All Out Racing
Performance
Motorcycle Parts
440-985-3853
All Out Racing
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ALL OUT RACING
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SUZUKI

RF900R

SERVICE MANUAL

All Out Racing
Performance
Motorcycle Parts
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ALL OUT RACING
Performance Motorcycle Parts
440-985-3853

SUZUKI MOTOR CORPORATION PRINTED IN JAPAN JANUARY, '94

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(英)

FOREWORD

This manual contains an introductory description on SUZUKI RF900R and procedures for its inspection/service and overhaul of its main components. Other information considered as generally known is not included.

Read GENERAL INFORMATION section to familiarize yourself with outline of the vehicle and MAINTENANCE and other sections to use as a guide for proper inspection and service.

This manual will help you know the vehicle better so that you can assure your customers of your optimum and quick service.

- *This manual has been prepared on the basis of the latest specification at the time of publication. If modification has been made since then, difference may exist between the content of this manual and the actual vehicle.*
- *Illustrations in this manual are used to show the basic principles of operation and work procedures. They may not represent the actual vehicle exactly in detail.*
- *This manual is intended for those who have enough knowledge and skills for servicing SUZUKI vehicles. Without such knowledge and skills, you should not attempt servicing by relying on this manual only. Instead, please contact your nearby authorized SUZUKI motorcycle dealer.*

IMPORTANT

All street-legal Suzuki motorcycles with engine displacement of 50cc or greater are subject to Environmental Protection agency emission regulations. These regulations set specific standards for exhaust emission output levels as well as particular servicing requirements. This manual includes specific information required to properly inspect and service RF900R in accordance with all EPA regulations. It is strongly recommended that the chapter on Emission Control, Periodic Servicing and Carburetion be thoroughly reviewed before any type of service work is performed.

Further information concerning the EPA emission regulations and U.S. Suzuki's emission control program can be found in the U.S. SUZUKI EMISSION CONTROL PROGRAM MANUAL/SERVICE BULLETIN.

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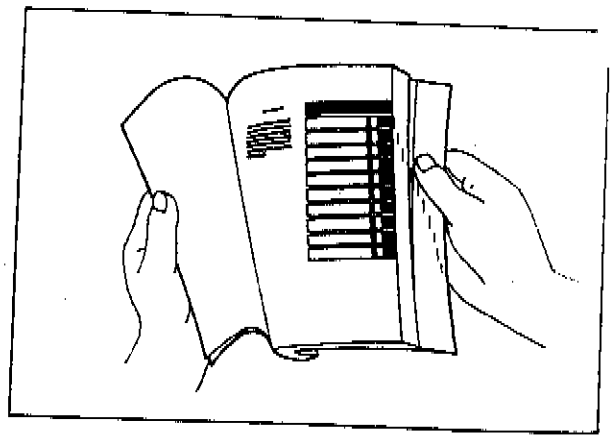
SUZUKI MOTOR CORPORATION
Motorcycle Service Department

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HOW TO USE THIS MANUAL

TO LOCATE WHAT YOU ARE LOOKING FOR:

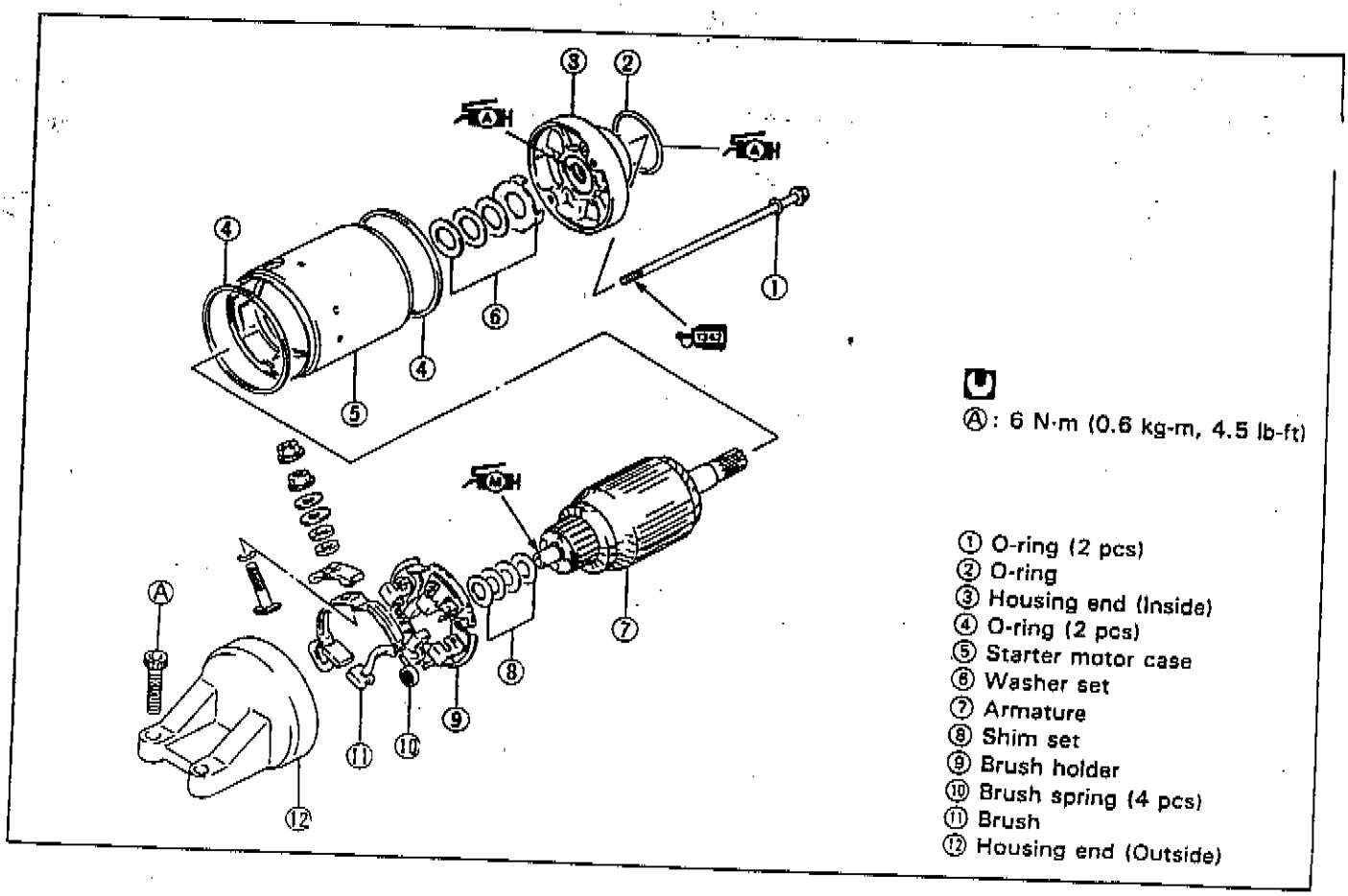
1. The text of this manual is divided into sections.
2. As the title of these sections are listed on the previous page as GROUP INDEX, select the section where what you are looking for belong.
3. Holding the manual as shown at the right will allow you to find the first page of the section easily.
4. On the first page of each section, its contents are listed. Find the item and page you need.



COMPONENT PARTS AND WORK TO BE DONE

Under the name of each system or unit, its exploded view is provided with work instruction and other service information such as the tightening torque, lubricating points and locking agent points.

Example: Starter motor



SYMBOL

Listed in the table below are the symbols indicating instructions and other information necessary for servicing and meaning associated with them respectively.

SYMBOL	DEFINITION	SYMBOL	DEFINITION
	Torque control required. Data beside it indicates specified torque.		Apply THREAD LOCK SUPER "1303".
	Apply oil. Use engine oil unless otherwise specified.		Apply or use brake fluid.
	Apply SUZUKI SUPER GREASE "A".		Measure in voltage range.
	Apply SUZUKI SILICONE GREASE.		Measure in resistance range.
	Apply SUZUKI MOLY PASTE.		Measure in current range.
	Apply SUZUKI BOND "1207B".		Use special tool.
	Apply THREAD LOCK "1342".		Use engine coolant.
	Apply THREAD LOCK SUPER "1360".		Use fork oil.

GENERAL INFORMATION

1

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WARNING/CAUTION/NOTE

Please read this manual and follow its instructions carefully. To emphasize special information, the symbol and the words WARNING, CAUTION and NOTE have special meanings. Pay special attention to the messages highlighted by these signal words.

⚠ WARNING

Indicates a potential hazard that could result in death or injury.

⚠ CAUTION

Indicates a potential hazard that could result in vehicle damage.

NOTE:
Indicates special information to make maintenance easier or instructions clearer.

Please note, however, that the warnings and cautions contained in this manual cannot possibly cover all potential hazards relating to the servicing, or lack of servicing, of the motorcycle. In addition to the WARNINGS and CAUTIONS stated, you must use good judgement and basic mechanical safety principles. If you are unsure about how to perform a particular service operation, ask a more experienced mechanic for advice.

GENERAL PRECAUTIONS

⚠ WARNING

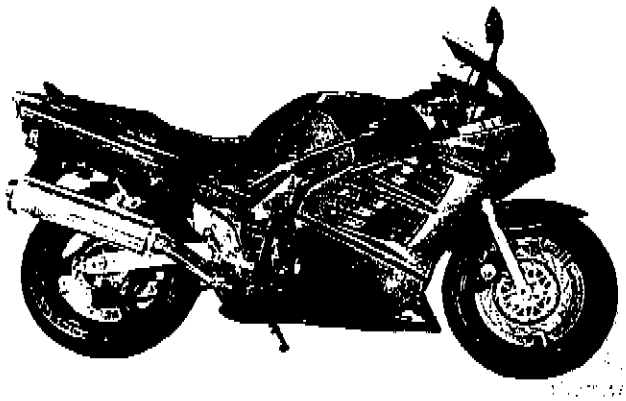
- **Proper service and repair procedures are important for the safety of the service mechanic and the safety and reliability of the vehicle.**
- **When 2 or more persons work together, pay attention to the safety of each other.**
- **When it is necessary to run the engine indoors, make sure that exhaust gas is forced outdoors.**
- **When working with toxic or flammable materials, make sure that the area you work in is well-ventilated and that you follow all of the material manufacturer's instructions.**
- **Never use gasoline as a cleaning solvent.**
- **To avoid getting burned, do not touch the engine, engine oil, radiator or exhaust system during or for a while after engine operation.**
- **After servicing fuel, oil, water, exhaust or brake systems, check all lines and fittings related to the system for leaks.**

⚠ CAUTION

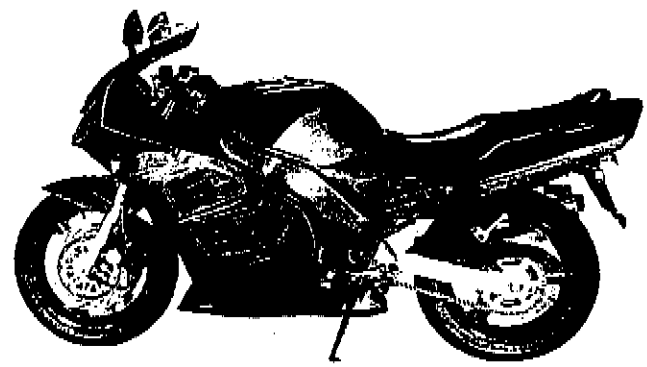
- If parts replacement is necessary, replace the parts with Suzuki Genuine Parts or their equivalent.
- When removing parts that are to be reused, keep them arranged in an orderly manner so that they may be reinstalled in the proper order and orientation.
- Be sure to use special tools when instructed.
- Make sure that all parts used in reassembly are clean, and also lubricated when specified.
- When use of a certain type of lubricant, bond, or sealant is specified, be sure to use the specified type.
- When removing the battery, disconnect the negative cable first and then the positive cable. When reconnecting the battery, connect the positive cable first and then the negative cable, and replace the terminal cover on the positive terminal.
- When performing service to electrical parts, if the service procedures not require use of battery power, disconnect the negative cable the battery.
- Tighten cylinder head and case bolts and nuts, beginning with larger diameter and ending with smaller diameter, from inside to outside diagonally, to the specified tightening torque.
- Whenever you remove oil seals, gaskets, packing, O-rings, locking washers, cotter pins, circlips, and certain other parts as specified, be sure to replace them with new ones. Also, before installing these new parts, be sure to remove any left over material from the mating surfaces.
- Never reuse a circlip. When installing a new circlip, take care not to expand the end gap larger than required to slip the circlip over the shaft. After installing a circlip, always ensure that it is completely seated in its groove and securely fitted.
- Do not use self-locking nuts a few times over.
- Use a torque wrench to tighten fastners to the torque values when specified. Wipe off grease or oil if a thread is smeared with them.
- After reassembly, check parts for tightness and operation.

- To protect environment, do not unlawfully dispose of used motor oil, engine coolant and other fluids: batteries, and tires.
- To protect Earth's natural resouces, properly dispose of used vehicles and parts.

SUZUKI RF900RR ('94-MODEL)



RIGHT SIDE

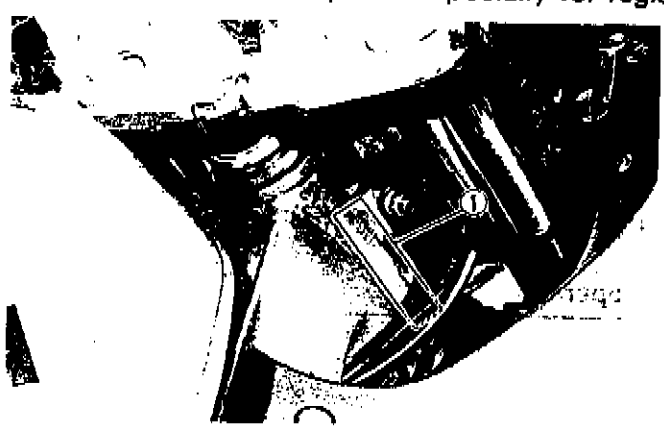


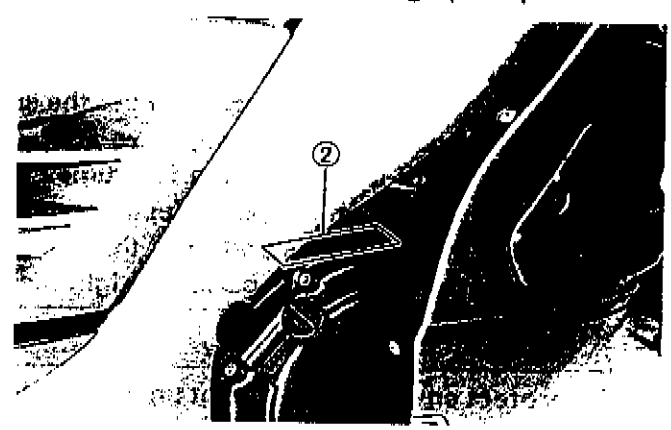
LEFT SIDE

*Difference between photographs and actual motorcycles depends on the markets.

SERIAL NUMBER LOCATION

The frame serial number or V.I.N. (Vehicle Identification Number) ① is stamped on the right side of the steering head pipe. The engine serial number ② is located on the right side of the crankcase. These numbers are required especially for registering the machine and ordering spare parts.





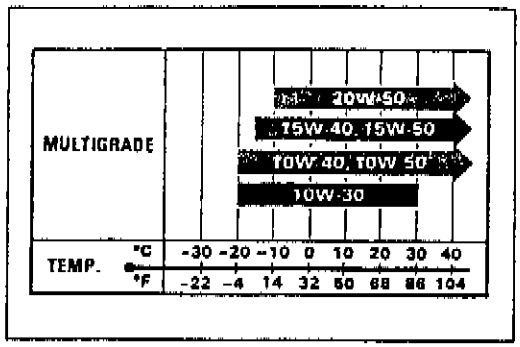
FUEL, OIL AND ENGINE COOLANT RECOMMENDATION

FUEL

1. Use only unleaded gasoline of at least 87 pump octane ($\frac{R+M}{2}$) method or 91 octane or higher rated by the research method.
2. Suzuki recommends that customers use alcohol free, unleaded gasoline whenever possible.
3. Use of blended gasoline containing MTBE (Methyl Tertiary Butyl Ether) is permitted.
4. Use of blended gasoline/alcohol fuel is permitted, provided that the fuel contains not more than 10% ethanol. Gasoline/alcohol fuel may contain up to 5% methanol if appropriate cosolvents and corrosion inhibitors are present in it.
5. If the performance of the vehicle is unsatisfactory while using blended gasoline/alcohol fuel, you should switch to alcohol-free unleaded gasoline.
6. Failure to follow these guideline could possibly void applicable warranty coverage. Check with your fuel supplier to make sure that the fuel you intend to use meets the requirements listed above.

ENGINE OIL

SUZUKI recommends the use of SUZUKI PERFORMANCE 4 MOTOR OIL or an oil which is rated SE or SF under the API (American Petroleum Institute) classification system. The viscosity rating is SAE 10W/40. If an SAE 10W/40 motor oil is not available, select an alternate according to the right chart.



BRAKE FLUID

Specification and classification: DOT4

⚠ WARNING

Since the brake system of this motorcycle is filled with a glycol-based brake fluid by the manufacturer, do not use or mix different types of fluid such as silicone-based and petroleum-based fluid for refilling the system, otherwise serious damage will result.
Do not use any brake fluid taken from old or used or unsealed containers.
Never re-use brake fluid left over from a previous servicing, which has been stored for a long period.

FRONT FORK OIL

Use fork oil # 10

ENGINE COOLANT

Use an anti-freeze/engine coolant compatible with an aluminum radiator, mixed with distilled water only.

WATER FOR MIXING

Use distilled water only. Water other than distilled water can corrode and clog the aluminum radiator.

ANTI-FREEZE/ENGINE COOLANT

The engine coolant perform as a corrosion and rust inhabit as well as anti-freeze. Therefore, the engine coolant should be used at all times even though the atmospheric temperature in your area does not go down to freezing point.

LIQUID AMOUNT OF WATER/ENGINE COOLANT

Solution capacity (total): 2450 ml (2.6/2.2 US/Imp qt)

For engine coolant mixture information, refer to cooling system section, page 5-4.

⚠ CAUTION

Mixing of anti-freeze/engine coolant should be limited to 60%. Mixing beyond it would reduce its efficiency. If the anti-freeze/engine coolant mixing ratio is below 50%, rust inhabiting performance is greatly reduced. Be sure to mix it above 50% even though the atmospheric temperature does not go down to the freezing point.

BREAK-IN PROCEDURES

During manufacture only the best possible materials are used and all machined parts are finish to a very high standard but it is still necessary to allow the moving parts to "BREAK-IN" before subjecting the engine to maximum stresses. The future performance and reliability of the engine depends on the care and restraint exercised during its early life. The general rules are as follows.

- Keep to these break-in engine speed limits:

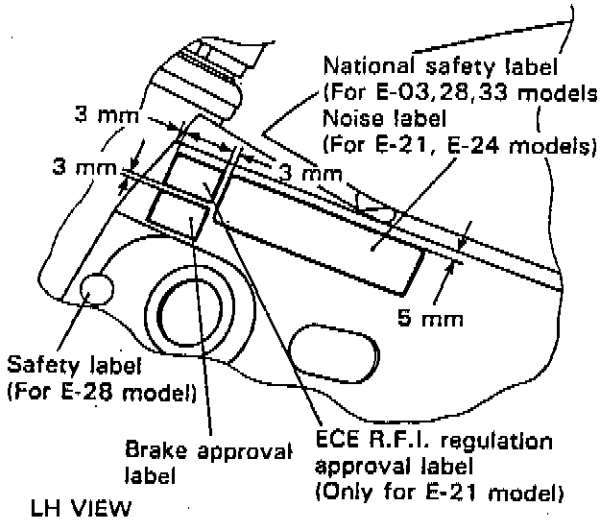
Initial 800 km (500 miles): Below 6000 r/min
Up to 1600 km (1000 miles): Below 9000 r/min
Over 1600 km (1000 miles): Below 12000 r/min

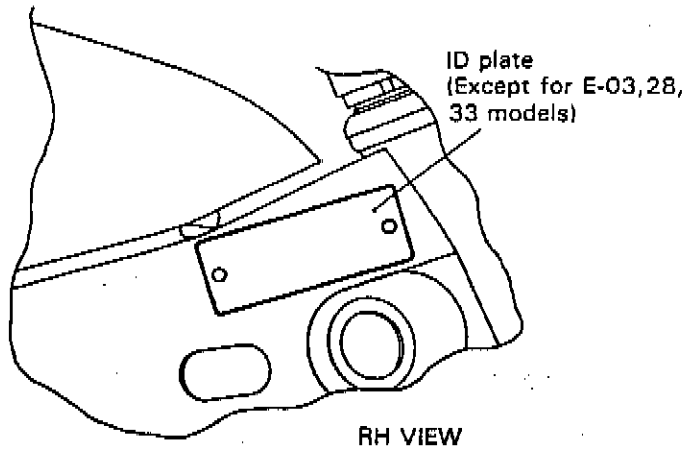
- Upon reaching an odometer reading of 1600 km (1000 miles) you can subject the motorcycle to full throttle operation. However, do not exceed 12000 r/min at any time.

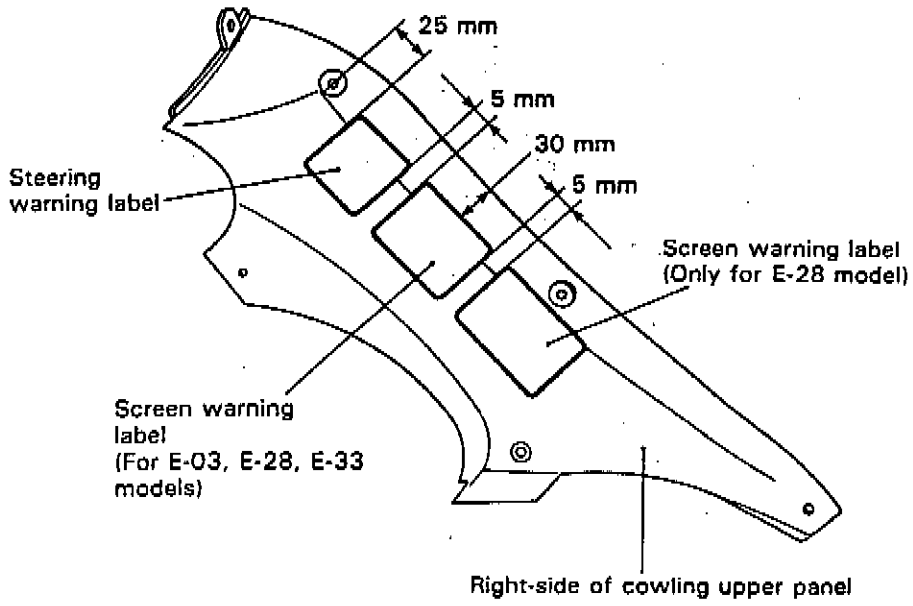
CYLINDER IDENTIFICATION

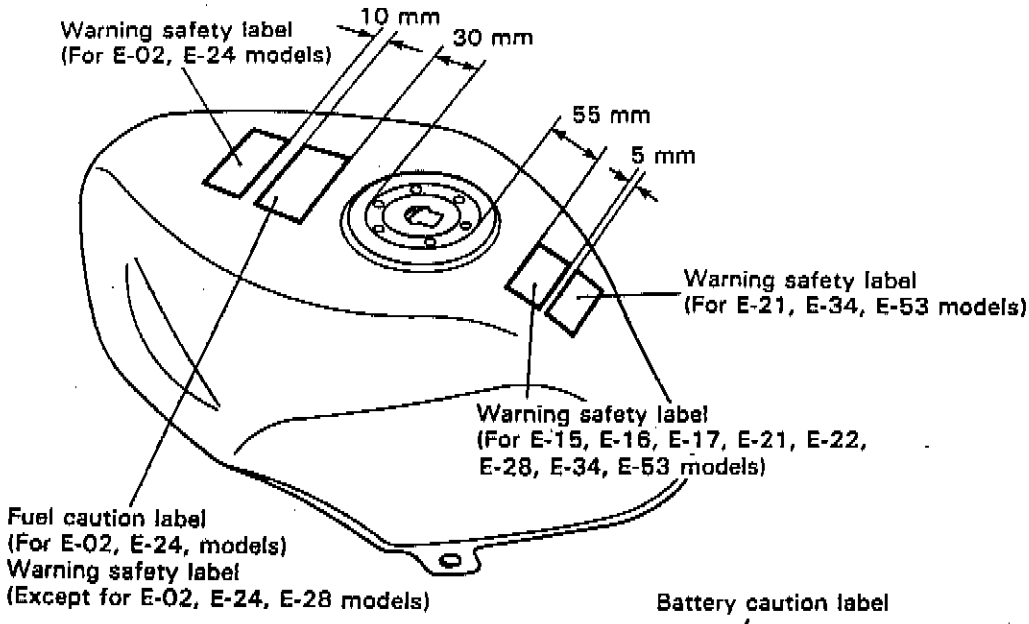
The four cylinders of this engine are identified as No.1, No.2, No.3 and No.4 cylinder, as counted from left to right (as viewed by the rider on the seat).

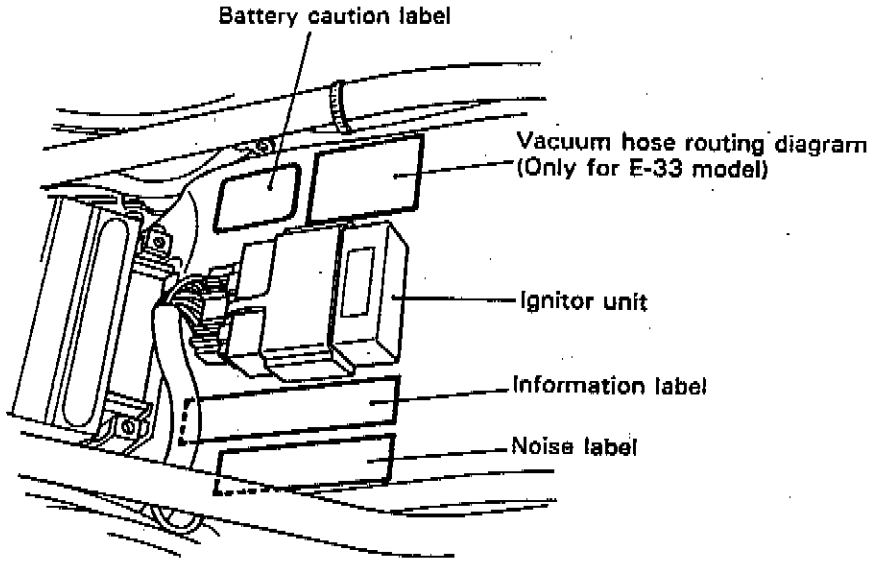
INFORMATION LABELS

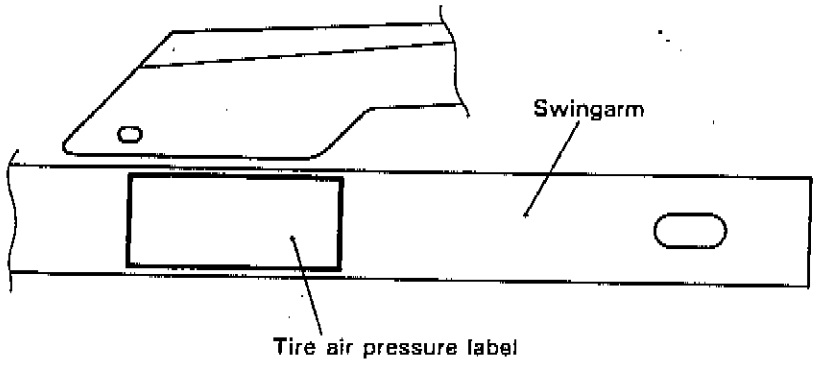







Warning safety label
(For E-02, E-24 models)
10 mm
30 mm
55 mm
5 mm
Warning safety label
(For E-21, E-34, E-53 models)
Warning safety label
(For E-15, E-16, E-17, E-21, E-22,
E-28, E-34, E-53 models)
Fuel caution label
(For E-02, E-24, models)
Warning safety label
(Except for E-02, E-24, E-28 models)


Battery caution label
Vacuum hose routing diagram
(Only for E-33 model)
Ignitor unit
Information label
Noise label


Swingarm
Tire air pressure label

SPECIFICATIONS

DIMENSIONS AND DRY MASS

Overall length	2 130 mm (83.9 in)	For E-02,03,04,21,24, 25,28,33,34,53
	2 155 mm (84.8 in)	For E-15,16,17,18,22, 39
Overall width	730 mm (28.7 in)	
Overall height	1 165 mm (45.9 in)	
Wheelbase	1 440 mm (56.7 in)	
Ground clearance	115 mm (4.5 in)	
Dry mass	203 kg (447 lbs)	
	206 kg (454 lbs)	E-33 only

ENGINE

Type	Four-stroke, Water-cooled, DOHC, TSCC
Number of cylinders	4
Bore	73.0 mm (2.874 in)
Stroke	56.0 mm (2.205 in)
Piston displacement	937 cm^3 (57.2 cu. in)
Carburetor	MIKUNI BDST36
Air cleaner	Non-woven fabric element
Starter system	Electric starter
Lubrication system	Wet sump

TRANSMISSION

Clutch	Wet multi-plate type
Transmission	5-speed constant mesh
Gearshift pattern	1-down, 4-up
Primary reduction ratio	1.565 (72/46)
Final reduction ratio	2.866 (43/15)
Gear ratios, Low	2.714 (38/14)
2nd	1.809 (38/21)
3rd	1.409 (31/22)
4th	1.181 (26/22)
Top	1.038 (27/26)
Drive chain	TAKASAGO RK532GSV2, 110 links

CHASSIS

Front suspension	Telescopic, coil spring, oil damped, spring pre-load fully adjustable.
Rear suspension	Link type system, oil damped, coil spring, spring pre-load 7-way adjustable, rebound damping force 4-way adjustable and compression damping force fully adjustable.
Steering angle	30° (right & left)
Caster	65° 30'
Trail	102 mm (4.02 in)
Turning radius	3.2 m (10.5 ft)
Front brake	Disc brake, twin
Rear brake	Disc brake
Front tire size	120/70 ZR17, tubeless
Rear tire size	170/60 ZR17, tubeless
Front fork stroke	120 mm (4.7 in)
Rear wheel travel	130 mm (5.1 in)

ELECTRICAL

Ignition type	Electronic Ignition (Fully Transistorized)
Ignition timing	4° B.T.D.C. at 1500 r/min ... For E-03,18,33,39 7° B.T.D.C. at 1500 r/min ... For the others
Spark plug	N.G.K.: CR9E, NIPPONDENSO U27ESR-N
Battery	12V 28.8 kC (8 Ah)/10 HR
Generator	Three-phase A.C. Generator
Main fuse	30A
Fuse	15/15/15/10/10A
Headlight	12V 60/55W
Turn signal light	12V 21W
Parking or city light	12V 4W ..... Except for E-03,24,28,33
Taillight	12V 5W
Brake light	12V 21W x 2
License plate light	12V 5W
Speedometer light	12V 1.7W x 2
Tachometer light	12V 1.7W x 2
Engine coolant temp. meter light	12V 1.7W
Neutral indicator light	12V 3.4W
High beam indicator light	12V 3.4W
Turn signal indicator light	12V 3.4W
Oil pressure indicator light	12V 3.4W
Fuel level indicator light	12V 3.4W

CAPACITIES

Fuel tank, including reserve	21.0 L (5.5/4.6 US/Imp gal)
Engine oil, oil change	3 000 ml (3.2/2.6 US/Imp qt)
with filter change	3 300 ml (3.5/2.9 US/Imp qt)
overhaul	3 900 ml (4.1/3.4 US/Imp qt)
Front fork oil	459 ml (15.5/16.2 US/Imp oz) ... For E-03,33 466 ml (15.8/16.4 US/Imp oz) ... For the others
Engine coolant	2 450 ml (2.6/2.2 US/Imp qt)

These specifications are subject to change without notice.

COUNTRY OR AREA

The series of symbols on the left stand for the countries or area on the right.

SYMBOL	COUNTRY or AREA
E-02	England
E-03	U.S.A. (except California)
E-04	France
E-15	Finland
E-16	Norway
E-17	Sweden
E-18	Switzerland
E-21	Belgium
E-22	Germany
E-24	Australia
E-25	Netherlands
E-28	Canada
E-33	California (U.S.A.)
E-34	Italy
E-39	Austria
E-53	Spain

(E-15,16 and 17 countries are included in E-22.
E-21 and 53 countries are included in E-34.)

PERIODIC MAINTENANCE

2

CONTENTS

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- LUBRICATION POINTS 2- 2

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OIL PRESSURE CHECK 2-22

PERIODIC MAINTENANCE SCHEDULE

IMPORTANT: The periodic maintenance intervals and service requirements have been established in accordance with EPA regulations. Following these instructions will ensure that the motorcycl will not exceed emission standards and it will also ensure the reliability and performance of the motorcycle.

The chart below lists the recommended intervals for all the required periodic service work necessary to keep the motorcycle operating at peak performance and economy. Mileages are expressed in terms of kilometer, miles and time for your convenience.

NOTE:
More frequent servicing may be performed on motorcycles that are used under severe conditions however, it is not necessary for ensuring emission level compliance.

PERIODIC MAINTENANCE CHART

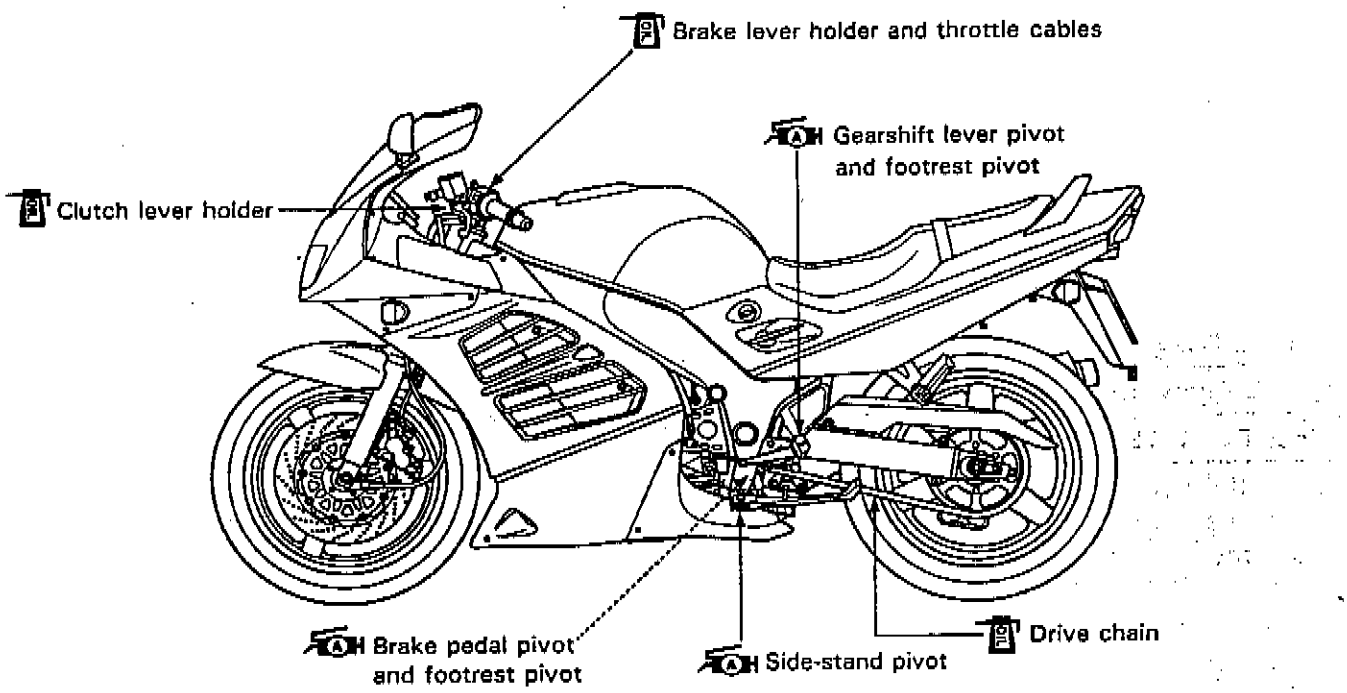
Item \ Interval	km	1000	6000	12000	18000	24000
	miles	600	4000	7500	11000	15000
	months	2	12	24	36	48
Exhaust pipe bolts		—	T	T	T	T
Air cleaner		—	I	I	R	I
Tappet clearance		—	—	I	—	I
Spark plug		—	I	R	I	R
Engine oil		R	R	R	R	R
Engine oil filter		R	—	R	—	R
Fuel line (EVAP hose . . . . . California model only)		—	I	I	I	I
		Replace every 4 years				
Fuel filter		—	—	C	—	C
Engine idle rpm (Carburetor)		I	I	I	I	I
Throttle cable play (Carburetor)		I	I	I	I	I
Clutch hose		—	I	I	I	I
		Replace every 4 years				
Clutch fluid		—	—	I	—	I
		Replace every 2 years				
Drive chain		I	I	I	I	I
		Lubricate every 1000 km (600 miles)				
Radiator hose		—	I	I	I	I
		Replace every 4 years				
Engine coolant		Replace every 2 years				
Brake		I	I	I	I	I
Brake hose		—	I	I	I	I
		Replace every 4 years				
Brake fluid		—	I	I	I	I
		Replace every 2 years				
Tire		—	I	I	I	I
Steering		I	—	I	—	I
Front fork		—	—	I	—	I
Rear suspension		—	—	I	—	I
Chassis bolts and nuts		T	T	T	T	T

I = Inspection and adjust, clean, lubricate or replace as necessary
C = Clean R = Replace T = Tighten

LUBRICATION POINTS

Proper lubrication is important for smooth operation and long life of each working part of the motorcycle.

Major lubrication points are indicated below.



NOTE:

- *Before lubricating each part, clean off any rusty spots and wipe off any grease, oil, dirt or grime.*
- *Lubricate exposed parts which are subject to rust, with a rust preventative spray whenever the motorcycle has been operated under wet or rainy conditions.*

MAINTENANCE AND TUNE-UP PROCEDURES

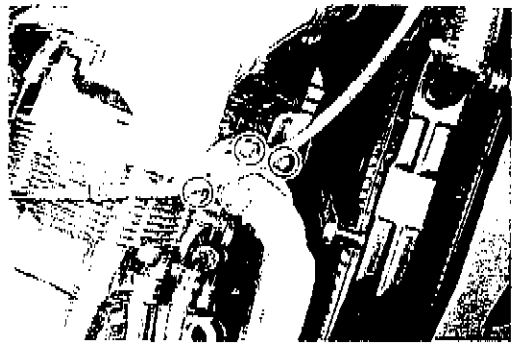
This section describes the servicing procedures for each item of the Periodic Maintenance requirements.

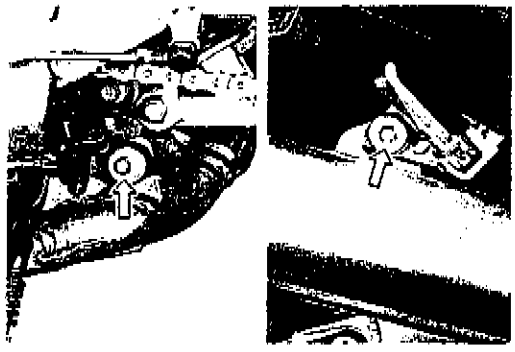
EXHAUST PIPE BOLTS

Tighten Every 6000 km (4000 miles, 12 months).

- Remove the lower cowling assembly. (Refer to pages 6-2 and 3.)
- Remove the radiator mounting bolts. (Refer to page 3-4.)
- Tighten the exhaust pipe clamp bolts and muffler mounting bolts to the specified torque with a torque wrench.

Exhaust pipe clamp bolt & Muffler mounting bolt: 23 N·m (2.3 kg-m, 16.5 lb-ft)

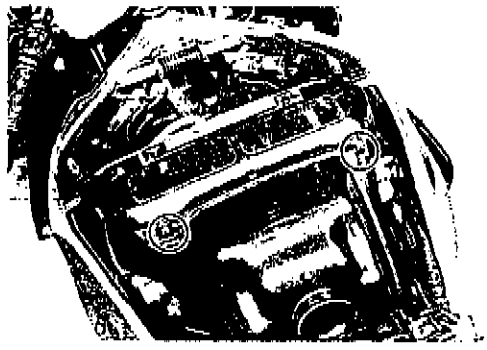




AIR CLEANER

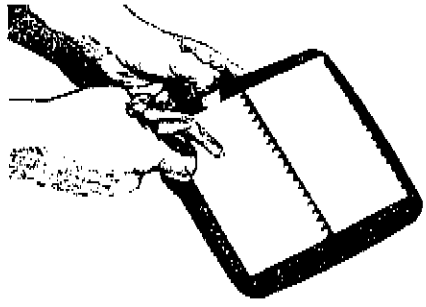
Inspect Every 6000 km (4000 miles, 12 months) and Replace Every 18000 km (11000 miles, 36 months).

- Remove the seat, frame cover assembly and fuel tank. (Refer to pages 6-4, 6-5 and 4-5.)
- Remove the air cleaner element by removing the screws.
- Carefully use air hose to blow the dust from the cleaner element.



⚠ CAUTION

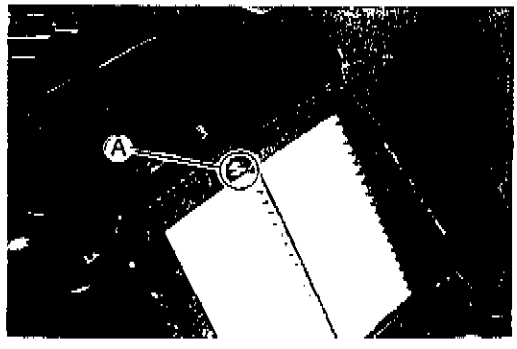
Always use air pressure on the inside of the air cleaner element. If air pressure is used on the outside, dirt will be forced into the pores of the air cleaner element thus restricting air flow through the air cleaner element.



- Reinstall the cleaned or new air cleaner element in the reverse order of removal.
- When installing the air cleaner element in the cleaner case, make sure that the ⏏ mark Ⓐ comes upward.

⚠ CAUTION

If driving under dusty condition, clean the air cleaner element more frequently. The surest way to accelerate engine wear is to use the engine without the element or to use a ruptured element. Make sure that the air cleaner is in good condition at all times. Life of the engine depends largely on this component!



NOTE:

When you clean the air cleaner element, drain water from the air cleaner drain hose by removing the drain plug.

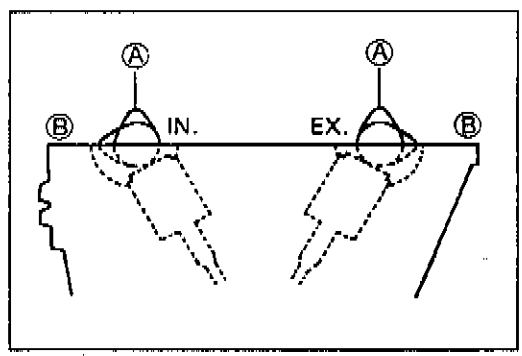
TAPPET CLEARANCE

Inspect Every 12000 km (7500 miles, 24 months).

- Remove the seat, frame cover assembly, lower cowling assembly and fuel tank. (Refer to pages 6-2, 6-3, 6-4, 6-5 and 4-5.)
- Remove the air cleaner box and carburetors. (Refer to pages 3-2 and 3.)
- Remove all the spark plugs.
- Remove the cylinder head cover. (Refer to page 3-10.)

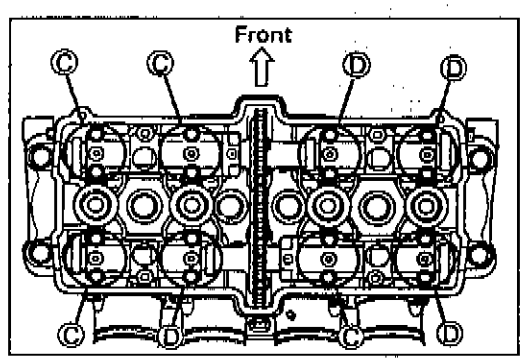
The tappet clearance specification is different for intake and exhaust valves.
Tappet clearance adjustment must be checked and adjusted, 1) at the time of periodic inspection, 2) when the valve mechanism is serviced, and 3) when the camshafts are disturbed by removing them for servicing.

Tappet clearance (when cold):
IN. : 0.10—0.20 mm (0.004—0.008 in)
EX.: 0.20—0.30 mm (0.008—0.012 in)



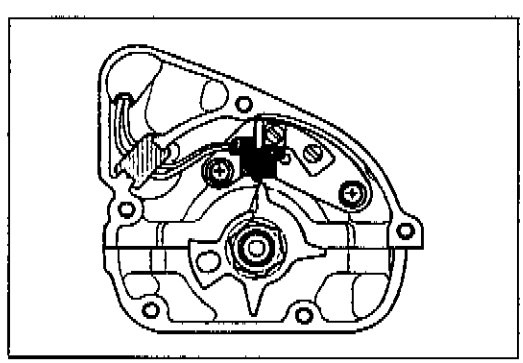
NOTE:

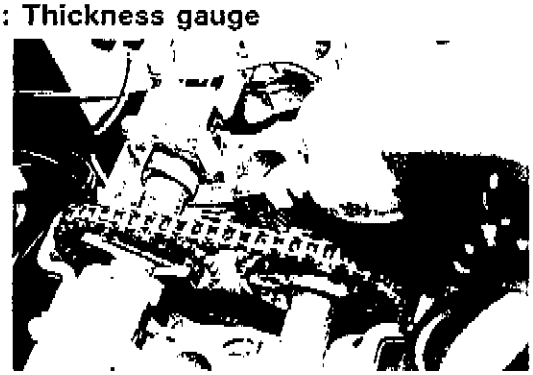
* *The cam must be at positions, Ⓐ or Ⓑ, in order to check the tappet clearance, or to adjust tappet clearance. Clearance readings should not be taken with the cam in any other position than these two positions.*
* *The clearance specification is for COLD state.*
* *To turn the crankshaft for clearance checking, be sure to use a 19-mm wrench, and rotate in the normal running direction. All spark plugs should be removed.*

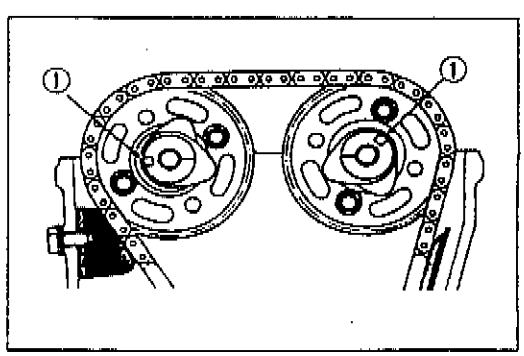


- Turn crankshaft to bring the "T" mark on the rotor to the center of pick-up coil and also to bring the notches ① in the right ends of both camshafts (Ex and In) to the positions shown. In this condition, read the tappet clearance at the valves Ⓒ (In and Ex of No.1 cylinder, Ex of No.2 and In of No.3).
- Use a thickness gauge between the tappet and the cam. If the clearance is out of specification, bring it into the specified range.

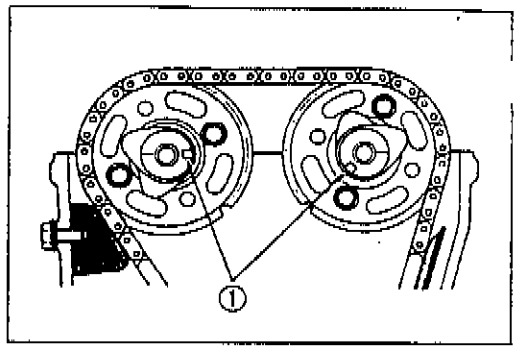
TOOL **09900-20803: Thickness gauge**







- Turn the crankshaft 360° (one rotation) to bring the "T" mark on the rotor to the center of pick-up coil and also to bring the notches ① to the positions shown.
- Read the clearance at the remaining valves Ⓓ and adjust the clearance if necessary.



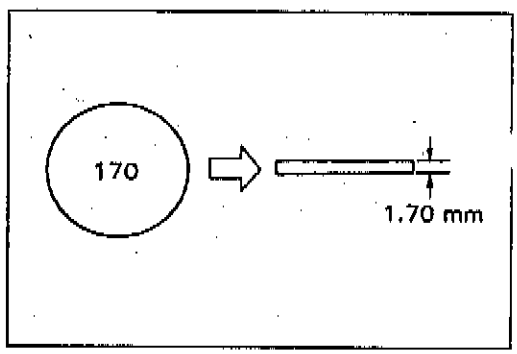
Cam Position	Notch ① position	
	Intake Camshaft	Exhaust Camshaft
Ⓒ	⊖	⊖
Ⓓ	⊖	⊖

TAPPET CLEARANCE ADJUSTMENT

The clearance is adjusted by replacing the existing tappet shim by a thicker or thinner shim.

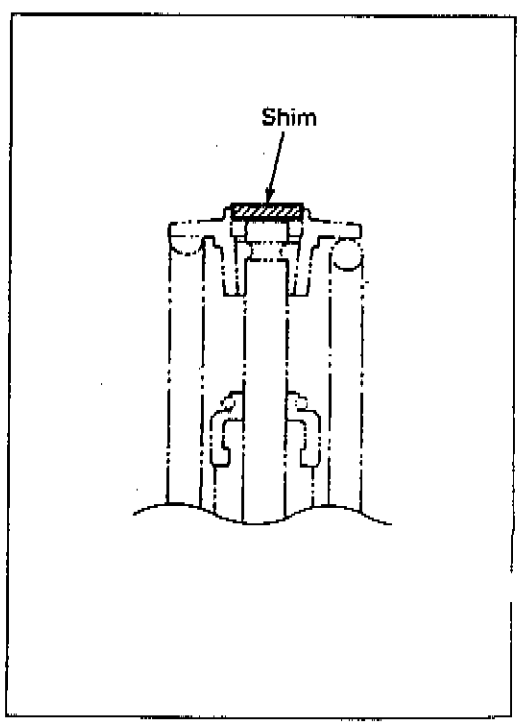
- Remove the intake or exhaust camshafts. (Refer to page 3-11.)
- Remove the tappet and shim by fingers or magnetic hand. (Refer to page 3-22.)

- Check the figures printed on the shim. These figures indicate the thickness of the shim, as illustrated.
- Select a replacement shim that will provide a clearance within the specified range. For the purpose of this adjustment, a total of 21 sizes of tappet shim are available ranging from 1.20 to 2.20 mm in steps of 0.05 mm. Fit the selected shim to the valve stem end, with numbers toward tappet. Be sure to check shim size with micrometer to ensure its size.
  Refer to the tappet shim selection table for details.



NOTE:

* *Be sure to apply engine oil to tappet shim top and bottom faces.*
* *When seating the tappet shim, be sure to face figure printed surface to the tappet.*



- After replacing the tappet shim and camshafts, rotate the engine so that the tappet is depressed fully. This will squeeze out oil trapped between the shim and the tappet that could cause an incorrect measurement, then check the clearance again to confirm that it is within the specified range.
- When installing the cylinder head cover, apply SUZUKI BOND NO.1207B to the head cover groove and cam end caps. (Refer to page 3-66.)
- Tighten the head cover bolts to the specified torque. (Refer to page 3-67.)

TAPPET SHIM SELECTION TABLE [INTAKE]

TAPPET SHIM NO.(12892-05C00-× × ×)

TAPPET SHIM SET NO. (12800-05820)

(INTAKE SIDE)

MEASURED TAPPET CLEARANCE (mm) \ SUFFIX NO.	120	125	130	135	140	145	150	155	160	165	170	175	180	185	190	195	200	205	210	215	220
PRESENT SHIM SIZE (mm)	1.20	1.25	1.30	1.35	1.40	1.45	1.50	1.55	1.60	1.65	1.70	1.75	1.80	1.85	1.90	1.95	2.00	2.05	2.10	2.15	2.20
0.00–0.04			1.20	1.25	1.30	1.35	1.40	1.45	1.50	1.55	1.60	1.65	1.70	1.75	1.80	1.85	1.90	1.95	2.00	2.05	2.10
0.05–0.09		1.20	1.25	1.30	1.35	1.40	1.45	1.50	1.55	1.60	1.65	1.70	1.75	1.80	1.85	1.90	1.95	2.00	2.05	2.10	2.15
0.10–0.20	SPECIFIED CLEARANCE/NO ADJUSTMENT REQUIRED																				
0.21–0.25	1.30	1.35	1.40	1.45	1.50	1.55	1.60	1.65	1.70	1.75	1.80	1.85	1.90	1.95	2.00	2.05	2.10	2.15	2.20	2.20	
0.26–0.30	1.35	1.40	1.45	1.50	1.55	1.60	1.65	1.70	1.75	1.80	1.85	1.90	1.95	2.00	2.05	2.10	2.15	2.20			
0.31–0.35	1.40	1.45	1.50	1.55	1.60	1.65	1.70	1.75	1.80	1.85	1.90	1.95	2.00	2.05	2.10	2.15	2.20				
0.36–0.40	1.45	1.50	1.55	1.60	1.65	1.70	1.75	1.80	1.85	1.90	1.95	2.00	2.05	2.10	2.15	2.20					
0.41–0.45	1.50	1.55	1.60	1.65	1.70	1.75	1.80	1.85	1.90	1.95	2.00	2.05	2.10	2.15	2.20						
0.46–0.50	1.55	1.60	1.65	1.70	1.75	1.80	1.85	1.90	1.95	2.00	2.05	2.10	2.15	2.20							
0.51–0.55	1.60	1.65	1.70	1.75	1.80	1.85	1.90	1.95	2.00	2.05	2.10	2.15	2.20								
0.56–0.60	1.65	1.70	1.75	1.80	1.85	1.90	1.95	2.00	2.05	2.10	2.15	2.20									
0.61–0.65	1.70	1.75	1.80	1.85	1.90	1.95	2.00	2.05	2.10	2.15	2.20										
0.66–0.70	1.75	1.80	1.85	1.90	1.95	2.00	2.05	2.10	2.15	2.20											
0.71–0.75	1.80	1.85	1.90	1.95	2.00	2.05	2.10	2.15	2.20												
0.76–0.80	1.85	1.90	1.95	2.00	2.05	2.10	2.15	2.20													
0.81–0.85	1.90	1.95	2.00	2.05	2.10	2.15	2.20														
0.86–0.90	1.95	2.00	2.05	2.10	2.15	2.20															
0.91–0.95	2.00	2.05	2.10	2.15	2.20																
0.96–1.00	2.05	2.10	2.15	2.20																	
1.01–1.05	2.10	2.15	2.20																		
1.06–1.10	2.15	2.20																			
1.11–1.15	2.20																				

HOW TO USE THIS CHART:

I. Measure tappet clearance. "ENGINE IS COLD"

II. Measure present shim size.

III. Match clearance in vertical column with present shim size in horizontal column.

EXAMPLE

Tappet clearance is 0.23 mm

Present shim size 1.70 mm

Shim size to be used 1.80 mm

TAPPET SHIM SELECTION TABLE (EXHAUST)

TAPPET SHIM NO.(12892-05C00-x x x)

TAPPET SHIM SET NO. (12800-05820)

(EXHAUST SIDE)

MEASURED TAPPET CLEARANCE (mm) \ SUFFIX NO. / PRESENT SHIM SIZE (mm)	120	125	130	135	140	145	150	155	160	165	170	175	180	185	190	195	200	205	210	215	220
	1.20	1.25	1.30	1.35	1.40	1.45	1.50	1.55	1.60	1.65	1.70	1.75	1.80	1.85	1.90	1.95	2.00	2.05	2.10	2.15	2.20
0.05–0.09				1.20	1.25	1.30	1.35	1.40	1.45	1.50	1.55	1.60	1.65	1.70	1.75	1.80	1.85	1.90	1.95	2.00	2.05
0.10–0.14			1.20	1.25	1.30	1.35	1.40	1.45	1.50	1.55	1.60	1.65	1.70	1.75	1.80	1.85	1.90	1.95	2.00	2.05	2.10
0.15–0.19		1.20	1.25	1.30	1.35	1.40	1.45	1.50	1.55	1.60	1.65	1.70	1.75	1.80	1.85	1.90	1.95	2.00	2.05	2.10	2.15
0.20–0.30	SPECIFIED CLEARANCE/NO ADJUSTMENT REQUIRED																				
0.31–0.35	1.30	1.35	1.40	1.45	1.50	1.55	1.60	1.65	1.70	1.75	1.80	1.85	1.90	1.95	2.00	2.05	2.10	2.15	2.20	2.20	
0.36–0.40	1.35	1.40	1.45	1.50	1.55	1.60	1.65	1.70	1.75	1.80	1.85	1.90	1.95	2.00	2.05	2.10	2.15	2.20			
0.41–0.45	1.40	1.45	1.50	1.55	1.60	1.65	1.70	1.75	1.80	1.85	1.90	1.95	2.00	2.05	2.10	2.15	2.20				
0.46–0.50	1.45	1.50	1.55	1.60	1.65	1.70	1.75	1.80	1.85	1.90	1.95	2.00	2.05	2.10	2.15	2.20					
0.51–0.55	1.50	1.55	1.60	1.65	1.70	1.75	1.80	1.85	1.90	1.95	2.00	2.05	2.10	2.15	2.20						
0.56–0.60	1.55	1.60	1.65	1.70	1.75	1.80	1.85	1.90	1.95	2.00	2.05	2.10	2.15	2.20							
0.61–0.65	1.60	1.65	1.70	1.75	1.80	1.85	1.90	1.95	2.00	2.05	2.10	2.15	2.20								
0.66–0.70	1.65	1.70	1.75	1.80	1.85	1.90	1.95	2.00	2.05	2.10	2.15	2.20									
0.71–0.75	1.70	1.75	1.80	1.85	1.90	1.95	2.00	2.05	2.10	2.15	2.20										
0.76–0.80	1.75	1.80	1.85	1.90	1.95	2.00	2.05	2.10	2.15	2.20											
0.81–0.85	1.80	1.85	1.90	1.95	2.00	2.05	2.10	2.15	2.20												
0.86–0.90	1.85	1.90	1.95	2.00	2.05	2.10	2.15	2.20													
0.91–0.95	1.90	1.95	2.00	2.05	2.10	2.15	2.20														
0.96–1.00	1.95	2.00	2.05	2.10	2.15	2.20															
1.01–1.05	2.00	2.05	2.10	2.15	2.20																
1.06–1.10	2.05	2.10	2.15	2.20																	
1.11–1.15	2.10	2.15	2.20																		
1.16–1.20	2.15	2.20																			
1.21–1.25	2.20																				

HOW TO USE THIS CHART:

I. Measure tappet clearance. "ENGINE IS COLD"

II. Measure present shim size.

III. Match clearance in vertical column with present shim size in horizontal column.

EXAMPLE

Tappet clearance is 0.33 mm

Present shim size 1.70 mm

Shim size to be used 1.80 mm

JUN-10-2002 15:28 GPO ISO9002 CERTIFIED

SPARK PLUG

Inspect at 6000 km (4000 miles, 12 months), 18000 km (11000 miles, 36 months) and Replace Every 12000 km (7500 miles, 24 months).

- Remove the seat, frame cover assembly and fuel tank. (Refer to pages 6-4, 6-5 and 4-5.)
- Remove all the spark plugs.

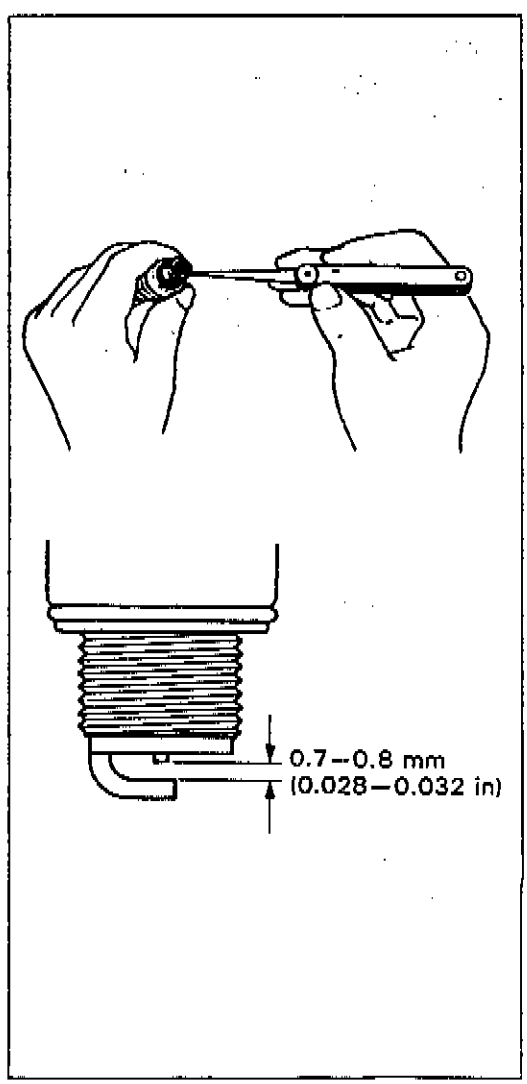
NOTE:
If it is difficult to remove the spark plug cap, pry up it with a screwdriver.

09930-10121: Spark plug socket wrench set
09930-14530: Universal joint
09914-24510: T-handle
09900-20803: Thickness gauge

	Standard	Cold type	Hot type
NGK	CR9E	CR10E	CR8E
ND	U27ESR-N	U31ESR-N	U24ESR-N

CARBON DEPOSIT

Check to see the carbon deposit on the plug.
If the carbon is deposited, remove it with a spark plug cleaner machine or carefully using a tool with a pointed end.



SPARK PLUG GAP

Measure the plug gap with a thickness gauge if it is correct. If not, adjust it to the following gap.

	Standard
Spark plug gap	0.7–0.8 mm (0.028–0.032 in)

09900-20803: Thickness gauge

ELECTRODE'S CONDITION

Check to see the worn or burnt condition of the electrodes. If it is extremely worn or burnt, replace the plug. And also replace the plug if it has a broken insulator, damaged thread, etc.

⚠ CAUTION

Confirm the thread size and reach when replacing the plug. If the reach is too short, carbon will be deposited on the screw portion of the plug hole and engine damage may result.

ENGINE OIL AND OIL FILTER

(ENGINE OIL)
Replace Initially at 1000 km (600 miles, 2 months) and Every 6000 km (4000 miles, 12 months) thereafter.

(OIL FILTER)
Replace Initially at 1000 km (600 miles, 2 months) and Every 12000 km (7500 miles, 24 months) thereafter.

Oil should be changed while the engine is warm. Oil filter replacement at the above intervals, should be done together with the engine oil change.

- Keep the motorcycle upright.
- Place an oil pan below the engine, and drain the oil by removing the drain plug ① and filler cap ② .
- Remove the oil filter ③ by using the special tool Ⓐ .
- Apply engine oil lightly to the gasket of the new filter before installation. (Do not lose the washer and spring washer fitted on the oil cooler union bolt.) See page 3-69.
- Install the new filter turning it by hand until you feel that the filter gasket contacts the mounting surface. Then tighten it 2 turns using the oil filter wrench. (Special tool Ⓐ)

TOOL 09915-40610: Oil filter wrench

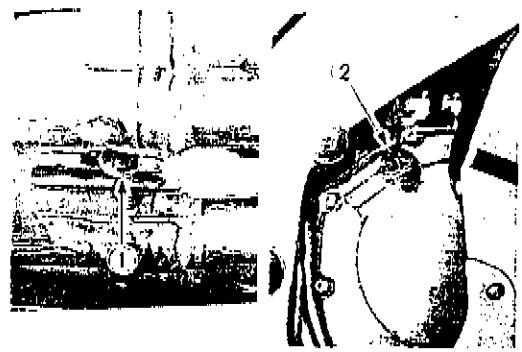
NOTE:
To properly tighten the filter, use the special tool. Never tighten the filter by hand.

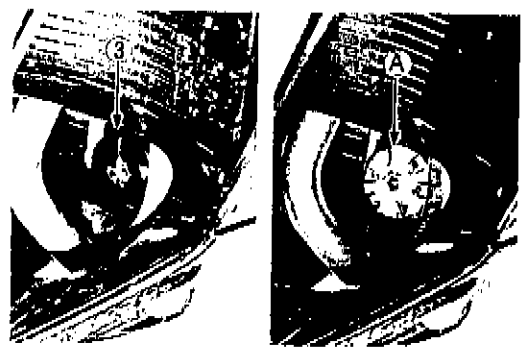
- Fit the drain plug ① securely, and pour fresh oil through the oil filler. The engine will hold about 3.3 L (3.5 US qt) of oil. Use an API classification of SE or SF oil with SAE 10W/40 viscosity.
- Start up the engine and allow it to run for several seconds at idling speed.
- Turn off the engine and wait about one minute, then check the oil level through the inspection window ④ . If the level is below mark "F", add oil to that level.

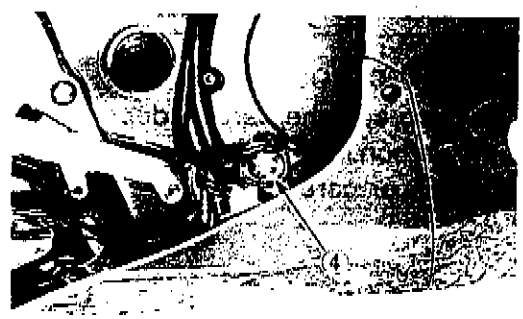
NECESSARY AMOUNT OF ENGINE OIL
Oil change: 3.0 L (3.2/2.6 US/Imp qt)
Filter change: 3.3 L (3.5/2.9 US/Imp qt)
Overhaul engine: 3.9 L (4.1/3.4 US/Imp qt)

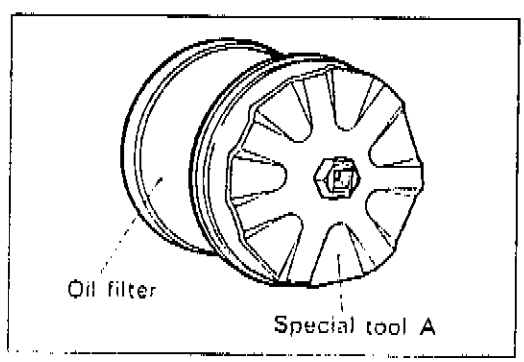
⚠ CAUTION

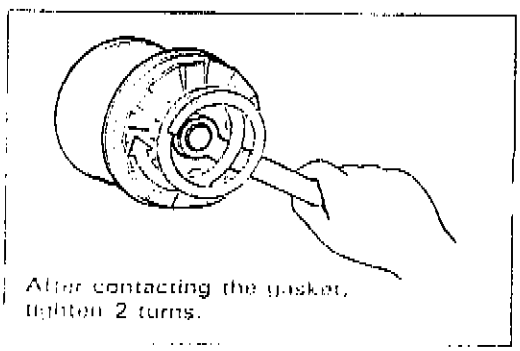
Use SUZUKI MOTORCYCLE GENUINE OIL FILTER only, since the other make's genuine filters and after-market parts may differ in thread specifications (thread diameter and pitch), filtering performance and durability, which could cause engine damage or oil leaks. Suzuki automobile genuine oil filter is also not usable for the motorcycles.











FUEL LINE (EVAP HOSE ... California model only)

Inspect Every 6000 km (4000 miles, 12 months).
Replace Every 4 years.

FUEL FILTER

Clean Every 12000 km (7500 miles, 24 months).

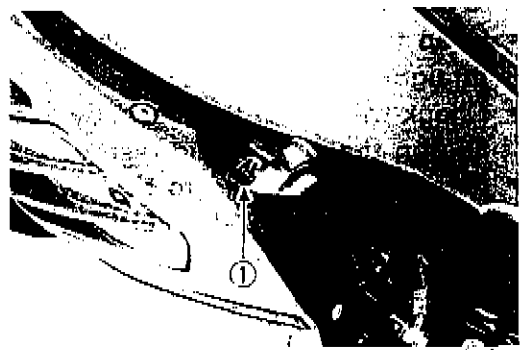
(Refer to page 4-5.)

CARBURETOR

IDLE RPM (Idling adjustment)

Inspect Initially at 1000 km (600 miles, 2 months) and Every 6000 km (4000 miles, 12 months) thereafter.

NOTE:
Make this adjustment when the engine is hot.



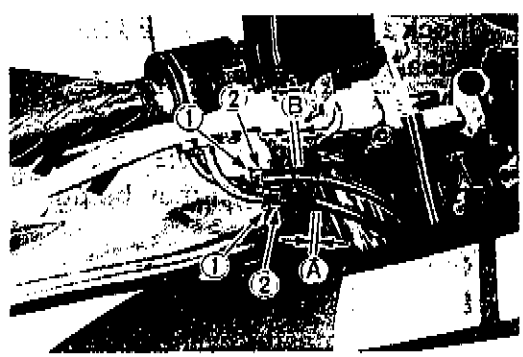
- Connect a tachometer.
- Start up the engine and set its speed at anywhere between 1100 and 1300 r/min by turning throttle stop screw ① .

Engine idle speed:
1200±100 r/min ..... U.S.A.
1200± 50 r/min ..... California (U.S.A.)

THROTTLE CABLE PLAY

Pulling cable play Ⓐ

There should be 0.5—1.0 mm (0.02—0.04 in) play Ⓐ in the throttle cable. Adjust the throttle cable play with the following procedures.



- Loosen the lock nut ① and turn the adjuster ② in or out until the specified play is obtained.
- Tighten the lock nut ① while holding the adjuster.

Returning cable play Ⓑ

- Adjust the returning cable to the specified play in the same manner as the pulling cable play adjustment.

Throttle cable play (Ⓐ and Ⓑ): 0.5—1.0 mm (0.02—0.04 in)

⚠ WARNING

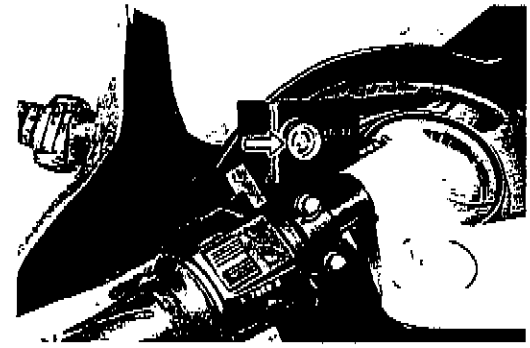
After the adjustment is completed, check that handlebar movement does not raise the engine idle speed and that the throttle grip returns smoothly and automatically.

CLUTCH

(CLUTCH FLUID)
Inspect Every 12000 km (7500 miles, 24 months).
Replace fluid Every 2 years.

(CLUTCH HOSE)
Inspect Every 6000 km (4000 miles, 12 months).
Replace hose Every 4 years.

CLUTCH FLUID LEVEL



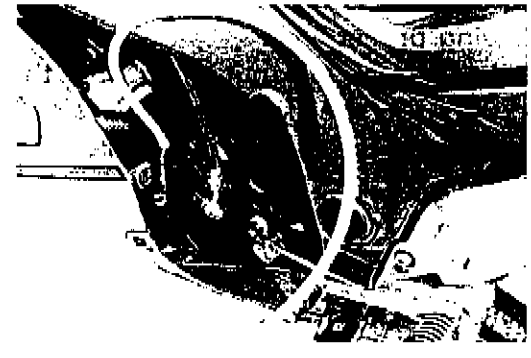
- Keep the motorcycle upright and place the handlebars straight.
- Check the clutch fluid level by observing the lower limit line on the clutch fluid reservoir.
- If the level is found to be lower than the lower mark, replenish with BRAKE FLUID that the following specification.

Specification and classification: DOT4

⚠ WARNING

The clutch system of this motorcycle is filled with a glycol-based brake fluid. Do not use or mix different types of fluid such as silicone-based or petroleum-based. Do not use any brake fluid taken from old, used or unsealed containers. Never re-use brake fluid left over from the last servicing or stored for a long periods. Check the clutch hose and hose joints for cracks and oil leakage.

BLEEDING AIR FROM THE CLUTCH FLUID CIRCUIT

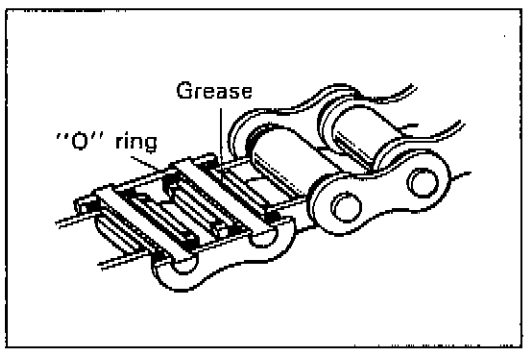


The clutch fluid circuit may be purged of air in the following manner.

- Keep the motorcycle upright and place the handlebars straight.
- Fill up the master cylinder reservoir to the upper end of the inspection window. Replace the reservoir cap to prevent entry of dirt.
- Attach a pipe to the bleeder valve and insert the free end of the pipe into a receptacle.
- Squeeze and release the clutch lever several times in rapid succession, and squeeze the lever fully without releasing it. Loosen the bleeder valve by turning it a quarter of a turn so that the fluid runs into the receptacle; this will remove the tension of the clutch lever causing it to touch the handlebar grip. Then, close the valve, pump and squeeze the lever, and open the valve. Repeat this process until the fluid flowing into the receptacle no longer contains air bubbles.
- Close the bleeder valve, and disconnect the pipe. Fill the reservoir with brake fluid to the upper end of the inspection window.

DRIVE CHAIN

Inspect Initially at 1000 km (600 miles, 2 months) and Every 6000 km (4000 miles, 12 months) thereafter. Lubricate Every 1000 km (600 miles).



Visually check the drive chain for the possible defects listed below. (Support the motorcycle by a jack and a wooden block, turn the rear wheel slowly by hand with the transmission shifted to Neutral.)

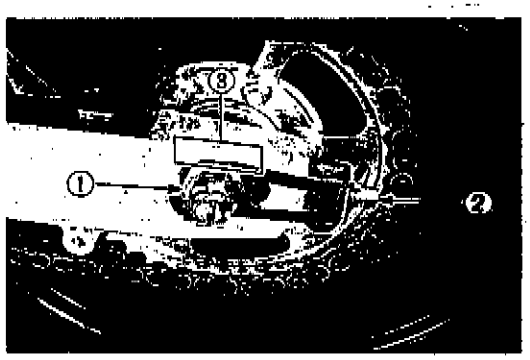
* Loose pins
* Damaged rollers
* Dry or rusted links
* Kinked or binding links
* Excessive wear
* Improper chain adjustment
* Missing O-ring seals

If any defects are found, the drive chain must be replaced.

NOTE:
When replacing the drive chain, replace the drive chain and sprockets as a set.

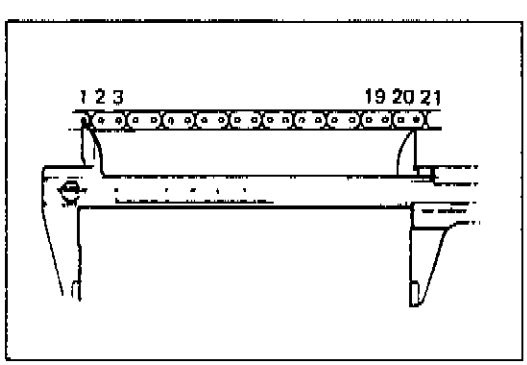
CHECKING

- Remove the axle cotter pin. (For E-03, 28 and 33 models)
- Loosen the axle nut ①.
- Tense the drive chain fully by turning both chain adjusters ②.



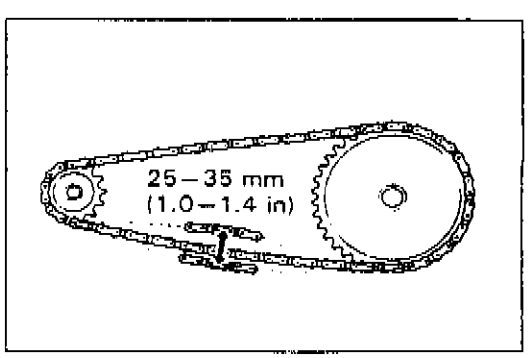
- Count out 21 pins (20 pitches) on the chain and measure the distance between the two points. If the distance exceeds the service limit, the chain must be replaced.

	Service Limit
Drive chain 20-pitch length	319.4 mm (12.6 in)



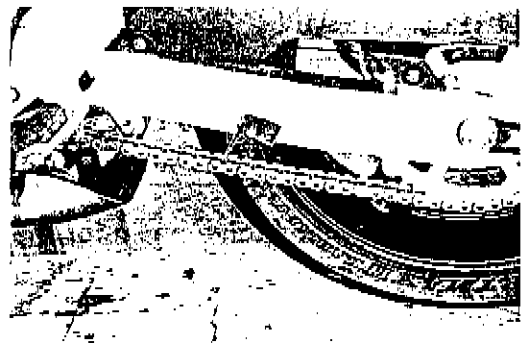
ADJUSTING

- Loosen or tighten both chain adjusters ② until the chain has 25—35 mm (1.0—1.4 in) of slack in the middle between engine and rear sprockets. The mark ③ on both chain adjusters must be at the same position on the scale to ensure that the front and rear wheels are correctly aligned.
- Place the motorcycle on its side-stand for accurate adjustment.
- After adjusting the drive chain, tighten the axle nut ① securely.
- Tighten both chain adjusters ② securely.



Rear axle nut: 100 N·m (10 kg-m, 72.5 lb-ft)

CLEANING AND LUBRICATING



- Wash the chain with kerosene. If the chain tends to rust quickly, the intervals must be shortened.

⚠ CAUTION

Do not use trichlene, gasoline or any similar fluids: These fluids have too great a dissolving power for this chain and, what is more important, they can damage the "O"-rings (or seals) confining the grease in the bush to pin clearance. Remember, high durability comes from the presence of grease in that clearance.

- After washing and drying the chain, oil it with a heavy-weight motor oil.

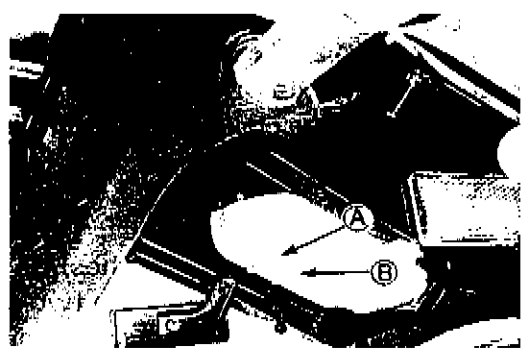
⚠ CAUTION

*** Do not use any oil sold commercially as "drive chain oil". Such oil can damage the "O"-rings (or seals).**
*** The standard drive chain TAKASAGO RK532GSV2. SUZUKI recommends that this standard drive chain should be used for the replacement.**

COOLING SYSTEM

Inspect Every 6000 km (4000 miles, 12 months).
Replace engine coolant Every 2 years.
Replace radiator hoses Every 4 years.

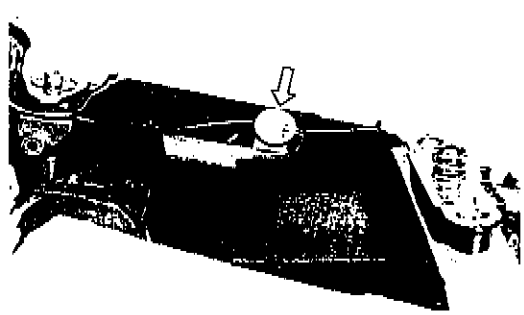
ENGINE COOLANT LEVEL



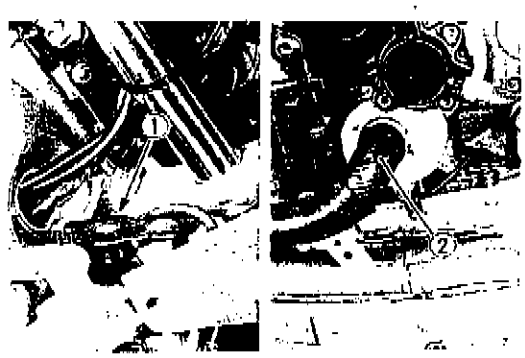
- Keep the motorcycle upright.
- Check the engine coolant level by observing the upper and lower limit lines on the engine coolant reservoir.
- If the level is below the lower limit line, add engine coolant to the upper limit line from the engine coolant reservoir filler.

Ⓐ Upper line Ⓑ Lower line

ENGINE COOLANT CHANGE



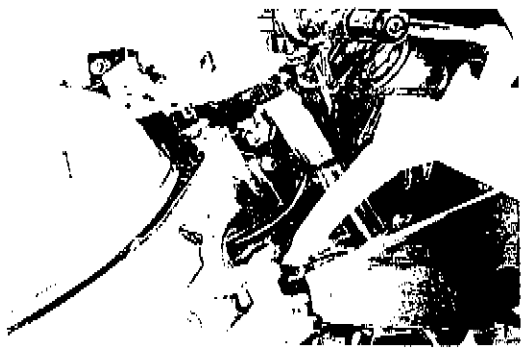
- Remove the seat, lower cowling assembly and right side of cowling upper panel. (Refer to pages 6-2 and 3.)
- Remove the radiator cap ① and disconnect the water hose ② , and drain engine coolant.



⚠ WARNING

*** Do not open the radiator cap when the engine is hot, as you may be injured by escaping hot liquid or vapor.**
*** Engine coolant may be harmful if swallowed or if it comes in contact with skin or eyes. If engine coolant gets into the eyes or in contact with the skin, flush thoroughly with plenty of water. If swallowed, induce vomitting and call physician immediately!**

- Flush the radiator with fresh water if necessary.
- Connect the water hose ② securely.
- Pour the specified engine coolant up to the radiator inlet.



NOTE:
For engine coolant information, refer to page 5-4.

- Close the radiator cap ① securely.
- After warming up and cooling down the engine, add the specified engine coolant up to the engine coolant reservoir.



⚠ CAUTION

Repeat above procedure several times and make sure that the radiator is filled with engine coolant up to the engine coolant reservoir.

Engine coolant capacity: 2450 ml (2.6/2.2 US/Imp qt)

BRAKE

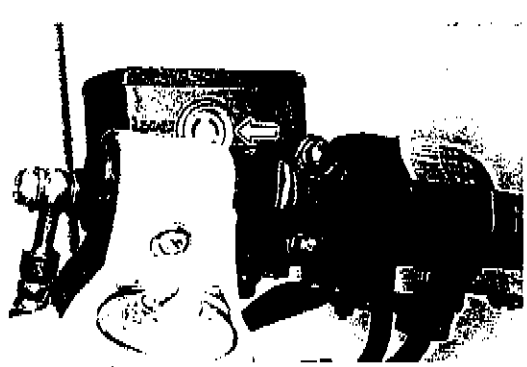
(BRAKE)
Inspect Initially at 1000 km (600 miles, 2 months) and Every 6000 km (4000 miles, 12 months) thereafter.

(BRAKE HOSE AND BRAKE FLUID)
Inspect Every 6000 km (4000 miles, 12 months). Replace hoses Every 4 years. Replace fluid Every 2 years.

BRAKE FLUID LEVEL

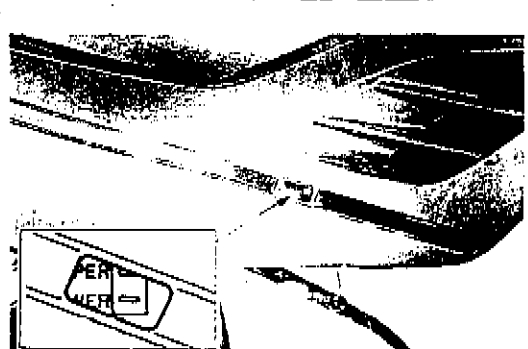
- Keep the motorcycle upright and place the handlebars straight.
- Check the brake fluid level by observing the lower limit lines on the front and rear brake fluid reservoirs.
- When the level is below the lower limit line, replenish with brake fluid that meets the following specification.

Specification and Classification: DOT4



⚠ WARNING

The brake system of this motorcycle is filled with a glycol-based brake fluid. Do not use or mix different types of fluid such as silicone-based or petroleum-based. Do not use any brake fluid taken from old, used or unsealed containers. Never re-use brake fluid left over from the last servicing or stored for a long period.

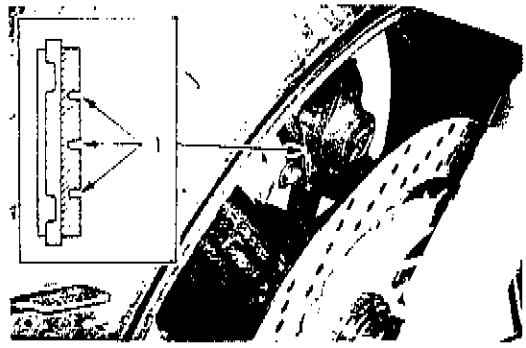


⚠ WARNING

Brake fluid, if it leaks, will interfere with safe running and immediately discolor painted surfaces. Check the brake hoses and hose joints for cracks and oil leakage before riding.

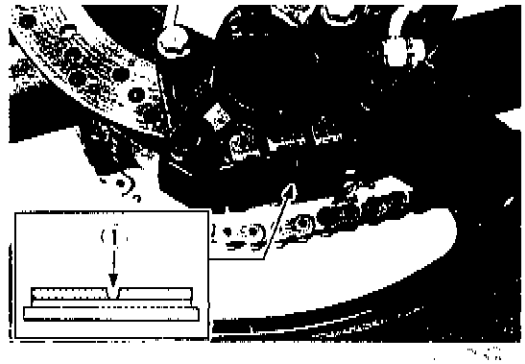
BRAKE PADS

The extent of brake pad wear can be checked by observing the grooved limit line ① on the pad. When the wear exceeds the grooved limit line, replace the pads with new ones. (Refer to pages 6-17 and 6-43.)



⚠ CAUTION

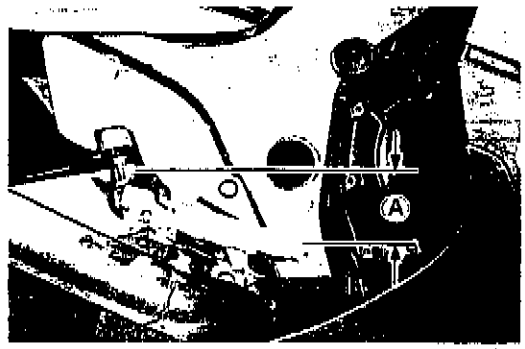
Replace the brake pad as a set, otherwise braking performance will be adversely affected.

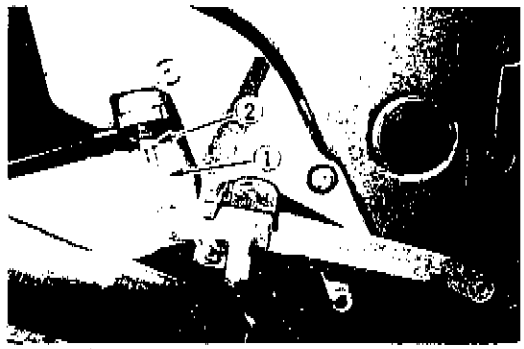


BRAKE PEDAL HEIGHT

- Loosen the lock nut ① and rotate the push rod ② to locate brake pedal 50—60 mm (2.0—2.4 in) Ⓐ below the top face of the footrest.
- Retighten the lock nut ① to secure the push rod ② in the proper position.

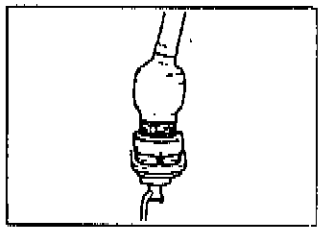
Brake pedal height Ⓐ: 50—60 mm (2.0—2.4 in)





BRAKE LIGHT SWITCH

Adjust the rear brake light switch so that the brake light will come on just before pressure is felt when the brake pedal is depressed.

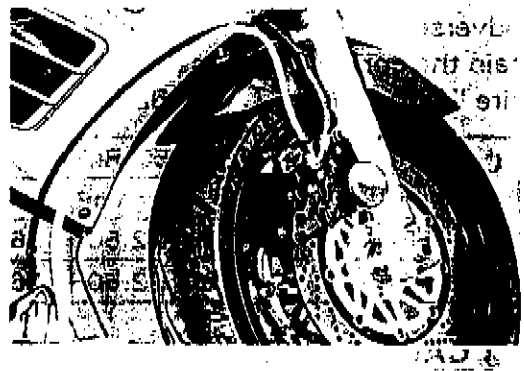


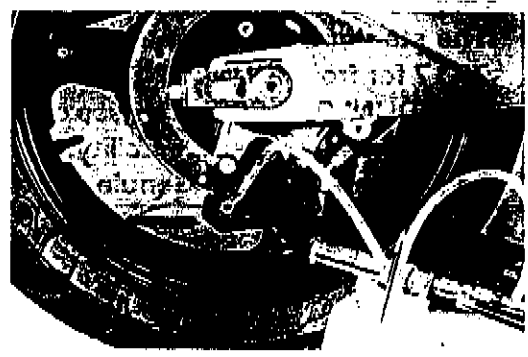


AIR BLEEDING THE BRAKE FLUID CIRCUIT

Air trapped in the fluid circuit acts like a cushion to absorb a large proportion of the pressure developed by the master cylinder and thus interferes with the full braking performance of the brake caliper. The presence of air is indicated by "sponginess" of the brake lever and also by lack of braking force. Considering the danger to which such trapped air exposes the machine and rider, it is essential that, after remounting the brake and restoring the brake system to the normal condition, the brake fluid circuit be purged of air in the following manner:

- Fill up the master cylinder reservoir to the "UPPER" line. Replace the reservoir cap to prevent entry of dirt.
- Attach a pipe to the caliper bleeder valve, and insert the free end of the pipe into a receptacle.
- Front brake: Bleed the air from the air bleeder valve.
- Squeeze and release the brake lever several times in rapid succession and squeeze the lever fully without releasing it. Loosen the bleeder valve by turning it a quarter of a turn so that the brake fluid runs into the receptacle; this will remove the tension of the brake lever causing it to touch the handlebar grip. Then, close the valve, pump and squeeze the lever, and open the valve. Repeat this process until the fluid flowing into the receptacle no longer contains air bubbles.





NOTE:
Replenish the brake fluid in the reservoir as necessary while bleeding the brake system. Make sure that there is always some fluid visible in the reservoir.

- Close the bleeder valve, and disconnect the pipe. Fill the reservoir with brake fluid to the "UPPER" end of the inspection window.

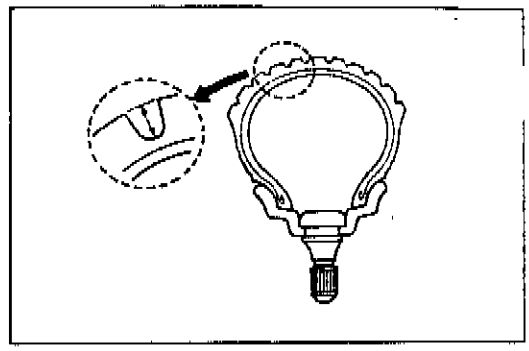
Air bleeder valve: 8 N·m (0.8 kg-m, 6.0 lb-ft)

⚠ CAUTION

Handle brake fluid with care: the fluid reacts chemically with paint, plastics, rubber materials etc.

- The only difference between bleeding the front and rear brakes is that the rear master cylinder is actuated by a pedal.

TIRE



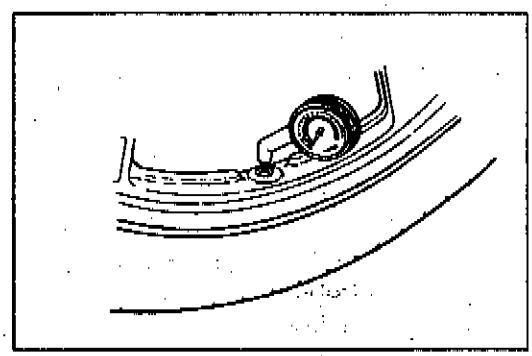
Inspect Every 6000 km (4000 miles, 12 months).

TIRE TREAD CONDITION

Operating the motorcycle with excessively worn tires will decrease riding stability and consequently invite a dangerous situation. It is highly recommended to replace a tire when the remaining depth of tire tread reaches the following specification.

Tire tread depth limit: FRONT 1.6 mm (0.06 in)
REAR 2.0 mm (0.08 in)

TIRE PRESSURE



If the tire pressure is too high or too low, steering will be adversely affected and tire wear increased. Therefore, maintain the correct tire pressure for good roadability or shorter tire life will result. Cold inflation tire pressure is as follows.

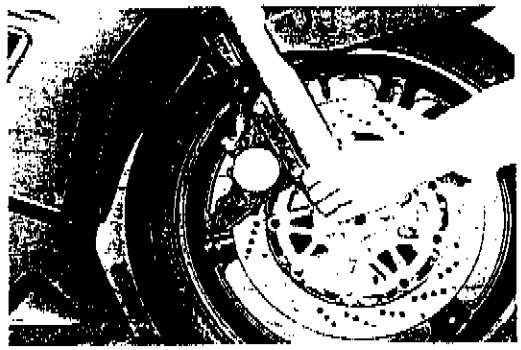
COLD INFLATION TIRE PRESSURE	SOLO RIDING			DUAL RIDING		
	kPa	kg/cm²	psi	kPa	kg/cm²	psi
FRONT	250	2.50	36	250	2.50	36
REAR	250	2.50	36	290	2.90	42

⚠ CAUTION

The standard tire fitted on this motorcycle is 120/70 ZR17 for front (DUNLOP D203F) and 170/60 ZR17 for rear (DUNLOP D203). The use of tires other than those specified may cause instability. It is highly recommended to use a SUZUKI Genuine Tire.

STEERING

Inspect Initially at 1000 km (600 miles, 2 months) and Every 12000 km (7500 miles, 24 months) thereafter.



Taper roller type bearings are used on the steering system for better handling. Steering should be adjusted properly for smooth turning of handlebars and safe running. Overtight steering prevents smooth turning of the handlebars and too loose steering will cause poor stability. Check that there is no play in the front fork assembly by supporting the machine so that the front wheel is off the ground, with the wheel straight ahead, grasp the lower fork tubes near the axle and pull forward. If play is found, perform steering bearing adjustment as described in page 6-31 of this manual.

FRONT FORK

Inspect Every 12000 km (7500 miles, 24 months).

Inspect the front forks for oil leakage, scoring or scratches on the outer surface of the inner tubes. Replace any defective parts, if necessary. (Refer to page 6-24.)

REAR SUSPENSION

Inspect Every 12000 km (7500 miles, 24 months).

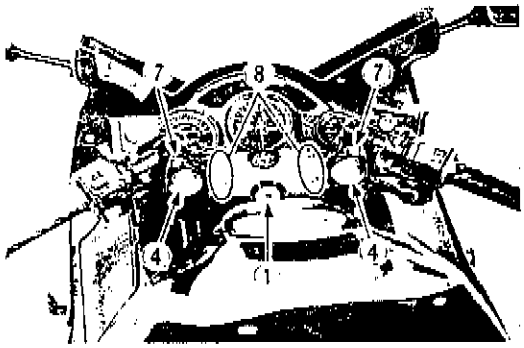
Inspect the rear shock absorber for oil leakage and check that there is no play in the swingarm assembly.

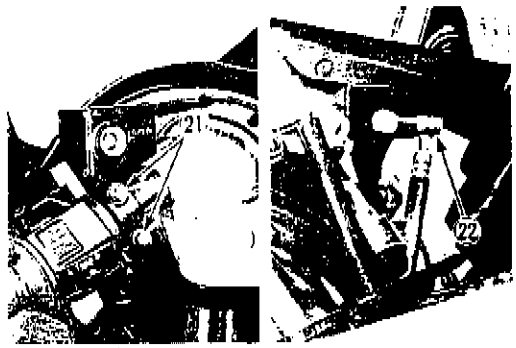
CHASSIS BOLTS AND NUTS

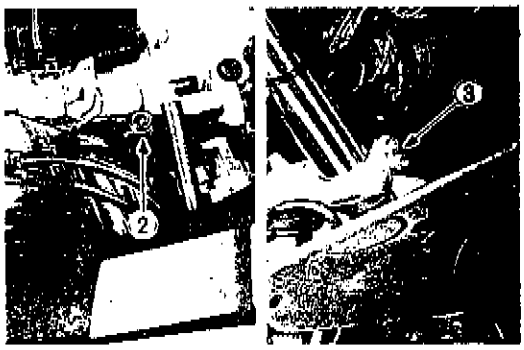
Tighten Initially at 1000 km (600 miles, 2 months) and Every 6000 km (4000 miles, 12 months) thereafter.

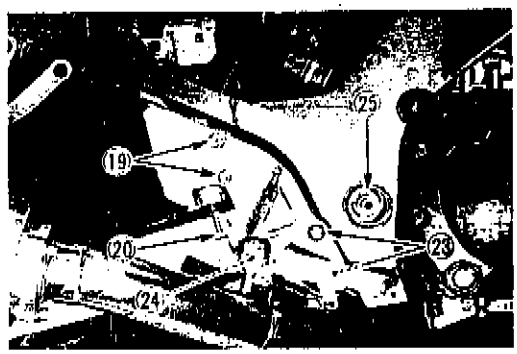
Check that all chassis bolts and nuts are tightened to their specified torque. (Refer to page 2-20 for the locations of the following nuts and bolts on the motorcycle.)

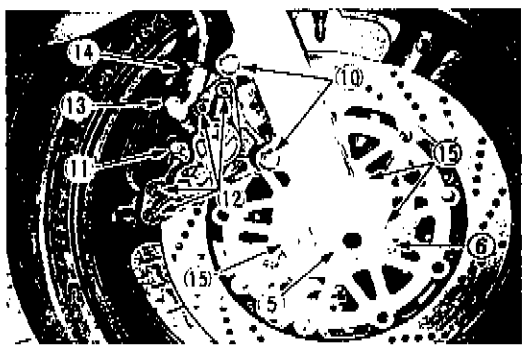
Item	N·m	kg-m	lb-ft
① Steering stem head bolt	65	6.5	47.0
② Front fork upper clamp bolt	23	2.3	16.5
③ Front fork lower clamp bolt	23	2.3	16.5
④ Front fork cap bolt	23	2.3	16.5
⑤ Front axle and nut	100	10.0	72.5
⑥ Front axle pinch bolt	23	2.3	16.5
⑦ Handlebar set bolt	23	2.3	16.5
⑧ Handlebar holder mounting nut	34	3.4	24.5
⑨ Front brake master cylinder mounting bolt	10	1.0	7.0
⑩ Front brake caliper mounting bolt	39	3.9	28.0
⑪ Front brake caliper pad mounting bolt	18	1.8	13.0
⑫ Front brake caliper housing bolt	23	2.3	16.5
⑬ Brake hose union bolt (Front & Rear)	23	2.3	16.5
⑭ Air bleeder valve (Front & Rear)	8	0.8	6.0
⑮ Brake disc bolt (Front & Rear)	23	2.3	16.5
⑯ Rear brake caliper pad mounting bolt	16	1.6	11.5
⑰ Rear brake caliper mounting bolt	25	2.5	18.0
⑱ Rear brake caliper housing bolt	33	3.3	24.0
⑲ Rear brake master cylinder mounting bolt	23	2.3	16.5
⑳ Rear brake master cylinder rod lock nut	18	1.8	13.0
㉑ Clutch master cylinder mounting bolt	10	1.0	7.0
㉒ Clutch hose union bolt	23	2.3	16.5
㉓ Front footrest bracket mounting bolt	25	2.5	18.0
㉔ Front footrest nut	54	5.4	39.0
㉕ Swingarm pivot nut	100	10.0	72.5
㉖ Rear shock absorber mounting nut (Upper & Lower)	50	5.0	36.0
㉗ Rear cushion lever/rod mounting nut	85	8.5	61.5
㉘ Rear axle nut	100	10.0	72.5
㉙ Rear sprocket nut	60	6.0	43.5

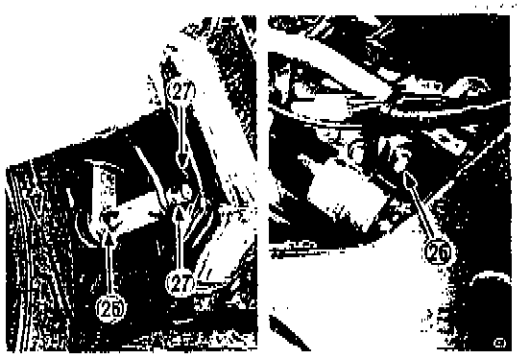

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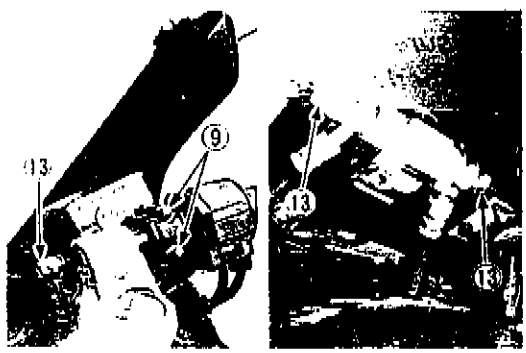

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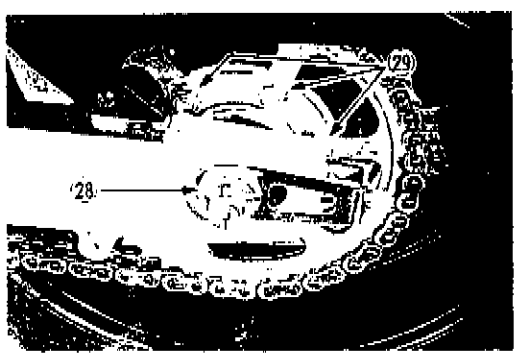

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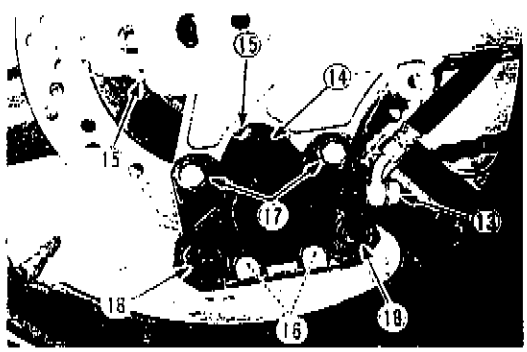

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COMPRESSION PRESSURE CHECK

The compression of a cylinder is a good indicator of its internal condition.
The decision to overhaul the cylinder is often based on the results of a compression test. Periodic maintenance records kept at your dealership should include compression readings for each maintenance service.

COMPRESSION PRESSURE SPECIFICATION

Standard	Limit	Difference
1000—1500 kPa (10—15 kg/cm²) 142—213 psi	800 kPa (8 kg/cm²) 114 psi	200 kPa (2 kg/cm²) 28 psi

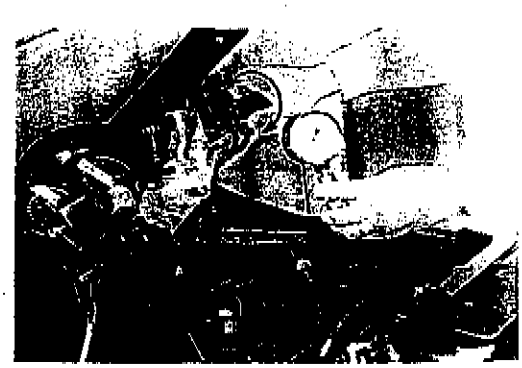
Low compression pressure can indicate any of the following conditions:
* Excessively worn cylinder wall
* Worn-down piston or piston rings
* Piston rings stuck in grooves
* Poor seating of valves
* Ruptured or otherwise defective cylinder head gasket

Overhaul the engine in the following cases:
* Compression pressure in one of the cylinders is less than 800 kPa (8 kg/cm², 114 psi).
* Difference in compression pressure between any two cylinders is more than 200 kPa (2 kg/cm², 28 psi).
* All compression pressure are below 1000 kPa (10 kg/cm², 142 psi) even when they measure more than 800 kPa (8 kg/cm², 114 psi).

COMPRESSION TEST PROCEDURE

NOTE:
* *Before testing the engine for compression pressure, make sure that the cylinder head bolts are tightened to the specified torque values and valves are properly adjusted.*
* *Have the engine warmed up by idling before testing.*
* *Be sure that the battery used is in fully-charged condition.*

Remove the parts concerned and test the compression pressure in the following manner.
- Remove the seat and fuel tank. (Refer to pages 6-4 and 4-5.)
- Remove all the spark plugs.
- Fit the compression gauge in one of the plug holes, while taking care that the connection tight.
- Keep the throttle grip in full-open position.
- While cranking the engine a few seconds with the starter, and record the maximum gauge reading as the compression of that cylinder.
- Repeat this procedure with the other cylinders.



TOOL 09915-64510: Compression gauge
09915-63310: Adaptor

OIL PRESSURE CHECK

Check periodically the oil pressure in the engine to judge roughly the condition of the moving parts.

OIL PRESSURE SPECIFICATION

Above 300 kPa (3.0 kg/cm², 43 psi) **Below 600 kPa (6.0 kg/cm², 85 psi)**	**at 3000 r/min., Oil temp. at 60°C (140°F)**

If the oil pressure is lower or higher than the specification, the following causes may be considered.

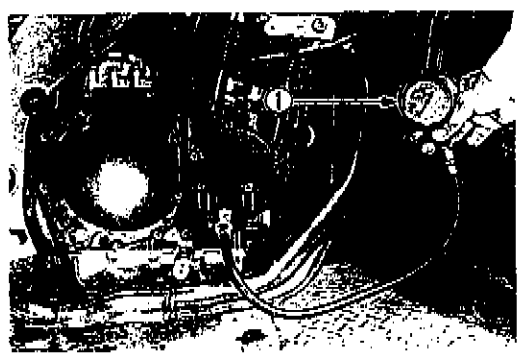
LOW OIL PRESSURE
* Clogged oil filter
* Oil leakage from the oil passage way
* Damaged O-ring
* Defective oil pump
* Combination of above items

HIGH OIL PRESSURE
* Used a engine oil which is too high viscosity
* Clogged oil passage way
* Combination of above items

OIL PRESSURE TEST PROCEDURE

Start the engine and check if the oil pressure indicator light is turned on. If it keeps on lighting, check the oil pressure indicator light circuit. If it is in good condition, check the oil pressure in the following manner.

- Remove the lower cowling.
- Remove the main oil gallery plug.
- Install the oil pressure gauge ① with adaptor in the position shown in the figure.
- Warm up the engine as follows:
  Summer 10 min. at 2000 r/min.
  Winter 20 min. at 2000 r/min.
- After warming up, increase the engine speed to 3000 r/min. (with the engine tachometer), and read the oil pressure gauge.



TOOL **09915-74510: Oil pressure gauge**
09915-74540: Adaptor
09915-77330: Meter (for high pressure)

ENGINE

3

CONTENTS

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ENGINE COMPONENTS REMOVABLE WITH ENGINE IN PLACE

The parts listed below can be removed and reinstalled without removing the engine from the frame. Refer to the page listed in each section for removal and reinstallation instructions.

ENGINE CENTER

	See page
Radiator	3- 4
Exhaust pipe/muffler	3- 5
Oil pressure switch	3-53
Oil hose	3-11
Oil filter	3-10
Oil cooler	3-10
Oil pan	3-17
Engine oil pressure regulator	3-52
Oil sump filter	3-18
Carburetors	3- 3
Cam chain tensioner	3-11 and 65
Cylinder head cover	3-10 and 67
Cylinder head breather cover	3-10
Camshafts	3-11 and 62
Cylinder head	3-12 and 61
Cylinder	3-12 and 61
Water pipe (Front side)	3-10 and 67
Water pipe (Rear side)	3-10 and 67
Pistons	3-13 and 60
Starter motor	3-13 and 59
Generator	3-13 and 59
Starter clutch cover	3-13 and 58
Starter idle gear	3-14 and 58
Starter clutch	3-14 and 47

ENGINE LEFT SIDE

	See page
Gearshift lever	3- 5
Engine sprocket cover	3- 5
Water pump	3-17
Engine sprocket and drive chain	3- 6
Neutral indicator switch body	3-17

ENGINE RIGHT SIDE

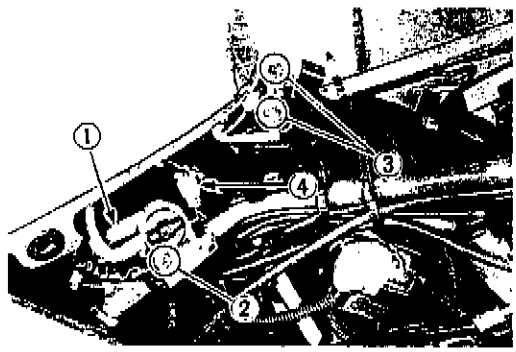
	See page
Clutch cover	3-14 and 56
Signal generator	3-14 and 57
Clutch pressure, drive and driven plates	3-15 and 55
Clutch sleeve hub	3-15 and 55
Oil pump driven gear	3-16 and 54
Generator/oil pump drive gears	3-16 and 55
Primary driven gear	3-16 and 55
Gearshift shaft	3-16 and 54
Gearshift cam shifter	3-17 and 53

ENGINE REMOVAL AND REINSTALLATION

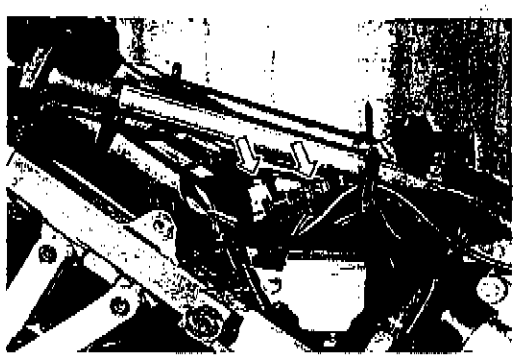
ENGINE REMOVAL

Before taking the engine out of the frame, wash the engine with a steam cleaner. The procedure of engine removal is sequentially explained in the following steps, and engine installation is effected by reversing the removal procedure.

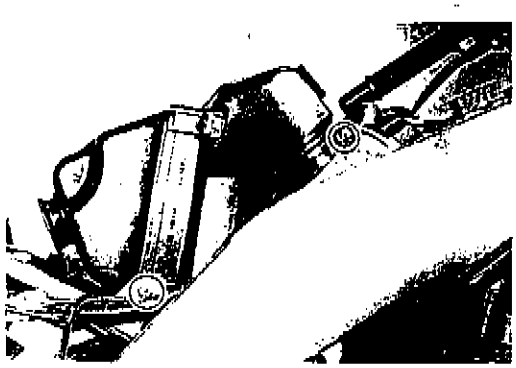
- Remove the oil drain plug to drain out engine oil.
- Remove the front and rear seats.
- Remove the frame cover assembly. (See page 6-5.)
- Remove the lower cowling assembly. (See page 6-2.)
- Turn the fuel cock to "OFF" position and disconnect the fuel hose ① from the fuel cock.
- Remove the fuel cock mounting screw ②.
- Remove the fuel tank mounting bolts ③.
- Disconnect the fuel level indicator switch lead wire coupler ④ and remove the fuel tank.



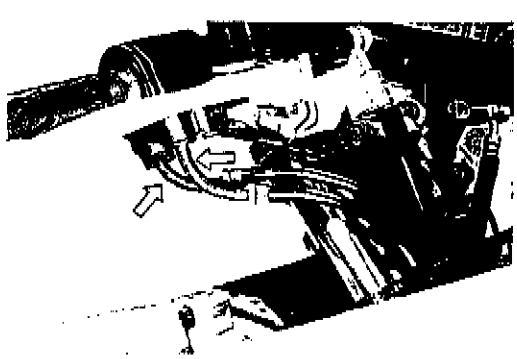
- Disconnect the battery ⊖ lead wire terminal and battery ⊖ lead wire coupler.



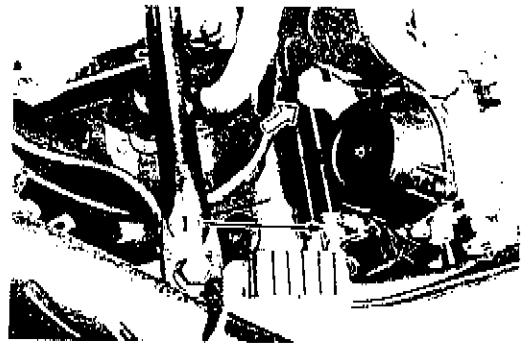
- Loosen the respective carburetor clamp screws (air cleaner side).
- Remove the air cleaner box by removing its mounting screws, left and right.



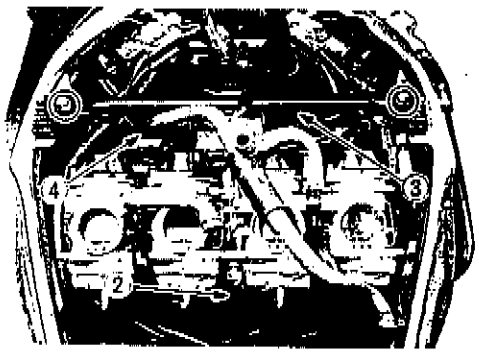
- Disconnect the throttle cables from the throttle grip.



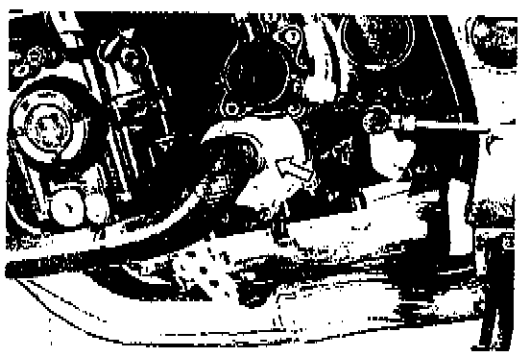
- Disconnect the starter cable ① from the carburetor assembly.



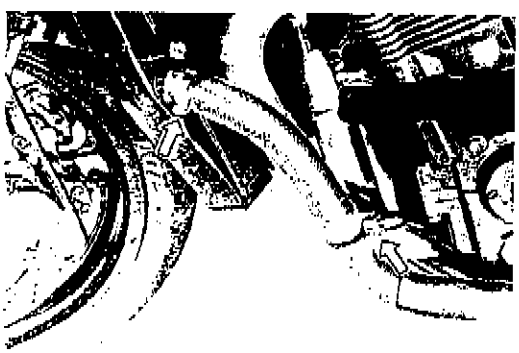
- Disconnect the fuel hose ② from the carburetor assembly.
- Remove the frame strut bar ③ by removing its mounting bolts.
- Disconnect the breather hose ④.
- Loosen the respective carburetor clamp screws (engine side) and remove the carburetor assembly.



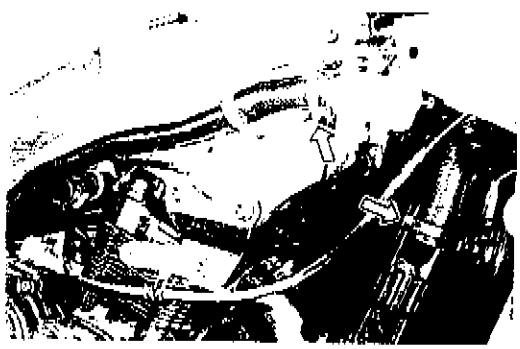
- Disconnect the water hose by loosening its clamp to drain out engine coolant.



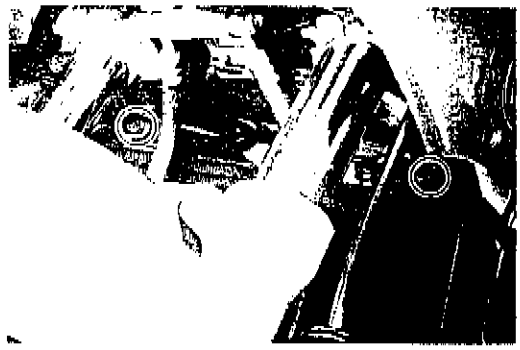
- Disconnect the water hoses by loosening their clamps.

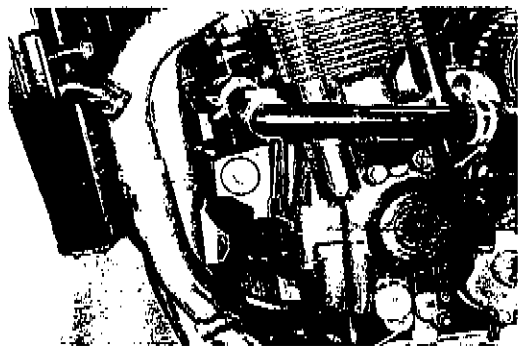




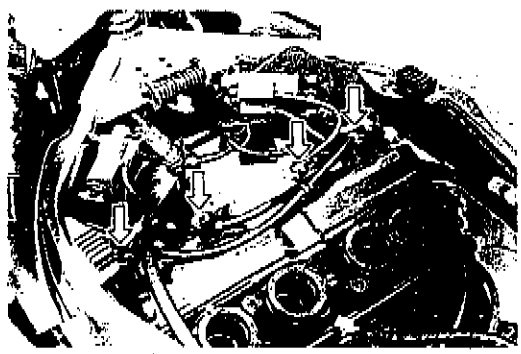


- Remove the radiator by removing its mounting bolts.

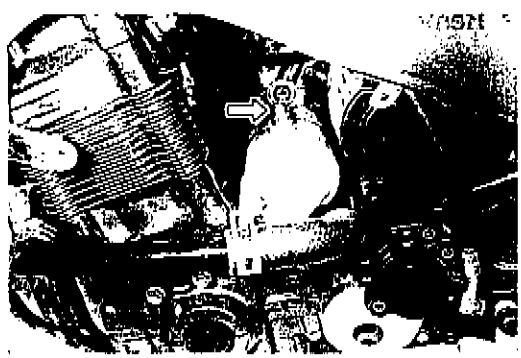




- Disconnect all the spark plug caps.

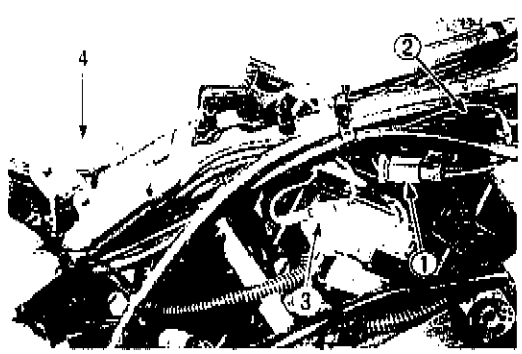


- Disconnect the starter motor lead wire.

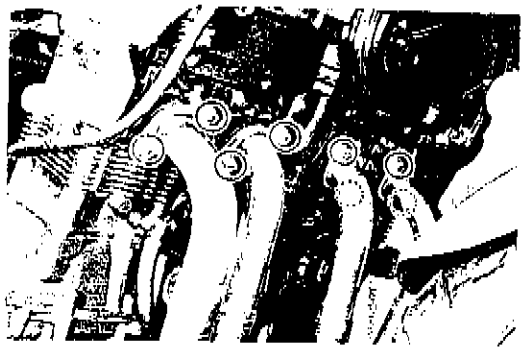


- Disconnect the various lead wires.

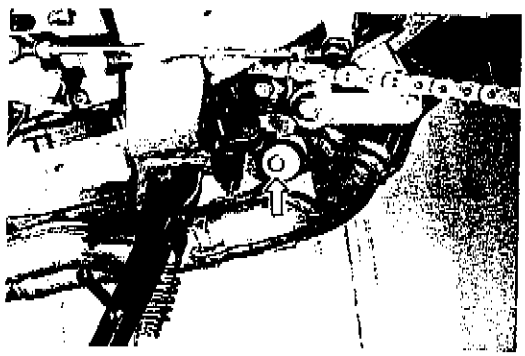
  ① Signal generator
  ② Generator
  ③ Oil pressure switch
  ④ Neutral switch

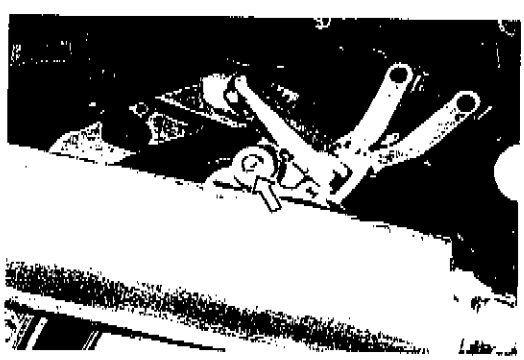


- Remove the eight exhaust pipe clamp bolts.

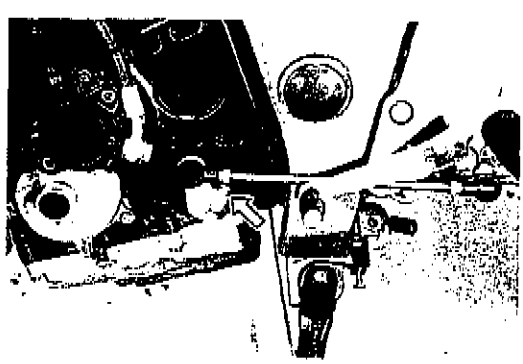


- Remove the muffler mounting bolts, then remove the exhaust pipe/muffler assembly.





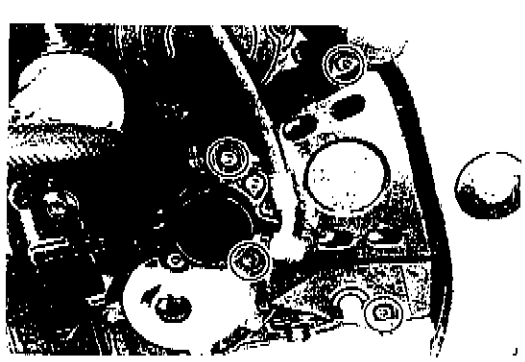
- Remove the gearshift lever by removing its mounting bolt.



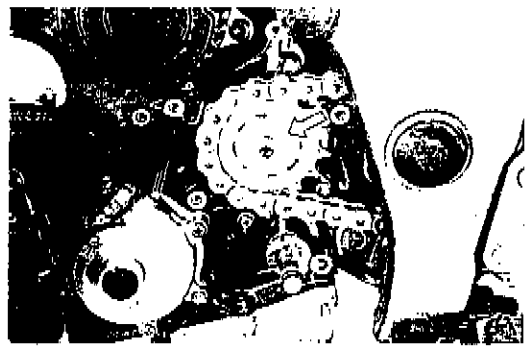
- Remove the engine sprocket cover by removing the bolts.

⚠ CAUTION

Do not operate the clutch lever to prevent clutch piston retainer damage.

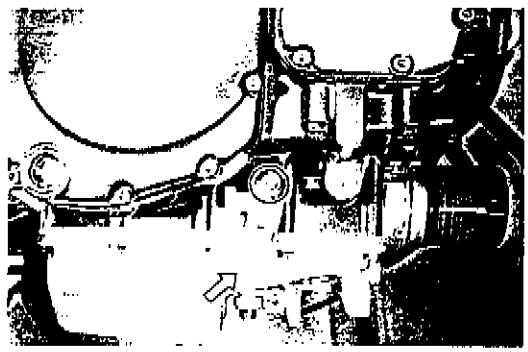


- Remove the engine sprocket nut while depressing the rear brake pedal.
- Remove the engine sprocket.

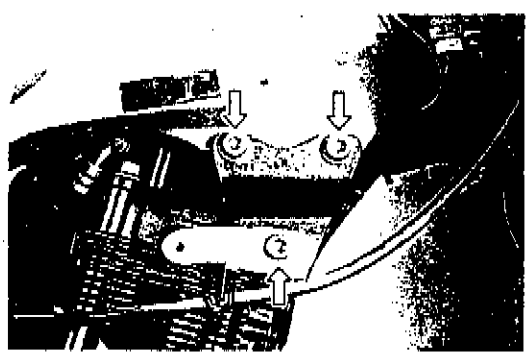


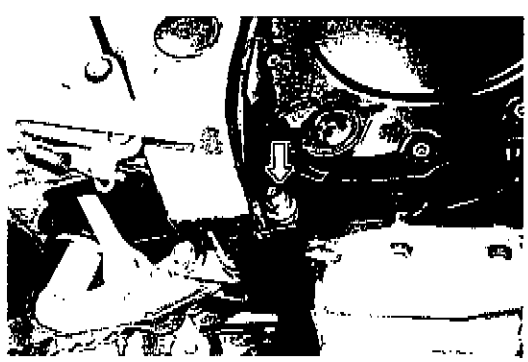
NOTE:
If it is difficult to remove the engine sprocket, loosen the axle nut and chain adjusters to provide additional chain slack.

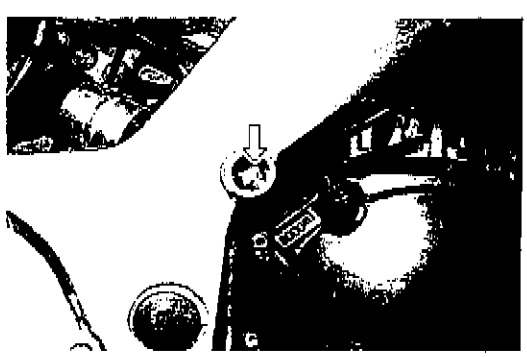
- Remove the lower cowling brackets, left and right.



- Support the engine with a proper engine jack.
- Remove the engine mounting bolts, nuts, spacers and brackets.
- Gradually lower the engine assembly.







ENGINE REINSTALLATION

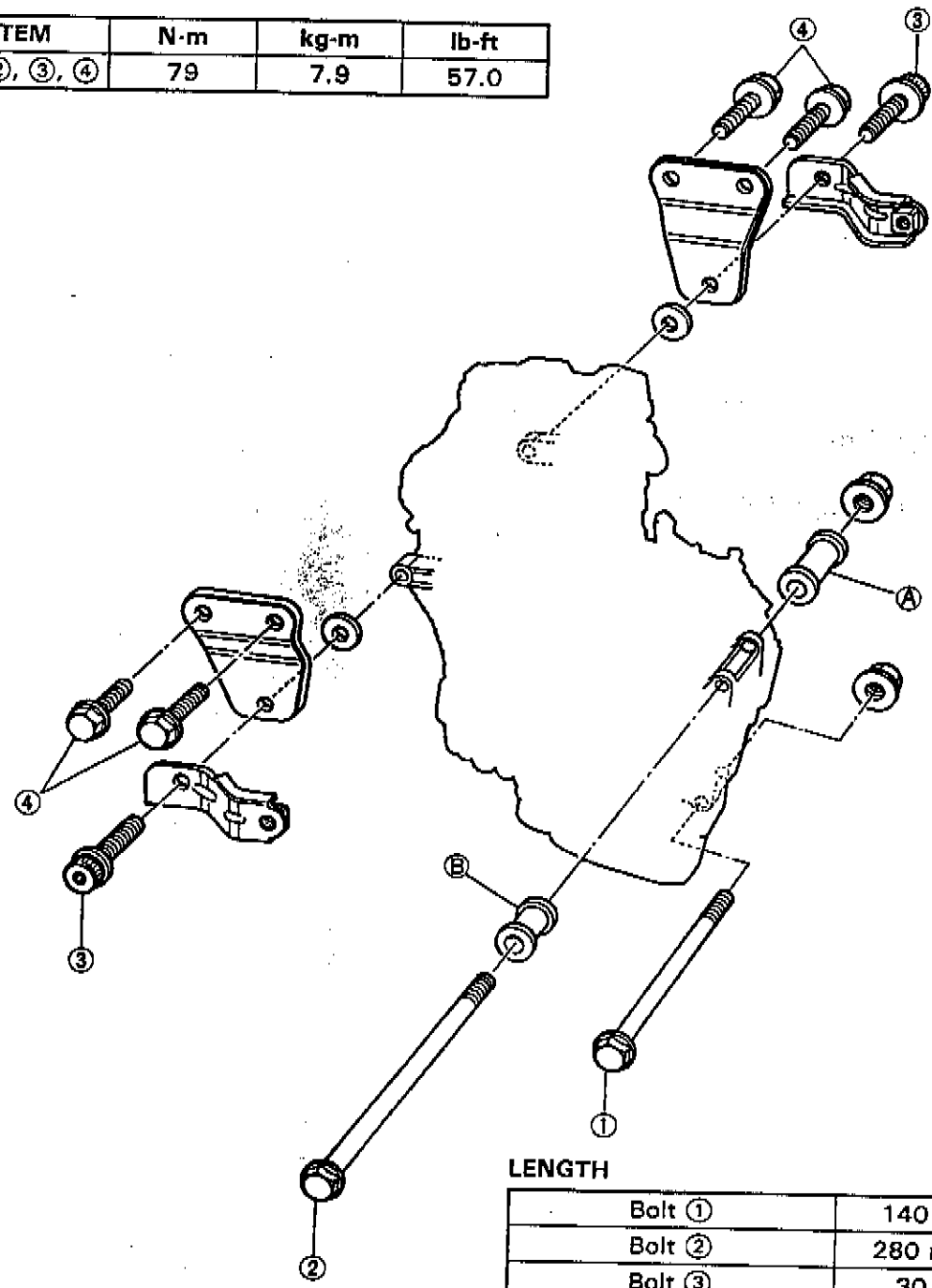
Reinstall the engine in the reverse order of engine removal.

- Insert the two long bolts from left side. Install the brackets, spacers, bolts and nuts properly, as shown in the following illustration.

NOTE:

The engine mounting nuts are self-locking. Once the nut has been removed, it is no longer of any use. Be sure to use new nuts and tighten them to the specified torque.

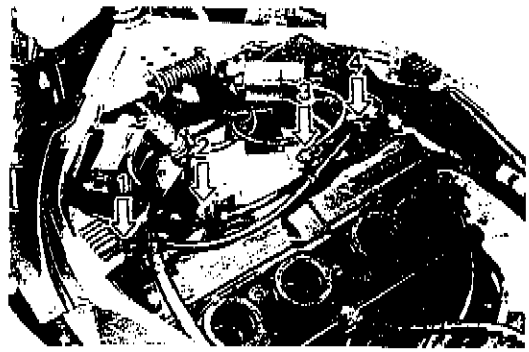
ITEM	N·m	kg-m	lb-ft
①, ②, ③, ④	79	7.9	57.0



LENGTH

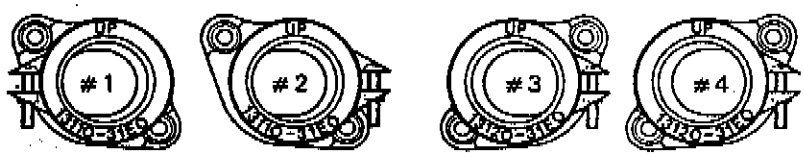
Bolt ①	140 mm (5.5 in)
Bolt ②	280 mm (11.0 in)
Bolt ③	30 mm (1.2 in)
Bolt ④	30 mm (1.2 in)
Spacer RH Ⓐ	65 mm (2.6 in)
Spacer LH Ⓑ	45 mm (1.8 in)

- Replace the plug caps on the spark plugs so that their code markings correspond to the cylinder numbers arranged in the order of **1**, **2**, **3**, and **4** from the left hand.

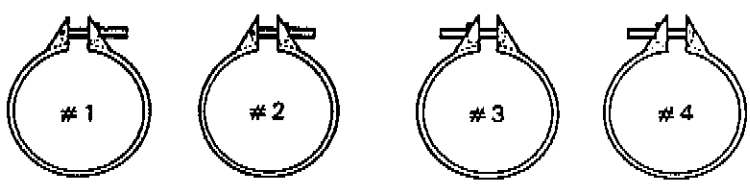


- Locate the carburetor clamps, as shown in the illustration.

Carburetor clamp position (Engine side)

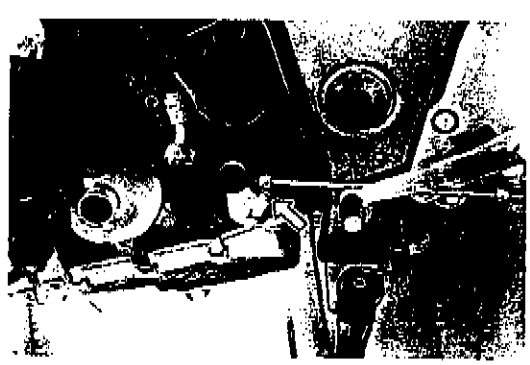


L.H ← → R.H



Carburetor clamp position (Air cleaner side)

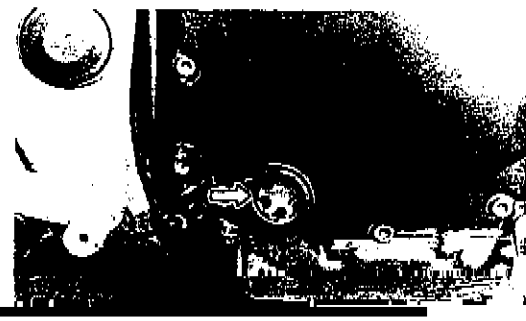
- Install the gearshift lever to the gearshift shaft in the correct position.



- After remounting the engine, route wiring harnesses, cables and hoses properly by referring to the sections, for wire routing, cable routing and hose routing. (See pages 8-12 through 23.)
- Adjust the following items to the specification.

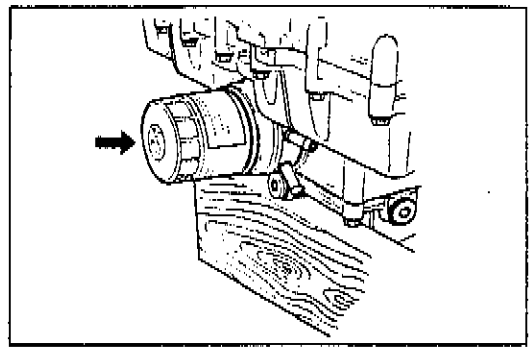
	Page
* Filling engine coolant	2-13
* Throttle cable play	2-10
* Idling adjustment	4-18
* Balancing carburetors	4-17
* Drive chain	2-12

- Pour 3.9 L (4.1/3.4 US/Imp qt) of engine oil SAE 10W/40 graded SE or SF into the engine after overhauling engine.
- Start up the engine and allow it run for several minutes at idle speed. About several minutes after stopping engine, check that the oil level remains between the marks of oil level inspection window.



Change	3000 ml (3.2/2.6 US/Imp qt)
[illegible]	[illegible]

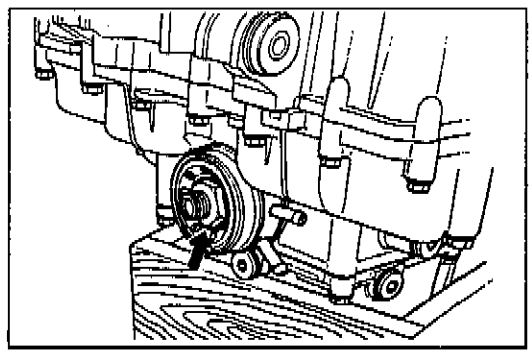
ENGINE DISASSEMBLY



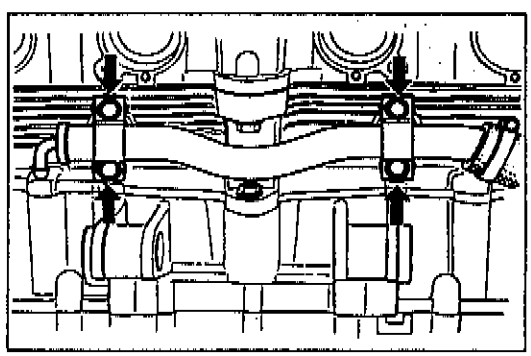
- Remove the oil filter by using the special tool.

09915-40610: Oil filter wrench

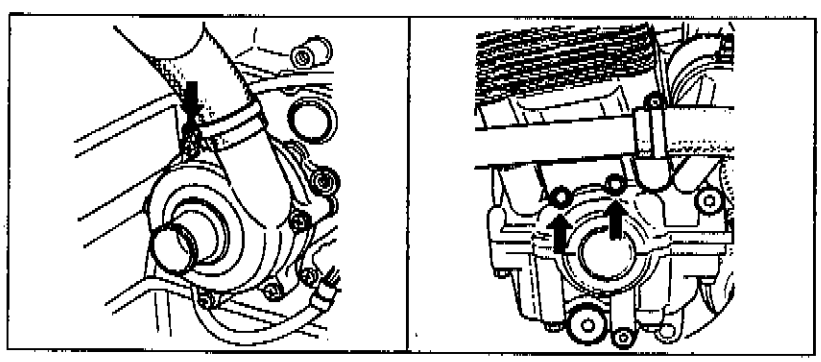
NOTE:
Refer to page 2-9 for installation procedures.

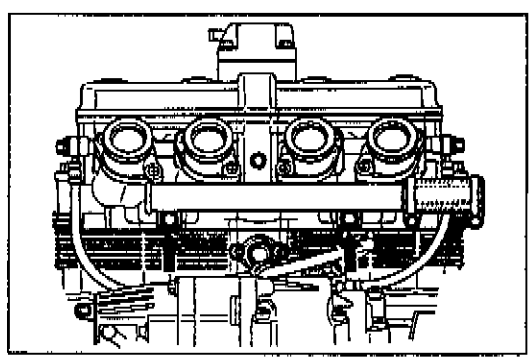


- Remove the oil cooler by removing its union bolt.



- Remove the inlet and outlet water pipes/hoses by removing the mounting bolts and clamp screws.

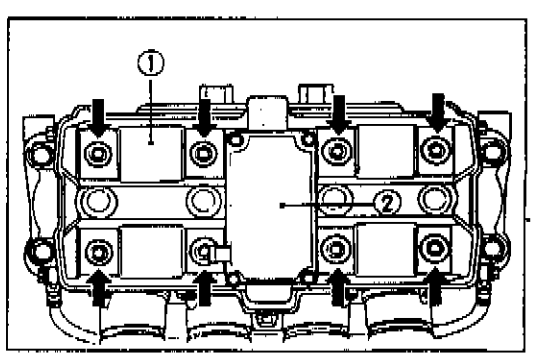




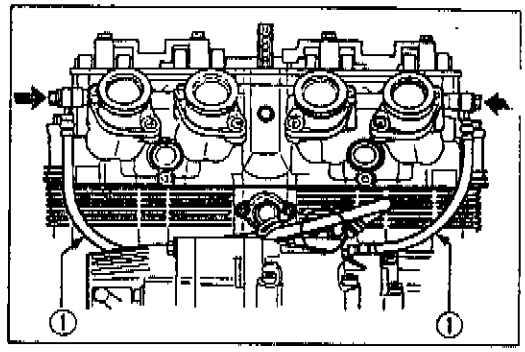
- Remove the cylinder head cover ① by removing the bolts.

NOTE:
The cylinder head breather cover ② is to be removed only when replacing it or when removing the engine from the frame.

09914-25811: 6 mm "T" type hexagon wrench

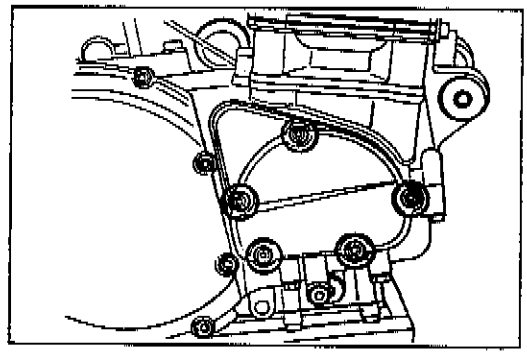


- Remove the left and right oil hoses ① by removing the union bolts.

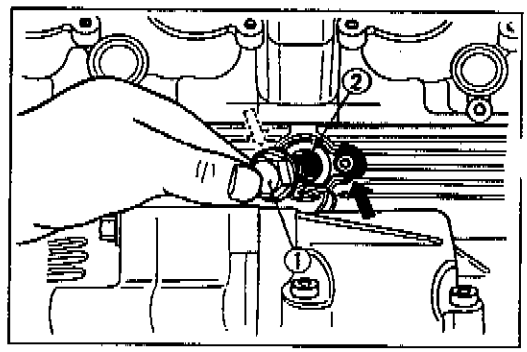


- Remove the signal generator cover by removing the bolts.

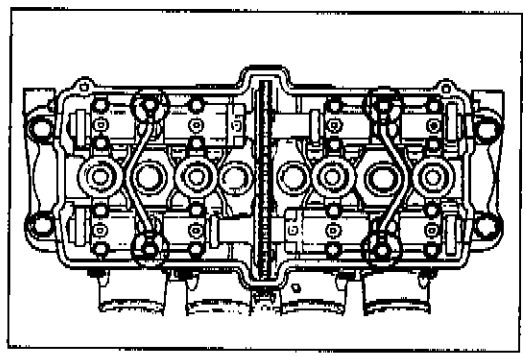
TOOL 09911-73730: 5 mm "T" type hexagon wrench



- After removing the spring holder bolt ① and spring ②, remove the cam chain tensioner by removing the mounting bolts.



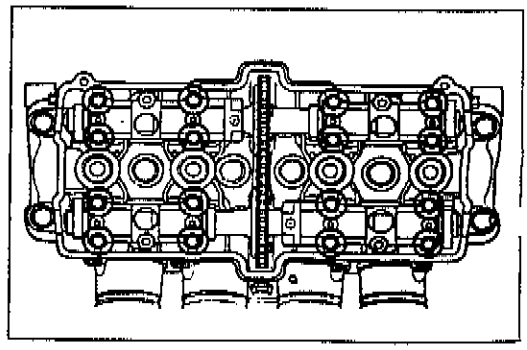
- Remove the left and right oil pipes by removing the bolts.



- Remove the four camshaft journal holders by removing the bolts.

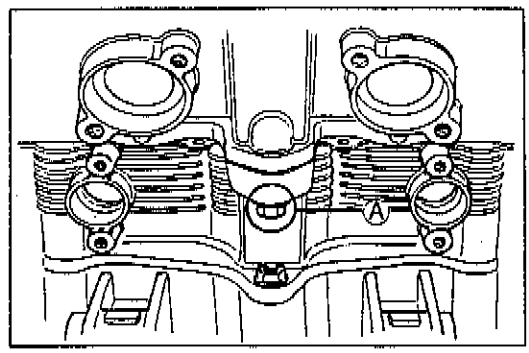
NOTE:
Be sure to loosen camshaft journal holder bolts evenly by shifting the wrench diagonally.

- Remove the two camshafts, intake and exhaust.



- The cylinder head becomes free for removal when its one 6-mm bolt Ⓐ and twelve 10-mm bolts are removed.

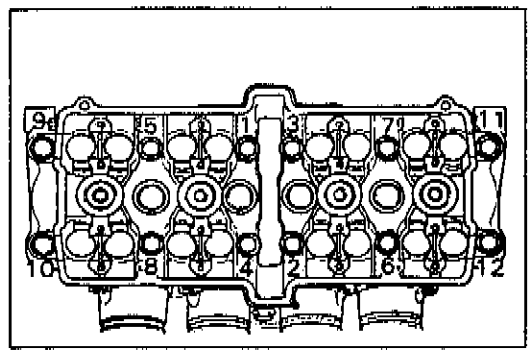
TOOL 09911-74520: Long socket 12 mm
09914-24510: T-handle



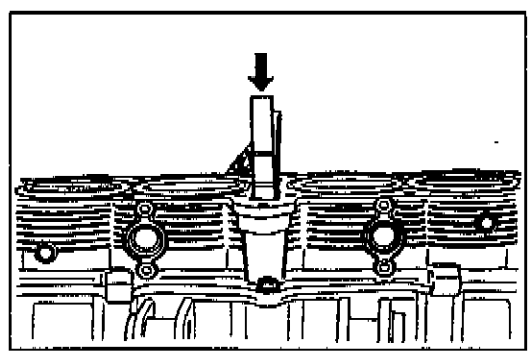
NOTE:
When loosening the cylinder head bolts, loosen each bolt little by little, in a descending order, according to the numbers.

⚠ CAUTION

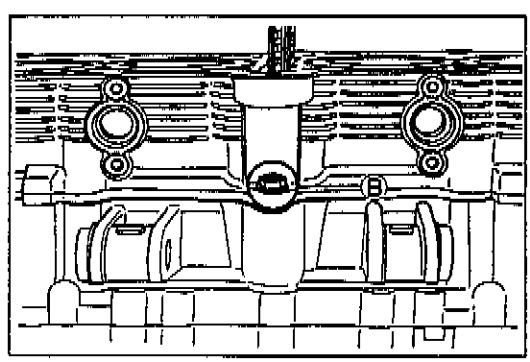
Be careful not to damage the fins when removing or handling the cylinder head. This precaution applies to the cylinder block also.



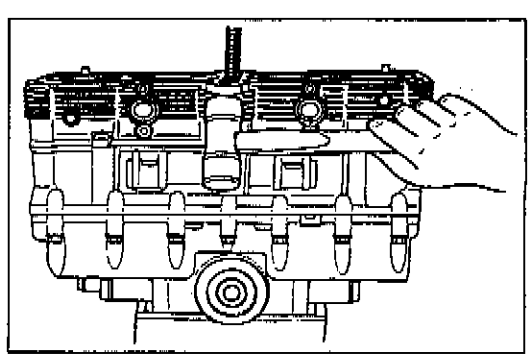
- Remove the cam chain guide.



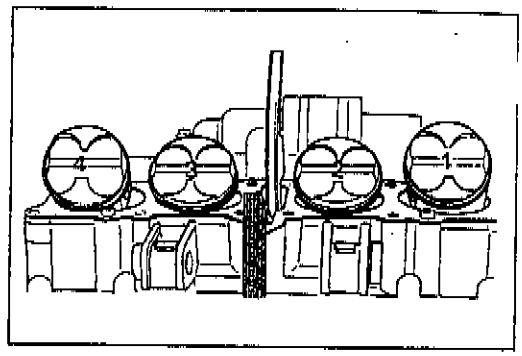
- Remove the cylinder nut Ⓑ.



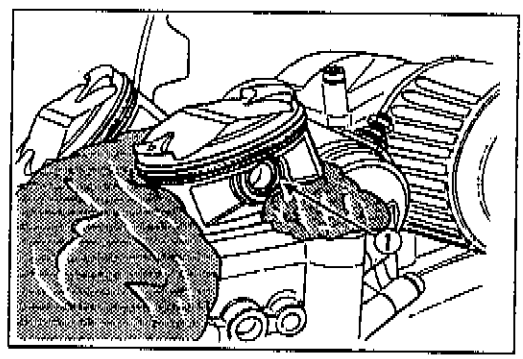
- Firmly grip the cylinder block at both ends, and lift it straight up. If the block does not come off, lightly tap on the finless portions of the block with a plastic mallet to make the gasketed joint loose.



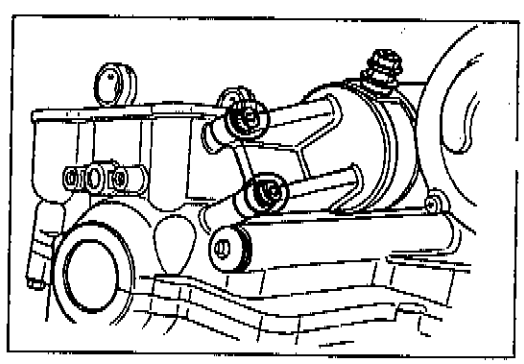
- Scribe the cylinder number on the head of the respective pistons.



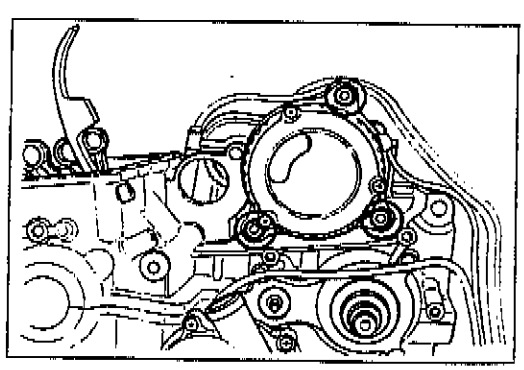
- Place a cloth beneath the piston so as not to drop any parts in the crankcase, and remove the circlip ① with long-nose pliers.
- Draw out the piston pin. Place each piston pin in the same piston as that it was removed from.



- Remove the starter motor by removing the bolts.

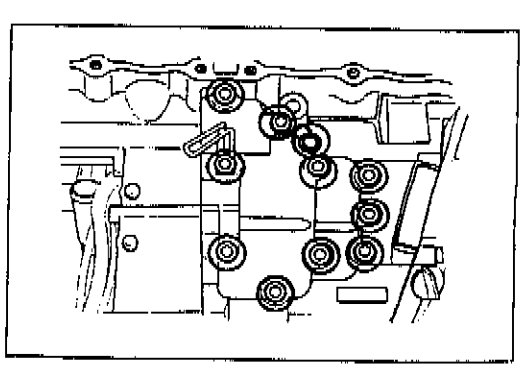


- Remove the generator by removing the bolts.

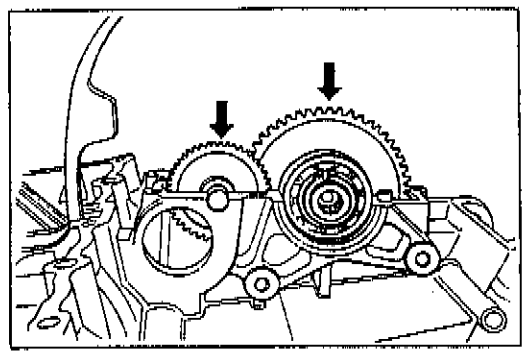


- Remove the starter clutch cover by removing the bolts.

TOOL **09911-73730: 5 mm "T" type hexagon wrench**

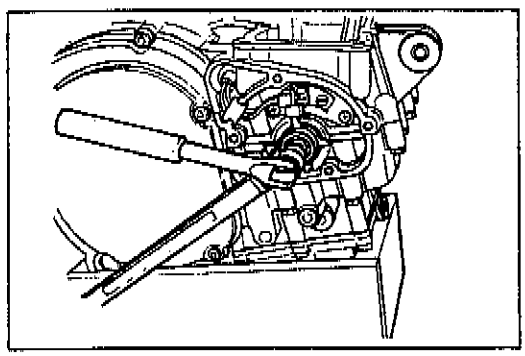


- Remove the starter idle gear and its shaft.
- Remove the starter clutch assembly.

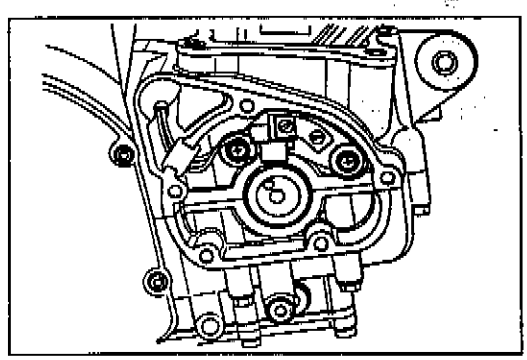


- Remove the signal generator rotor by removing the bolt.

TOOL **09900-00410: Hexagon wrench set**

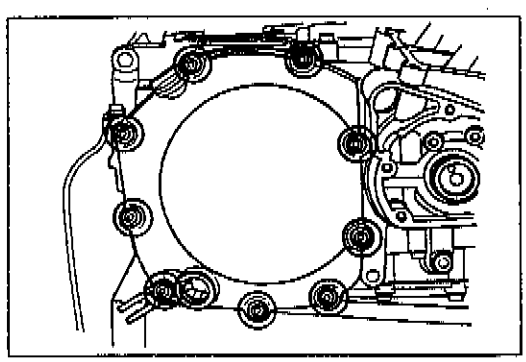


- Remove the signal generator stator by removing the two screws.



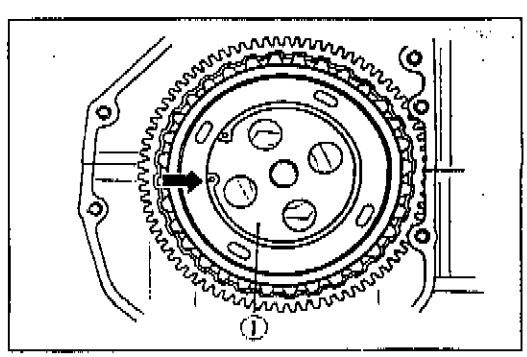
- Remove the clutch cover by removing the bolts.

TOOL **09911-73730: 5 mm "T" type hexagon wrench**



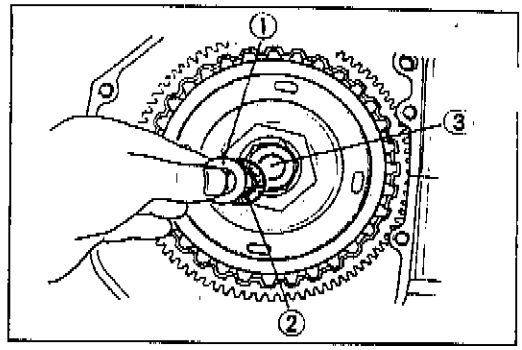
- Remove the clutch pressure plate lifter ① by removing the circlip.

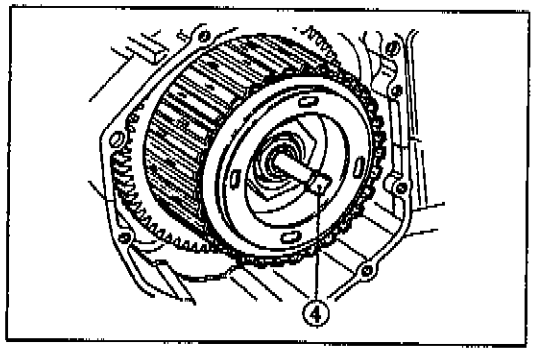
TOOL **09900-06108: Snap ring pliers**

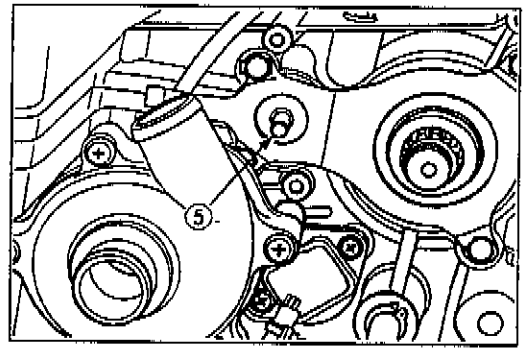


- After removing the clutch pressure plate lifter, remove the thrust washer ①, bearing ② and clutch push piece ③, and draw out the clutch push rods, ④ and ⑤.

NOTE:
If it is difficult to draw out the push rod ④, use a magnetic hand or wire.

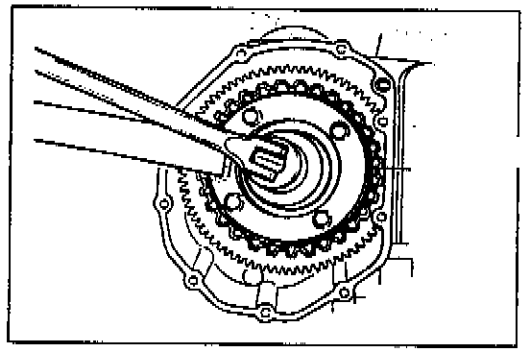




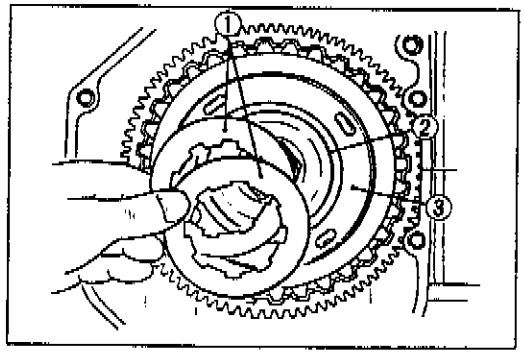


- Remove the clutch diaphragm spring holder nut with the special tools.

TOOL 09920-34820: Clutch pressure plate holder
09941-58010: 50 mm socket wrench

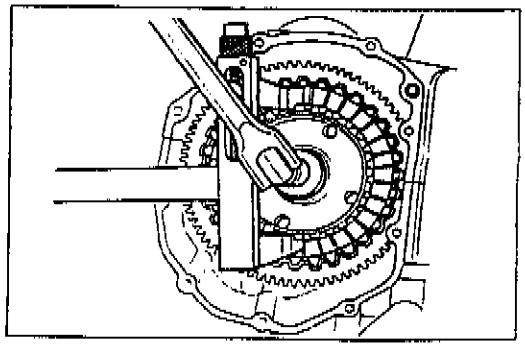


- After removing the clutch diaphragm spring holder nut, remove the clutch diaphragm springs ①, clutch diaphragm spring seat ② and clutch pressure plate ③.

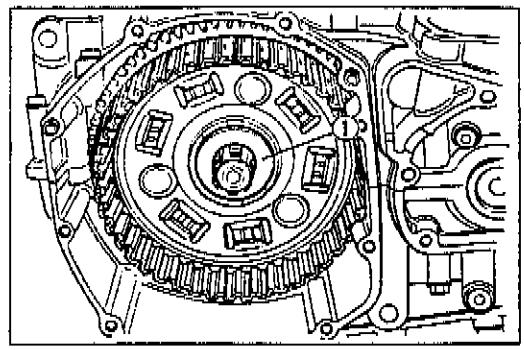


- After removing the several clutch plates, remove the clutch sleeve hub nut after firmly locking the clutch sleeve hub with a clutch sleeve hub holder, and then remove the remainder of clutch drive and driven plates along with the clutch sleeve hub.

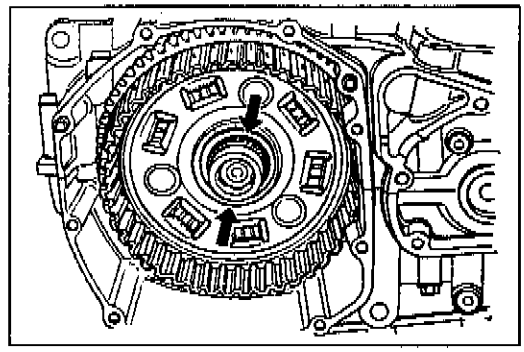
TOOL 09920-53740: Clutch sleeve hub holder



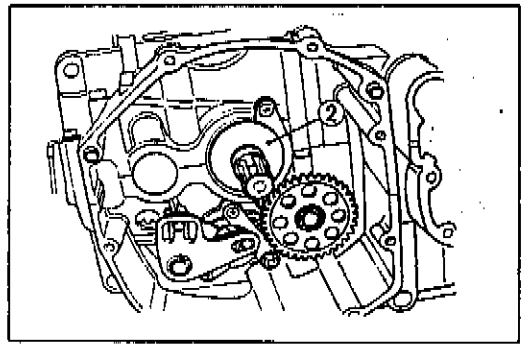
- Remove the thrust washer ① .



- With the spacer and bearing removed, the primary driven gear (integral with the clutch housing) is free to disengage from the primary drive gear.
- Remove the primary driven gear assembly with the generator/oil pump drive gears.



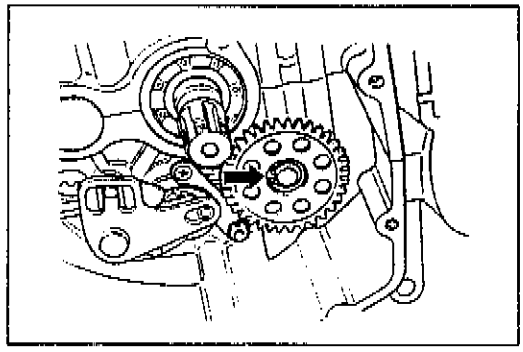
- Remove the thrust washer ② .



- Remove the oil pump driven gear by removing the circlip.

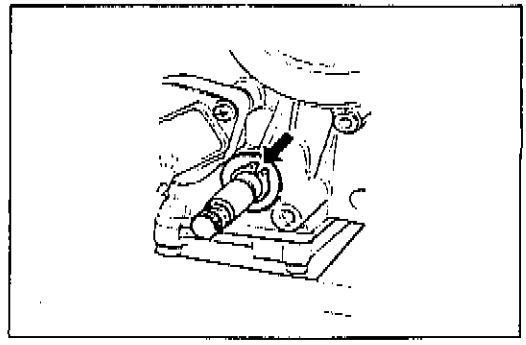
09900-06107: Snap ring pliers

NOTE:
Do not lose the circlip, pin and washers.

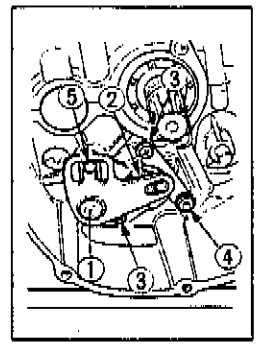


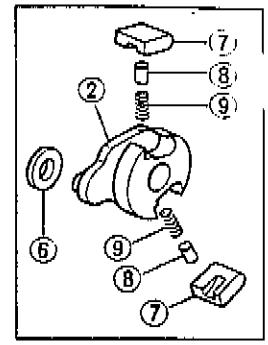
- Remove the circlip and washer from the gearshift shaft.

09900-06107: Snap ring pliers



- Draw out the gearshift shaft/gearshift arm ① , and then remove the cam shifter ② by removing the screws ③ , nut ④ and arm stopper bolt ⑤ .

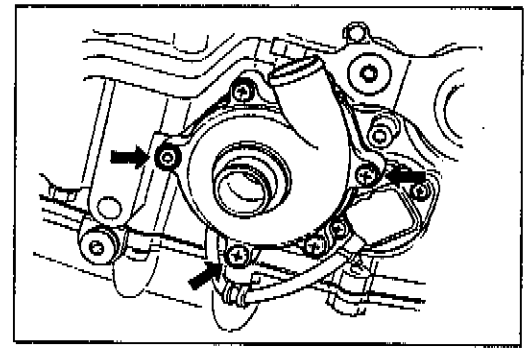




09900-09003: Impact driver set

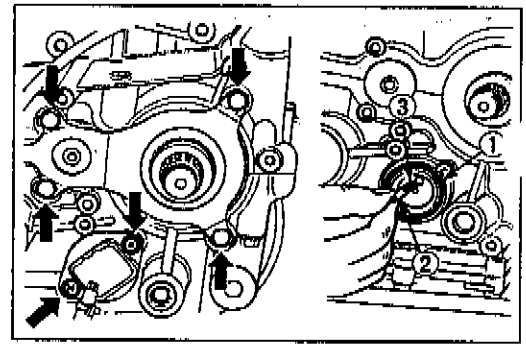
NOTE:
When removing the cam shifter ② , do not lose the gear shifting roller ⑥ , pawl ⑦ , pin ⑧ and spring ⑨ .

- Remove the water pump by removing the mounting screws and nut.

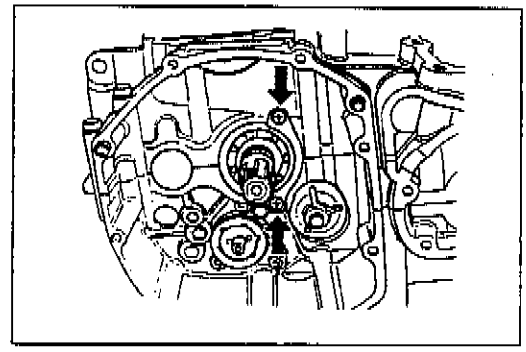


- Flatten the lock portions of the oil seal retainer and remove it by removing the four bolts.
- Remove the neutral position indicator switch by removing the screws.

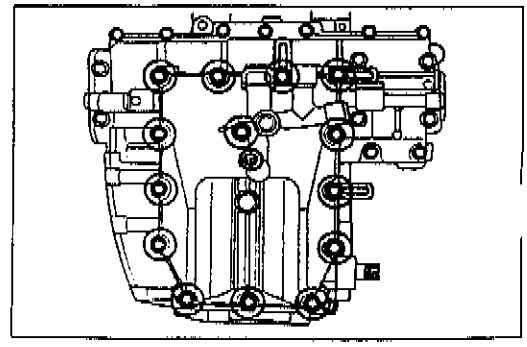
NOTE:
Do not lose the O-ring ① , switch contact ② and its spring ③ .



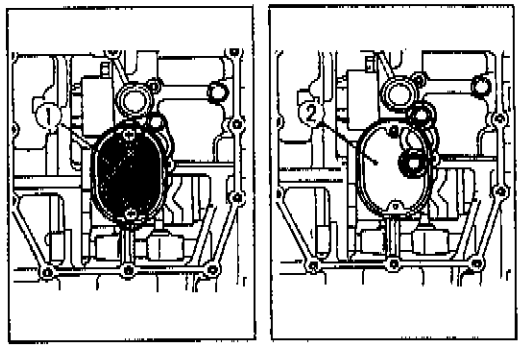
- Remove the countershaft bearing retainer by removing the two screws.



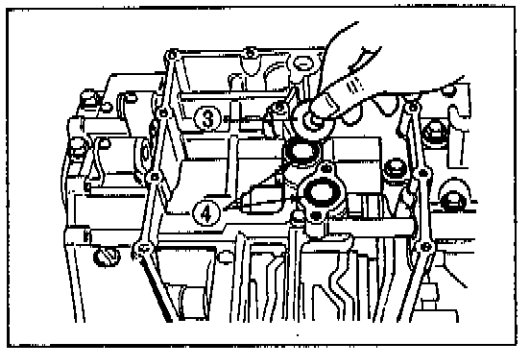
- Remove the oil pan by removing the bolts.



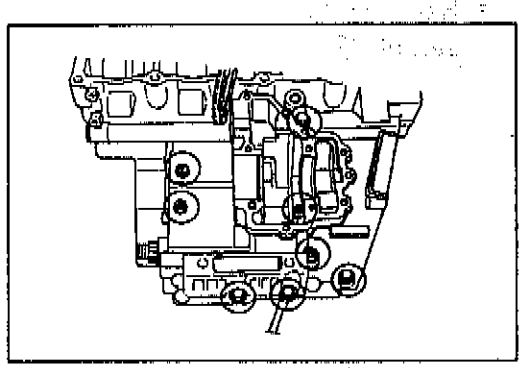
- Remove the oil sump filter ① by removing the two screws.
- Remove the oil sump filter guide ② by removing the two bolts.



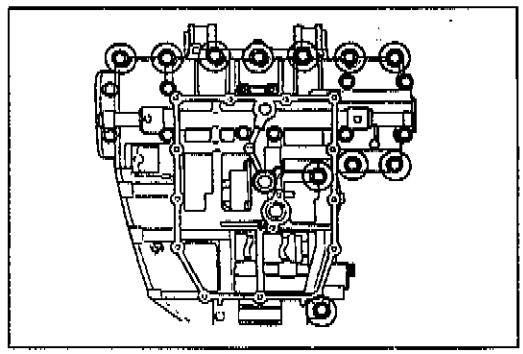
- Remove the shim ③ and O-rings ④ .



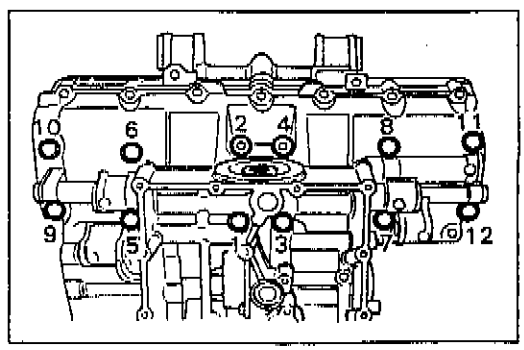
- Remove the upper crankcase tightening bolts.



- Remove the lower crankcase tightening bolts.



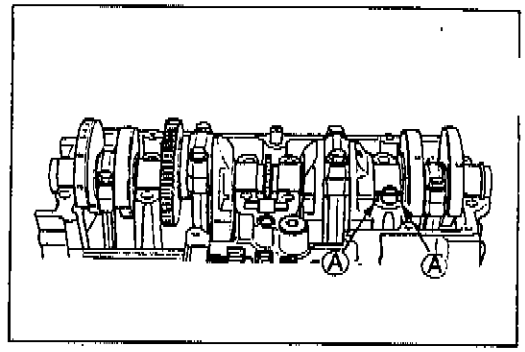
- When removing the crankshaft tightening bolts, loosen them in the descending order of numbers assigned to these bolts.
- Make sure that all bolts are removed without fail. Hammer lightly the lower crankcase side with a plastic hammer to separate the upper and lower crankcase halves and then lift the latter.



⚠ CAUTION

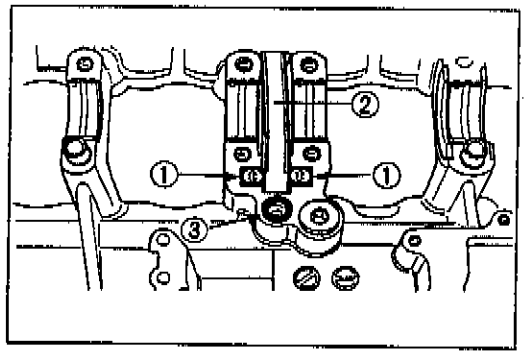
Do not drop the crankshaft journal bearings from the lower crankcase.

- Remove the crankshaft assembly from the upper crankcase.

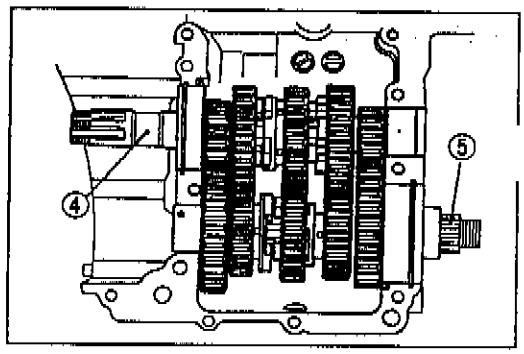


NOTE:
Bear in mind that the crankshaft thrust bearings Ⓐ are located between the shaft and the case.

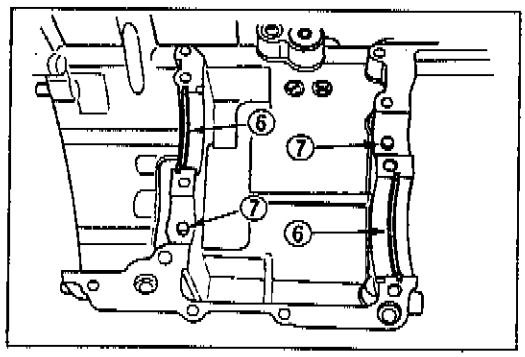
- Remove the two dampers ① and cam chain guide ② .
- Remove the O-ring ③ .



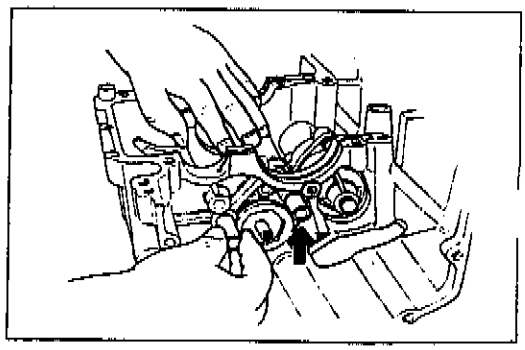
- Remove the countershaft assembly ④ and driveshaft assembly ⑤ .



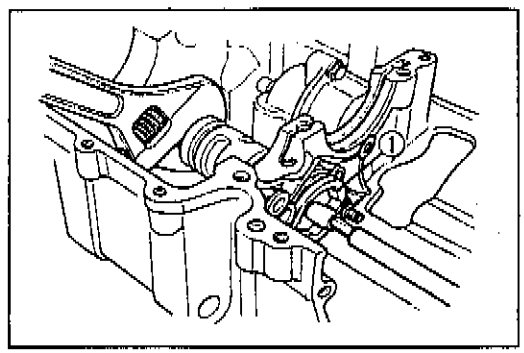
NOTE:
Do not lose the C-rings ⑥ and bearing pins ⑦ .



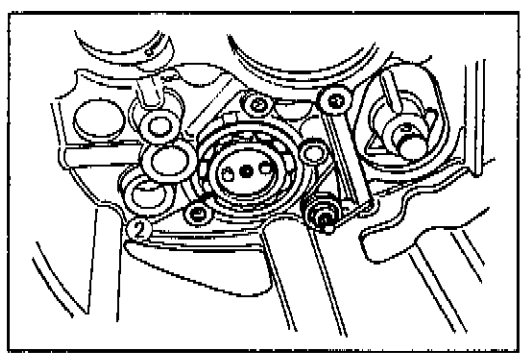
- Hold the gearshift forks by hand while drawing out the gearshift fork shafts from the lower crankcase.



- Remove the gearshift cam stopper plate ① by removing the bolt while holding the gearshift cam with an adjuster wrench.

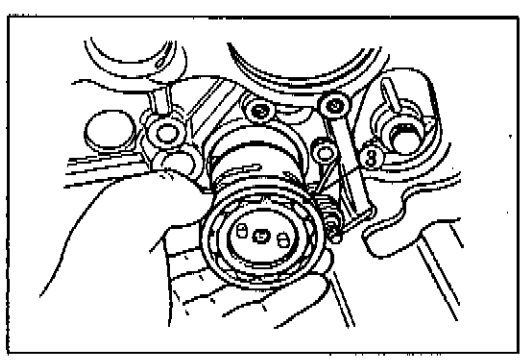


- Remove the washer ② .



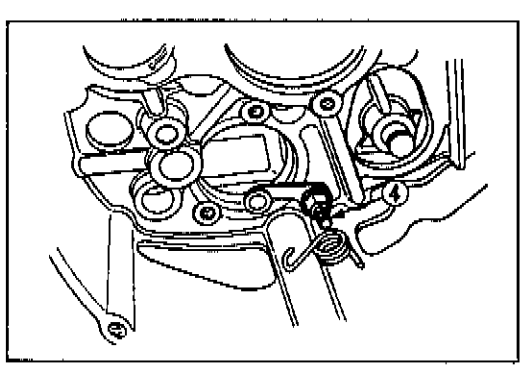
- Draw out the gearshift cam with bearing from the lower crankcase.

NOTE:
Rotate the bearing ③ on the gearshift cam by hand to inspect for abnormal noise and smooth rotation. Replace the bearing if there is anything unusual.



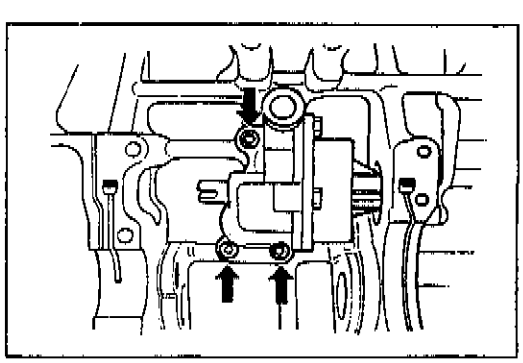
NOTE:
When replacing the gearshift cam stopper bolt ④ , apply a small quantity of THREAD LOCK "1342" to the bolt.

99000-32050: THREAD LOCK "1342"

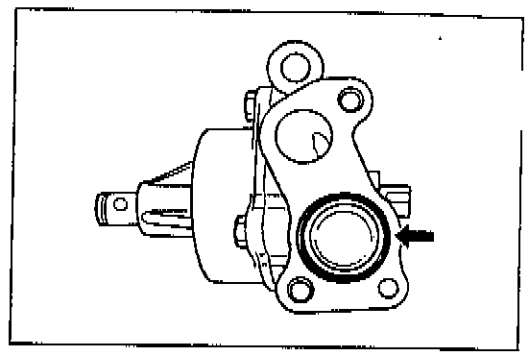


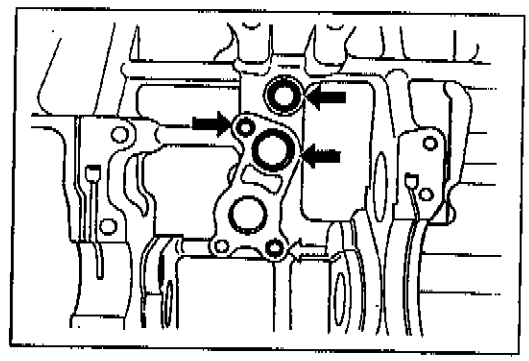
- Remove the oil pump by removing the mounting bolts.

09900-00410: Hexagon wrench set



- Remove the oil pump O-rings and dowel pins.





ENGINE COMPONENTS INSPECTION AND SERVICE

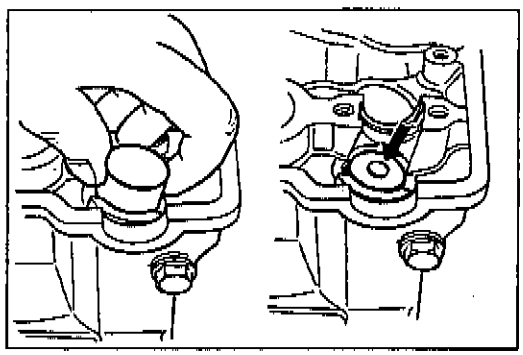
CYLINDER HEAD SERVICE

⚠ CAUTION

Be sure to identify each removed part as to its location, and lay the parts out in groups designated as "No.1", "No.2", "Exhaust", "Inlet", so that each will be restored to the original location during assembly.

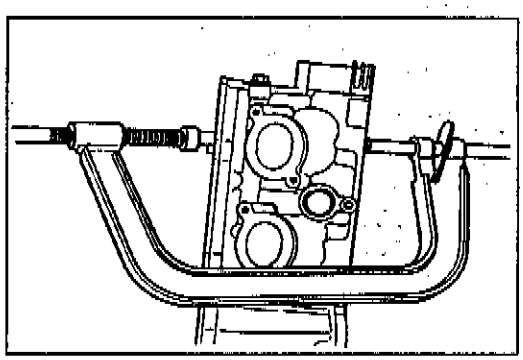
NOTE:
If valve guides have to be removed for replacement after inspecting related parts, carry out the steps shown in valve guide servicing.

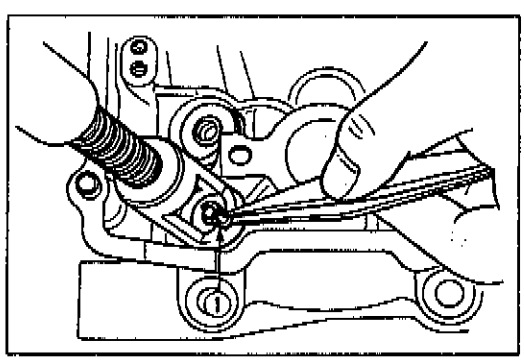
- Remove the tappets and shims by fingers or magnetic hand.



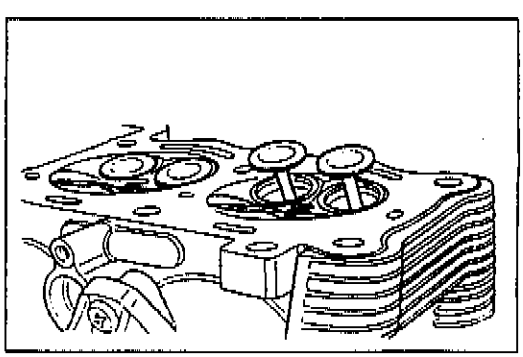
- Using special tools, compress the valve spring and remove the two cotter halves ① from valve stem.

TOOL **09916-14510: Valve lifter**
09916-14521: Valve lifter attachment
09916-84511: Tweezers





- Remove the valve spring retainer, valve spring and valve spring seat.
- Pull out the valve from the other side.

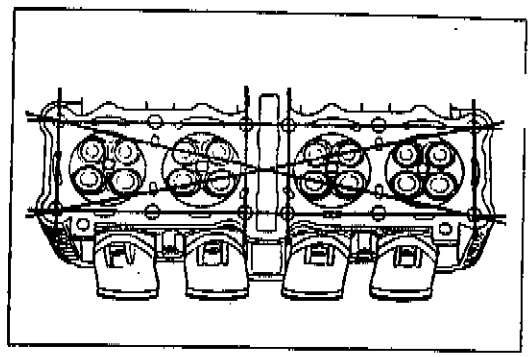


CYLINDER HEAD DISTORTION

Decarbonize the combustion chambers.
Check the gasketed surface of the cylinder head for distortion with a straightedge and thickness gauge, taking a clearance reading at several places indicated. If the largest reading at any position of the straightedge exceeds the limit, replace the cylinder head.

09900-20803: Thickness gauge

Service Limit: 0.2 mm (0.008 in.)

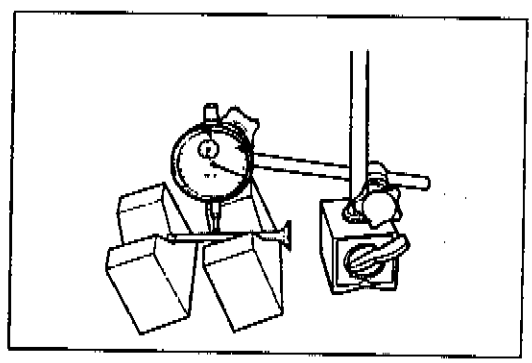


VALVE STEM RUNOUT

Support the valve with "V" blocks, as shown, and check its runout with a dial gauge.
The valve must be replaced if the runout exceeds the limit.

09900-20606: Dial gauge (1/100 mm)
09900-20701: Magnetic stand
09900-21304: V-block (100 mm)

Service Limit: 0.05 mm (0.002 in)

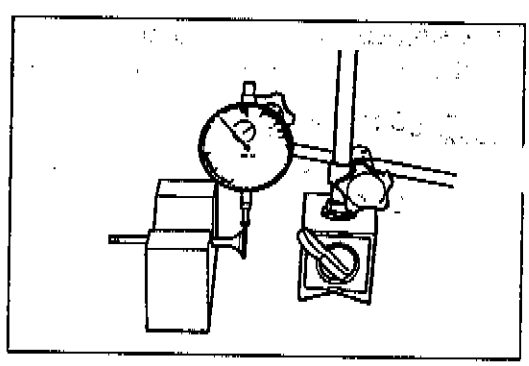


VALVE HEAD RADIAL RUNOUT

Place the dial gauge at right angles to the valve head face, and measure the valve head radial runout.
If it measures more than the limit, replace the valve.

09900-20606: Dial gauge (1/100 mm)
09900-20701: Magnetic stand
09900-21304: V-block (100 mm)

Service Limit: 0.03 mm (0.001 in.)

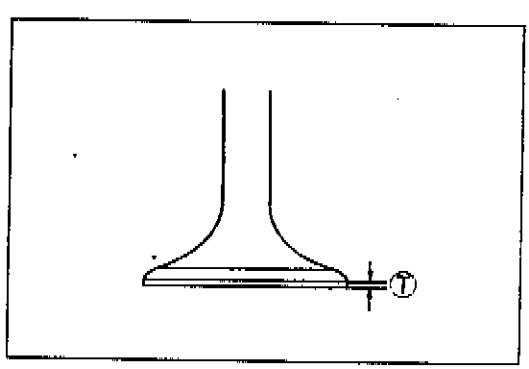


VALVE FACE WEAR

Visually inspect each valve for wear of its seating face. Replace any valve with an abnormally worn face. The thickness Ⓣ decreases as the wear of the face advances. Measure the thickness and, if the thickness is found to have been reduced to the limit, replace it.

09900-20102: Vernier calipers

Service Limit Ⓣ: 0.5 mm (0.02 in)

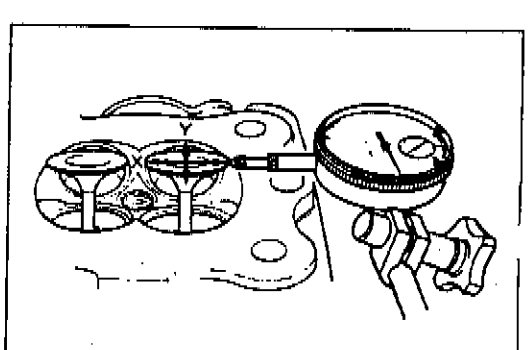


VALVE STEM DEFLECTION

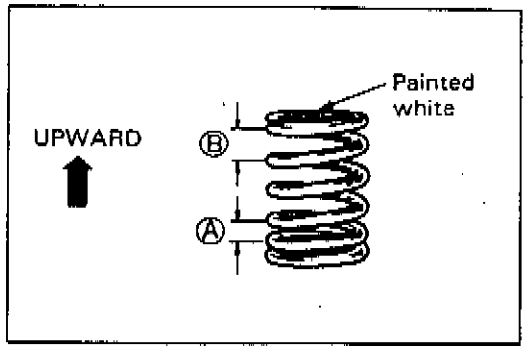
Lift the valve about 10 mm (0.39 in) from the valve seat. Measure the valve stem deflection in two directions, "X" and "Y", perpendicular to each other, by positioning the dial gauge as shown. If the deflection measured exceeds the limit, (see below) then determine whether the valve or the guide should be replaced with a new one.

09900-20606: Dial gauge (1/100 mm)
09900-20701: Magnetic stand

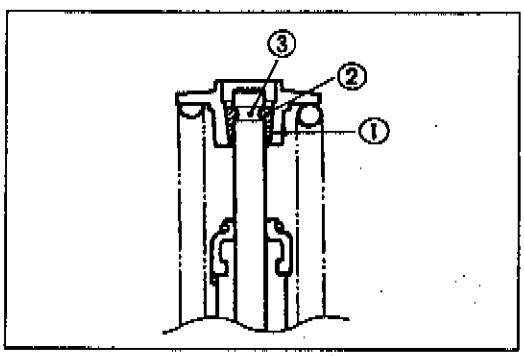
Service Limit
Intake and exhaust valves: 0.35 mm (0.014 in)



- Install the valve spring with the small-pitch portion Ⓐ facing cylinder head. Ⓑ Large-pitch portion.



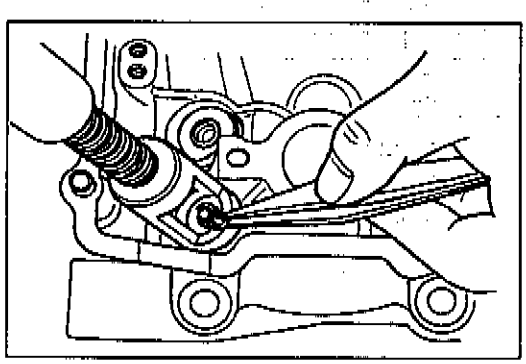
- Put on the valve spring retainer and, using the valve lifter, press down the spring, fit the cotter halves to the stem end, and release the lifter to allow the cotter ① to wedge in between retainer and stem. Be sure that the rounded lip ② of the cotter fits snugly into the groove ③ in the stem end.



TOOL **09916-14510: Valve lifter**
09916-14521: Valve lifter attachment
09916-84511: Tweezers

⚠ CAUTION

Be sure to restore each spring, valve, shim and tappet to their original positions.

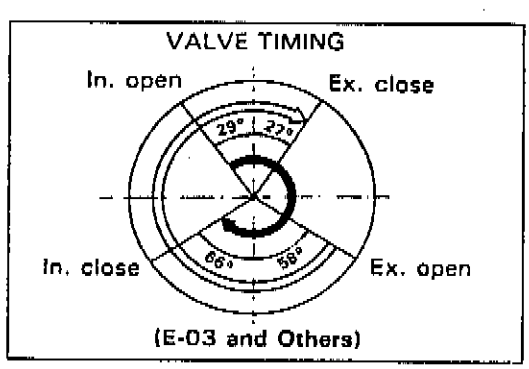


NOTE:
Apply engine oil to the shim and tappet before fitting them.

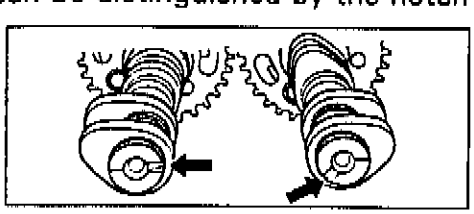
CAMSHAFT

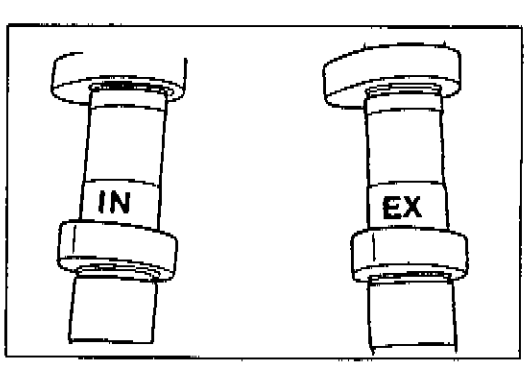
Both camshafts should be checked for runout and also for wear of cams and journals if the engine has been noted as giving abnormal noise or vibration or lack power output. Any of these conditions may be caused by camshafts worn down or distorted to the service limit.

Country	In. open	In. close	Ex. open	Ex. close
E-04	19°	64°	63°	18°
E-33	11°	68°	63°	18°
E-03 and others	29°	66°	58°	27°



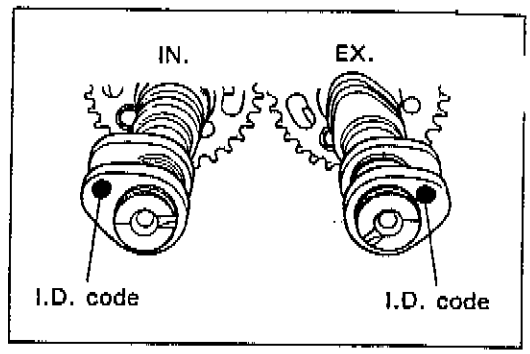
The exhaust camshaft can be distinguished from that of the intake by the embossed letters "EX" (for exhaust) as against letters "IN" (for intake).
Similarly, the right end can be distinguished by the notch from the left end.





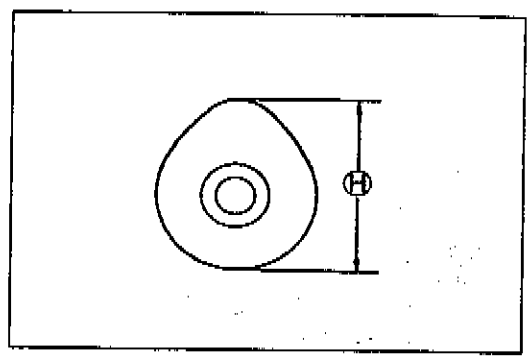
The following each I.D. code on the camshaft is identified by the stamped marks for the respective countries.

Country	Intake cams	Exhaust cams
E-04	G	E
E-33	E	E
E-03 and others	D	D



CAM WEAR

Worn-down cams are often the cause of mistimed valve operation resulting in reduced power output.
The limit of cam wear is specified for both intake and exhaust cams in terms of cam height Ⓗ, which is to be measured with a micrometer. Replace camshafts if found worn down to the limit.



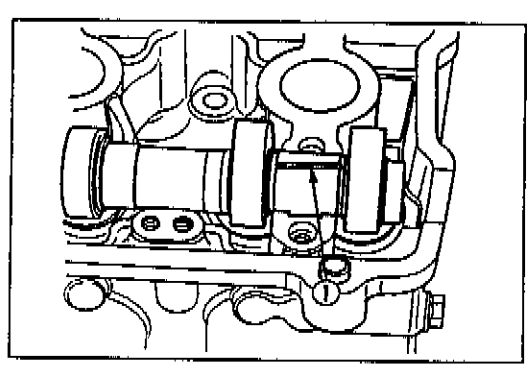
09900-20202: Micrometer (25—50 mm)

Cam height Ⓗ
Service Limit

Country	Intake cams	Exhaust cams
E-04	33.20 mm (1.307 in)	34.66 mm (1.365 in)
E-33	35.00 mm (1.378 in)	34.66 mm (1.365 in)
E-03 and others	36.40 mm (1.433 in)	35.23 mm (1.387 in)

CAMSHAFT JOURNAL WEAR

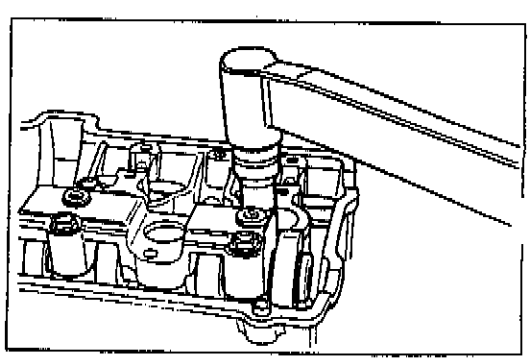
Determine whether or not each journal is worn down to the limit by measuring the oil clearance with the camshaft installed in place. Use the plastigauge ① to read the clearance at the widest portion, which is specified as follows:



Camshaft-Journal oil clearance (IN & EX)
Service Limit: 0.150 mm (0.0059 in)

09900-22301: Plastigauge

NOTE:
Install each holder to their original positions. (page 3-64.)

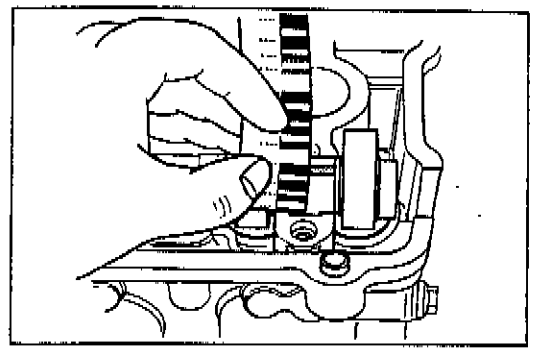


Tighten the camshaft holder bolts evenly and diagonally to the specified torque.

Camshaft holder bolt: 10 N·m (1.0 kg-m, 7.0 lb-ft)

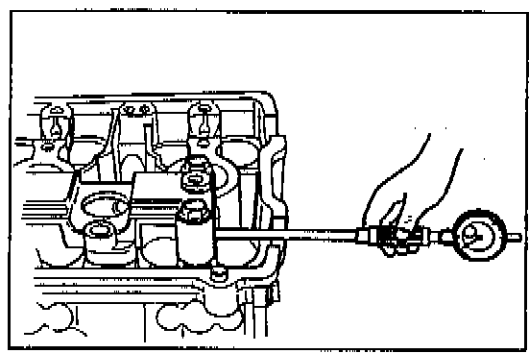
NOTE:
Do not rotate the camshafts with the plastigauge in place.

Remove the camshaft holders, and read the width of the compressed plastigauge with envelope scale. This measurement should be taken at the widest part.



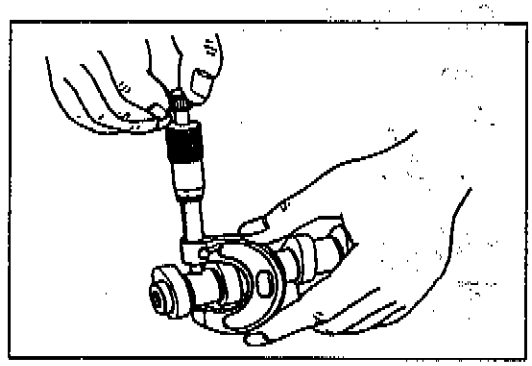
If the camshaft journal oil clearance measured exceeds the limit, measure the inside diameter of the camshaft journal holder and outside diameter of the camshaft journal. Replace the camshaft or the cylinder head depending upon which one exceeds the specification.

Standard
Journal holder I.D. (IN & EX): 22.012—22.025 mm (0.8666—0.8671 in)



09900-20205: Micrometer (0—25 mm)

Standard
Camshaft journal O.D. (IN & EX): 21.959—21.980 mm (0.8645—0.8654 in)

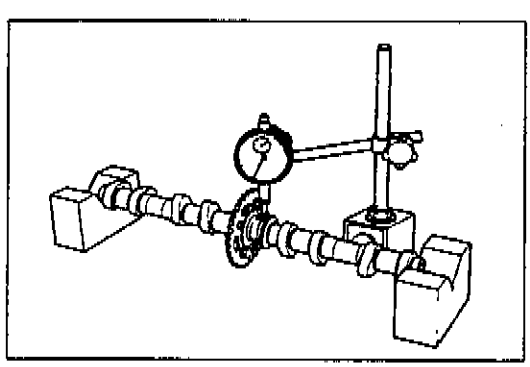


CAMSHAFT RUNOUT

Measure the runout with a dial gauge. Replace the camshaft if the runout exceeds the limit.

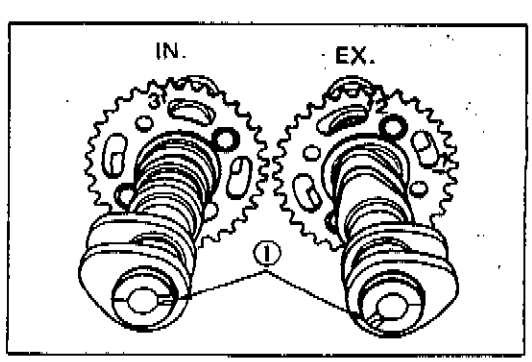
Camshaft runout (IN & EX)
Service Limit: 0.1 mm (0.004 in)

09900-20606: Dial gauge (1/100 mm, 10 mm)
09900-20701: Magnetic stand
09900-21304: V-block (100 mm)



CAM SPROCKET

The fixed position of each cam sprocket on each camshaft is determined by arrow mark "3" (on INTAKE sprocket) or arrow marks "1" and "2" (on EXHAUST sprocket) located (as shown) in reference to the notch ① in the right end of each camshaft.

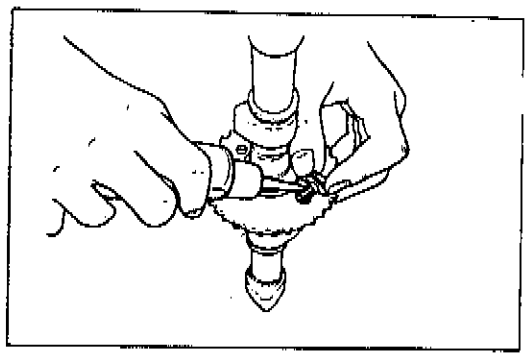


REASSEMBLY

- Apply THREAD LOCK SUPER "1303" to the threads of cam sprocket bolts, and tighten them to the following torque value:

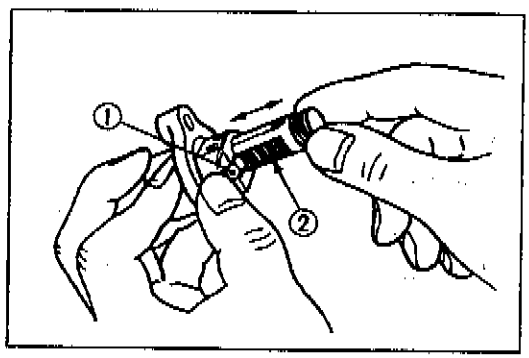
99000-32030: THREAD LOCK SUPER "1303"

Cam sprocket bolt: 25 N·m (2.5 kg-m, 18.0 lb-ft)



CAM CHAIN TENSIONER

The cam chain tensioner is maintained at the proper tension by an automatically adjusted tensioner.
Unlock the ratchet mechanism ①, and move the push rod ② in place to see if it slides smoothly. If any stickiness is noted or ratchet mechanism is faulty, replace the cam chain tensioner assembly with a new one.

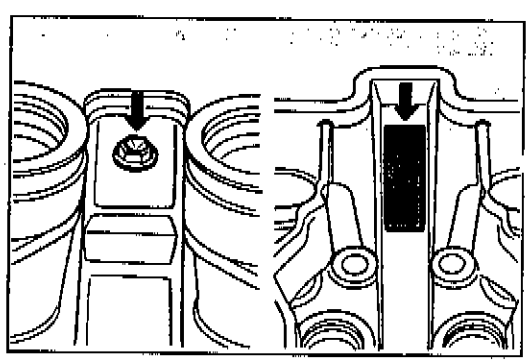


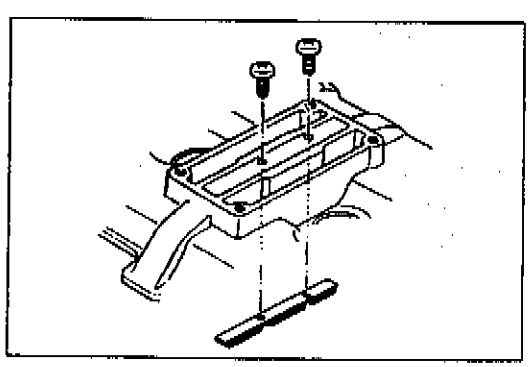
CAM CHAIN GUIDE

NOTE:
When replacing the cam chain guides, apply SUZUKI THREAD LOCK SUPER "1303" to threads of bolt and screws.

99000-32030: THREAD LOCK SUPER "1303"

Cam chain guide mounting bolt: 6 N·m (0.6 kg-m, 4.5 lb-ft)



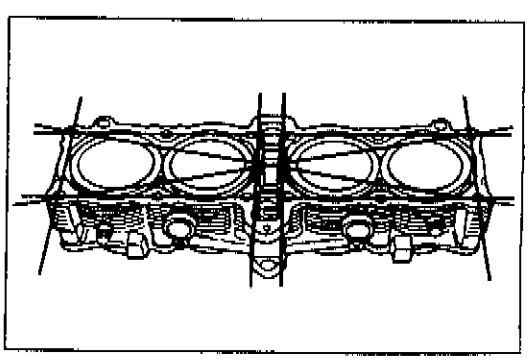


CYLINDER BLOCK DISTORTION

Check the gasketed surface of the cylinder block for distortion with a straightedge and thickness gauge, taking a clearance reading at several places as indicated. If the largest reading at any position of the straightedge exceeds the limit, replace the cylinder block.

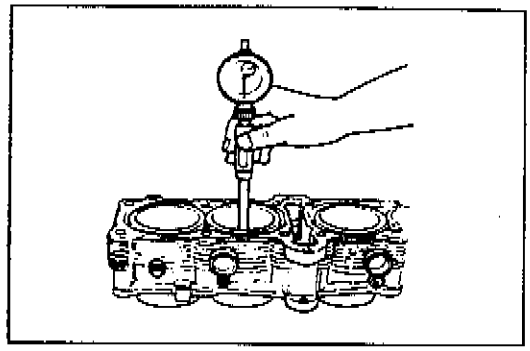
09900-20803: Thickness gauge

Cylinder distortion
Service Limit: 0.2 mm (0.008 in)



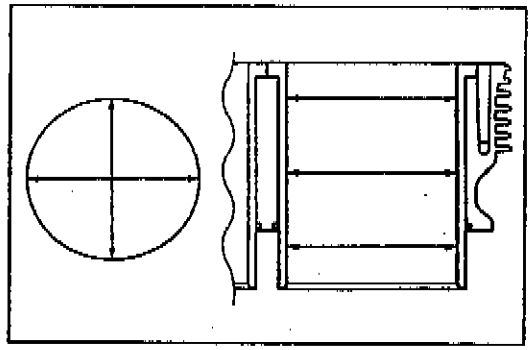
CYLINDER BORE

Measure the cylinder bore diameter at six places. If any one of the measurements exceeds the limit, overhaul the cylinder and replace the piston with an oversize piston. The remaining cylinders must be also rebored accordingly. Otherwise, the imbalance might cause excess vibration.



Cylinder bore
Service Limit: 73.085 mm (2.8774 in)

TOOL **09900-20508: Cylinder gauge set**

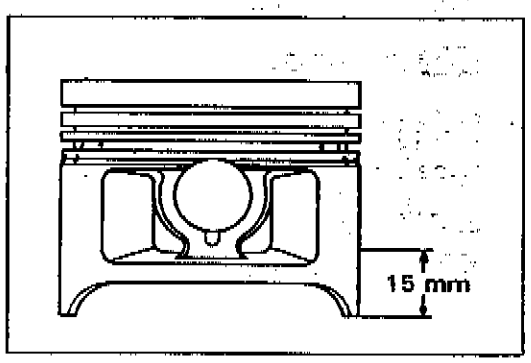


PISTON DIAMETER

Using a micrometer, measure the piston's outside diameter at the place shown in Fig. If the measurement is less than the limit, replace the piston.

Service Limit: 72.880 mm (2.8693 in)

TOOL **09900-20203: Micrometer (50—75 mm)**

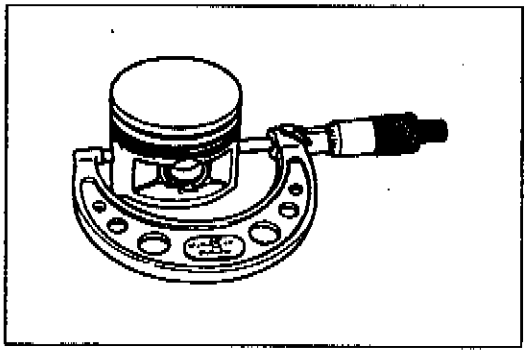


PISTON-CYLINDER CLEARANCE

As a result of the above measurement, if the piston clearance exceeds the following limit, overhaul the cylinder and use an oversize piston, or replace both cylinder and piston.

Service Limit: 0.12 mm (0.0047 in)

Piston oversize: 0.5, 1.0 mm

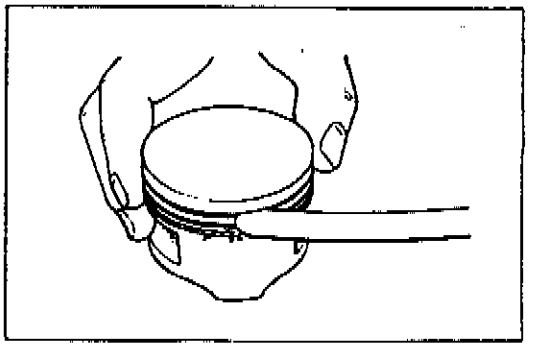


PISTON RING-GROOVE CLEARANCE

Using a thickness gauge, measure the side clearances of the 1st and 2nd rings. If any of the clearances exceeds the limit, replace both piston and piston rings.

TOOL **09900-20803: Thickness gauge**

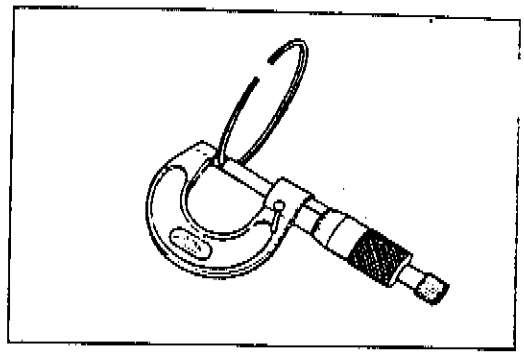
Piston ring-groove clearance
Service Limit
1st & 2nd: 0.18 mm (0.007 in)



Piston ring groove width

Standard	1st : 1.02—1.04 mm	(0.040—0.041 in)
	2nd: 1.02—1.04 mm	(0.040—0.041 in)
	Oil : 2.01—2.03 mm	(0.079—0.080 in)

Piston ring thickness
Standard
1st & 2nd: 0.97—0.99 mm (0.038—0.039 in)



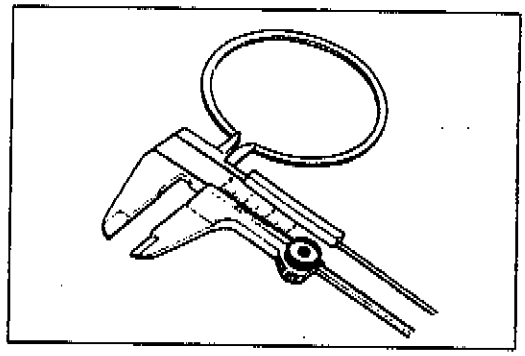
PISTON RING FREE END GAP AND PISTON RING END GAP

Before installing piston rings, measure the free end gap of each ring using vernier calipers. Next, fit the ring in the cylinder, and measure each ring end gap using a thickness gauge.
If any ring has an excess end gap, replace the ring.

Piston ring free end gap

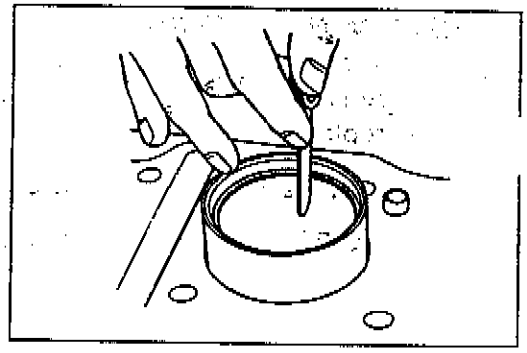
Service Limit 1st : 5.5 mm (0.22 in)
2nd: 5.8 mm (0.23 In)

TOOL 09900-20102: Vernier calipers



Piston ring end gap
Service Limit
1st: 0.5 mm (0.02 in)
2nd: 1.0 mm (0.04 in)

TOOL 09900-20803: Thickness gauge

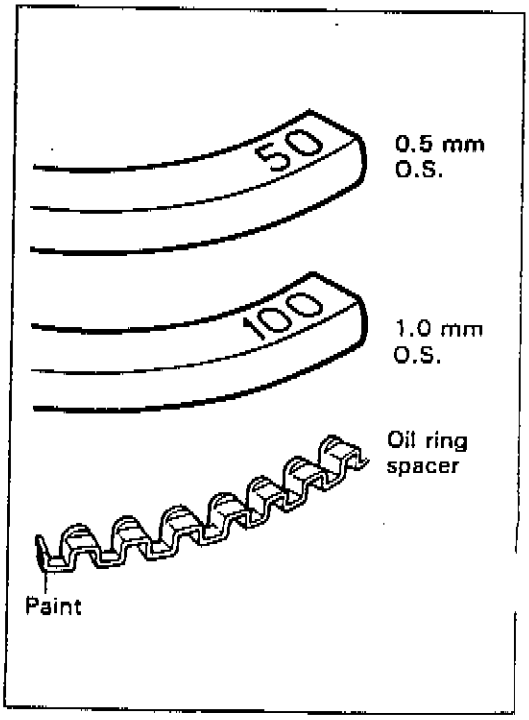


Oversize piston ring
The following two types of oversize piston ring are used. They bear the following identification numbers.

	1st	2nd
0.5 mm	50	50
1.0 mm	100	100

Oversize oil ring
The following two types of oversize oil ring are available as optional parts. They bear the following identification marks.

SIZE	COLOR
STD	NIL
0.5 mm O.S.	Painted red
1.0 mm O.S.	Painted yellow



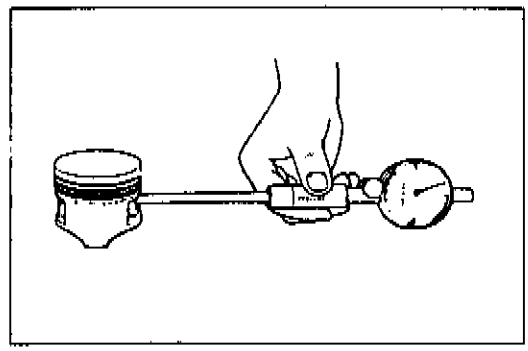
Oversize side rail
Just measure out side diameter to identify the size.

PISTON PIN AND PIN BORE

Using a small bore gauge, measure the piston pin bore inside diameter, and using a micrometer, measure the piston pin outside diameter. If the difference between these two measurements is more than the limits, replace both piston and piston pin.

Piston pin bore I.D.
Service Limit: 19.030 mm (0.7492 in)

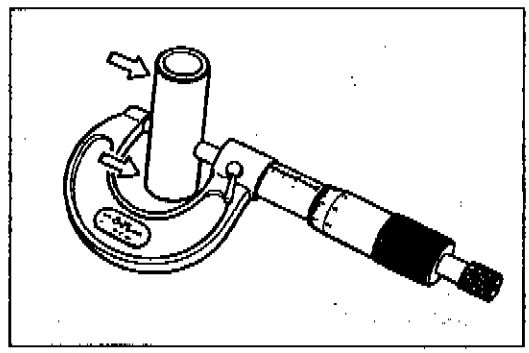
TOOL **09900-20602: Dial gauge (1/1000 mm, 1 mm)**
09900-22403: Small bore gauge (18—35 mm)



Using a micrometer, measure the piston pin outside diameter at three positions.

Piston pin O.D.
Service Limit: 18.980 mm (0.7472 in)

TOOL **09900-20205: Micrometer (0—25 mm)**

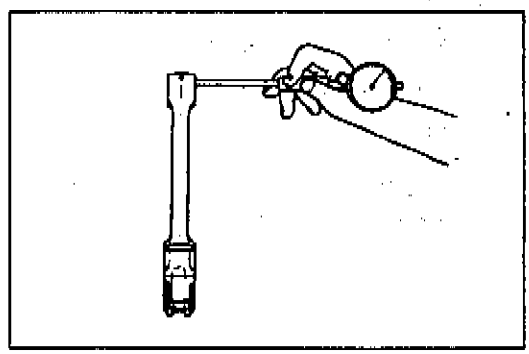


CONROD SMALL END I.D.

Using a small bore gauge, measure the conrod small end inside diameter.

TOOL **09900-20602: Dial gauge (1/1000 mm, 1 mm)**
09900-22403: Small bore gauge (18—35 mm)

Conrod small end I.D.
Service Limit: 19.040 mm (0.7496 in)



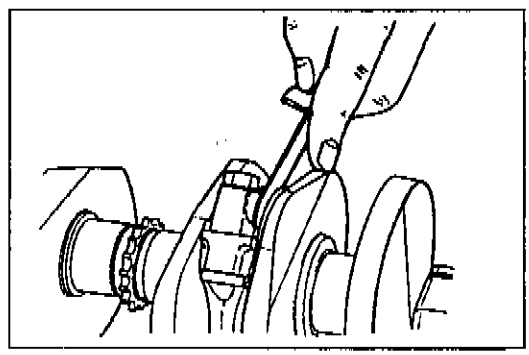
If the conrod small end inside diameter exceeds the above-mentioned limit, replace the conrod.

CONROD BIG END SIDE CLEARANCE

Check the conrod side clearance by using a thickness gauge. If the clearance exceeds the limit, replace conrod or crankshaft.

Service Limit: 0.3 mm (0.01 in)

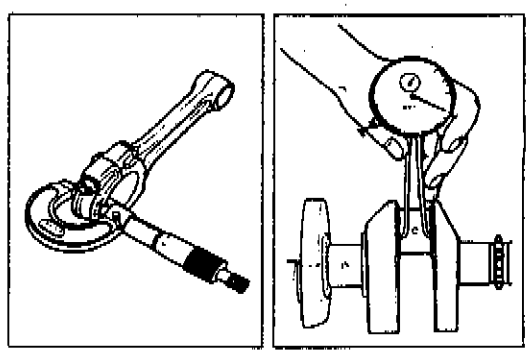
TOOL **09900-20803: Thickness gauge**



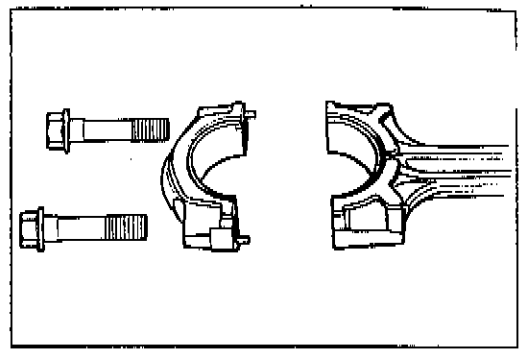
Standard
Big end width: 20.95—21.00 mm (0.825—0.827 in)

Standard
Crank pin width: 21.10—21.15 mm (0.831—0.833 in)

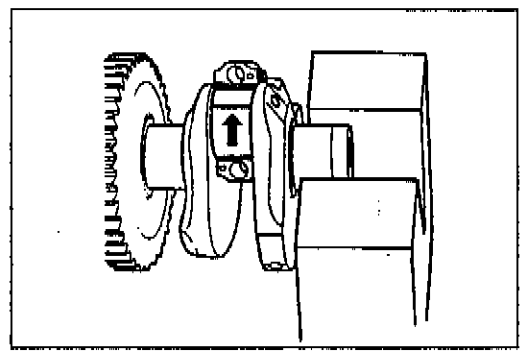
TOOL **09900-20205: Micrometer (0—25 mm)**
09900-20605: Dial calipers (10—34 mm)



CONROD-CRANK PIN BEARING SELECTION



- Remove the bearing cap bolts, and tap the bearing cap lightly with plastic hammer to remove the bearing cap.
- Remove the rods, and mark them to identify the cylinder position.
- Inspect the bearing surfaces for any sign of fusion, pitting, burn, or flaws. If any, replace them with a specified set of bearings.



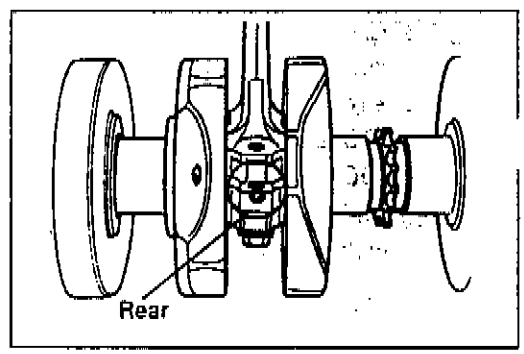
- Place plastigauge axially on the crank pin avoiding the oil hole, at TDC or BDC side as shown.
- Tighten the bearing cap bolts with two-step torque values.

Initial tightening torque: 35 N·m (3.5 kg-m, 25.5 lb-ft)

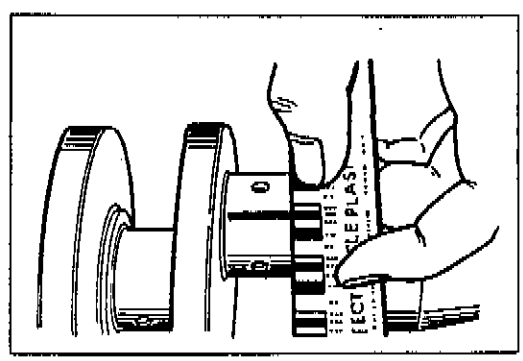
Final tightening torque: 67 N·m (6.7 kg-m, 48.5 lb-ft)

09900-22301: Plastigauge

NOTE:
When fitting bearing cap to crank pin, be sure to discriminate one end from the other, namely front and rear.



NOTE:
Never rotate the crankshaft or conrod when a piece of plastigauge is in the clearance.

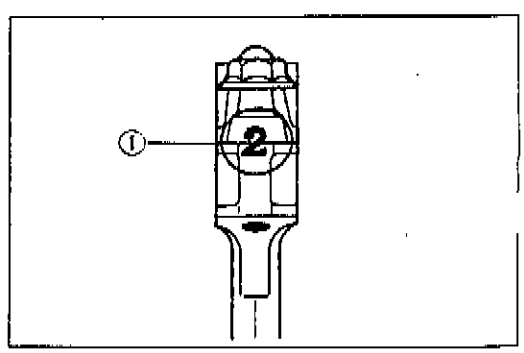


- Remove the caps, and measure the width of compressed plastigauge with envelope scale. This measurement should be taken at the widest part.

Crank pin bearing oil clearance

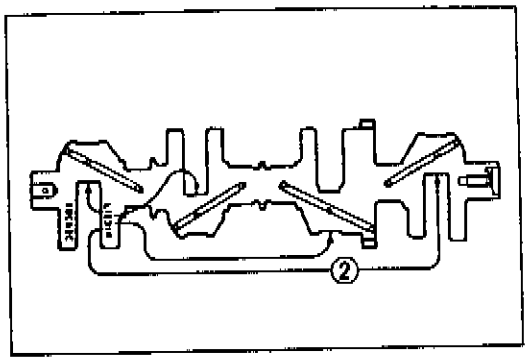
Standard: 0.032—0.056 mm (0.0013—0.0022 in)

Service Limit: 0.080 mm (0.0031 in)



- If oil clearance exceeds the service limit, select the specified bearings from the bearing selection table.
- Check the corresponding conrod I.D. code number ① , "1" or "2".

- Check the corresponding crank pin O.D. code number ② , "1", "2" or "3".



Bearing selection table

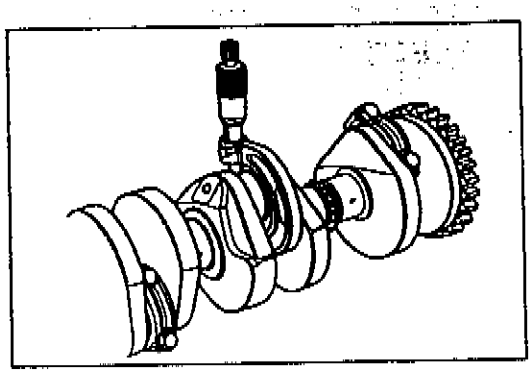
		Crank pin O.D. ②		
	Code	1	2	3
Conrod I.D. ①	1	Green	Black	Brown
	2	Black	Brown	Yellow

Conrod I.D. specification

Code	I.D. specification
1	39.000—39.008 mm (1.5354—1.5357 in)
2	39.008—39.016 mm (1.5357—1.5361 in)

Crank pin O.D. specification

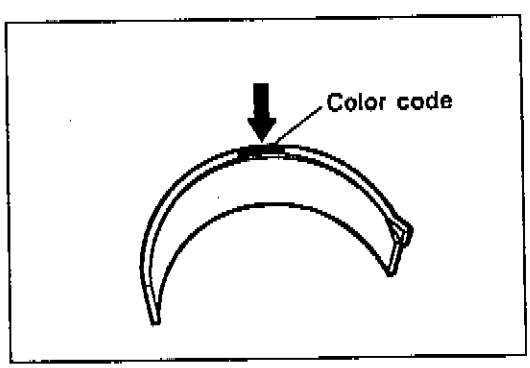
Code	O.D. specification
1	35.992—36.000 mm (1.4170—1.4173 in)
2	35.984—35.992 mm (1.4167—1.4170 in)
3	35.976—35.984 mm (1.4164—1.4167 in)



TOOL 09900-20202: Micrometer (25—50 mm)

Bearing thickness

Color (Part No.)	Thickness
Green (12164-31E00-0A0)	1.480—1.484 mm (0.0583—0.0584 in)
Black (12164-31E00-0B0)	1.484—1.488 mm (0.0584—0.0586 in)
Brown (12164-31E00-0C0)	1.488—1.492 mm (0.0586—0.0587 in)
Yellow (12164-31E00-0D0)	1.492—1.496 mm (0.0587—0.0589 in)

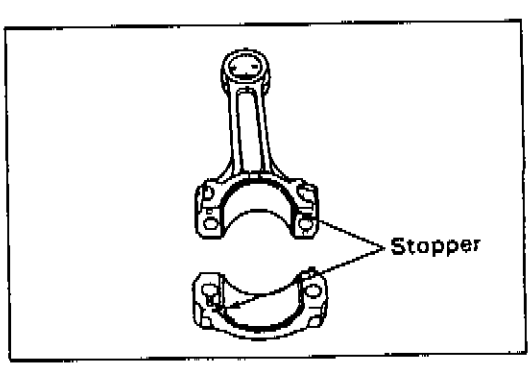


⚠ CAUTION

Bearing should be replaced as a set.

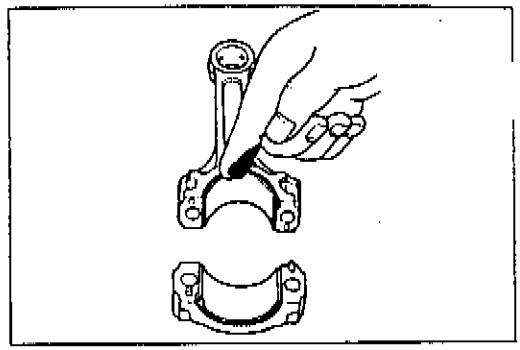
BEARING ASSEMBLY

- When fitting the bearings to the bearing cap and conrod, be sure to fix the stopper part first, and press in the other end.



- Apply engine oil or SUZUKI MOLY PASTE to the crank pin and bearing surface.

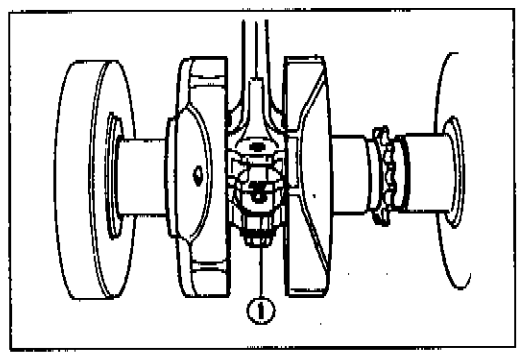
99000-25140: SUZUKI MOLY PASTE



- When mounting the conrod on the crankshaft, make sure that numeral figure ① of the conrod faces rearward.
- Tighten the bearing cap bolts with specified torque.

Initial tightening torque: 35 N·m (3.5 kg-m, 25.5 lb-ft)

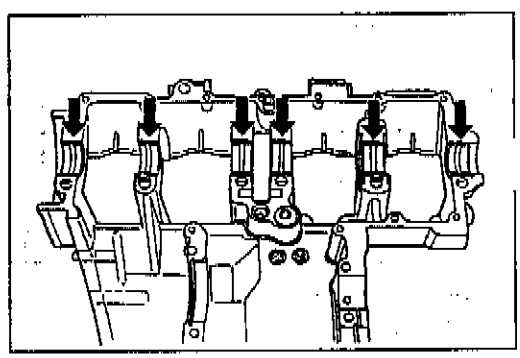
Final tightening torque : 67 N·m (6.7 kg-m, 48.5 lb-ft)



- Check the conrod movement for smooth turning.

CRANKCASE-CRANKSHAFT BEARING SELECTION

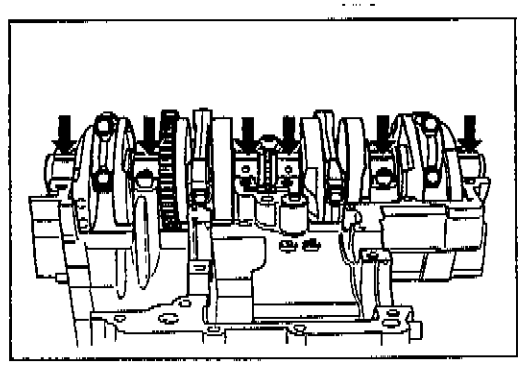
- Inspect each bearing of upper and lower crankcases for any damage.



- Place the plastigauge on each crankshaft journal in the usual manner.

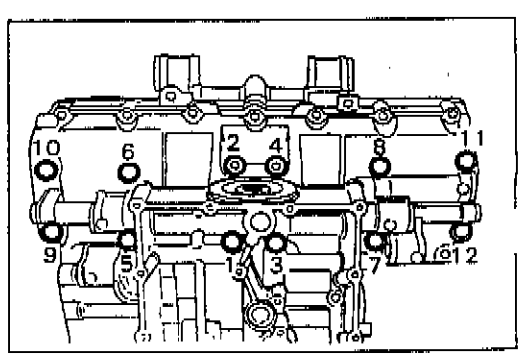
09900-22301: Plastigauge

NOTE:
Do not place the plastigauge on the oil hole, and do not rotate the shaft when plastigauge is in place.



- Mate the lower crankcase with the upper crankcase, and tighten the crankshaft tightening bolts with specified torque value in the indicated order.

Tightening torque	Initial Tightening	Final Tightening
9 mm bolt	13 N·m 1.3 kg-m 9.5 lb-ft	26 N·m 2.6 kg-m 19.0 lb-ft

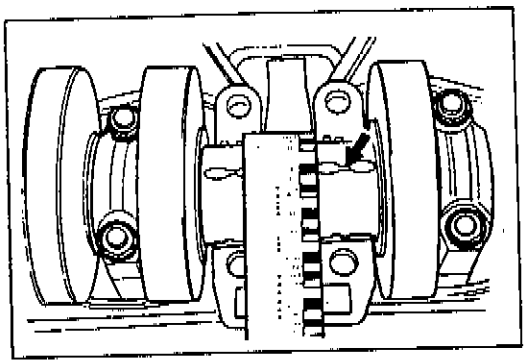


- Remove the lower crankcase, and measure the width of compressed plastigauge in the usual manner.

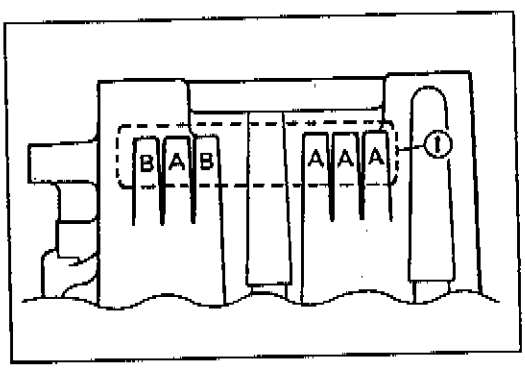
Crank journal bearing oil clearance
Standard: 0.020—0.044 mm (0.0008—0.0017 in)

Service Limit: 0.08 mm (0.0031 in)

- If the width at the widest part exceeds the limit, replace the set of bearings with new ones by referring to the selection table.

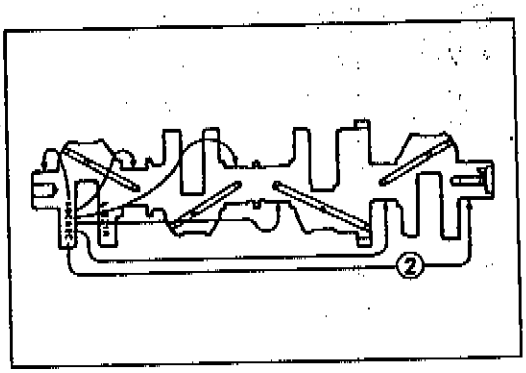


- Check the corresponding crankcase journal I.D. code number ①, "A" or "B" which are stamped on the rear of upper crankcase.
- Check the corresponding crankshaft journal O.D. code number ②, "A", "B" or "C" which are stamped on the crankshaft.



Bearing selection table

		Crankshaft O.D. ②		
	Code	A	B	C
Crankcase I.D. ①	A	Green	Black	Brown
	B	Black	Brown	Yellow

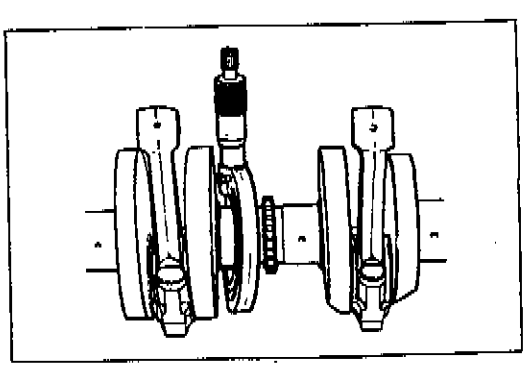


Crankcase I.D. specification

Code	I.D. specification
A	37.000—37.008 mm (1.4567—1.4570 in)
B	37.008—37.016 mm (1.4570—1.4573 in)

Crankshaft journal O.D. specification

Code	O.D. specification
A	33.992—34.000 mm (1.3383—1.3386 in)
B	33.984—33.992 mm (1.3380—1.3383 in)
C	33.976—33.984 mm (1.3376—1.3380 in)

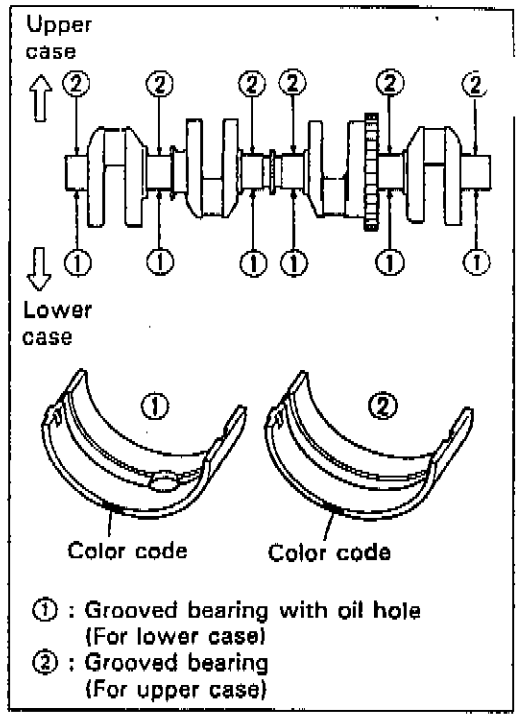


TOOL 09900-20202: Micrometer (25—50 mm)

Bearing thickness specification
(Grooved bearing with oil hole ..... For lower case)

Color (Part No.)	Specification
Green (12229-31E00-0A0)	1.486—1.490 mm (0.0585—0.0587 in)
Black (12229-31E00-0B0)	1.490—1.494 mm (0.0587—0.0588 in)
Brown (12229-31E00-0C0)	1.494—1.498 mm (0.0588—0.0590 in)
Yellow (12229-31E00-0D0)	1.498—1.502 mm (0.0590—0.0591 in)

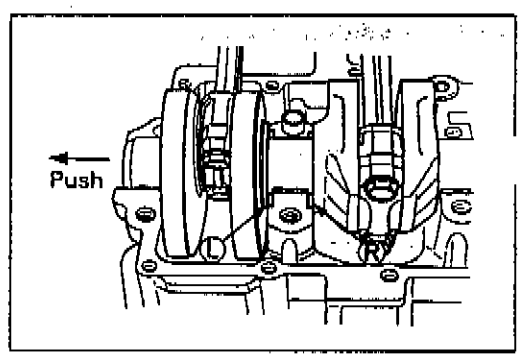
NOTE:
* *Grooved bearings have the same specification as the Grooved bearing with oil hole.*
* *These parts numbers are shown as follows. 12229-31E10-XXX. (Grooved bearing)*



CRANKSHAFT THRUST CLEARANCE

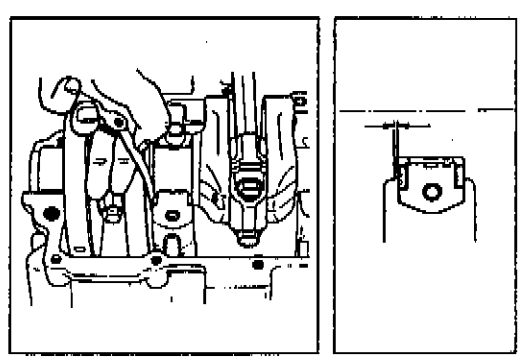
- With the crankshaft, right-side thrust bearing and left-side thrust bearing inserted in the upper crankcase, use a thickness gauge to measure the thrust clearance on the left-side. Ⓡ: Right-side thrust bearing Ⓛ: Left-side thrust bearing

NOTE:
Push the crankshaft to the left-side, so that there is no clearance on the right-side thrust bearing.

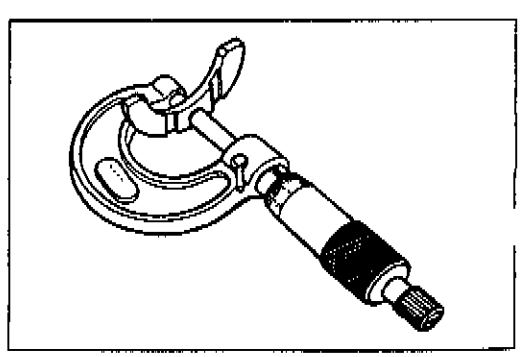


Thrust clearance
Standard: 0.055—0.110 mm (0.0022—0.0043 in)

If the thrust clearance exceeds the standard range, adjust the thrust clearance by the following procedures:

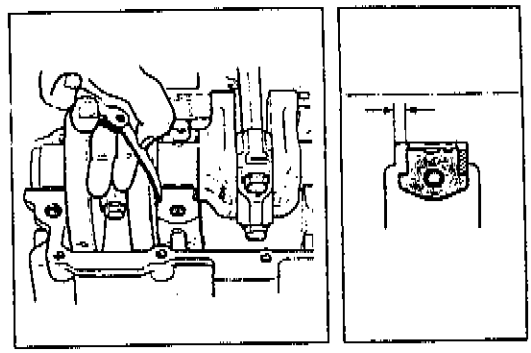


- Remove the right-side thrust bearing and measure its thickness with a micrometer. If the thickness of the right-side thrust bearing is below standard, replace with a new bearing and once again perform the thrust clearance measurement listed above, checking to make sure it is within standard.



Right-side thrust bearing thickness
Standard: 2.425—2.450 mm (0.0955—0.0965 in)

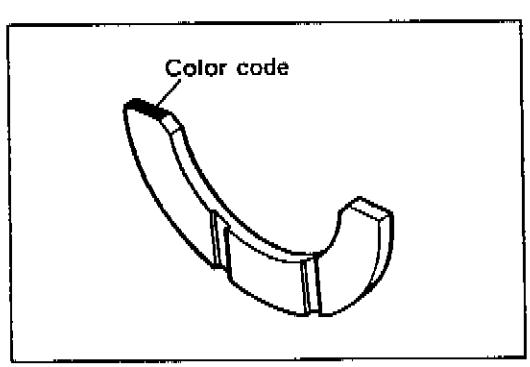
- If the right-side thrust bearing is within the standard range, reinsert the right-side thrust bearing and remove the left-side thrust bearing.
- As shown in the illustration, use a thickness gauge to measure the clearance before inserting of the left-side thrust bearing, and select a left-side thrust bearing from the selection table.



Thrust bearing selection table

Clearance before inserting left-side thrust bearing	Color (Part No.)	Thrust bearing thickness	Thrust clearance
2.560—2.585 mm (0.1008—0.1018 in)	White (12228-17E00-0F0)	2.475—2.500 mm (0.0974—0.0984 in)	0.060—0.110 mm (0.0024—0.0043 in)
2.535—2.560 mm (0.0998—0.1008 in)	Yellow (12228-17E00-0E0)	2.450—2.475 mm (0.0965—0.0974 in)	0.060—0.110 mm (0.0024—0.0043 in)
2.510—2.535 mm (0.0988-0.0998 in)	Green (12228-17E00-0D0)	2.425—2.450 mm (0.0955—0.0965 in)	0.060—0.110 mm (0.0024—0.0043 in)
2.485—2.510 mm (0.0978—0.0988 in)	Blue (12228-17E00-0C0)	2.400—2.425 mm (0.0945—0.0955 in)	0.060—0.110 mm (0.0024—0.0043 in)
2.460—2.485 mm (0.0969—0.0978 in)	Black (12228-17E00-0B0)	2.375—2.400 mm (0.0935—0.0945 in)	0.060—0.110 mm (0.0024—0.0043 in)
2.430—2.460 mm (0.0957—0.0969 in)	Red (12228-17E00-0A0)	2.350—2.375 mm (0.0925—0.0935 in)	0.055—0.110 mm (0.0022—0.0043 in)

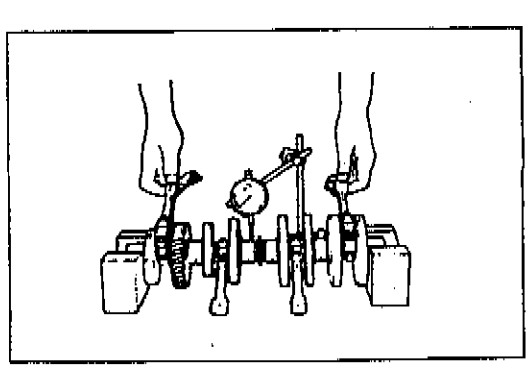
- After selecting a left-side thrust bearing, insert it and again perform the thrust clearance measurement to make sure it falls within the standard range.



NOTE:
Right-side thrust bearing has the same specification as the GREEN (12228-17E00-0D0) of left-side thrust bearing.

CRANKSHAFT RUNOUT

Support the crankshaft with "V" blocks as shown, with the two end journals resting on the blocks. Set up the dial gauge, as shown, and rotate the crankshaft slowly to read the runout. Replace the crankshaft if the runout is greater than the limit.



TOOL **09900-20606: Dial gauge (1/100 mm, 10 mm)**
09900-20701: Magnetic stand
09900-21304: V-block (100 mm)

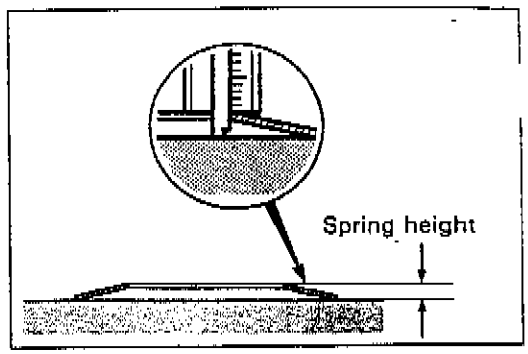
Crankshaft runout
Service Limit: 0.05 mm (0.002 in)

CLUTCH DIAPHRAGM SPRING

Measure the free height of each diaphragm spring with a vernier calipers. If each diaphragm spring height is not within the specified limit, replace it with a new one.

09900-20102: Vernier calipers

Service Limit: 3.1 mm (0.12 in)

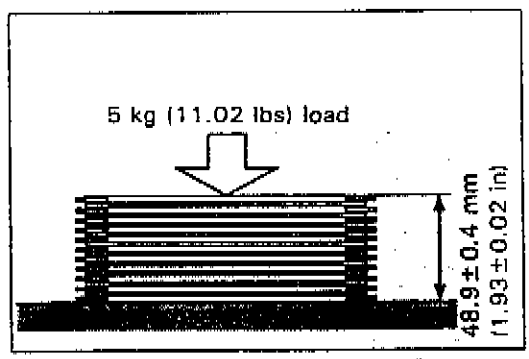


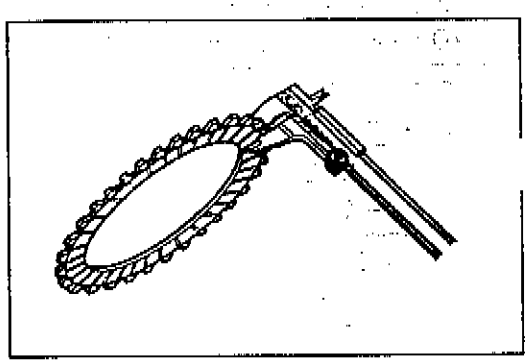
CLUTCH DRIVE AND DRIVEN PLATES

Measure the total thickness of drive and driven plates by compressing them with a 5 kg load.

NOTE:
Wipe off the engine oil from the drive and driven plates with a clean rag and put them one by one on the surface plate. If the total thickness of drive and driven plates is not within specification, replace the drive plates with new ones or measure each drive plate thickness and driven plate distortion.

Total thickness of drive and driven plates	48.9 ± 0.4 mm at 5 kg load (1.93 ± 0.02 in at 11.02 lbs load)

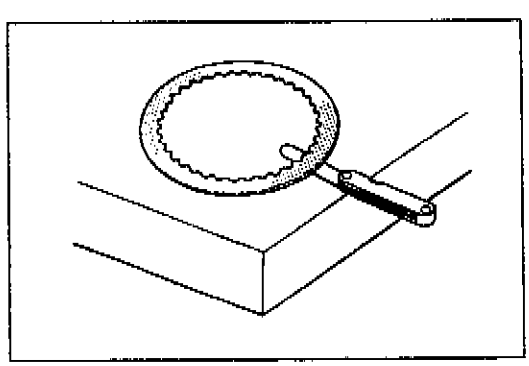




PARTS SUPPLY DATA
21400-40C01: Clutch plate assembly
21441-48B00: Clutch drive plate No.1 (8 pcs)
21441-48B10: Clutch drive plate No.2 (2 pcs)
21442-46E00: Clutch drive plate No.3 (1 pc)
21451-48B00: Clutch driven plate (10 pcs)
(The clutch drive plate NO.3 is not included in the clutch plate assembly.)

Measure the thickness of each drive plate with a vernier calipers. If each drive plate is not within the standard range, replace it with a new one.

09900-20102: Vernier calipers
Standard (No.1 and No.2 drive plates)
Thickness: 2.52—2.68 mm (0.100—0.106 in)

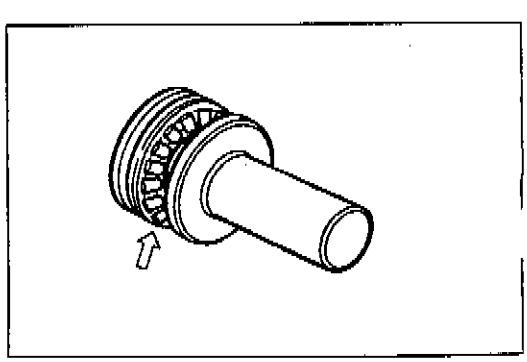


Measure each driven plate for distortion with a thickness gauge.
Replace driven plates which exceed the limit.

09900-20803: Thickness gauge
Service Limit: 0.1 mm (0.004 in)

CLUTCH BEARING

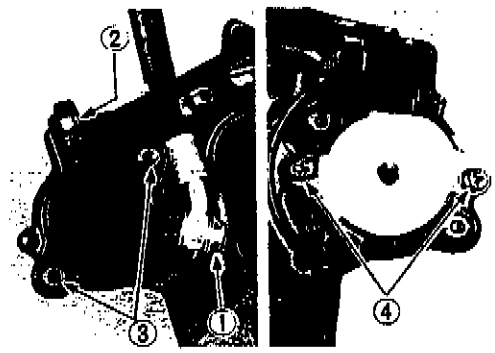
Inspect the clutch release bearing for any abnormality, particularly cracks, to decide whether it can be reused or should be replaced.
Smooth engagement and disengagement of the clutch depends on the condition of this bearing.



CLUTCH RELEASE CYLINDER

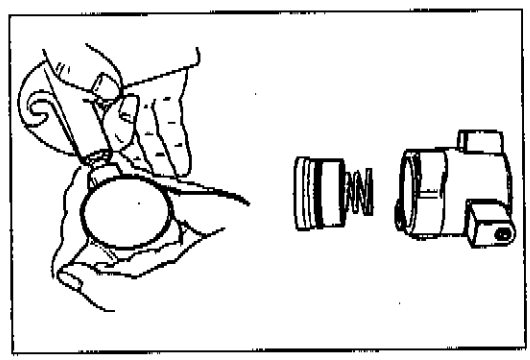
DISASSEMBLY

- Remove the gearshift lever and engine sprocket cover. (Refer to page 3-5.)
- Remove the clutch hydraulic line by removing the union bolt ①.
- Remove the air bleeder valve ②.
- Remove the clutch release cylinder by removing the mounting bolts ③ and piston retainer screws ④.



NOTE:
Completely wipe off any clutch fluid adhering to any part of motorcycle.
The fluid reacts chemically with paint, plastics, rubber materials, etc.

- Place a rag over the piston to prevent popping up. Force out the piston by using air gun.

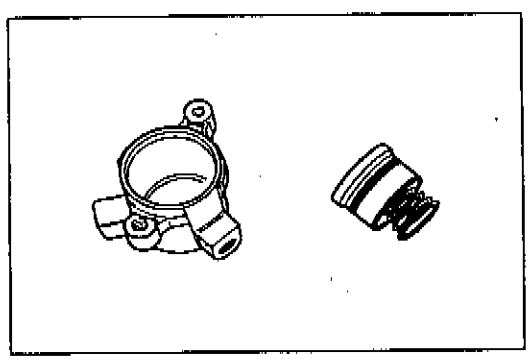


⚠ CAUTION

Do not use high pressure air to prevent piston damage.

INSPECTION

Inspect the clutch cylinder bore wall for nicks, scratches or other damage. Inspect the oil seal for damage and wear. Inspect the piston surface for any scratches or other damage.



REASSEMBLY

Reassemble the clutch cylinder in the reverse order of disassembly and by taking the following steps:

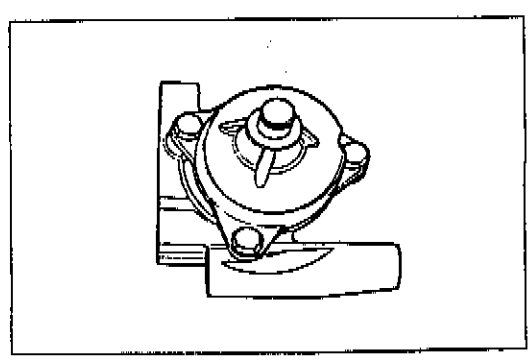
⚠ CAUTION

*** Wash the clutch cylinder components with fresh brake fluid before reassembly.**
*** Never use cleaning solvent or gasoline to wash them.**
*** Apply brake fluid to the cylinder bore and piston to be inserted into the bore.**
*** Bleed air from the system after reassembling the cylinder. (Refer to page 2-11.)**
(Refer to page 6-56 for the clutch master cylinder.)

OIL PUMP

⚠ CAUTION

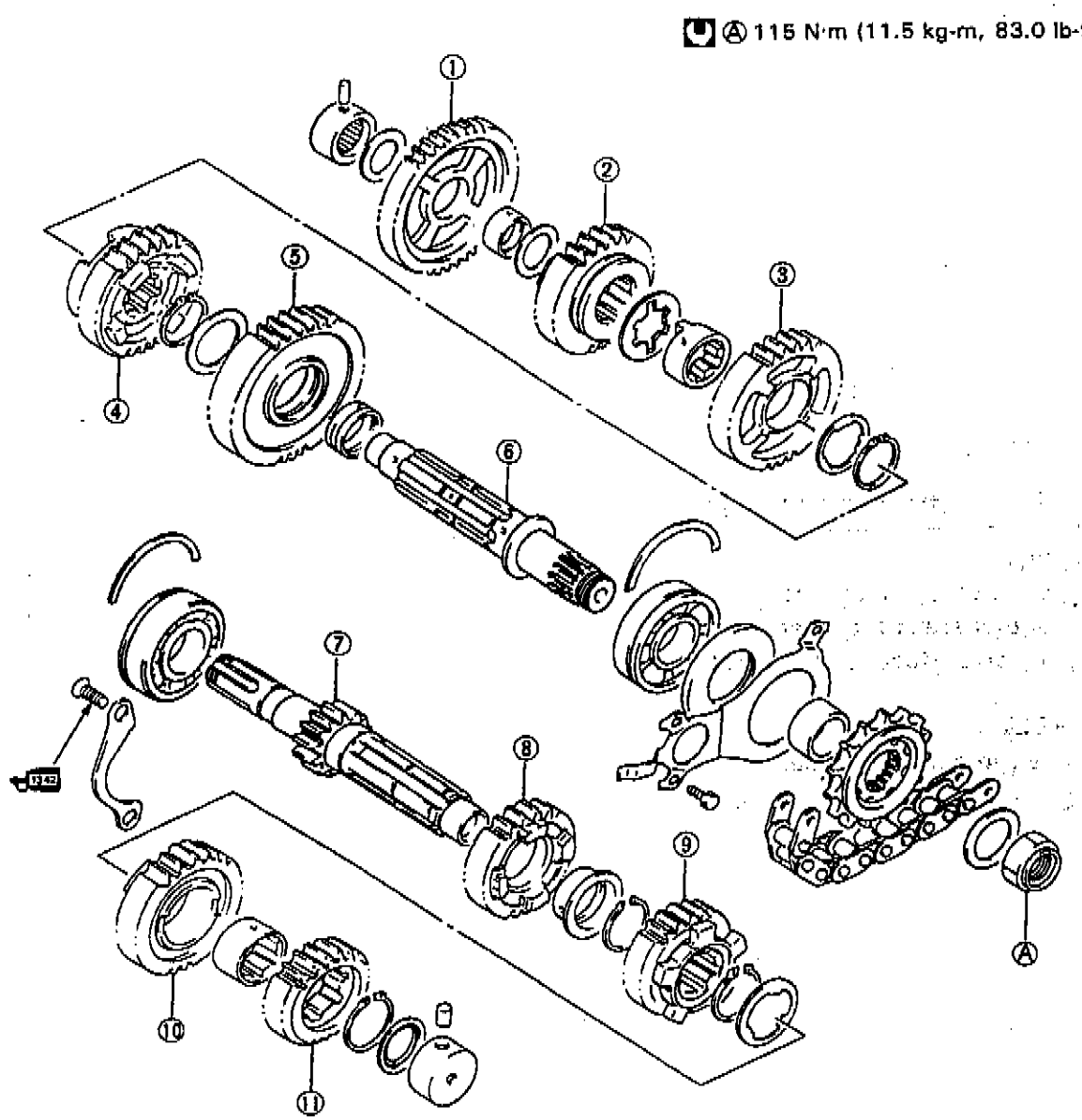
Do not attempt to disassemble the oil pump assembly. The oil pump is available only as an assembly.



TRANSMISSION

DISASSEMBLY

- Disassemble the transmission gears as shown in the illustration.



① Low driven gear
② 4th driven gear
③ 3rd driven gear
④ Top driven gear
⑤ 2nd driven gear
⑥ Driveshaft
⑦ Countershaft/Low drive gear
⑧ 4th drive gear
⑨ 3rd drive gear
⑩ Top drive gear
⑪ 2nd drive gear

REASSEMBLY

Assemble the countershaft and driveshaft in the reverse order of disassembly. Pay attention to the following points:

NOTE:

* *Before installing the gears, rotate the bearing by hand to inspect for abnormal noise and smooth rotation. Replace the bearing if there is anything unusual.*
* *Before installing the gears, lightly coat moly paste or engine oil to the driveshaft and countershaft.*
* *Before installing the oil seal, apply grease to the oil seal lip.*

99000-25140: SUZUKI MOLY PASTE

99000-25030: SUZUKI SUPER GREASE "A"

⚠ CAUTION

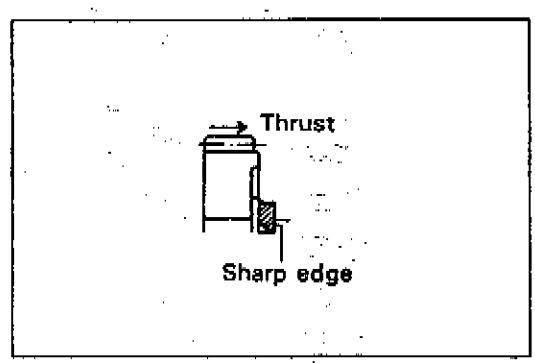
* **Never reuse a circlip. After a circlip has been removed from a shaft, it should be discarded, a new circlip must be installed.**
* **When installing a new circlip, care must be taken not to expand the end gap larger than required to slip the circlip over the shaft.**
* **After installing a circlip, always insure that it is completely seated in its groove and securely fitted.**

NOTE:

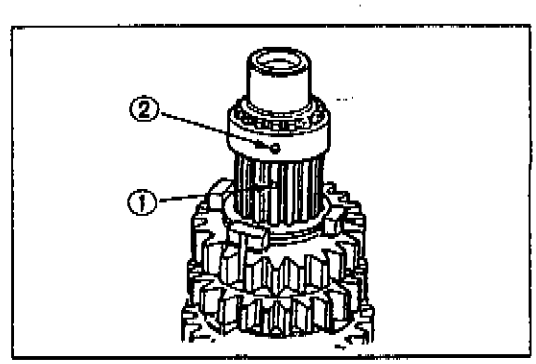
In reassembling the transmission, attention must be given to the locations and positions of washers and circlips. The cross sectional view given here will serve as a reference for correctly mounting the gears, washers and circlips. (Refer to page 3-45.)

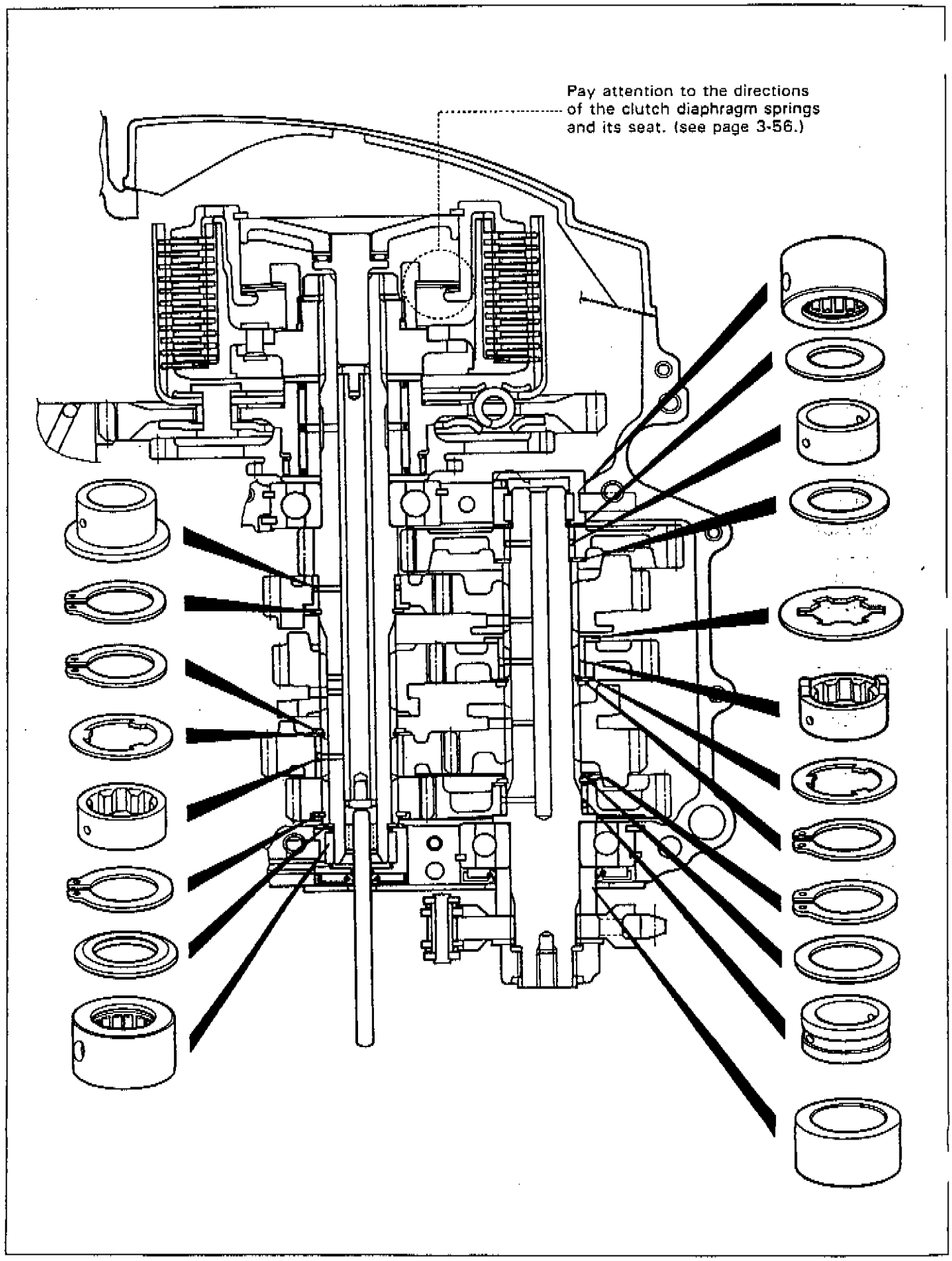


- When installing a new circlip, pay attention to the direction of the circlip. Fit it to the side where the thrust is as shown in the illustration.



- When installing the gear bushing onto the shaft, align the shaft oil hole ① with the bushing oil hole ② .




Pay attention to the directions
of the clutch diaphragm springs
and its seat. (see page 3-56.)

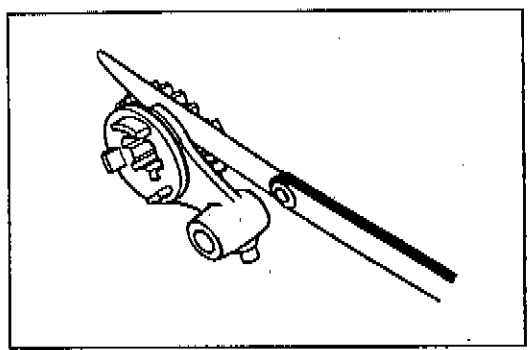
GEARSHIFT FORK-GROOVE CLEARANCE

Using a thickness gauge, check the gearshift fork clearance in the groove of its gear.
The clearance for each of the three gearshift forks plays an important role in the smoothness and positiveness of the shifting action.

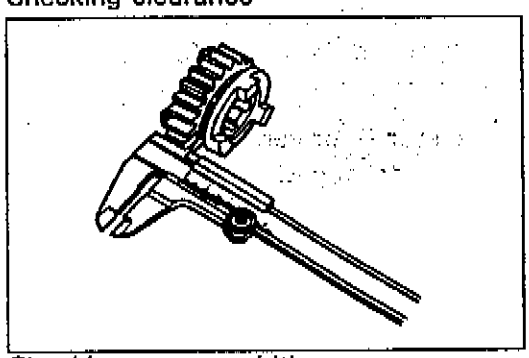
Gearshift fork-Groove clearance
Standard : 0.10—0.30 mm (0.004—0.012 in)
Service Limit: 0.50 mm (0.020 in)

If the clearance checked is noted to exceed the limit specified, replace the fork or its gear, or both.

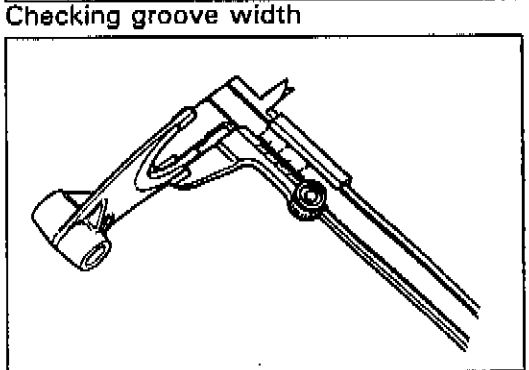
TOOL **09900-20803: Thickness gauge**
09900-20102: Vernier calipers


Checking clearance

Shift fork groove width
Standard: 5.00—5.10 mm (0.197—0.201 in)


Checking groove width

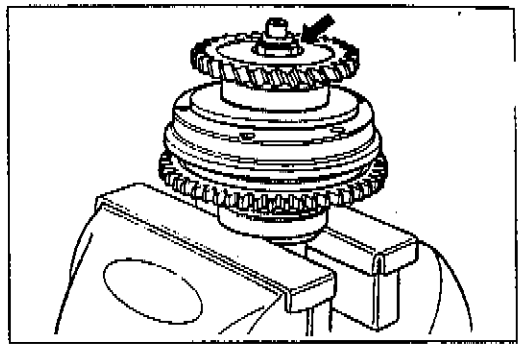
Shift fork thickness
Standard: 4.80—4.90 mm (0.189—0.193 in)


Checking thickness

STARTER CLUTCH

DISASSEMBLY AND INSPECTION

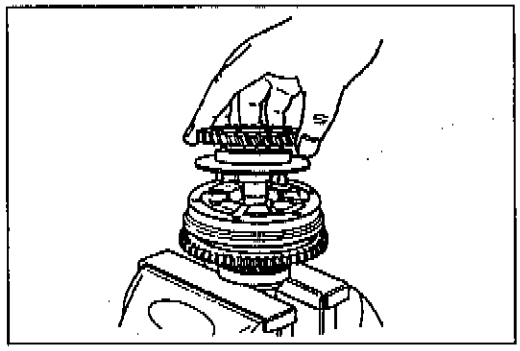
- Hold the starter clutch shaft to use a vise and appropriate pieces of soft metals, and remove the nut as shown in the Fig.



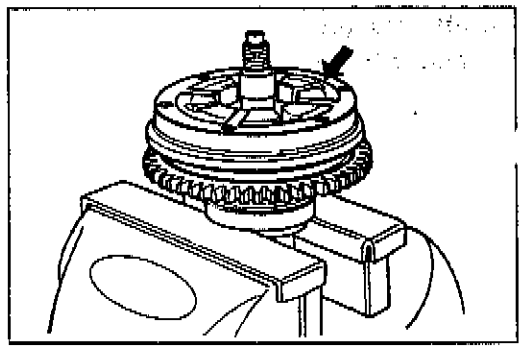
⚠ CAUTION

This is a left-hand thread nut.

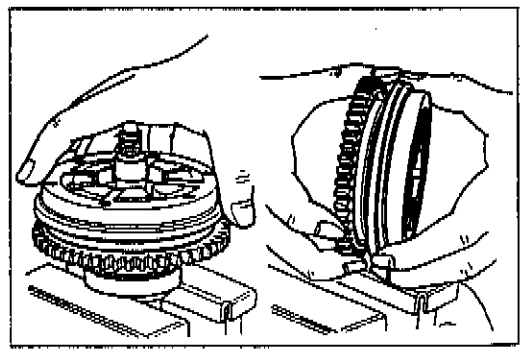
- Remove the generator driven gear assembly.



- Inspect the dampers for wear and damage.
  If any defects are found, replace the dampers as a set.
- Inspect the starter clutch and its contacting surface of the starter driven gear for wear damage. If they are found to be damaged, replace them with new ones.

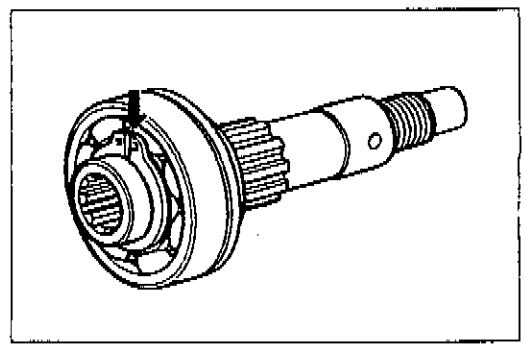


- Remove the starter clutch and its driven gear.
- Remove the driven gear from the starter clutch.

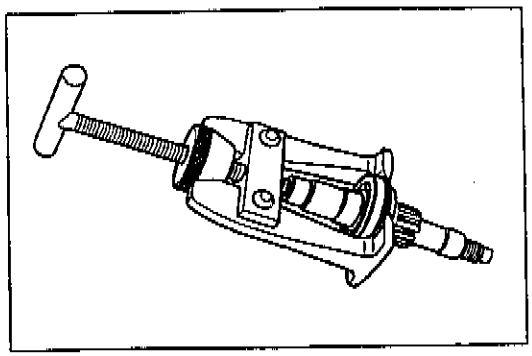


- Remove the circlip from the starter clutch shaft.

TOOL **09900-06107: Snap ring pliers**



• Remove the bearing with a bearing puller.



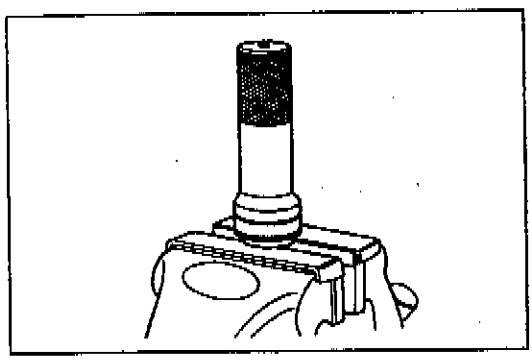
NOTE:
Before removing the bearing, rotate the outer race by hand to inspect for abnormal noise and smooth rotation.

⚠ CAUTION

The removed bearing should be replaced with a new one.

REASSEMBLY

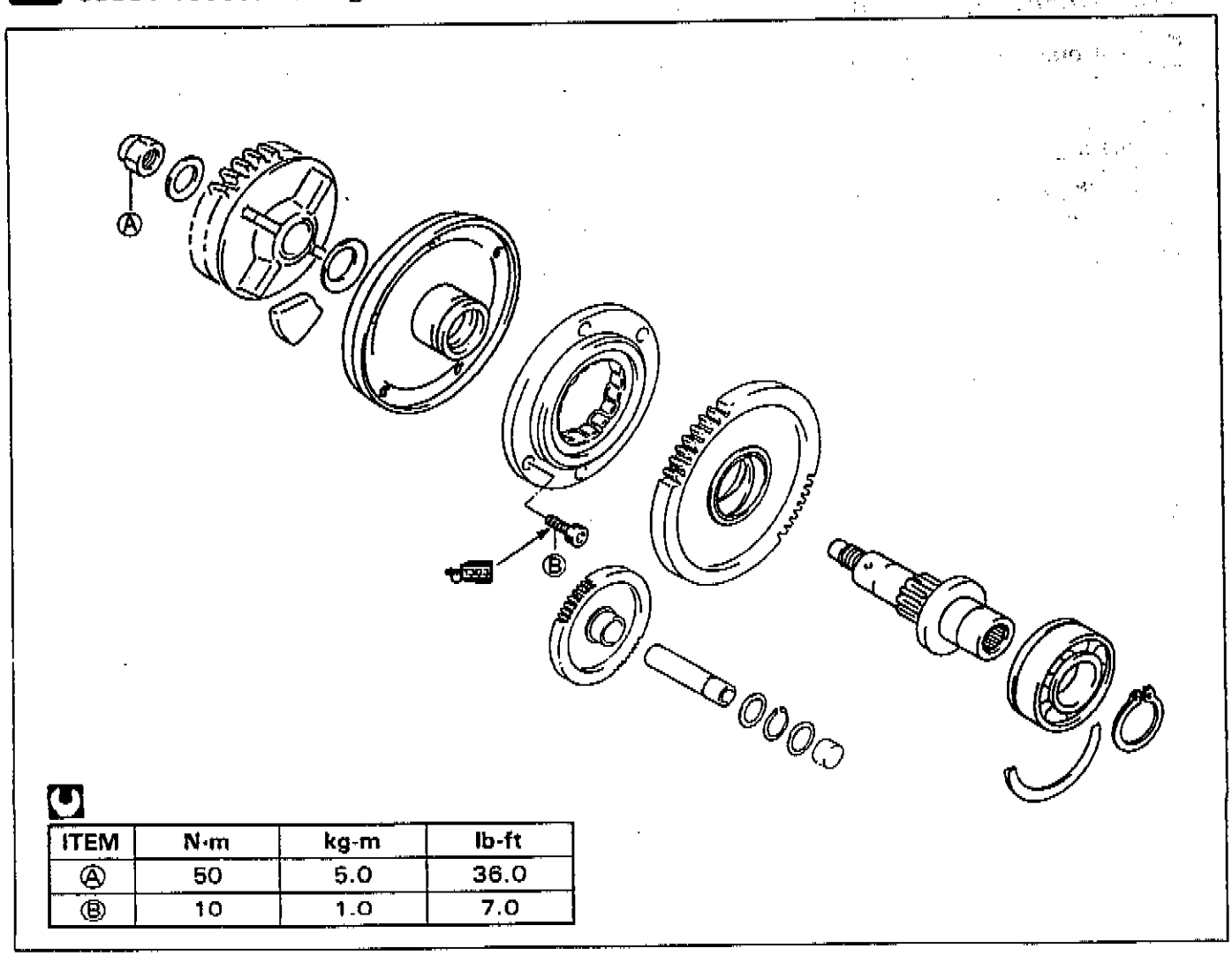
Assemble the starter clutch in the reverse order of disassembly. Pay attention to the following points:



NOTE:
Apply engine oil to each starter clutch part before reassembling.

• Install the bearing with a bearing installer.

TOOL 09951-16080: Bearing installer



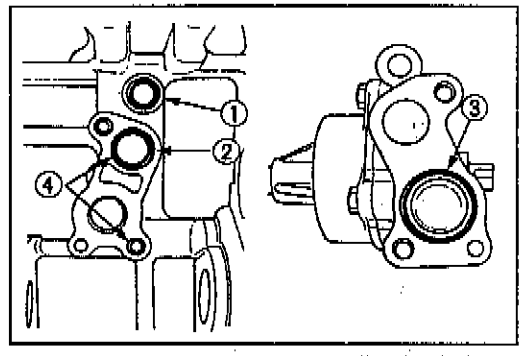
ITEM	N·m	kg-m	lb-ft
Ⓐ	50	5.0	36.0
Ⓑ	10	1.0	7.0

ENGINE REASSEMBLY

The engine is reassembled by carrying out the steps of disassembly in the reversed order, but the are a number of steps which demand special descriptions or precautionary measures.

NOTE:
Apply engine oil to each running and sliding part before reassembling.

- Fit the O-rings (① , ② and ③) and dowel pins ④ to the correct positions, as shown in the Figs.



⚠ CAUTION

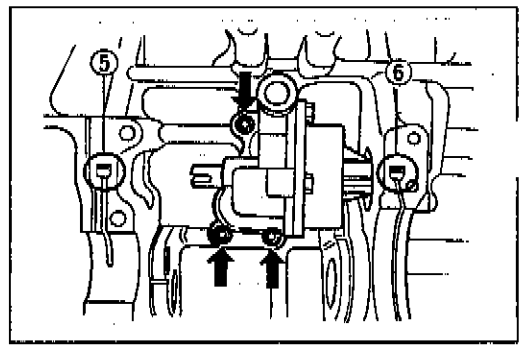
Replace the O-rings with new ones to prevent oil leakage.

- Install the oil pump to the lower crankcase with three bolts and tighten them to the specified torque.

NOTE:
Apply a small quantity of THREAD LOCK "1342" to the bolts.

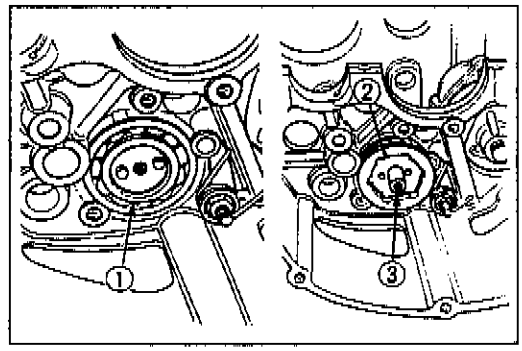
99000-32050: THREAD LOCK "1342"

Oil pump bolt: 10 N·m (1.0 kg-m, 7.0 lb-ft)



NOTE:
Check the oil jets (⑤ and ⑥) fitted on the lower crankcase for clogging.
Each oil jet can be distinguished by the numbers and colors.
⑤ Oil jet . . . . . Number 12, Yellow
⑥ Oil jet . . . . . Number 14, White

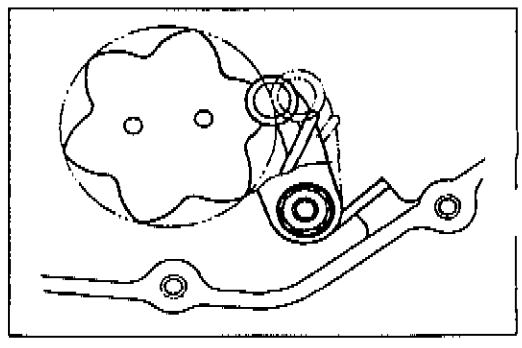
- Install the gearshift cam related parts.
  ① Washer
  ② Gearshift cam stopper plate
  ③ Bolt



NOTE:
When installing the gearshift cam stopper plate ② , apply a small quantity of THREAD LOCK "1342" to its bolt ③ .

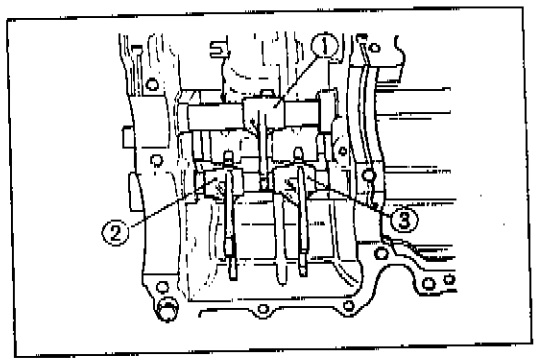
99000-32050: THREAD LOCK "1342"

- Position the gearshift cam as shown in Fig. so that the gearshift forks and transmission can be installed easily.

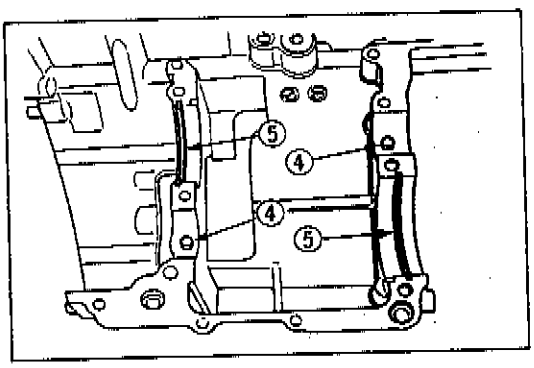


- Install the gearshift forks to the crankcase in the correct positions and directions.

  ① For 3rd drive gear
  ② For Top driven gear
  ③ For 4th driven gear

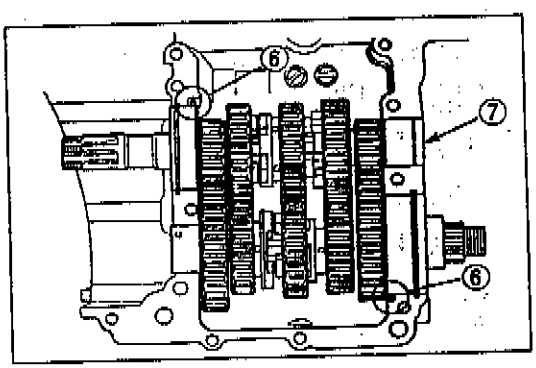


- Fit the bearing pins ④ and C-rings ⑤ on the upper crankcase.



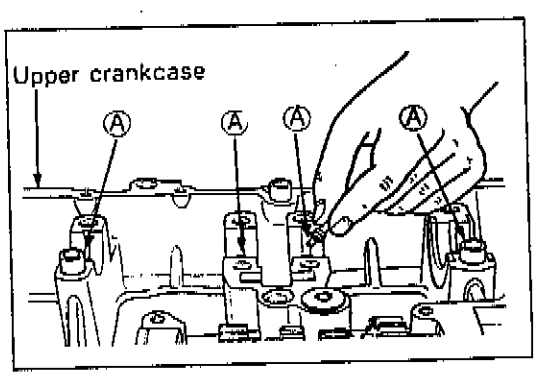
- Install the countershaft assembly and driveshaft assembly on the upper crankcase.

NOTE:
* *Be sure to install the bearing dowel pins ⑥ in the respective positions.*
* *Install the countershaft end cap to the position ⑦ .*
* *Make sure that the countershaft turns freely while holding the driveshaft. If not, shift the gear which is engaged to the neutral position.*



NOTE:
Before fitting the crankshaft journal bearings, check the piston oil jets Ⓐ fitted on the upper crankcase for clogging.

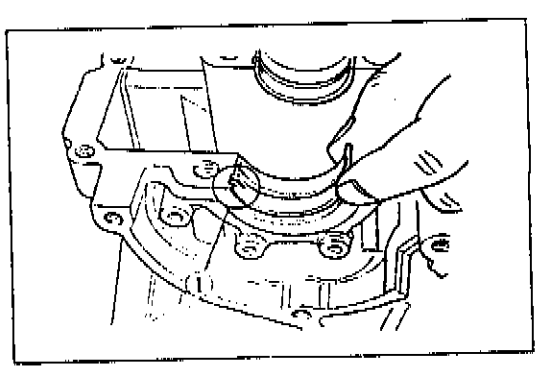
Ⓐ Piston oil jet (4 pcs) .....Jet number is 9.



- When fitting the crankshaft journal bearings to the upper and lower crankcases, be sure to fix the stopper part ① first and press the other end. (Refer to page 3-39.)

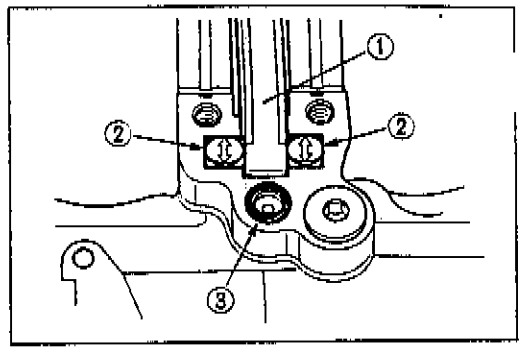
⚠ CAUTION

Do not touch the bearing surfaces with your hands. Grasp by the edge of the bearing shell.



- Install the cam chain guide ① and two dampers ② properly.

NOTE:
Be sure to face the arrow mark on the damper to the front and rear, not to the left and right.



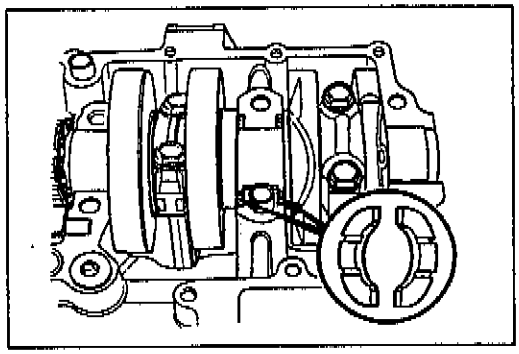
- Fit the O-ring ③ .

⚠ CAUTION

Replace the O-ring with a new one to prevent oil leakage.

- Before installing the crankshaft, apply SUZUKI MOLY PASTE to each journal bearing lightly.

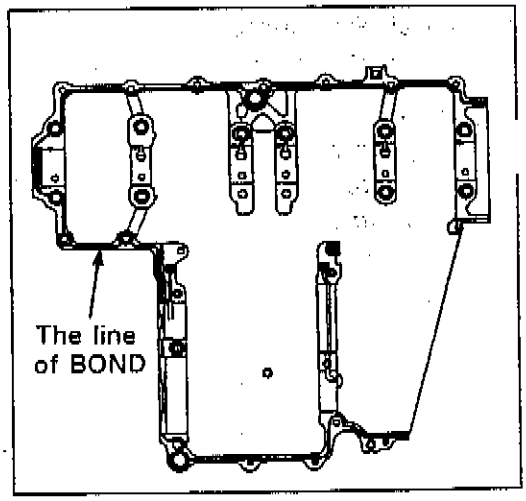
99000-25140: SUZUKI MOLY PASTE



- Install the crankshaft with the cam chain to the upper crankcase.
- Insert the right and left-thrust bearings with oil grooved facing the crank web. (Refer to page 3-40.)

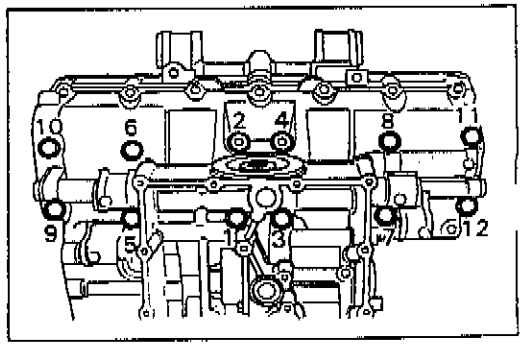
- Clean the mating surfaces of the crankcases before matching the upper and lower ones.
- Install the dowel pins to the upper crankcase.
- Apply SUZUKI BOND NO. 1207B to the mating surface of the lower crankcase and crankshaft left end cap in the following procedure.

99104-31140: SUZUKI BOND NO. 1207B



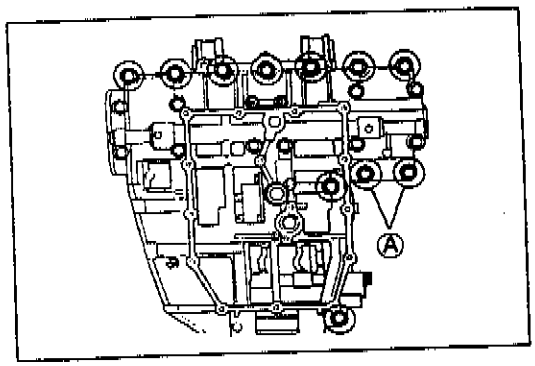
NOTE:
Use of SUZUKI BOND NO. 1207B is as follows:
* *Make surfaces free from moisture, oil, dust and other foreign materials.*
* *Spread on surfaces thinly to form an even layer, and assemble the cases within few minutes.*
* *Take extreme care not to apply any BOND NO. 1207B to the bearing surfaces.*
* *Apply to cornered surface as it forms a comparatively thick film.*

- Tighten the crankshaft tightening 9-mm bolts in ascending order of numbers assigned to these bolts, tightening each bolt a little at a time to equalize the pressure. Tighten the lower and upper crankcase tightening bolts to the specified torque values.



Tightening torque	Initial tightening			Final tightening		
	N·m	kg-m	lb-ft	N·m	kg-m	lb-ft
6 mm bolt	6	0.6	4.5	13	1.3	9.5
8 mm bolt	13	1.3	9.5	26	2.6	19.0
9 mm bolt	13	1.3	9.5	26	2.6	19.0

- Fit the new gaskets to the lower crankcase bolts Ⓐ correctly as shown in the Fig.

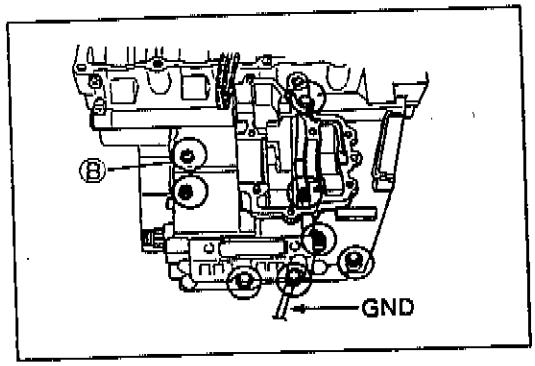


⚠ CAUTION

Use a new gasket to prevent oil leakage.

TOOL 09900-00410: Hexagon bit wrench set

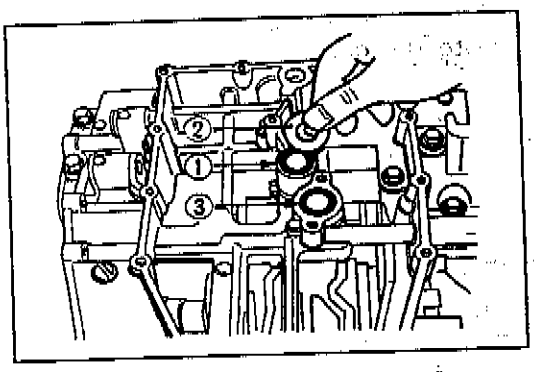
- Fit the engine ground wire to the correct position as shown in the Fig.
- Fit a new gasket to the upper crankcase bolt Ⓑ correctly as shown in the Fig.



⚠ CAUTION

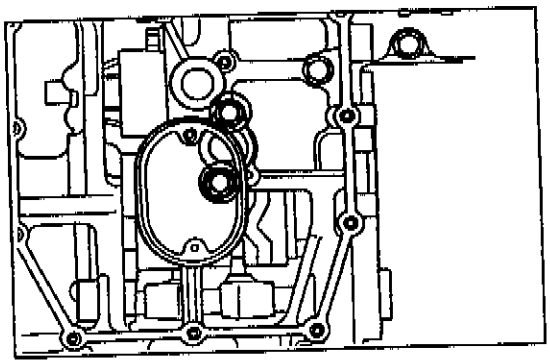
Use a new gasket to prevent oil leakage.

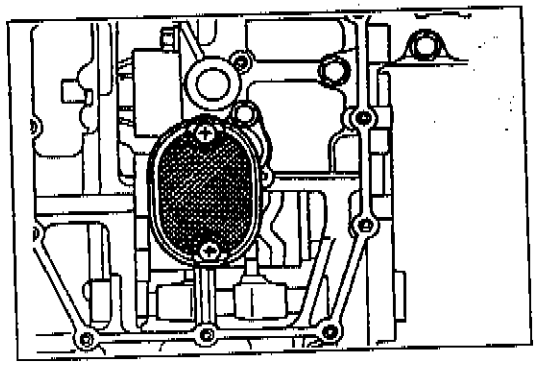
- Fit a new O-ring ① and shim ② .
- Fit a new O-ring ③ and install the oil sump filter to the lower crankcase.



⚠ CAUTION

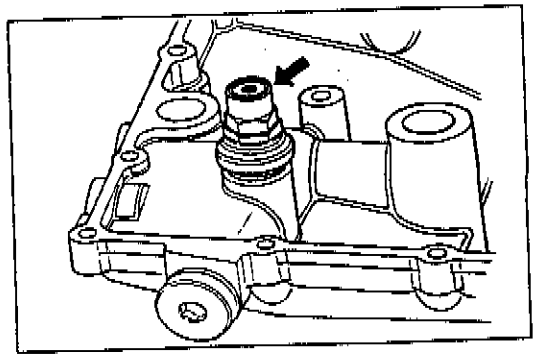
Replace the O-rings with new ones to prevent oil leakage.



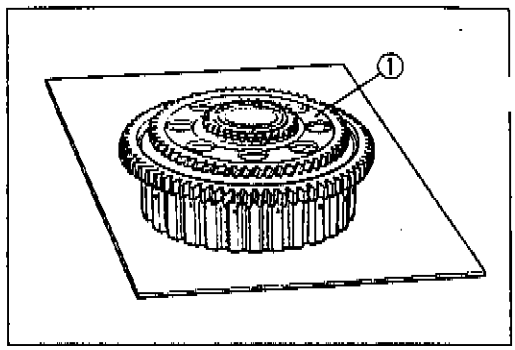


- Seat the washer and install the oil pressure regulator to the oil pan and tighten it to the specified torque.

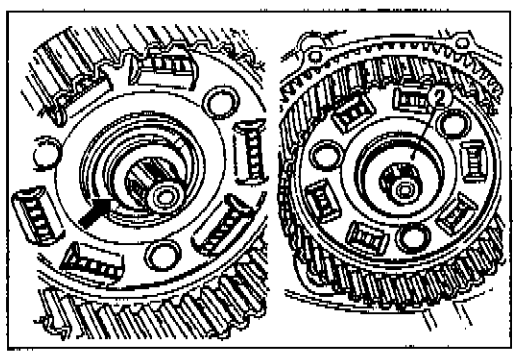
Oil pressure regulator: 28 N·m (2.8 kg-m, 20.0 lb-ft)



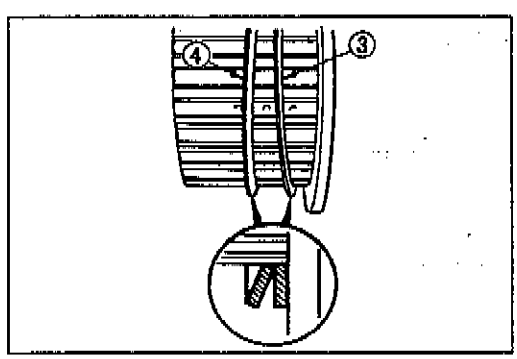
- Install the generator/oil pump drive gears ① onto the primary driven gear.



- Install the primary driven gear assembly onto the countershaft, and apply engine oil to the needle bearing and spacer.
- Install the thrust washer ② onto the countershaft.



- Install the spring washer seat ③ and spring washer ④ onto the clutch sleeve hub correctly.

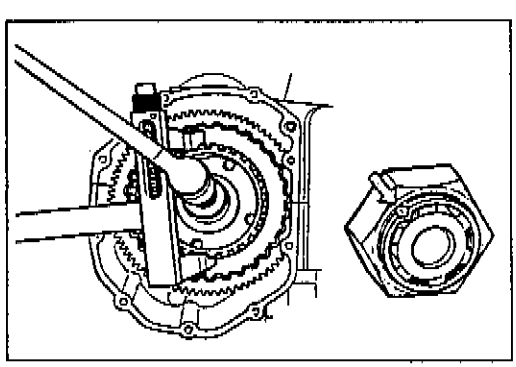


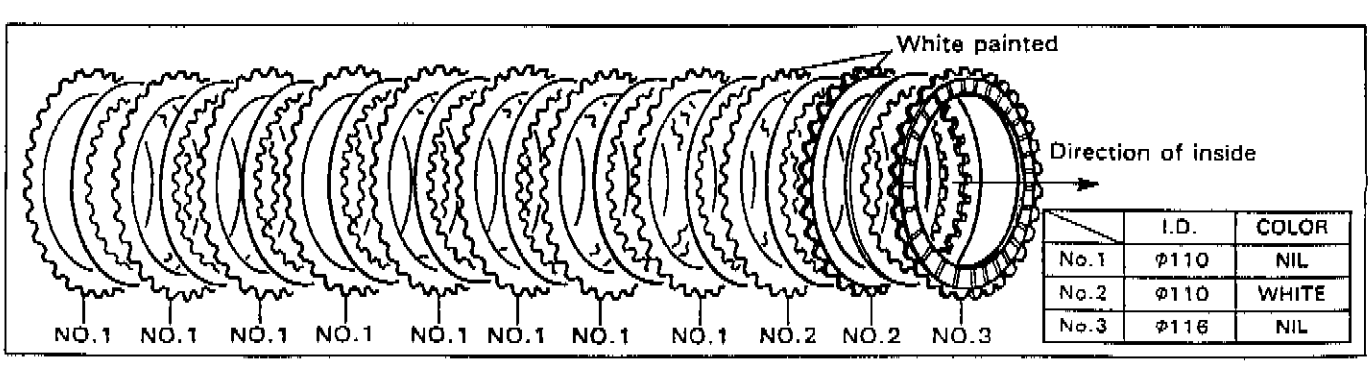
- Install the clutch sleeve hub onto the countershaft.
- Tighten the clutch sleeve hub nut to the specified torque by using the torque wrench and clutch sleeve hub holder.
- Lock the clutch sleeve hub nut with a center punch.

09920-53740: Clutch sleeve hub holder

Clutch sleeve hub nut: 150 N·m (15.0 kg-m, 108.5 lb-ft)

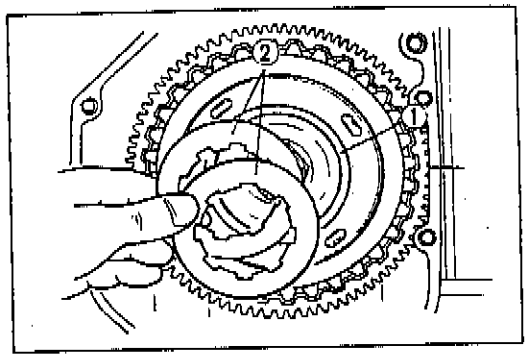
- Insert the clutch drive plates and driven plates one by one into the clutch sleeve hub in the prescribed order, drive plate first. (Three kinds of drive plate, No.1, No.2 and No.3, are used, they can be distinguished by the painted color and inside diameter.)





	I.D.	COLOR
No.1	φ110	NIL
No.2	φ110	WHITE
No.3	φ116	NIL

- Put the clutch pressure plate onto the clutch sleeve hub.
- Put the clutch diaphragm spring seat ① and clutch diaphragm springs ② onto the clutch pressure plate properly.

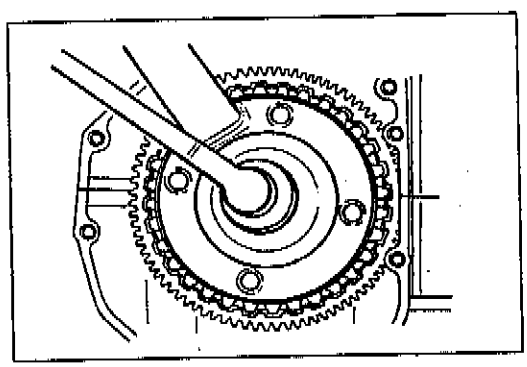


NOTE:
When installing the clutch diaphragm springs and its seat, refer to page 3-45.

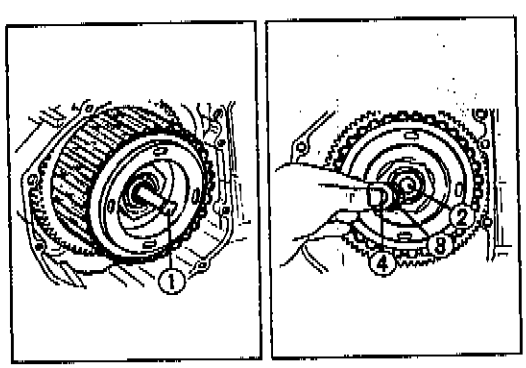
- Tighten the clutch diaphragm spring holder nut to the specified torque by using the special tools.

TOOL 09920-34820: Clutch pressure plate holder
09941-58010: 50 mm socket wrench

Clutch diaphragm spring holder nut: 100 N·m (10.0 kg-m, 72.5 lb-ft)



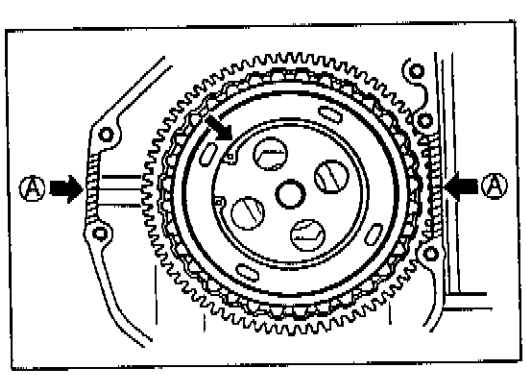
- Install the clutch push rod ①, clutch push piece ②, bearing ③ and thrust washer ④ into the countershaft.



- Fix the clutch pressure plate lifter with the circlip.

TOOL 09900-06108: Snap ring pliers

NOTE:
When fitting the circlip, make sure that the sharp edge of the circlip faces outside.

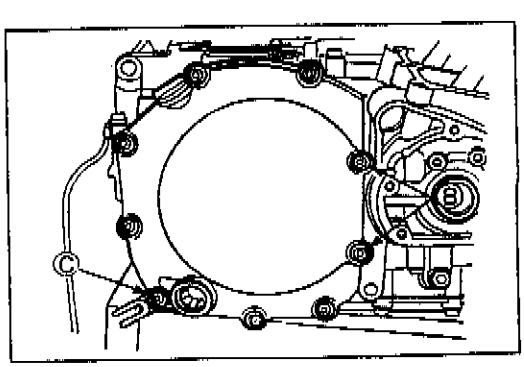


- Coat SUZUKI BOND NO. 1207B lightly to the mating surfaces Ⓐbetween upper and lower crankcases as shown in the Fig.

1207B 99104-31140: SUZUKI BOND NO. 1207B

- Install the dowel pins, a new gasket and clutch cover.
- Tighten the cover bolts securely.

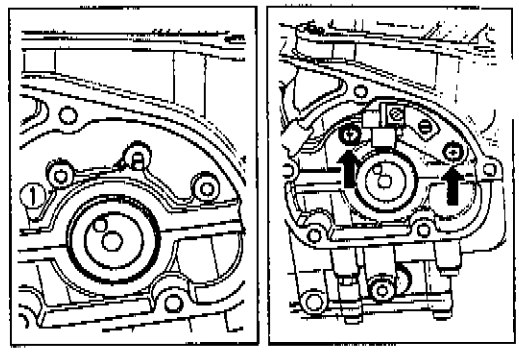
NOTE:
Fit the two gaskets to the clutch cover bolts Ⓑcorrectly as shown in the Fig.
Fit the hose clamp to the clutch cover bolt Ⓒcorrectly as shown in the Fig.



⚠ CAUTION

Use only new gasket to prevent oil leakage.

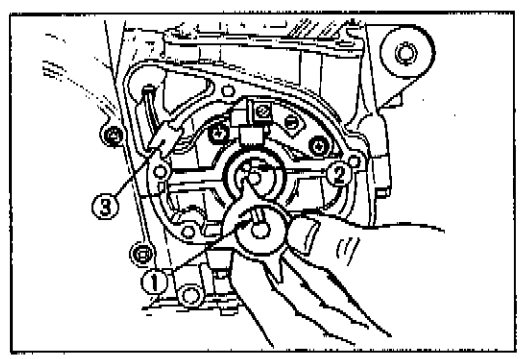
- Put the signal generator dowel pin ① to the crankcase.
- Install the signal generator stator with two screws.



- Make sure to fit the slot ① on the back surface of the signal generator rotor over the locating pin ② at the end of crankshaft.

NOTE:
BOND NO. 1207B should be applied to the groove of the signal generator lead wire grommet ③ .

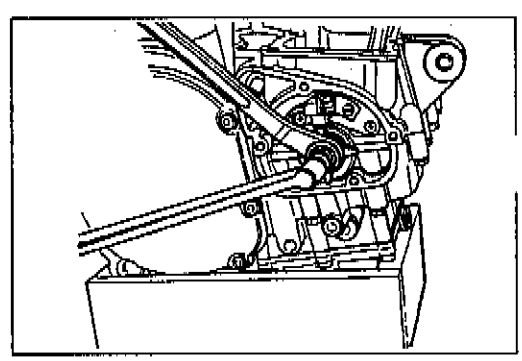
1207B 99104-31140: SUZUKI BOND NO. 1207B



- Hold the crankshaft turning nut and tighten the rotor bolt to the specified torque using 6-mm hexagon wrench.

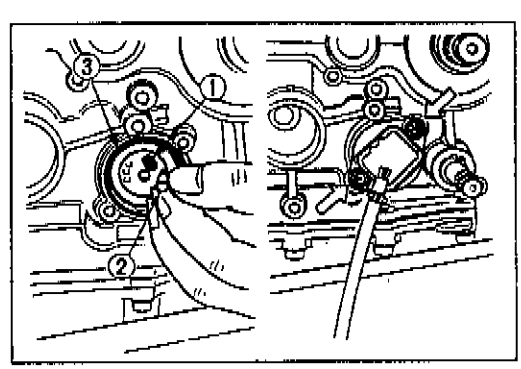
TOOL 09900-00410: Hexagon wrench set

Signal generator rotor bolt: 25 N·m (2.5 kg-m, 18.0 lb-ft)

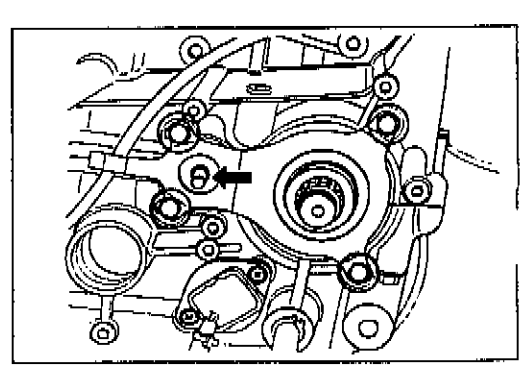


- Install the neutral position indicator switch with two screws.

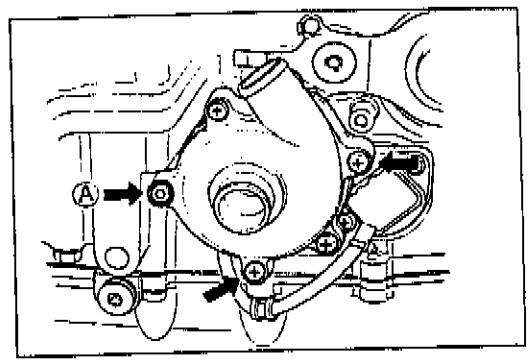
NOTE:
When installing the neutral position indicator switch, be sure to locate the spring ① , switch contact ② and O-ring ③ .



- Install the oil seal retainer with four bolts, and positively bend the lock portion of the retainer.
- Insert the clutch push rod into the countershaft.



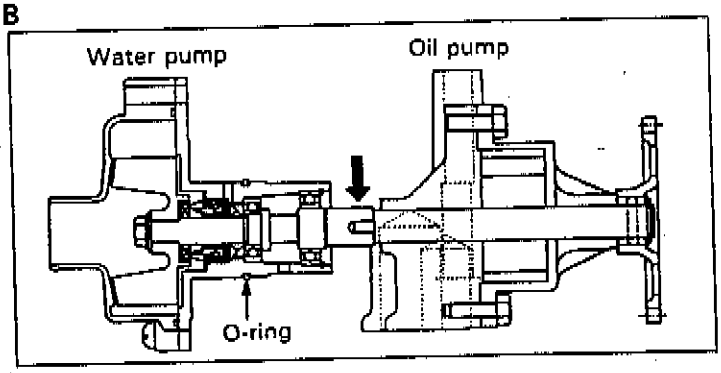
- Install the water pump with screws and nut.



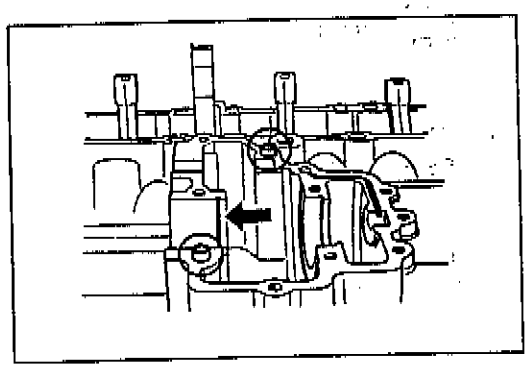
NOTE:

* *Apply SUZUKI SUPER GREASE "A" to the water pump O-ring.*
* *Set the water pump shaft to the oil pump shaft.*
* *When replacing the stud bolt which is located at the position Ⓐ, apply SUZUKI BOND NO.1207B to its threads to prevent oil leakage.*

99000-25030: SUZUKI SUPER GREASE "A"
99104-31140: SUZUKI BOND NO.1207B

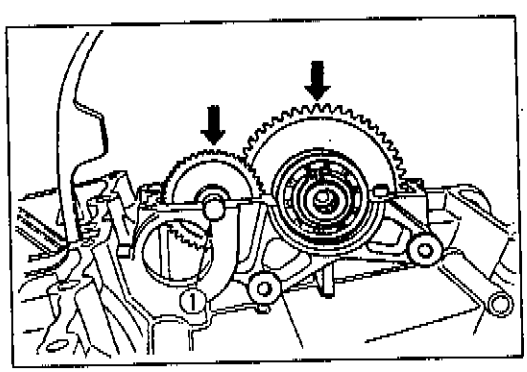


- Install the two dowel pins and C-ring.



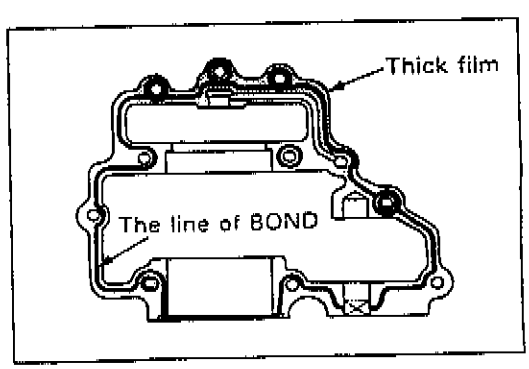
- Install the starter clutch assembly.
- Install the starter idle gear and its shaft.
- Install the shaft end cap to the position ① .
- Clean the mating surfaces of the upper crankcase and starter clutch cover.
- Apply SUZUKI BOND NO. 1207B to the mating surface of the starter clutch cover.

99104-31140: SUZUKI BOND NO. 1207B



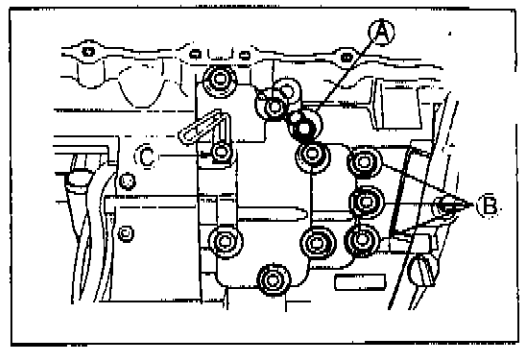
NOTE:
Use of SUZUKI BOND NO. 1207B is as follows:

* *Make surfaces free from moisture, oil, dust and other foreign materials.*
* *Spread on surfaces thinly to form an even layer, and assemble the cover within few minutes.*
* *Take extreme care not to apply any BOND NO. 1207B to the bearing surfaces.*
* *Apply to cornered surface as it forms a comparatively thick film.*



- Place the starter clutch cover and tighten its bolts to the specified torque.

Starter clutch cover bolt: 10 N·m (1.0 kg-m, 7.0 lb-ft)



NOTE:

* *Fit the gaskets to the starter clutch cover bolt Ⓐ and bolts Ⓑ correctly as shown in the Fig.*
* *Fit the oil hose clamp to the starter clutch cover bolt Ⓒ correctly as shown in the Fig.*

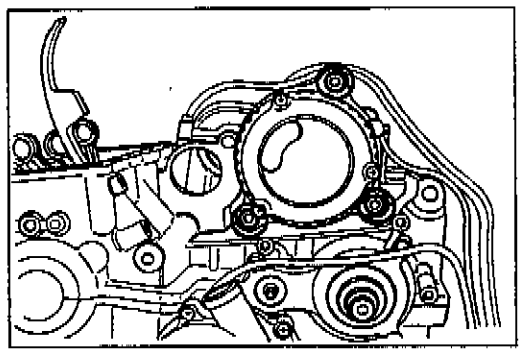
Bolt Ⓐ: Copper washer gasket
Bolt Ⓑ: Steel washer with rubber gasket

⚠ CAUTION

Use a new gasket to prevent oil leakage.

- Install the generator with three bolts.

Generator mounting bolt: 25 N·m (2.5 kg-m, 18.0 lb-ft)

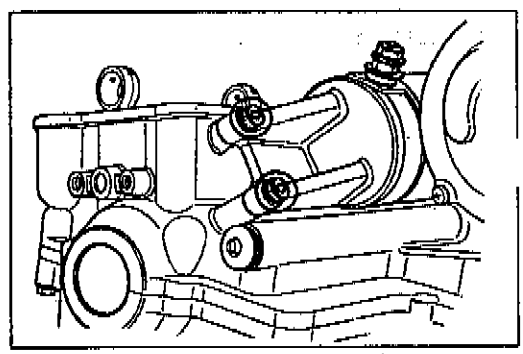


NOTE:
Apply SUZUKI SUPER GREASE "A" to the generator O-ring.

99000-25030: SUZUKI SUPER GREASE "A"

- Install the starter motor with two bolts.

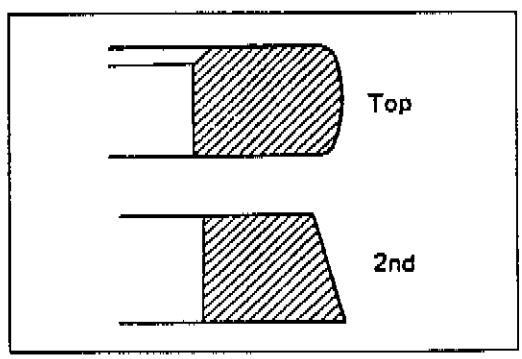
Starter motor mounting bolt: 6 N·m (0.6 kg-m, 4.5 lb-ft)



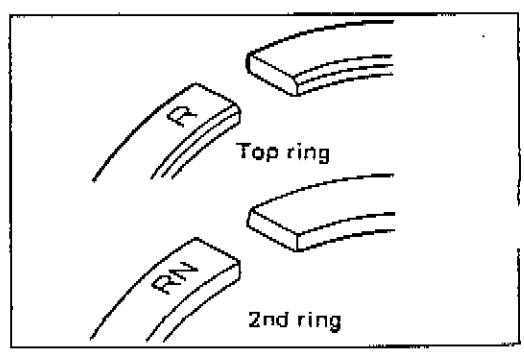
NOTE:
Apply SUZUKI SUPER GREASE "A" to the starter motor O-ring.

- Install the piston rings in the order of oil ring, 2nd ring and top ring.

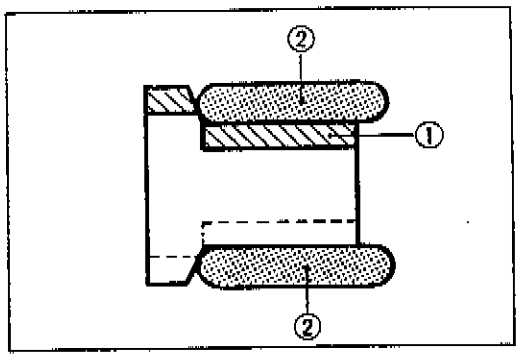
NOTE:
Top ring and 2nd ring differ in the shape of the ring face.



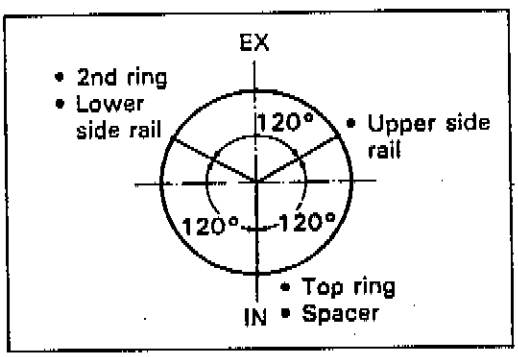
- Top and 2nd rings have a letter "R" or "RN" marked on the side. Be sure to bring the marked side to the top when fitting them to the piston.



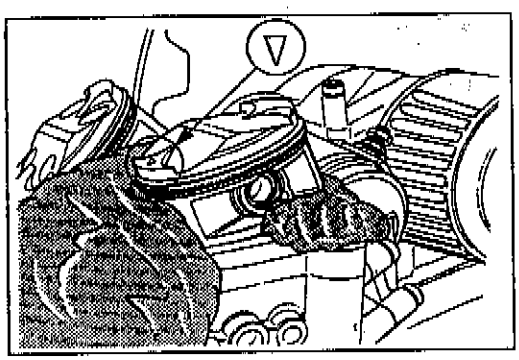
- The first member to go into the oil ring groove is a spacer ① . After placing the spacer, fit the two side rails ② . Side designations, top and bottom, are not applied to the spacer and side rails: you can position each either way.



- Position the gaps of the three rings as shown. Before inserting each piston into the cylinder, check that the gaps are so located.

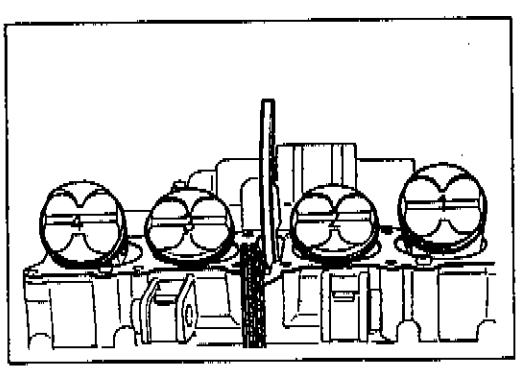


NOTE:
When fitting the piston, turn the triangle mark on the piston head to exhaust side.



- Be sure to install the pistons in the cylinder from which they were removed in disassembly, refer to the letter mark, "1" through "4", scribed on the piston.
- Have each piston pin moly paste oiled lightly before installing it.
- Place a cloth beneath the piston, and install the circlips.

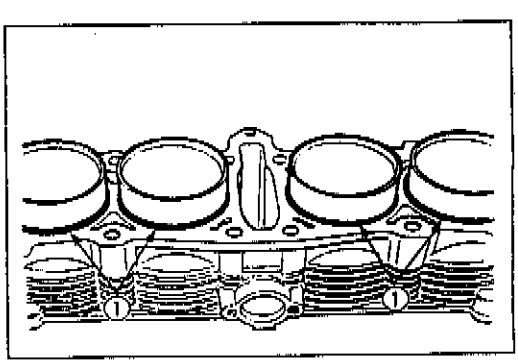
NOTE:
Be sure to use new circlips.



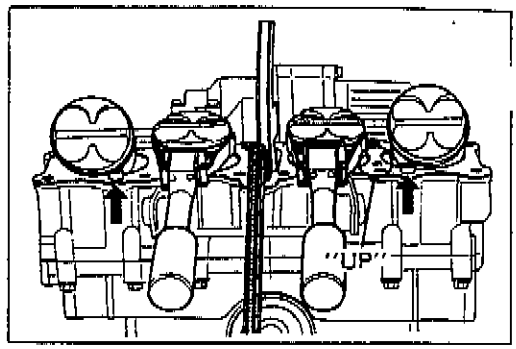
- Before putting on the cylinder block, oil the big and small ends of each conrod and also the sliding surface of each piston.
- Place the new O-rings ① to each cylinder sleeve correctly as shown in the Fig.

⚠ CAUTION

Use a new O-ring to prevent water leakage.



- Place the dowel pins and new cylinder gasket on the crankcase.

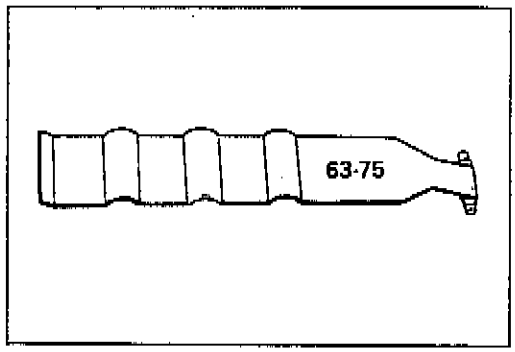


⚠ CAUTION

Use a new gasket to prevent oil leakage.

NOTE:
Be sure to identify the top surface by "UP" mark on the cylinder gasket as shown in the Fig.

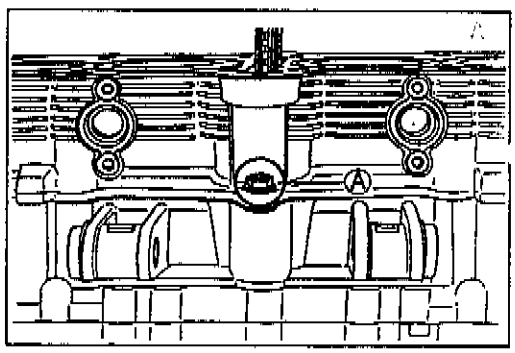
- Install piston ring holders in the indicated manner. Some light resistance must be overcome to lower the cylinder block.
- With No.2 and No.3 pistons in place, install No.1 and No.4 pistons, and insert them into the cylinder.



TOOL 09916-74521: Holder body
09916-74540: Band

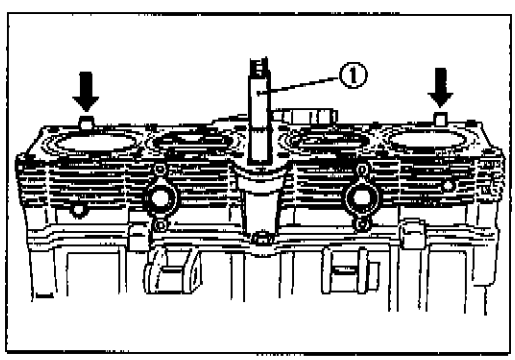
NOTE:
Do not overtighten the special tool bands or the pistons entry into the cylinders will be difficult.

- Tighten the cylinder base nut Ⓐ to the specified torque.



Cylinder base nut: 9 N·m (0.9 kg-m, 6.5 lb-ft)

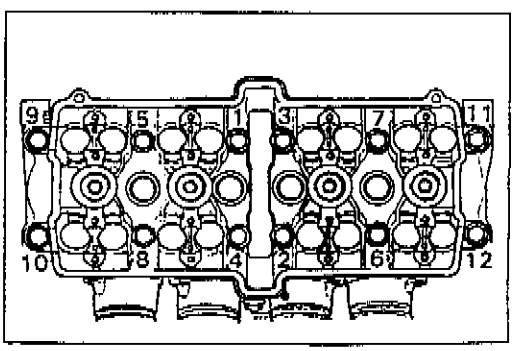
- Install the cam chain guide ① properly.
- Place the dowel pins and new cylinder head gasket on the cylinder.



⚠ CAUTION

Use a new gasket to prevent gas leakage.

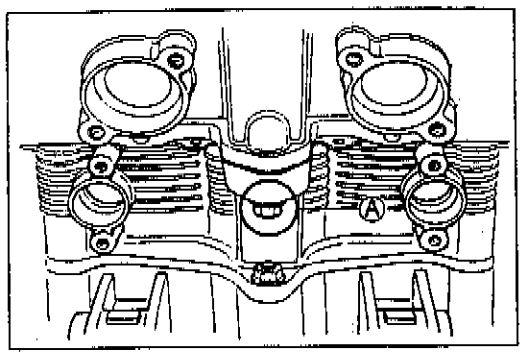
- Place the cylinder head on the cylinder block.
- Tighten the twelve 10-mm bolts to the specified torque with a torque wrench sequentially in the ascending order of numbers.



Cylinder head bolt: 43 N·m (4.3 kg-m, 31.0 lb-ft)

- After firmly tightening the twelve 10-mm bolts, install one 6-mm bolt Ⓐ and tighten it to the specified torque.

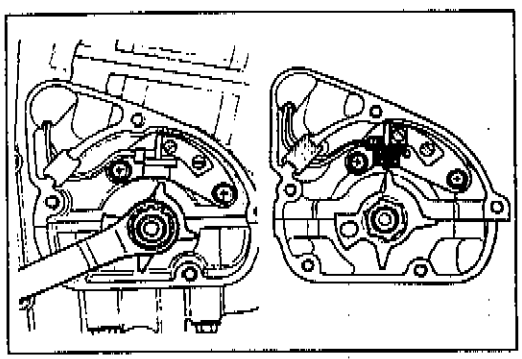
Cylinder head bolt: 10 N·m (1.0 kg-m, 7.0 lb-ft)



- While holding down the cam chain, rotate the crankshaft in normal direction to bring the "T" mark on the rotor to the center of pick-up coil.

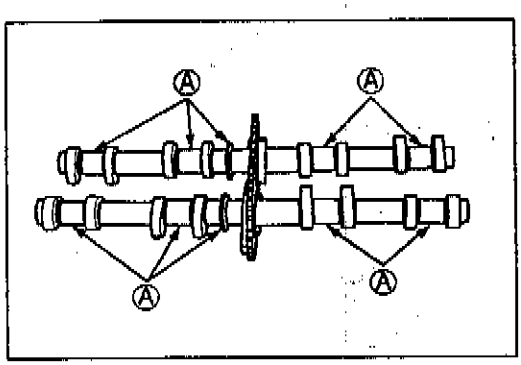
⚠ CAUTION

To turn over crankshaft, torque nut with a 19 mm wrench. Never try to rotate crankshaft by putting a 6 mm T-type wrench over the bolt.

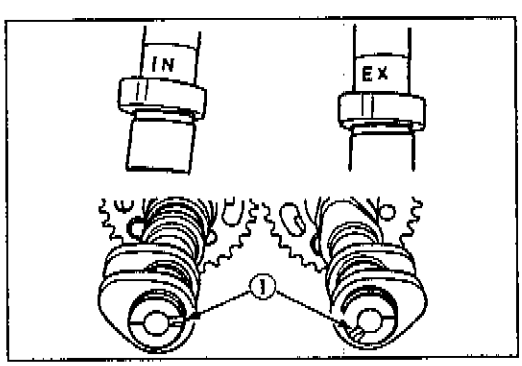


NOTE:
Just before placing the camshaft on the cylinder head, apply SUZUKI MOLY PASTE to its journals, fully coating each journal Ⓐ with the paste, taking care not to leave any dry spot. Apply engine oil to the camshaft journal holders.

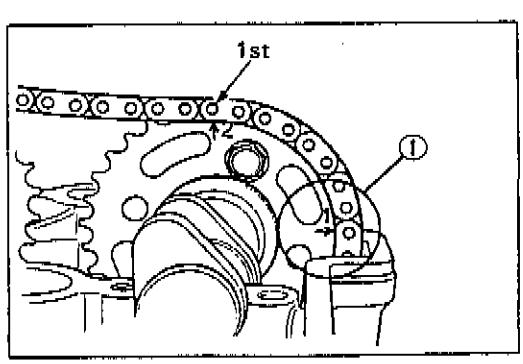
99000-25140: SUZUKI MOLY PASTE



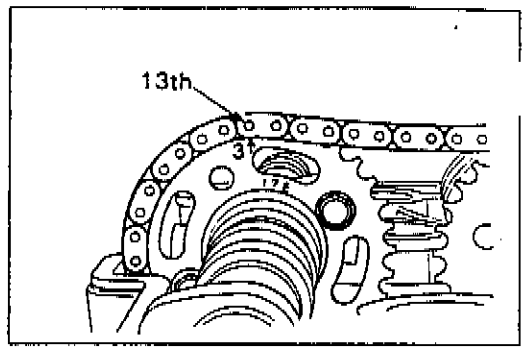
- The exhaust camshaft can be distinguished from that of the intake by the embossed letters "EX" (for exhaust) as against letters "IN" (for intake). Similarly, the right end can be distinguished by the notch ① at the right end.



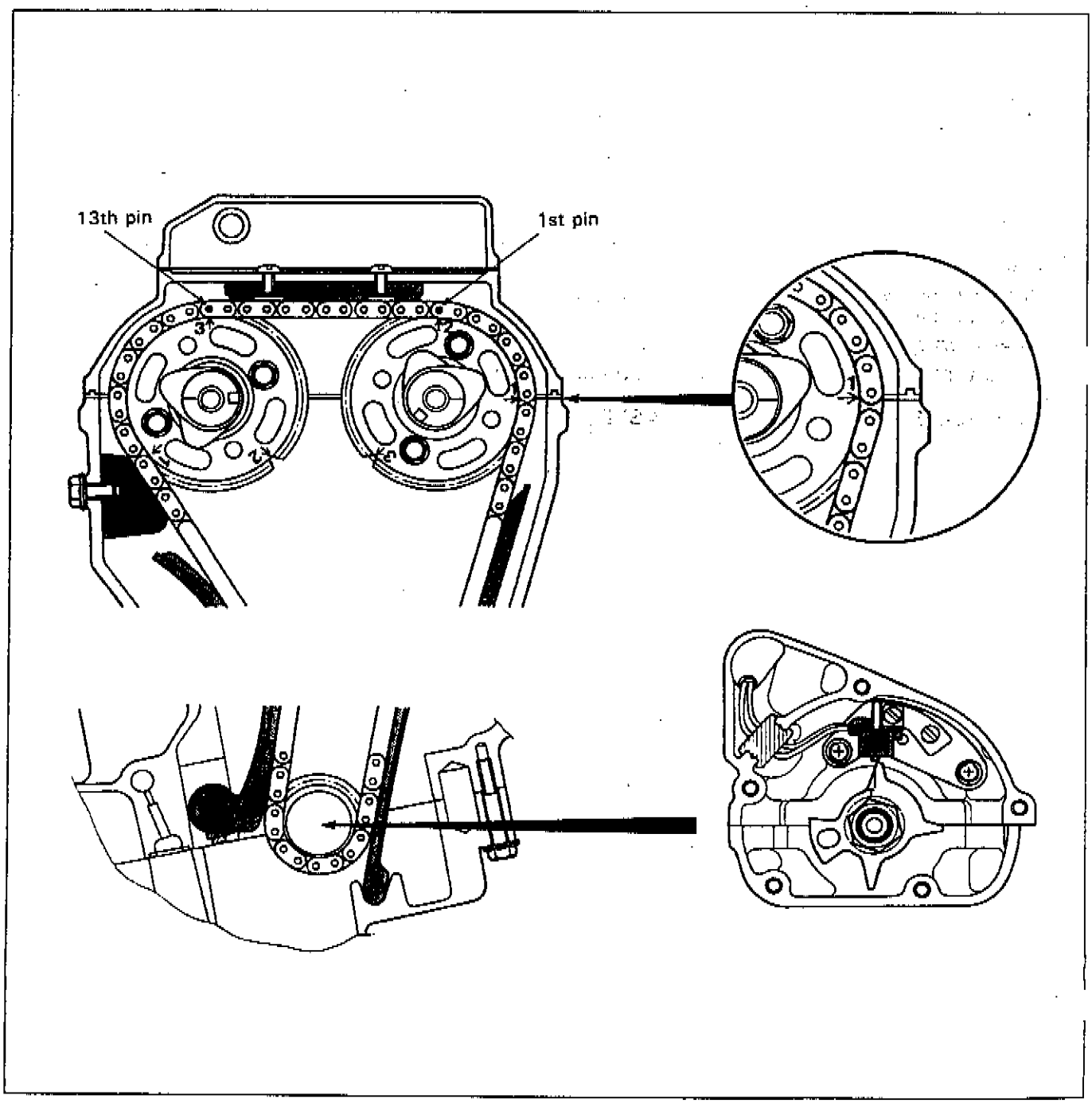
- With "T" mark accurately lined up with the timing mark, hold the camshaft steady and lightly pull up the chain to remove the slack between the crank sprocket and exhaust sprocket.
- The exhaust sprocket bears an arrow marked "1" indicated as ① . Turn over the exhaust camshaft so that the arrow points flush with the gasketed surface of the cylinder head.
  Engage the cam chain with this sprocket.



- The other arrow marked "2" is now pointing straight upward. Count the chain roller pins toward the intake camshaft, starting from the roller pin directly above this arrow marked "2" and ending with the 13th roller pin. Engage the cam chain with intake sprocket, locating the 13th pin at the above the arrow marked "3" on the intake sprocket.



NOTE:
The cam chain is now riding on all three sprockets. Be careful not to disturb the crankshaft until the camshaft journal holders and cam chain tensioner are secured.



- Each camshaft journal holder is identified with a cast-on letter. Install the dowel pins to each camshaft journal holder.
- Fasten the camshaft journal holders evenly by tightening the camshaft journal holder bolts sequentially in the ascending order of numbers. (Try to equalize the pressure by shifting the wrench in this above manner, to fasten the shafts evenly.)

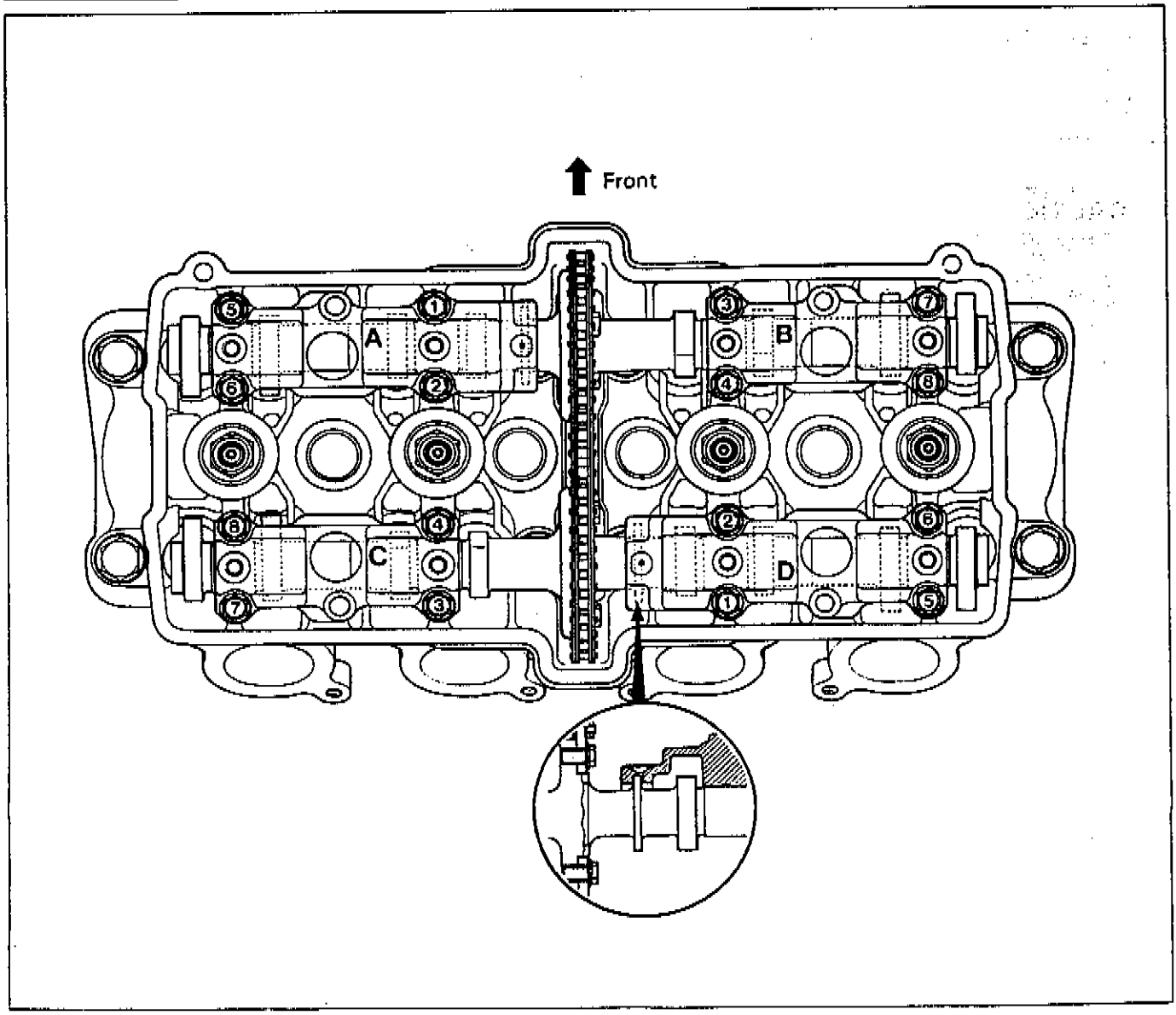
NOTE:
Damage to head or camshaft journal holder thrust surfaces may result if the camshaft journal holders are not drawn down evenly.

- Tighten the camshaft journal holder bolts to the specified torque.

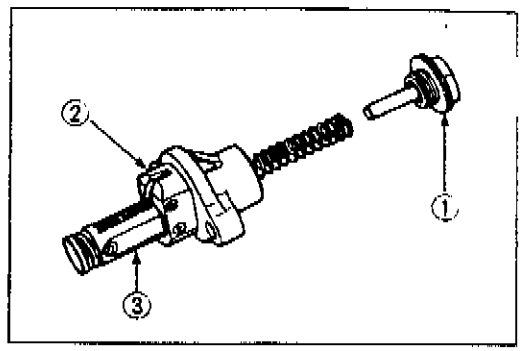
Camshaft journal holder bolt: 10 N·m (1.0 kg-m, 7.0 lb-ft)

⚠ CAUTION

The camshaft journal holder bolts are made of a special material and much superior in strength, compared with other types of high strength bolts.
Take special care not to use other types of bolts instead of these special bolts. To identify these bolts, each of them has a figure "9" on its head.



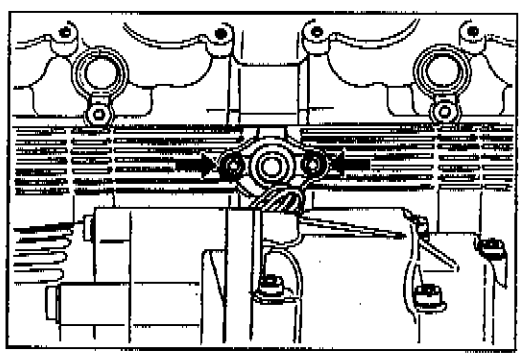
- After removing the spring holder bolt ① and spring, unlock the ratchet mechanism ② and push in the push rod ③ all the way.



NOTE:
Before installing the cam chain tensioner, turn the crankshaft clockwise to remove the cam chain slack between the crank sprocket and exhaust sprocket.

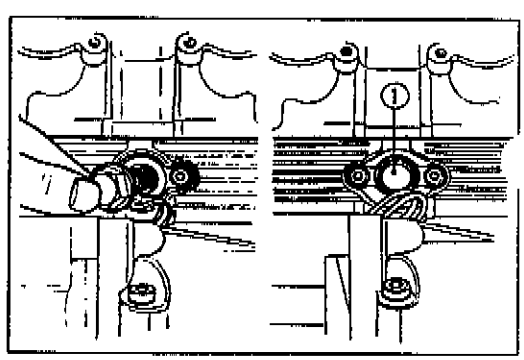
- Install a new gasket and the cam chain tensioner to the cylinder block with two bolts and tighten them to the specified torque.

Cam chain tensioner mounting bolt: 7 N·m (0.7 kg-m, 5.0 lb-ft)



- Insert the spring into the cam chain tensioner and tighten the spring holder bolt ① to the specified torque.

Cam chain tensioner spring holder bolt: 35 N·m (3.5 kg-m, 25.5 lb-ft)



⚠ CAUTION

After installing the cam chain tensioner, check to be sure that the tensioner work properly by checking the slack of cam chain.

- Pour about 50 ml of engine oil in each oil pocket in the head.

NOTE:
Turn the crankshaft and check that all the moving parts such as cam follower, camshaft, work properly.

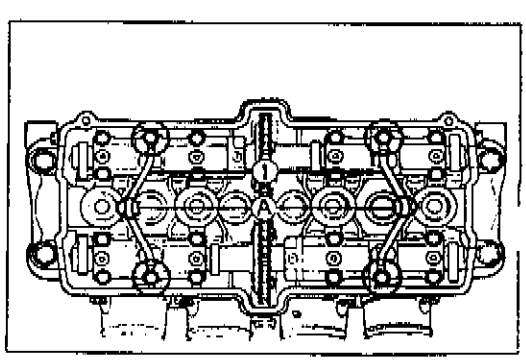
⚠ CAUTION

Be sure to check the tappet clearance. (Refer to page 2-4.)

- Place the oil pipes ① to the camshaft journal holders as shown in the Fig.

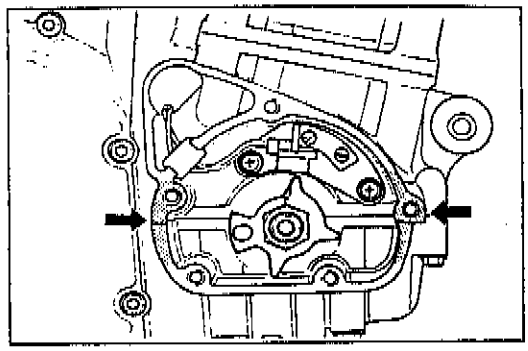
NOTE:
Be sure to bring the white painted side Ⓐ on the oil pipes to the top when installing them to the camshaft journal holders.

Oil pipe bolt: 10 N·m (1.0 kg-m, 7.0 lb-ft)



- Coat SUZUKI BOND NO. 1207B lightly to the mating surfaces between upper and lower crankcases as shown in the Fig.

1207B **99104-31140: SUZUKI BOND NO. 1207B**

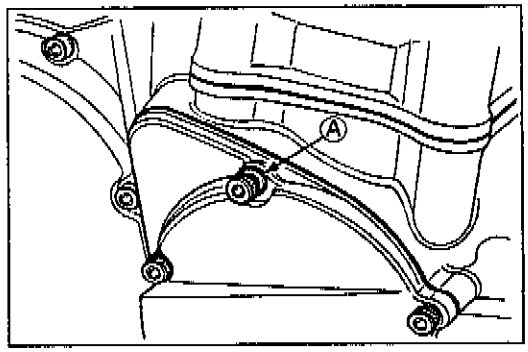


- Install a new gasket and the signal generator cover with five bolts.

NOTE:
Fit a gasket to the signal generator cover bolt Ⓐ correctly as shown in the Fig.

⚠ CAUTION

Use a new gasket to prevent oil leakage.



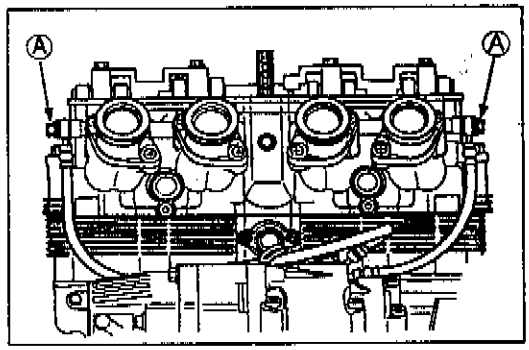
- Place the left and right oil hoses as shown in the Fig.

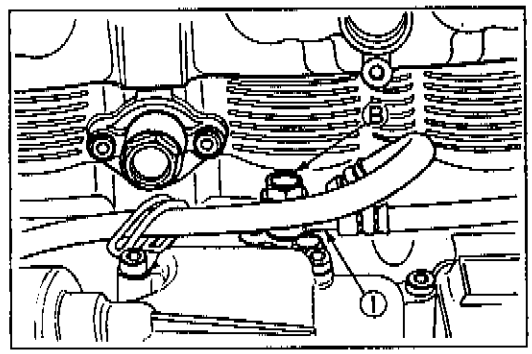
NOTE:
* *Install the new gaskets to both sides of the union bolt.*
* *Be sure to bring the green painted side ① on the oil hoses to the top when installing them. Refer to page 8-17.*

⚠ CAUTION

Replace the gaskets with new ones to prevent oil leakage.

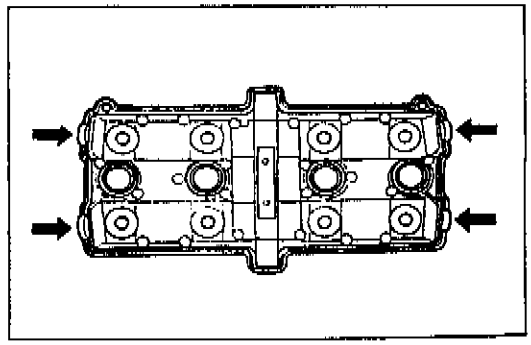
Oil hose union bolt
Upper side Ⓐ : 22 N·m (2.2 kg-m, 16.0 lb-ft)
Lower side Ⓑ : 27 N·m (2.7 kg-m, 19.5 lb-ft)





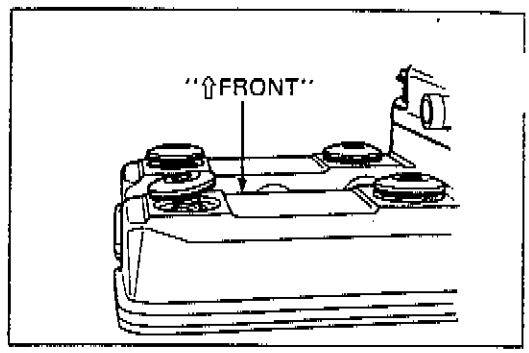
- Before installing the cylinder head cover gaskets on the cylinder head cover, apply SUZUKI BOND NO. 1207B to the grooves of the head cover.
- Apply SUZUKI BOND NO. 1207B to the four cam end caps of the gasket as shown in the Fig.

1207B **99104-31140: SUZUKI BOND NO. 1207B**



- Place the cylinder head cover on the cylinder head.
- Fit the eight gaskets to each head cover bolt.

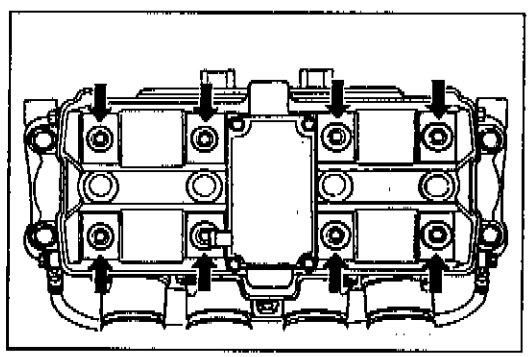
NOTE:
Be sure to face the arrow mark on the cylinder head cover to the front side.



⚠ CAUTION

Replace the gaskets with new ones to prevent oil leakage.

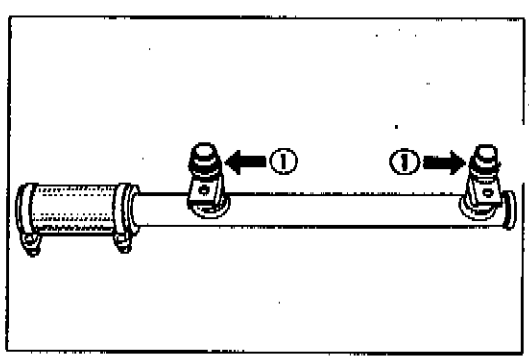
Head cover bolt: 14 N·m (1.4 kg-m, 10.0 lb-ft)



- Fit the new O-rings ① to the inlet and outlet water pipes.

NOTE:
Before installing the water pipes to the cylinder block, apply engine oil lightly to each O-ring.

- Install the inlet and outlet water pipes to the cylinder block.

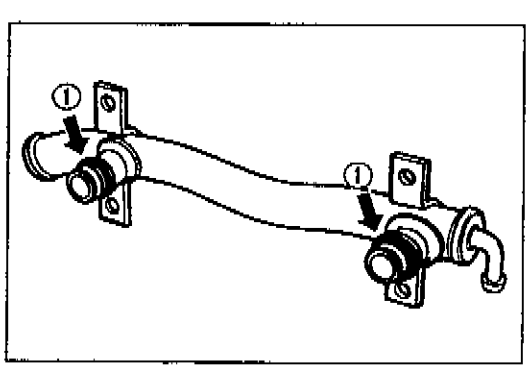


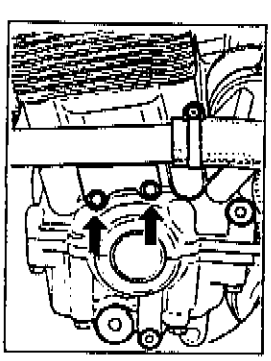
NOTE:
When installing the inlet water pipe ② to the cylinder block, apply a small quantity of the SUZUKI BOND NO.1207B to the threads of the inlet water pipe mounting bolts ③.

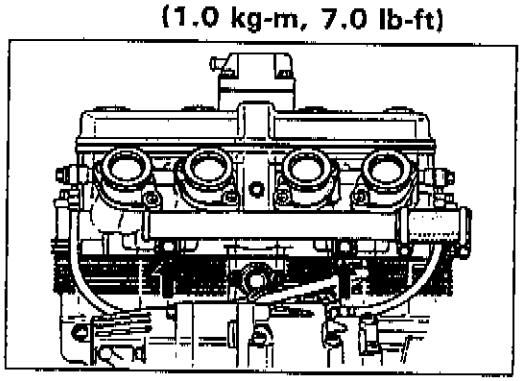
99104-31140: SUZUKI BOND NO.1207B

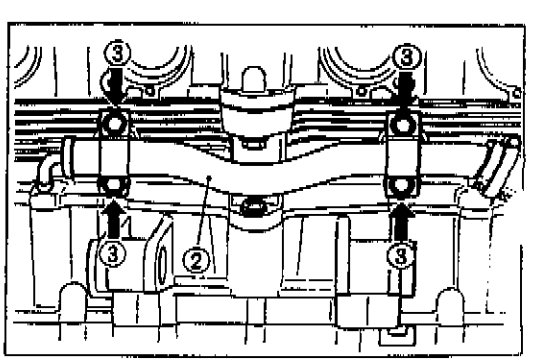
- Tighten the water pipe mounting bolts to the specified torque.

Water pipe mounting bolt: 10 N·m (1.0 kg-m, 7.0 lb-ft)



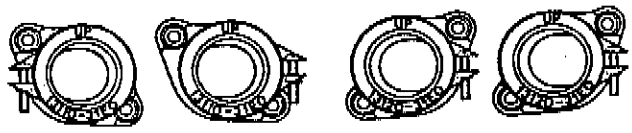






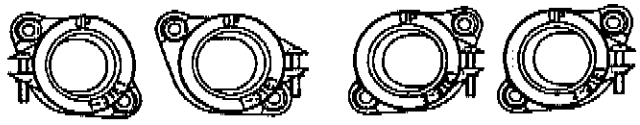
NOTE:
When replacing the intake pipes, identify the different intake pipes according to each I.D. code.

For E-02 and other market models
(13110-31E0 for No.1 cylinder)
(13110-31E0 for No.2 cylinder)
(13120-31E0 for No.3 cylinder)
(13120-31E0 for No.4 cyllinder)



No.1 No.2 No.3 No.4

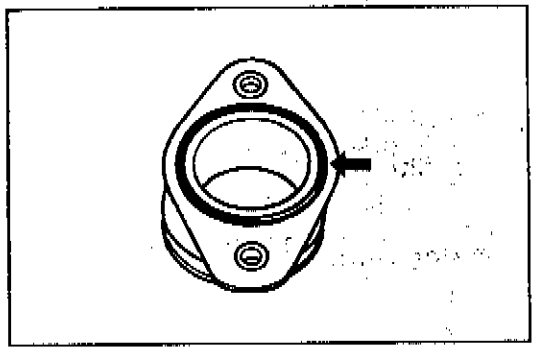
Only for E-22 model
(1—31E1 for No.1 cylinder)
(1—31E1 for No.2 cylinder)
(2—31E1 for No.3 cylinder)
(2—31E1 for No.4 cylinder)



No.1 No.2 No.3 No.4

⚠ CAUTION

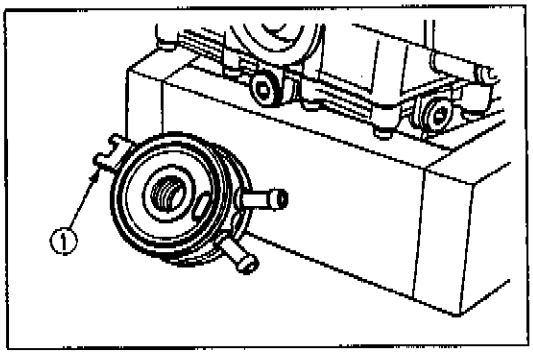
Use a new O-ring to prevent sucking air from the joint.

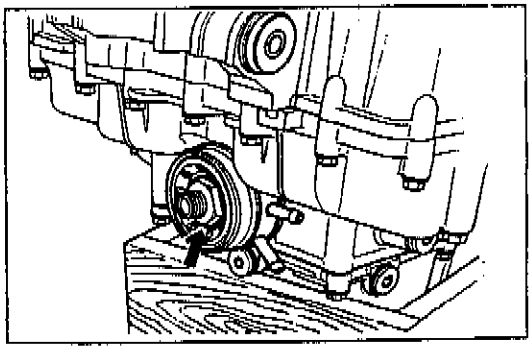


- Install the oil cooler and tighten its mounting bolt to the specified torque.

NOTE:
* *Before installing the oil cooler, apply engine oil lightly to its O-ring.*
* *Set the lug ① of the oil cooler to the recess of the crankcase.*

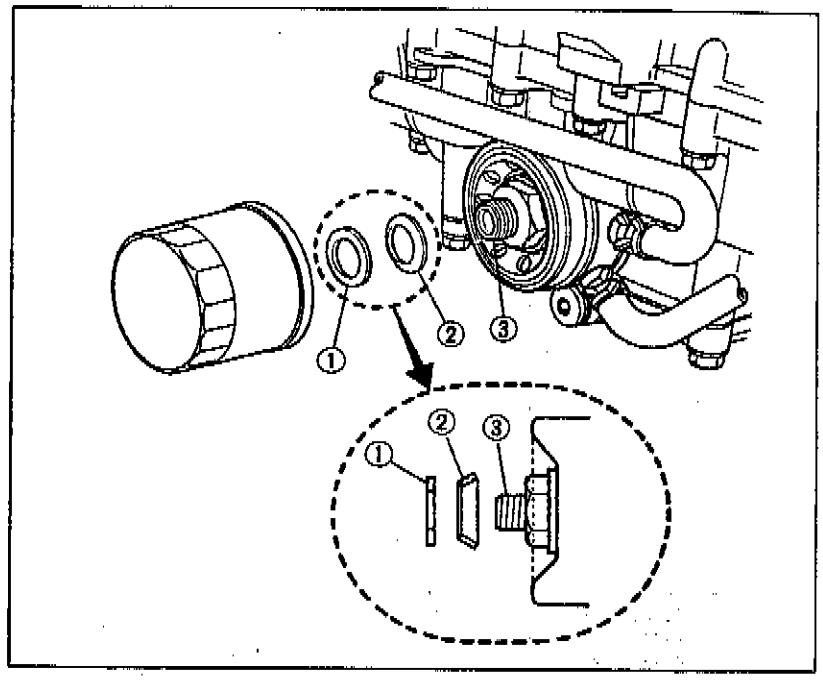
Oil cooler union bolt: 59 N·m (5.9 kg-m, 42.5 lb-ft)





⚠ CAUTION

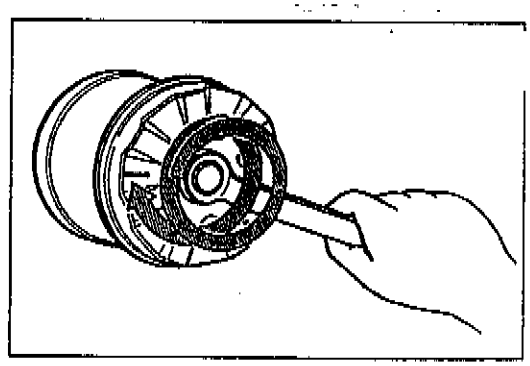
Make sure that the washer ① and spring washer ② are correctly fitted on the oil cooler unior bolt ③.



- Install the oil filter turning it by hand until you feel that the filter gasket contacts the mounting surface. Then tighten it 2 turns by using the special tool.

09915-40610: Oil filter wrench

NOTE:
Before installing the oil filter, apply engine oil lightly to its O-ring.



FUEL AND LUBRICATION SYSTEM

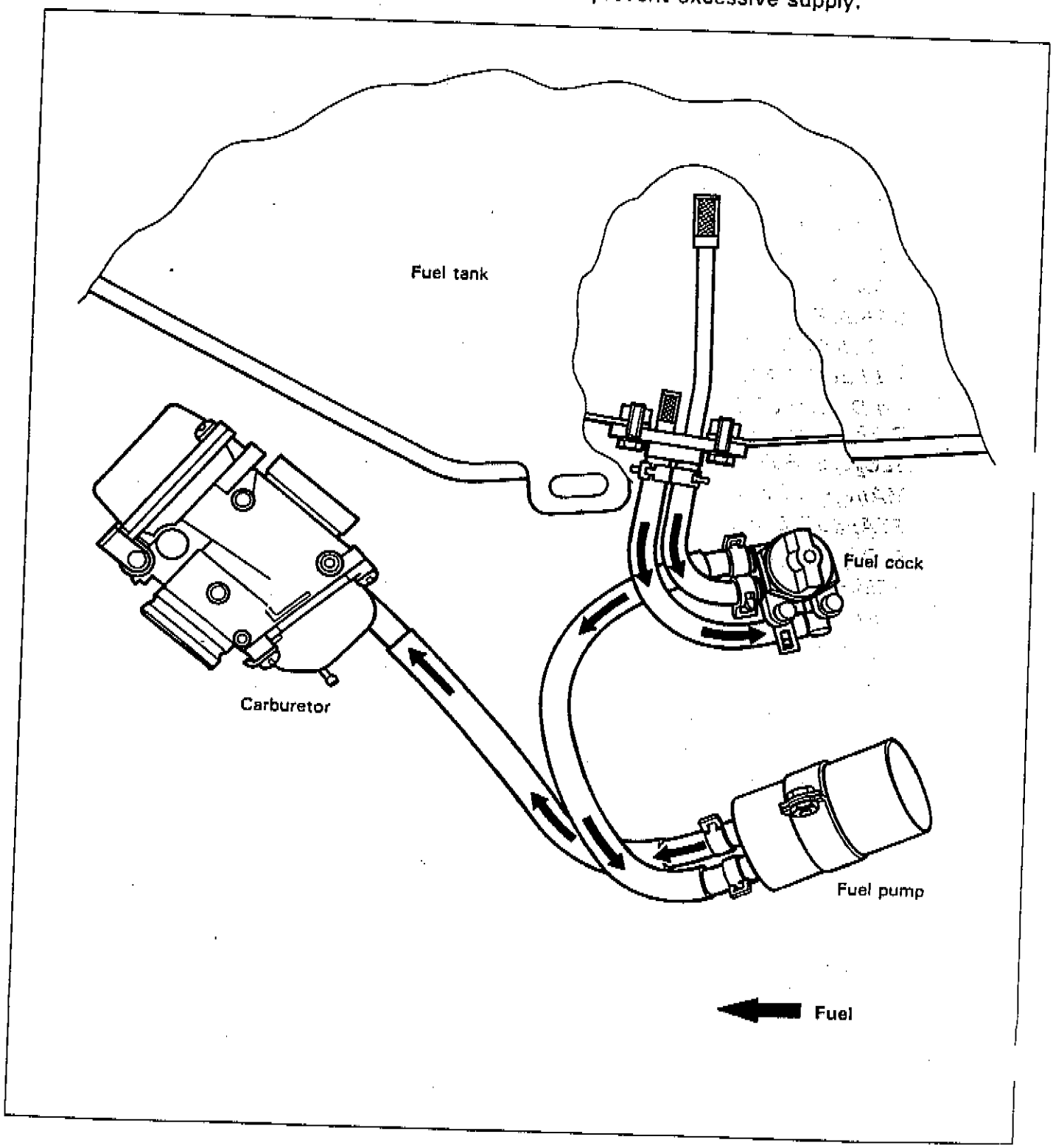
4

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FUEL SYSTEM

The fuel pump is operated by an electro-magnetic force and its electrical energy is supplied fro the battery which is controlled by the fuel pump relay's control circuit. The fuel sent under pressure by the fuel pump flows into the float chamber when the float of the carburetor has dropped and the needle valve is open. When the needle valve closes, the pressure of the fuel in the hose connecting the carburetor and the fuel pump increases, and when the set pressure is reached, the operation of the fuel pump is stopped by the fuel pressure to prevent excessive supply.



FUEL PUMP

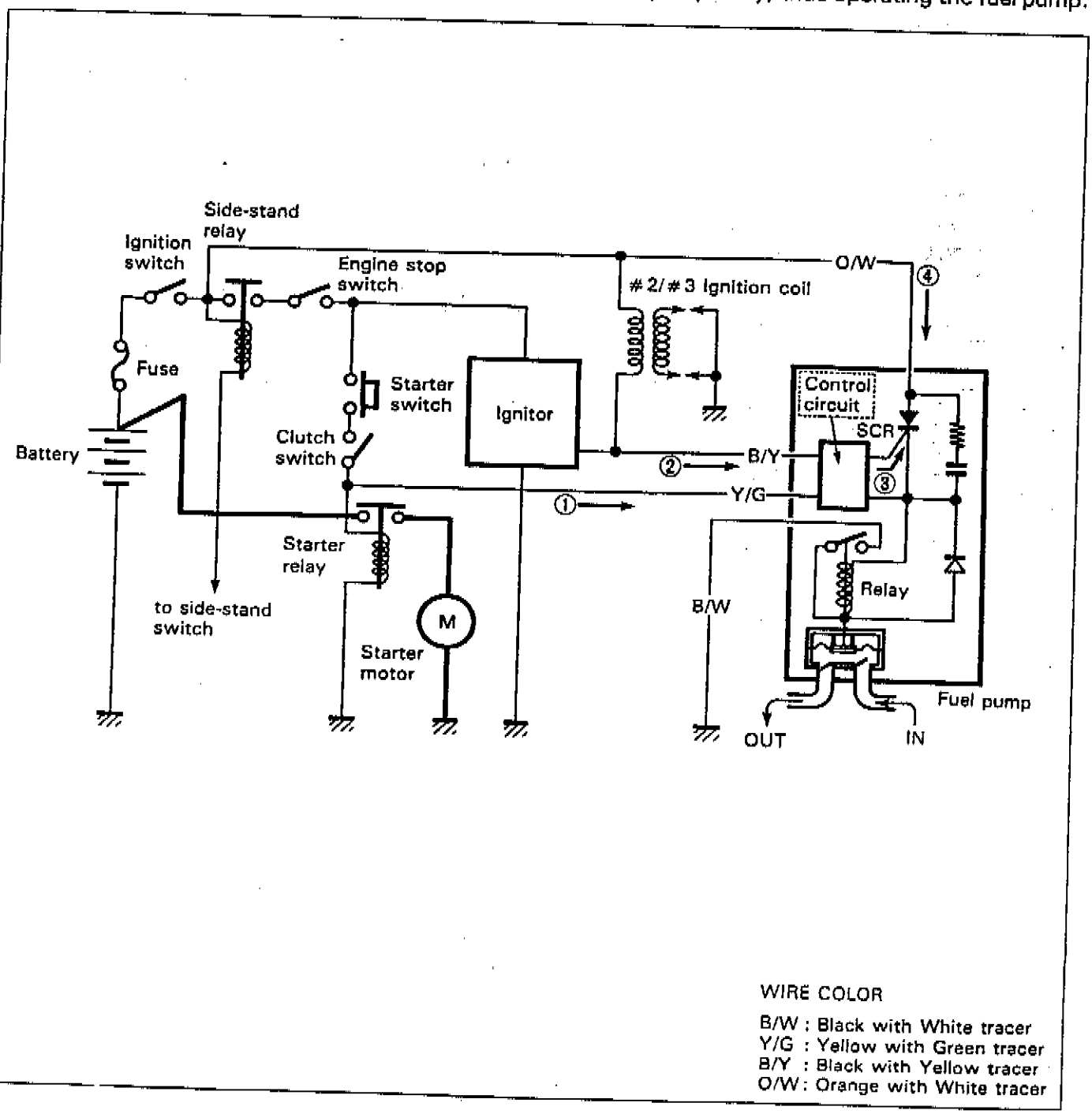
DESCRIPTION

Starting Engine:

In order to supplement fuel supply when starting the engine by turning the starter switch ON, current ① is sent directly from the battery and passes through the fuel pump relay, thus operating the fuel pump.

After start:

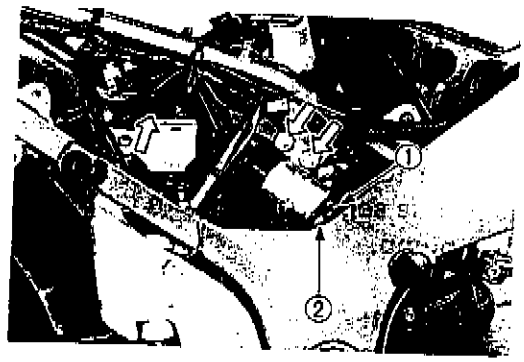
The current ② generated at coils No.2/No.3 flows to the fuel pump relay's control circuit. The control circuit receives this current ② and sends signal ③ to the SCR, turning it ON. When the SCR turns ON, current ④ is sent from the battery through the fuel pump relay, thus operating the fuel pump.



FUEL PUMP REMOVAL

- Remove the seat. (Refer to page 6-4.)
- Remove the frame cover assembly.
- Turn the fuel cock "OFF" position and disconnect the fuel hoses (① and ②) from the fuel pump.
- Disconnect the fuel pump lead wire coupler and remove the fuel pump mounting bolts.

①: Outlet hose
②: Inlet hose



FUEL PUMP INSPECTION

- Using the pocket tester (x kΩ range), measure the resistance between the lead wires in the following table. If the resistance checked is incorrect, replace the fuel pump.

⚠ WARNING

Gasoline is very explosive. Extreme care must be taken.

TOOL 09900-25002: Pocket tester

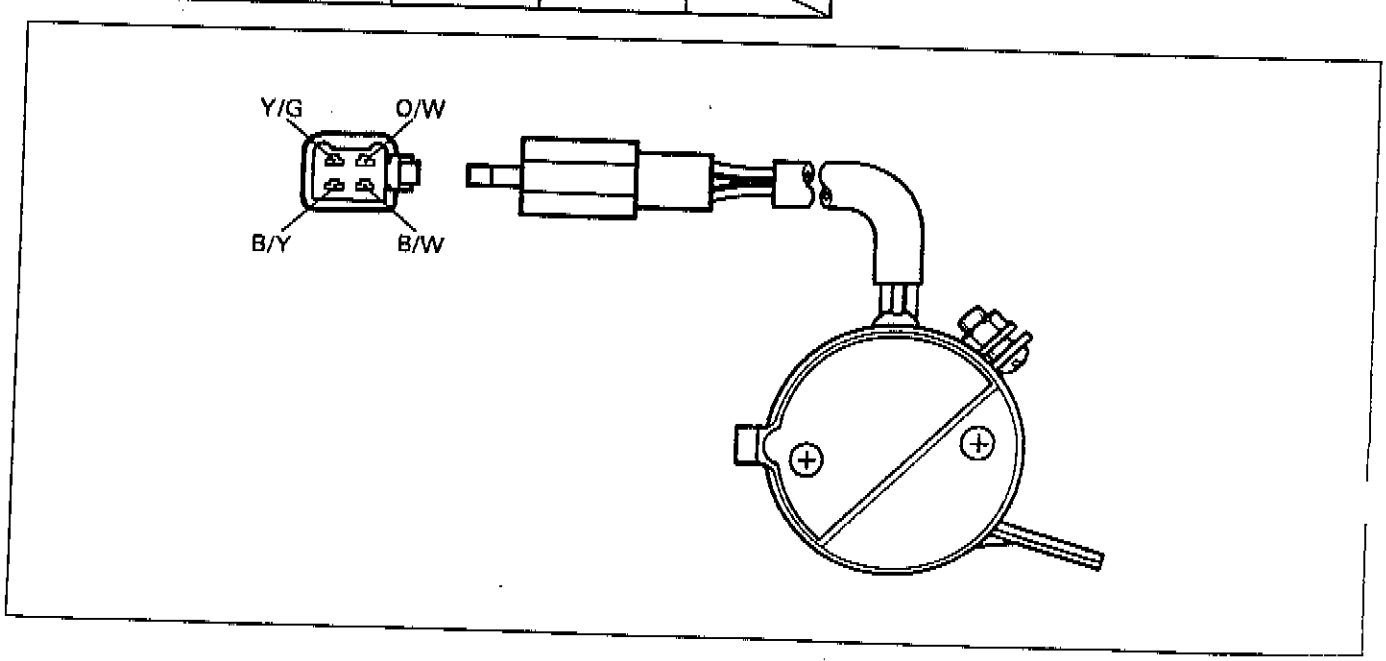
NOTE:
As capacitor, diodes, etc. are used inside this fuel pump, the resistance values will differ when an ohmmeter other than SUZUKI pocket tester is used.

(Approx. kΩ)

⊖ Probe of tester to: \ ⊕ Probe of tester to:	O/W	B/Y	Y/G	B/W
O/W		∞	∞	∞
B/Y	∞		∞	∞
Y/G	∞	45—55		10—12
B/W	∞	31—37	10—12	

WIRE COLOR

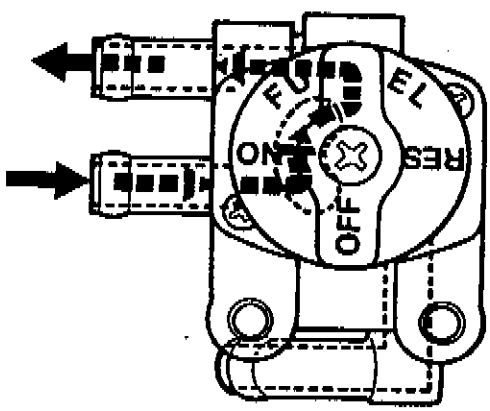
O/W : Orange with White tracer
B/Y : Black with Yellow tracer
Y/G : Yellow with Green tracer
B/W : Black with White tracer
∞ : Infinity



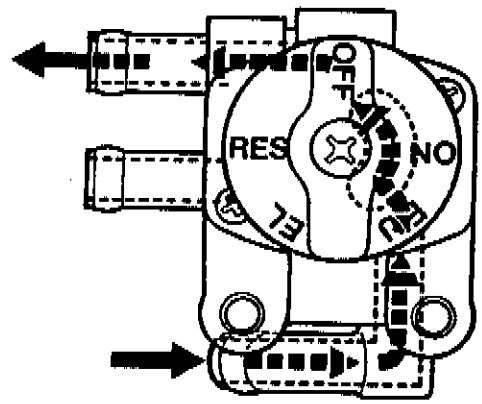
FUEL COCK

FUEL COCK MECHANISM

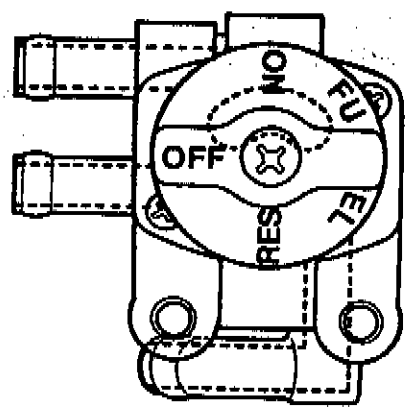
A valve is provided at the end of the fuel cock lever and can switch over to "OFF", "ON" and "RES". With the valve "ON" (normal), the main passage opens. With the valve "OFF", both holes close.



"ON" position



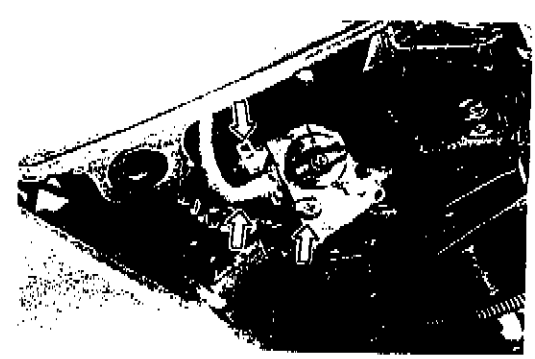
"RES" position



"OFF" position

FUEL COCK REMOVAL

- Remove the seat and frame cover assembly. (Refer to pages 6-4 and 5.)
- Remove the fuel cock mounting screw.
- Bend the fuel hoses with a soft clip and disconnect the fuel hoses from the fuel cock.



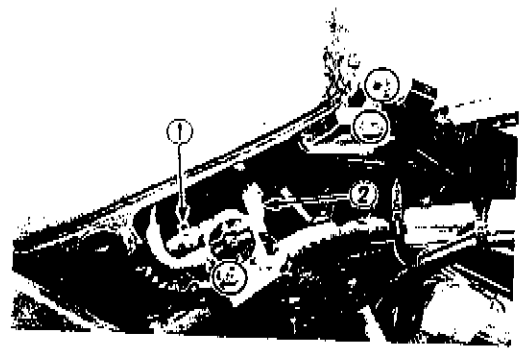
⚠ WARNING

Gasoline is very explosive. Extreme care must be taken.

FUEL TANK AND FUEL FILTER

FUEL TANK REMOVAL

- Remove the seat and frame cover assembly. (Refer to pages 6-4 and 5.)
- Turn the fuel cock to "OFF" position and disconnect the fuel cock outlet hose ①.
- Disconnect the fuel level indicator switch lead wire coupler ②.
- Remove the fuel cock mounting screw.
- Remove the fuel tank by removing the mounting bolts.



⚠ WARNING

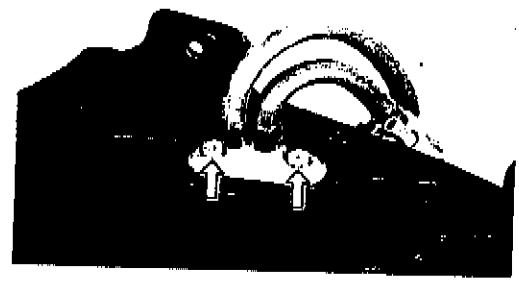
Gasoline is very explosive. Extreme care must be taken.

FUEL FILTER REMOVAL

- Remove the fuel filter assembly by removing the bolts.

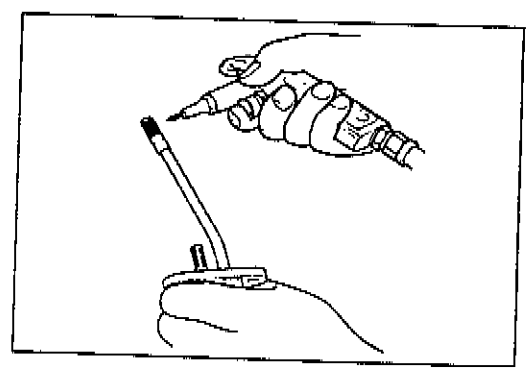
⚠ WARNING

Gasoline is very explosive. Extreme care must be taken. Gaskets and O-ring must be replaced with new ones to prevent fuel leakage.



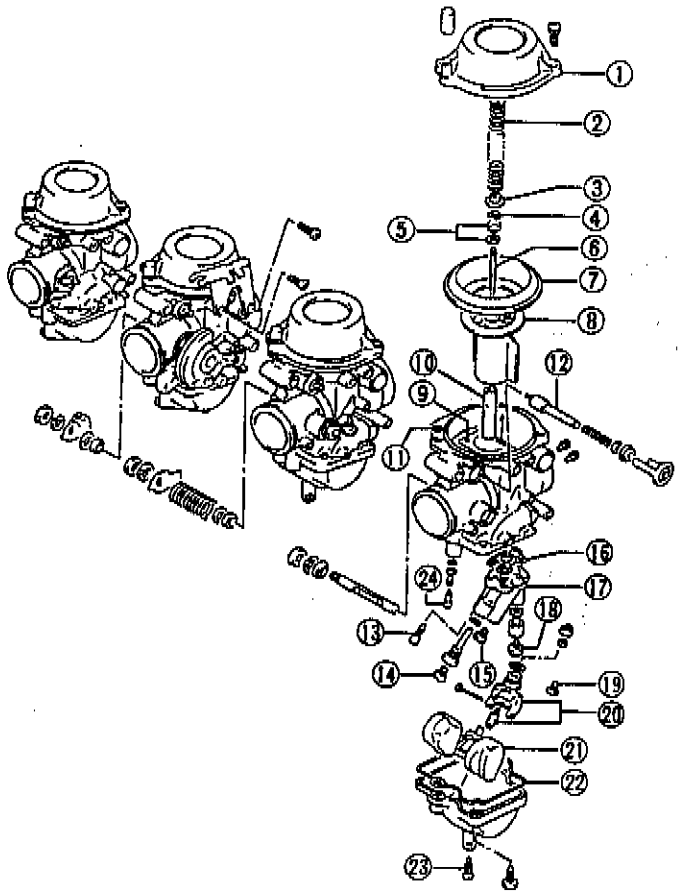
INSPECTION AND CLEANING

If the fuel filter is dirty with sediment or rust, fuel will not flow smoothly and loss in engine power may result. Clean the fuel filter with compressed air.

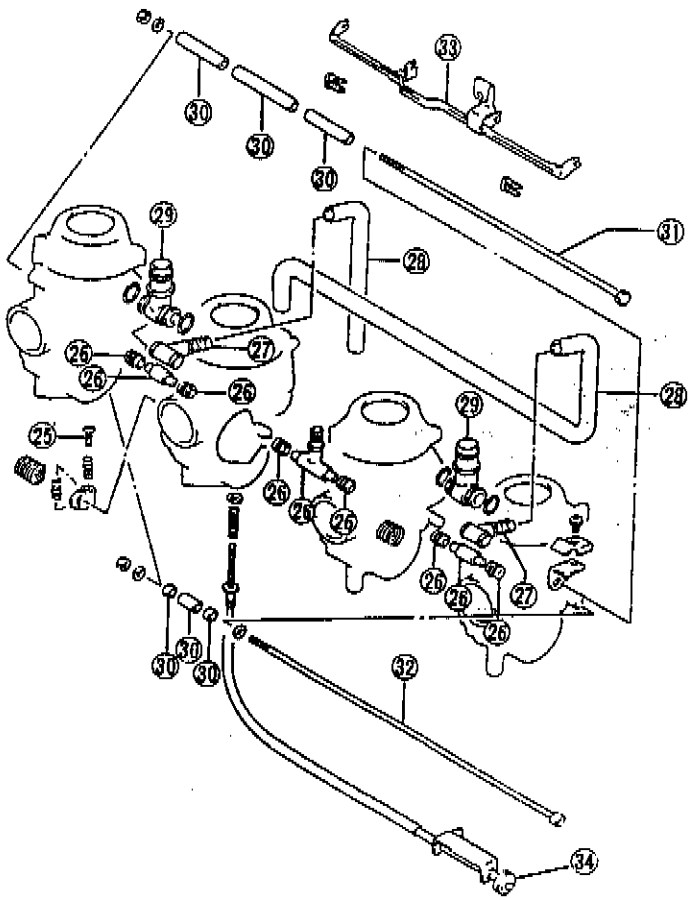


CARBURETOR

CONSTRUCTION



① Top cap
② Spring
③ Spring seat
④ E-ring
⑤ Washer
⑥ Jet needle
⑦ Diaphragm
⑧ Piston valve
⑨ Piston valve guide
⑩ Needle jet
⑪ O-ring
⑫ Starter plunger
⑬ Pilot jet
⑭ Main jet
⑮ Starter jet
⑯ Gasket
⑰ Mixing body
⑱ Needle jet set bolt
⑲ Needle valve ass'y set screw
⑳ Needle valve ass'y
㉑ Float
㉒ Gasket
㉓ Drain screw
㉔ Pilot screw



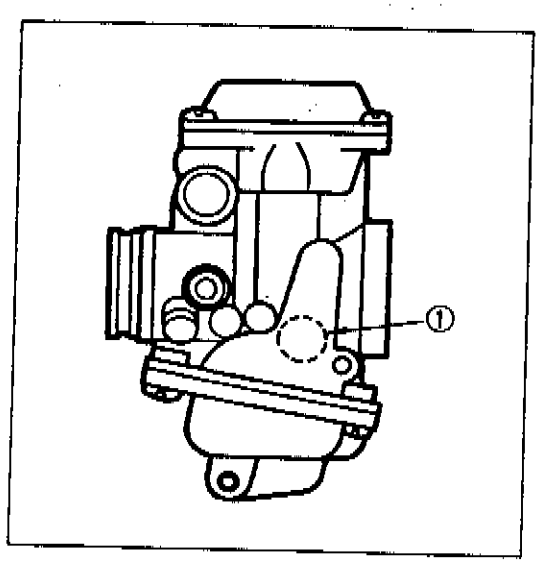
㉕ Throttle valve balance screw
㉖ Fuel hose connector set
㉗ Air vent hose connector
㉘ Air vent hose
㉙ Diaphragm chamber hose connector
㉚ Spacer
㉛ Carburetor set upper shaft
㉜ Carburetor set lower shaft
㉝ Starter shaft lever
㉞ Throttle stop screw

SPECIFICATIONS

ITEM		SPECIFICATION	
		U.S.A.	California (U.S.A.)
Carburetor type		MIKUNI BDST36SS	←
Bore size		36 mm	←
I.D. No.		31E1	31E4
Idle r/min.		1 200±100 r/min.	1 200±50 r/min.
Float height		6.9±1.0 mm (0.27±0.04 in)	←
Main jet	(M.J.)	#112.5	←
Main air jet	(M.A.J.)	0.9 mm	No.1 & 4 : 0.6 mm No.2 & 3 : 0.7 mm
Jet needle	(J.N.)	5DV3	5DFT13
Needle jet	(N.J.)	O-9	←
Throttle valve	(Th.V.)	#120	#125
Pilot jet	(P.J.)	#12.5	←
By-pass	(B.P.)	0.8, 0.8, 0.8 mm	←
Pilot outlet	(P.O.)	0.8 mm	0.7 mm
Valve seat	(V.S.)	1.5 mm	←
Starter jet	(G.S.)	#52.5	←
Pilot screw	(P.S.)	PRE-SET	←
Throttle cable play		0.5—1.0 mm (0.02—0.04 in)	←

I.D. NO. LOCATION

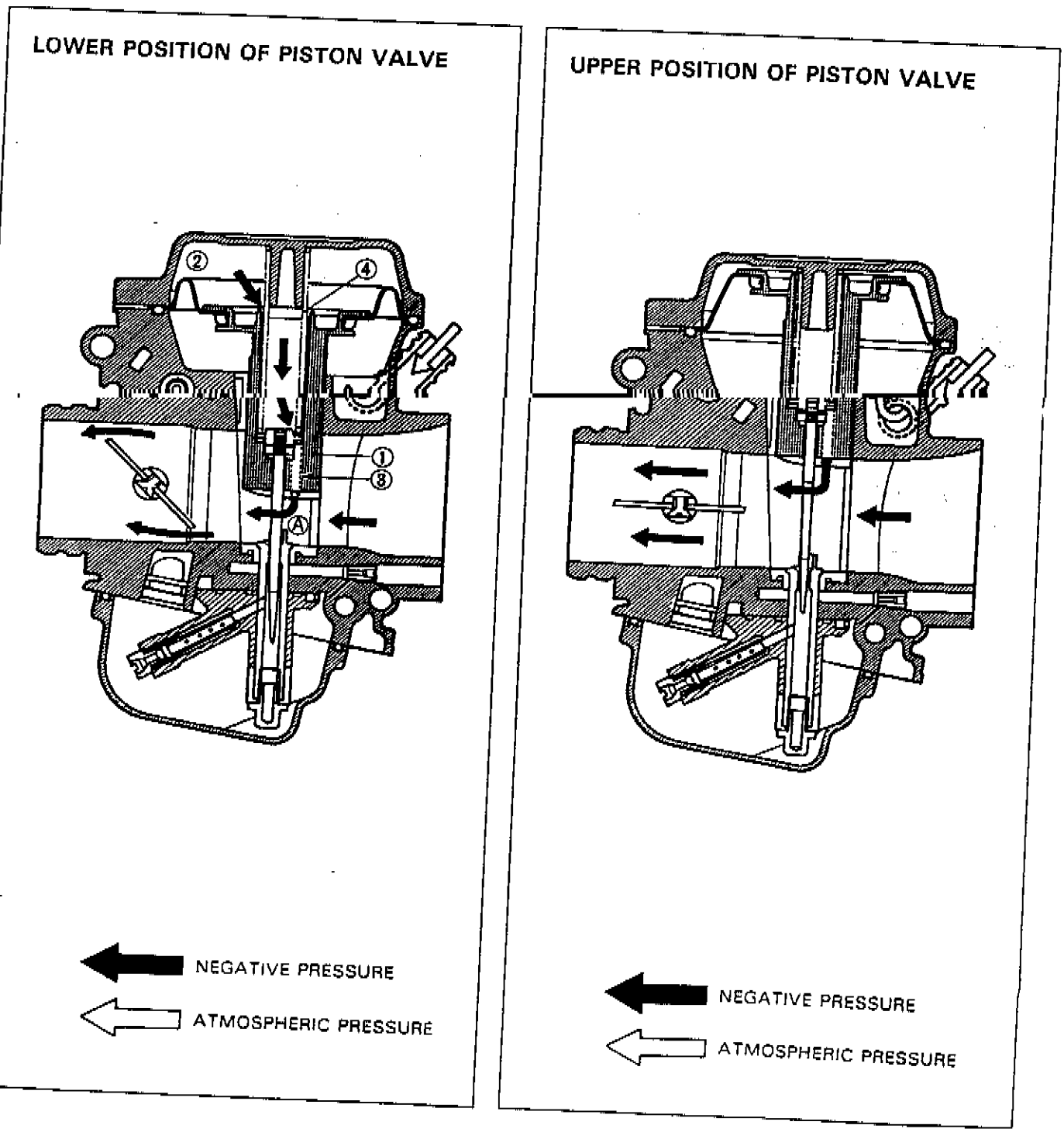
Each carburetor has I.D. Number ① printed on the carburetor body according to its specification.



DIAPHRAGM AND PISTON OPERATION

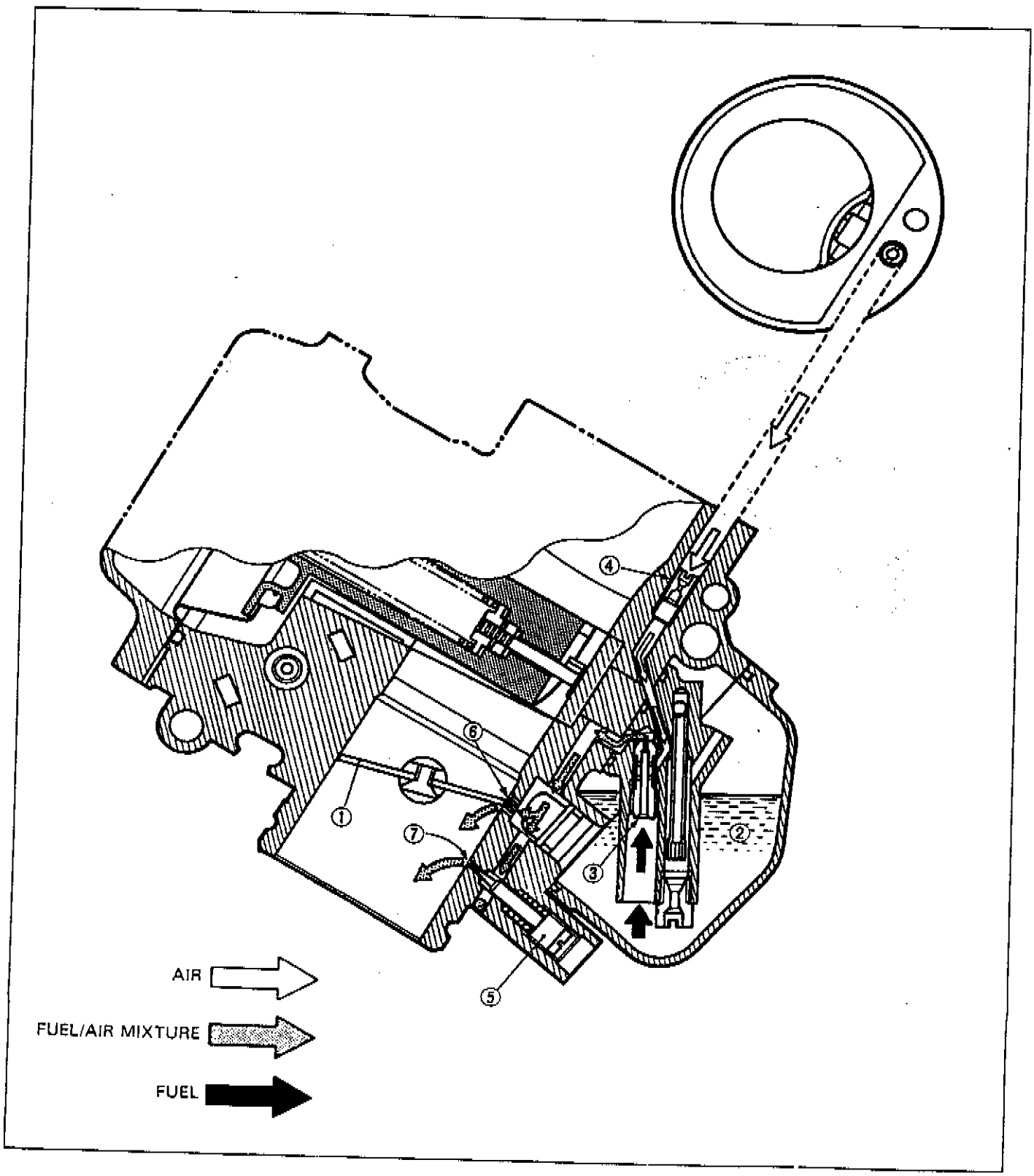
The carburetor is a variable-venturi type, whose venturi cross section area is increased or decreased automatically by the piston valve ① which moves according to the negative pressure present on the downstream side of the venturi Ⓐ. Negative pressure is admitted into the diaphragm chamber ② through two orifices ③ provided in the piston valve ① .

Rising negative pressure overcomes the spring ④ force, causing the piston valve ① to rise to increase the said area and thus prevent the air velocity from increasing. Thus, air velocity in the venturi passage is kept relatively constant for improved fuel atomization and for securing optimum ratio of fuel/air mixture.



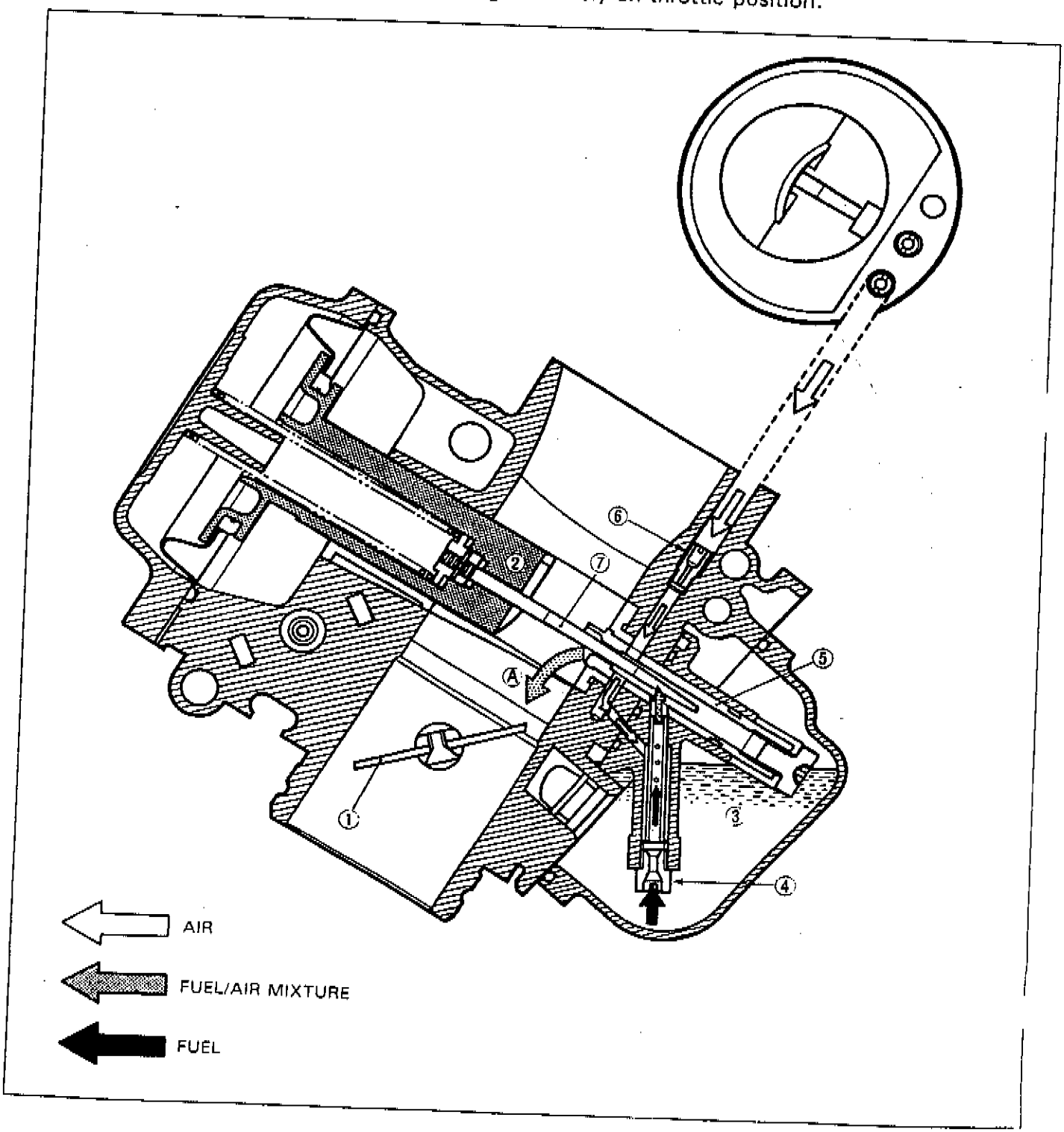
SLOW SYSTEM

This system supplies fuel during engine operation with the throttle valve ① closed or slightly open. The fuel from the float chamber ② is metered by the pilot jet ③, where it mixes with air coming in through the pilot air jet ④ . This mixture, rich with fuel, then travels up through the pilot passage towards the pilot screw ⑤ . A part of the mixture is discharged into the main bore out of bypass ports ⑥ . The remainder of mixture is metered by the pilot screw ⑤, and is sprayed out into the main bore through the pilot outlet ⑦ .



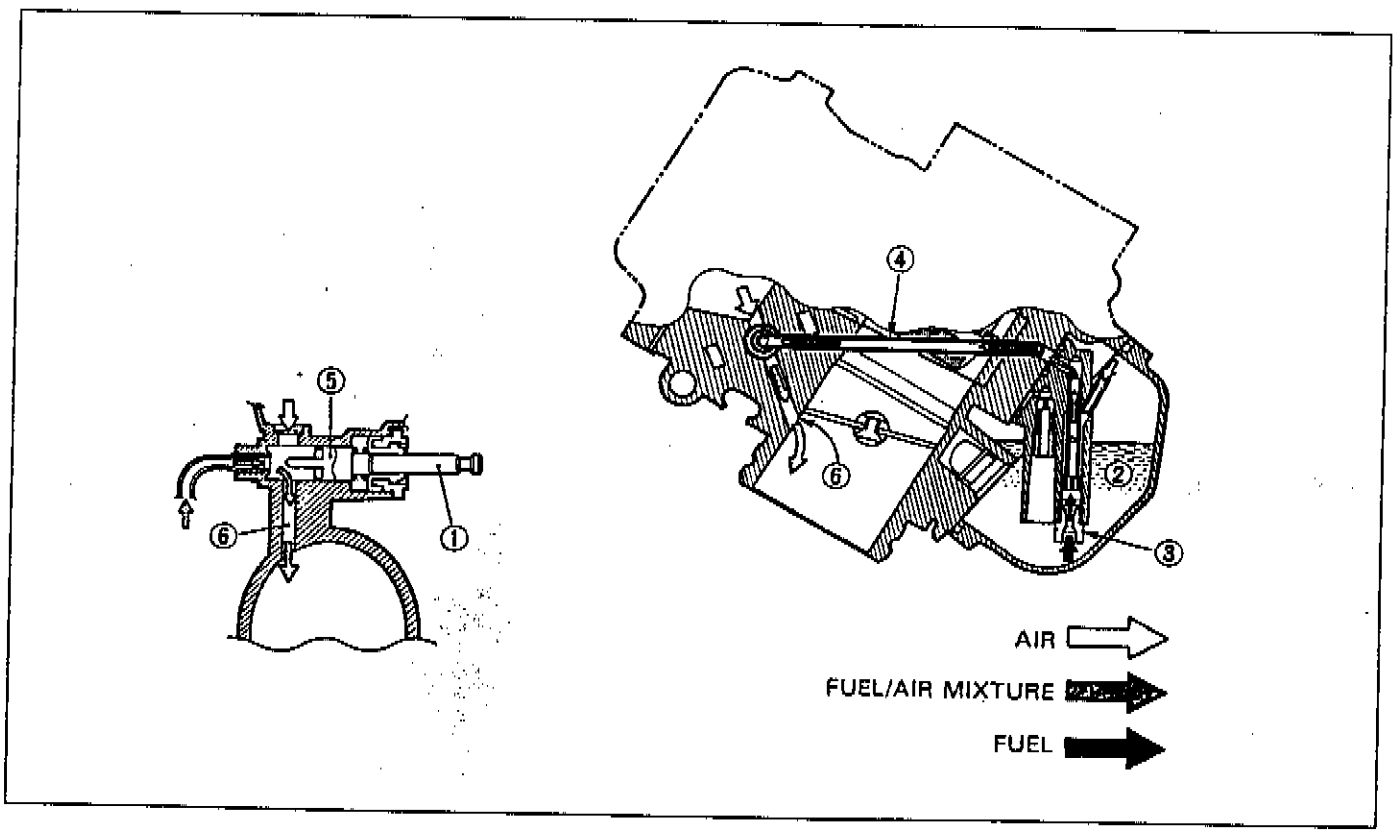
MAIN SYSTEM

As the throttle valve ① is opened, engine speed increases, thus increasing the negative pressure in the venturi Ⓐ. Consequently the piston valve ② moves upward.
Meanwhile, the fuel in float chamber ③ is metered by the main jet ④, and the metered fuel enters the needle jet ⑤, in which the fuel is mixed with air admitted through the main air jet ⑥ to form an emulsion.
The emulsified fuel then passes through the clearance between the needle jet ⑤ and the jet needle ⑦, and is discharged into the venturi Ⓐ, in which it meets main air stream being drawn by the engine.
Mixture proportioning is accomplished in needle jet ⑤; the clearance through which the emulsified fuel must flow in large or small, depending ultimately on throttle position.



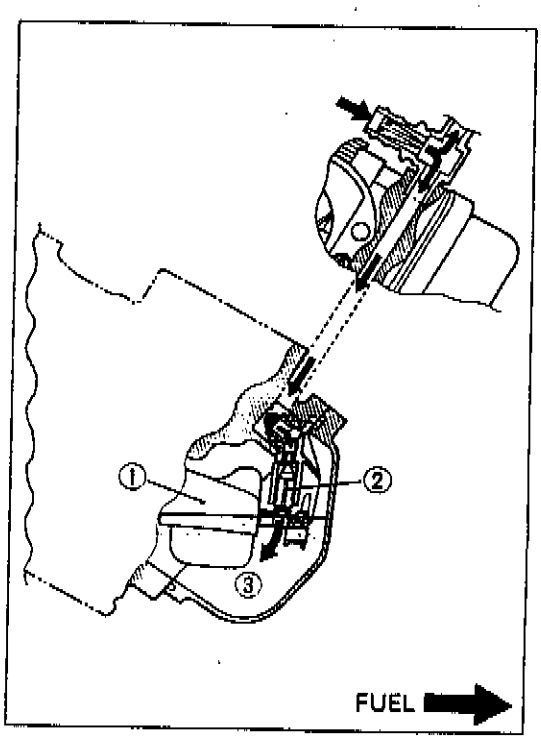
STARTER SYSTEM

Pulling up the starter shaft ① , fuel is drawn into the starter circuit from the float chamber ② . Starter jet ③ meters this fuel, which then flows into the starter pipe ④ and mixes with air coming from the float chamber ② . The mixture, rich in fuel content, reaches starter plunger ⑤ and mixes again with air coming through a passage extending from behind the diaphragm.
The two successive mixings of fuel with air are such that proper fuel/air mixture for starting is produced when the mixture is sprayed out through the starter outlet ⑥ into the main bore.



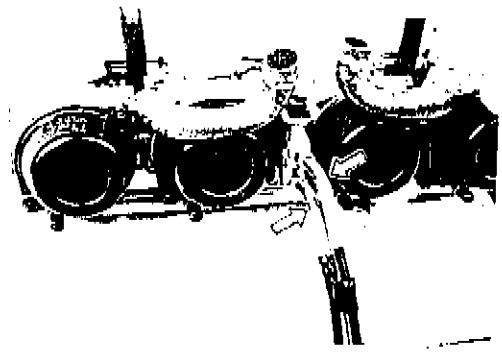
FLOAT SYSTEM

Floats ① and needle valve ② are associated with the same mechanism, so that, as the floats ① move up and down, the needle valve ② too moves likewise.
When fuel level is up in the float chamber ③ , floats ① are up and needle valve ② remains pushed up against valve seat. Under this condition, no fuel enters the float chamber ③ .
As the fuel level falls, floats ① go down and needle valve ② unseats itself to admit fuel into the chamber ③ .
In this manner, needle valve ② admits and shuts off fuel alternately to maintain a practically constant fuel level inside the float chamber ③ .



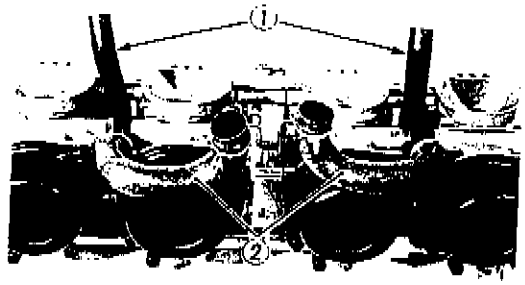
REMOVAL

- Remove the carburetor assembly. (Refer to page 3-3.)

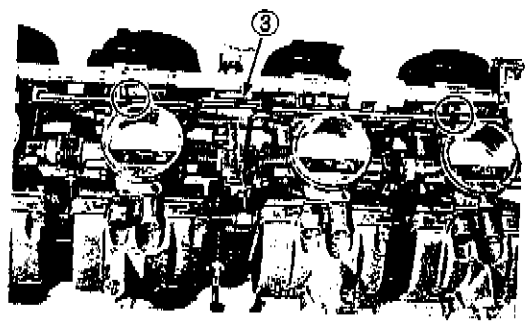


DISASSEMBLY

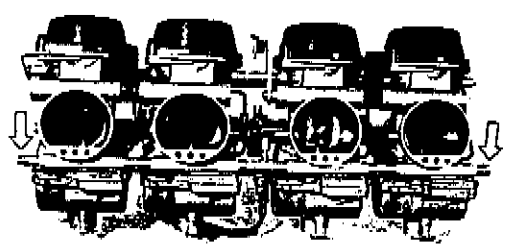
- Remove the throttle cables from the throttle lever.
- Disconnect the air vent hoses ① and diaphragm chamber air cleaner hoses ② .

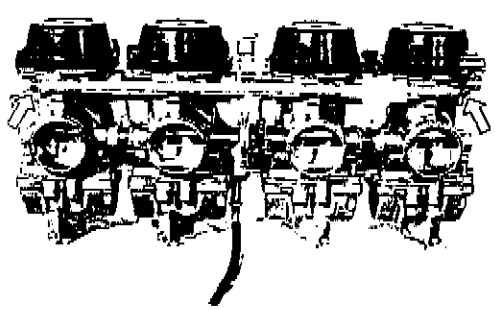


- Remove the starter shaft lever ③ .



- Remove the upper and lower carburetor set shafts.
- Separate the carburetor assembly.

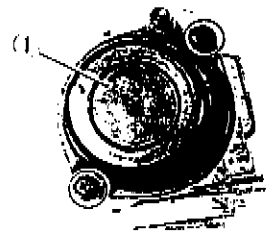




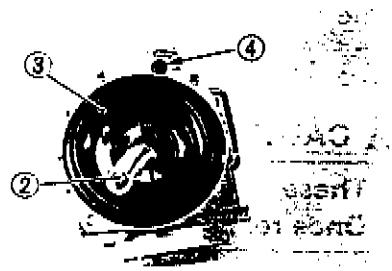
- Remove the carburetor top cap ① .

⚠ CAUTION

Do not blow the carburetor body with compressed air, before removing the diaphragm. It may cause a damage to the diaphragm.

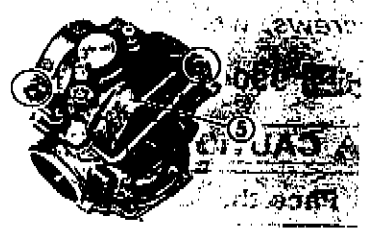


- Remove the piston valve return spring ② and piston valve with diaphragm ③ .
- Remove the O-ring ④ .



- Remove the float chamber body ⑤ .

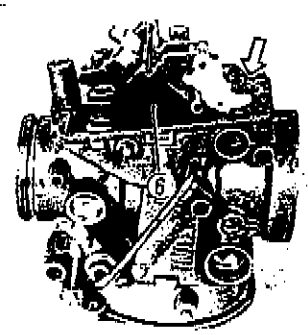
TOOL 09900-09003: Impact driver set



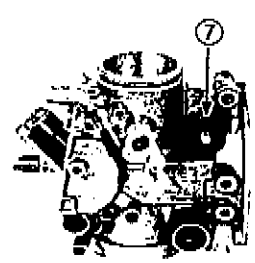
- Remove the float assembly ⑥ .

⚠ CAUTION

Do not use a wire for cleaning the valve seat.



- Remove the starter plunger assembly ⑦ .

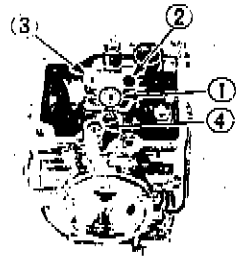


• Remove the main jet ①, pilot jet ② and starter jet ③.

⚠ CAUTION

Do not use a wire for cleaning of passage and jets.

Do not remove the pilot screw ④. This component is PRE-SET at the factory by the very specialized equipment.

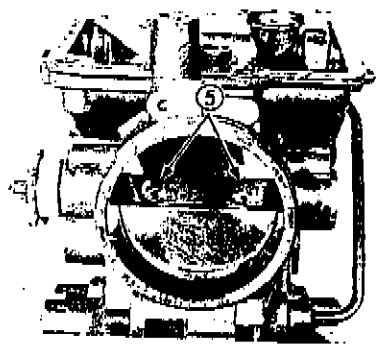


• Remove two throttle valve screws ⑤ and pull out throttle valve plate.

TOOL 09900-09003: Impact driver set

⚠ CAUTION

These two screws are locked by punching these ends. Once removing the screws, they will be damaged.



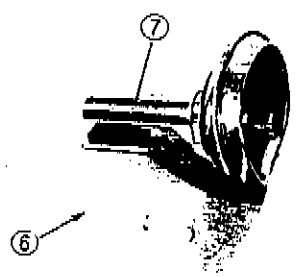
NOTE:
Apply a small quantity of THREAD LOCK "1342" to the screws, when installing the throttle valve to the shaft.

1342 99000-32050: THREAD LOCK "1342"

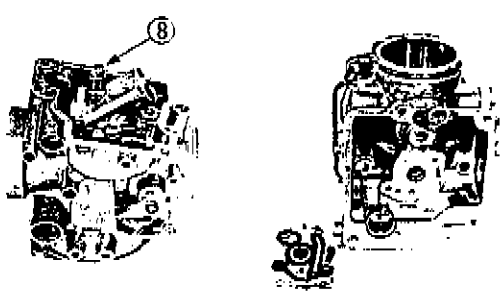
⚠ CAUTION

Face the stamped side of throttle valve to outside.

• Remove the jet needle ⑥ from the piston valve ⑦.

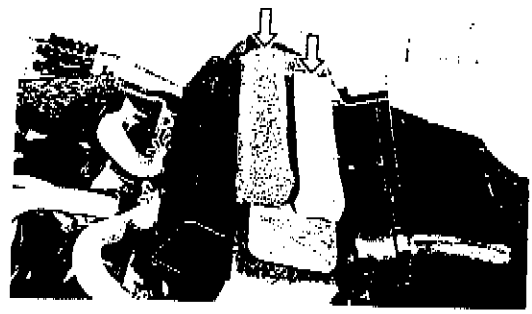


• Remove the mixing body by removing the bolt ⑧.



• Remove the carb. diaphragm chamber air cleaner elements.

Cleaning of Carb. diaphragm chamber air cleaner element
- Immerse the element in the cleaning solvent and wash it clean.
- Squeeze the cleaning solvent out of the washed element by pressing it between the palms of both hands.
- Immerse the element in motor oil, and squeeze the oil out of the element leaving it slightly wet with oil.



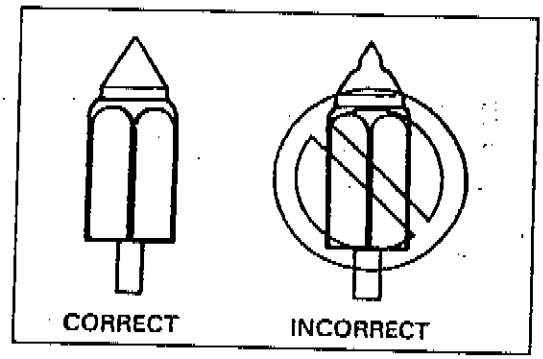
INSPECTION AND ADJUSTMENT

Check following items for any damage or clogging.

* Pilot jet
* Main jet
* Main air jet
* Pilot air jet
* Needle jet air bleeding hole
* Float
* Needle valve
* Starter jet
* Gasket and O-ring
* Throttle shaft oil seal
* Diaphragm
* Pilot outlet and by-pass holes

NEEDLE VALVE INSPECTION

If foreign matter is caught between the valve seat and the needle, the gasoline will continue flowing and cause it to overflow. If the seat and needle are worn beyond the permissible limits, similar trouble will occur. Conversely, if the needle sticks, the gasoline will not flow into the float chamber. Clean the float chamber and float parts with gasoline. If the needle is worn as shown in the illustration, replace it together with a valve seat. Clean the fuel passage of the mixing chamber with compressed air.

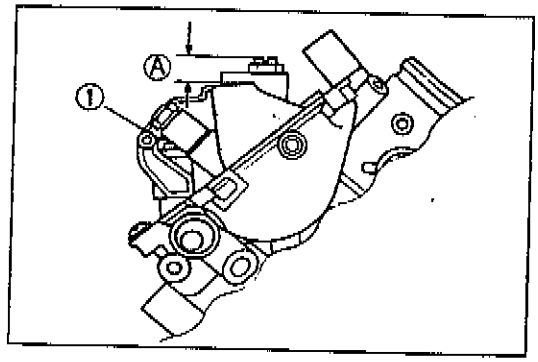


FLOAT HEIGHT ADJUSTMENT

To check the float height, invert the carburetor body, with the float arm kept free, measure the height Ⓐ while float arm is just in contact with needle valve by using calipers. Bend the tongue ① as necessary to bring the height Ⓐ to this value.

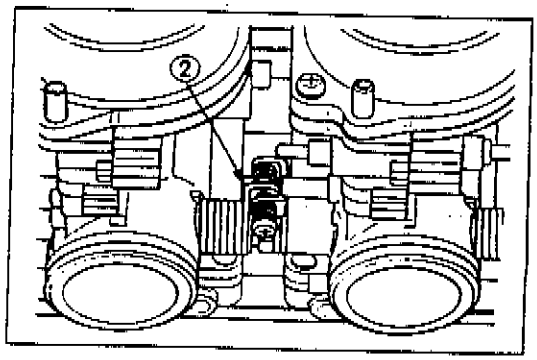
Float height Ⓐ: 6.9 ± 1.0 mm (0.27 ± 0.04 in)

TOOL 09900-20102: Vernier calipers



REASSEMBLY AND REMOUNTING

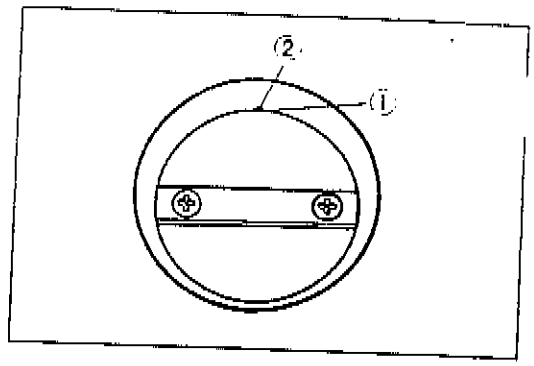
Reassemble and remount the carburetor assembly in the reverse order of disassembly and removal.
Pay attention to the following points:
- When engaging two carburetors, position the throttle valve control lever ② correctly.



⚠ CAUTION

- **Replace the O-rings and seals with new ones.**
- **Make sure that the pipes and seals are positioned correctly, when engaging the carburetors.**

- Set each throttle valve in such a way that its top end ① meets the foremost by-pass ② . This is accomplished by turning the throttle stop screw and throttle valve balance screw.

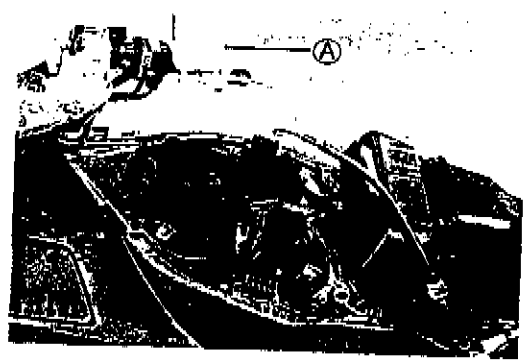


- After all wok is completed, mount the carburetors on the engine and the following adjustments are necessary.
  * Engine idle r/min ..... Page 2-10
  * Throttle cable play ..... Page 2-10
  * Balancing carburetors ..... Page 4-18

BALANCE OF CARBURETORS

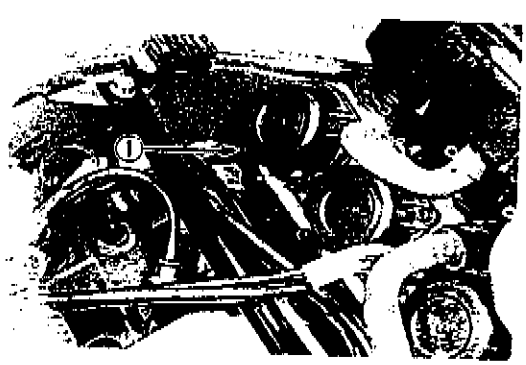
Check the four carburetors for balancing movement according to the following procedures.

NOTE:
When balancing the carburetors, remove the fuel tank and fuel should be supplied by a separate fuel tank Ⓐ.



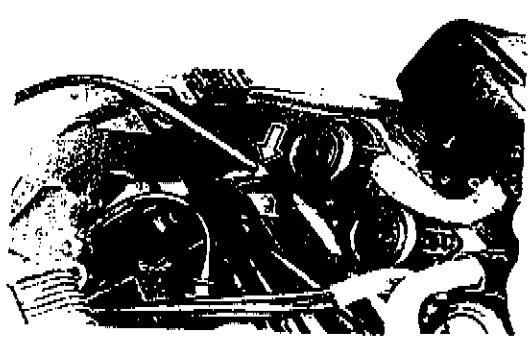
CALIBRATING EACH GAUGE

- Start up the engine and run it in idling condition for warming up.
- Stop the warmed-up engine.
- Remove the vacuum inlet cap ① for No.1 or No.4 cylinder.

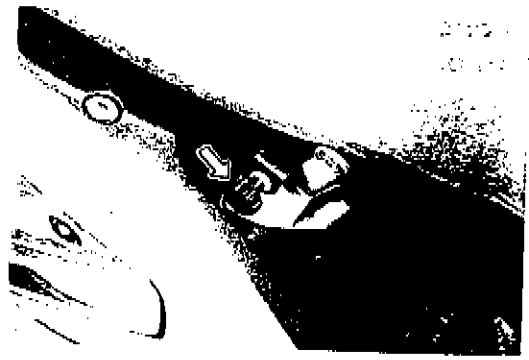


- Connect one of the four rubber hoses of balancer gauge to this inlet.

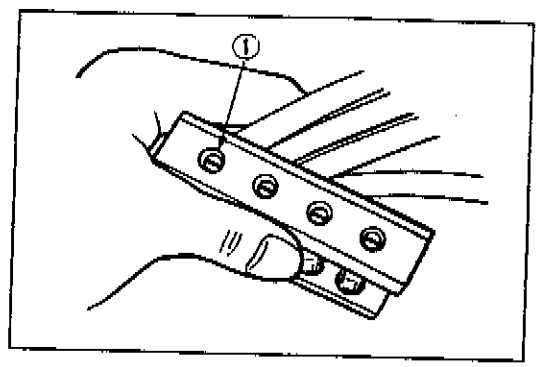
TOOL **09913-13121: Carburetor balancer**

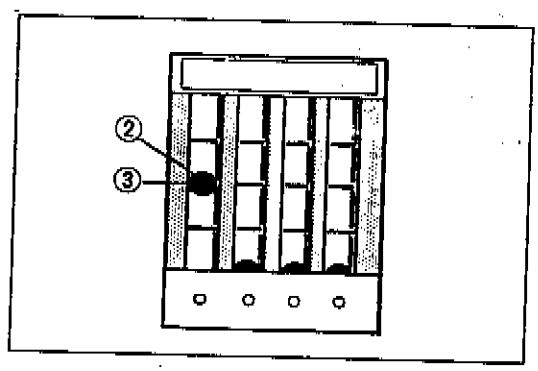


- Start up the engine and keep it running at 1 750 r/min by turning throttle stop screw.



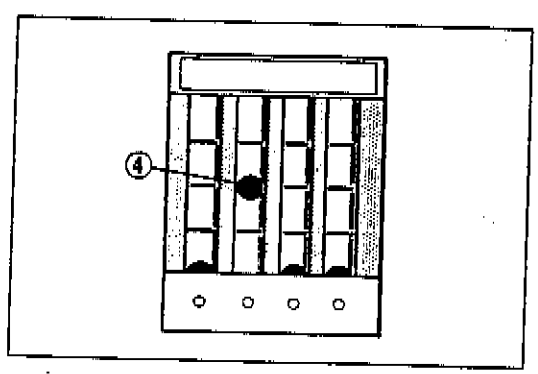
- Turn the air screw ① of the gauge so that the vacuum acting on the tube of that hose will bring the steel ball ② in the tube to the center line ③ .





- After making sure that the steel ball stays steady at the center line, disconnect the hose from inlet and connect the next hose to the inlet.
- Turn air screw to bring the other steel ball ④ to the center line.
- Repeat the above process on the third and fourth hoses.

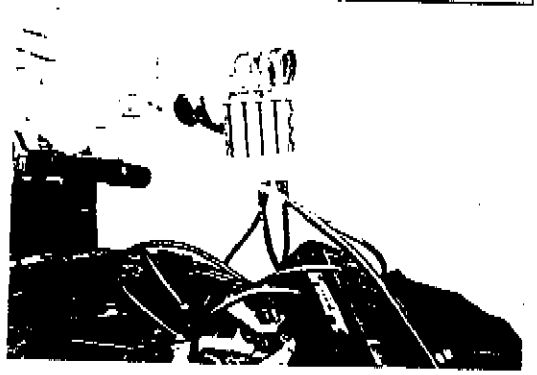
The balancer gauge is now ready for use in balancing the carburetors.



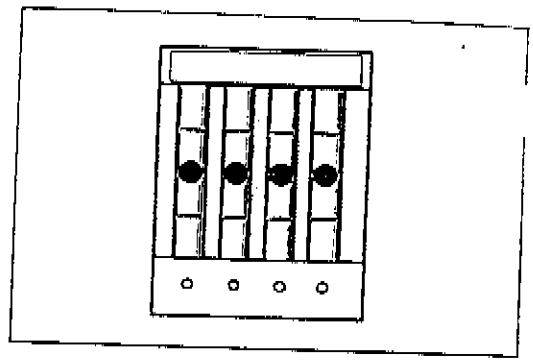
BALANCING CARBURETORS

For balancing all the carburetor movement, remove all the vacuum inlet caps from each carburetor. Connect the balancer gauge hoses to these vacuum inlets and adjust the balance of four carburetors as follows:

- Start up the engine and keep it running at 1 750 r/min to see engine tachometer reading.

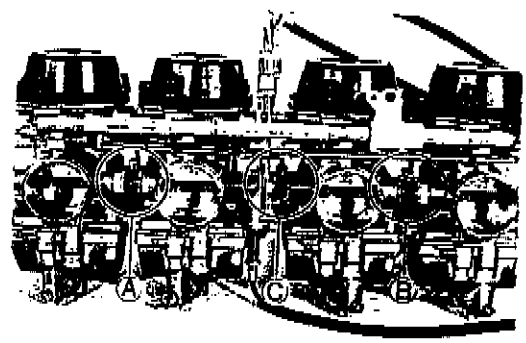


A correctly adjusted carburetor has the steel balls in the Nos. 1 through 4 tubes at the same level.



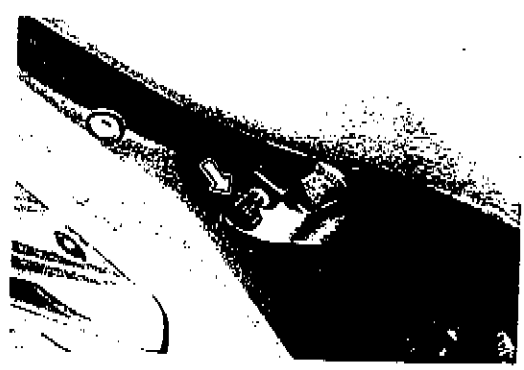
- If the steel balls are not in correct positions, adjust the throttle valve balance screws correctly.
- Adjusting order is as follows.

Ⓐ
↓
Ⓑ
↓
Ⓒ



- After balancing the carburetors, set there speed between 1100 and 1300 r/min. by turning the throttle stop screw referring engine tachometer reading.

Idle r/min: 1200 ± 100 r/min ... U.S.A.
Idle r/min: 1200 ± 50 r/min ... California (U.S.A.)



LUBRICATION SYSTEM

OIL PRESSURE

Refer to page 2-22.

OIL FILTER

Refer to page 2-9.

OIL SUMP FILTER

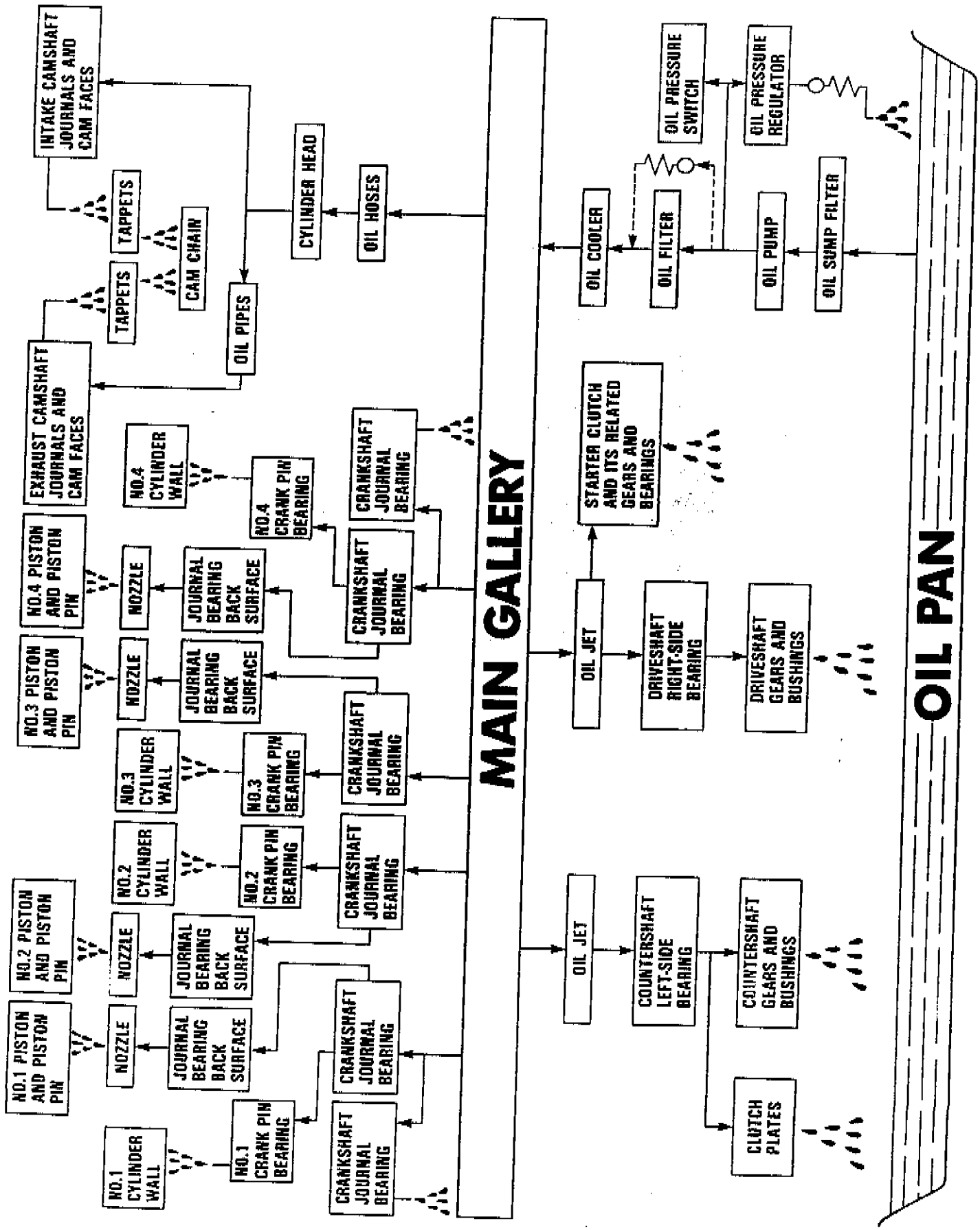
When you wash the oil pan, check to be sure that the oil sump filter is free from any sign of rupture, also wash the filter clean periodically.

⚠ CAUTION

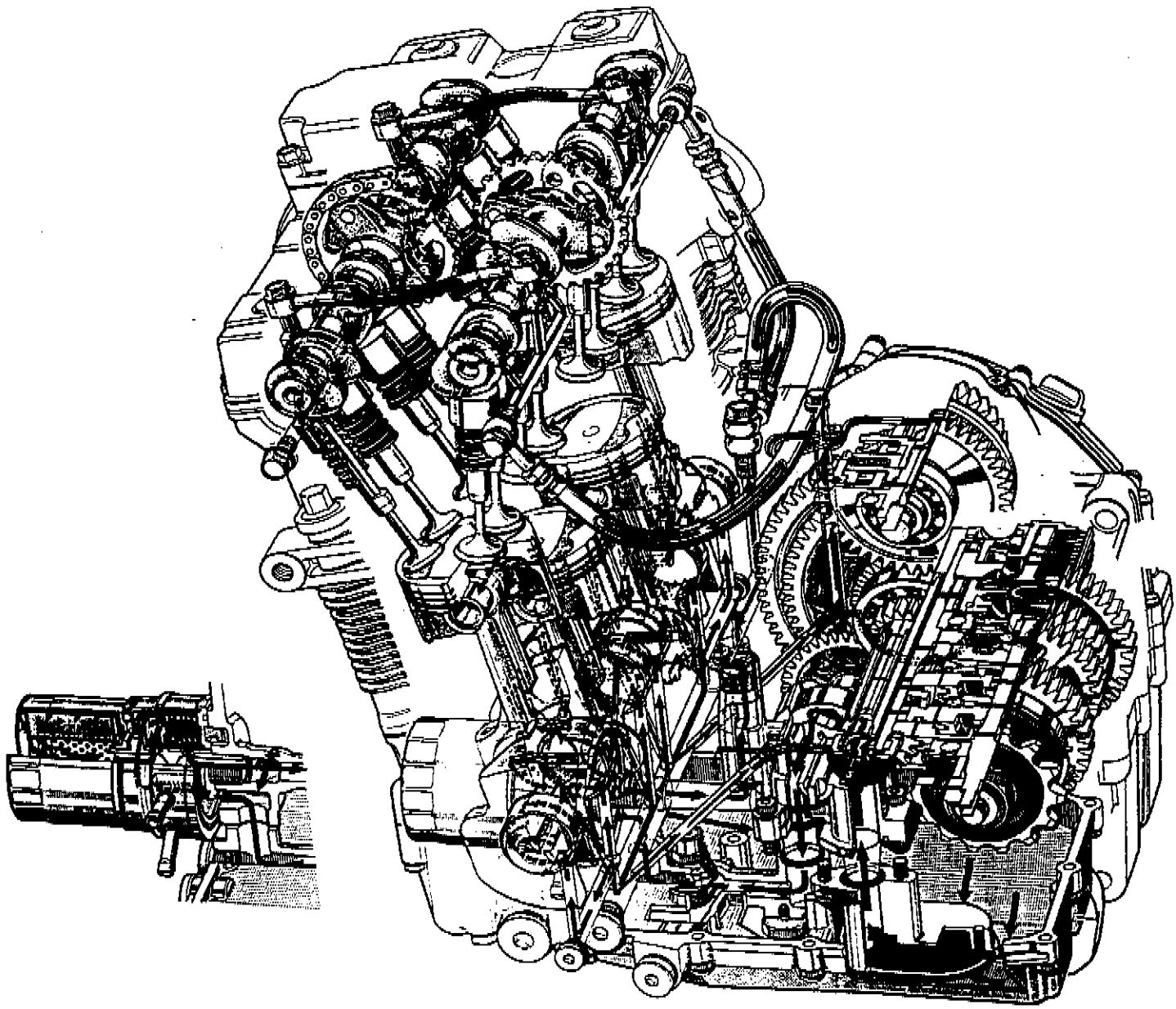
Replace the oil pan gasket with a new one to prevent oil leakage.

(Refer to pages 3-52 and 3-53.)

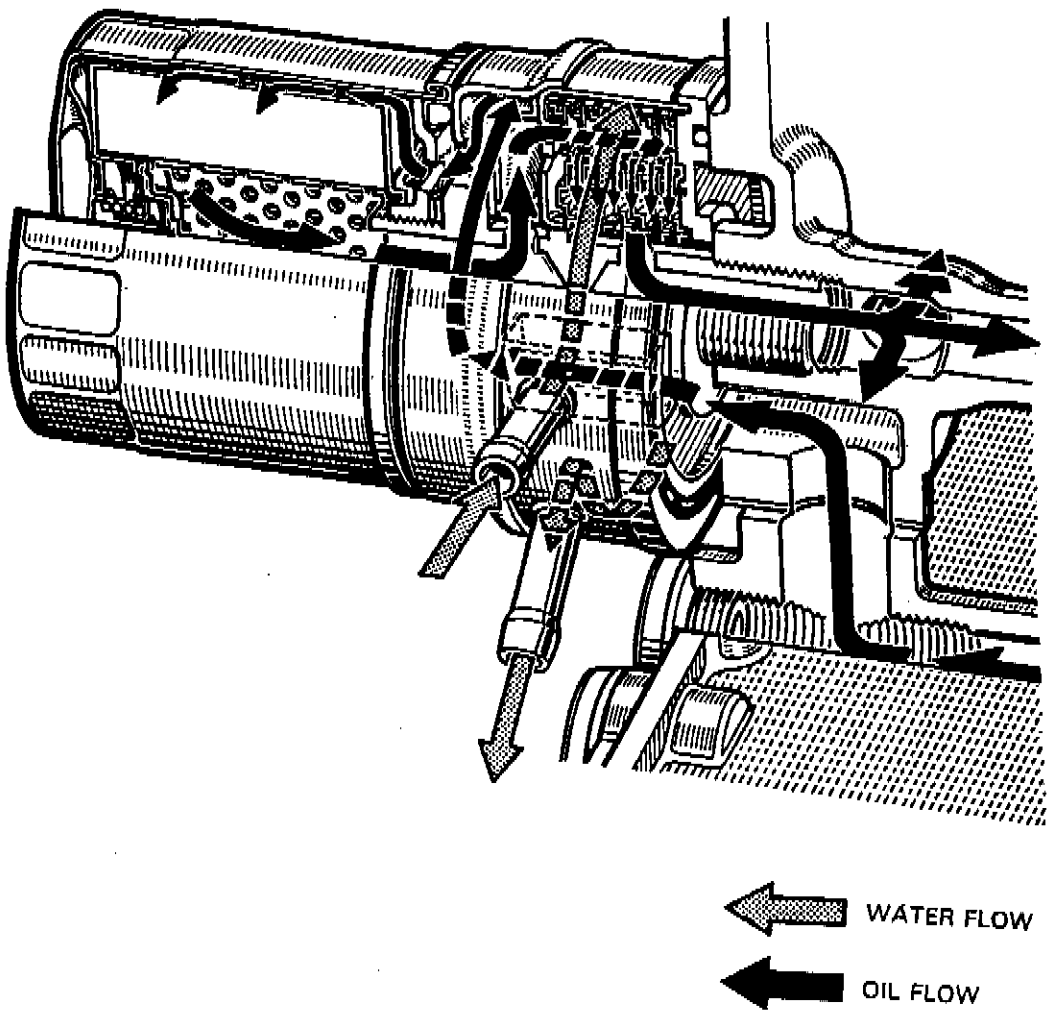
ENGINE LUBRICATION SYSTEM CHART

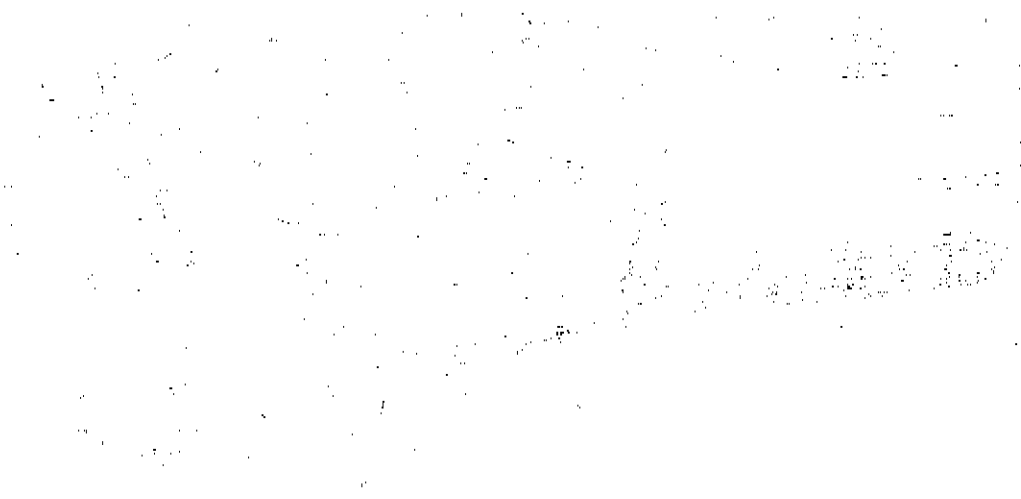


ENGINE LUBRICATION SYSTEM



ENGINE OIL COOLING SYSTEM





COOLING SYSTEM

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COOLING SYSTEM

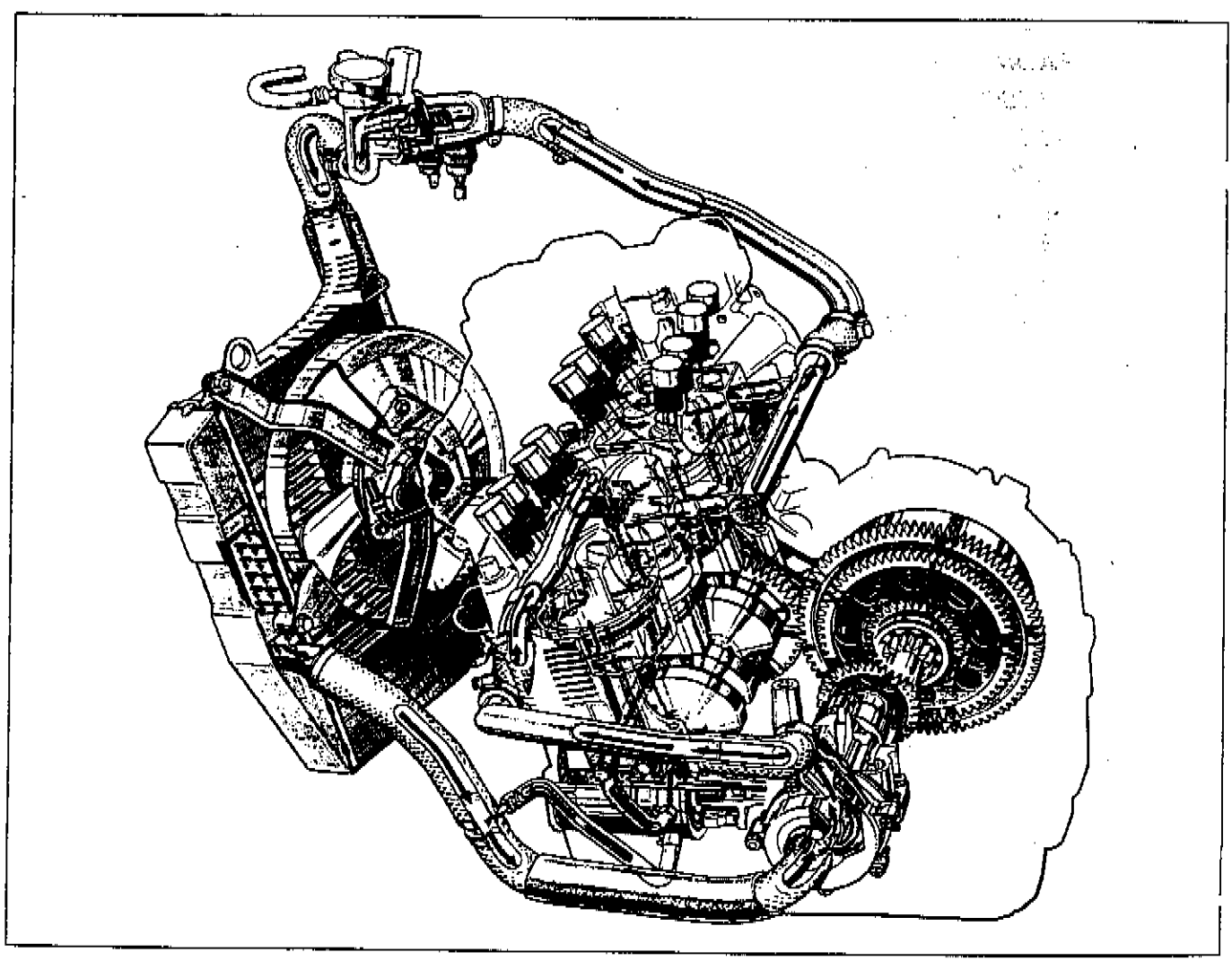
DESCRIPTION

The engine is cooled by engine coolant set in forced recirculation through jackets formed in the cylinder and cylinder head, and through the radiator. For the water pump, a high-capacity centrifugal pump is used. The radiator is a tube-and-fin type made of aluminum material, which is characterized by lightness in weight and good heat dissipation.

The thermostat is of wax pellet type, complete with a valve as the means of temperature-dependent control over the flow of engine coolant through the radiator. The valve is actuated by the temperature-sensitive wax contained in the pellet.

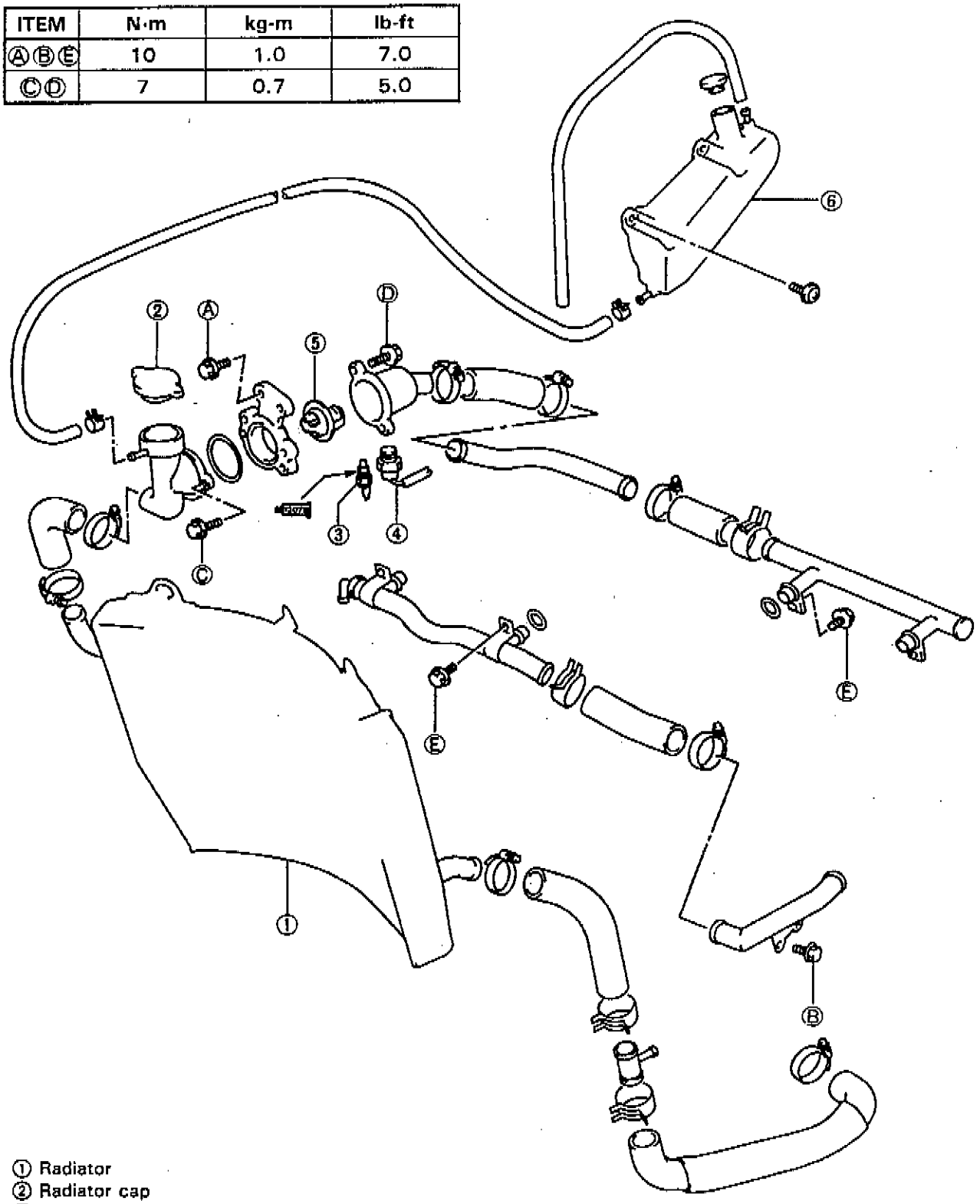
Referring to the following illustration, the thermostat is in the closed condition, so that engine coolant recirculates through the route comprising pump, engine, by-pass hole of the thermostat and radiator in the regulated condition.

As the engine coolant temperature rises to 76.5°C and the thermostat valve unseats, the normal engine coolant flow is established. At about 90°C of engine coolant temperature, the thermostat becomes completely open and most of heat is released to the atmosphere through the radiator core.



CONSTRUCTION

ITEM	N·m	kg-m	lb-ft
ⒶⒷⒺ	10	1.0	7.0
ⒸⒹ	7	0.7	5.0

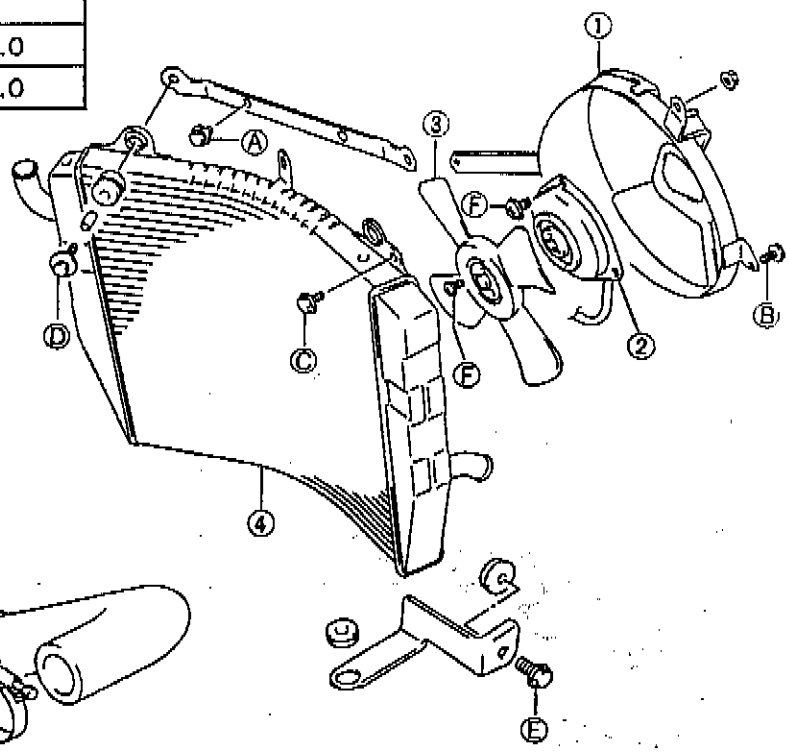


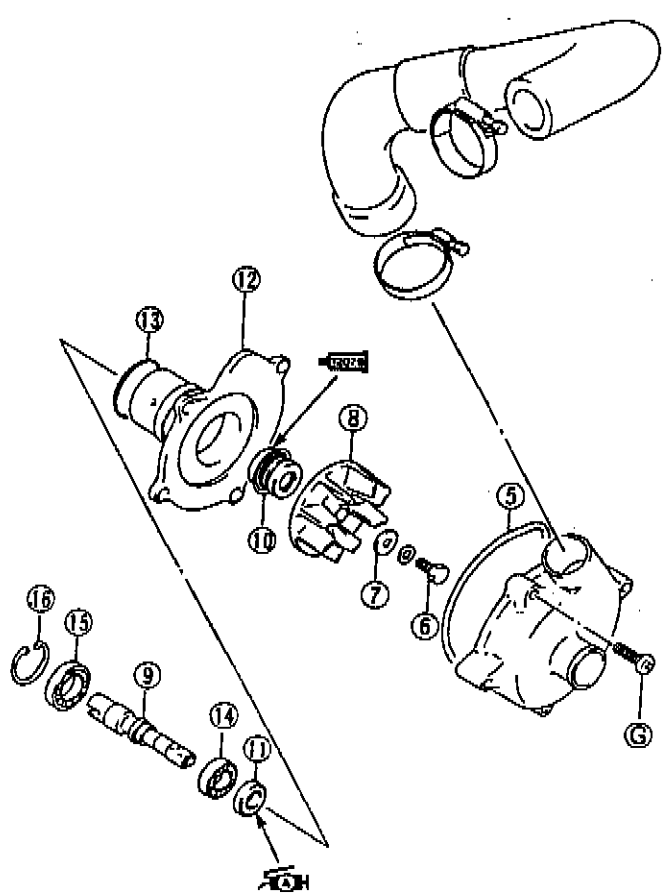
① Radiator
② Radiator cap
③ Engine coolant temperature gauge
④ Cooling fan thermo-switch
⑤ Thermostat
⑥ Engine coolant reservoir

5-3 COOLING SYSTEM

ITEM	N·m	kg-m	lb-ft
Ⓐ Ⓑ Ⓒ	6	0.6	4.5
Ⓓ Ⓔ	10	1.0	7.0
Ⓕ	8	0.8	6.0

① Shroud
② Fan motor
③ Cooling fan
④ Radiator





⑤ O-ring
⑥ Bolt
⑦ Gasket
⑧ Impeller
⑨ Impeller shaft
⑩ Mechanical seal
⑪ Oil seal
⑫ Stuffing box
⑬ O-ring
⑭ Bearing
⑮ Bearing
⑯ Circlip

ITEM	N·m	kg-m	lb-ft
Ⓖ	10	1.0	7.0
Ⓑ	8	0.8	6.0

ENGINE COOLANT

At the time of manufacture, the cooling system is filled with a 50 : 50 mixture of distilled water and ethylene glycol anti-freeze. This 50 : 50 mixture will provide the optimum corrosion protection and excellent heat protection, and will protect the cooling system from freezing at temperatures above −31°C (−24°F).
If the motorcycle is to be exposed to temperatures below −31°C (−24°F), this mixing ratio should be increased up to 55% or 60% according to the figure.

Anti-freeze density	Freezing point
50%	−31°C (−24°F)
55%	−40°C (−40°F)
60%	−55°C (−67°F)

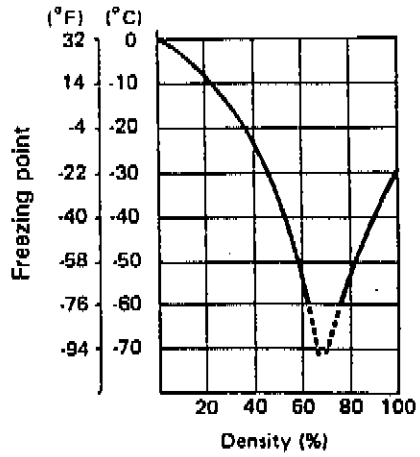


Fig. 1 Engine coolant density-freezing point curve.

⚠ CAUTION

- **Use a high quality ethylene glycol base anti-freeze, mixed with distilled water. Do not mix a alcohol base anti-freeze and different brands of anti-freeze.**
- **Do not put in more than 60% anti-freeze or less than 50%. (Refer to Right figure.)**
- **Do not use a radiator anti-leak additive.**

50% Engine coolant including reserve

Anti-freeze	1 225 ml (1.3/1.1 US/Imp. qt)
Water	1 225 ml (1.3/1.1 US/Imp. qt)

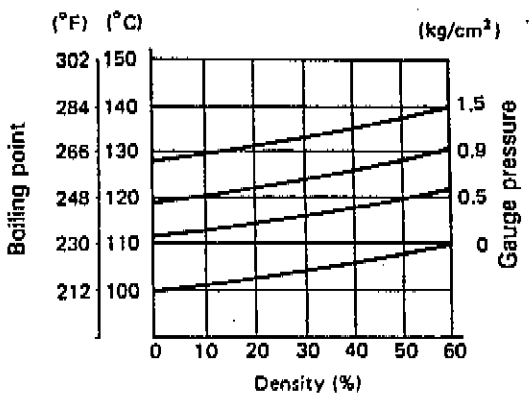


Fig. 2 Engine coolant density-boiling point curve.

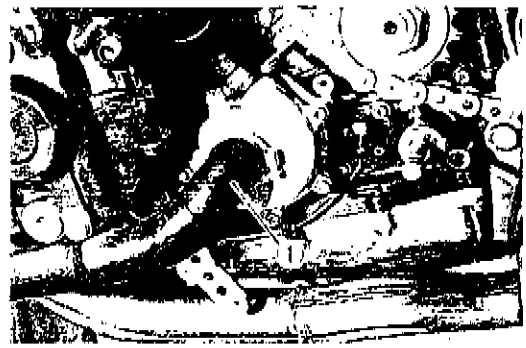
⚠ WARNING

- **You can be injured by scalding fluid or steam if you open the radiator cap when the engine is hot. After the engine cools, wrap a thick cloth around cap and carefully remove the cap by turning it a quarter turn to allow pressure to escape and then turn the cap all the way off.**
- **The engine must be cool before servicing the cooling system.**
- **The coolant is harmful;**
  - **If it comes in contact with skin or eyes, flush with water.**
  - **If swallow it accidentally, induce vomiting and call physician immediately.**
  - **Keep it away from children.**

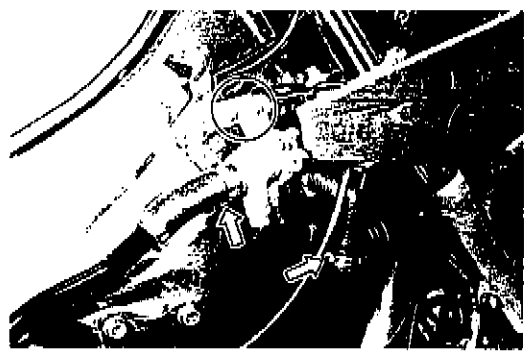
COOLING SYSTEM REMOVAL AND DISASSEMBLY

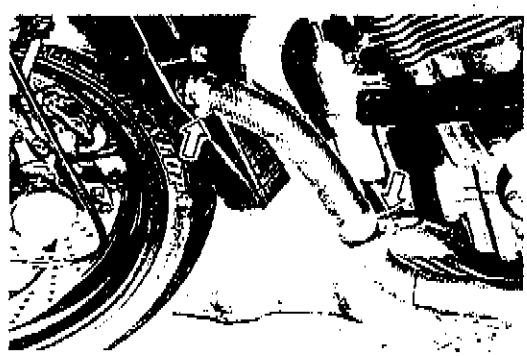
WATER HOSES AND THERMOSTAT CASE

- Remove the lower cowling. (Refer to pages 6-2 and 3.)
- Remove the gearshift lever and engine sprocket cover. (Refer to page 3-5.)
- Drain out engine coolant by removing the water hose ① .



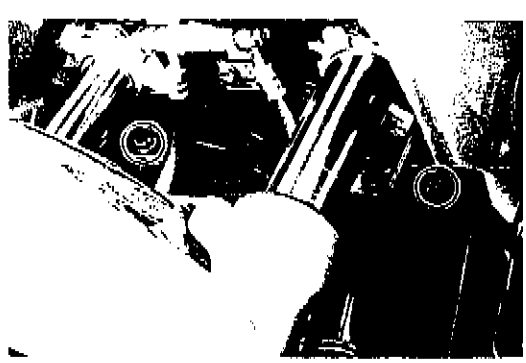
- Remove the thermostat case bracket mounting bolts.
- Disconnect the water hoses by loosening their clamp screws.
- Disconnect the engine coolant temperature gauge lead wire, cooling fan switch lead wire coupler and ground wire.
- Remove the thermostat case along with the water hoses.

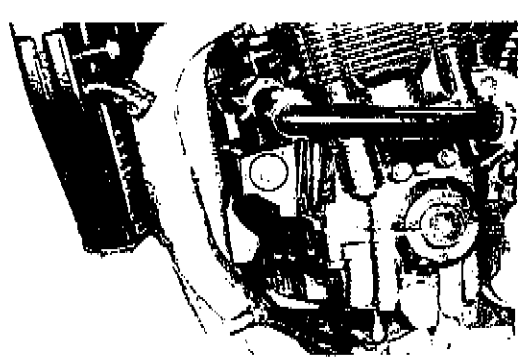




RADIATOR

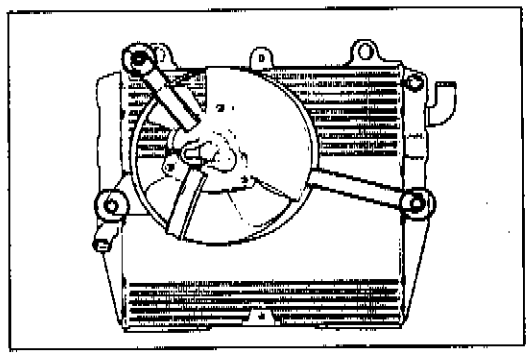
- Remove the radiator by removing the mounting bolts.





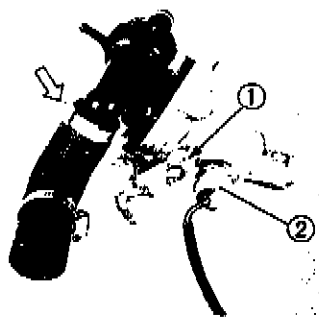
COOLING FAN

- Remove the cooling fan.



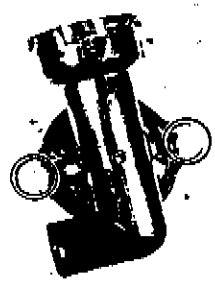
ENGINE COOLANT TEMPERATURE GAUGE AND COOLING FAN THERMO-SWITCH

- Loosen the clamp screw and disconnect the water hose.
- Remove the engine coolant temperature gauge ① and cooling fan thermo-switch ② .



THERMOSTAT

- Separate the thermostat case into halves and remove the thermostat.



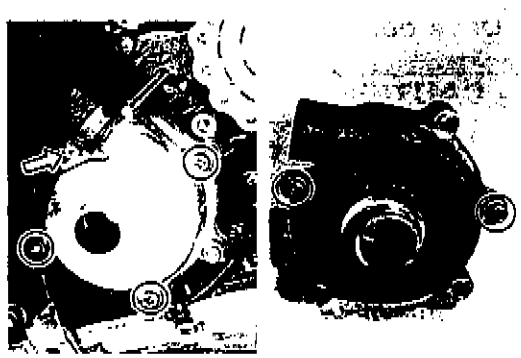


WATER PUMP

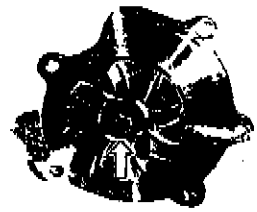
NOTE:

If abnormal noise or water leakage from the water pump does not occur, it is not necessary to remove the water pump.

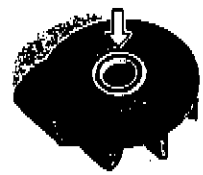
- *Remove the gearshift lever and engine sprocket cover. (Refer to page 3-6.)*
- *Remove the water pump assembly.*
- *Remove the water pump cover.*



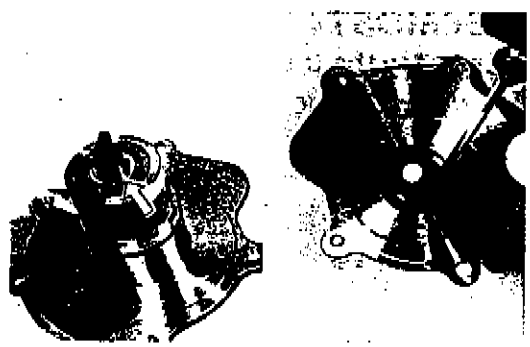
- Remove the impeller securing bolt by holding the impeller shaft with a water pump pliers.



- Remove the mechanical seal ring.



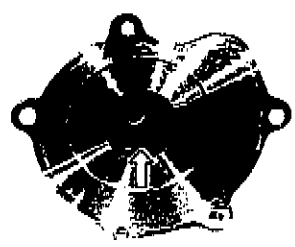
- Remove the circlip from the impeller shaft.
- Remove the impeller shaft.
- Remove the mechanical seal.



- Remove the oil seal.

⚠ CAUTION

The removed mechanical seal or oil seal should be replaced with a new one.

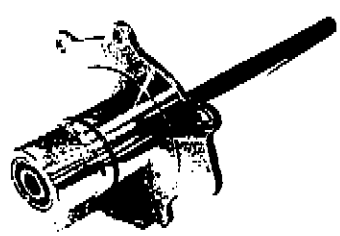


NOTE:
If water leakage or oil leakage from the water pump does not occur, it is not necessary to remove the mechanical seal or oil seal.

- Drive out the bearings by using a suitable bar.

⚠ CAUTION

The removed bearings should be replaced with new ones.



NOTE:
If abnormal noise does not occur, it is not necessary to remove the bearing.

RADIATOR

INSPECTION

Before removing the radiator and draining the engine coolant, inspect the following items.

1. Test the cooling system for tightness by using the radiator tester as follows: Remove the radiator cap, and connect the tester to the filler. Give a pressure of about 1.2 kg/cm² (17 psi, 120 kPa) and see if the system holds this pressure for 10 seconds. If the pressure should fall during this 10-second interval, it means that there is a leaking point in the system. In such a case, inspect the entire system and replace the leaking component or part.

⚠ WARNING

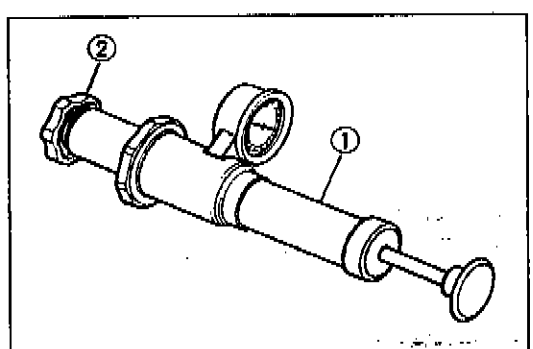
Do not remove the radiator cap when the engine is hot.

⚠ WARNING

When removing the radiator cap tester, put a rag on the filler to prevent spouting of engine coolant.

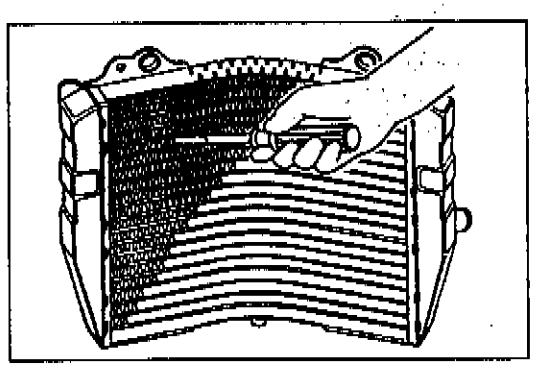
⚠ CAUTION

Do not exceed the radiator cap release pressure, or the radiator can be damaged.



① Radiator cap tester ② Radiator cap

2. Test the radiator cap for release pressure by using the radiator tester in the following manner: Fit the cap to the tester, as shown, and build up pressure slowly by operating the tester. Make sure that the pressure build-up stops at 1.1 ± 0.15 kg/cm² (15.6 ± 2.1 psi, 110 ± 15 kPa) and that, with the tester held standstill, the cap is capable of that pressure for at least 10 seconds. Replace the cap if it is found not to satisfy either of these two requirements.



Radiator cap valve
release pressure: 1.1 ± 0.15 kg/cm²
(15.6 ± 2.1 psi, 110 ± 15 kPa)

3. Road dirt or trash stuck to the fins must be removed. Use of compressed air is recommended for this cleaning. Fins bent down or dented can be repaired by straightening them with the blade of a small screwdriver.
4. Any water hose found in a cracked condition or flattened must be replaced. Any leakage from the connecting section should be corrected by proper tightening.

REMOVAL

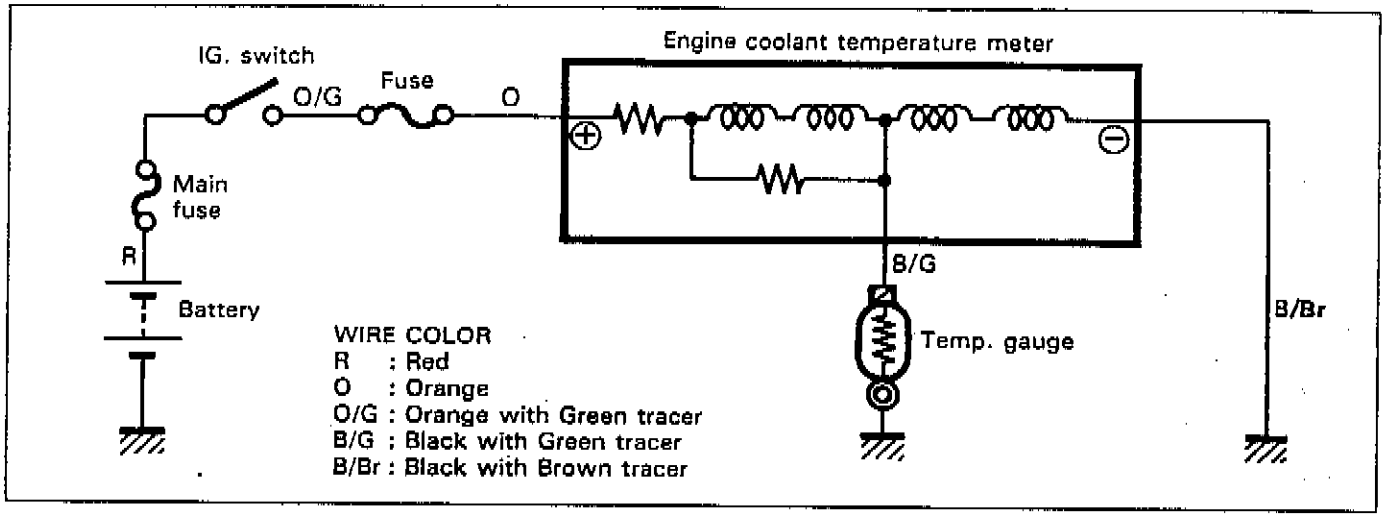
• Refer to page 5-5.

INSTALLATION

The radiator is to be installed in the reverse order of the removal procedure. After installing the radiator, be sure to add engine coolant: refer to page 2-13 for refilling information.

ENGINE COOLANT TEMPERATURE GAUGE

The following circuit diagram shows the electrical wiring for the thermometer. The major components are temperature gauge in contact with engine coolant; and temperature indicator (engine coolant temperature meter).

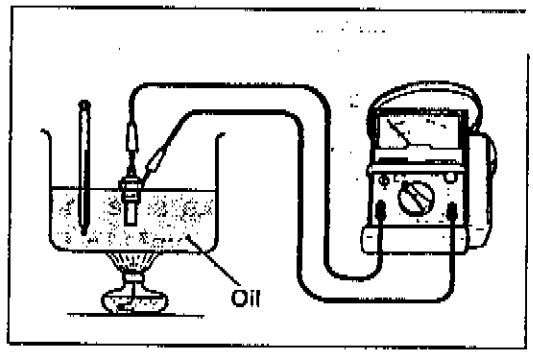


REMOVAL

- Refer to page 5-6.

INSPECTION

Test the temperature gauge at the bench to see if its ohmic value changes, as specified, with temperature. The test is to be run as follows: Connect the temperature gauge to the ohmmeter and place it in the oil contained in a pan, which is placed on a stove; heat the oil to raise its temperature slowly, reading the thermometer placed in the pan and also the ohmmeter. A temperature gauge whose ohmic value does not change in the proportion indicated in the table must be replaced.



TOOL **09900-25002: Pocket tester**

⚠ CAUTION

Do not allow the temperature gauge to touch the pan, or false reading will result.

Temperature gauge specification

Engine coolant temperature	Standard resistance
50°C (122°F)	Approx. 153.9 Ω
80°C (176°F)	Approx. 51.9 Ω
100°C (212°F)	Approx. 27.4 Ω
120°C (248°F)	Approx. 16.1 Ω

If the resistance noted to show infinity or too much different resistance value, temperature gauge must be replaced. For inspecting the engine coolant temperature meter, refer to page 7-31.

REASSEMBLY

Apply SUZUKI BOND NO.1207B to the thread portion of the temperature gauge and tighten it to the specified torque.

1207B 99104-31140: SUZUKI BOND NO.1207B

Engine coolant temperature gauge: 8.0 N·m (0.8 kg-m, 6.0 lb-ft)

⚠ CAUTION

Take special care when handling the temperature gauge. If may cause damage if it gets a sharp impact.

- Fill the specified engine coolant. (Refer to page 2-14.)

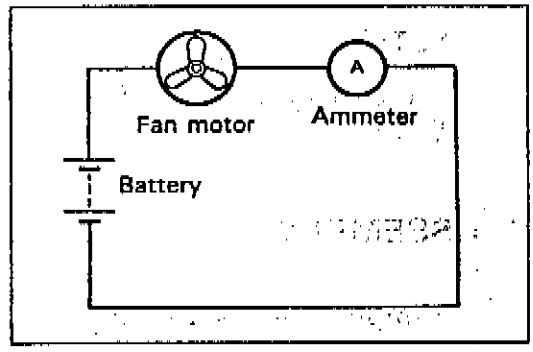
COOLING FAN

REMOVAL

- Refer to page 5-6.

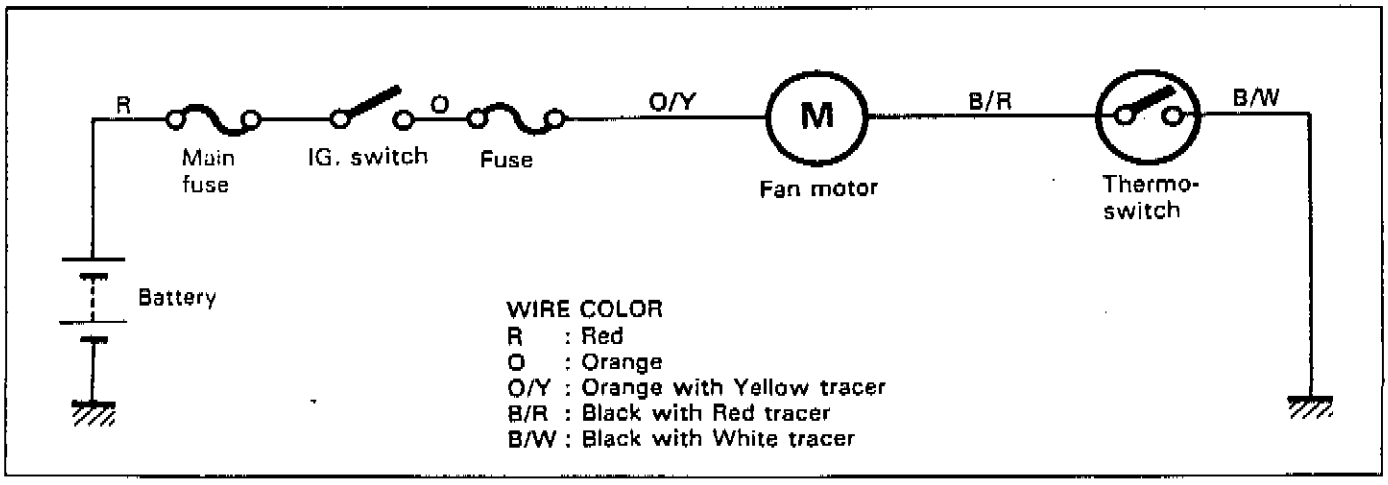
INSPECTION

Test the cooling fan drive motor for load current with an ammeter connected as shown in the illustration.
The voltmeter is for making sure that the battery applies 12 volts to the motor. With the motor with electric motor fan running at full speed, the ammeter should be indicating not more than 5 amperes.
If the fan motor does not turn, replace the motor assembly with a new one.



COOLING FAN THERMO-SWITCH

The cooling fan, being located behind the radiator, is secured to the radiator by three bolts. The fan drive motor is automatically controlled by the thermo-switch. This switch remains open when the temperature of engine coolant is low, but it closes at about 105°C (221°F) of rising engine coolant temperature to set the fan in motion.

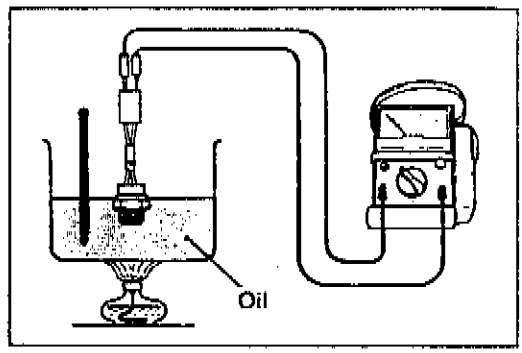


REMOVAL

• Refer to page 5-6.

INSPECTION

The thermo-switch must be checked for its temperature-initiated closing action at the specification value of 105°C (221°F) by testing it at the bench as shown in the figure. Connect the thermo-switch to a circuit tester and place it in the oil contained in a pan, which is placed on a stove; heat the oil to raise its temperature slowly, and read the column thermometer when the switch closes.



09900-25002: Pocket tester

Thermo-switch specification

OFF → ON	Approx. 105°C (221°F)
ON → OFF	Approx. 100°C (212°F)

⚠ CAUTION

Do not allow the switch to touch the pan, or false reading will result.

REASSEMBLY

NOTE:
Do not forget the new O-ring.

Thermo-switch: 12 N·m (1.2 kg-m, 8.5 lb-ft)

⚠ CAUTION

Take special care when handling the thermo-switch. It may cause damage if it gets a sharp impact. Replace the O-ring with a new one.

THERMOSTAT

REMOVAL

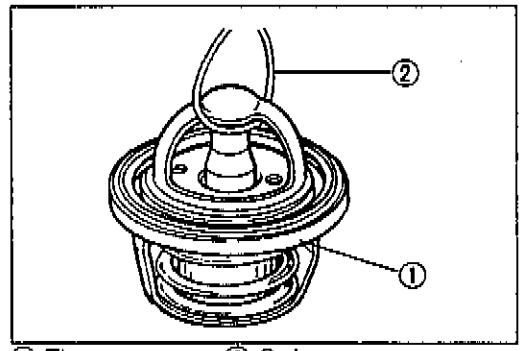
• Refer to page 5-6.

INSPECTION

Inspect the thermostat pellet for signs of cracking.

Test the thermostat at the bench for control action, in the following manner.

• Pass a string between flange, as shown in the illustration.
• Immerse the thermostat in the water contained in a beaker, as shown in the illustration. Note that the immersed thermostat is in suspension. Heat the water by placing the beaker on a stove and observe the rising temperature on a thermometer.



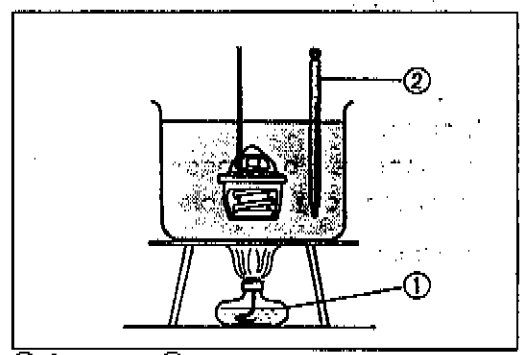
① Thermostat ② String

⚠ CAUTION

Do not allow the thermostat to touch the pan, or false reading will result.

• Read the thermometer just when opening the thermostat. This reading, which is the temperature level at which the thermostat valve begins to open, should be anywhere between 74.5°C (166.1°F) and 78.5°C (173.3°F).

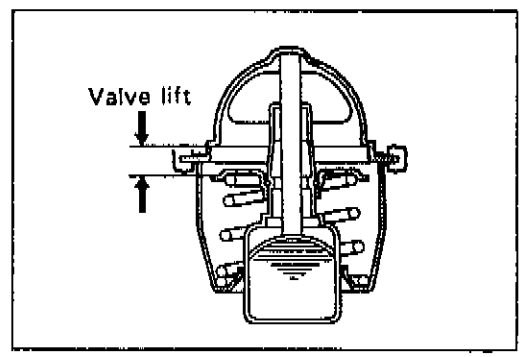
Thermostat valve opening temperature: 74.5—78.5°C (166.1—173.3°F)



① Stove ② Thermometer

• Keep on heating the water to raise its temperature to and beyond 90°C (194°F).
• Just when the water reaches 90°C (194°F), the thermostat valve should have lifted by at least 7.0 mm (0.28 in).

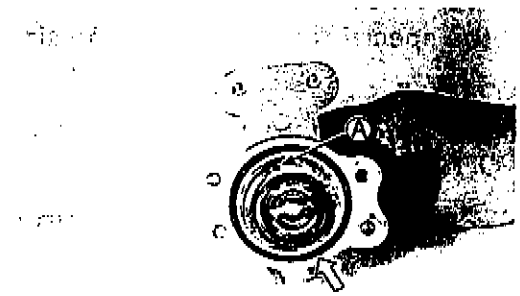
Thermostat valve lift: Over 7.0 mm at 90°C (Over 0.28 in at 194°F)



• A thermostat failing to satisfy either of the two requirements (start-to-open temperature and valve lift) must be replaced.

REASSEMBLY

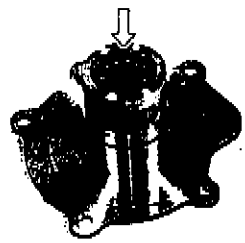
• The air bleeder hole Ⓐ of the thermostat faces upside.
• Replace the O-ring with a new one.



WATER PUMP

REMOVAL AND DISASSEMBLY

- Refer to page 5-6 for the water pump removal and disassembly procedures.



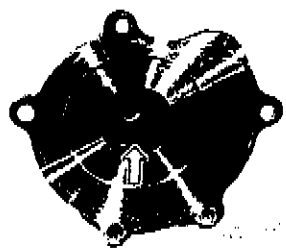
INSPECTION

WATER PUMP BEARING

Turn the inner race and check the bearing play. If abnormal noise occurs or any sign of stickiness is noted, replace the bearing with a new one.

MECHANICAL SEAL

Visually inspect the mechanical seal for damage, with particular attention given to the sealing face. Replace the mechanical seal that shows indications of leakage. Also replace the oil seal if necessary.

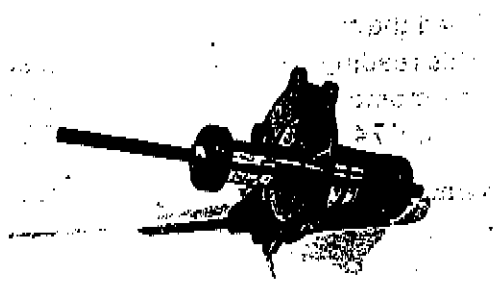


REASSEMBLY

Reassemble and remount the water pump in the reverse order of removal and disassembly. Pay attention to the following points:

- Press the new bearings into the stuffing box with the special tool and a suitable size sleeve etc.

TOOL 09924-84521: Bearing installer

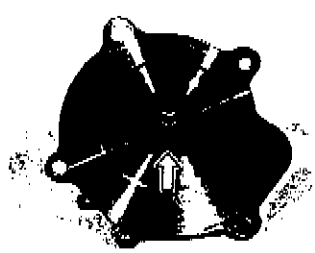


- Apply grease to the oil seal lip before installing.

A 99000-25030: SUZUKI SUPER GREASE "A"

- Press the new oil seal into the stuffing box with the special tool and a suitable size sleeve etc.

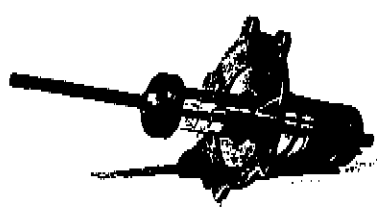
TOOL 09924-84521: Bearing installer



- Press the new mechanical seal into the stuffing box with the special tool and a suitable size sleeve etc.

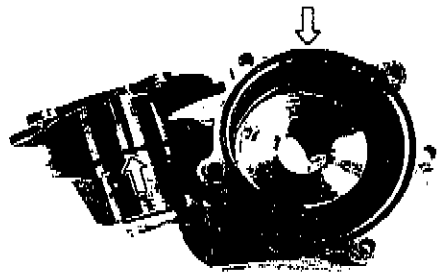
NOTE:
When installing the mechanical seal, apply SUZUKI BOND NO.1207B to its outer surface.

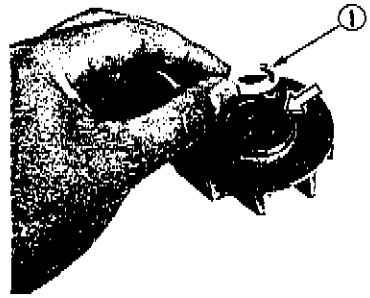
1207B 99104-31140: SUZUKI BOND NO.1207B



- Replace the O-rings and water seal with new ones when reassembling the water pump.

NOTE:
The mechanical seal ring must be assembled with marked face ① of the ring toward the impeller.



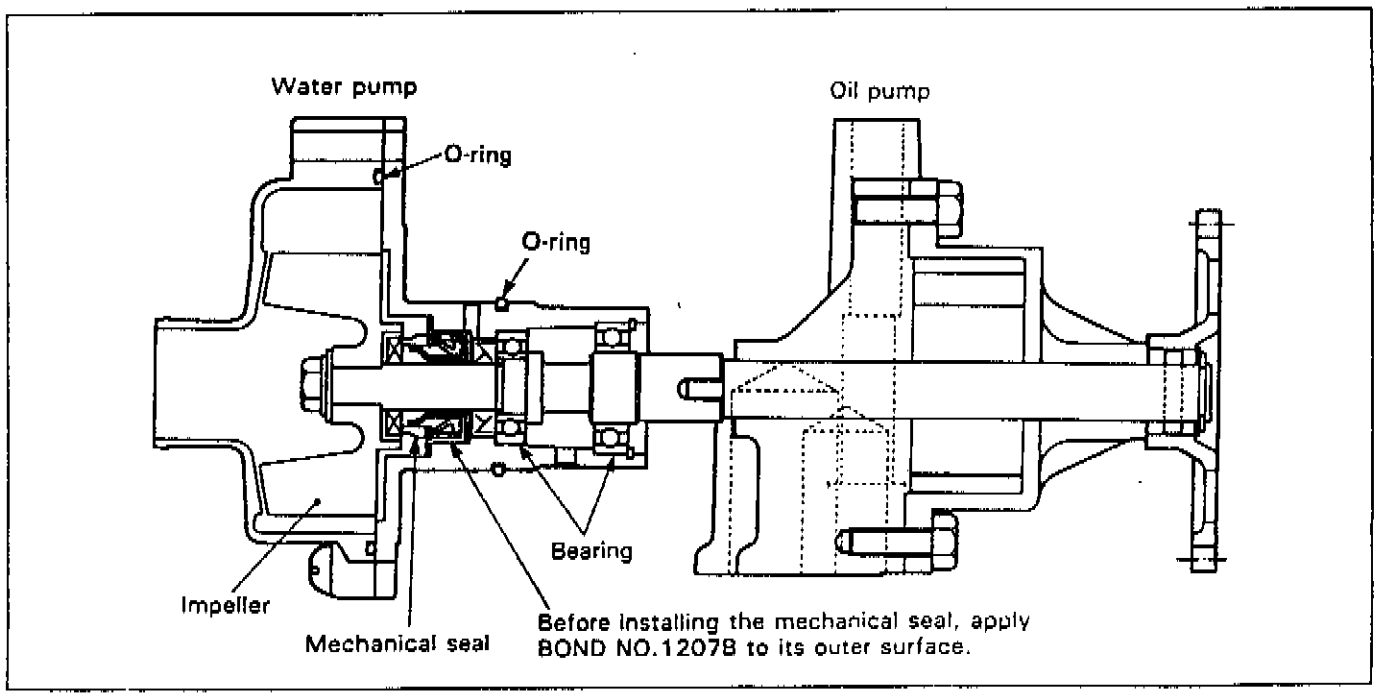


- Tightening the impeller securing bolt to the specified torque.

Impeller securing bolt: 8 N·m (0.8 kg-m, 6.0 lb-ft)

NOTE:
The seal lip side ② faces impeller.





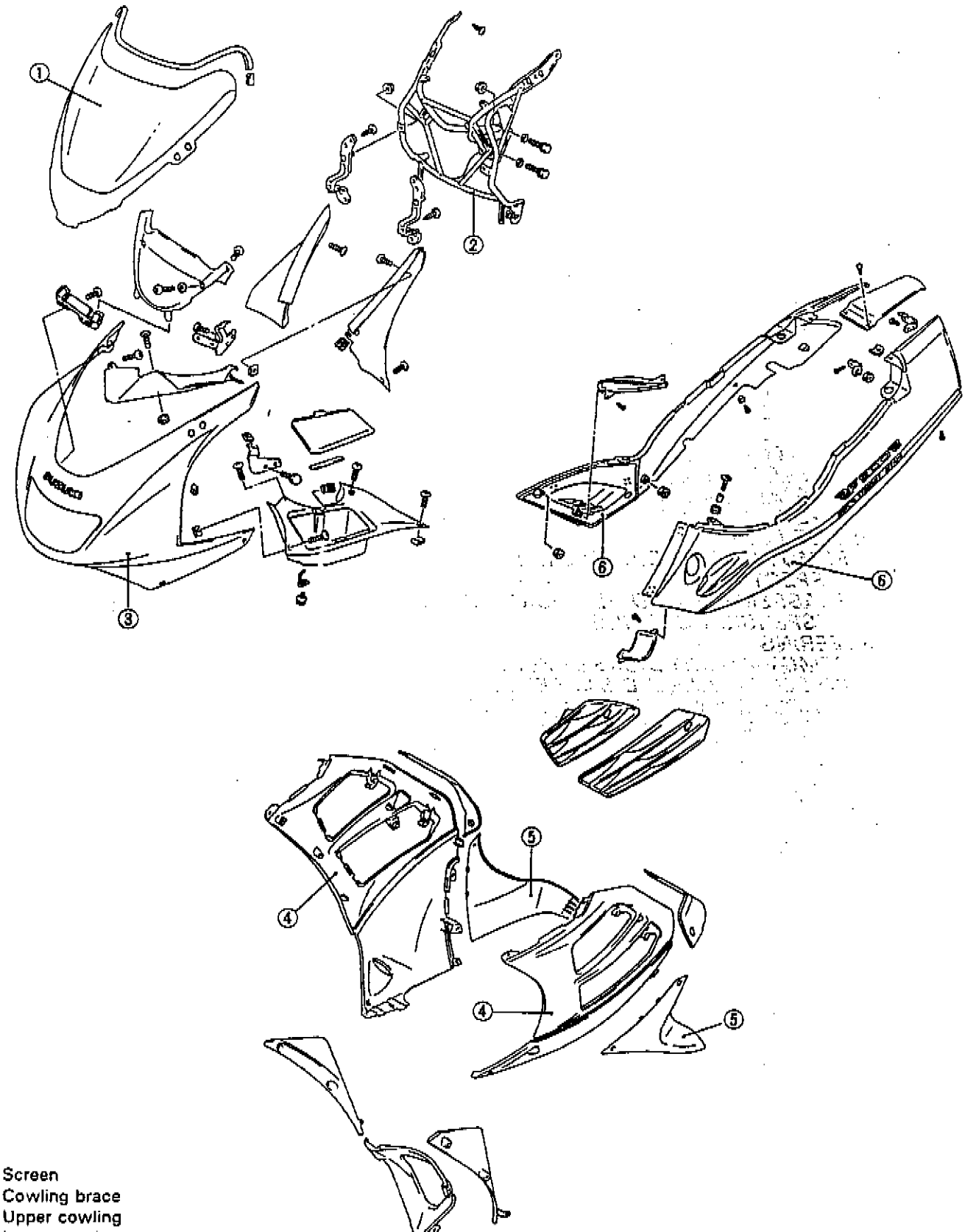
Refer to page 8-18 for the radiator hose routing.

CHASSIS

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EXTERIOR PARTS



① Screen
② Cowling brace
③ Upper cowling
④ Lower cowling
⑤ Lower cowling of rear
⑥ Frame cover

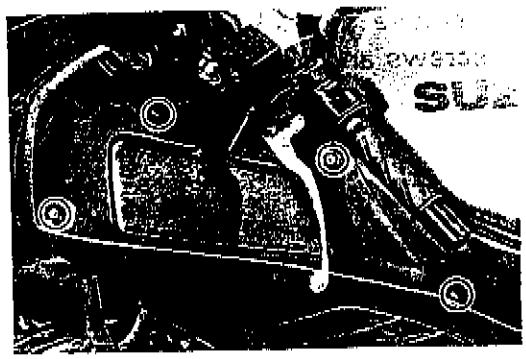
REMOVAL

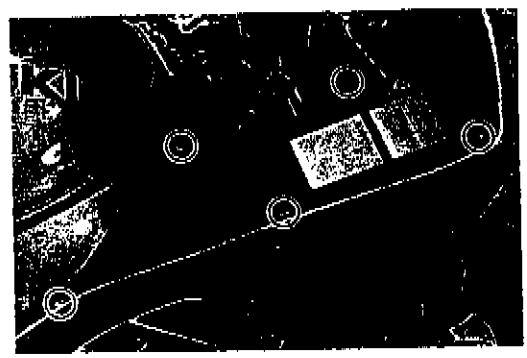
COWLING AND COWLING BRACE

- Remove the cowling upper panels of front by removing the screws, left and right.

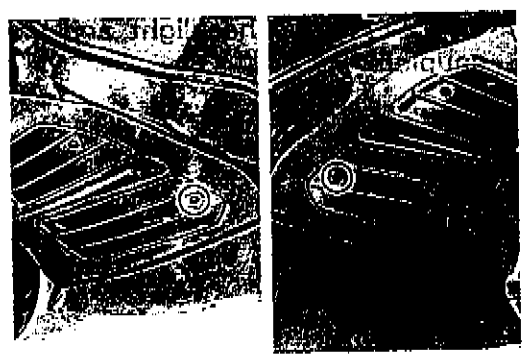


- Remove the cowling upper panels of rear by removing the screws, left and right.

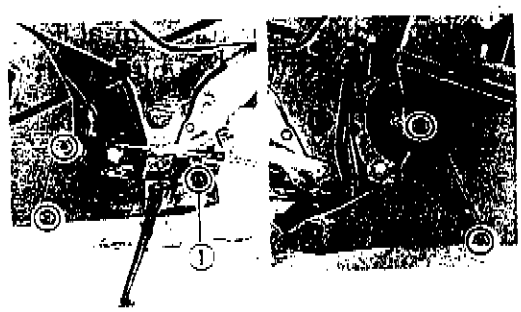




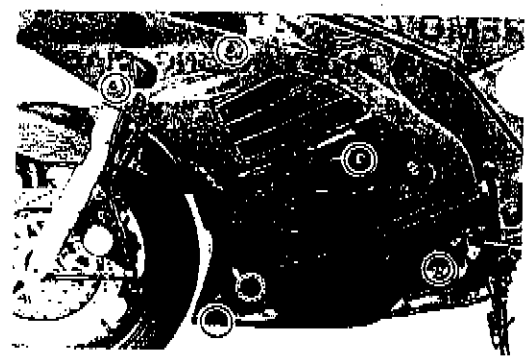
- Remove the service lids on the lower cowling by removing the screws, left and right.



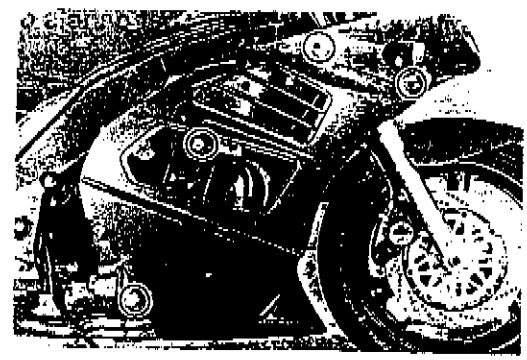
- Remove the lower cowling of rear by removing the screws and nut ① .



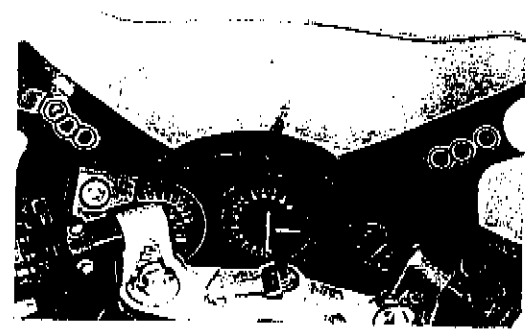
- Remove the left lower cowling assembly by removing the screws and bolts.



- Remove the right cowling assembly by removing the screws and bolts.



- Remove the rear-view mirrors by removing the bolts, left and right.
- Remove the upper cowling mounting screws.



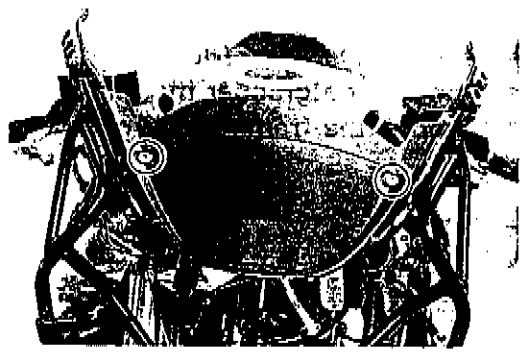
- Disconnect the headlight and position light lead wire couplers.



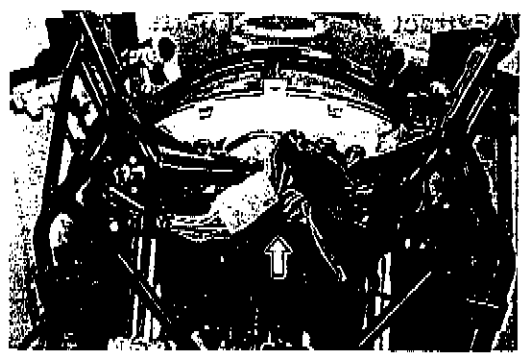
- Remove the front turn signal lights after disconnecting the their lead wire couplers, left and right.
- Remove the upper cowling along with the screen and headlight.



- Remove the center panel.



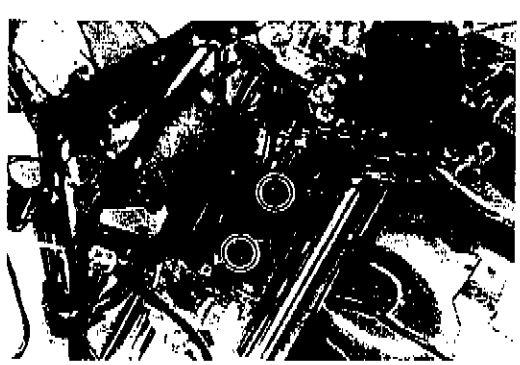
- Disconnect the various lead wire couplers.



- Disconnect the speedometer cable.
- Remove the clamps.

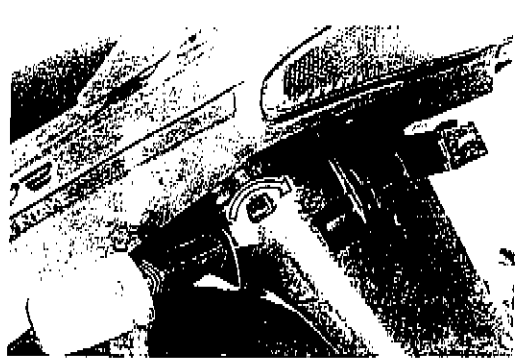


- Remove the cowling brace along with the combination meter by removing the bolts and nut.



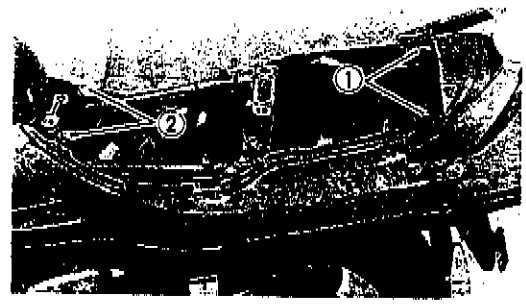
SEAT

- Remove the seat with the ignition key.



FRAME COVER

- Remove the seat. (Refer to page 6-4.)
- Remove the grabber mounting bolts ①.
- Remove the frame cover mounting screws ② .

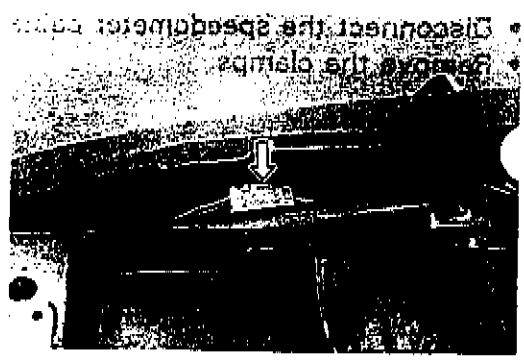


- Extract the hooked parts of frame cover, left and right.



☆: hooked part

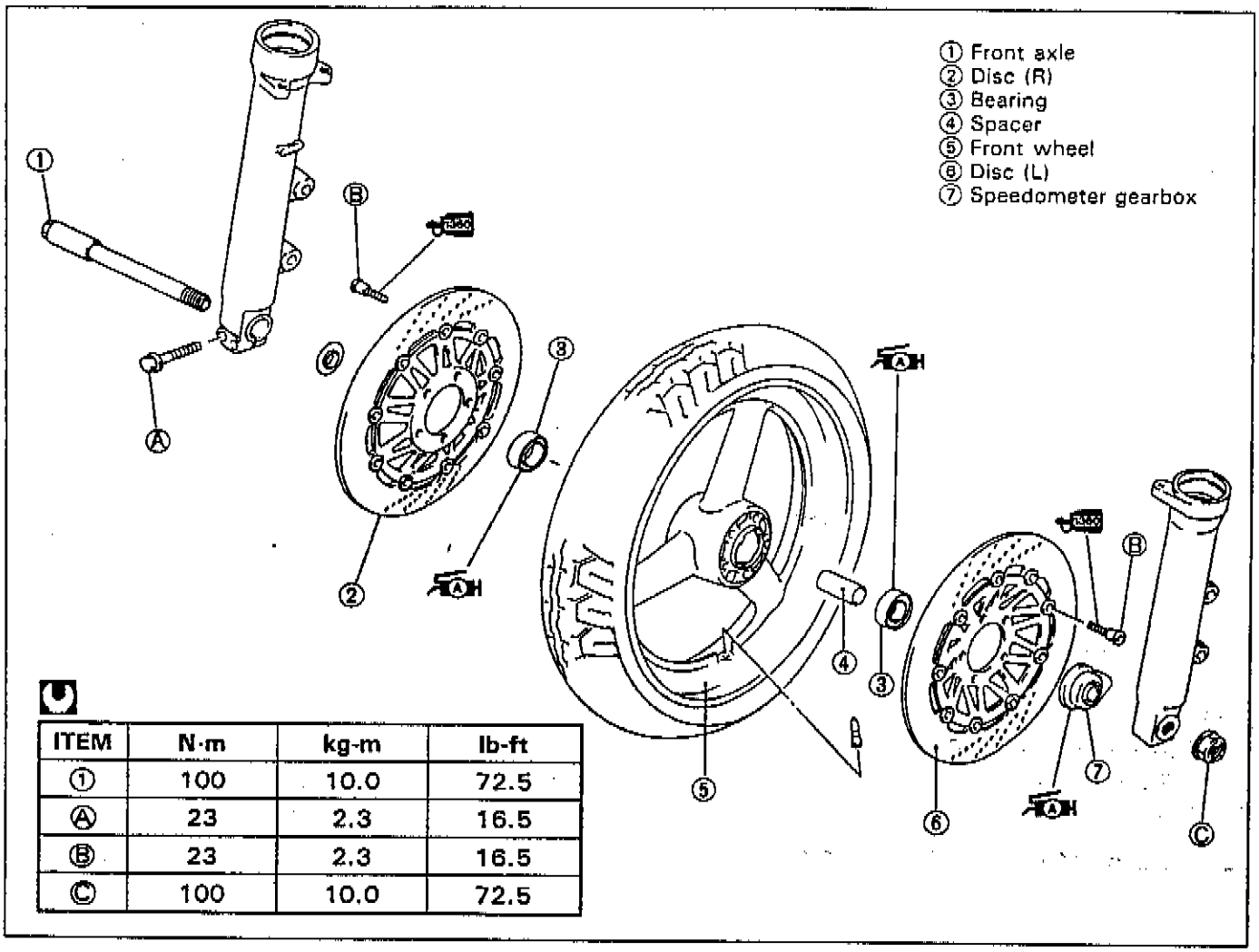
- Remove the frame cover after disconnecting the tail/brake light lead wire coupler.



REMOUNTING

Remount the cowling, seat and frame cover in the reverse order of its removal. (Refer to pages 8-24, 8-25 and 8-26.)

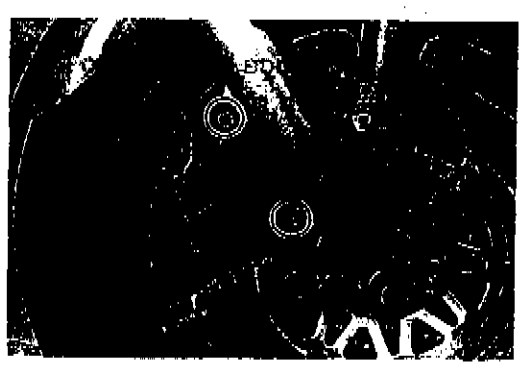
FRONT WHEEL



ITEM	N·m	kg-m	lb-ft
①	100	10.0	72.5
Ⓐ	23	2.3	16.5
Ⓑ	23	2.3	16.5
Ⓒ	100	10.0	72.5

REMOVAL

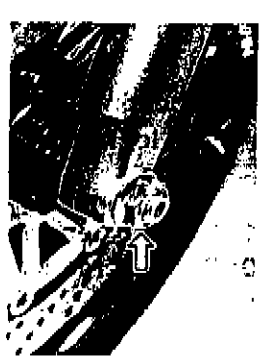
- Remove the lower cowling. (Refer to page 6-2.)
- Remove the brake calipers, left and right.
- Remove the axle nut.
- Loosen the axle pinch bolts.
- Loosen the front axle.
- Raise the front wheel off the ground with a jack or wooden block.
- Remove the axle and front wheel.

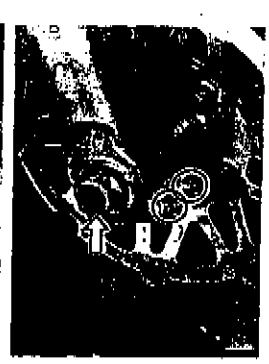


⚠ CAUTION

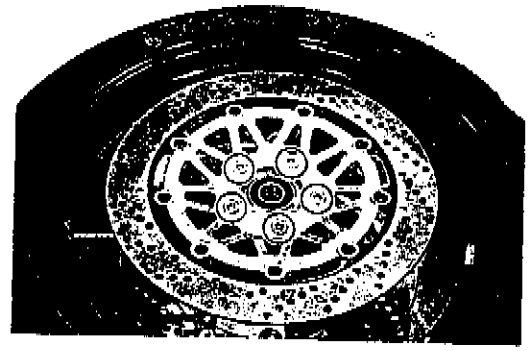
Do not operate the brake lever while removing the calipers.

NOTE:
After removing the front wheel, fit the calipers temporarily to the original positions.





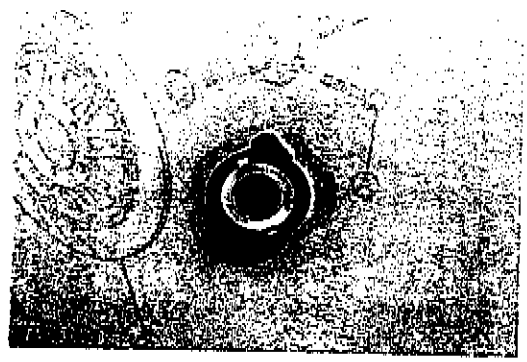
• Remove the brake discs from the front wheel.



INSPECTION AND DISASSEMBLY

SPEEDOMETER GEARBOX DUST SEAL

Inspect the lip of the dust seal for damage.



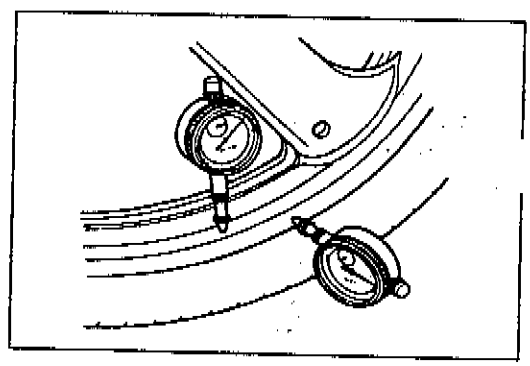
TIRE

Refer to page 6-11.

FRONT WHEEL

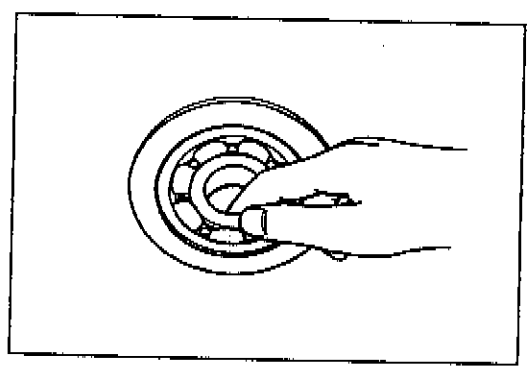
Inspect the wheel runout.
Excessive runout is usually due to worn or loosen wheel bearings and can be reduced by replacing the bearings.
If bearing replacement fails to reduce the runout, replace the wheel.

Service Limit (Axial and Radial): 2.0 mm (0.08 in)



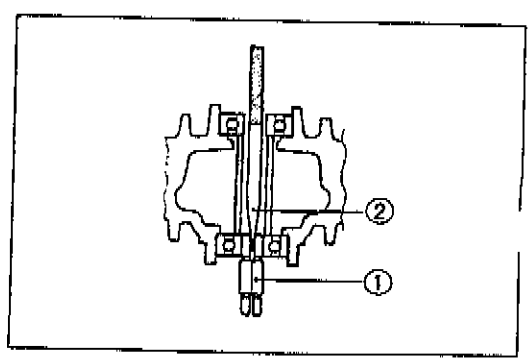
WHEEL BEARING

Rotate the inner race by finger to inspect for abnormal play, noise and smooth rotation while the wheel bearings are in the wheel.
Replace the bearing in the following procedure if there is anything unusual.

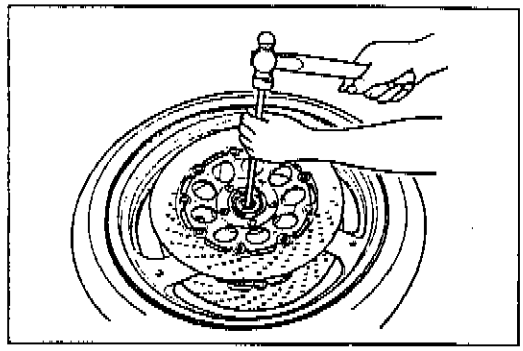


- Insert the attachment ① of bearing remover to the bearing as shown.
- Insert the wedge ② of bearing remover to the attachment from the opposite side, lock the wedge in the slit of attachment.

09941-50111: Bearing remover
09941-50120: Bearing remover attachment



- Drive out the wheel bearings by knocking the bearing remover.



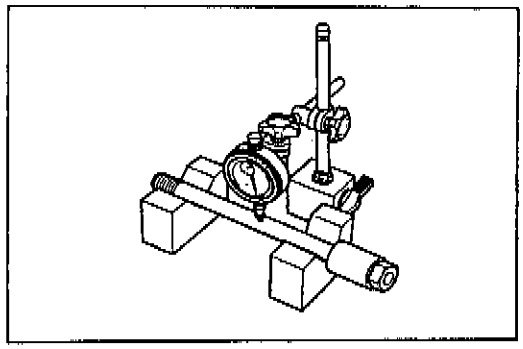
⚠ CAUTION

The removed bearings should be replaced with new ones.

FRONT AXLE

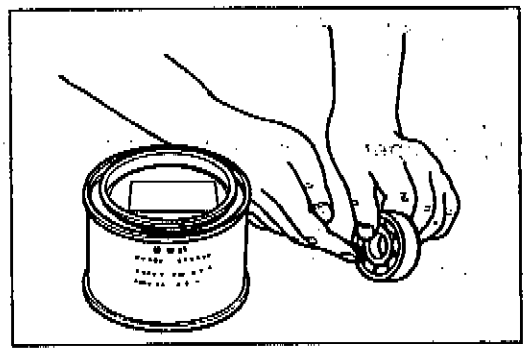
Using a dial gauge, check the axle for runout.
If the runout exceeds the limit, replace the axle.

Service Limit: 0.25 mm (0.010 in)



REASSEMBLY AND REMOUNTING

Reassemble and remount the front wheel in the reverse order of removal and disassembly. Pay attention to the following points:

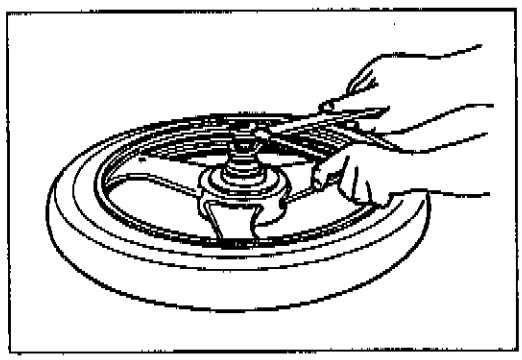


WHEEL BEARING

- Apply SUZUKI SUPER GREASE "A" to the bearings before installing.

99000-25030: SUZUKI SUPER GREASE "A"

- Install the wheel bearings as follows by using the used bearing and special tool.



09924-84510: Bearing Installer set

⚠ CAUTION

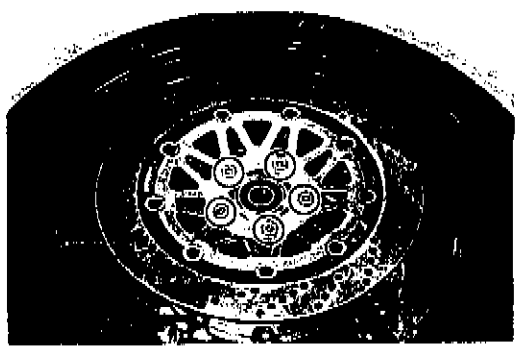
First install the left wheel bearing, then install the right wheel bearing. Refer to page 6-10 for details.
The sealed cover on the bearing must face to the outside.

BRAKE DISC

- Make sure that the brake disc is clean and free of any greasy matter. Apply THREAD LOCK SUPER "1360" to the disc mounting bolts and tighten them to the specified torque.

99000-32130: THREAD LOCK SUPER "1360"

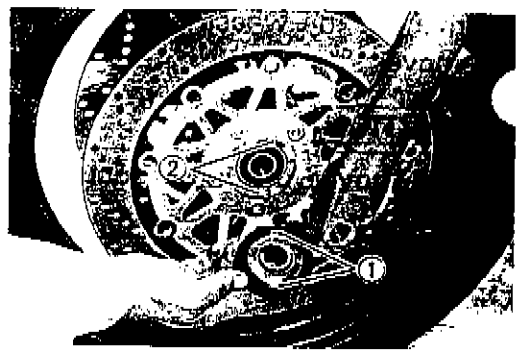
Brake disc bolt: 23 N·m (2.3 kg-m, 16.5 lb-ft)



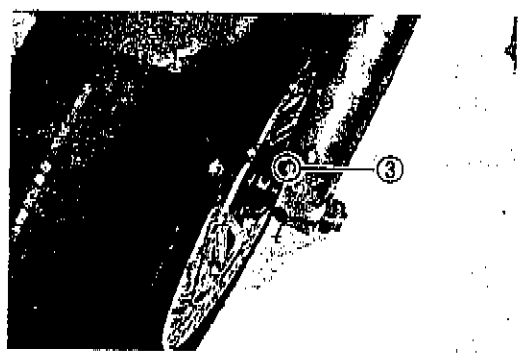
SPEEDOMETER GEARBOX

- Before installing the speedometer gearbox, apply grease to its dust seal lip and align the drive lugs ① to the recesses ② of the wheel hub and attach the speedometer gearbox to the wheel hub.

(A)H 99000-25030: SUZUKI SUPER GREASE "A"



- Set the stopper on the speedometer gearbox to the lug ③ on the left front fork.

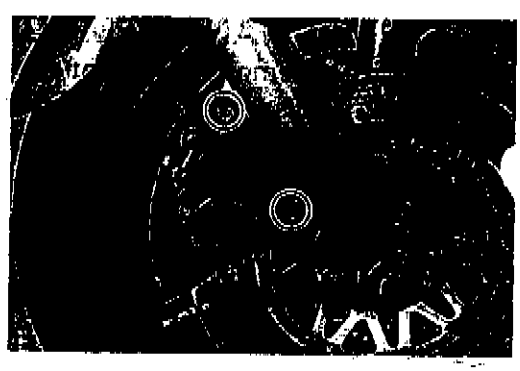


BRAKE CALIPER

- Tighten the brake caliper mounting bolts to the specified torque.

Caliper mounting bolt: 39 N·m (3.9 kg-m, 28.0 lb-ft)

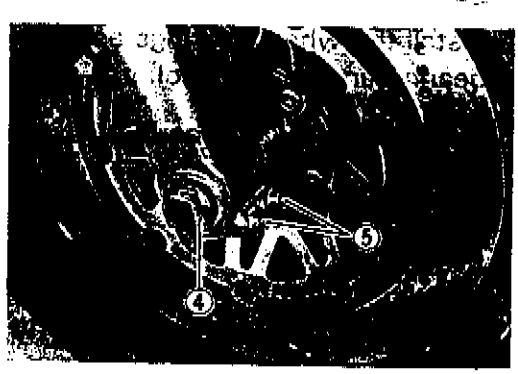
NOTE:
Push the pistons all the way into the caliper and remount the calipers.



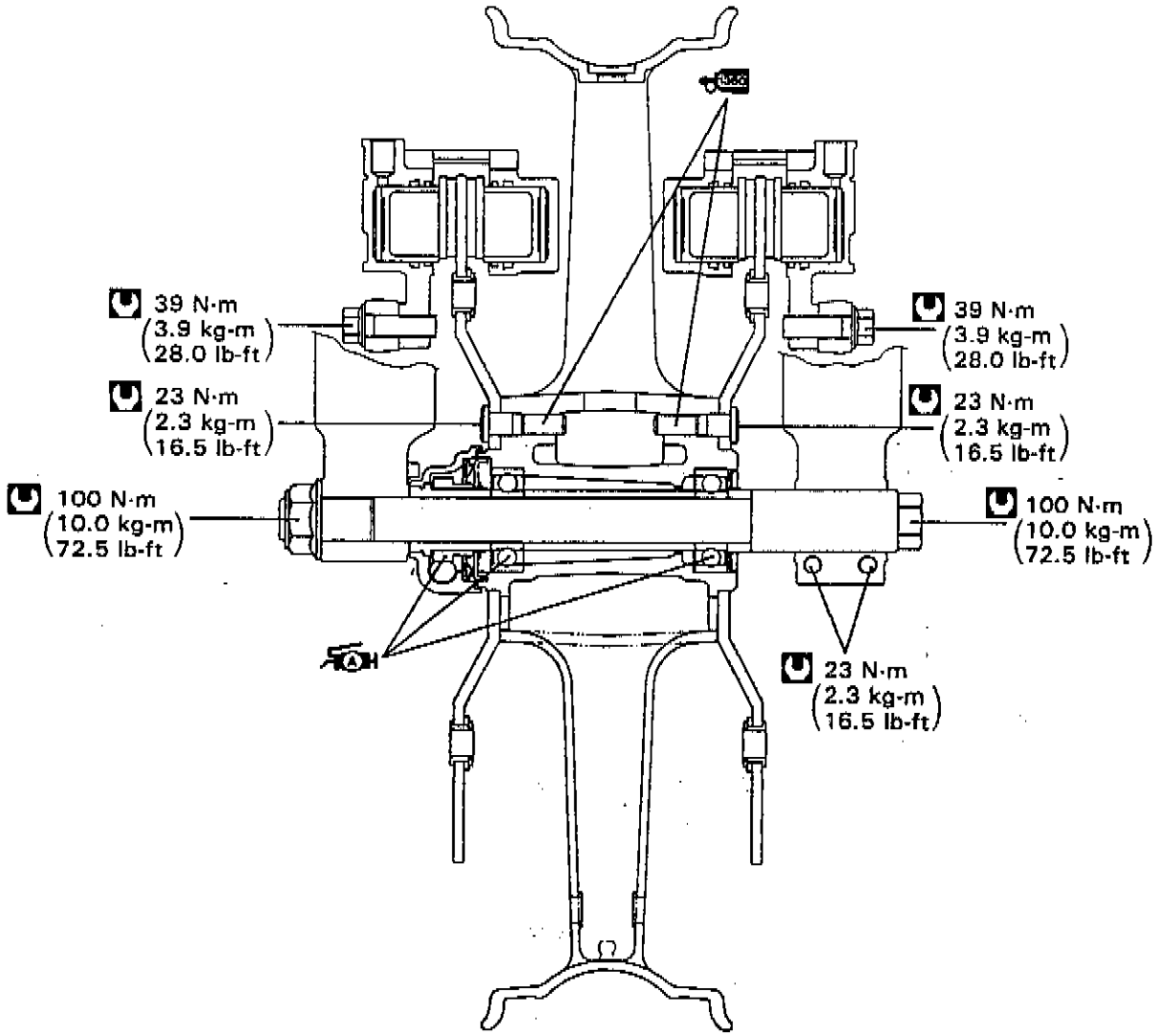
FRONT AXLE

- Tighten the front axle to the specified torque and then moving the motorcycle up and down.
- Tighten the pinch bolt and then axle nut to the specified torque.

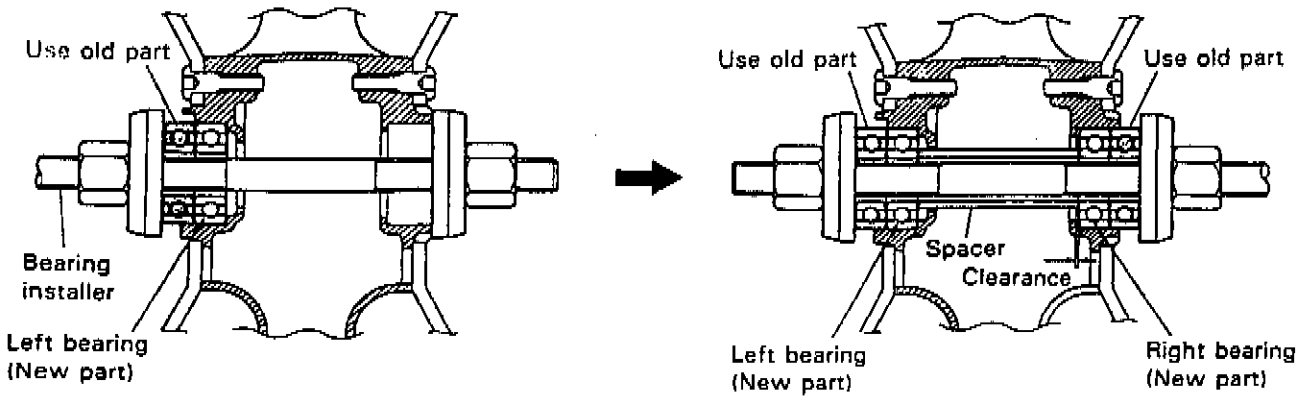
Front axle ④: 100 N·m (10.0 kg-m, 72.5 lb-ft)
Pinch bolt ⑤: 23 N·m (2.3 kg-m, 16.5 lb-ft)
Axle nut ⑥: 100 N·m (10.0 kg-m, 72.5 lb-ft)







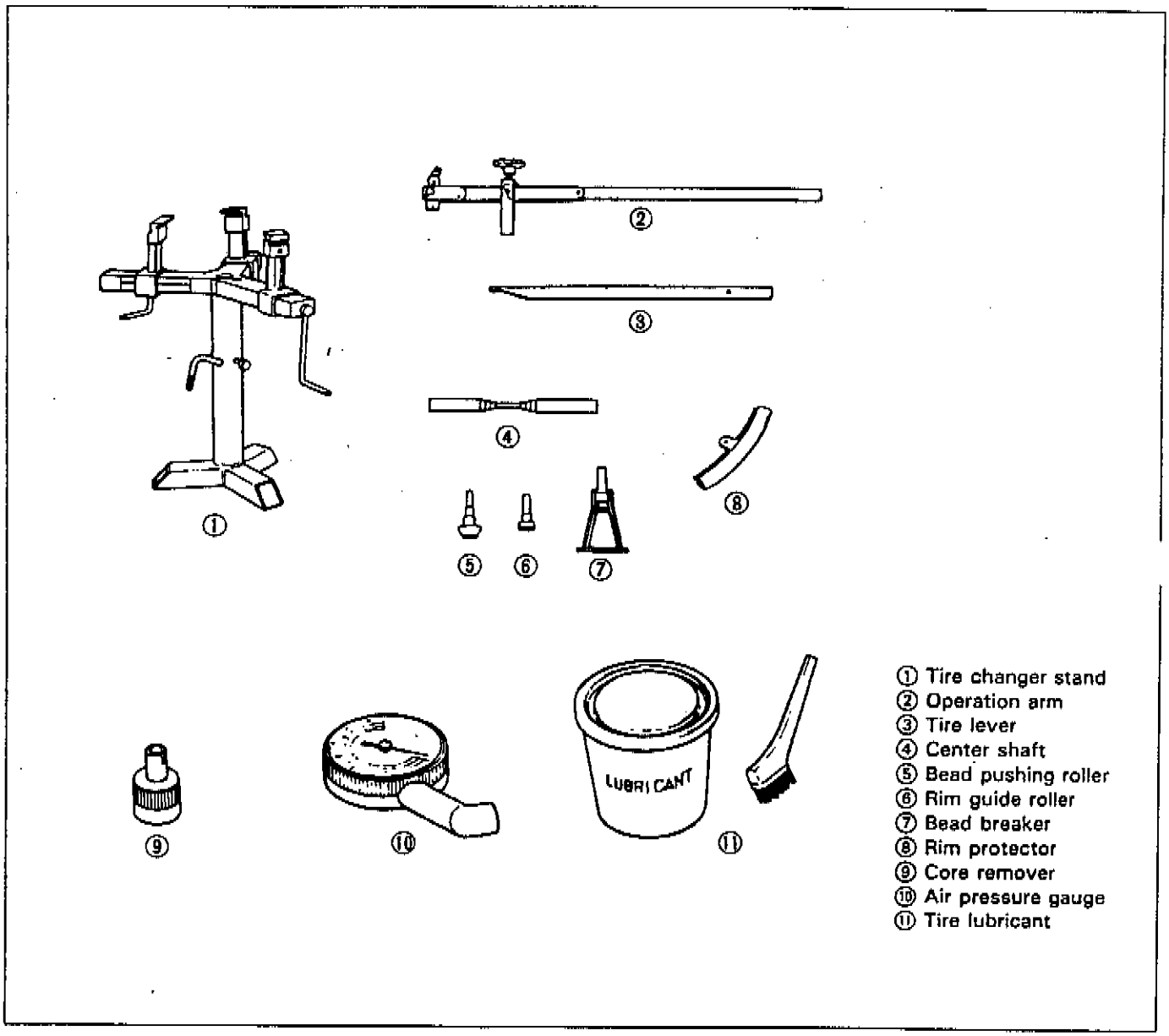
Left ⇦ ⇨ Right Left ⇦ ⇨ Right



TIRE AND WHEEL

TIRE REMOVAL

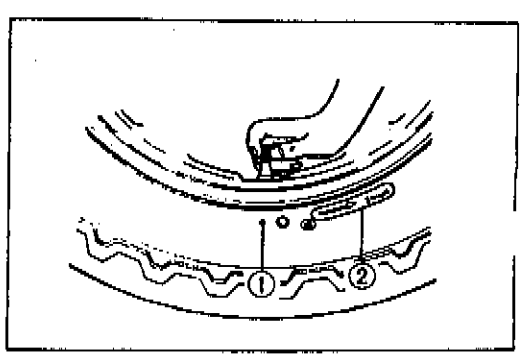
The most critical factor of a tubeless tire is the seal between the wheel rim and the tire bead. Because of this, we recommend using a tire changer which is also more efficient than tire levers. For tire removal, the following tools are required.



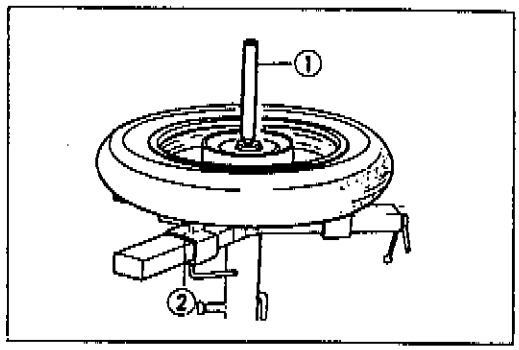
① Tire changer stand
② Operation arm
③ Tire lever
④ Center shaft
⑤ Bead pushing roller
⑥ Rim guide roller
⑦ Bead breaker
⑧ Rim protector
⑨ Core remover
⑩ Air pressure gauge
⑪ Tire lubricant

- Remove the valve core from the valve stem, and deflate the tire completely.

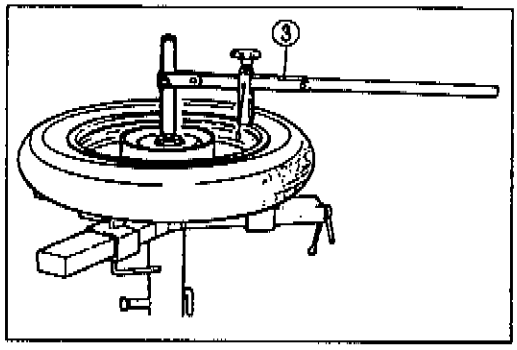
NOTE:
Mark the tire with chalk to note the position ① of the tire on the rim and rotational direction ② of the tire.



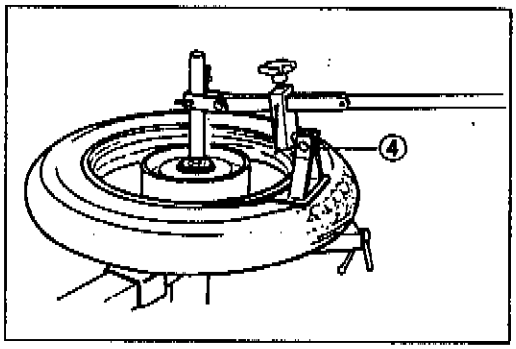
- Place the center shaft ① to the wheel, and fix the wheel with the rim holder ② .



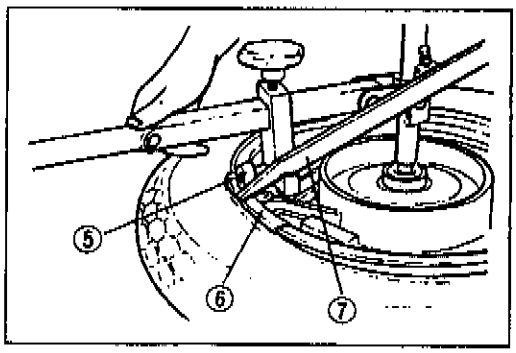
- Attach the operation arm ③ to the center shaft.



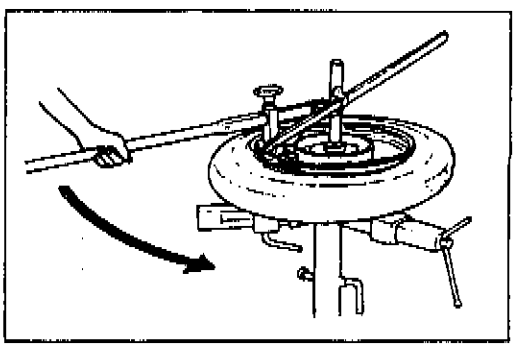
- Attach the bead breaker ④ to the operation arm, and dismount the bead from the rim. Turn the wheel over and dismount the other bead from the rim.



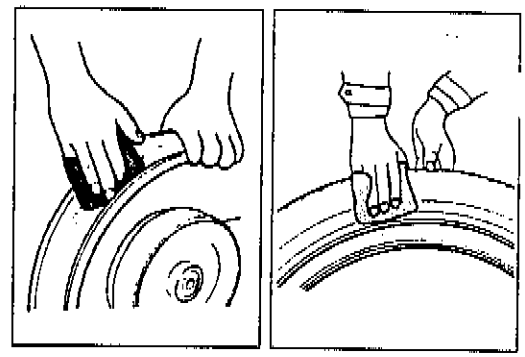
- Install the rim guide roller ⑤ .
- Install the rim protector ⑥ , and raise the bead with the tire lever ⑦ .



- Set the tire lever against the operation arm, and rotate the lever around the rim. Repeat this procedure to remove the other bead from the rim.



INSPECTION



WHEEL

Wipe off any rubber substance or rust from the wheel, and inspect the wheel rim. If any one of the following items is observed, replace it with a new wheel.

* A distortion or crack.
* Any scratches or flaws in the bead seating area.
* Wheel runout (Axial & Radial) of more than 2.0 mm (0.08 in).

TIRE

Thoroughly inspect the removed tire, and if any one of the following items is observed, do not repair the tire. Replace with a new one.

* A puncture or a split whose total length or diameter exceeds 6.0 mm (0.24 in).
* A scratch or split at the side wall.
* Tread depth less than 1.6 mm (0.06 in) in the front tire and less than 2.0 mm (0.08 in) in the rear tire.

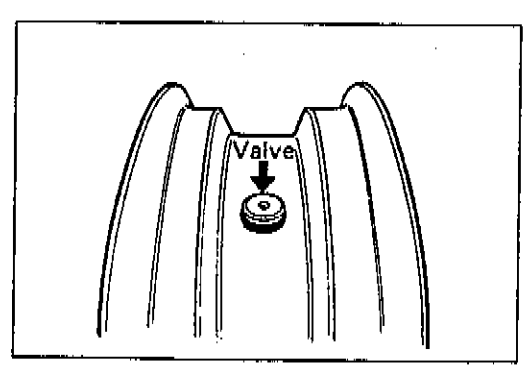
TOOL 09900-20805: Tire depth gauge

* Ply separation.
* Tread separation.
* Tread wear is extraordinarily deformed or distributed around the tire.
* Scratches at the bead.
* Cord is cut.
* Damage from skidding (flat spots).
* Abnormality in the inner liner.

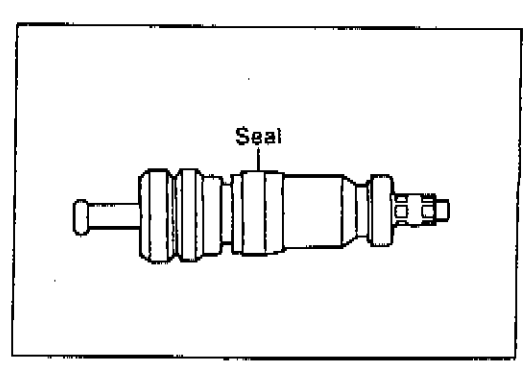
NOTE:
When repairing a flat tire, follow the repair instructions and use only recommended repairing materials.

VALVE INSPECTION

Inspect the valve after the tire is removed from the rim, and replace with a new valve if the seal rubber has any splits or scratches.



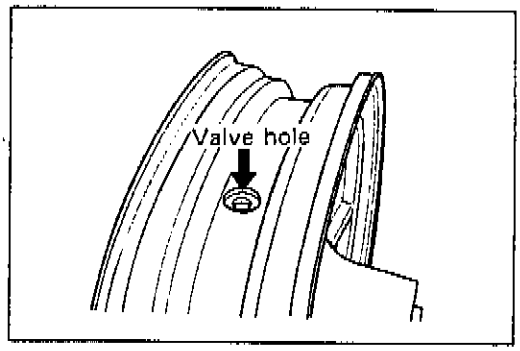
Inspect the removed valve core and replace with the new one if the seal is abnormally deformed or worn.



VALVE INSTALLATION

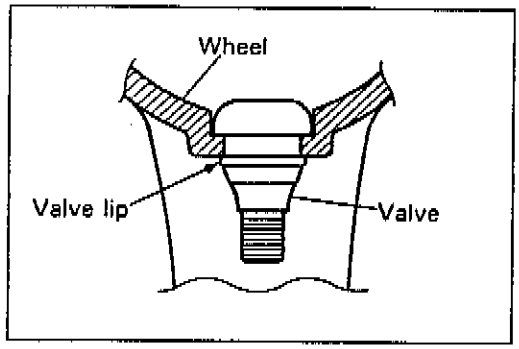
Any dust or rust around the valve hole must be cleaned off. Then install the valve in the rim.

NOTE:
To properly install the valve into the valve hole, apply a special tire luburicant or neutral soapy liquid to the valve.



⚠CAUTION

Be careful not to damage the lip of valve.

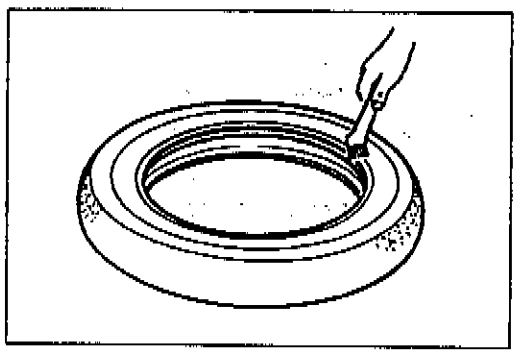


TIRE INSTALLATION

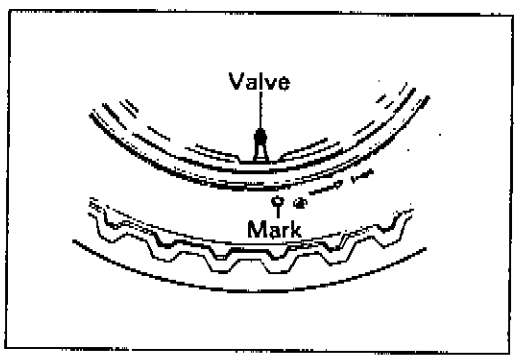
- Apply a special tire lubricant or neutral soapy liquid to the tire bead.

⚠CAUTION

Never apply grease, oil or gasoline to the tire bead.

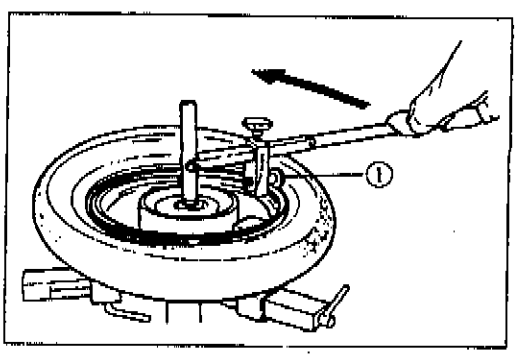


- When installing the tire, make certain that the directional arrow faces the direction of wheel rotation and align the balancing mark of the tire with the valve as shown.

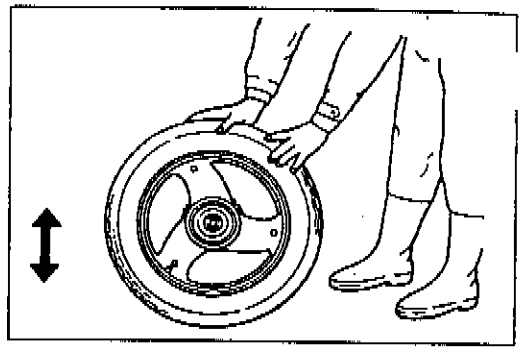


- Set the bead pushing roller ①.
- Rotate the operation arm around the rim to mount the bead completely. Do the bottom bead first, then the upper bead.
- Remove the wheel from the tire changer, and install the valve core in the valve stem.

NOTE:
Before installing the valve core, inspect the core.

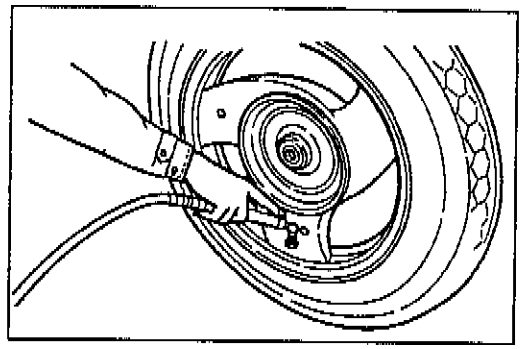


- Bounce the tire several times while rotating. This makes the tire bead expand outwards, and thus makes inflation easier.



NOTE:
Before inflating, confirm that the balance mark lines up with the valve stem.

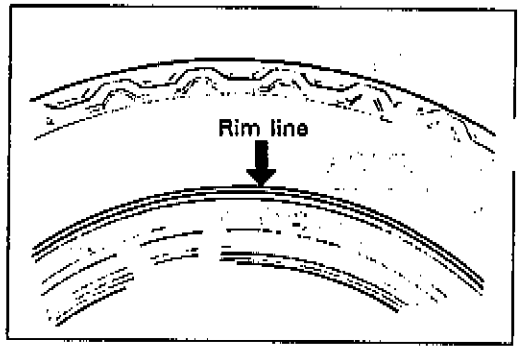
- Pump up the tire with air.



⚠ WARNING

Do not inflate the tire to more than 400 kPa (4.0 kg/cm², 56 psi). The tire could burst with sufficient force to cause severe injury. Never stand directly over the tire while inflating it.

NOTE:
Check the "rim line" cast on the tire side walls. It must be equidistant from the wheel rim all the way around. If the distance between the rim line and wheel rim varies, this indicates that the bead is not properly seated. If this is so, deflate the tire completely, and unseat the bead for both sides. Coat the bead with lubricant, and try again.



- After tire is properly seated to the wheel rim, adjust the air-pressure to the recommended pressure. Correct the wheel balance if necessary.

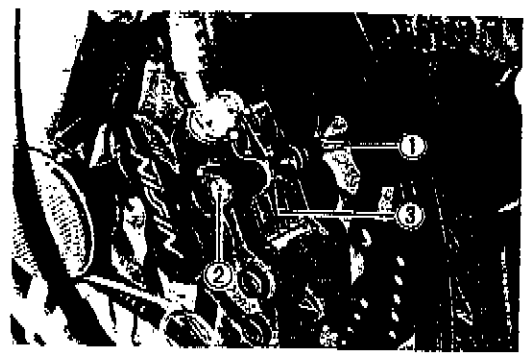
⚠ WARNING

- **Do not run a repaired tire more than 50 km/h (30 mph) within 24 hours after tire repairing, since the patch may not be completely cured.**
- **Do not exceed 130 km/h (80 mph) with a repaired tire.**

TIRE PRESSURE

COLD INFLATION TIRE PRESSURE	SOLO RIDING			DUAL RIDING		
	kPa	kg/cm²	psi	kPa	kg/cm²	psi
FRONT	250	2.50	36	250	2.50	36
REAR	250	2.50	36	290	2.90	42

BRAKE PAD REPLACEMENT



- Remove the brake pads by removing the clip ①, pad mounting pin ② and spring ③.

⚠ CAUTION

- **Do not operate the brake lever while dismounting the pads.**
- **Replace the brake pad as a set, otherwise braking performance will be adversely affected.**

- Remount the new pads.

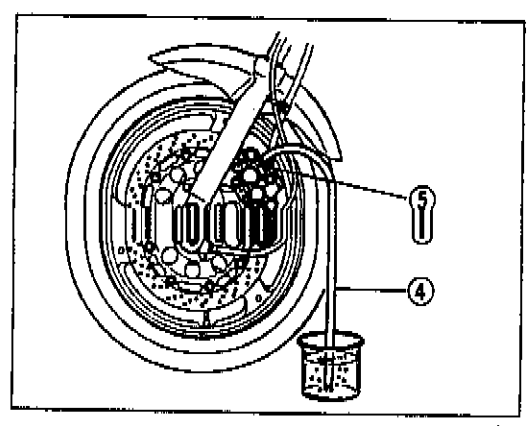
NOTE:
After replacing the brake pads, pump with the brake lever few times to operate the brake correctly and then check the brake fluid level.

BRAKE FLUID REPLACEMENT

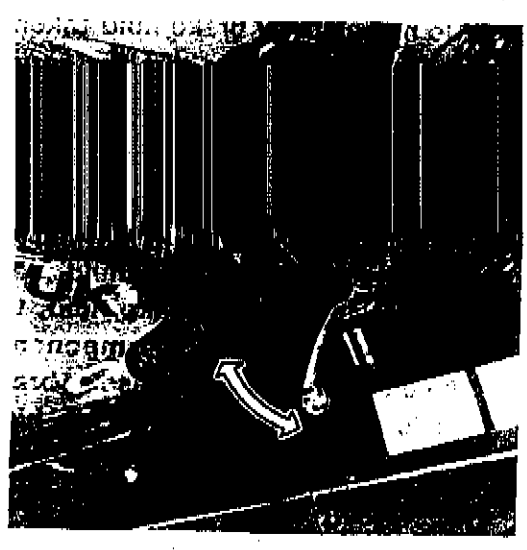


- Place the motorcycle on a level surface and keep the handlebars straight.
- Remove the master cylinder reservoir cap and diaphragm.
- Suck up the old brake fluid as much as possible.
- Fill the reservoir with fresh brake fluid.

Specification and classification: DOT 4

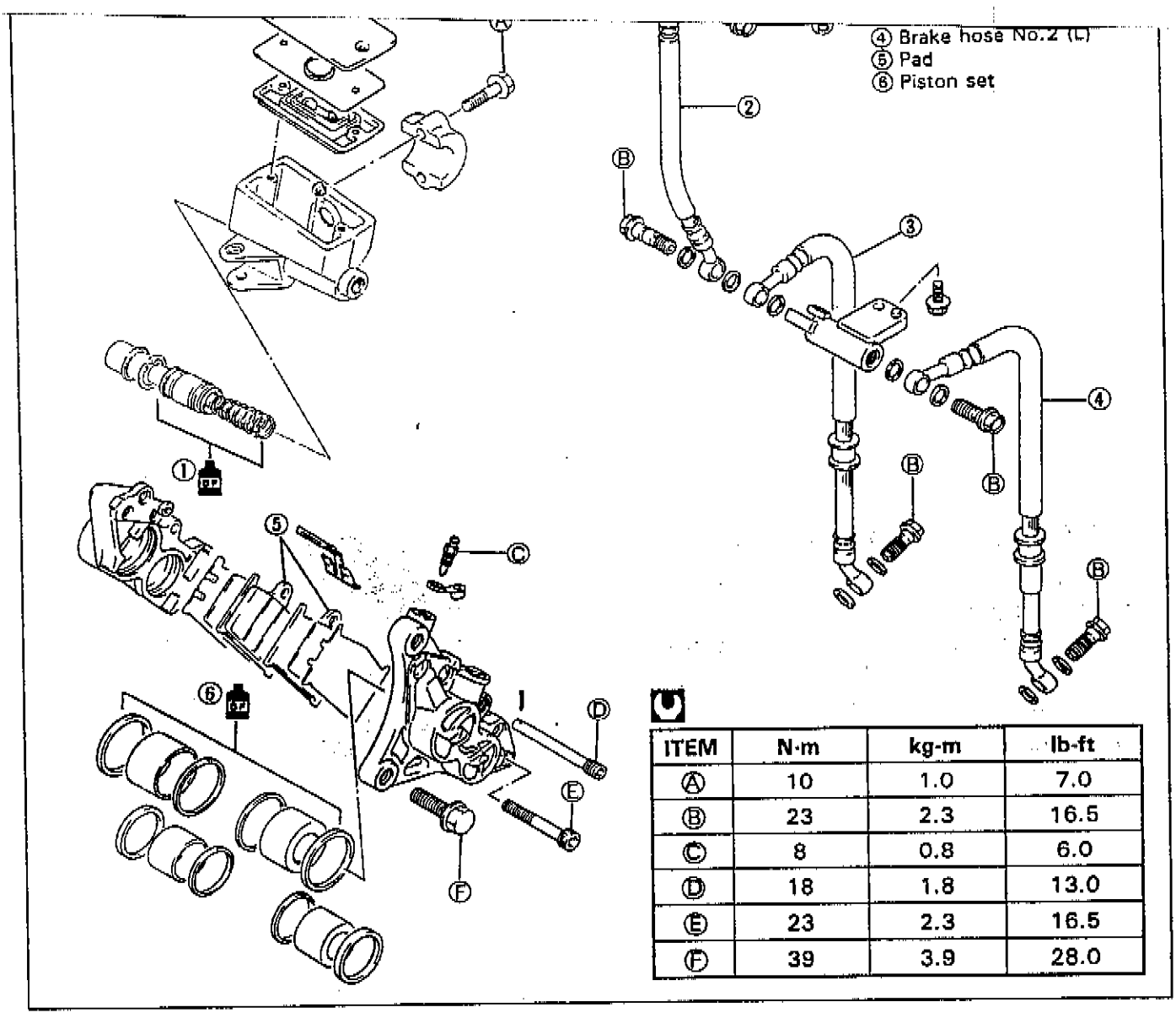


- Connect a clear hose ④ to the air bleeder valve ⑤, and insert the free end of hose into a receptacle.
- Loosen the bleeder valve and pump the brake lever until no more old brake fluid flows out of the bleeder valve.
- Close the air bleeder valve, and disconnect a clear hose.
- Fill the reservoir with fresh brake fluid to the upper end of the inspection window.



⚠ CAUTION

Bleed air in the brake fluid circuit. (Refer to page 2-16.)



ITEM	N·m	kg-m	lb-ft
Ⓐ	10	1.0	7.0
Ⓑ	23	2.3	16.5
Ⓒ	8	0.8	6.0
Ⓓ	18	1.8	13.0
Ⓔ	23	2.3	16.5
Ⓕ	39	3.9	28.0

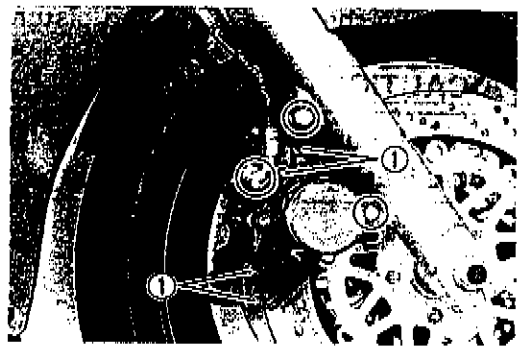
⚠ WARNING

- **This brake system is filled with a ethylene glycol-based DOT4 brake fluid. Do not use or mix different types of fluid such as silicone-based or petroleum-based.**
- **Do not use any brake fluid taken from old, used or unsealed containers. Never reuse brake fluid left over from the last servicing or stored for long periods.**
- **When storing the brake fluid, seal the container completely and keep away from children.**
- **When replenishing brake fluid, take care not to get dust into fluid.**
- **When washing brake components, use fresh brake fluid. Never use cleaning solvent.**
- **A contaminated brake disc or brake pad reduces braking performance. Discard contaminated pads and clean the disc with high quality brake cleaner or neutral detergent.**

⚠ CAUTION

Handle brake fluid with care: the fluid reacts chemically with paint, plastics rubber materials etc.

CALIPER REMOVAL AND DISASSEMBLY



- Disconnect the brake hose from the caliper by removing the union bolt and catch the brake fluid in a suitable receptacle.
- Remove the brake caliper by removing the caliper mounting bolts.

⚠ CAUTION

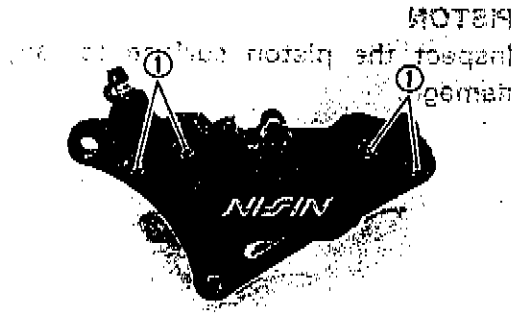
Never reuse the brake fluid left over from previous servicing and stored for long periods.

⚠ WARNING

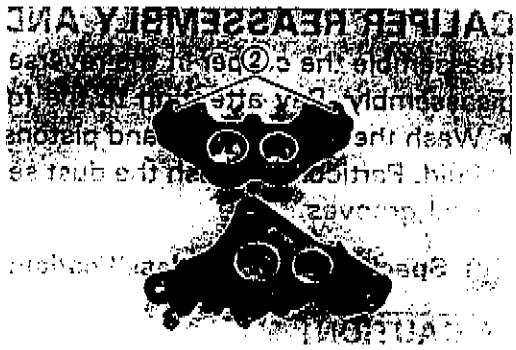
Brake fluid, if it leaks, will interfere with safe running and discolor painted surfaces. Check the brake hose and hose joints for cracks and oil leakage.

NOTE:
Slightly loosen the caliper housing bolts ① to facilitate later disassembly before removing the caliper mounting bolts.

- Remove the pads. (Refer to page 6-17.)
- Remove the caliper housing bolts ①.



- Separate the caliper halves.
- Remove the O-rings ②.



⚠ CAUTION

Do not reuse the O-ring to prevent fluid leakage.

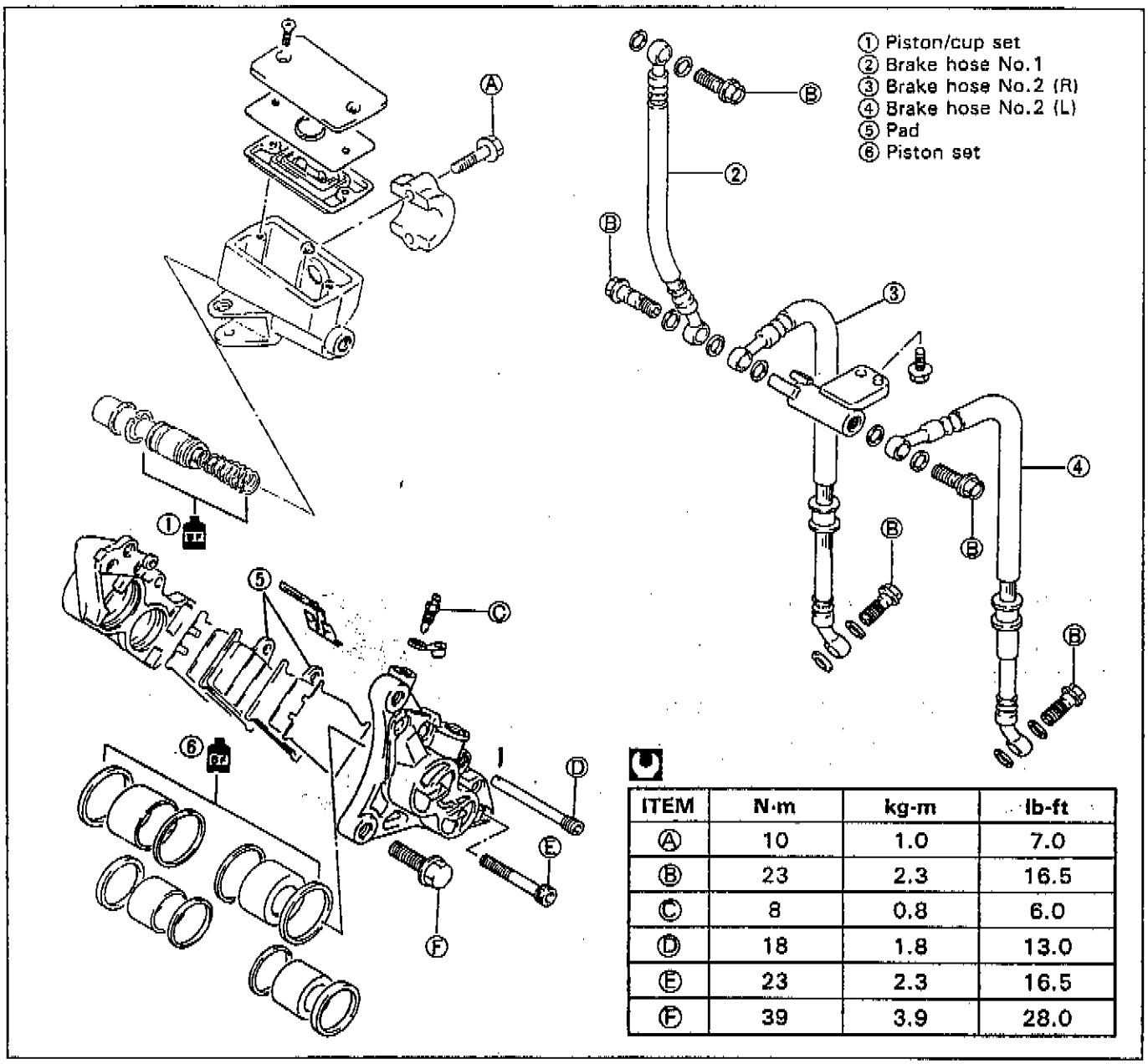
- Place a rag over the piston to prevent its popping out and push out the piston with an air gun.

⚠ CAUTION

Do not use high pressure air to prevent piston damage.



FRONT BRAKE



ITEM	N·m	kg-m	lb-ft
Ⓐ	10	1.0	7.0
Ⓑ	23	2.3	16.5
Ⓒ	8	0.8	6.0
Ⓓ	18	1.8	13.0
Ⓔ	23	2.3	16.5
Ⓕ	39	3.9	28.0

⚠ WARNING

- This brake system is filled with a ethylene glycol-based DOT4 brake fluid. Do not use or mix different types of fluid such as silicone-based or petroleum-based.
- Do not use any brake fluid taken from old, used or unsealed containers. Never reuse brake fluid left over from the last servicing or stored for long periods.
- When storing the brake fluid, seal the container completely and keep away from children.
- When replenishing brake fluid, take care not to get dust into fluid.
- When washing brake components, use fresh brake fluid. Never use cleaning solvent.
- A contaminated brake disc or brake pad reduces braking performance. Discard contaminated pads and clean the disc with high quality brake cleaner or neutral detergent.

⚠ CAUTION

• Remove the dust seals and piston seals.



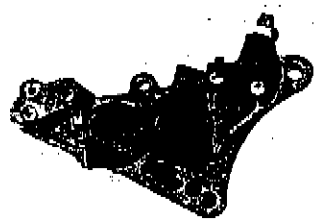
⚠ CAUTION

Do not reuse the dust seals and piston seals to prevent fluid leakage.

CALIPER INSPECTION

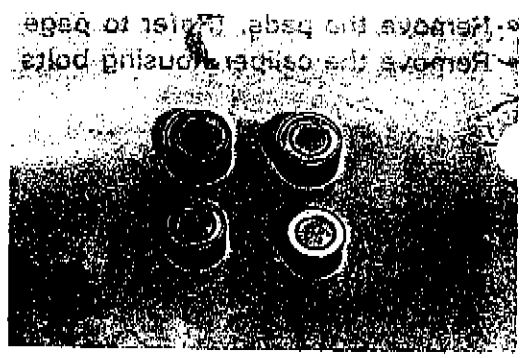
CALIPER

Inspect the caliper cylinder wall for nicks, scratches or other damage.



PISTON

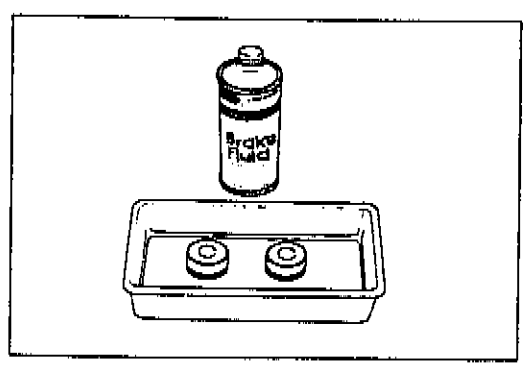
Inspect the piston surface for any scratches or other damage.



CALIPER REASSEMBLY AND REMOUNTING

Reassemble the caliper in the reverse order of removal and disassembly. Pay attention to the following points:

• Wash the caliper bores and pistons with specified brake fluid. Particularly wash the dust seal grooves and piston seal grooves.

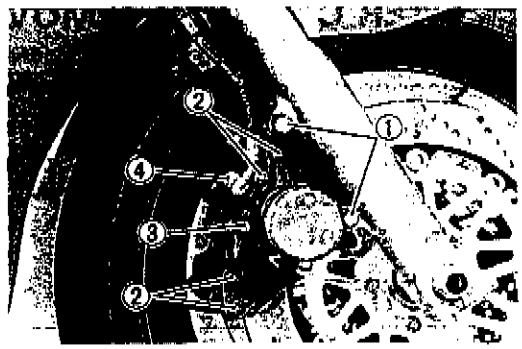


Specification and classification: DOT 4

⚠ CAUTION

- **Wash the caliper components with fresh brake fluid before reassembly.**
- **Do not wipe the brake fluid off after washing the components.**
- **When washing the components, use the specified brake fluid. Never use different types of fluid or cleaning solvent such as gasoline, kerosine or the others.**
- **Replace the piston seals and dust seals with new ones when reassembly. Apply the brake fluid to both seals when installing them.**

- Tighten each bolt to the specified torque.



Caliper mounting bolt ①: 39 N·m (3.9 kg-m, 28.0 lb-ft)
Caliper housing bolt ②: 23 N·m (2.3 kg-m, 16.5 lb-ft)
Pads mounting pin ③: 18 N·m (1.8 kg-m, 13.0 lb-ft)
Brake hose union bolt ④: 23 N·m (2.3 kg-m, 16.5 lb-ft)

NOTE:
Before remounting the caliper, push the piston all the way into the caliper.

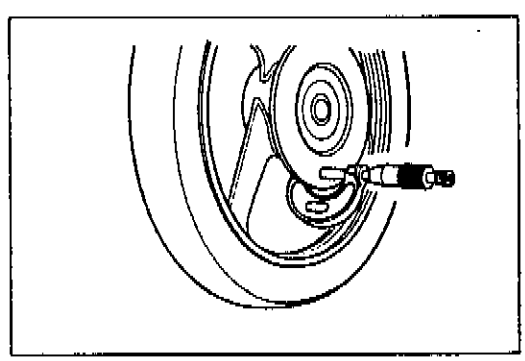
⚠ CAUTION

Bleed air from the system after reassembling the caliper. (Refer to page 2-16.)

BRAKE DISC INSPECTION

- Remove the front and rear wheels. (Refer to pages 6-6 and 6-37.)
- Remove the disc. (Refer to pages 6-7 and 6-38.)
- Install the disc. (Refer to pages 6-8 and 6-40.)

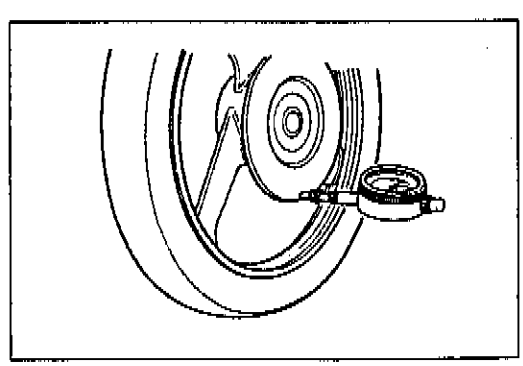
Visually check the brake disc for damage or cracks.
Measure the thickness with a micrometer.
Replace the disc if the thickness is less than the service limit or if damage is found.



Service Limit
Front disc: 4.0 mm (0.16 in)
Rear disc : 4.5 mm (0.18 in)

TOOL 09900-20205: Micrometer (0—25 mm)

Measure the runout with a dial gauge.
Replace the disc if the runout exceeds the service limit.

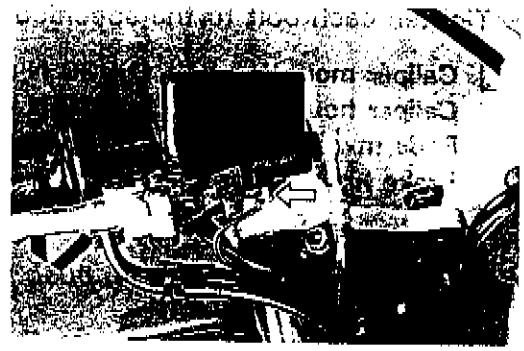


Service Limit
Front and Rear disc: 0.3 mm (0.012 in)

TOOL 09900-20606: Dial gauge (1/100 mm)
09900-20701: Magnetic stand

MASTER CYLINDER REMOVAL AND DISASSEMBLY

- Disconnect the front brake light switch lead wires.
- Place a rag underneath the union bolt on the master cylinder to catch any spilled drops of brake fluid. Remove the union bolt and disconnect the brake hose/master cylinder joint.

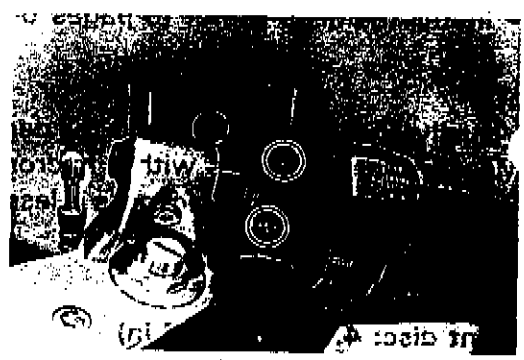


⚠ CAUTION

Immediately and completely wipe off any brake fluid contacting any part of the motorcycle. The fluid reacts chemically with paint, plastics and rubber materials, etc. and will damage them severely.



- Remove the master cylinder assembly.

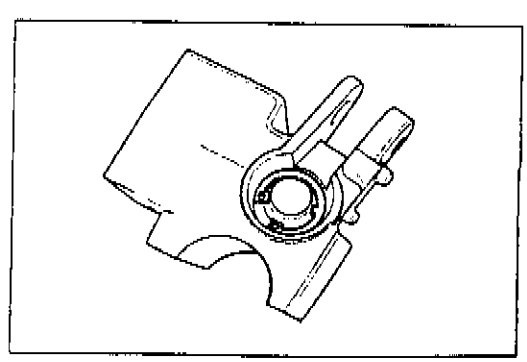


- Remove the brake lever and brake light switch.
- Remove the reservoir cap and diaphragm.
- Drain brake fluid.

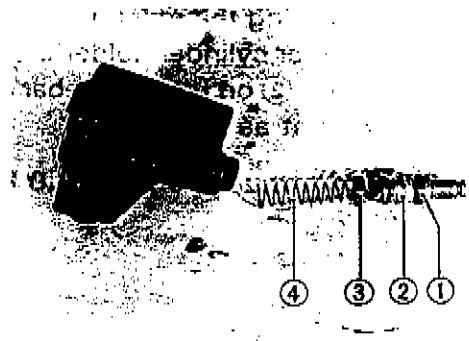


- Pull the boot out and remove the circlip.

TOOL **09900-06108: Snap ring pliers**



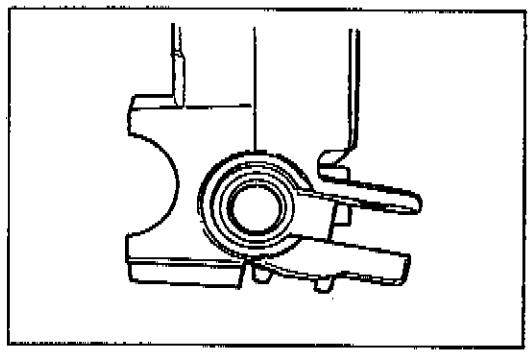
- Remove the piston/secondary cup, primary cup and spring.

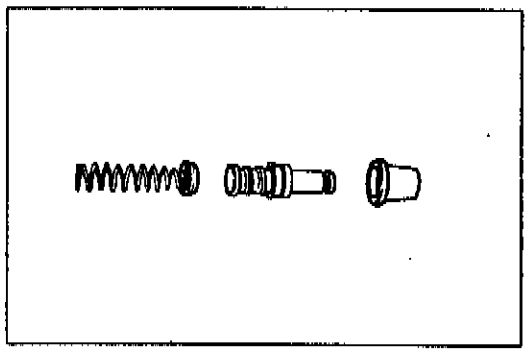


① Secondary cup
② Piston
③ Primary cup
④ Return spring

MASTER CYLINDER INSPECTION

Inspect the master cylinder bore for any scratches or other damage.
Inspect the piston surface for any scratches or other damage.
Inspect the primary cup, secondary cup and dust seal for wear or damage.



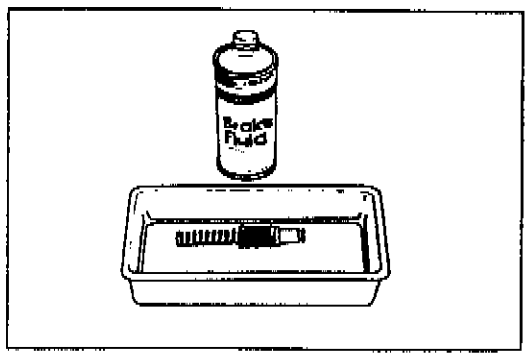


MASTER CYLINDER REASSEMBLY AND REMOUNTING

Reassemble the master cylinder in the reverse order of removal and disassembly. Pay attention to the following points:

⚠ CAUTION

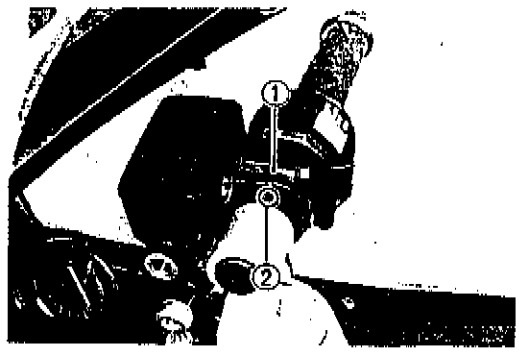
- **Wash the master cylinder components with fresh brake fluid before reassembly. Never use cleaning solvent or gasoline to wash them.**
- **Do not wipe the components with a rag.**
- **Apply brake fluid to the cylinder bore and all the component to be inserted into the bore.**



Specification and classification: DOT 4

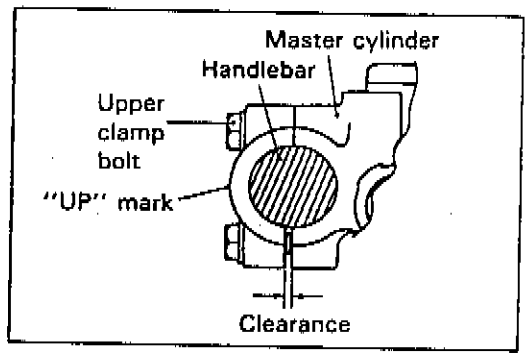
- When remounting the master cylinder on the handlebar, align the master cylinder holder's mating surface ① with punched mark ② on the handlebar and tighten the upper clamp bolt first as shown.

Tightening torque: 10 N·m (1.0 kg-m, 7.0 lb-ft)

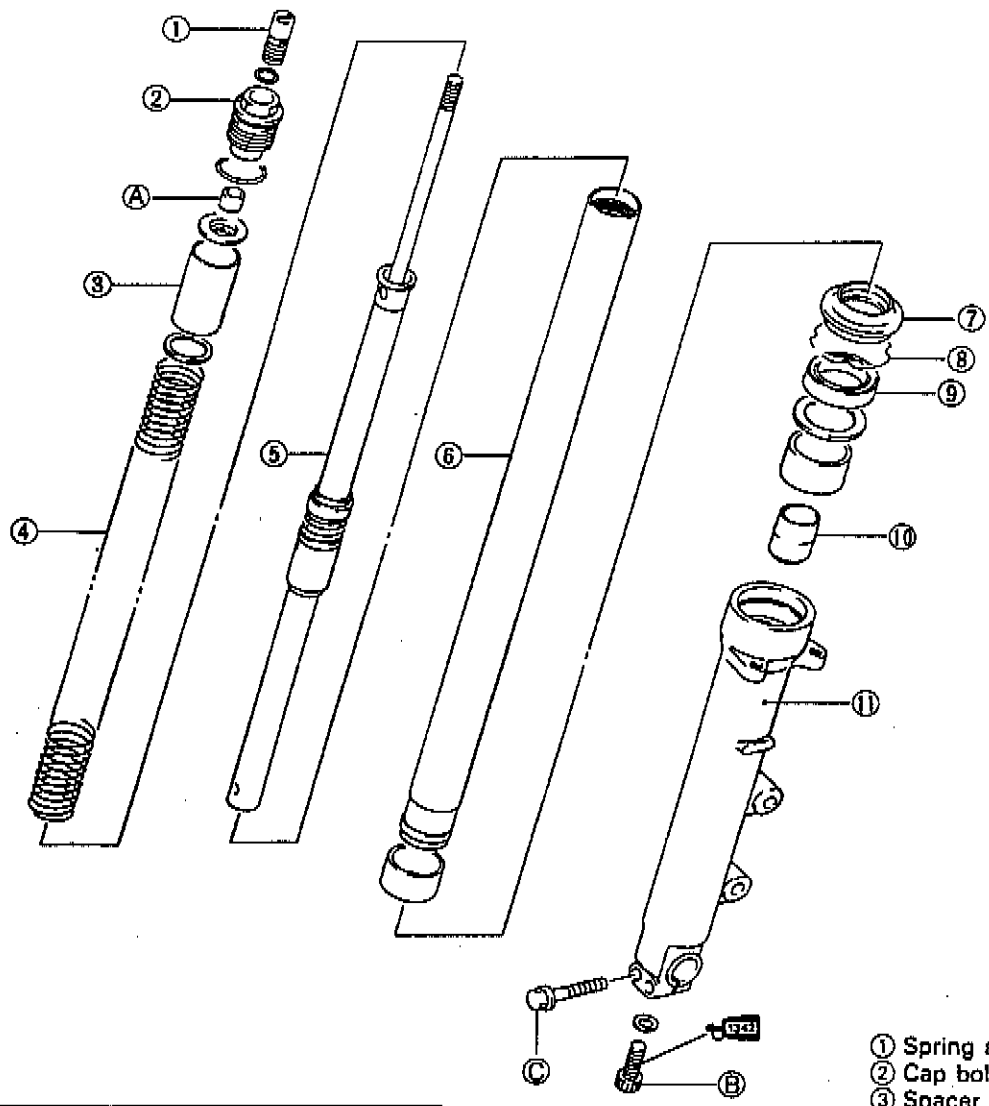


⚠ CAUTION

Bleed air from the system after reassembling master cylinder. (Refer to page 2-16.)



FRONT FORK

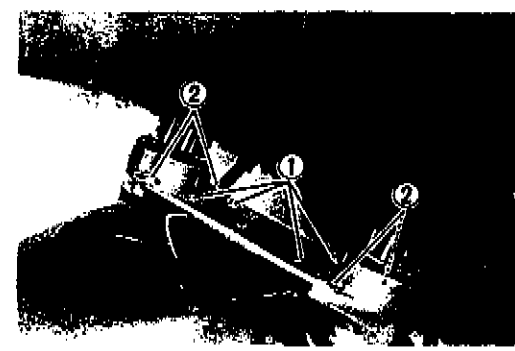


ITEM	N·m	kg-m	lb-ft
②	23	2.3	16.5
Ⓐ	20	2.0	14.5
Ⓑ	23	2.3	16.5
Ⓒ	23	2.3	16.5

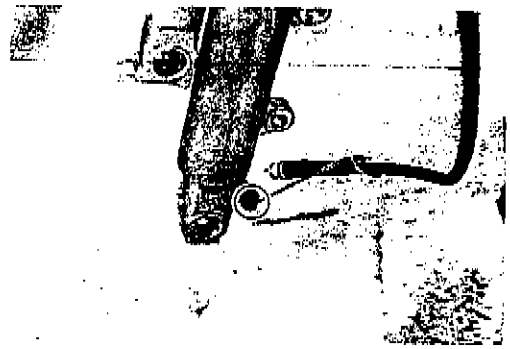
① Spring adjuster
② Cap bolt
③ Spacer
④ Spring
⑤ Damper
⑥ Inner tube
⑦ Dust seal
⑧ Stopper ring
⑨ Oil seal
⑩ Oil lock piece
⑪ Outer tube

REMOVAL AND DISASSEMBLY

- Remove the lower cowling. (Refer to page 6-2.)
- Remove the front wheel. (Refer to page 6-6.)
- Remove the front fender by removing the four screws ①.
- Remove the front fender brace by removing the four screws ②.

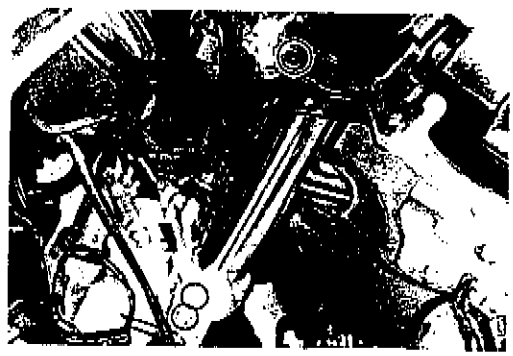


- Remove the speedometer cable guide.

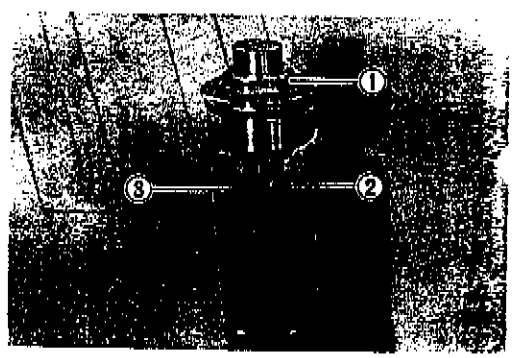


- Remove the front fork after loosening the front fork upper and lower clamp bolts.

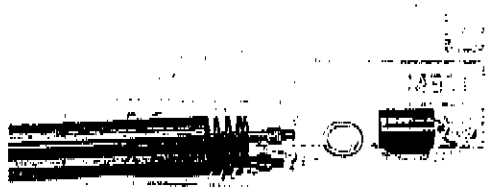
NOTE:
Slightly loosen the front fork cap bolt to facilitate later disassembly.



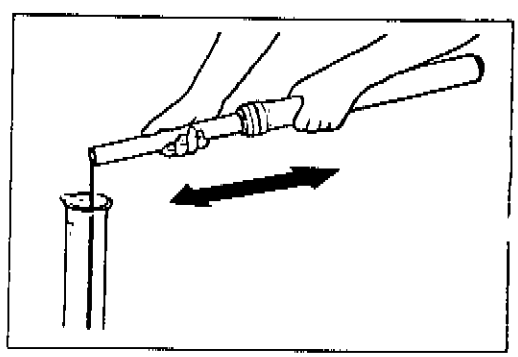
- Remove the front fork cap bolt ① by loosening the inner rod lock nut ②.
- Remove the spacer seat ③.



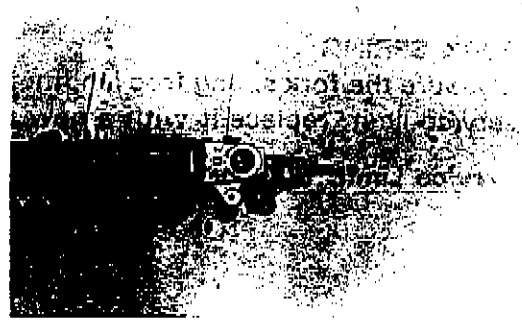
- Remove the spacer, washer and spring.



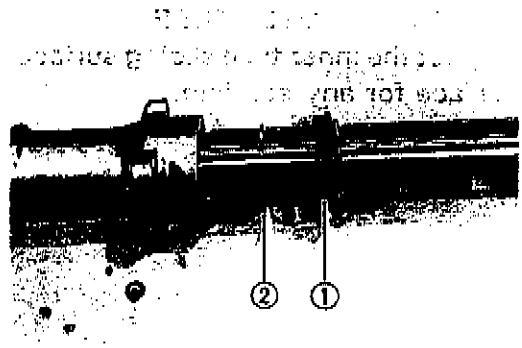
- Invert the fork and stroke it several times to drain out fork oil.
- Hold the fork inverted for a few-minutes to drain oil.



- Remove the damper rod bolt with a 6-mm hexagon wrench.
- Remove the inner rod cylinder.



- Remove the dust seal ① and stopper ring ②.

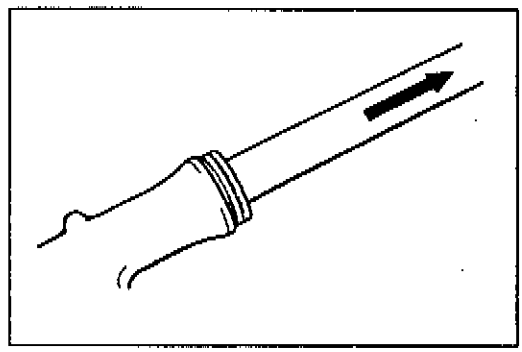


- Remove the oil seal by slowly pulling out the inner tube.

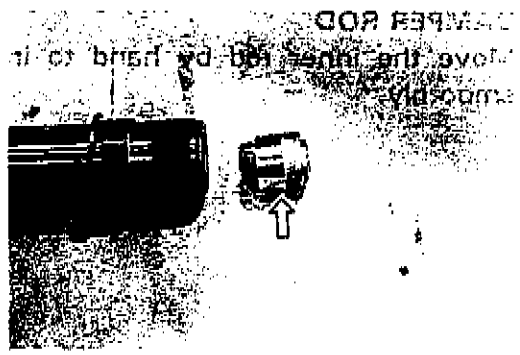
NOTE:
Be careful not to damage the inside of the tube.

⚠ CAUTION

The outer tube and inner tube "ANTI-FRICTION" metals must be replaced along with oil seal and dust seal, when assembling the front fork.



- Remove the oil lock piece.

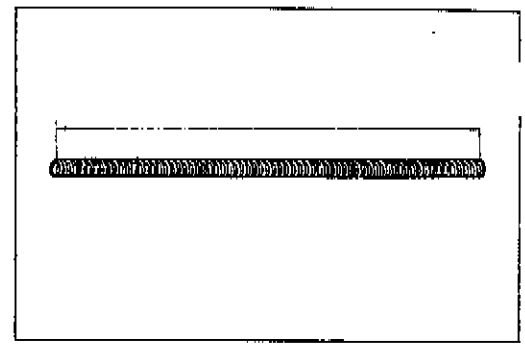


INSPECTION

FORK SPRING

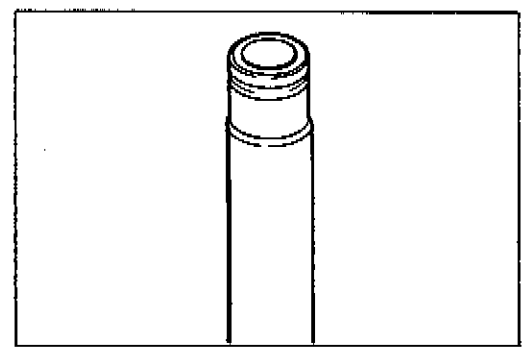
Measure the fork spring free length. If it is shorter than the service limit, replace it with a new one.

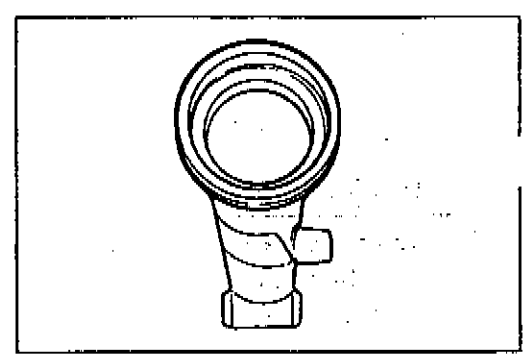
Service Limit: 303 mm (11.9 in)



INNER AND OUTER TUBE

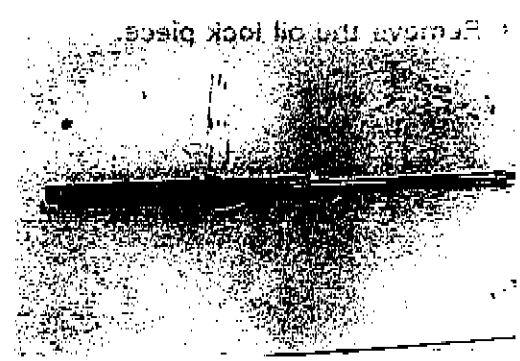
Inspect the inner tube sliding surface and outer tube sliding surface for any scuffing.





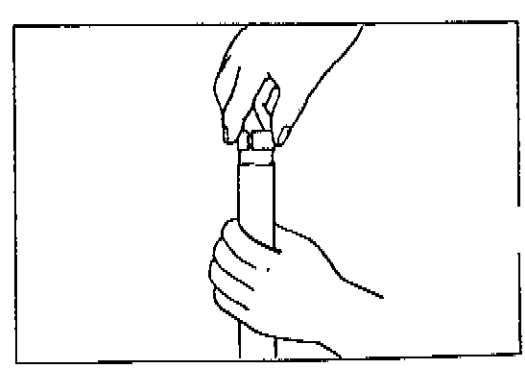
DAMPER ROD

Move the inner rod by hand to inspect it if operating smoothly.



REASSEMBLY AND REMOUNTING

Reassemble and remount the front fork in the reverse order of removal and disassembly. Pay attention to the following points:



TUBE METALS AND SEALS

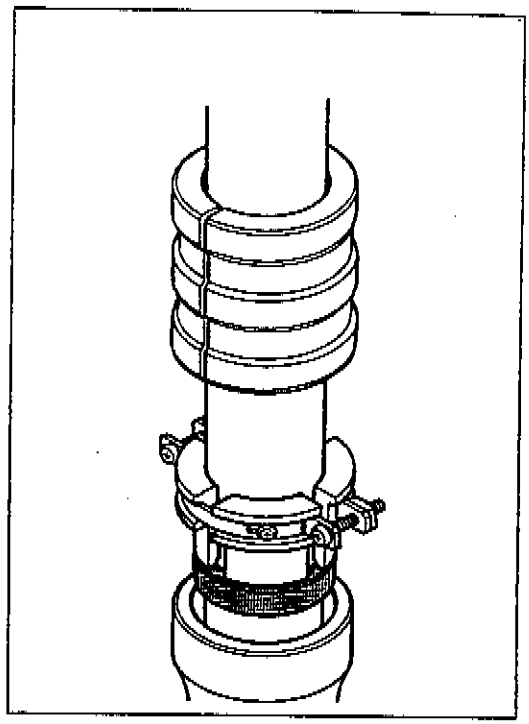
- Hold the inner tube vertically and clean the metal groove and install the ANTI-FRICTION metal by hand as shown.

- Install the outer tube metal ① , washer ② and oil seal ③ with the special tool.

09940-52860: Front fork oil seal installer

⚠ CAUTION

Use special care to prevent damage to the "Teflon" coated surface of the Anti-friction inner tube metal when mounting it.

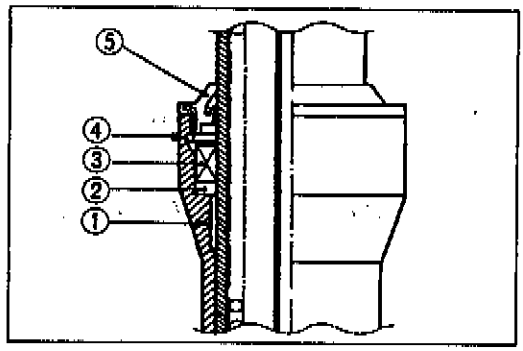


- Install the oil seal stopper ring ④ .

⚠ CAUTION

Make sure that the oil seal stopper ring fitted securely.

- Install the dust seal ⑤.

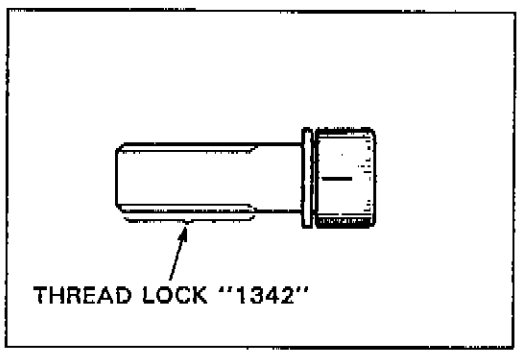


DAMPER ROD BOLT

Apply THREAD LOCK "1342" to the damper rod bolt and tighten it to the specified torque with a 6-mm hexagon wrench and special tools.

99000-32050: THREAD LOCK "1342"

Damper rod bolt: 23 N·m (2.3 kg-m, 16.5 lb-ft)



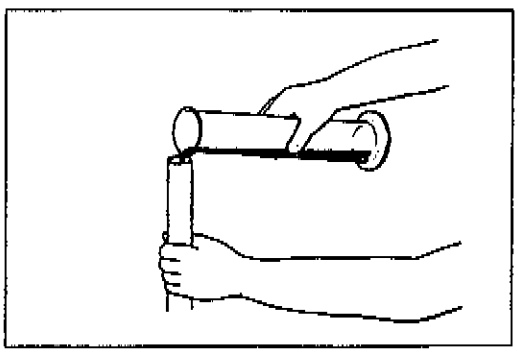
FORK OIL

- Pour specified fork oil into the inner tube.

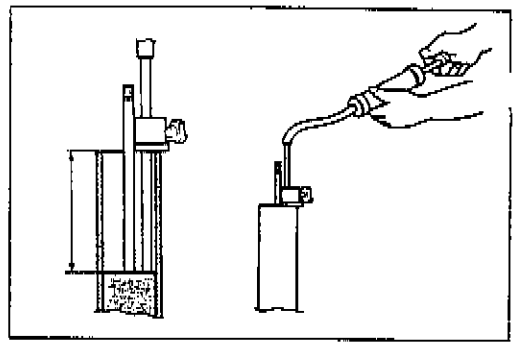
Fork oil type: Fork oil #10

99000-99044-10G: SUZUKI FORK OIL #10

Capacity (each leg): 459 ml (15.5/16.2 US/Imp oz)



- Hold the front fork vertical and adjust the fork oil level with the special tool.



TOOL 09943-74111: Fork oil level gauge

Oil level: 105 mm (4.1 in)

NOTE:
When adjusting the oil level, remove the fork spring and compress the inner tube fully.

FORK SPRING

- Install the fork spring as shown in the photograph.

NOTE:
Close-pitch end of spring should position upper.

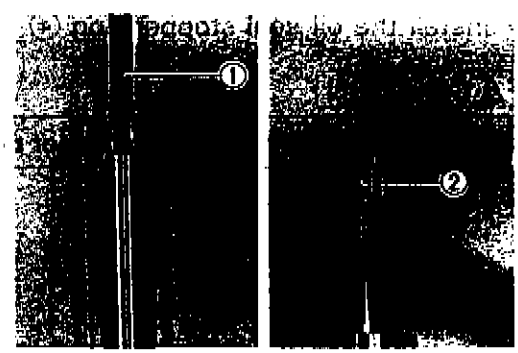


INNER ROD AND LOCK NUT

- Install the special tool ① and pull up the inner rod.

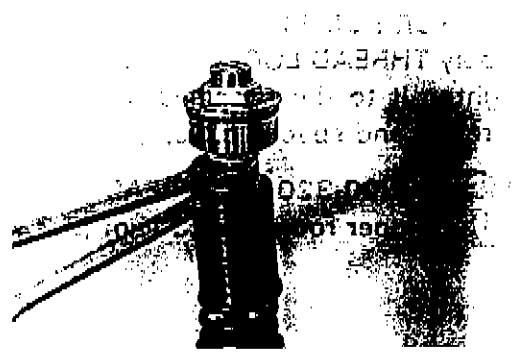
TOOL 09940-52840: Front fork inner rod holder

NOTE:
Before installing the front fork cap, turn the inner rod lock nut ② to the lower position as shown in the photograph.



- Tighten the front fork cap with finger, and tighten the lock nut to the specified torque.

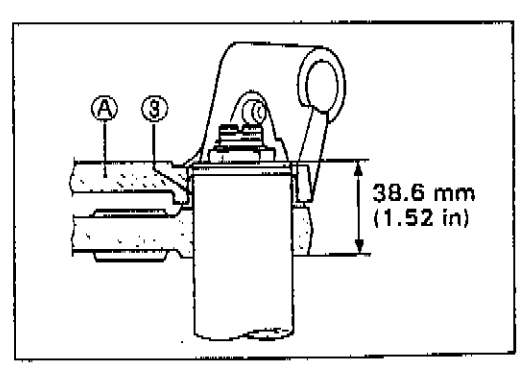
Lock nut: 20 N·m (2.0 kg-m, 14.5 lb-ft)



- When installing the front fork assembly, set the upper surface of fork cap at 38.6 mm from the bottom surface of the steering stem upper bracket as shown in the illustration.

⚠ CAUTION

Be sure to install the cushion ③ properly as shown in the illustration.



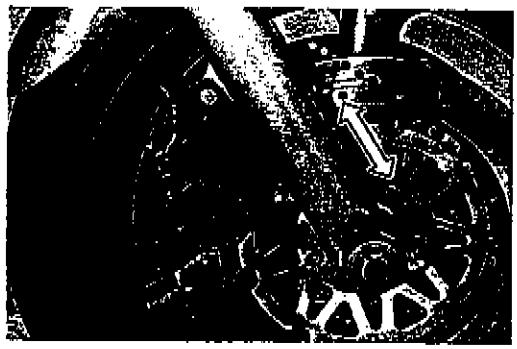
NOTE:
If not obtain the specified height, remove the handlebar holder Ⓐ and set the front fork assembly to the specified height.

• Tighten the bolts to the specified torque.

Item	N·m	kg-m	lb-ft
① Fork lower clamp bolt	23	2.3	16.5
② Fork cap	23	2.3	16.5
③ Fork upper clamp bolt	23	2.3	16.5

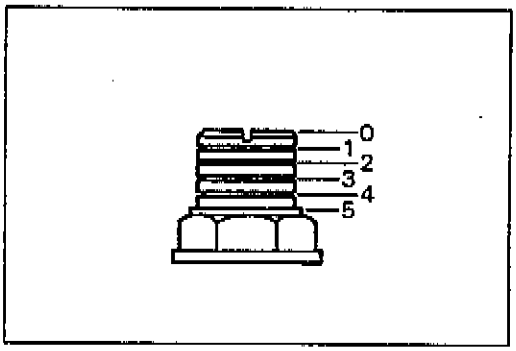


NOTE:
Before tightening the fender brace mounting screws, move the front fork up and down 4 or 5 times.



SUSPENSION SETTING

After installing the front fork, adjust the spring pre-load as follows.



SPRING PRE-LOAD ADJUSTMENT

There are four grooved lines on the side of the spring adjuster. Position 0 provides the maximum spring pre-load and position 5 provides the minimum spring pre-load.

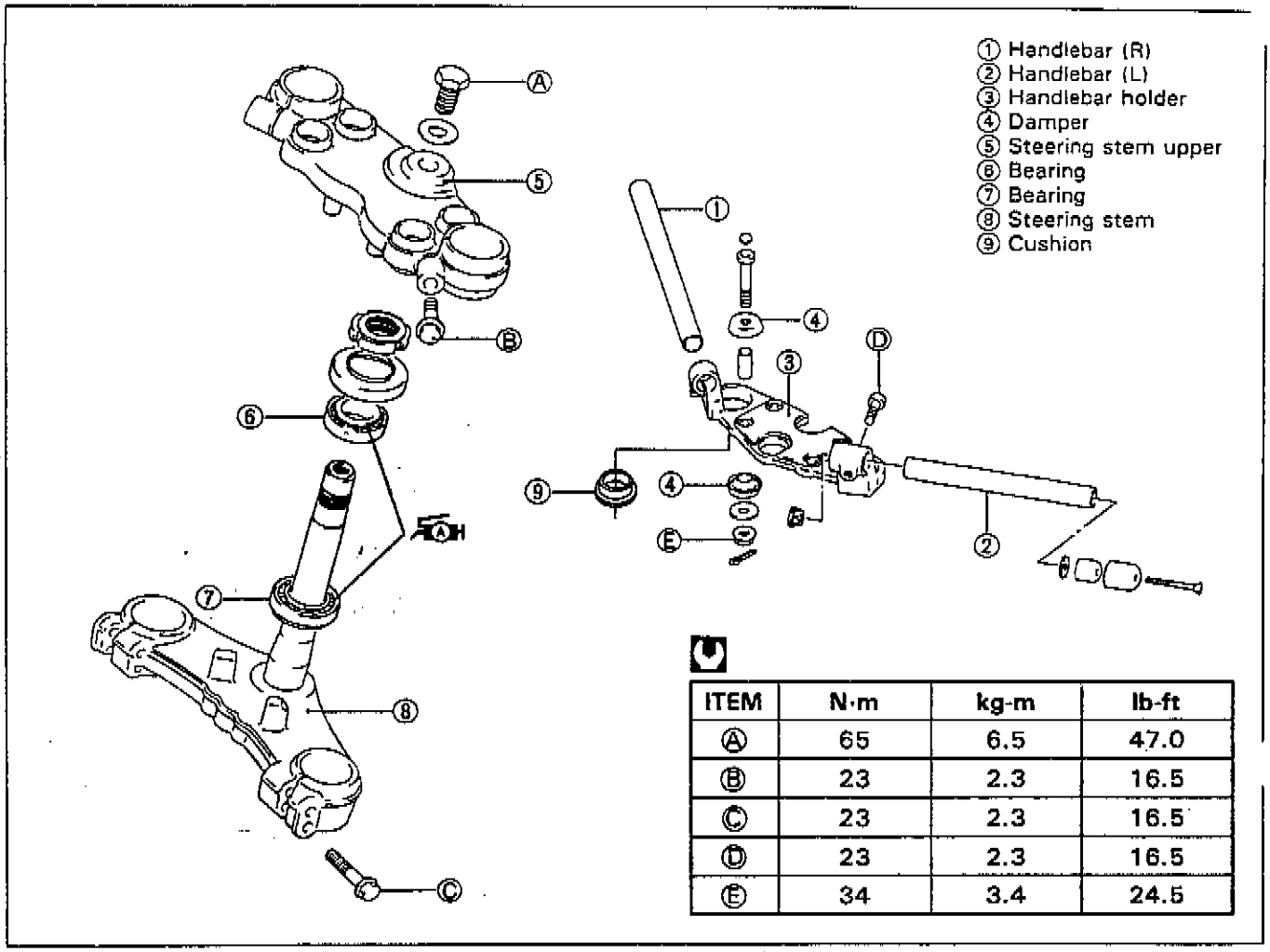
FRONT SUSPENSION SETTING (STD)

Item	Spring pre-road
Solo riding	3
Dual riding	3

⚠ WARNING

Be sure to adjust the spring pre-load on both front fork legs equally.

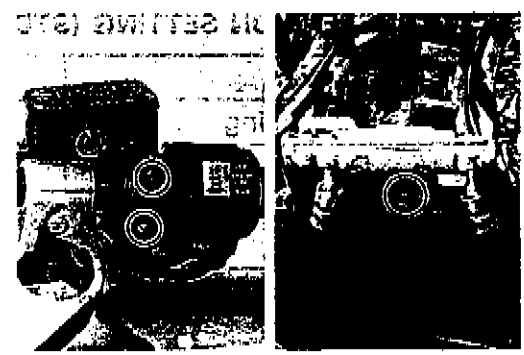
STEERING



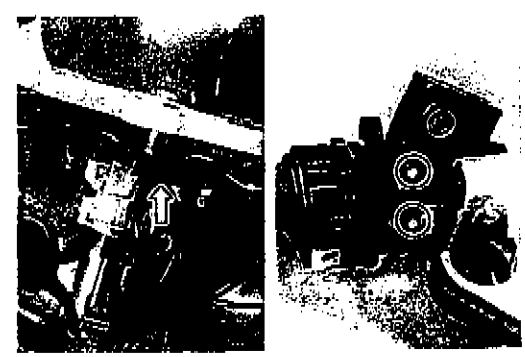
ITEM	N·m	kg-m	lb-ft
Ⓐ	65	6.5	47.0
Ⓑ	23	2.3	16.5
Ⓒ	23	2.3	16.5
Ⓓ	23	2.3	16.5
Ⓔ	34	3.4	24.5

REMOVAL AND DISASSEMBLY

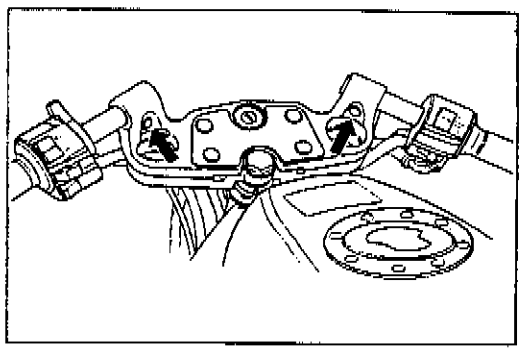
- Remove the cowling and cowling brace. (Refer to page 6-2.)
- Remove the front wheel. (Refer to page 6-6.)
- Remove the front fork. (Refer to page 6-24.)
- Remove the front brake master cylinder along with the brake hose joint and brake calipers.



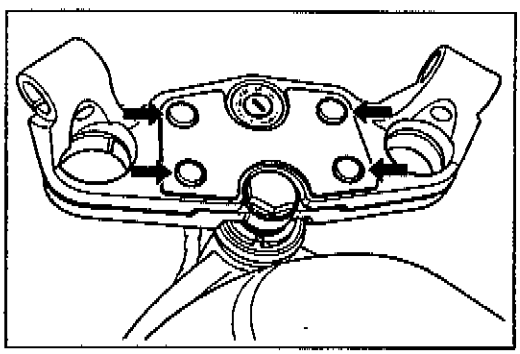
- Remove the handlebar switch lead wire's clamp.
- Remove the clutch master cylinder mounting bolts.



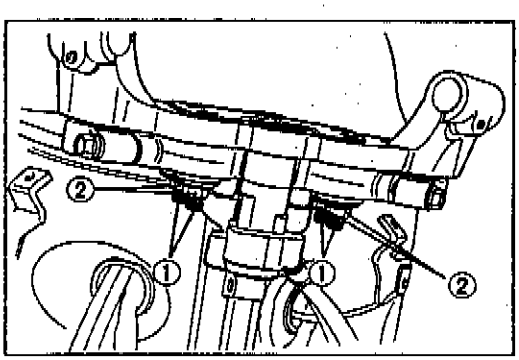
- Remove the handlebars by removing the mounting bolts.



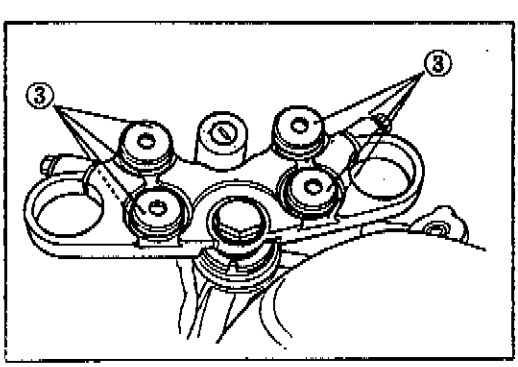
- Remove the handlebar holder mounting bolt caps.



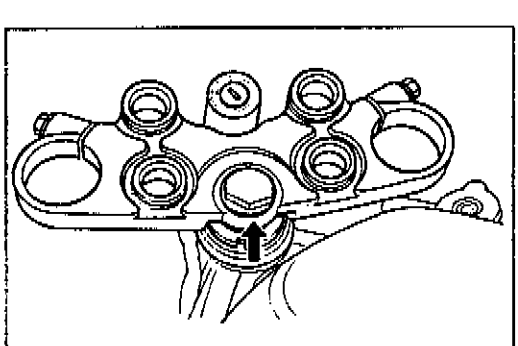
- Remove the handlebar holder by removing the clips ① and nuts ② .
- Remove the cushions.



- Remove the cushion damper rubbers ③ .



- Disconnect the ignition switch lead wire coupler.
- Remove the steering stem upper bracket by removing the bolt.



- Remove the steering stem nut with the special tool.

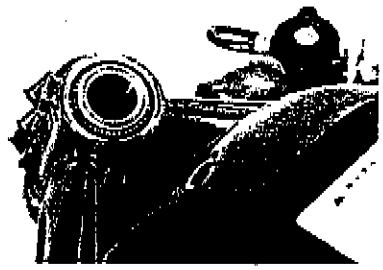
TOOL **09940-14911: Steering stem nut wrench**

- Draw out the steering stem lower bracket.

NOTE:
Hold the steering stem lower bracket by hand to prevent it from falling.



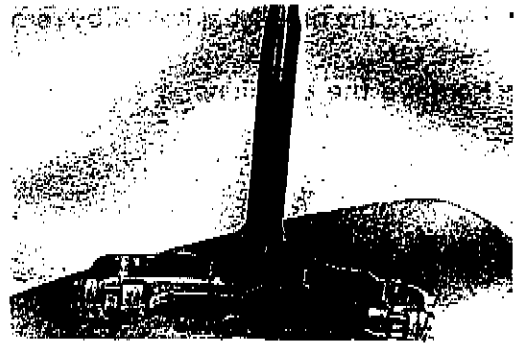
- Remove the steering stem upper bearing.



INSPECTION AND DISASSEMBLY

Inspect the removed parts for the following abnormalities.

* Handlebar distortion
* Race wear and brinelling
* Bearing wear or damage
* Abnormal noise of bearing
* Distortion of steering stem

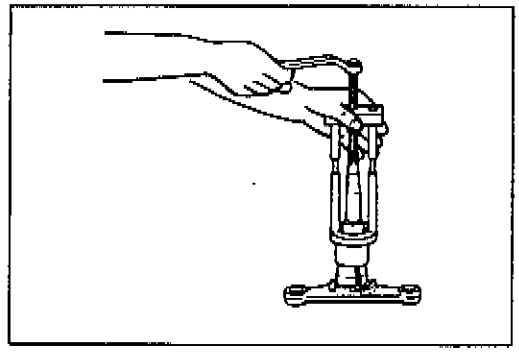


- Remove the steering stem lower bearing with the special tool.

TOOL **09941-84510: Bearing remover**

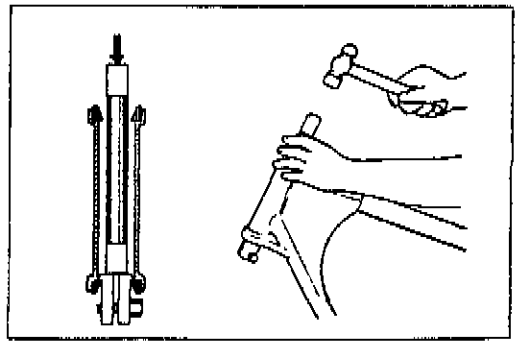
⚠ CAUTION

The removed bearing should be replaced with a new one.



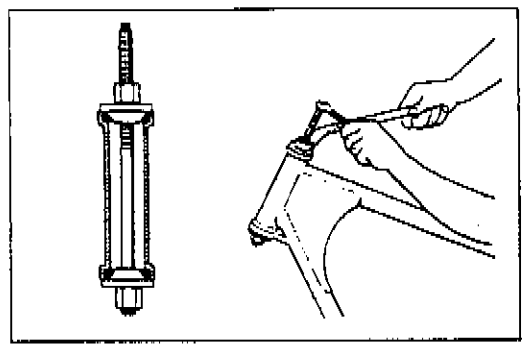
- Drive out the steering stem bearing races, upper and lower with the special tools.

TOOL **09941-54911: Bearing outer race remover**
09941-74910: Steering bearing installer



REASSEMBLY AND REMOUNTING

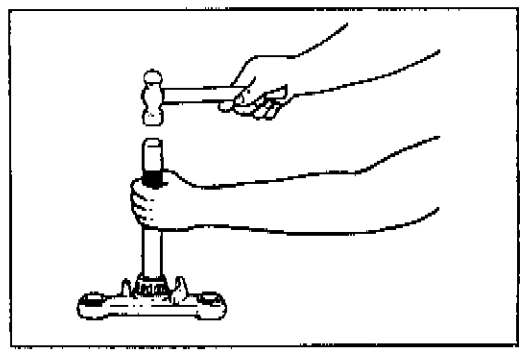
Reassemble and remount the steering stem in the reverse order of removal and disassembly. Pay attention to the following points:



OUTER RACES

- Press in the upper and lower outer races with the special tool.

09941-34513: Steering outer race installer



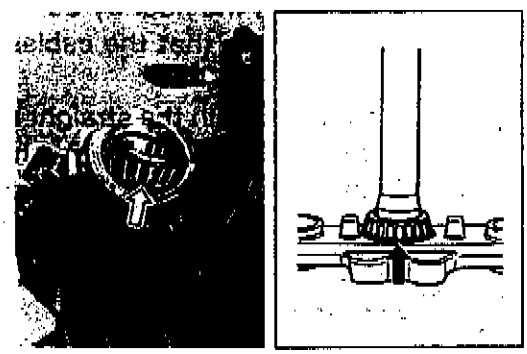
BEARING

- Press in the lower bearing with the special tool.

09941-74910: Steering bearing installer

- Apply grease to the upper and lower bearings before remounting the steering stem.

99000-25010: SUZUKI SUPER GREASE "A"

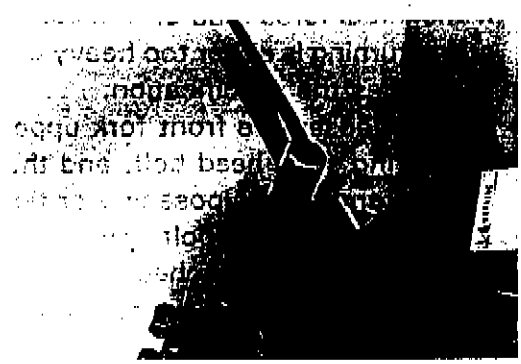


STEM NUT

- Tighten the steering stem nut to the specified torque.

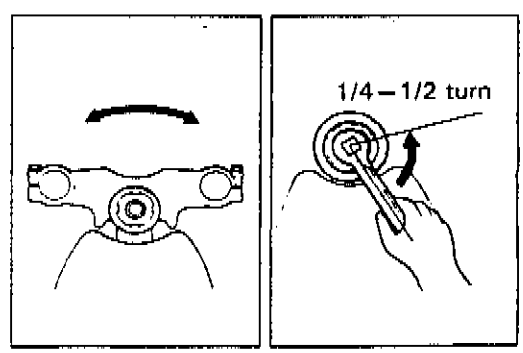
09940-14911: Steering stem nut wrench

Stem nut: 45 N·m (4.5 kg-m, 32.5 lb-ft)



- Turn the steering stem lower bracket about five or six times to the left and right so that the taper roller bearing will be seated properly.
- Turn back the stem nut by 1/4—1/2 turn.

NOTE:
This adjustment will vary from motorcycle to motorcycle.



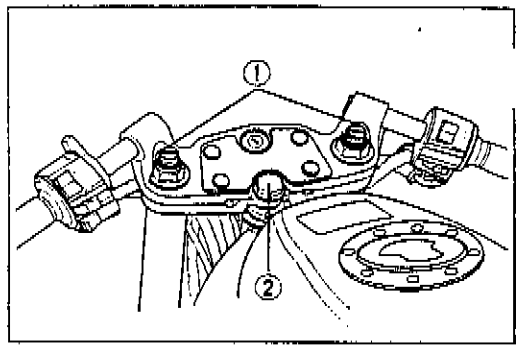
- Install the front fork. (Refer to page 6-29.)
- Tighten the handlebar set bolts ①, steering stem head bolt ② , handlebar holder mounting nuts ③ and front fork upper and lower clamp bolts ④ to the specified torque.

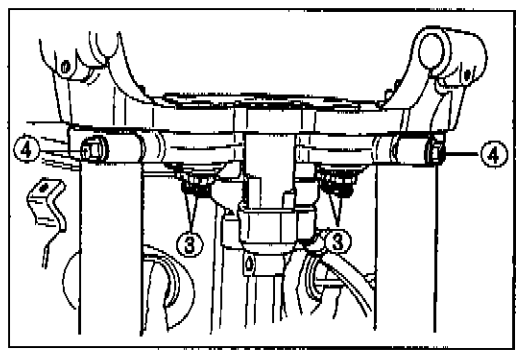
Handlebar set bolt ①: 23 N·m (2.3 kg-m, 16.5 lb-ft)

Steering stem head bolt
②: 65 N·m (6.5 kg-m, 47.0 lb-ft)

Handlebar holder mounting nut
③: 34 N·m (3.4 kg-m, 24.5 lb-ft)

Front fork upper and lower clamp bolt
④: 23 N·m (2.3 kg-m, 16.5 lb-ft)





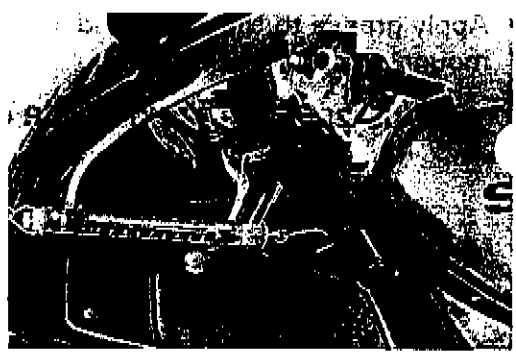
STEERING TENSION ADJUSTMENT

Check the steering movement in the following procedure.

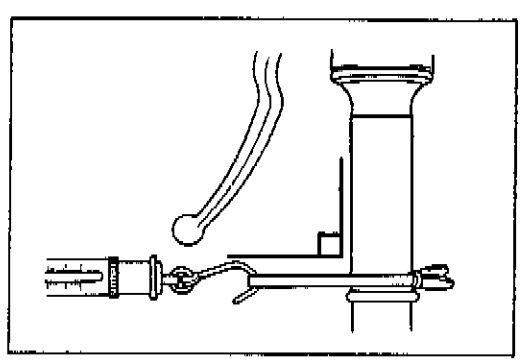
- By supporting the motorcycle with a jack, lift the front wheel until it is off the floor by 20—30 mm (0.8—1.2 in).
- Check to make sure that the cables and wire harnesses are properly routed.
- With the front wheel in the straight ahead state, hitch the spring scale (special tool) on one handlebar grip end as shown in the figure and read the graduation when the handlebar starts moving. Do the same on the other grip end.

Initial force: 200—500 grams

09940-92710: Spring scale



- If the initial force read on the scale when the handlebar starts turning is either too heavy or too light, adjust it till it satisfies the specification.
  1) First, loosen the front fork upper clamp bolts and steering stem head bolt, and then adjust the steering stem nut by loosening or tightening it.
  2) Tighten the head bolt and clamp bolts to the specified torque and re-check the initial force with the spring scale according to the previously described procedure.
  3) If the initial force is found within the specified range, adjustment has been completed.

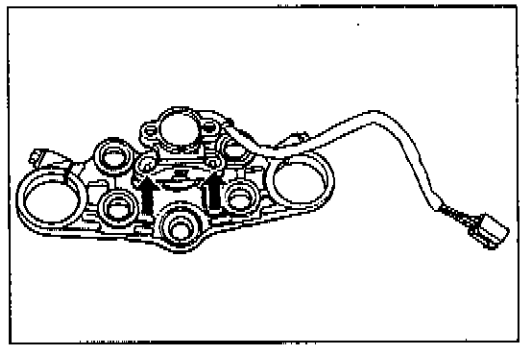


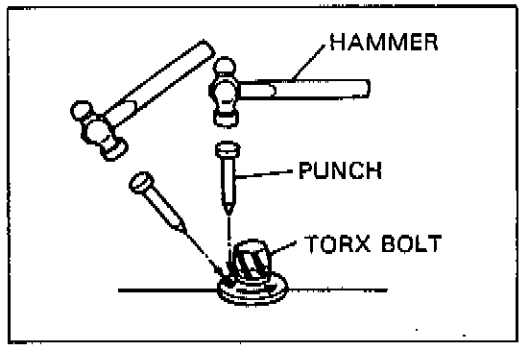
NOTE:
Hold the front fork legs, move them back and forth and make sure that the steering is not loose.



IGNITION SWITCH REMOVAL AND REMOUNTING

- To remove the ignition switch, remove the bolt to detach the ignition switch from the steering stem upper bracket by using a center punch and hammer.





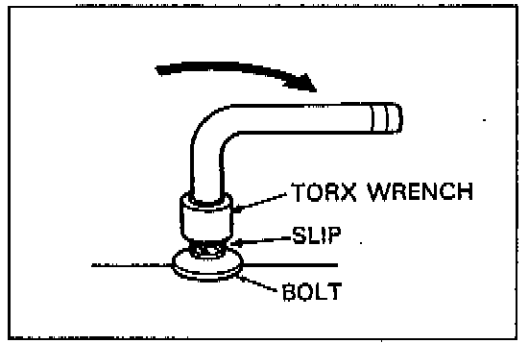
- To install the ignition switch, always use the new special bolt and follow the procedures below:

NOTE:
The spare ignition switch comes equipped with the special bolts, however, the bolt is also individually available as a spare part.

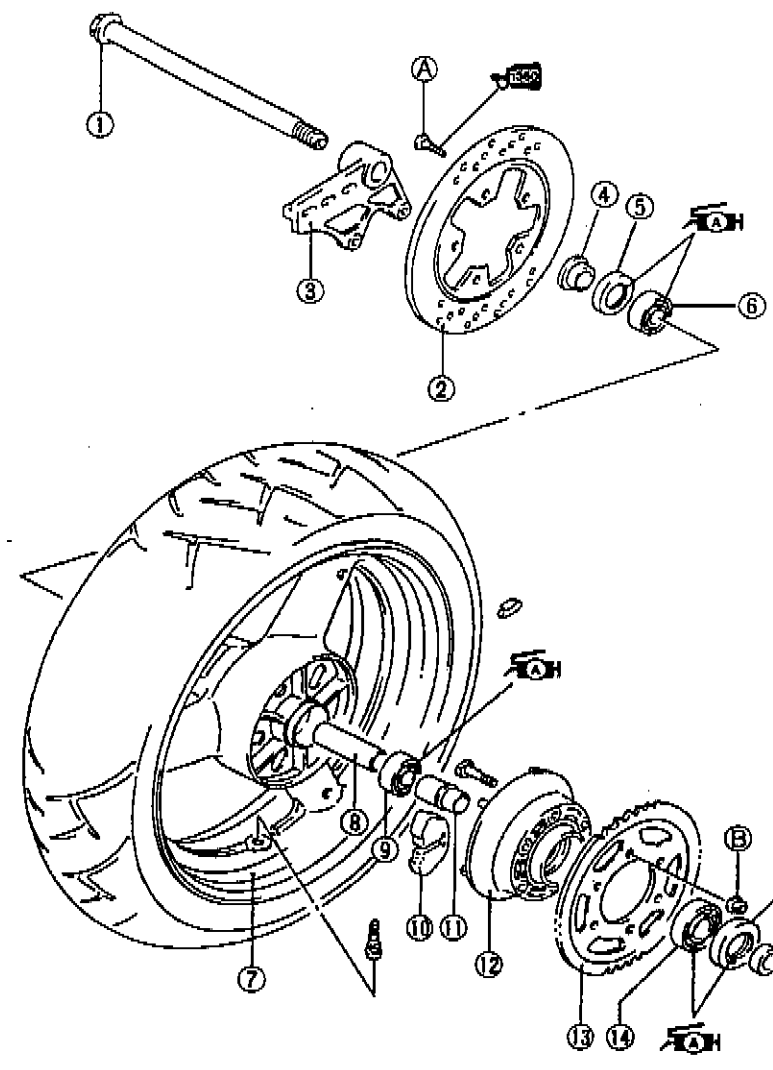
- Using the special bolts, attach the ignition switch on the steering stem upper bracket in place and run in the bolts with the special tool.

TOOL 09930-11910: Torx wrench

- Continue turning the tool until the tool slips from the bolt head or the bolt head breaks off, then the bolt has become tightened to the proper specification.



REAR WHEEL

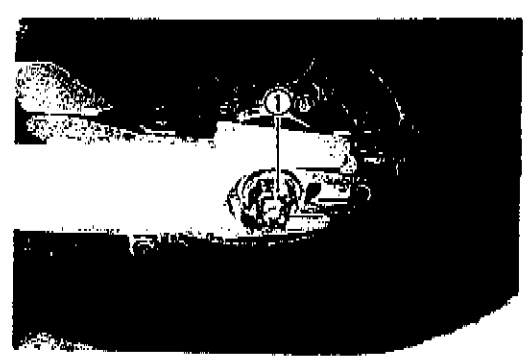


① Rear axle
② Disc
③ Caliper bracket
④ Spacer
⑤ Dust seal (R)
⑥ Bearing (R)
⑦ Rear wheel
⑧ Spacer
⑨ Bearing (L)
⑩ Cushion
⑪ Retainer
⑫ Sprocket drum
⑬ Sprocket
⑭ Bearing
⑮ Dust seal
⑯ Spacer

ITEM	N·m	kg-m	lb-ft
Ⓐ	23	2.3	16.5
Ⓑ	60	6.0	43.5
Ⓒ	100	10.0	72.5

REMOVAL

- Remove the lower cowling of rear. (Refer to page 6-2.)
- Support the motorcycle with a jack.
- Remove the axle cotter pin ①.
- Remove the axle nut and rear axle.
- Remove the rear wheel by disengaging the drive chain.

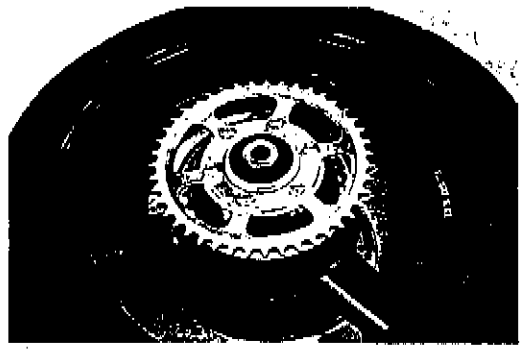


⚠ CAUTION

Do not operate the brake pedal while dismounting the rear wheel.

- Draw out the rear sprocket mounting drum from the wheel.

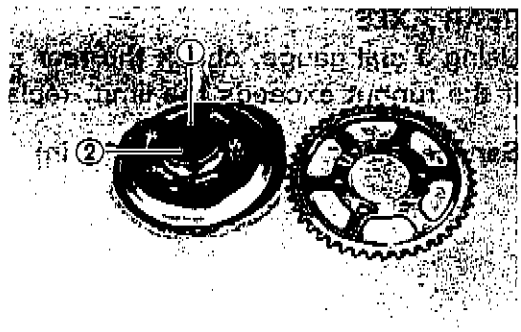
NOTE:
Slightly loosen the rear sprocket mounting nuts to facilitate later disassembly before separate the mounting drum.



- Separate the rear sprocket from the mounting drum.
- Remove the spacer ① and dust seal ② .

⚠ CAUTION

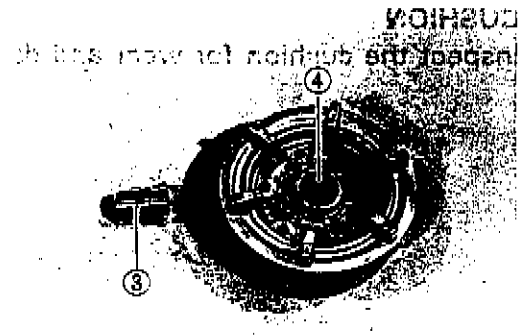
The removed dust seal should be replaced with a new one.



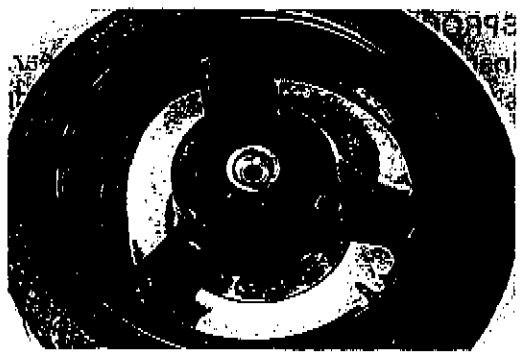
- **Remove the drum retainer ③ , draw out the sprocket mounting drum bearing ④ using an appropriate tool.**

⚠ CAUTION

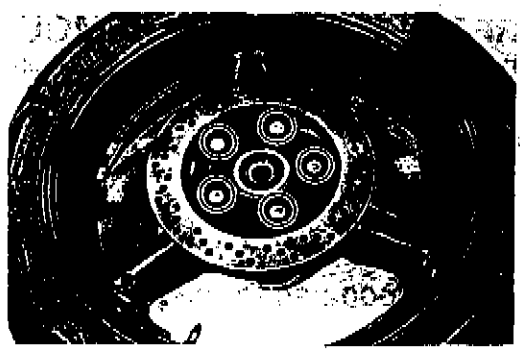
The removed bearing should be replaced with a new one.



- Remove the cushions.



- Separate the brake disc from the wheel.



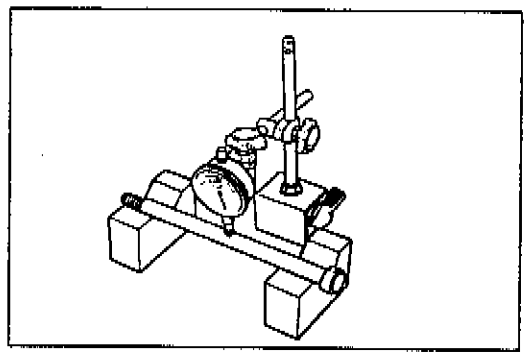
INSPECTION AND DISASSEMBLY

TIRE ..... Refer to page 6-11.
REAR WHEEL ..... Refer to page 6-7.
WHEEL BEARING ..... Refer to page 6-7.

REAR AXLE

Using a dial gauge, check the rear axle for runout.
If the runout exceeds the limit, replace the rear axle.

Service Limit: 0.25 mm (0.010 in)



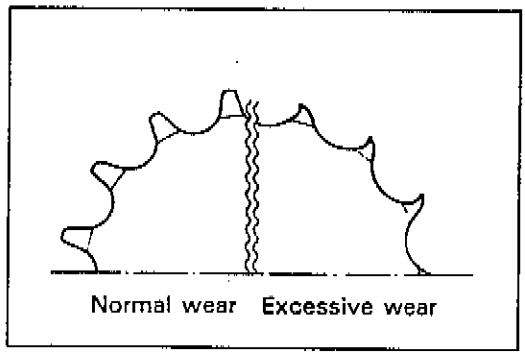
CUSHION

Inspect the cushion for wear and damage.



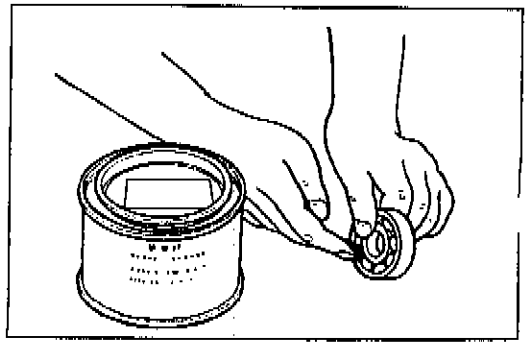
SPROCKET

Inspect the sprocket teeth for wear. If they are worn as shown, replace the sprockets and drive chain as a set.



REASSEMBLY AND REMOUNTING

Reassemble and remount the rear wheel in the reverse order of removal and disassembly. Pay attention to the following points:



WHEEL BEARING

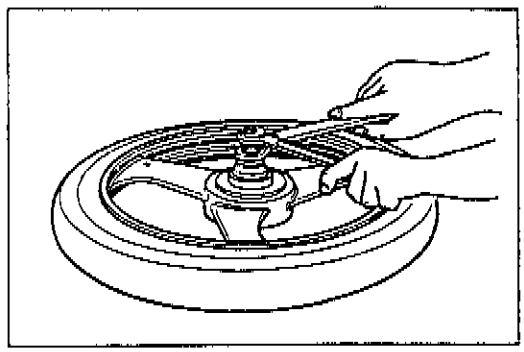
- Apply grease to the bearings before installing.

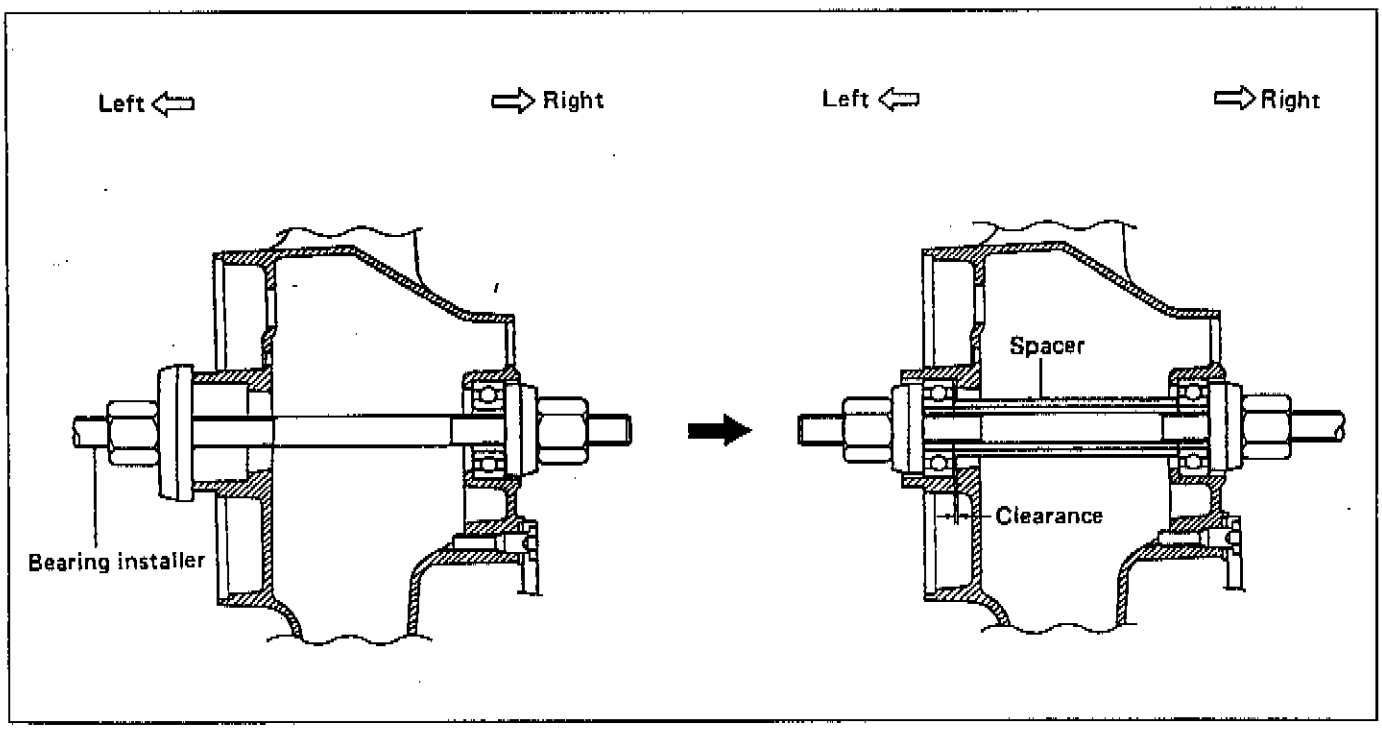
A 99000-25030: SUZUKI SUPER GREASE "A"

- Install the wheel bearings with the special tool.

TOOL 09941-34513: Bearing installer set

NOTE:
First install the right wheel bearing, then install the left wheel bearing. The sealed cover on the bearing is positioned outside. Refer to page 6-41 for details.



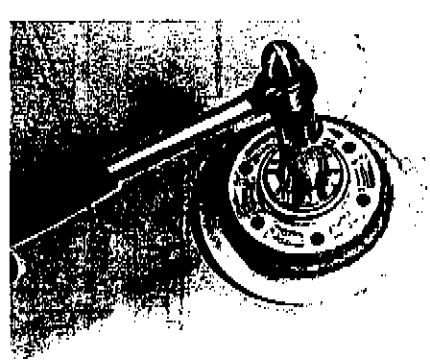


MOUNTING DRUM BEARING

- Install the bearing with the special tool.

TOOL 09913-75520: Bearing installer

NOTE:
Apply grease to the bearing and oil seal lip before assembling rear wheel.



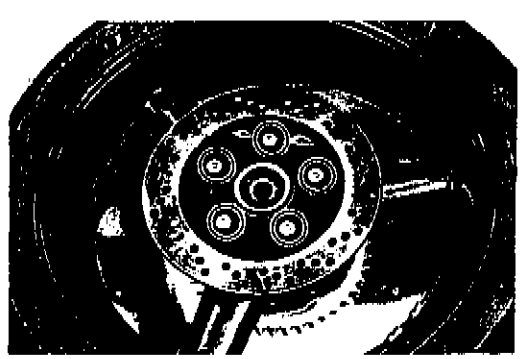
BRAKE DISC

- Apply THREAD LOCK SUPER "1360" to the disc bolts and tighten them to the specified torque.

NOTE:
Make sure that the brake disc is clean and free of any greasy matter.

1360 99000-32130: THREAD LOCK SUPER "1360"

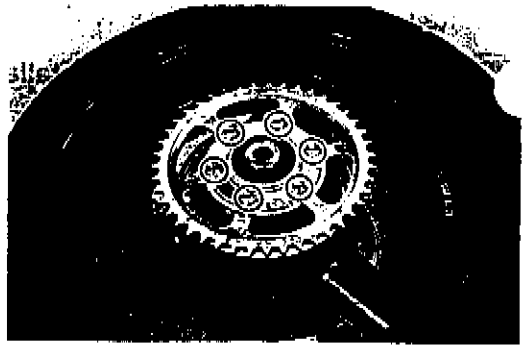
Brake disc bolt: 23 N·m (2.3 kg-m, 16.5 lb-ft)



REAR SPROCKET

- Tighten the sprocket mounting nuts to the specified torque.

Rear sprocket nut: 60 N·m (6.0 kg-m, 43.5 lb-ft)

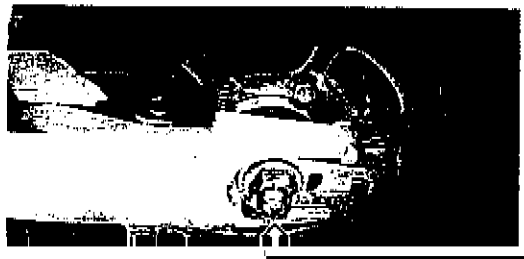


NOTE:
Face the stamped mark on the sprocket to outside.

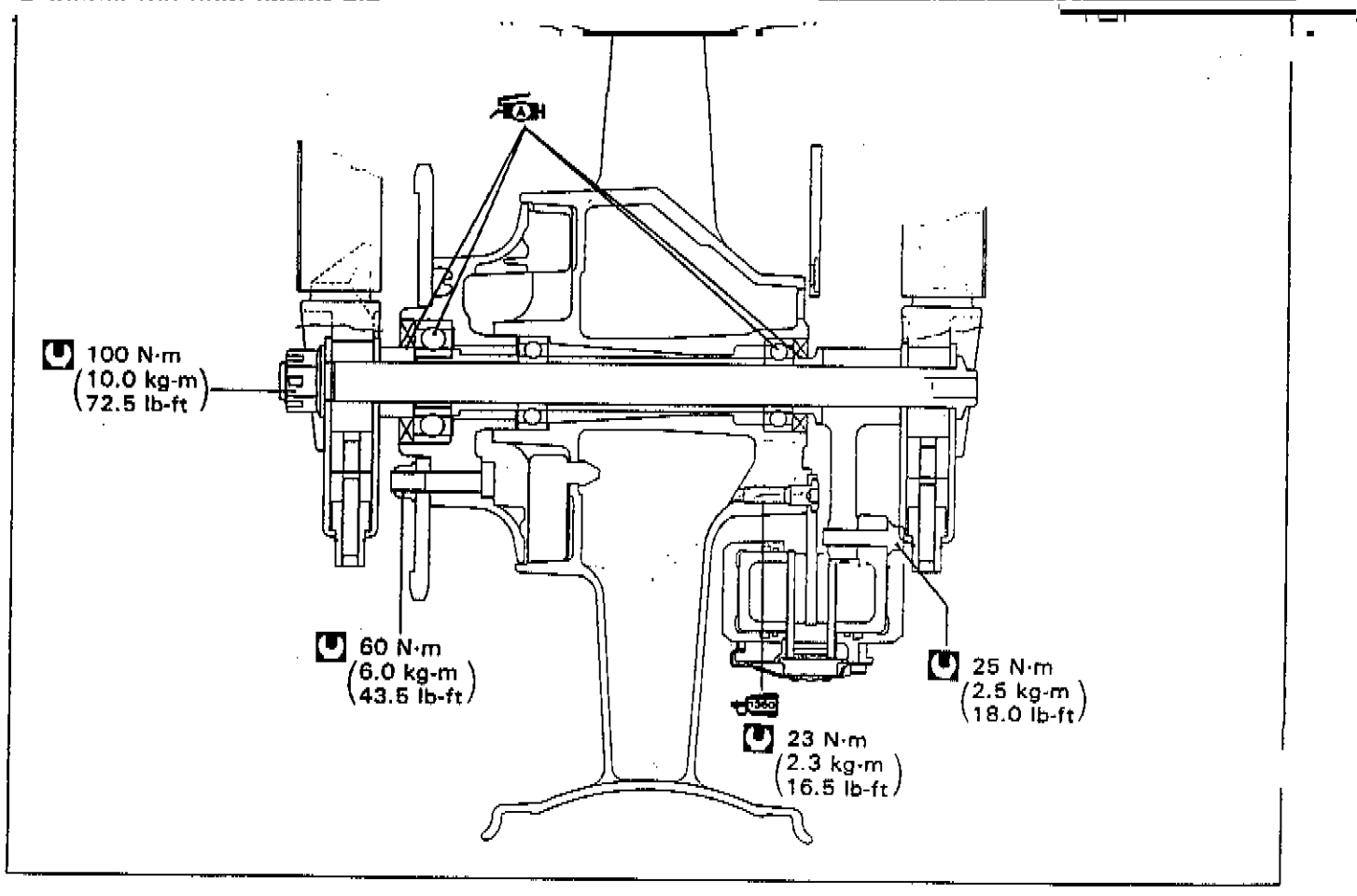
REAR AXLE

- Adjust the chain slack after rear wheel installation. (Refer to page 2-12.)
- Tighten the rear axle nut to the specified torque.

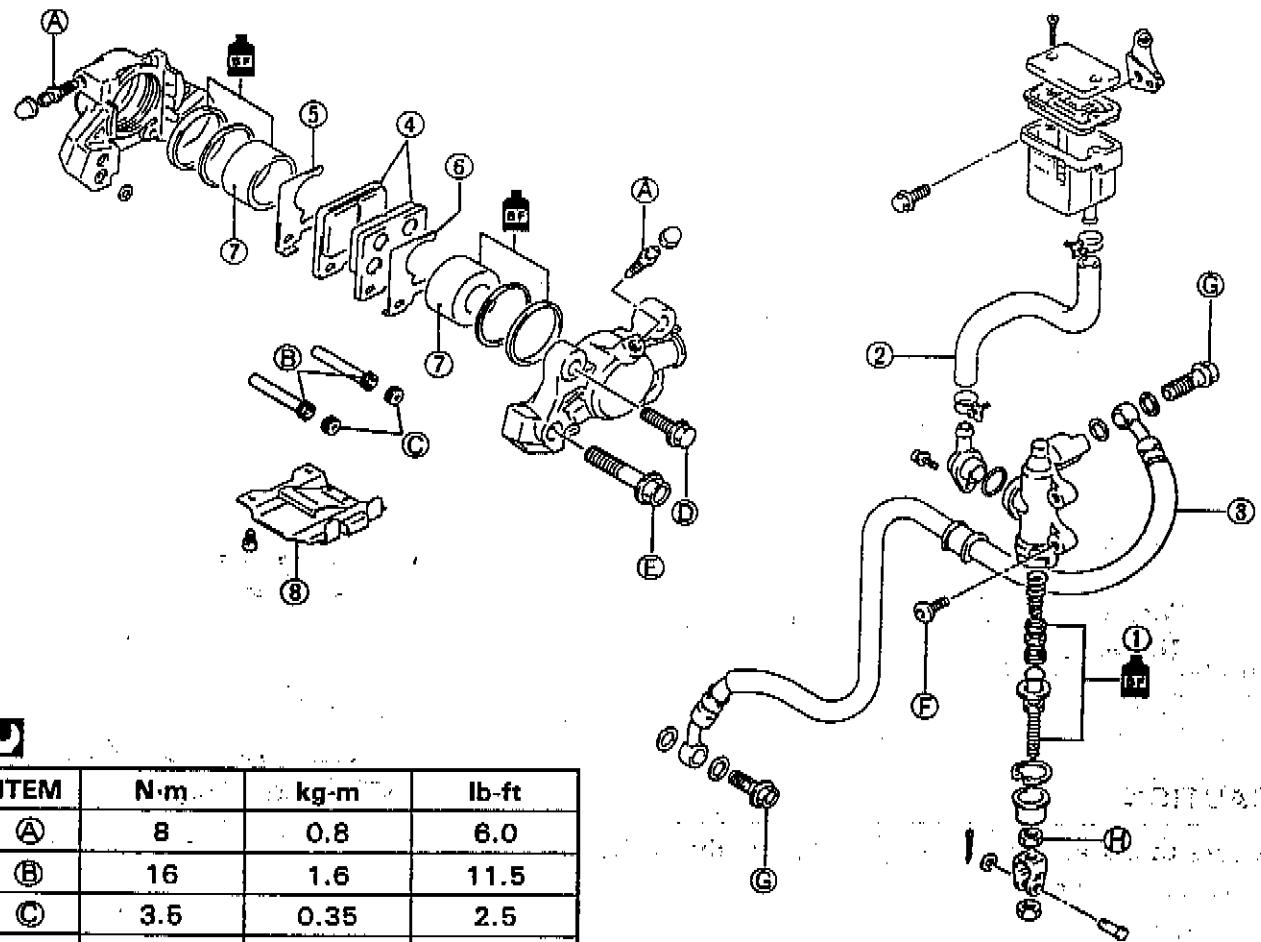
Rear axle nut: 100 N·m (10.0 kg-m, 72.5 lb-ft)



- Install the rear axle pin.



REAR BRAKE



ITEM	N·m	kg-m	lb-ft
Ⓐ	8	0.8	6.0
Ⓑ	16	1.6	11.5
Ⓒ	3.5	0.35	2.5
Ⓓ	25	2.5	18.0
Ⓔ	33	3.3	24.0
Ⓕ	23	2.3	16.5
Ⓖ	23	2.3	16.5
Ⓗ	18	1.8	13.0

⚠ WARNING

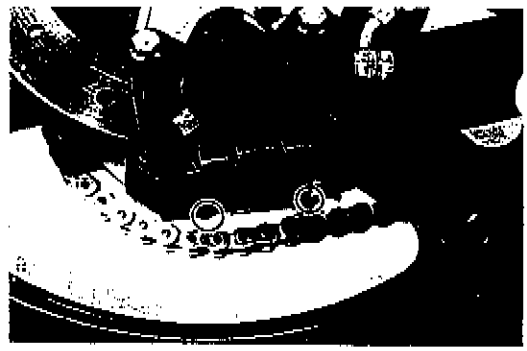
- This brake system is filled with a glycol-based DOT 4 brake fluid. Do not use or mix different types of fluid such as silicone-based or petroleum-based.
- Do not use any brake fluid taken from old, used or unsealed containers. Never reuse brake fluid left over from the last servicing or stored for long periods.
- When storing the brake fluid, seal the container completely and keep away from children.
- When replenishing brake fluid, take care not to get dust into fluid.
- When washing brake components, use fresh brake fluid. Never use cleaning solvent.
- A contaminated brake disc or brake pad reduces braking performance. Discard contaminated pads and clean the disc with high quality brake cleaner or neutral detergent.

⚠ CAUTION

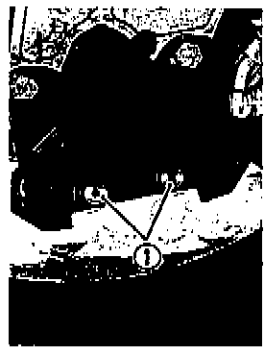
Handle brake fluid with care: the fluid reacts chemically with paint, plastics, rubber materials etc.

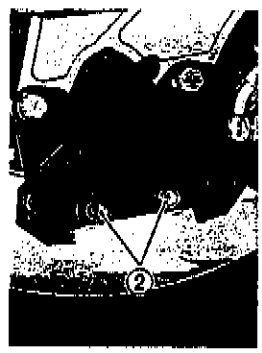
BRAKE PAD REPLACEMENT

- Remove the cover.



- Remove the plugs ①.
- Remove the pads and shims by removing the pad mounting pins ②.





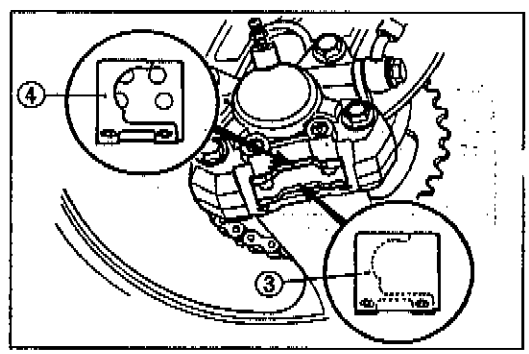
⚠ CAUTION

• Do not operate the brake pedal while dismounting the pads.
• Replace the brake pad as a set, otherwise braking performance will be adversely affected.
• Inspect the removed pad mounting pins ②. (Refer to page 6-44.)

- Remount the new brake pads and shims.

⚠ CAUTION

Be sure to install the shims (③, ④) properly as shown in the illustration.



NOTE:
After replacing the brake pads, pump with the brake pedal few times to operate the brake correctly and then check the brake fluid level.

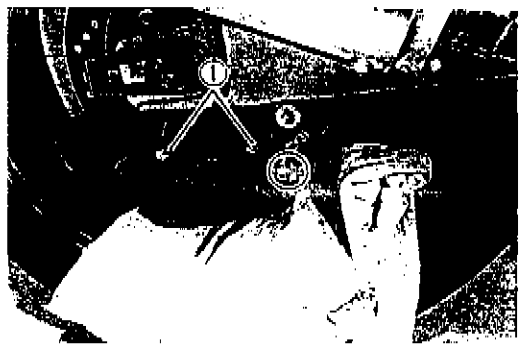
BRAKE FLUID REPLACEMENT

- Remove the seat. (Refer to page 6-4.)
- Remove the frame cover. (Refer to page 6-5.)
- Replace the brake fluid in the same manner of the front brake.

⚠ CAUTION

Bleed air in the brake fluid circuit. (Refer to page 2-16.)

CALIPER REMOVAL AND DISASSEMBLY



- Remove the union bolt and catch the brake fluid in a suitable receptacle.

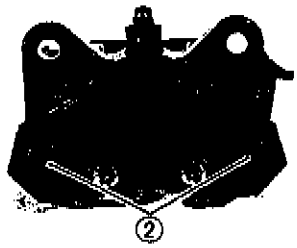
⚠ CAUTION

Never reuse the brake fluid left over from previous servicing and stored for long periods.

⚠ WARNING

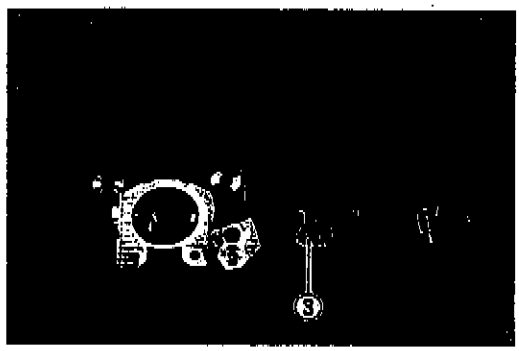
Brake fluid, if it leaks, will interfere with safe running and discolor painted surfaces. Check the brake hose and hose joints for cracks and oil leakage.

- Remove the caliper mounting bolts ①.



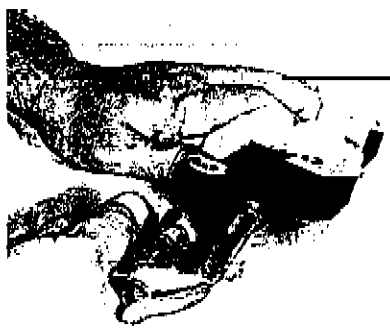
NOTE:
Slightly loosen the caliper housing bolts ② to facilitate later disassembly before removing the caliper mounting bolts.

- Remove the pads. (Refer to page 6-43.)
- Remove the caliper housing bolts.
- Separate the caliper halves.
- Remove the O-ring ③ .



NOTE:
Once separate the caliper halves, replace the O-ring ③ with a new one.

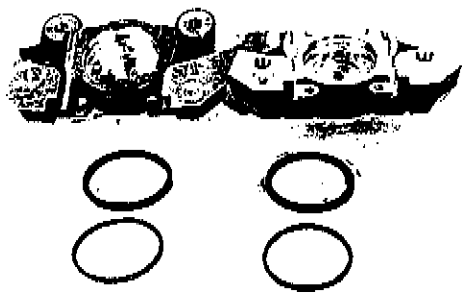
- Place a rag over the piston to prevent it from popping out and push out the piston by using an air gun.



⚠ CAUTION

Do not use high pressure air to prevent piston damage.

- Remove the dust seals and piston seals.



⚠ CAUTION

Do not reuse the dust seals and piston seals to prevent fluid leakage.

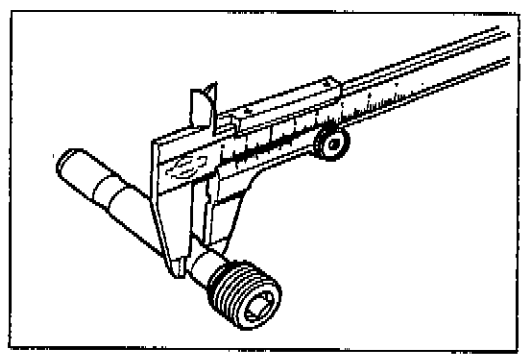
CALIPER INSPECTION

CYLINDER ..... Refer to page 6-19.
PISTON ..... Refer to page 6-19.
DISC ..... Refer to page 6-20.

PAD MOUNTING PIN

Inspect the pad mounting pin for wear or damage, and measure the pin diameter with a vernier calipers. If the measurement is less than the limit, replace both the pins.

Service Limit: 5.6 mm (0.22 in)

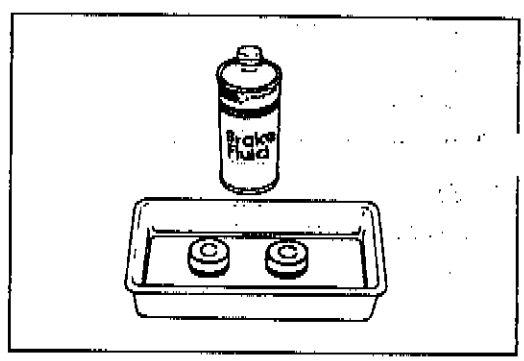


CALIPER REASSEMBLY AND REMOUNTING

Reassemble and remount the caliper in the reverse order of removal and disassembly. Pay attention to the following points:

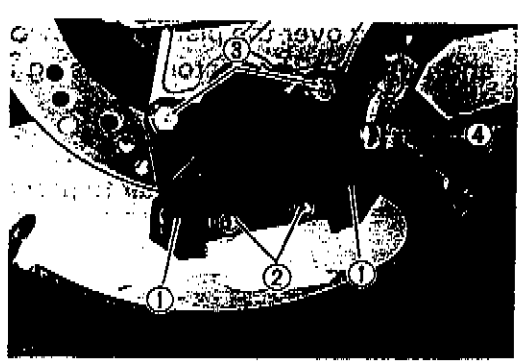
⚠ CAUTION

- **Wash the caliper components with fresh brake fluid before reassembly. Never use cleaning solvent or gasoline to wash them.**
- **Apply brake fluid to the caliper bore and piston to be inserted into the bore.**



Specification and classification: DOT 4

- Tighten each bolt to the specified torque.



Rear brake caliper housing bolt ① : 33 N·m (3.3 kg-m, 24.0 lb-ft)

Rear brake pad mounting pin ② : 16 N·m (1.6 kg-m, 11.5 lb-ft)

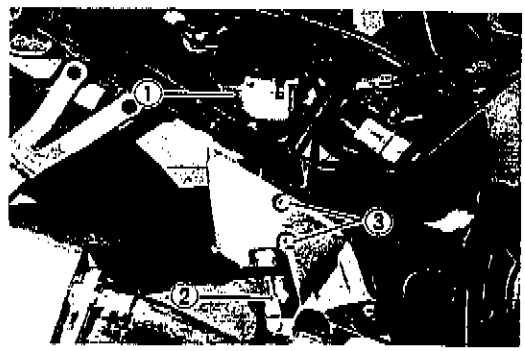
Rear brake caliper mounting bolt ③ : 25 N·m (2.5 kg-m, 18.0 lb-ft)

Brake hose union bolt ④ : 23 N·m (2.3 kg-m, 16.5 lb-ft)

⚠ CAUTION

Bleed air from the system after reassembling the caliper. (Refer to page 2-16.)

MASTER CYLINDER REMOVAL AND DISASSEMBLY



- Remove the seat. (Refer to page 6-4.)
- Remove the frame cover. (Refer to page 6-5.)
- Free the reservoir tank to remove its mounting bolt ① .
- Loosen the lock nut ② .
- Remove the master cylinder mounting bolts ③ .
- Place a cloth underneath the union bolt ④ on the master cylinder to catch spilled drops of brake fluid.
- Loosen the union bolt and disconnect the brake hose from the master cylinder joint.

⚠ CAUTION

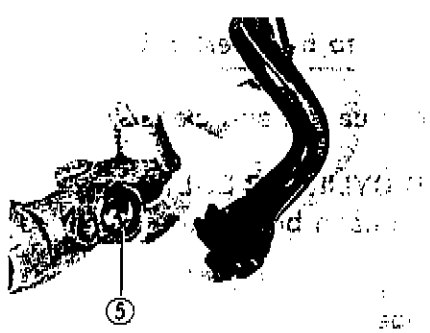
Immediately and completely wipe off any brake fluid contacting any part of the motorcycle. The fluid reacts chemically with paint, plastics and rubber materials, etc. and will damage them severely.



- Remove the connector by removing the screw.

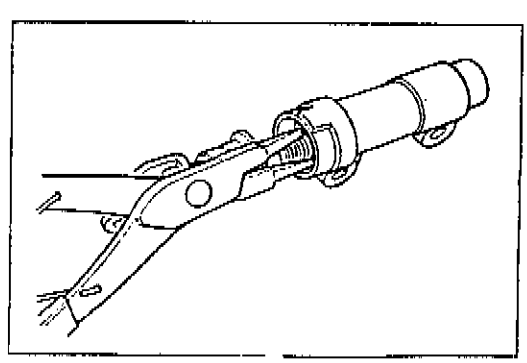


- Remove the O-ring ⑤.

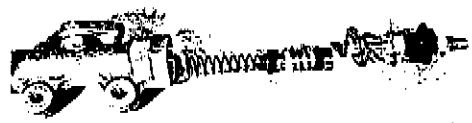


- Pull out the dust seal then remove the circlip with the special tool.

09900-06108: Snap ring pliers



- Remove the push rod, piston/primary cup and spring.



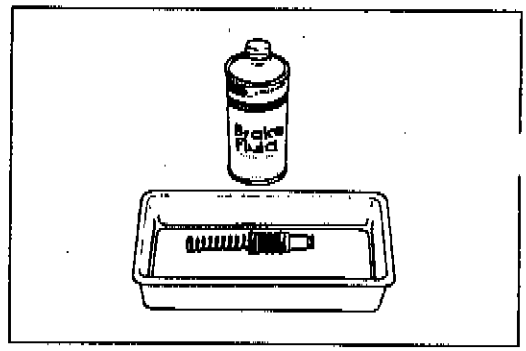
MASTER CYLINDER INSPECTION

CYLINDER, PISTON AND CUP SET

- Inspect the cylinder bore wall for any scratches or other damage.
- Inspect the piston surface for any scratches or other damage.
- Inspect the cup set and each rubber part for damage.

MASTER CYLINDER REASSEMBLY AND REMOUNTING

Reassemble and remount the master cylinder in the reverse order of removal and disassembly. Pay attention to the following points:



⚠ CAUTION

- **Wash the master cylinder components with fresh brake fluid before reassembly. Never use cleaning solvent or gasoline to wash them.**
- **Apply brake fluid to the cylinder bore and all the component to be inserted into the bore.**

Specification and classification: DOT 4

MASTER CYLINDER BOLTS

- Tighten each bolt to the specified torque.



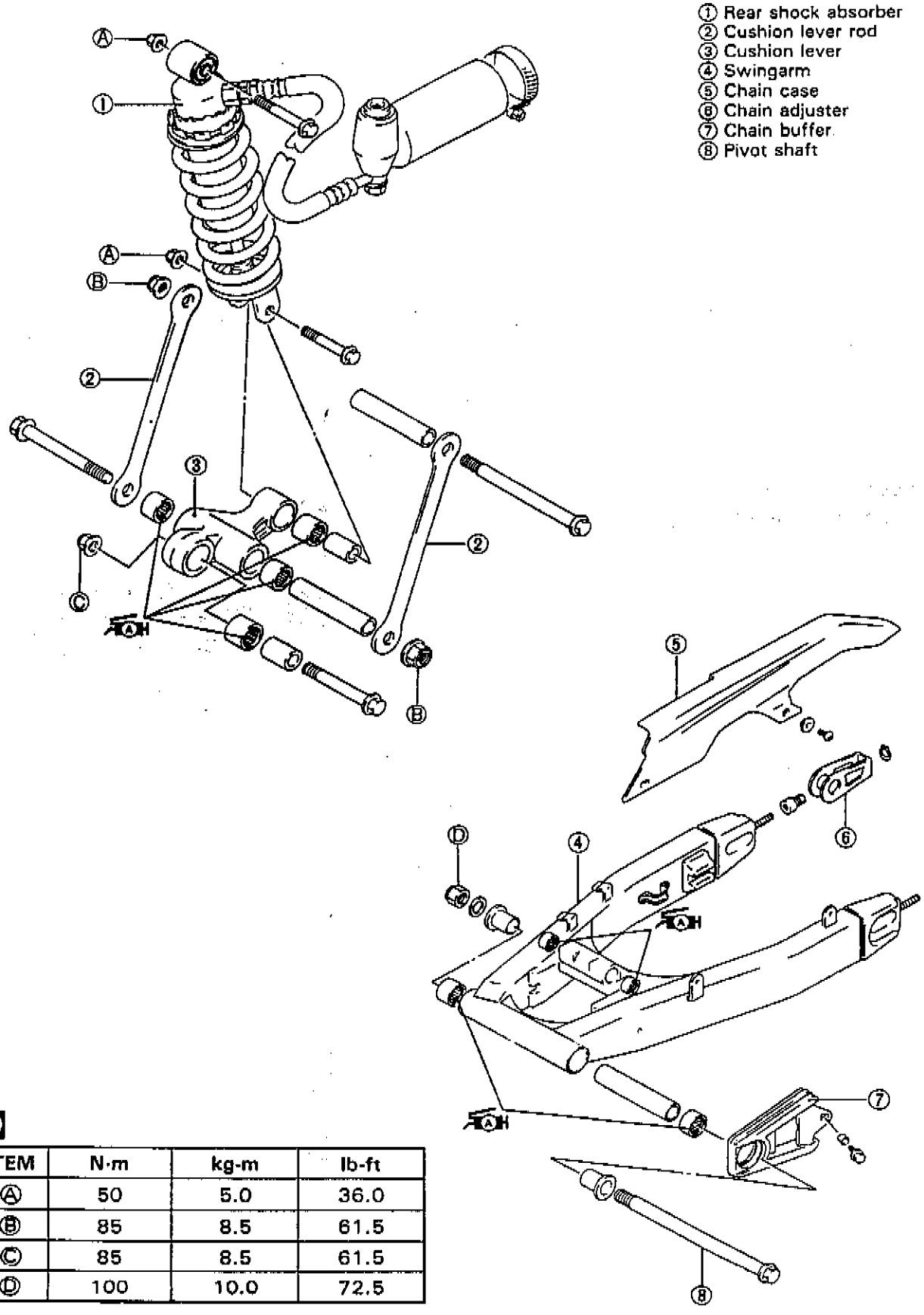
Brake hose union bolt ① : 23 N·m (2.3 kg-m, 16.5 lb-ft)

Master cylinder rod lock nut ③ : 18 N·m (1.8 kg-m, 13.0 lb-ft)

⚠ CAUTION

Bleed air from the system after reassembling master cylinder. (Refer to page 2-16.)

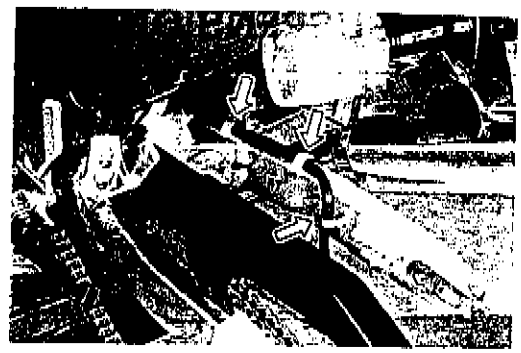
REAR SUSPENSION



ITEM	N·m	kg-m	lb-ft
Ⓐ	50	5.0	36.0
Ⓑ	85	8.5	61.5
Ⓒ	85	8.5	61.5
Ⓓ	100	10.0	72.5

REMOVAL

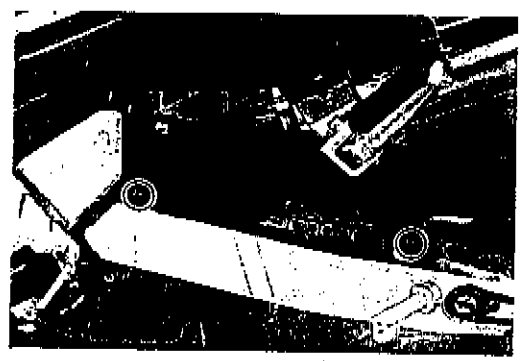
- Remove the seat and frame covers. (Refer to page 6-5.)
- Remove the rear wheel. (Refer to page 6-37.)
- Remove the rear brake hose union bolt.



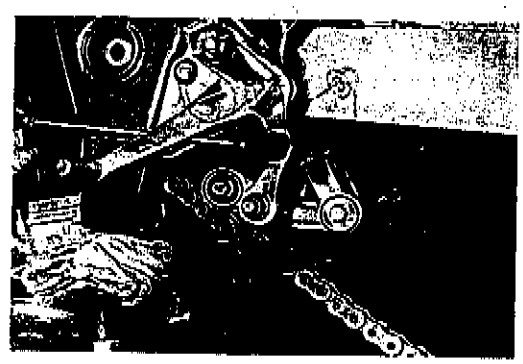
⚠ CAUTION

Completely wipe off any brake fluid adhering to any part of motorcycle. The fluid reacts chemically with paint, plastics, rubber materials, etc.

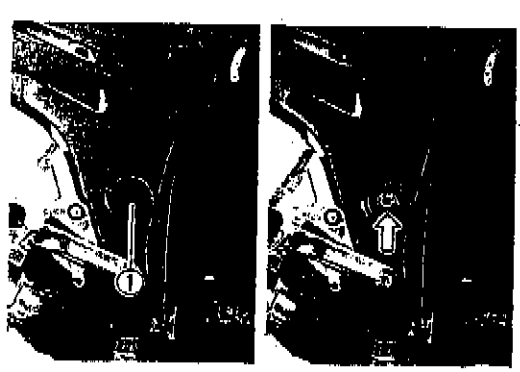
- Remove the brake hose from the brake hose guides at inside of swingarm.
- Remove the chain case.



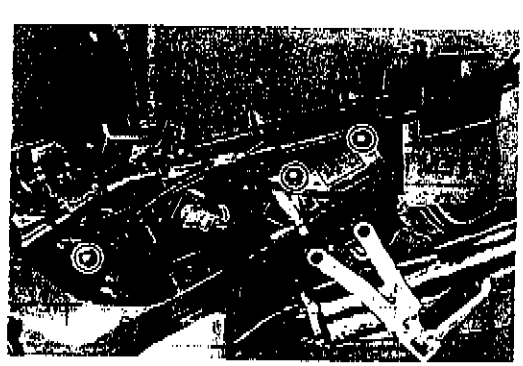
- Remove the cushion lever and shock absorber lower mounting nuts and bolts.



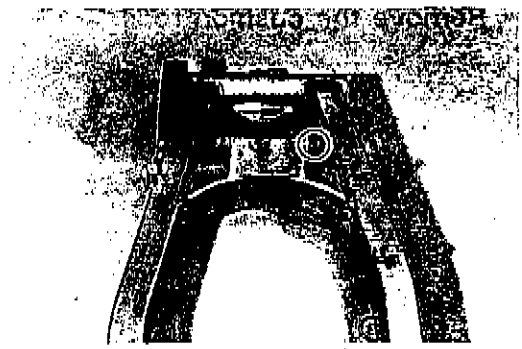
- Remove the right and left caps ①.
- Remove the swingarm by removing the pivot nut and shaft.



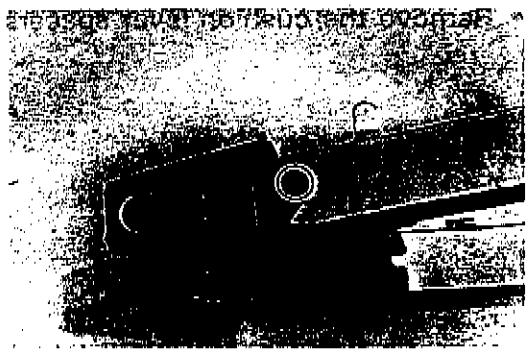
- Remove the shock absorber assembly by removing the reservoir tank mounting clamps and shock absorber upper mounting nut and bolt.



- Remove the cushion rod mounting nut and bolt.

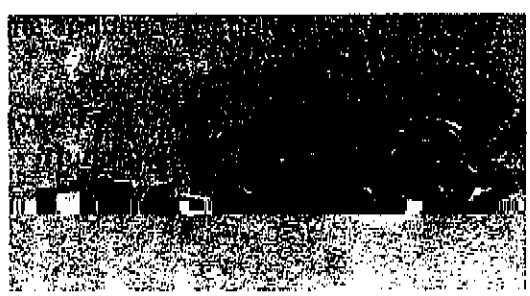


- Remove the chain buffer.

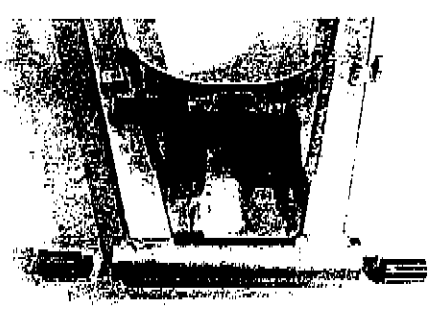


- Remove the chain adjusters.

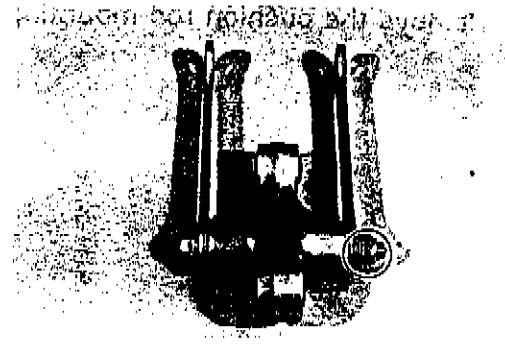




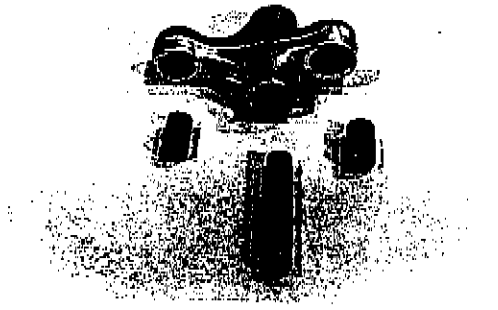
- Remove the spacers from swingarm.



• Remove the cushion rods.



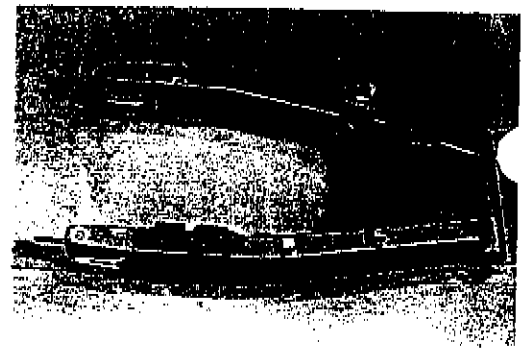
• Remove the cushion lever spacers.



INSPECTION AND DISASSEMBLY

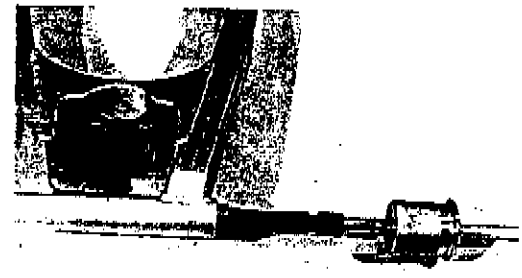
SWINGARM

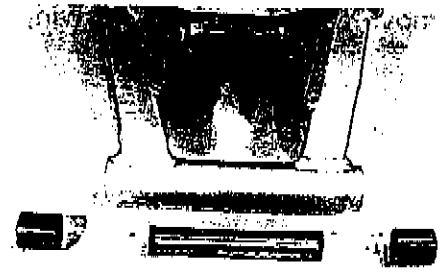
Inspect the spacer for any flaws or other damage.
Inspect the swingarm for wear or damage.
Insert the spacer into bearing and check the play to move the spacer up and down.
If excessive play is noted, replace the bearing with a new one.



• Draw out the swingarm bearings and spacer with the special tools.

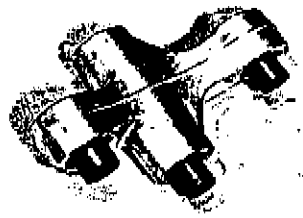
TOOL 09923-74510: Bearing remover
09930-30102: Sliding shaft





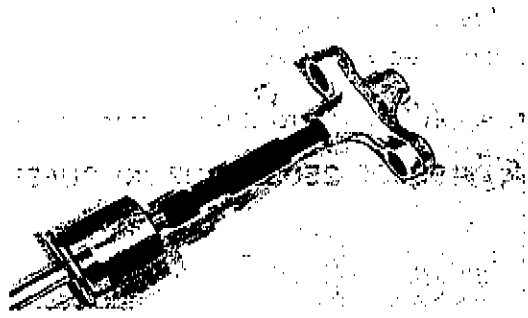
CUSHION LEVER

Inspect the spacer for any flaws or other damage.
Insert the spacer into bearing and check the play to move the spacer up and down. If an excessive play is noted, replace the bearing with a new one.



Draw out the bearing with the special tools.

TOOL **09923-73210: Bearing puller**
09930-30102: Sliding shaft

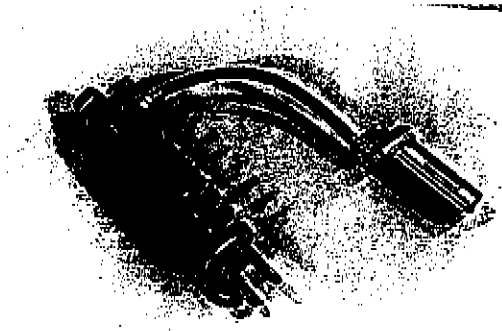


⚠ CAUTION

The removed bearings should be replaced with new ones.

SHOCK ABSORBER

Inspect the shock absorber body for damage and oil leakage. If any defects are found, replace the shock absorber with a new one.



⚠ CAUTION

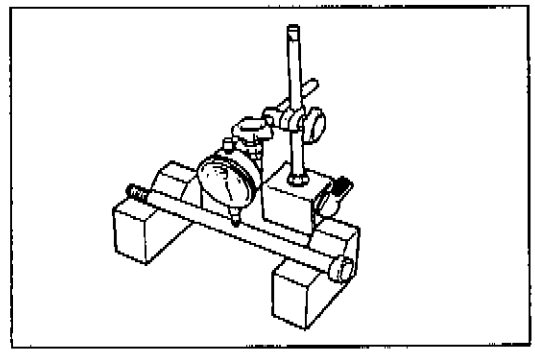
Do not attempt to disassemble the rear shock absorber unit. It is unserviceable.

SWINGARM PIVOT SHAFT

Using a dial gauge, check the pivot shaft runout and replace it if the runout exceeds the limit.

TOOL **09900-20606: Dial gauge (1/100 mm)**
09900-20701: Magnetic stand
09900-21304: V-block (100 mm)

Service Limit: 0.3 mm (0.01 in)



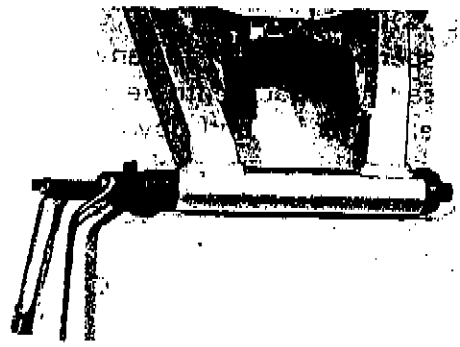
CHAIN BUFFER

Inspect the chain buffer for wear and damage.
If any defects are found, replace the chain buffer with a new one.



REASSEMBLY AND REMOUNTING

Reassemble and remount the swingarm and shock absorber in the reverse order of removal and disassembly, and also carry out the following steps:

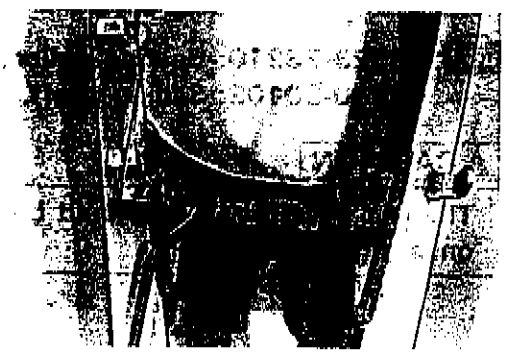


SWINGARM BEARING

- Press the bearing into the swingarm pivot with the special tool.

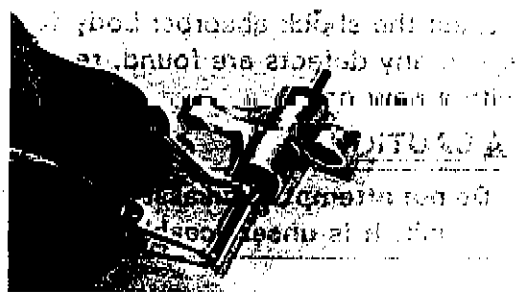
09941-34513: Steering race installer

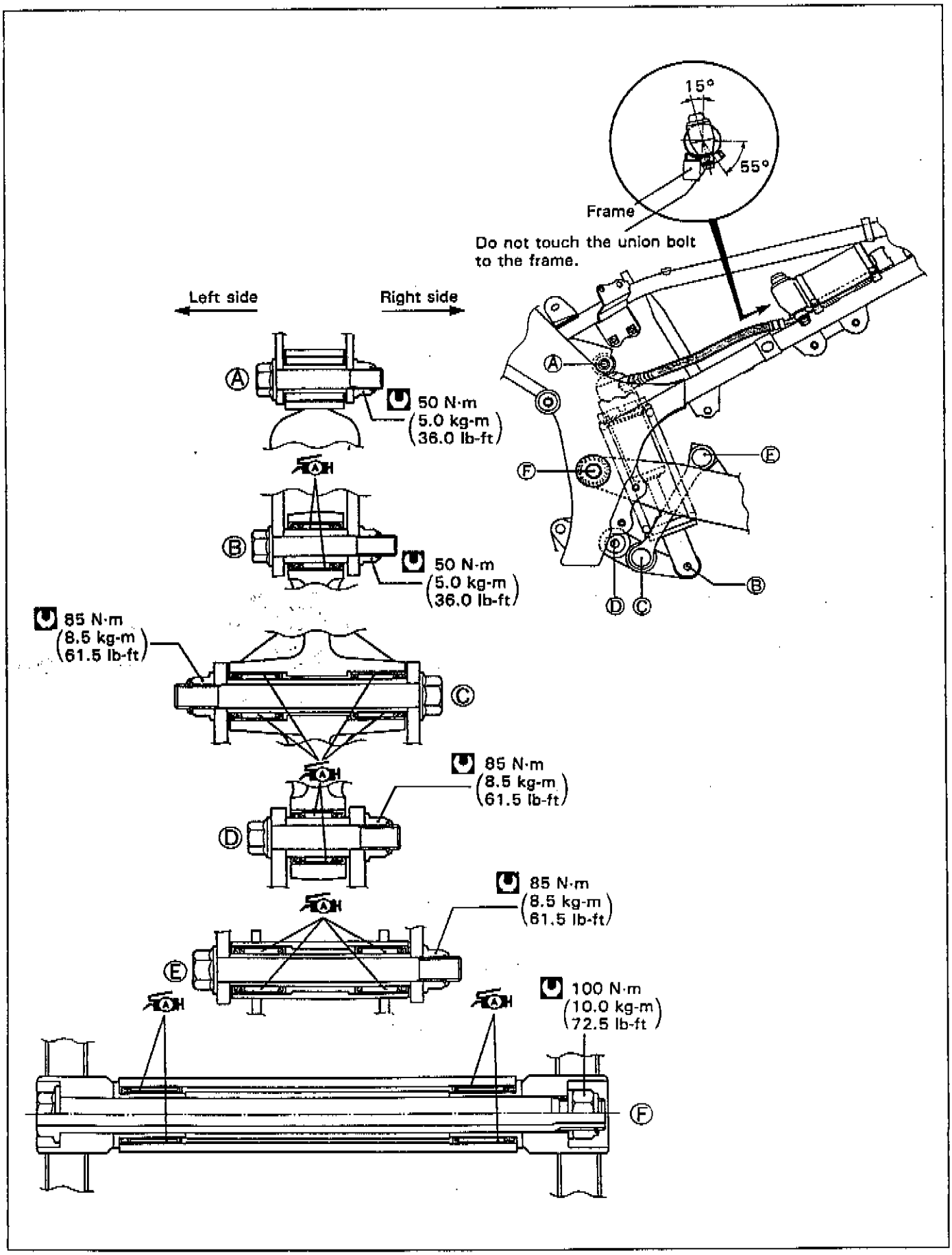
NOTE:
When reinstalling the bearing, stamped mark of bearing is positioned outside.



- Apply grease to the spacers and bearings.

99000-25030: SUZUKI SUPER GREASE "A"




15°
55°
Frame
Do not touch the union bolt to the frame.
Left side
Right side
Ⓐ
50 N·m (5.0 kg-m / 36.0 lb-ft)
Ⓑ
50 N·m (5.0 kg-m / 36.0 lb-ft)
85 N·m (8.5 kg-m / 61.5 lb-ft)
Ⓒ
85 N·m (8.5 kg-m / 61.5 lb-ft)
Ⓓ
85 N·m (8.5 kg-m / 61.5 lb-ft)
Ⓔ
100 N·m (10.0 kg-m / 72.5 lb-ft)
Ⓕ

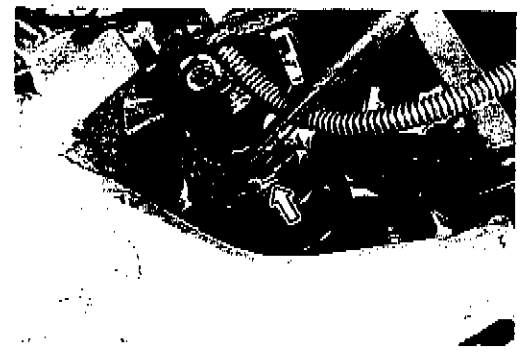
FINAL INSPECTION AND ADJUSTMENT

After installing the rear suspension and wheel, the following adjustments are required before driving.

* Drive chain
* Rear brake
* Tire pressure
* Chassis bolts and nuts
* Shock absorber

SUSPENSION SETTING

After installing the rear suspension, adjust the spring pre-load, compression damping force and rebound damping force as follows.

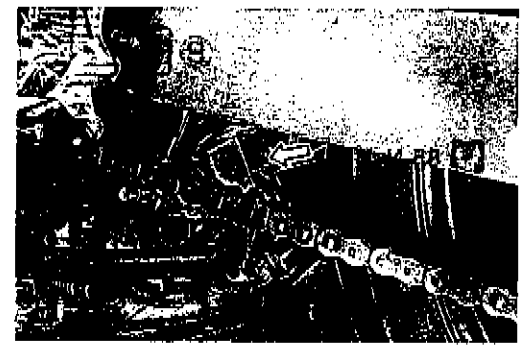


SPRING PRE-LOAD ADJUSTMENT

The set position "7" provides the stiffest spring pre-load.
The set position "1" provides the softest spring pre-load.
(STD position: "4")

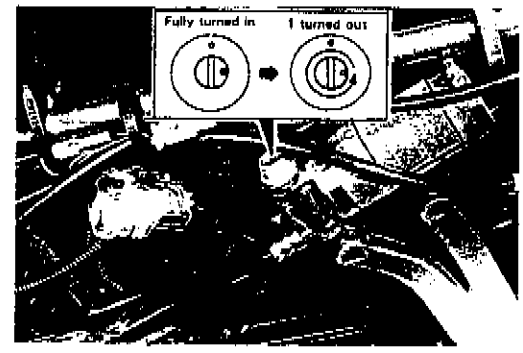
REBOUND DAMPING FORCE ADJUSTMENT

The set position "4" provides the stiffest rebound damping force.
The set position "1" provides the softest rebound damping force.
(STD position: "1")



COMPRESSION DAMPING FORCE ADJUSTMENT

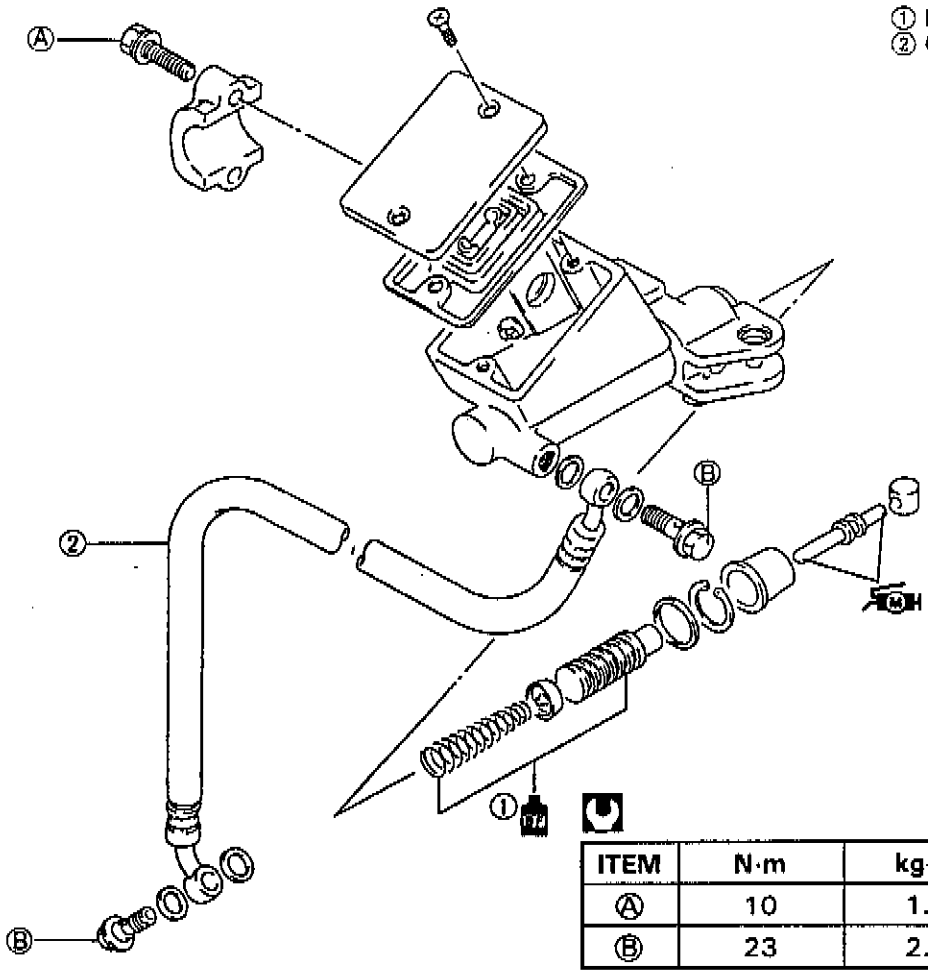
Fully turn the damping force adjuster clockwise. It is at stiffest position and turn it out to standard setting position. (STD position is about 1 turn out until the two punch marks align.)



REAR SUSPENSION SETTING (STANDARD)

Item		Spring set position	Damping force	
			Rebound	Compression
Solo riding	Softer	3	1	Align the puch marks (About 1 turn out from stiffest position)
	Standard	4	1	
	Stiffer	5	1	
Dual riding		6	2	

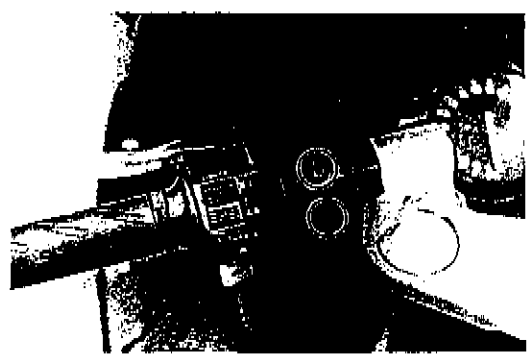
CLUTCH MASTER CYLINDER



ITEM	N·m	kg-m	lb-ft
Ⓐ	10	1.0	7.0
Ⓑ	23	2.3	16.5

REMOVAL

- Remove the clutch lever position switch.
- Place a rag underneath the union bolt on the master cylinder to catch spilled drops of brake fluid. Unscrew the union bolt and disconnect the clutch hose from the master cylinder.



⚠ CAUTION

Completely wipe off any brake fluid adhering to any parts of motorcycle. The fluid reacts chemically with paint, plastics, rubber materials, etc. and will damage them severely.

- Remove the clutch master cylinder by removing its clamp bolts.

DISASSEMBLY AND REASSEMBLY

Disassemble and reassemble the clutch master cylinder in the same manner of the front brake master cylinder.
(Refer to page 6-21 through 6-23 for details.)

ELECTRICAL SYSTEM

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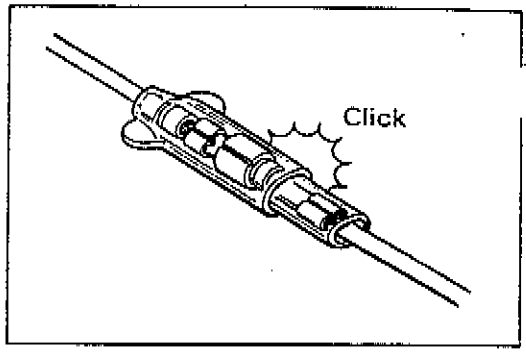
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7

CAUTIONS IN SERVICING

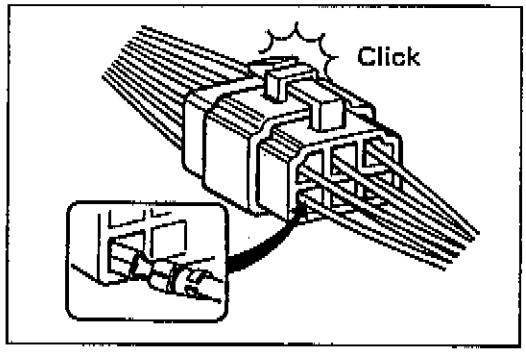
CONNECTOR

- When connecting a connector, be sure to push it in untill a click is felt.
- Inspect the connector for corrosion, contamination and breakage in its cover.



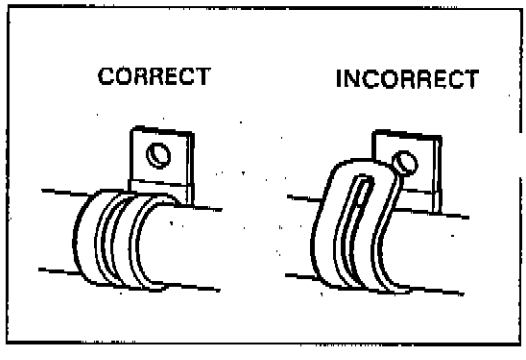
COUPLER

- With a lock type coupler, be sure to release the lock before disconnecting it and push it in fully till the lock works when connecting it.
- When disconnecting the coupler, be sure to hold the coupler itself and do not pull the lead wires.
- Inspect each terminal on the coupler for being loose or bent.
- Inspect each terminal for corrosion and contamination.



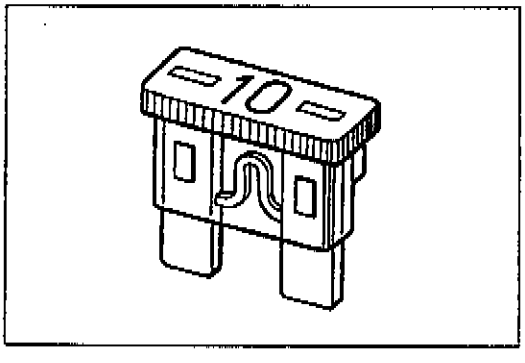
CLAMP

- Clamp the wire harness at such positions as indicated in "WIRE HARNESS ROUTING" (Refer to page 8-12.).
- Bend the clamp properly so that the wire harness is clamped securely.
- In clamping the wire harness, use care not to allow it to hang down.
- Do not use wire or any other substitute for the band type clamp.



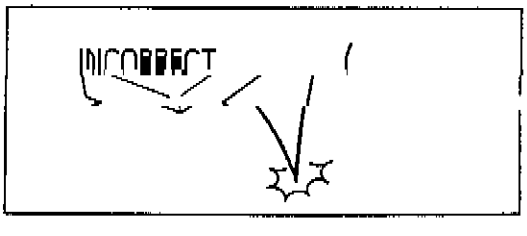
FUSE

- When a fuse blows, always investigate the cause, correct it and then replace the fuse.
- Do not use a fuse of a different capacity.
- Do not use wire or any other substitute for the fuse.

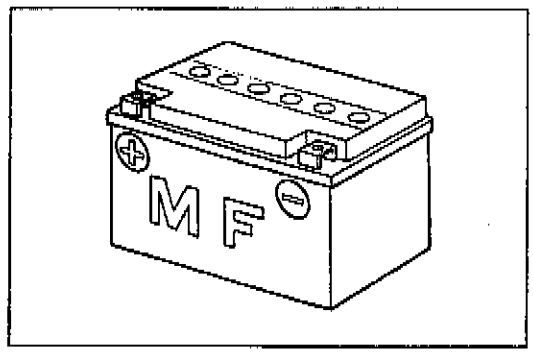


SEMI-CONDUCTOR EQUIPPED PART

- Be careful not to drop the part with semi conductor built to this part.

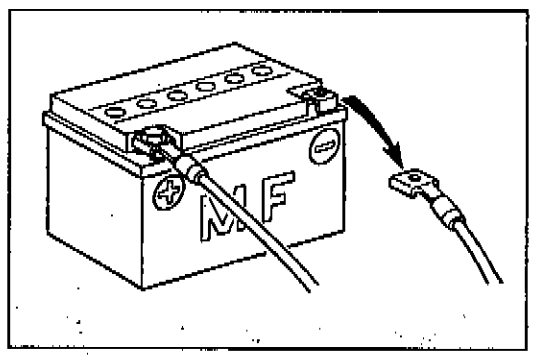


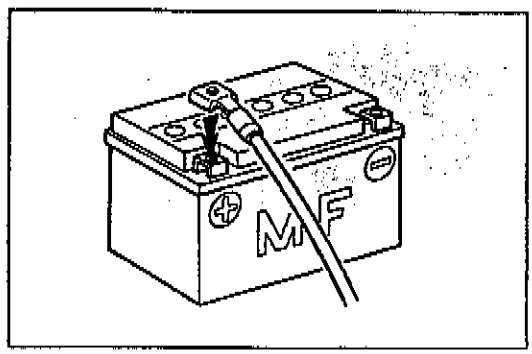
BATTERY



- The MF battery used in this vehicle does not require maintenance as inspection of electrolyte level and replenishment of water.
- No hydrogen gas is produced during normal charging of the battery, but such gas may be produced when it is overcharged. Therefore, do not bring fire near the battery while it is being charged.
- Note that the charging system for the MF battery is different from that of an ordinary battery. Do not replace with an ordinary battery.

CONNECTING BATTERY



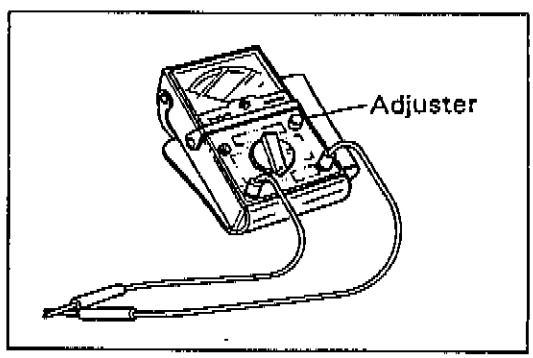


- When disconnecting terminals from the battery for disassembly or servicing, be sure to disconnect the negative (⊖) terminal first.
- When connecting terminals to the battery, be sure to connect the positive (⊕) terminal first.
- If the terminal is found corroded, remove the battery, pour warm water over it and clean with a wire brush.
- Upon completion of connection, apply grease lightly.
- Put a cover over the positive (⊕) terminal.

WIRING PROCEDURE

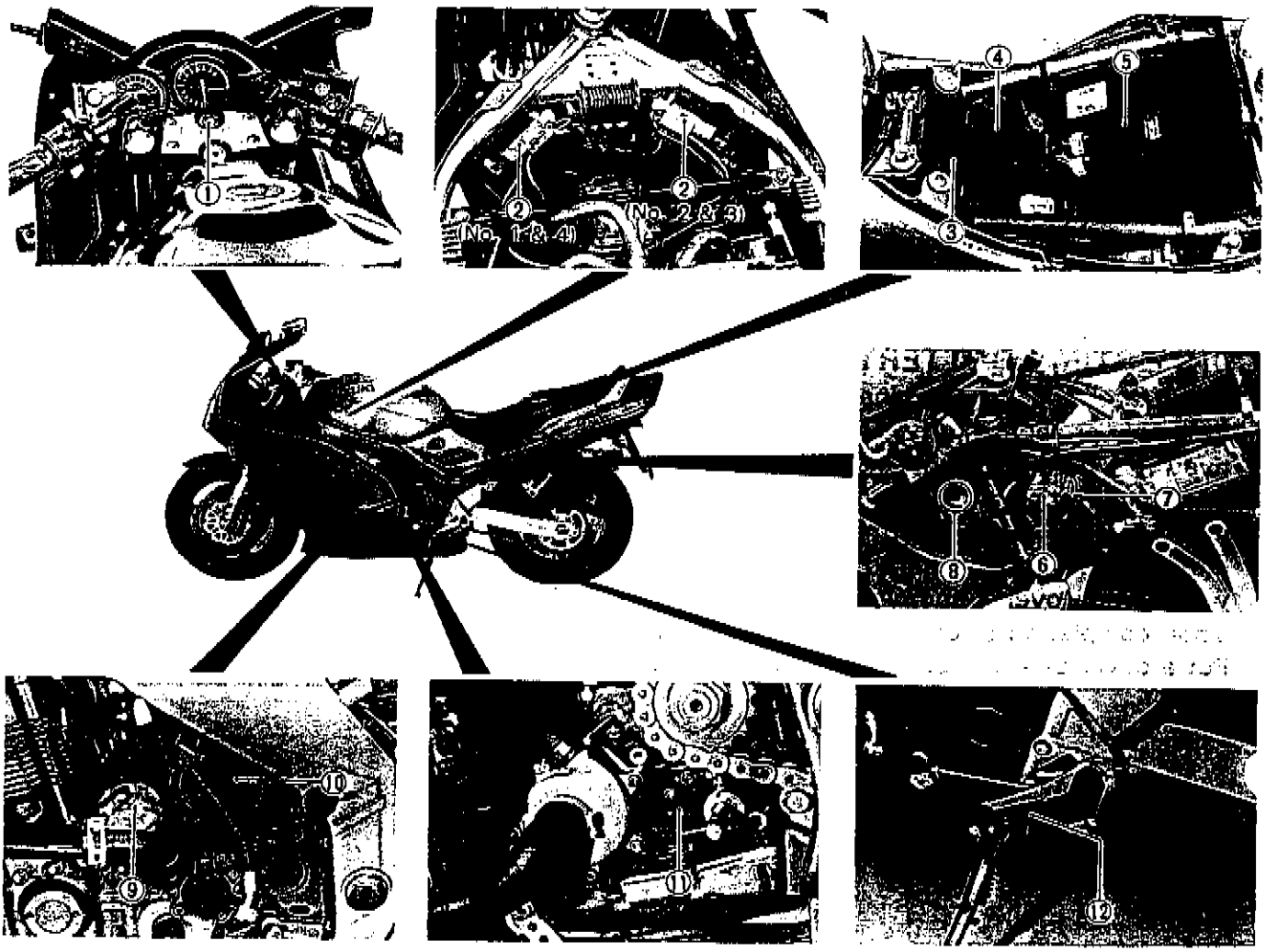
- Route the wire harness properly according to "WIRE HARNESS ROUTING" (Refer to page 8-12).

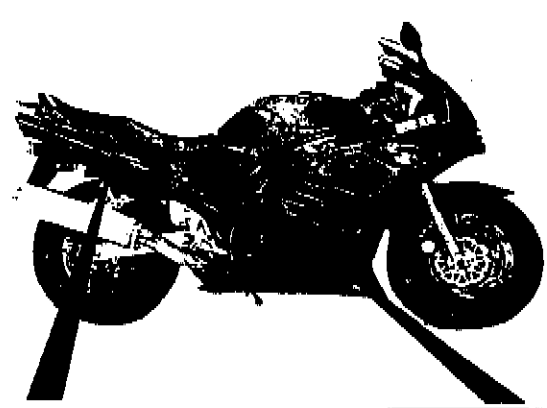
USING POCKET TESTER

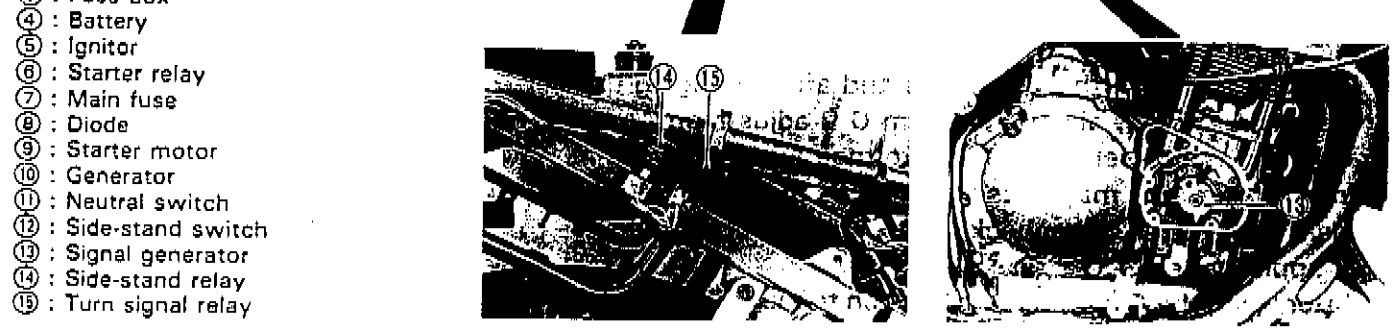


- Be sure to use positive (⊕) and negative (⊖) probes of the tester properly. Their false use may cause damage in the tester.
- If the voltage and current values are not known, start measuring in the higher range.
- Before measuring the resistance and after changing the resistance range, always perform 0 Ω adjustment.
- Taking a measurement where voltage is applied in the resistance range may cause damage in the tester. When measuring resistance, check to make sure that no voltage is applied there.
- After using the tester, turn the switch to the OFF position.

LOCATION OF ELECTRICAL COMPONENTS







① : Ignition switch
② : Ignition coil
③ : Fuse box
④ : Battery
⑤ : Ignitor
⑥ : Starter relay
⑦ : Main fuse
⑧ : Diode
⑨ : Starter motor
⑩ : Generator
⑪ : Neutral switch
⑫ : Side-stand switch
⑬ : Signal generator
⑭ : Side-stand relay
⑮ : Turn signal relay

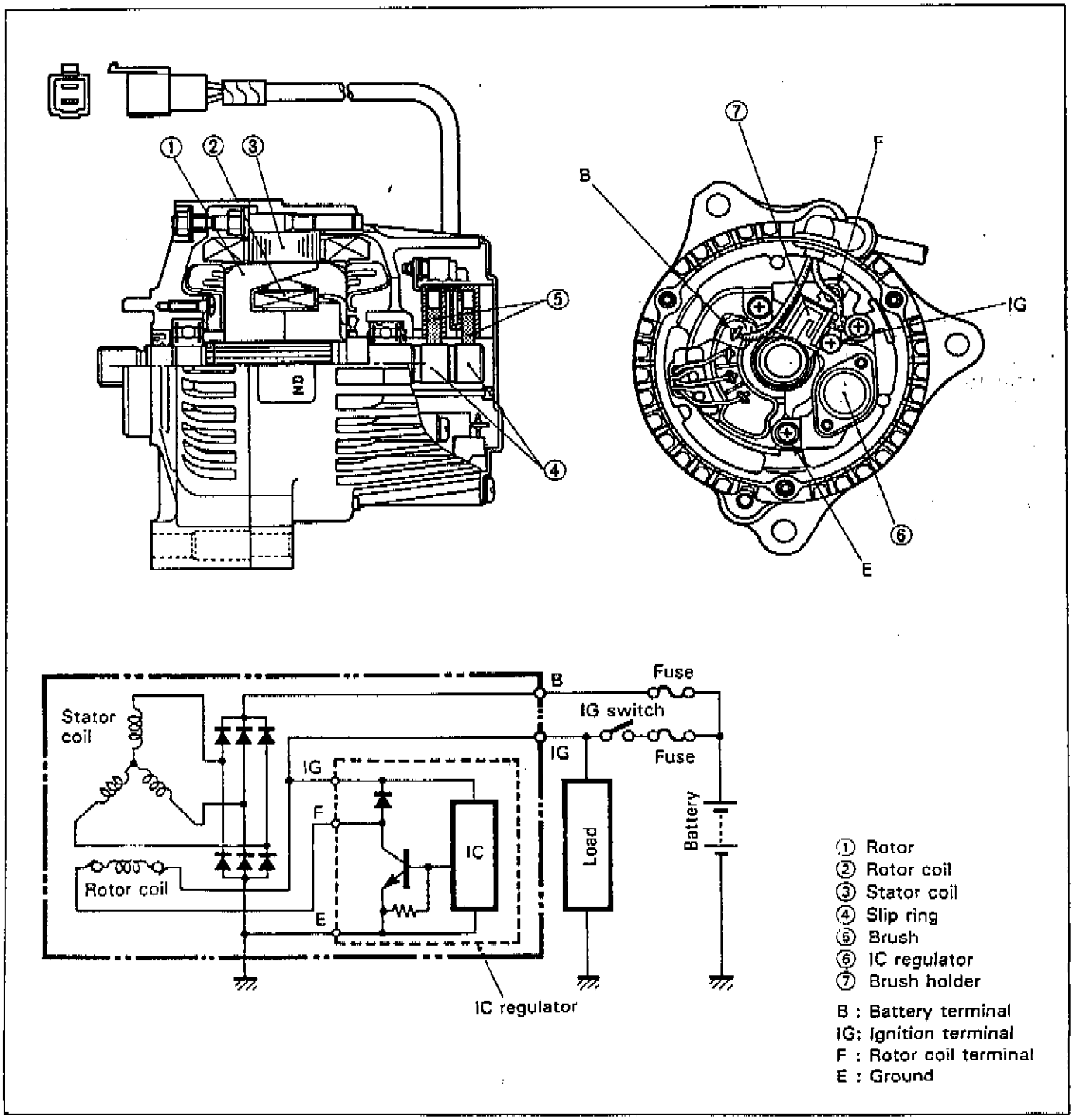
CHARGING SYSTEM

DESCRIPTION (GENERATOR WITH IC REGULATOR)

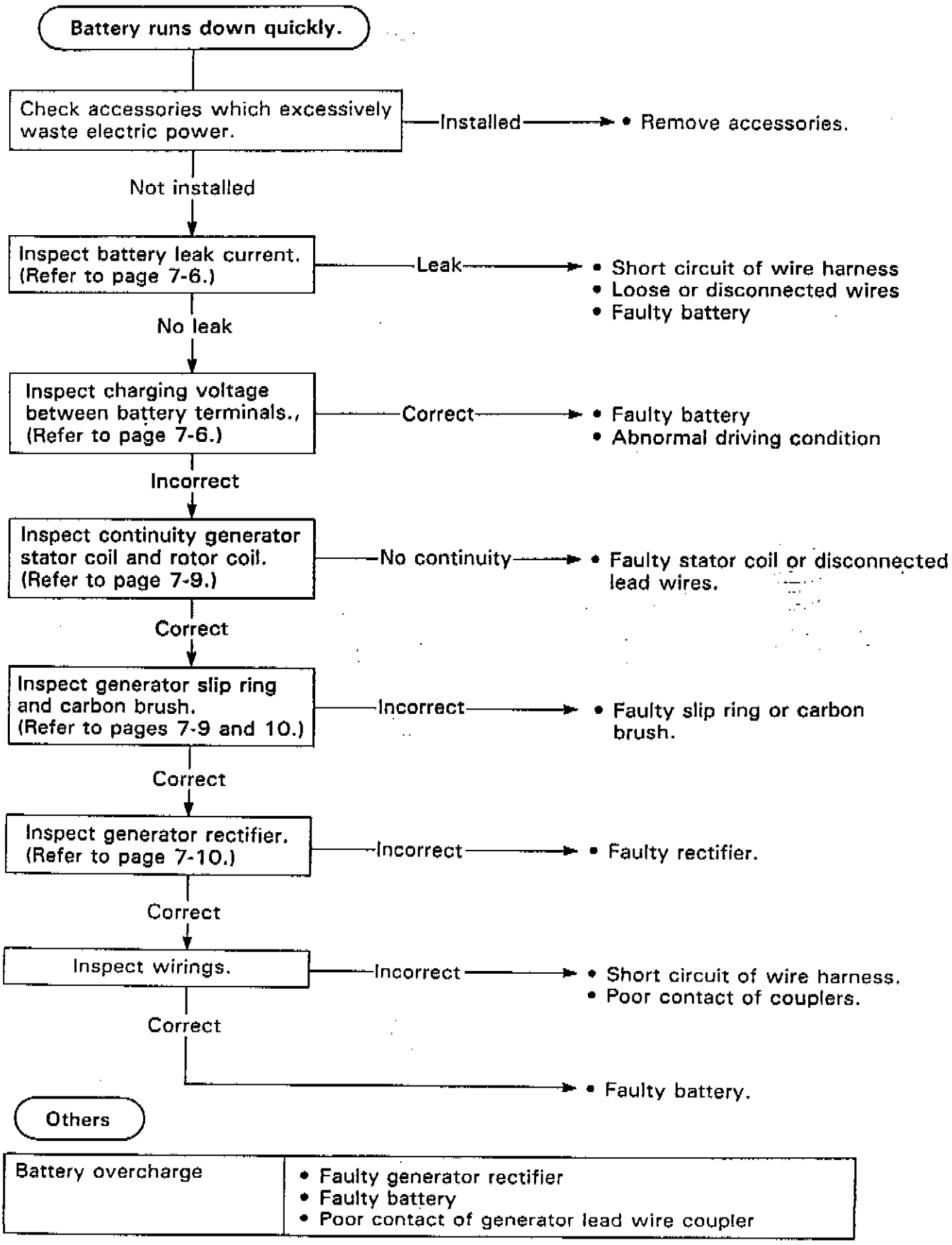
The generator features a solid state regulator that is mounted inside the generator. All regulator components are enclosed into a solid mold, and this unit is attached to the brush holder frame. The regulator voltage setting cannot be adjusted.

Two brushes carry current through the two slip rings to the rotor coil mounted on the rotor.

The stator windings are assembled on the inside of a laminated core that forms part of the generator housing. A rectifier bridge connected to the stator windings contains six diodes, and electrically changes the stator A.C. voltages to a D.C. voltage which appears at the generator output terminal.



TROUBLESHOOTING



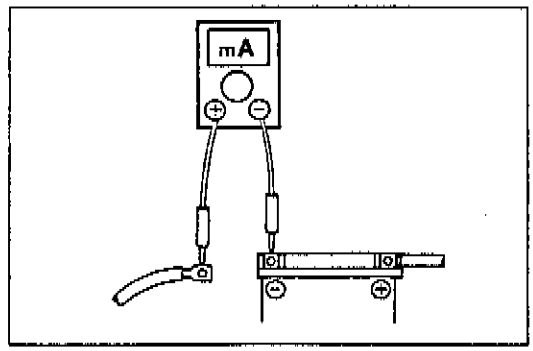
Battery overcharge	• Faulty generator rectifier • Faulty battery • Poor contact of generator lead wire coupler

INSPECTION

BATTERY LEAK CURRENT INSPECTION

- Turn the ignition switch to the OFF position.
- Remove the seat.
- Disconnect the battery ⊖ lead wire.

Note that leakage is indicated if the needle swings even a little when the milliampare meter of the pocket tester is connected between a ⊖ terminal and the lead wire of the battery as shown.



TOOL **09900-25002: Pocket tester**

⚠ CAUTION

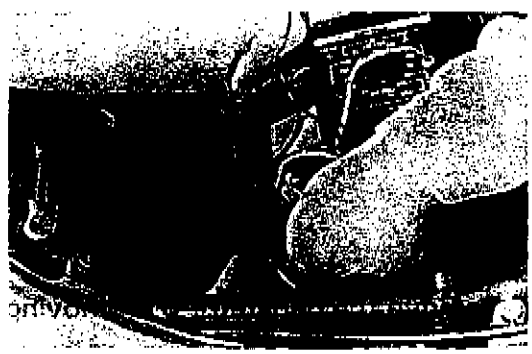
- **Because the leak current might be large, turn the tester to high range first when connecting an ammeter.**
- **Do not turn the ignition switch to the ON position when measuring current.**

When leakage is found, look for the part where the needle does not swing through the couplers and connectors are removed one by one.

CHARGING OUTPUT INSPECTION

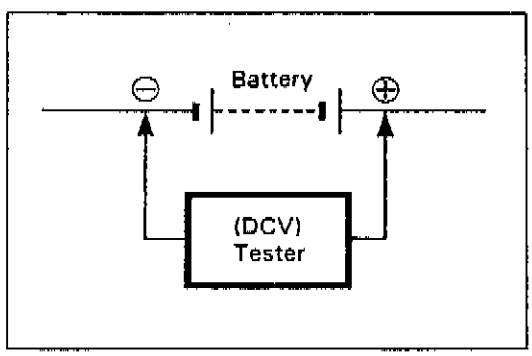
- Remove the seat.
- Start the engine and keep it running at 5 000 r/min.

Measure the DC voltage between the battery terminals ⊕ and ⊖ with a pocket tester. If the tester reads under 13.5V, check the stator coil, rectifier and IC regulator mounted in the generator.



⚠ CAUTION

If the pocket tester is set to read current or resistance and a voltage is applied across the test probes, damage will result. Therefore, it is important that the tester knob on the pocket tester be set the proper position before making any measurements.



NOTE:
When making this test, be sure that the battery is fully-charged condition.

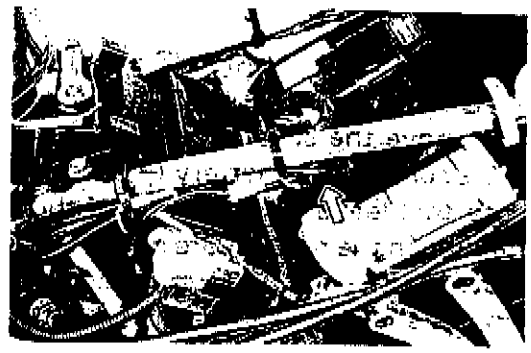
TOOL **09900-25002: Pocket tester**

Tester knob indication: DC 25V

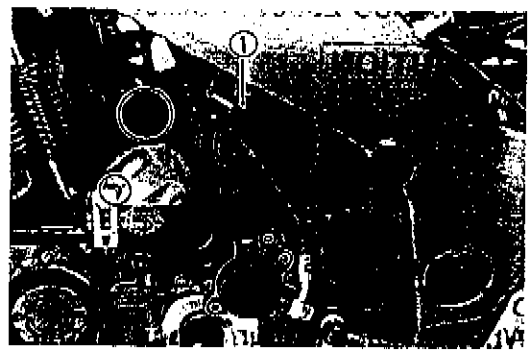
Charging output
Standard: Above 13.5V at 5 000 r/min.

REMOVAL AND DISASSEMBLY

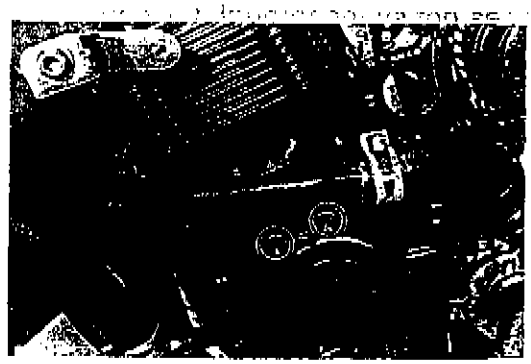
- Remove the seat and frame cover assembly. (Refer to page 6-5.)
- Remove the lower cowling. (Refer to page 6-2.)
- Disconnect the generator lead wire coupler.



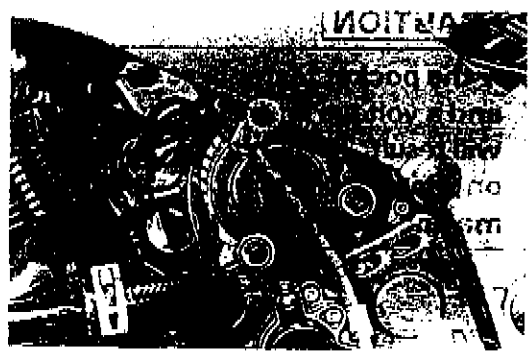
- Remove the starter motor.
- Remove the throttle stop screw bracket bolt ①.



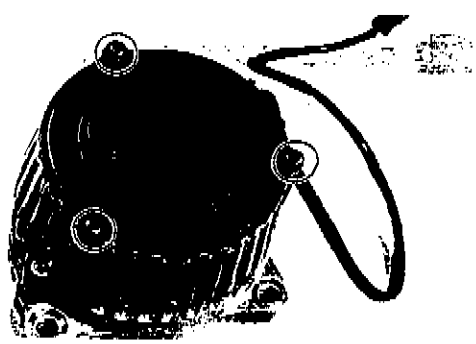
- Remove the coolant hose mounting bolts.



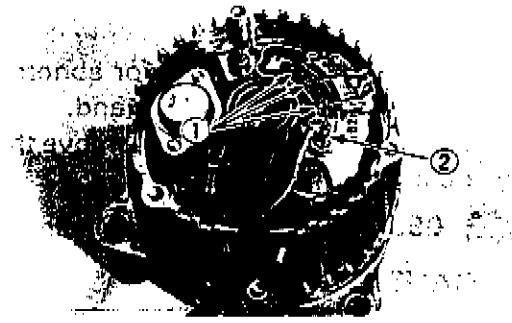
- Remove the generator by removing the mounting bolts.



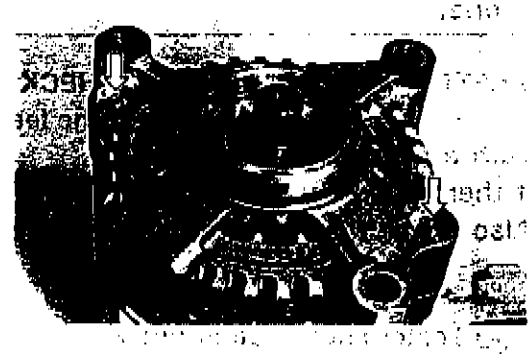
- Remove the generator end cover.



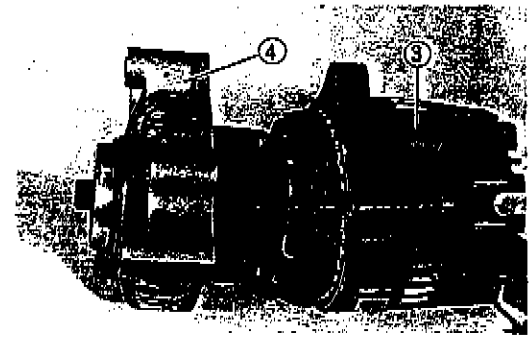
- Disconnect the stator coil lead wires ① and battery lead wire ② by using a soldering iron.
- Remove the brush holder, IC regulator and rectifier to remove three screws.



- Remove the two nuts.



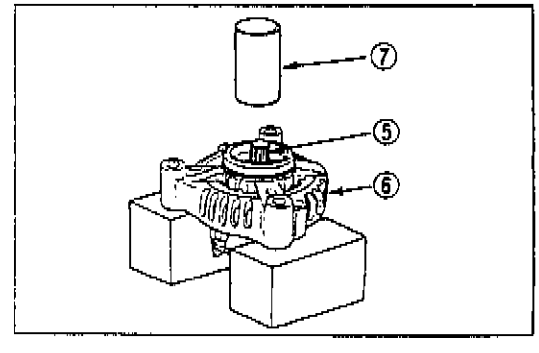
- Remove the generator housing ③ from generator end housing ④ .



- Remove the four bearing retainer screws.



- Remove the rotor ⑤ from generator end housing ⑥ by using a hand-press ⑦ as shown.



INSPECTION

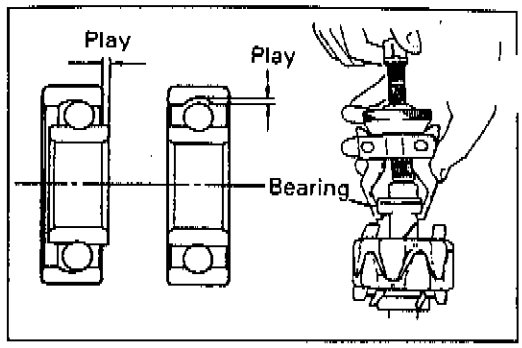
ROTOR BEARING

Inspect the rotor bearings for abnormal noise and smooth rotation to rotate them by hand.
If there is anything unusual, remove the bearing with a bearing puller.

09913-60910: Bearing puller (40—60 mm)

⚠ CAUTION

The removed bearing should be replaced with a new one.

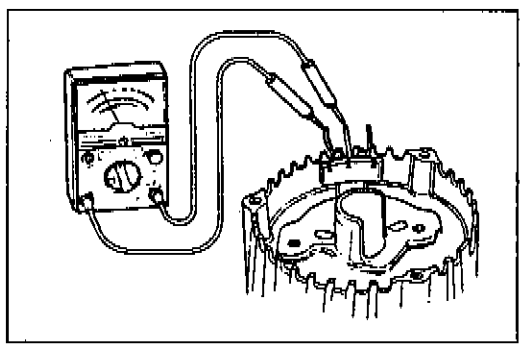


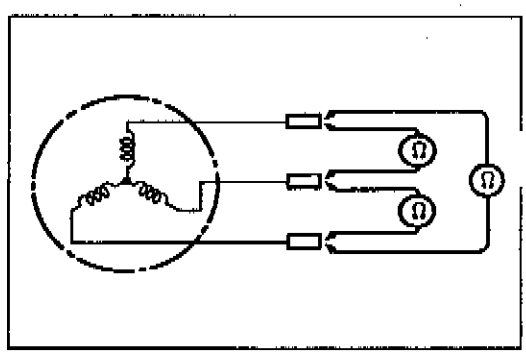
STATOR COIL CONTINUITY CHECK

Check the continuity between the lead wires of the stator with a pocket tester.
If there is no continuity, replace the stator.
Also check that the stator core is insulated.

09900-25002: Pocket tester

Tester knob indication: X 1Ω range



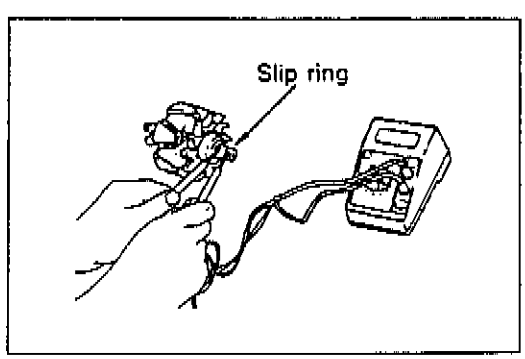


ROTOR COIL CONTINUITY CHECK

Check the continuity between the two slip rings of the rotor with a pocket tester.
If there is no continuity, replace the rotor.
Also check that the rotor is insulated.

09900-25002: Pocket tester

Tester knob indication: X 1Ω range

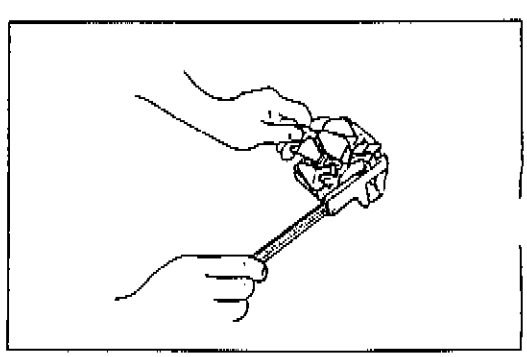


SLIP RING

If the slip ring surface is dirty, polish it with #400 fine emery paper to protect the charging performance. After polishing, wipe the slip ring with a clean dry cloth.

09900-20102: Vernier calipers (200 mm)

Slip ring O.D.
Service Limit: 14.0 mm (0.55 in)

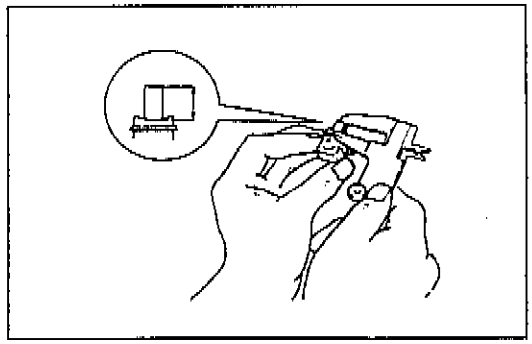


CARBON BRUSH

Measure the length of the brushes as shown. If it exceeds the service limit, replace them with new ones.

09900-20102: Vernier calipers (200 mm)

Brush length
Service Limit: 4.5 mm (0.18 in)

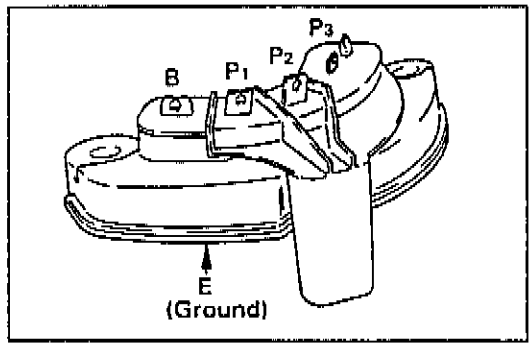


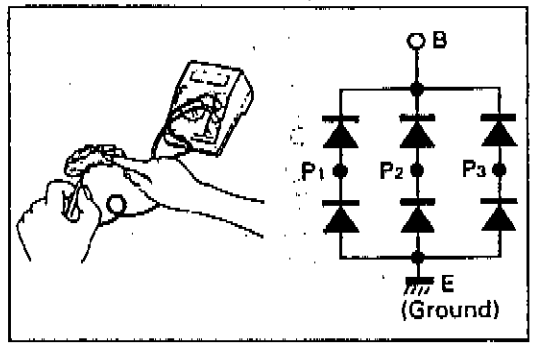
RECTIFIER

Check the continuity between terminals and ground. Put one tester lead to terminal "B" and the other lead to ground or other terminals; then swap the two leads. Of the two tester indications, one should be continuity, and the other should be infinity (non continuity). If not, replace the rectifier assembly.

09900-25002: Pocket tester

Tester knob indication: X 1Ω range





IC REGULATOR

Use a variable DC power source, switch, bulb and pocket tester, check the IC regulator, which re quires two steps described below:

First check:

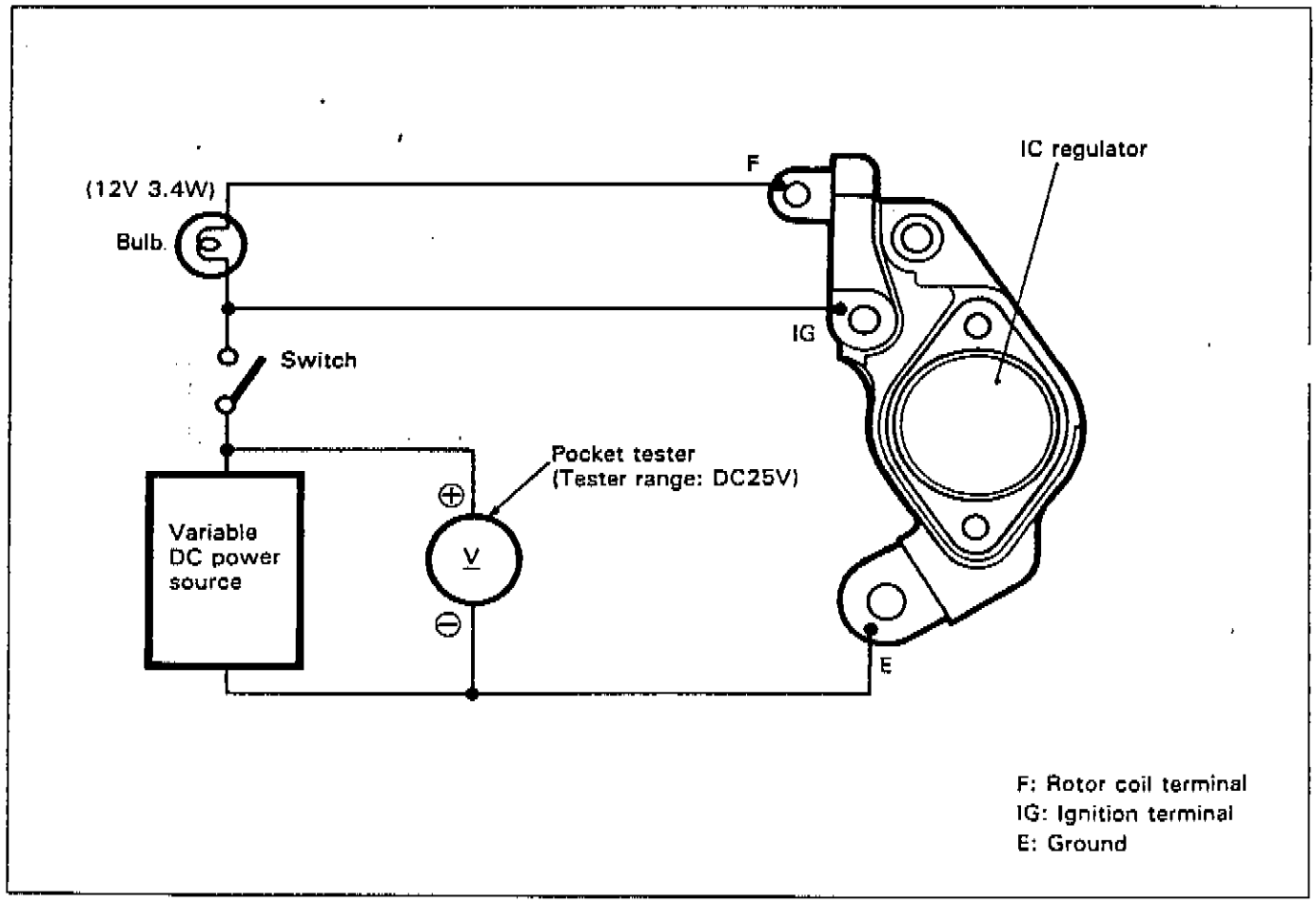
Set the variable DC power source to 12V and turn the switch to the ON position. If the bulb does not light, replace the IC regulator. If the bulb is lighting ON, this IC regulator has passed the first check.

Second check:

Under the above condition, set the variable DC power source to 14.5V, if the bulb goes out, the IC regulator is in good condition. If the bulb remains lit, replace the IC regulator.

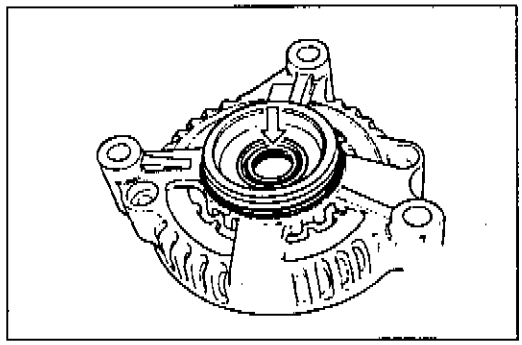
09900-25002: Pocket tester

Tester knob indication: DC25V



REASSEMBLY AND REMOUNTING

Reassemble and remount the generator in the reverse order of disassembly and removal. Pay attention to the following points:



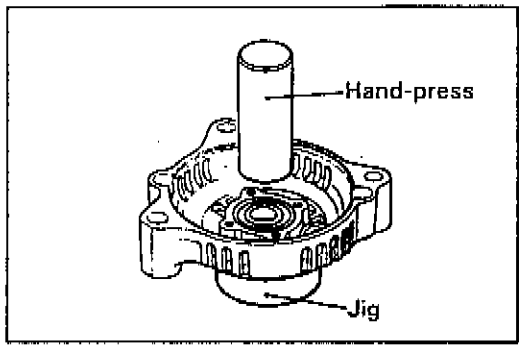
- Apply grease to the lip of the oil seal.

99000-25030: SUZUKI SUPER GREASE "A"

⚠ CAUTION

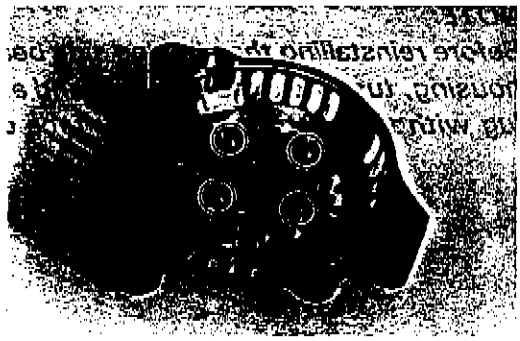
The removed oil seal should be replaced with a new one.

- Install the bearing by using a hand-press as shown.

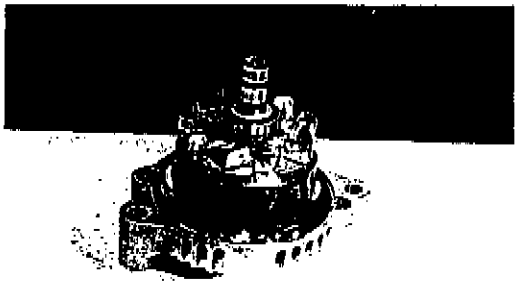


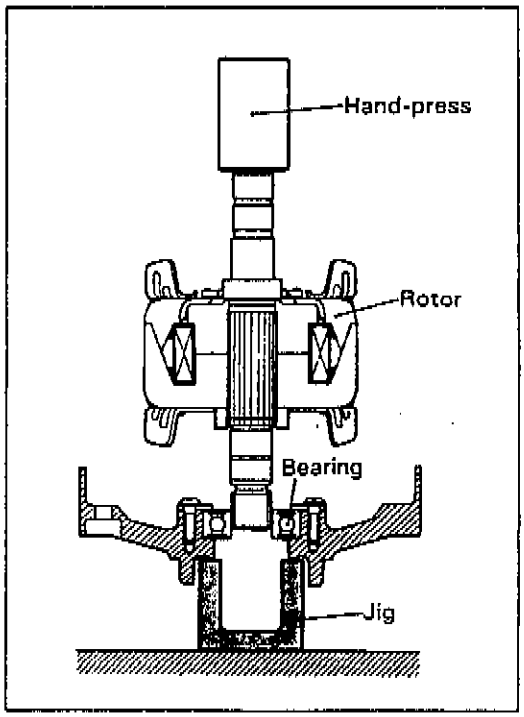
- Apply a small quantity of THREAD LOCK "1342" to the bearing retainer screws.

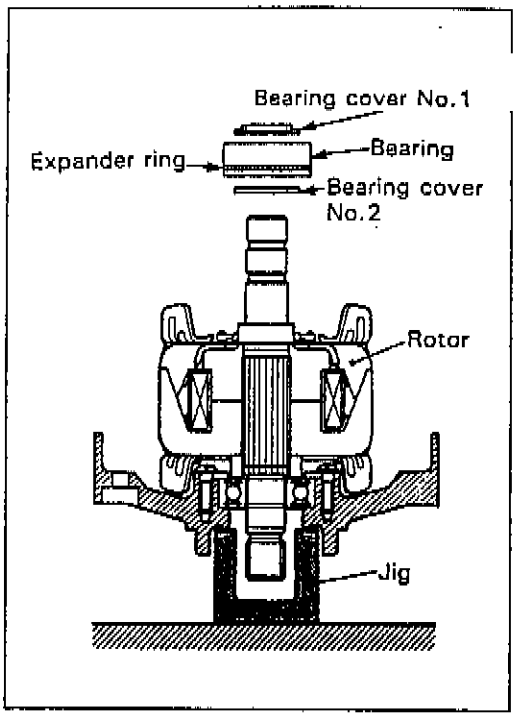
99000-32050: THREAD LOCK "1342"



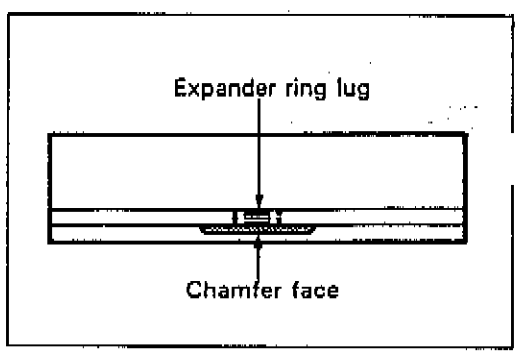
- Install the rotor and bearing by using a hand-press as shown.



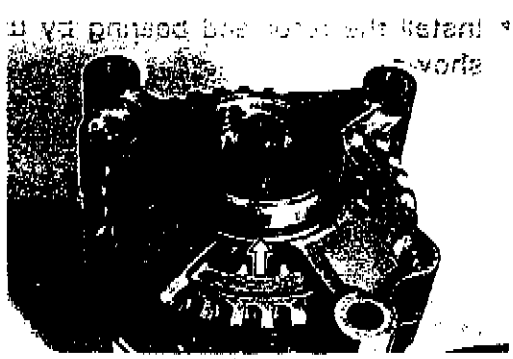




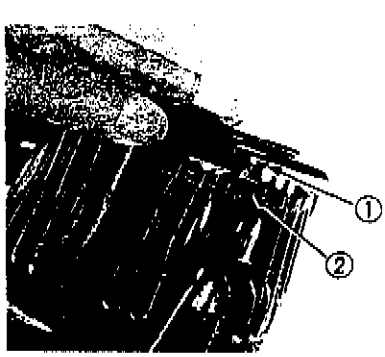
NOTE:
Before reinstalling the slip ring side bearing to generator end housing, turn the expander ring and align the expander ring lug with the center of chamfer face of bearing outer race.



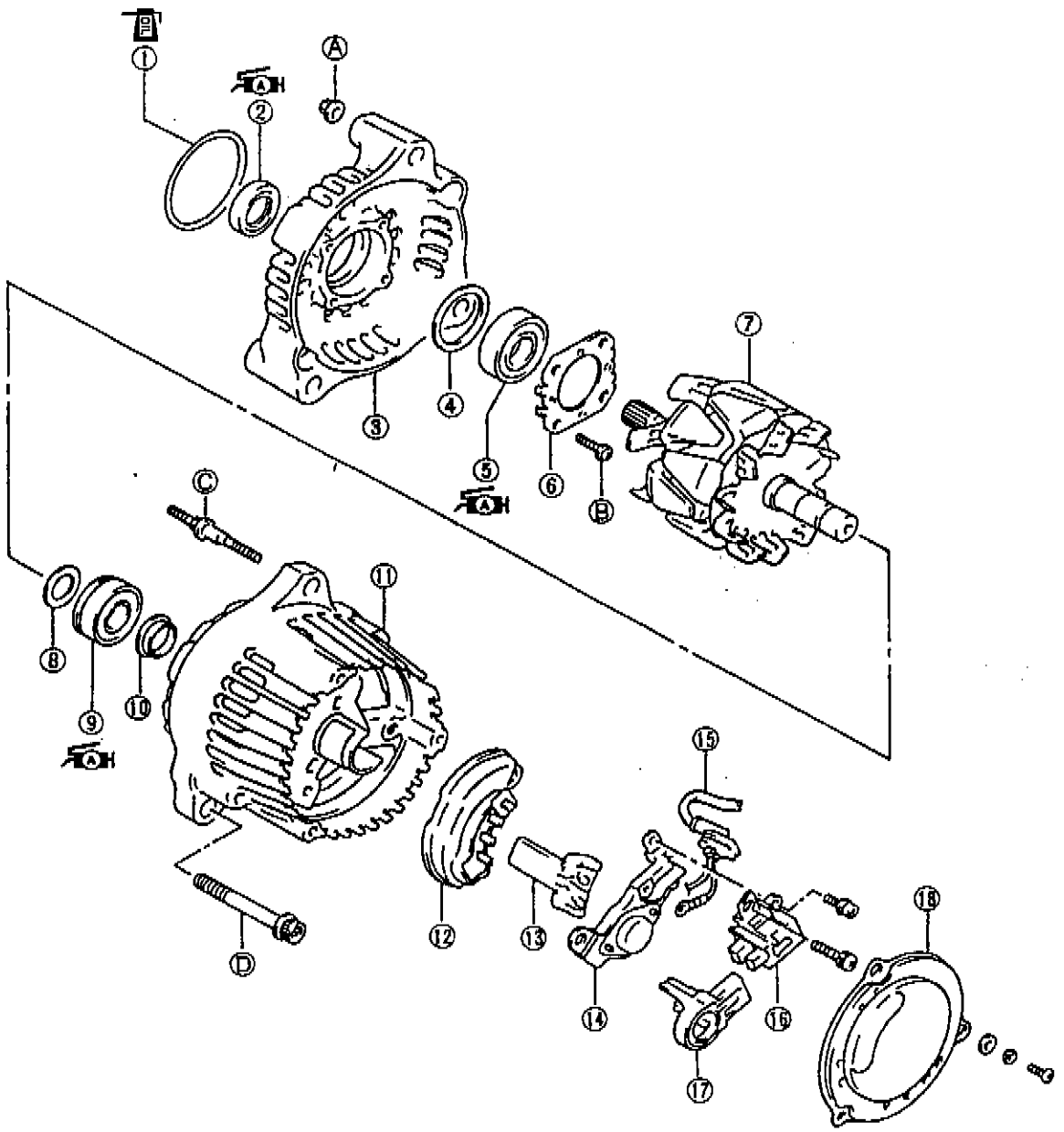
- Fit a new O-ring to the generator end housing.



- Align the lug ① of the generator end cover with the groove ② of the lead wire grommet.



REASSEMBLY INFORMATION



① O-ring
② Oil seal
③ Generator end housing
④ Bearing seat
⑤ Bearing
⑥ Bearing retainer
⑦ Rotor
⑧ Bearing cover No. 2
⑨ Bearing
⑩ Bearing cover No. 1
⑪ Generator housing
⑫ Rectifier
⑬ Rectifier cover
⑭ IC regulator
⑮ Generator lead wire
⑯ Brush holder
⑰ Brush cover
⑱ Generator end cover

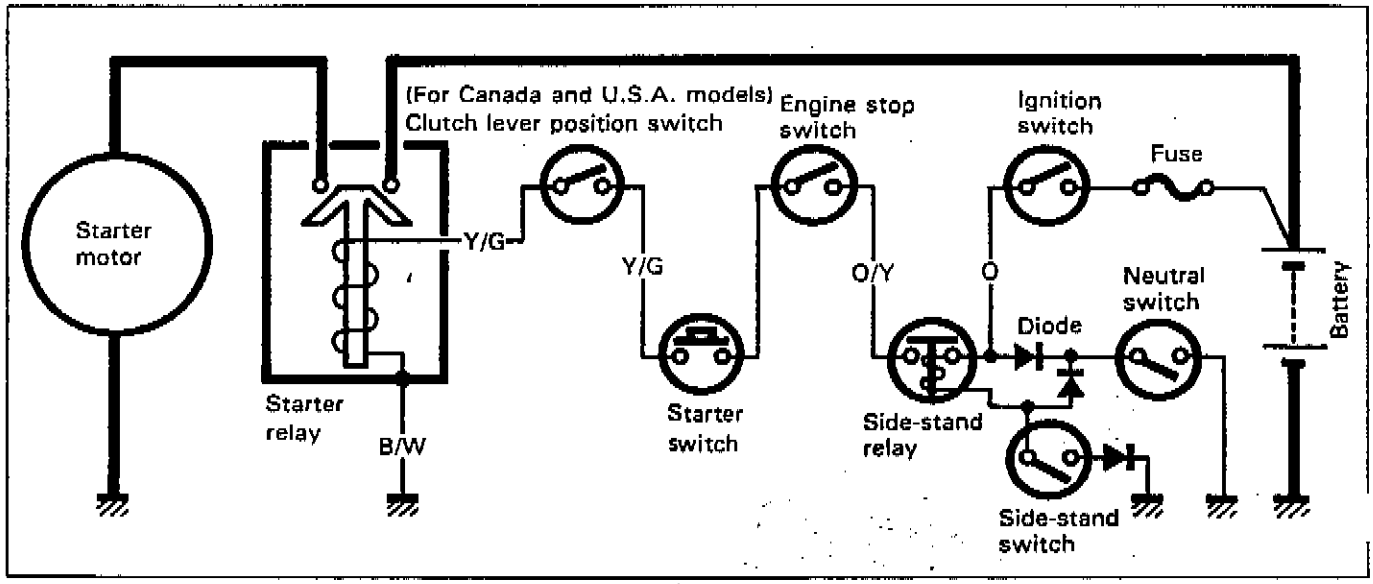
ITEM	N·m	kg-m	lb-ft
Ⓐ	4.6	0.46	3.3
Ⓑ	2.8	0.28	2.0
Ⓒ	4.6	0.46	3.3
Ⓓ	25	2.5	18.0

STARTER SYSTEM AND SIDE-STAND/IGNITION INTERLOCK SYSTEM

STARTER SYSTEM DESCRIPTION

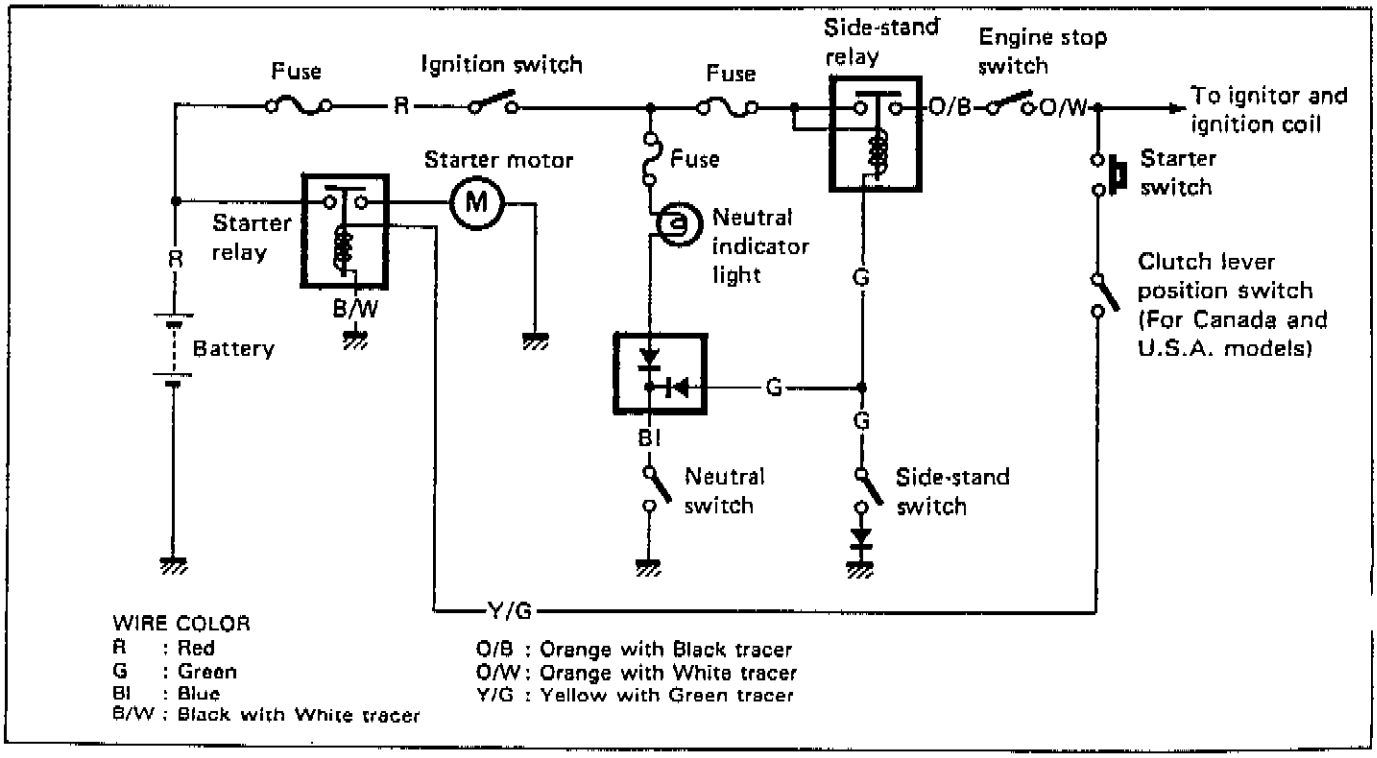
The starter system is shown in the diagram below: namely, the starter motor, starter relay, side-stand relay, side-stand switch, neutral switch, clutch lever position switch, starter switch, engine stop switch, IG switch and battery.

Depressing the starter switch (on the right handlebar switch box) energizes the relay, causing the contact points to close which connects the starter motor to the battery. The motor draws about 80 amperes to start the engine.



SIDE-STAND/IGNITION INTERLOCK SYSTEM DESCRIPTION

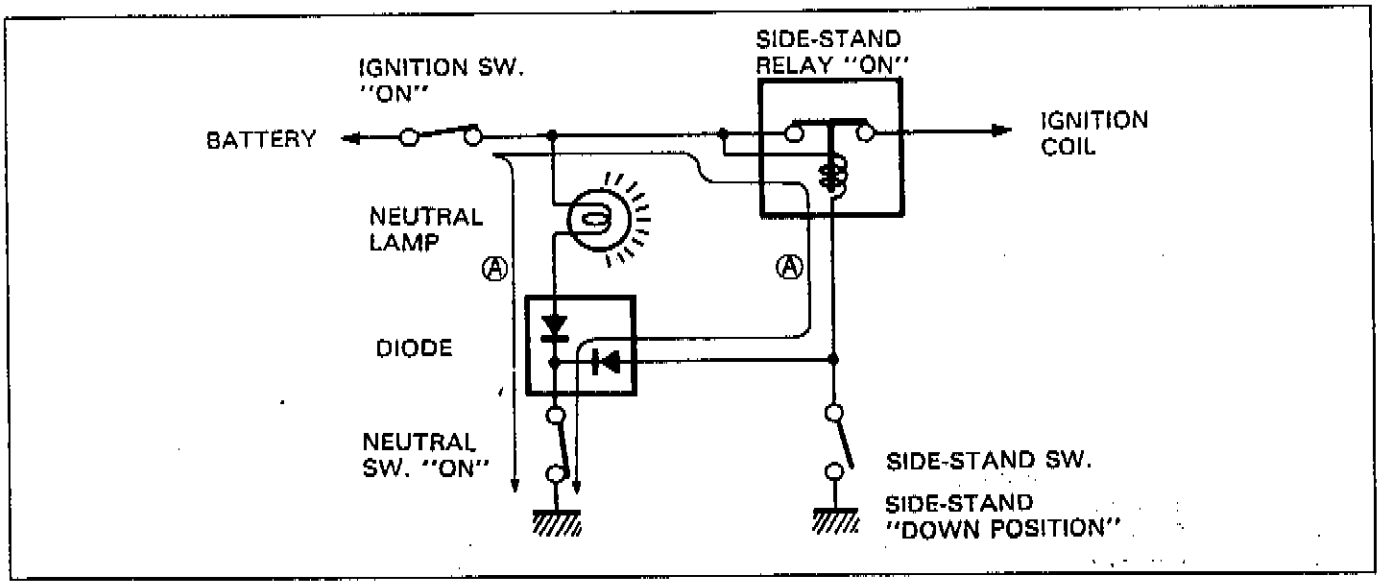
This side-stand/ignition interlock system is to prevent starting the motorcycle with the side-stand left down. The system is operated by an electric circuit provided between the battery and ignition coil.



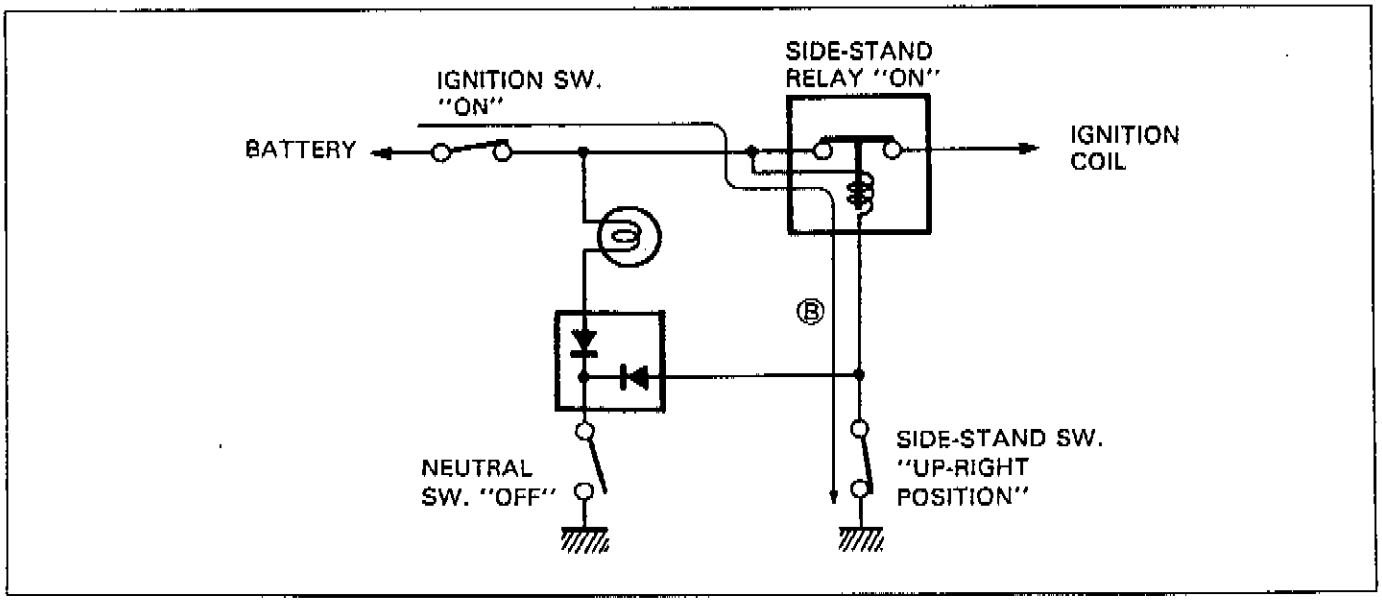
The circuit consists of relay, lamp, diode and switches and decides to live the ignition coil depending on the position of the TRANSMISSION and SIDE-STAND with the neutral and side-stand switches working mutually.

The ignition coil lives only in two situations as follows.

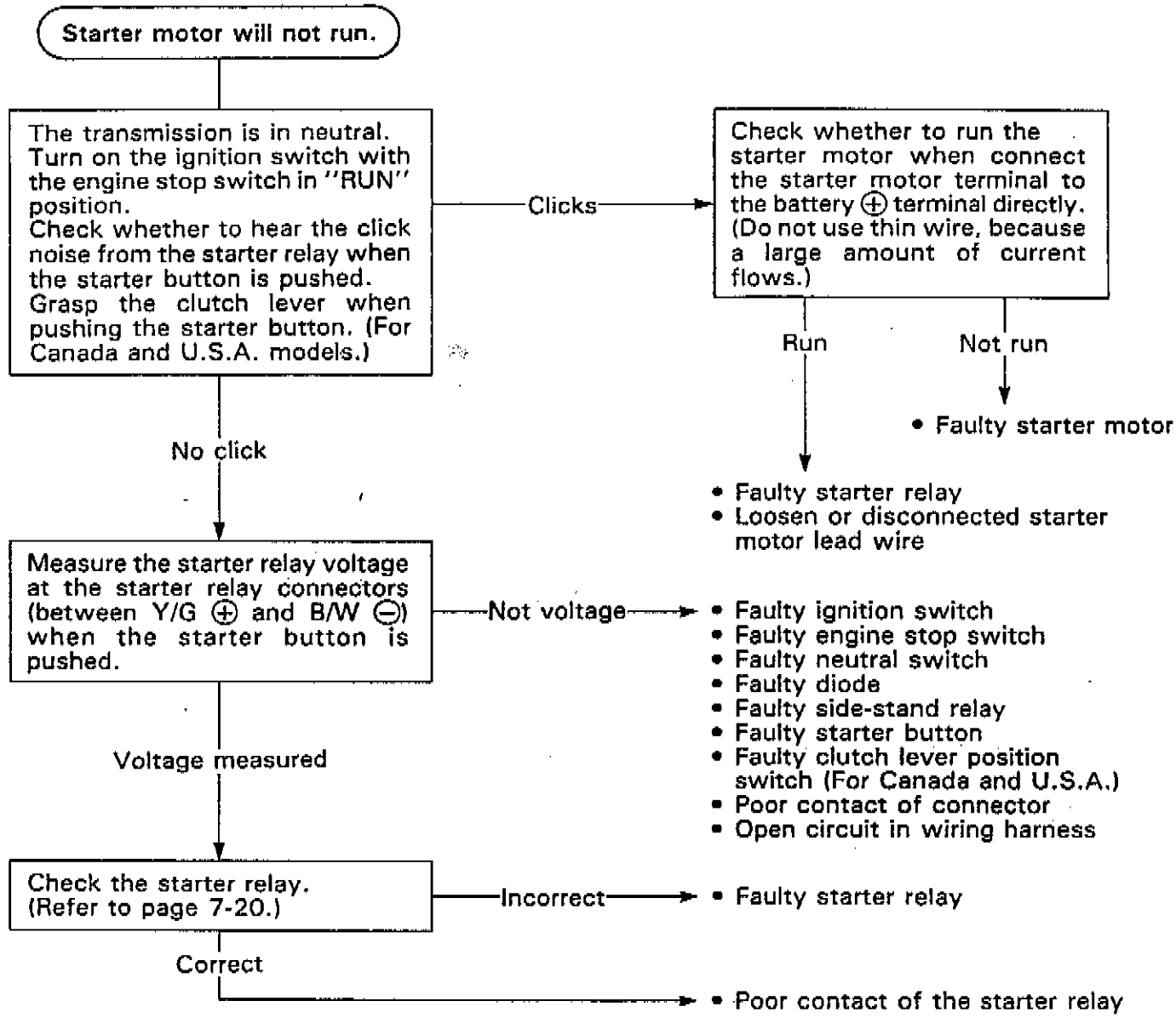
1. Transmission: "NEUTRAL (ON)" Side-stand: "DOWN (OFF)"
   The current flow Ⓐ turns "ON" the relay and the ignition coil lives even the side-stand is kept down. This is or warming up the engine.



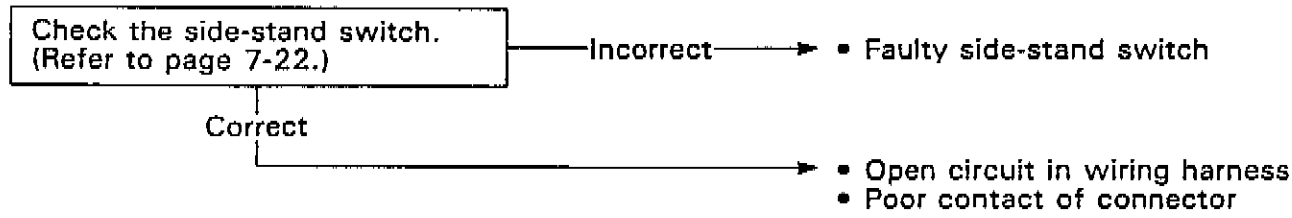
2. Side-stand: "UP-RIGHT (ON)"
   The current flow Ⓑ turns "ON" the relay and the ignition coil lives. The engine can be easily started at any transmission position.



TROUBLESHOOTING



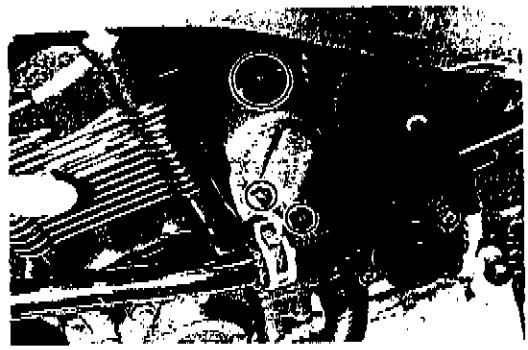
Starter motor runs when the transmission is in neutral, but does not run with the transmission in any position except neutral, with the side-stand up position.



Others

Engine does not turn though starter motor runs.	• Faulty starter clutch

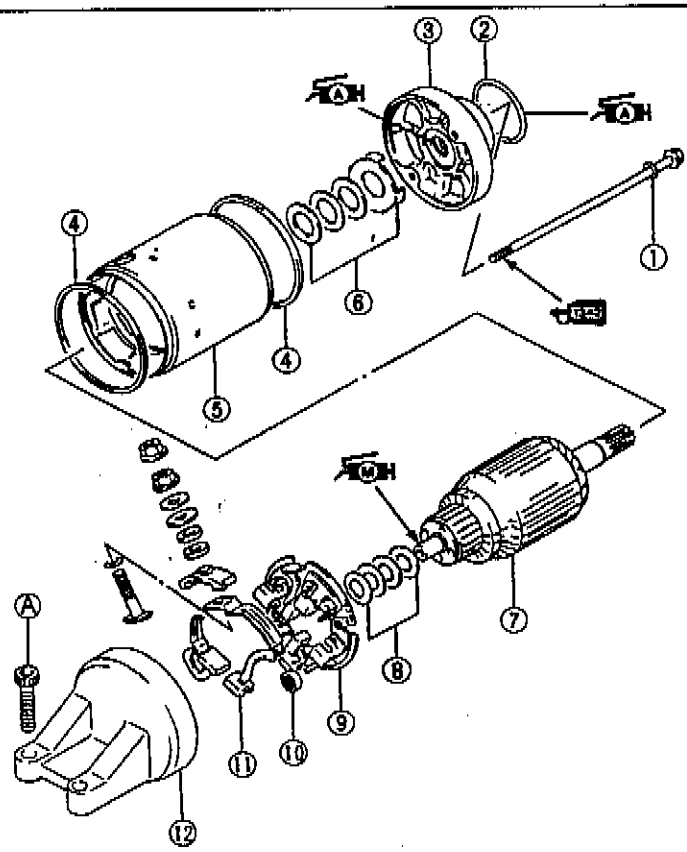
STARTER MOTOR REMOVAL AND DISASSEMBLY



- Remove the lower cowling assembly. (Refer to page 7-2.)
- Disconnect the starter motor lead wire and remove the starter motor by removing the mounting bolts.

NOTE:
If it is difficult to remove the starter motor, remove the water hose mounting bolts to provide additional space.

- Disassemble the starter motor as shown in the illustration.



Ⓐ: 6 N·m (0.6 kg-m, 4.5 lb-ft)

① O-ring (2 pcs)
② O-ring
③ Housing end (Inside)
④ O-ring (2 pcs)
⑤ Starter motor case
⑥ Washer set
⑦ Armature
⑧ Shim set
⑨ Brush holder
⑩ Brush spring (4 pcs)
⑪ Brush
⑫ Housing end (Outside)

STARTER MOTOR INSPECTION

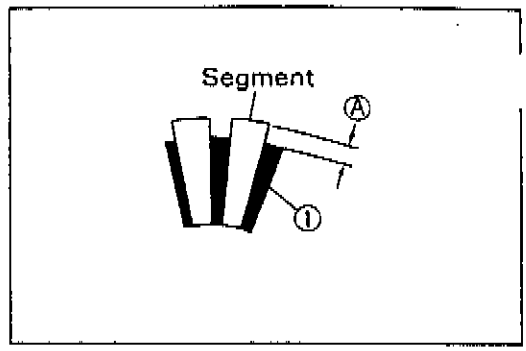
CARBON BRUSH

Inspect the brushed for abnormal wear, crack or smoothness in the brush holder.
If the brush has failed, replace the brush sub assy.



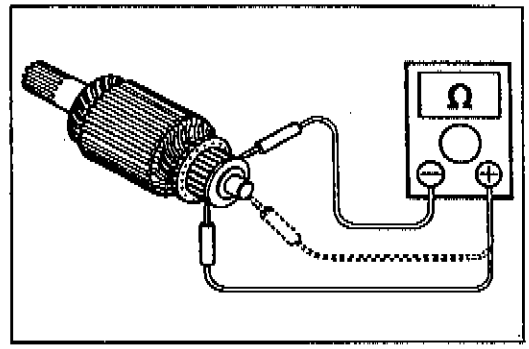
COMMUTATOR

Inspect the commutator for discoloration, abnormal wear or undercut Ⓐ.
If the commutator is abnormally worn, replace the armature.
When surface is descolored, polish it with #400 sand paper and clean it with dry cloth.
If there is no undercut, scrape out the insulator ① with saw blade.



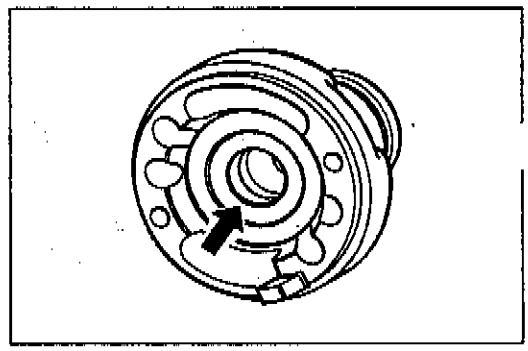
ARMATURE COIL INSPECTION

Check for continuity between each segment.
Check for continuity between each segment and the armature shaft.
If there is no continuity between the segments or there is continuity between the segments and shaft, replace the armature with a new one.



OIL SEAL INSPECTION

Check the seal lip for damage or leakage.
If any damage is found, replace the bracket.



STARTER MOTOR REASSEMBLY

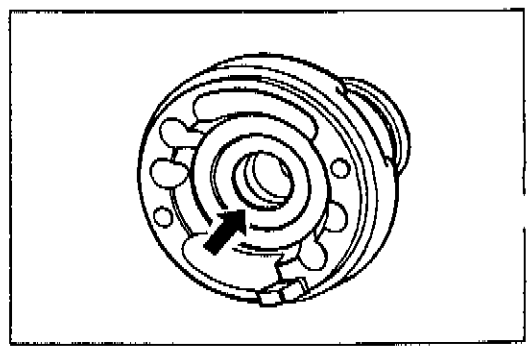
Reassemble the starter motor in the reverse order of disassembly. Pay attention to the following points:

⚠ CAUTION

Replace the O-rings with new ones to prevent oil leakage and moisture.

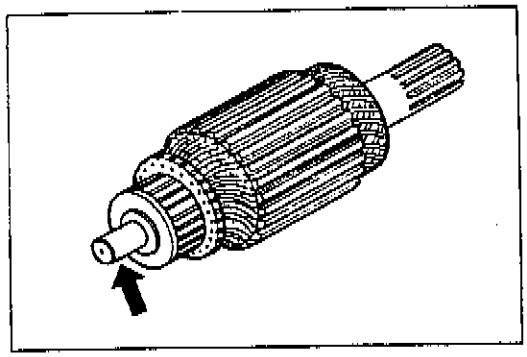
- Apply SUZUKI SUPER GREASE "A" to the lip of the oil seal.

Ⓐ 99000-25030: SUZUKI SUPER GREASE "A"



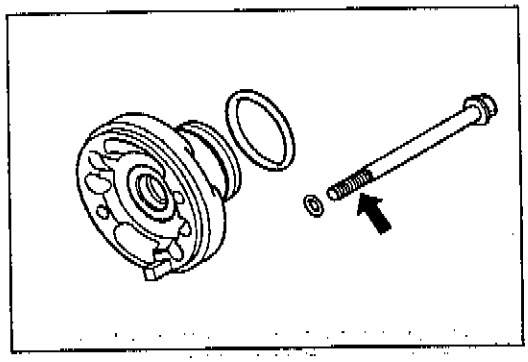
- Apply a small quantity of MOLY PASTE to the armature shaft.

99000-25140: SUZUKI MOLY PASTE



- Apply a small quantity of THREAD LOCK "1342" to the starter motor housing bolts.

99000-32050: THREAD LOCK "1342"



STARTER RELAY INSPECTION

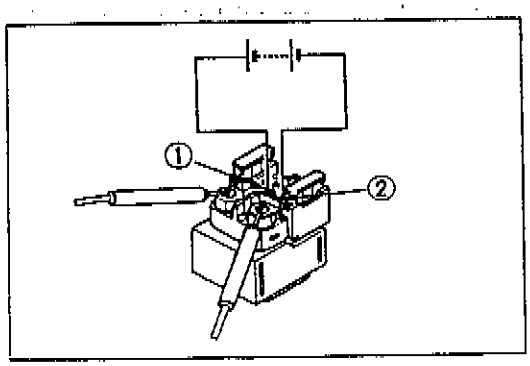
- Remove the seat and frame cover assembly. (Refer to page 6-5.)
- Remove the cover.
- Disconnect the starter motor lead wire and battery lead wire at the starter relay which is located behind the left frame cover.
- Disconnect the lead wire coupler from the starter relay.



Apply 12 volts to ① and ② terminals, inspect the continuity between the terminals, positive and negative.
If the starter relay is in sound condition, continuity is found.

09900-25002: Pocket tester

Tester knob indication: X 1Ω range



⚠ CAUTION

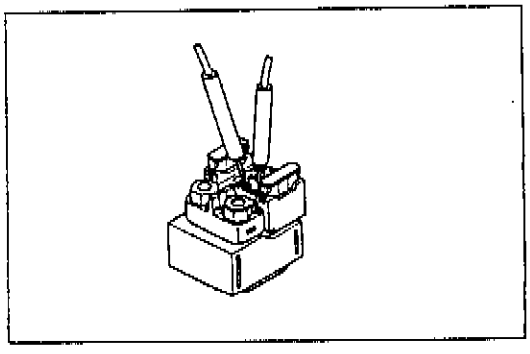
Do not apply a battery voltage more than 5 seconds to the starter relay as it may overheat and cause damage to the relay coil.

Check the coil for "open", "ground" and ohmic resistance.
The coil is in good condition if the resistance is as follows.

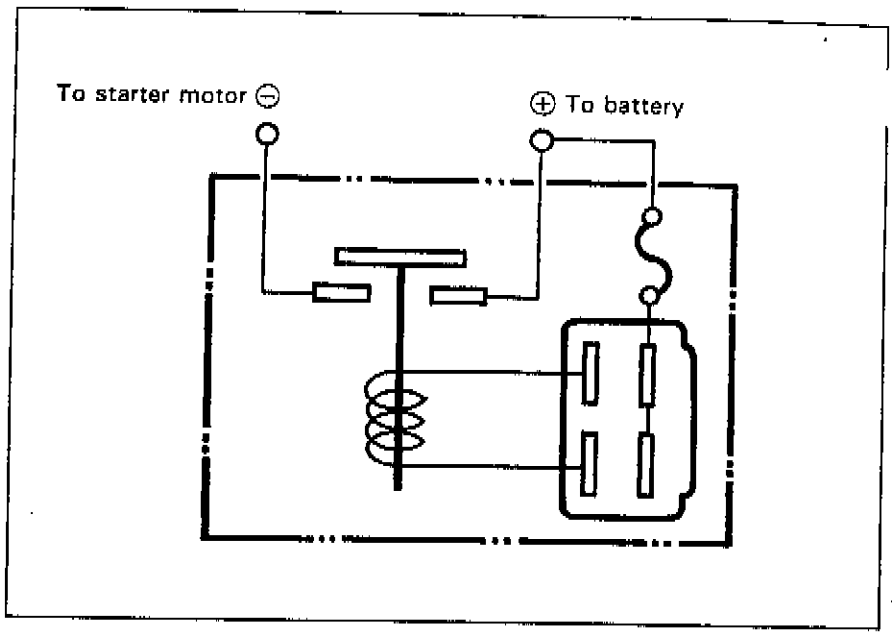
09900-25002: Pocket tester

Tester knob indication: X 1Ω range

Starter relay resistance
Standard: 3—5Ω



STARTER RELAY WIRING DIAGRAM



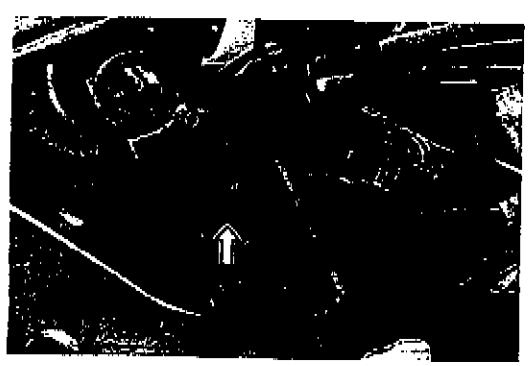
SIDE-STAND/IGNITION INTERLOCK SYSTEM PART INSPECTION

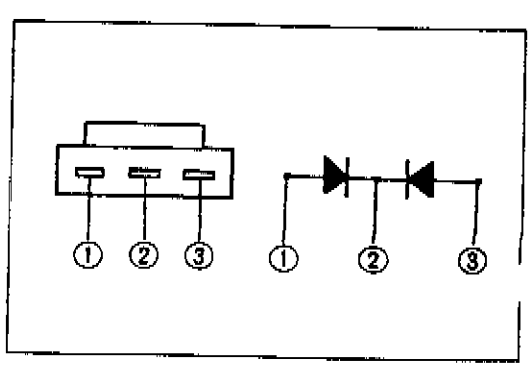
If the interlock system does not operate properly, check each component. If any abnormality is found, replace the component with a new one.

09900-25002: Pocket tester

DIODE

The diode is located behind the left frame cover.
The diode can pass current only in one direction.
Check the continuity between ① and ② . If one way continuity the diode is in good condition.
Also check the continuity between ② and ③ as required.

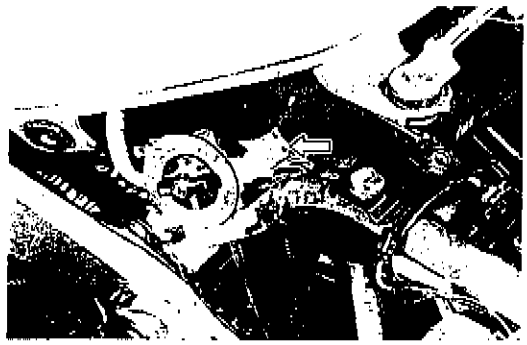




NEUTRAL SWITCH

The neutral lead wire coupler is located behind the left frame cover.

- Remove the seats and frame cover assembly.
- Disconnect the neutral switch lead and check the continuity between Blue and Ground with the transmission in "NEUTRAL".



SIDE-STAND SWITCH

	Green (⊖ Proboe)	Black/White (⊕ Proboe)
ON (UP-right position)	○———	———○
OFF (Down position)		

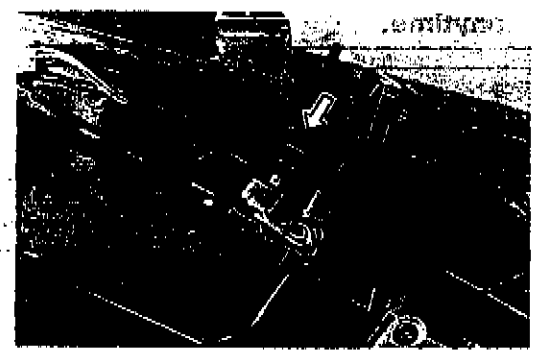




SIDE-STAND/IGNITION INTERLOCK RELAY

The side-stand/ignition interlock relay is located behind the right frame cover.

- Remove the seats and frame cover assembly.

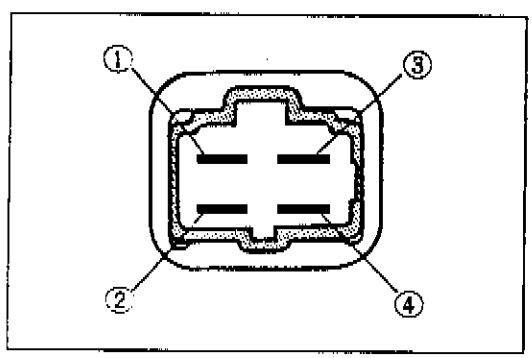


First, check the insulation between ① and ② terminals with pocket tester. Then apply 12 volts to ③ and ④ terminals, ⊕ to ③ and ⊖ to ④ , and check the continuity between ① and ② .

If there is no continuity, replace it with a new one.

09900-25002: Pocket tester

Tester knob indication: X 1Ω range



IGNITION SYSTEM (DIGITAL IGNITOR)

DESCRIPTION

The fully transistorized ignition system consists of a signal generator, ignitor unit (including 8-BIT MICROCOMPUTER and CERAMIC 4MHZ VIBRATOR), ignition coils and spark plugs. The characteristic of the ignition timing is programmed and stored in the "ROM" (READ ONLY MEMORY) of the ignitor unit.

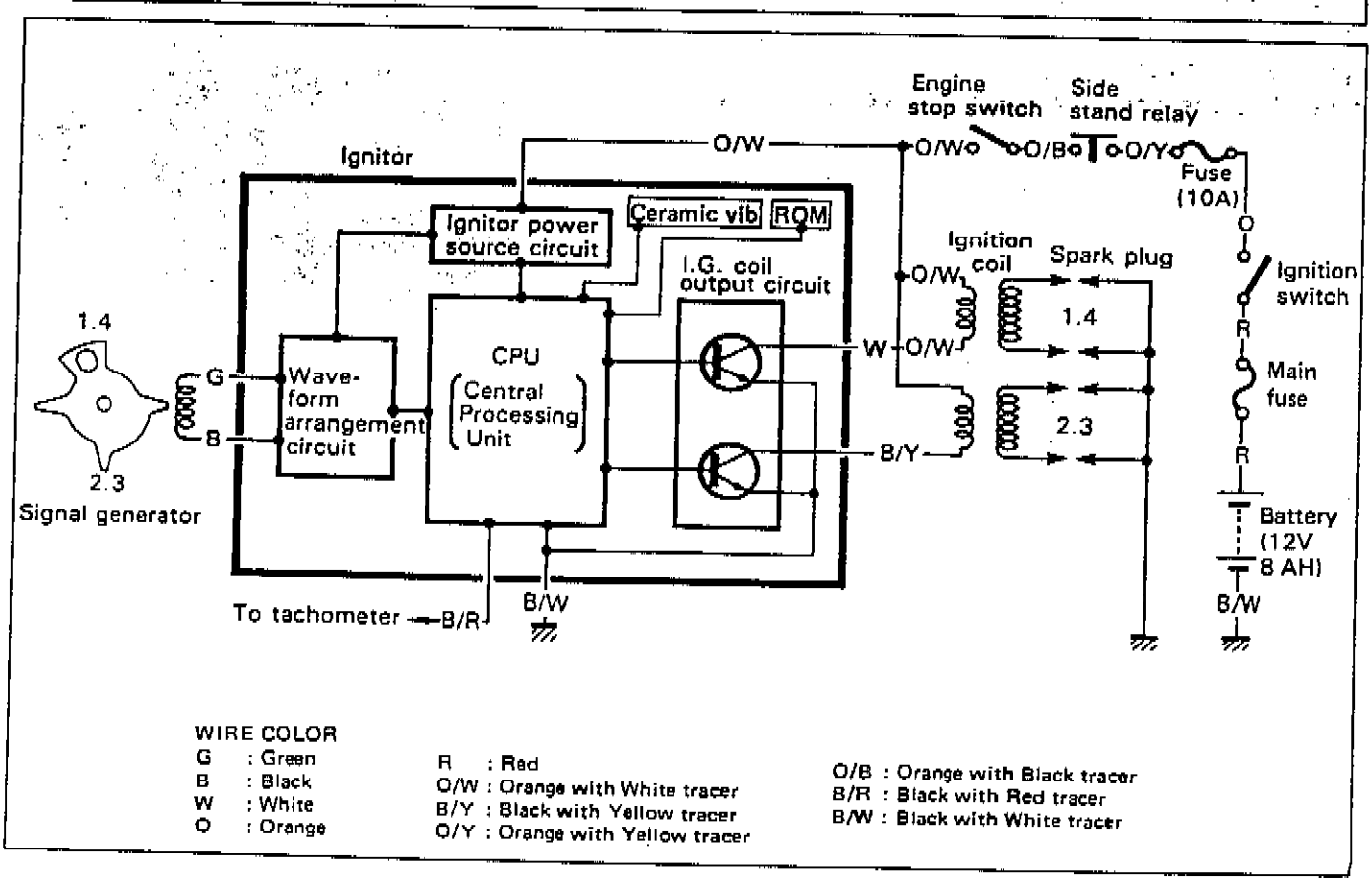
The signal generator comprises the rotor tip and pickup coil.

The signal generator is mounted at the right end of the crankshaft. The induced signal in the signal generator is sent to wave-form arrangement circuit, and CPU receives this signal and calculates the best ignition timing from the signal of ceramic vibrator and data stored in the ROM. The CPU outputs signal to the transistor of the I.G. coil output circuit which is connected to the primary windings of the ignition coil which is turned OFF and ON accordingly, thus it induces the secondary current on the ignition coil secondary windings and produce the spark between spark plug gaps.

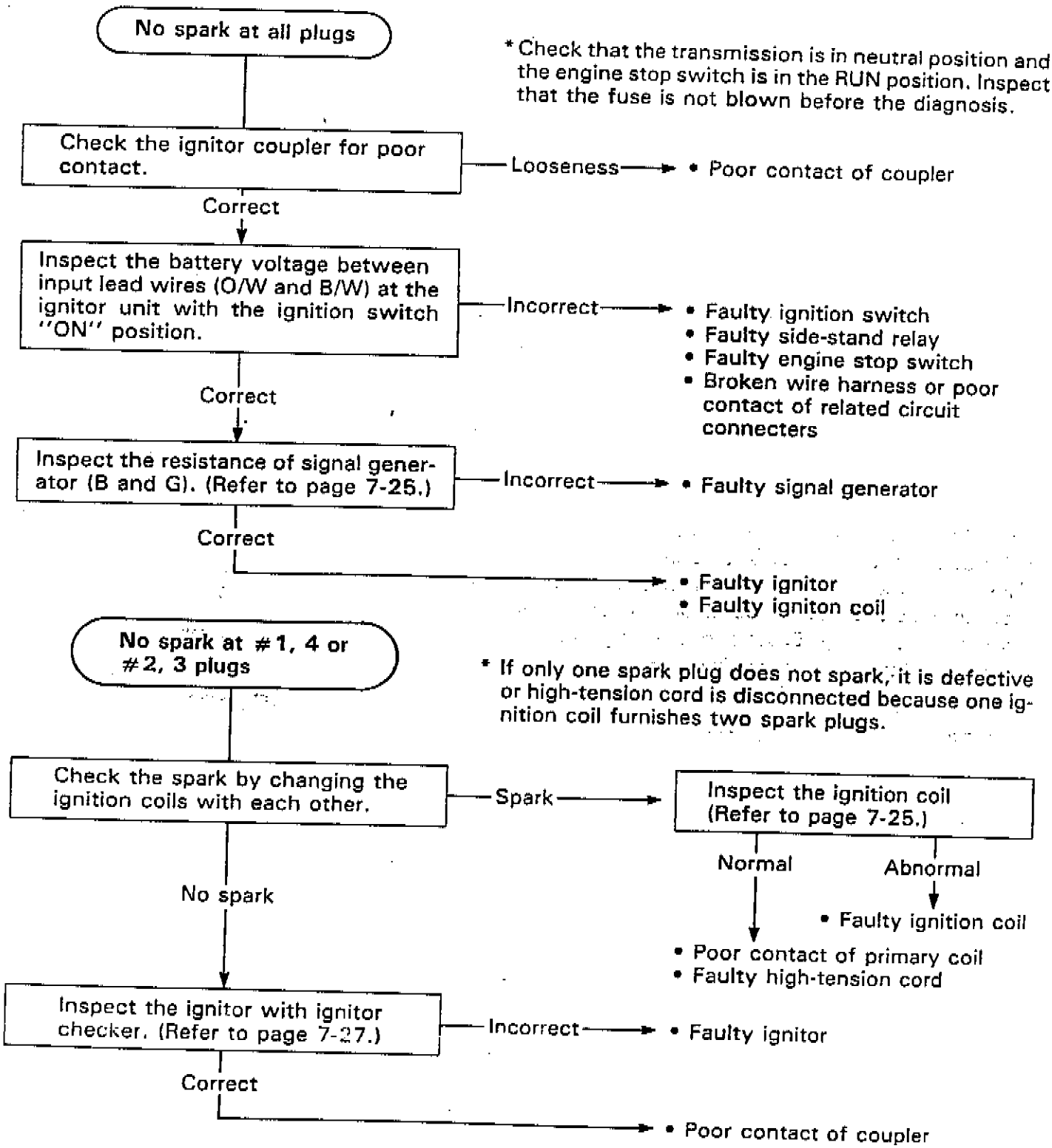
Ignition cut-off circuit is incorporated in the ignitor unit to prevent over-running engine. If engine r/min. reaches 11 500 r/min., this circuit cuts off the ignition primary current for all spark plugs.

⚠ CAUTION

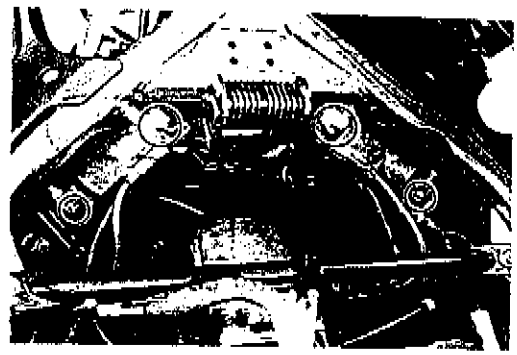
Engine can run over 11 500 r/min. without load, even if the ignition cut-off circuit is effective, and it may cause engine damage. Do not run the engine without load over 11 500 r/min. at anytime.



TROUBLESHOOTING



INSPECTION

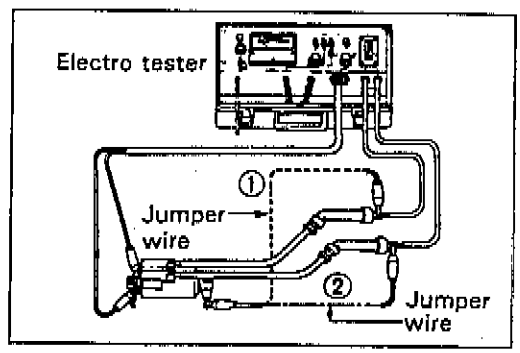


IGNITION COIL (Checking with Electro Tester)

- Remove the fuel tank. (Refer to page 4-5.)
- Remove the ignition coils.

NOTE:
Make sure that the three-needle sparking distance of electro tester is set at 8 mm (0.3 in).

- With the tester and jumper wire, test the ignition coil for sparking performance in accordance with the following two steps.
  STEP ① : Connect the jumper wire to the spark plug cap and ignition coil ground.
  STEP ② : Switch over the jumper wire to the other plug cap and ground.
  If no sparking or orange color sparking occures in the above conditions, it may be caused by defective coil.

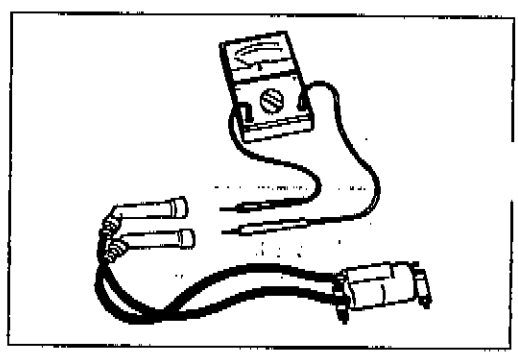


TOOL **09900-28106: Electro tester**

Spark performance: Over 8 mm (0.3 in)

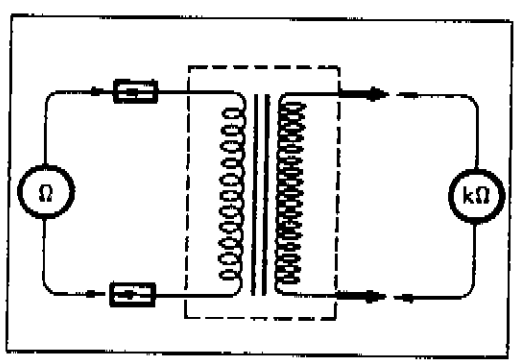
IGNITION COIL (Checking with Pocket Tester)

- A SUZUKI pocket tester or an ohm meter may be used, instead of the electro tester. In either case, the ignition coil is to be checked for continuity in both primary and secondary windings. Exact ohmic readings are not necessary, but, if the windings are in sound condition, their continuity will be noted with these approximate ohmic values.



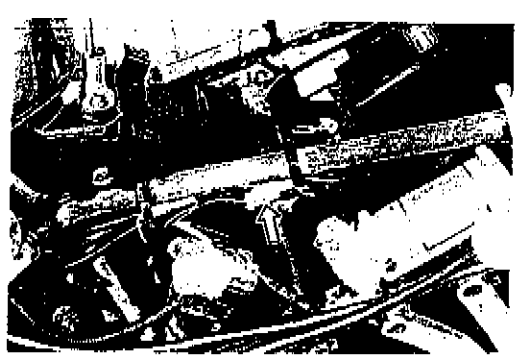
TOOL **09900-25002: Pocket tester**

Ignition coil resistance
Primary: 2.4—3.2Ω (⊕ tap—⊖ tap)
Tester knob indication: X 1Ω range
Secondary: 30—40 kΩ (Plug cap—Plug cap)
Tester knob indication: X 1 kΩ range



SIGNAL GENERATOR (Checking with Pocket Tester)

- Remove the seat and disconnect the lead wires.
- Measure the resistance between lead wires. If the resistance is infinity or less than the specifications, the signal generator must be replaced.



TOOL **09900-25002: Pocket tester**

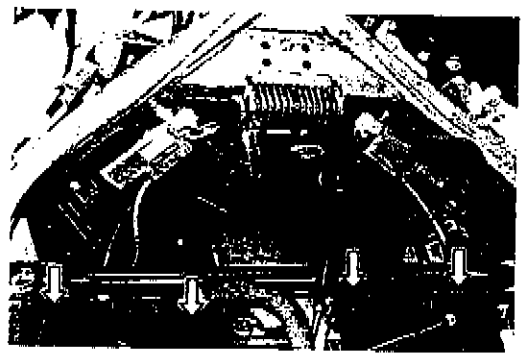
Signal coil resistance: Approx. 135—200Ω (Black—Green)
Tester knob indication: X 100Ω range

SPARK PLUGS

- Remove the fuel tank. (Refer to page 4-5.)
- Remove all the spark plugs.

Carbon Deposit

Check to see the carbon deposit on the plug.
If the carbon is deposited, remove it with a spark plug cleaner machine or carefully using a tool with a pointed end.

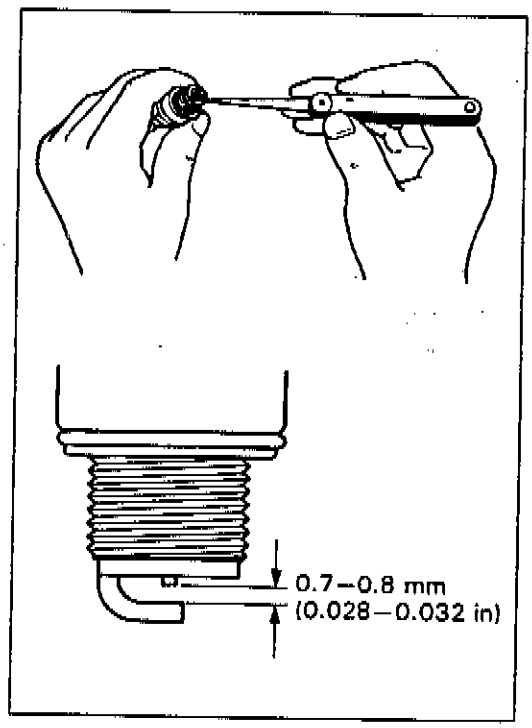


Spark Plug Gap

Measure the plug gap with a thickness gauge if it is correct. If not, adjust it to the following gap.

TOOL 09900-20803: Thickness gauge

Spark plug gap
Standard: 0.7—0.8 mm (0.028—0.032 in)



Electrode's Condition

Check to see a worn or burnt condition of the electrode. If it is extremely worn or burnt, replace the plug. Also replace the plug if it has a broken insulator, damaged thread, etc.

Heat Range

NGK CR9E should be used as the standard. However, the heat range of the spark plug should be selected to meet the requirements of speed, actual load, fuel and etc. Proper heat range would be indicated if all insulators were LIGHT BROWN in color. If they are baked white, they should be replaced with a cold type plug NGK CR10E or NIPPONDENSO U31ESR-N.

	Standard	Cold type	Hot type
NGK	CR9E	CR10E	CR8E
NIPPONDENSO	U27ESR-N	U31ESR-N	U24ESR-N

⚠ CAUTION

Confirm the thread size and reach when replacing the plug. If the reach is too short, carbon will be deposited on the screw portion of the plug hole and engine damage may result.

IGNITOR UNIT (Checking with Digital Ignitor Checker)

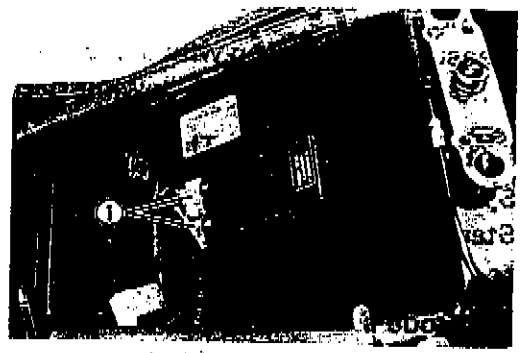
This section explains the checking procedure for the ignitor unit using Digital Ignitor Checker (special tool).

With this checker, the ignitor unit can be checked either on the machine or off the machine. The following explains the checking procedure on the machine.

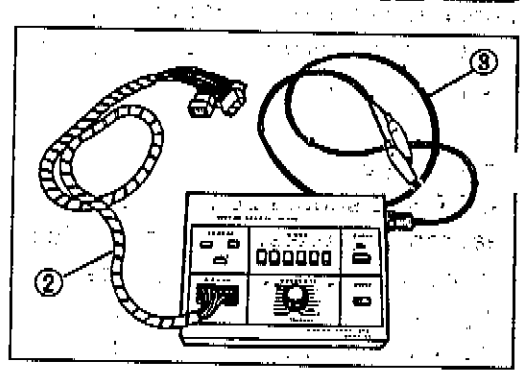
TOOL 09931-94430: Digital ignitor checker

WIRING PROCEDURE:

- Remove the seat.
- Disconnect two ignitor lead wire couplers ① at the ignitor unit.



- Prepare the ignitor checker lead wire "MODE 1-A" ② which comes supplied with the ignitor checker and connect its end to the ignitor unit and another end to the checker.
- Connect the power source leads ③ to the battery.



⚠ CAUTION

*** Be sure that the BLACK lead is connected to the battery ⊖ terminal and RED lead to the ⊕ terminal.**
*** Before connecting the power source leads, make sure that both "POWER" button and "START" switch are in "off" position (POWER button not depressed).**

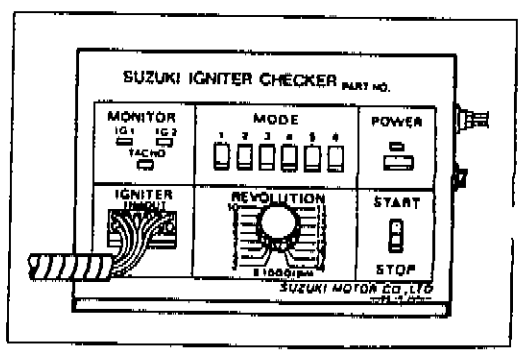
NOTE:
Be sure that the battery used is in fully-charged condition.

CHECK PROCEDURE:

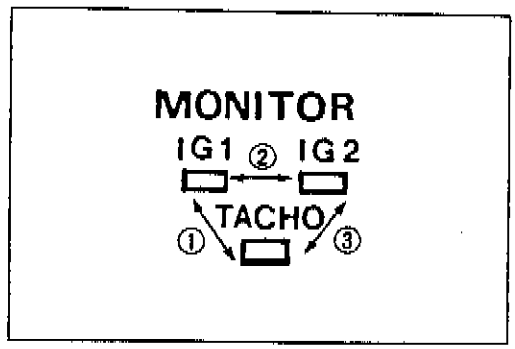
With all the lead wires properly connected, check the ignitor unit in the following four steps.

First Step:

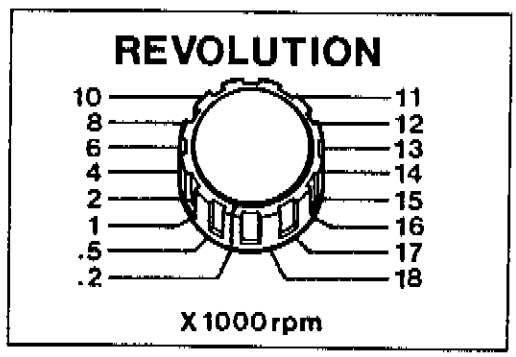
Depress "MODE 1" button then "POWER" button. This time, "POWER" lamp should come on, if not, battery is undercharged.



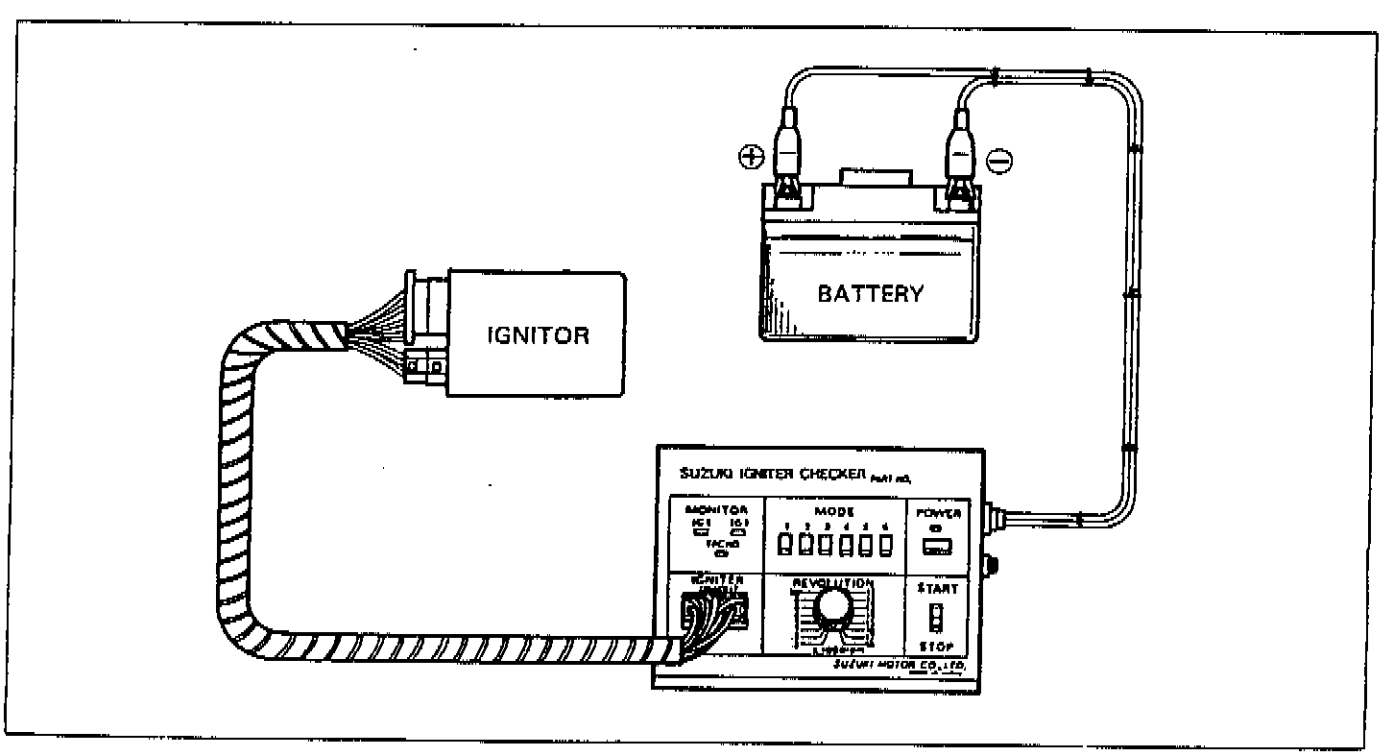
Second Step:
Set "REVOLUTION" dial pointer to ".2" position in which the checker produces the ignition primary current pulses simulating 200 r/min of engine revolution when "START" switch is turned on. With "START" switch is turned to ON position, check that three "MONITOR" lamps turn on and off in slow frequency in order of ①—②—③ or ①—③—②as illustrated.



Third Step:
Turn "REVOLUTION" dial up gradually (assuming the engine gradually revved up) and check that the MONITOR lamp flash frequency as explained in the second step above increases. As the dial pointer passes beyond the graduation "4" (4 000 r/min), all the three lamps should show continuously lighted.
When REVOLUTION dial pointer reaches between "11" and "12" (11 000—12 000 r/min), MONITOR "IG1" and "IG2" lamps should go off while "TACHO" lamp stays on. This is because the ignition "cut-off" provided in the RF900R ignition system functions at 11 500 ± 100 r/min. If the lamps go off at the graduation below "11", the engine can not perform properly and therefore the ignitor unit must be replaced.



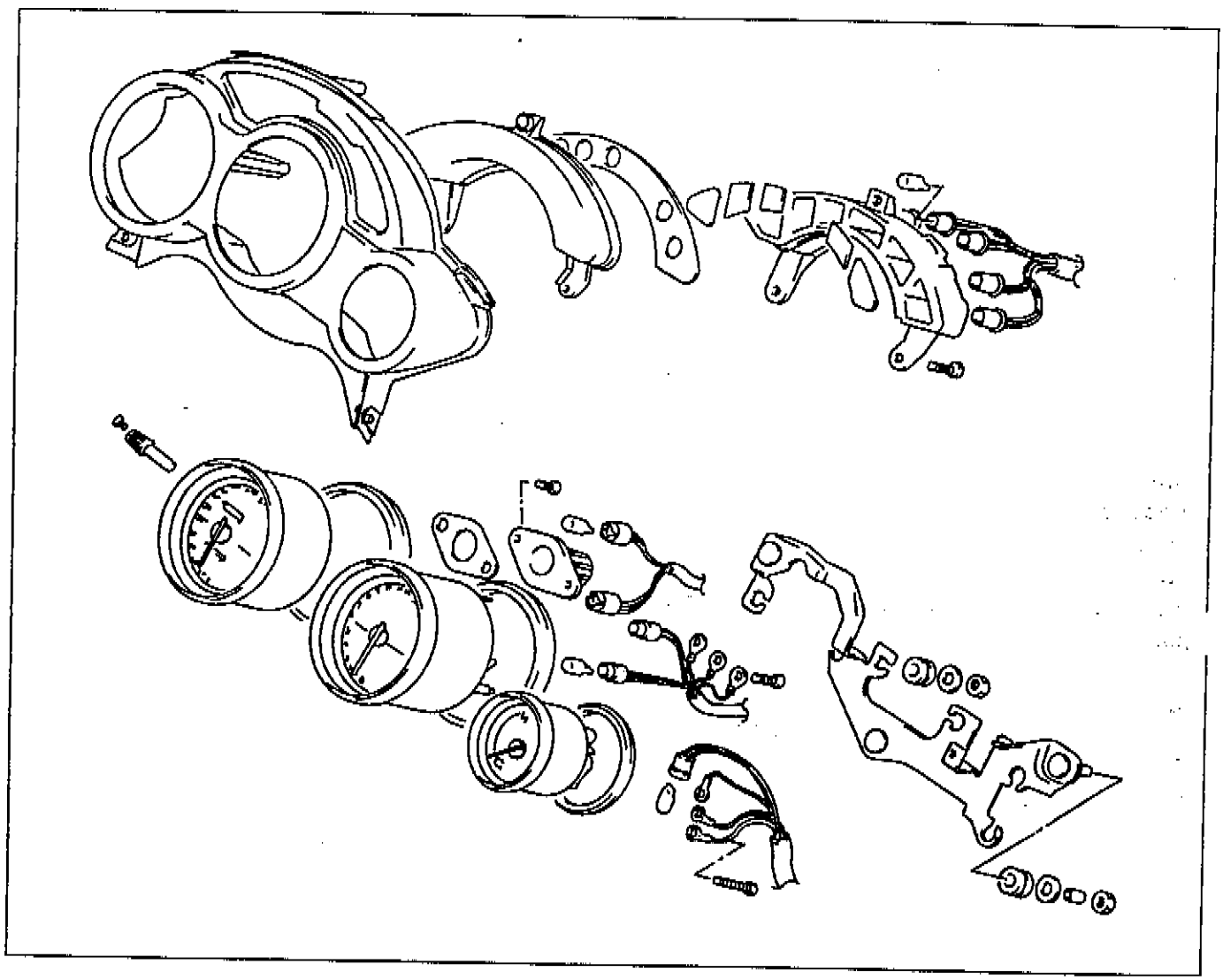
Fourth Step:
Turn "START" switch to STOP position. If the "IG1" or "IG2", or both lamps remain light more than 5 seconds, the ignitor unit must be replaced.



COMBINATION METER

REMOVAL AND DISASSEMBLY

- Remove the combination meter. (Refer to page 6-4.)
- Disassemble the combination meter as follows.



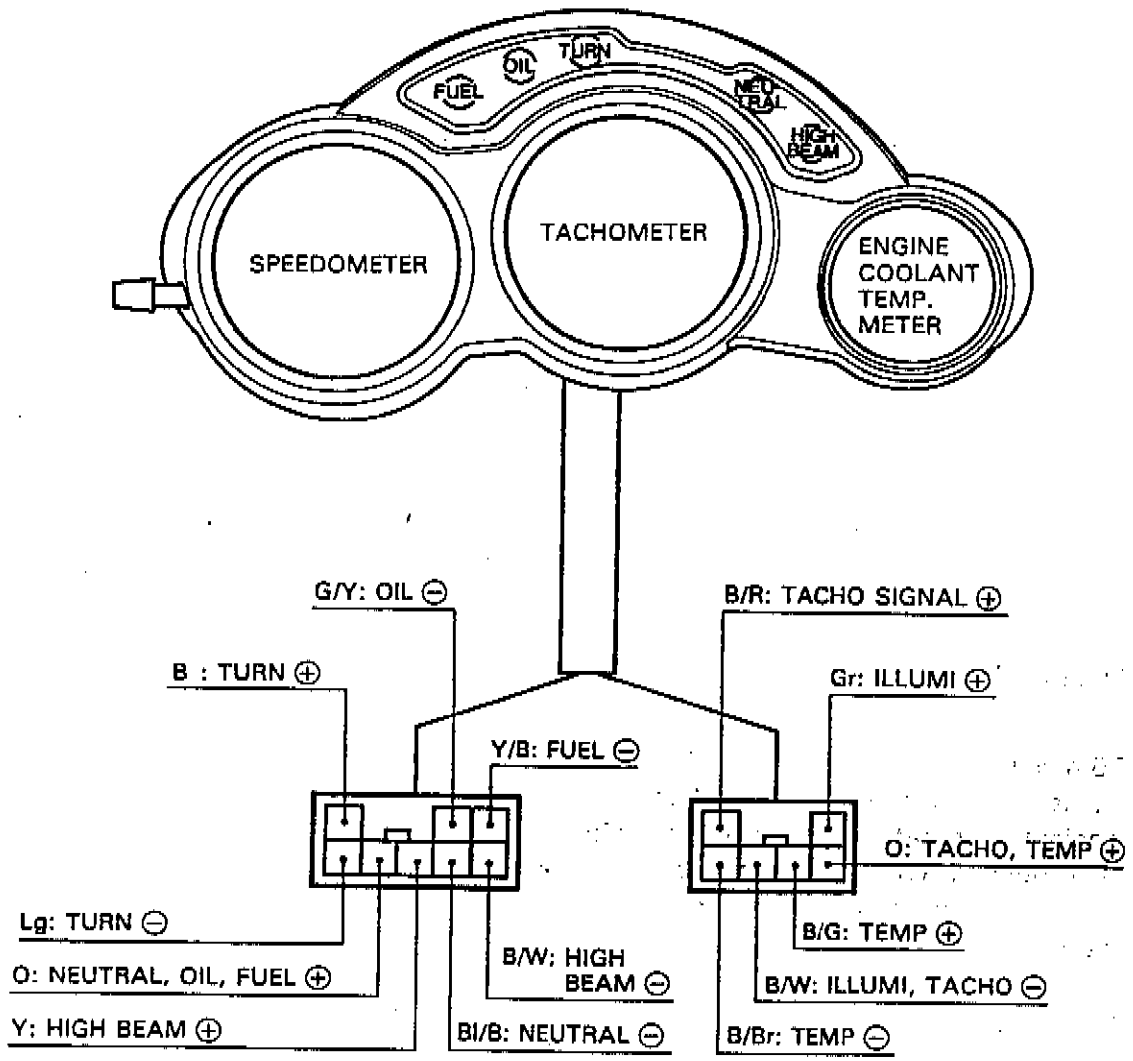
INSPECTION

Using the pocket tester, check the continuity between lead wires in the diagram on next page.
If the continuity measured is incorrect, replace the respective parts.

09900-25002: Pocket tester

Tester knob indication: X 1Ω range

NOTE:
When making this test, it is not necessary to remove the combination meter.



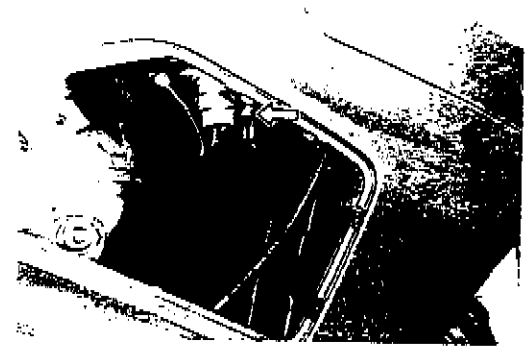
ITEM	⊕ Probe of tester to:	⊖ Probe of tester to:
OIL	O	G/Y
TURN (L)	B	Lg
TACHO SIGNAL	B/R	B/W
HIGH BEAM	Y	B/W
TURN (R)	Lg	B
NEUTRAL	O	Bl/B
ILLUMI	Gr	B/W
TEMP	O	B/Br
TEMP	O	B/G
TACHO	O	B/W
FUEL	O	Y/B

G/Y : Green with Yellow tracer
O : Orange
B : Black
B/R : Black with Red tracer
Y : Yellow
Lg : Light green
Gr : Gray
Bl/B : Blue with Black tracer
B/W: Black with White tracer
B/Bl : Black with Blue tracer
B/Br: Black with Brown tracer
B/G : Black with Green tracer
B/W: Black with White tracer
Y/B : Yellow with Black tracer

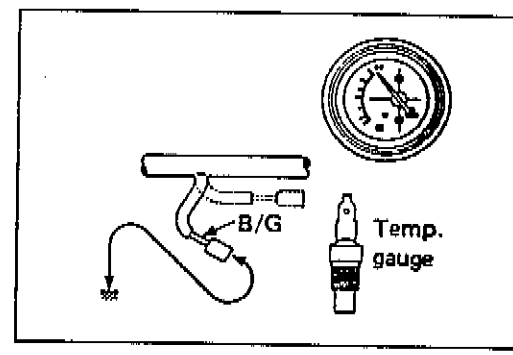
ENGINE COOLANT TEMPERATURE METER

INSPECTION

As the coil spring is installed on the needle shaft of the engine coolant temperature meter, the needle is forcibly back to the original position when ignition switch is turned OFF. To test the engine coolant temperature meter two different checks may be used. The first, and simplest test will tell if the meter is operating but will not indicate the meters accuracy throughout the range.



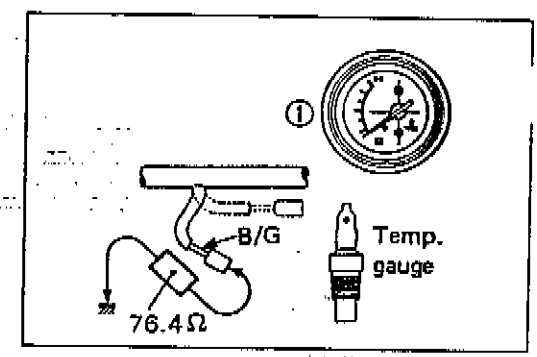
To perform this test, remove the service lid on the lower cowling and disconnect the B/G lead wire of the engine coolant temperature meter from the engine coolant temperature gauge. Connect a jumper wire between B/G wire coming from the main wiring harness and engine ground. With the ignition switch turned on, the engine coolant temperature meter should indicate "H".



B/G: Black with Green tracer

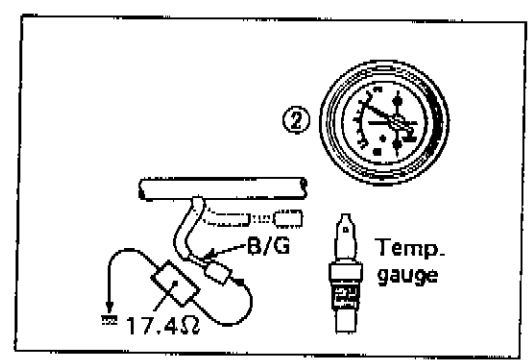
The second test will check the accuracy of the meter in the "①" and "②" positions.

Connect a 76.4-ohm resistor between the B/G lead wire of the engine coolant temperature meter and engine ground. The engine coolant temperature meter is normal if its pointer indicates the ① position when the specified voltage is applied to the circuit and if its pointer indicates the ② position when the resistor is changed to 17.4 ohms. If either one or both indications are abnormal, replace the engine coolant temperature meter with a new one.



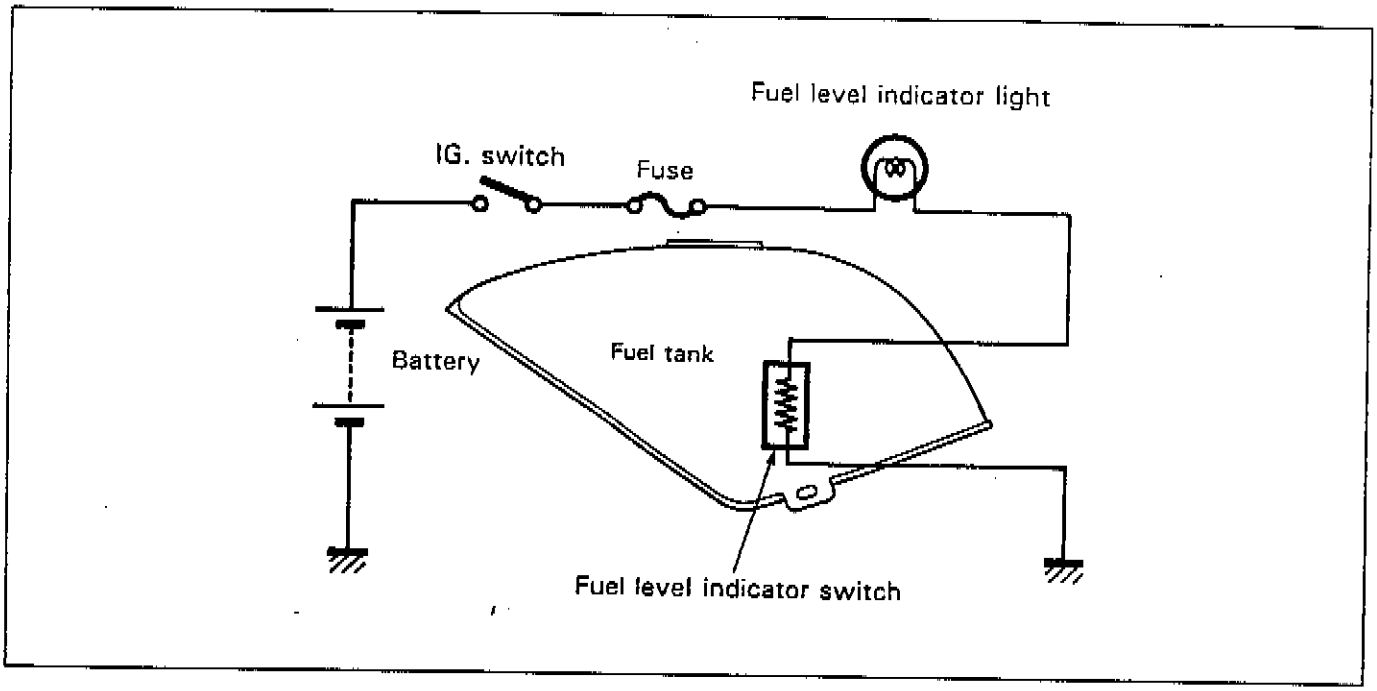
The relation between the position of the engine coolant temperature meter and resistance is shown in the following table.

POSITION	RESISTANCE
①	76.4 Ω
②	17.4 Ω



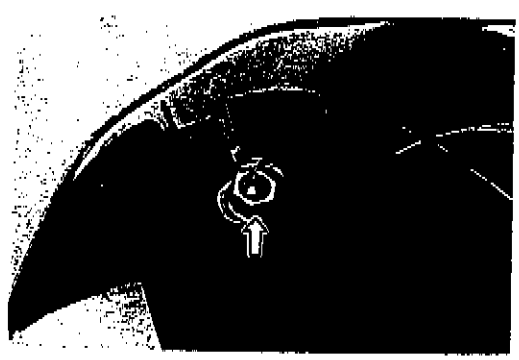
For inspecting the engine coolant temperature gauge, refer to page 5-9.

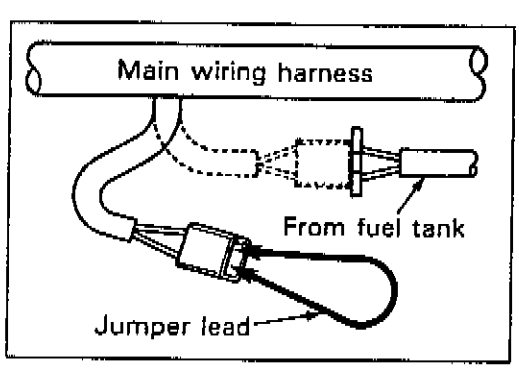
FUEL LEVEL INDICATOR



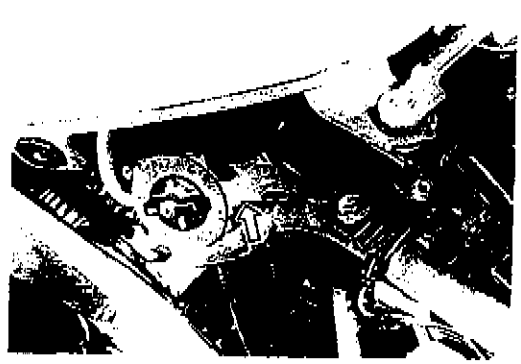
INSPECTION

- Remove the seat and frame cover assembly. (Refer to page 6-5.)
- Start the engine, and disconnect the two lead wires going into the fuel level indicator switch, connect the lead wires from the main wiring harness with a jumper lead and check whether the fuel level indicator light is ON. If a "LIGHT" is indicated, the circuit of fuel level indicator light is in good condition. If the fuel level indicator light does not light, replace the indicator bulb or repair the circuit connection. If the bulb is in good condition, the level indicator switch may be faulty, replace the indicator switch with a new one or inspect the fuel level indicator switch.



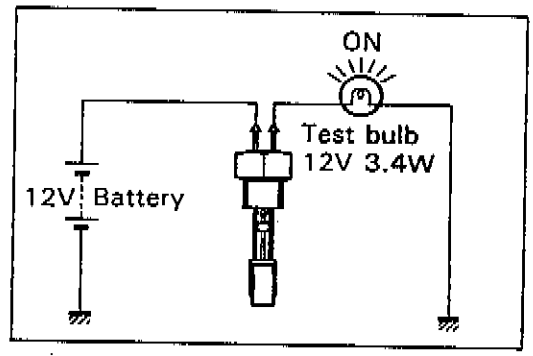


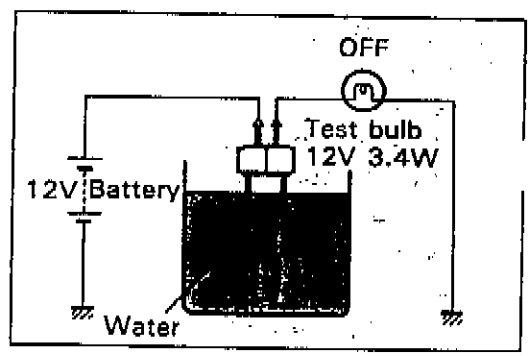
- Remove the fuel tank. (Refer to page 4-5.)
- Remove the fuel level indicator switch from the fuel tank.





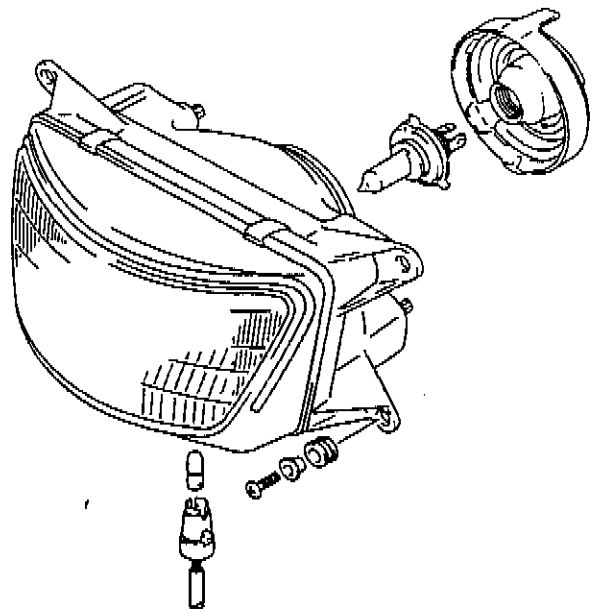
- Connect 12V battery to the fuel level indicator switch and ground through a 3.4W bulb. The bulb should light up after several seconds if the switch is in good condition.
- When the switch is immersed in water under the above condition, the bulb should go out. If the bulb remains lit, replace the fuel level indicator switch.





LAMPS

HEADLIGHT

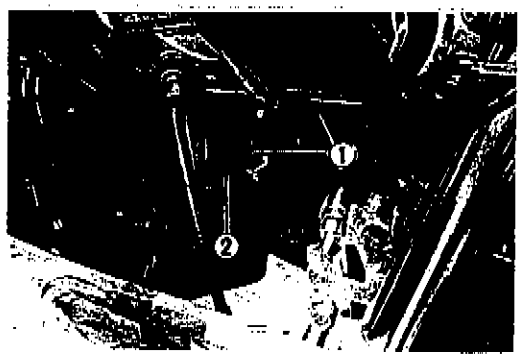


Headlight bulb: 12V 60/55W
Position light bulb: 12V 4W (Except for Australia, Canada and U.S.A.)

NOTE:
Adjust the headlight, both vertical and horizontal, after reassembling.

BULB REPLACEMENT

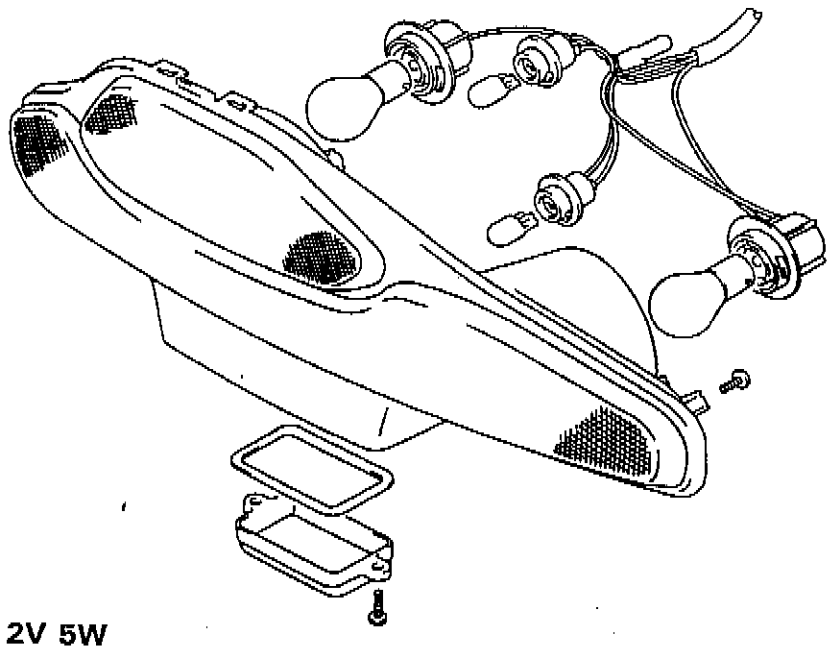
- Remove the left cowling upper pannel. (Refer to page 6-2.)
- Disconnect the socket ① and remove the rubber cap ②.
- Remove the bulb by removing the bulb holder spring.
- Reassemble the bulb in the reverse order of removal.



⚠ CAUTION

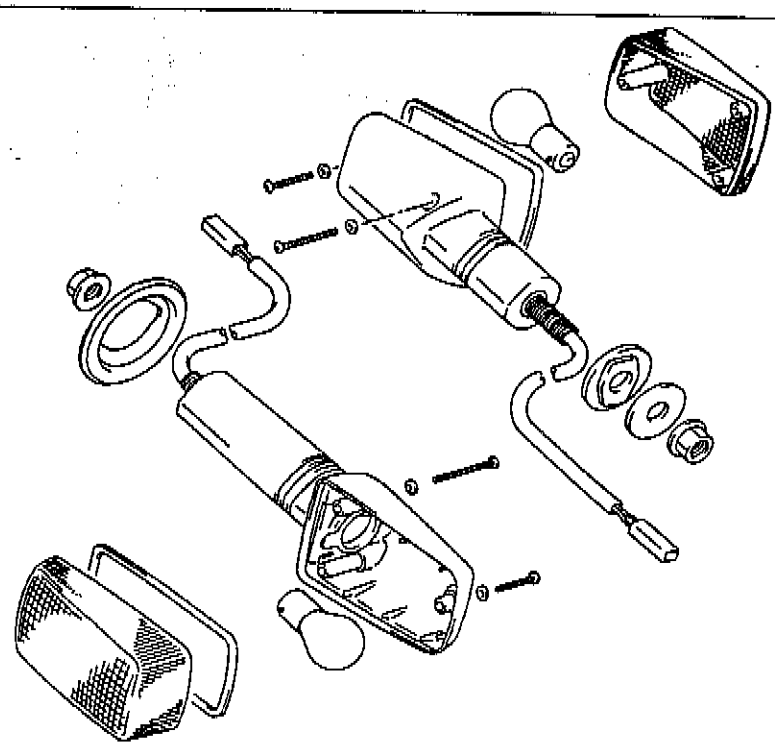
If you touch the bulb with your bare hands, clean it with a cloth moistened with alcohol or soapy water to prevent early failure.

TAIL/BRAKE LIGHT



Tail light bulb: 12V 5W
Brake light bulb: 12V 21W (2 pcs)
License plate light bulb: 12V 5W

TURN SIGNAL LIGHT



Turn signal light bulb: 12V 21W

CAUTION: Do not overtighten the lens fitting screws.

SWITCHES

Inspect each switch for continuity with the pocket tester. If any abnormality is found, replace the respective switch assemblies with new ones.

09900-25002: Pocket tester

Tester knob indication: X 1Ω range

IGNITION SWITCH

For Australia

Position \ Color	R	O
OFF		
ON	○——	——○

For Others

Position \ Color	R	O	Gr	Br
OFF				
ON	○——	——○	○——	——○
P	○——			——○

LIGHTING SWITCH

(Except for Australia, Canada and U.S.A.)

Position \ Color	O/Bl	Gr	O/R	Y/W
OFF				
•	○——	——○		
ON	○——	——○	○——	——○

DIMMER SWITCH

Position \ Color	Y/W	W	Y
HI	○——	——	——○
LO	○——	——○	

TURN SIGNAL SWITCH

Position \ Color	Lg	Lbl	B
L		○——	——○
PUSH			
R	○——	——○	

PASSING LIGHT SWITCH

(Except for Canada and U.S.A.)

Position \ Color	O/R	Y
•		
PUSH	○——	——○

ENGINE STOP SWITCH

Position \ Color	O/B	O/W
OFF		
RUN	○——	——○

STARTER BUTTON

Position \ Color	O/W	Y/G
•		
PUSH	○——	——○

HORN BUTTON

Position \ Color	B/Bl	B/W
•		
PUSH	○——	——○

FRONT BRAKE SWITCH

Position \ Color	B	B
OFF		
ON	○——	——○

REAR BRAKE SWITCH

Position \ Color	O/G	W/B
OFF		
ON	○——	——○

CLUTCH LEVER POSITION SWITCH

(For Canada and U.S.A.)

Position \ Color	Y/G	Y/G
OFF		
ON	○——	——○

WIRE COLOR

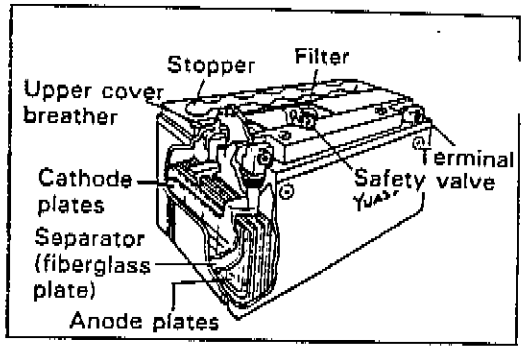
B : Black	Lbl: Light blue	R : Red
Br : Brown	Lg : Light green	Y : Yellow
Gr: Gray	O : Orange	W : White

B/Bl : Black with Blue tracer
B/W : Black with White tracer
O/B : Orange with Black tracer
O/Bl : Orange with Blue tracer
O/G : Orange with Green tracer
O/R : Orange with Red tracer
O/W: Orange with White tracer
W/B : White with Black tracer
Y/G : Yellow with Green tracer
Y/W: Yellow with White tracer

BATTERY

SPECIFICATIONS

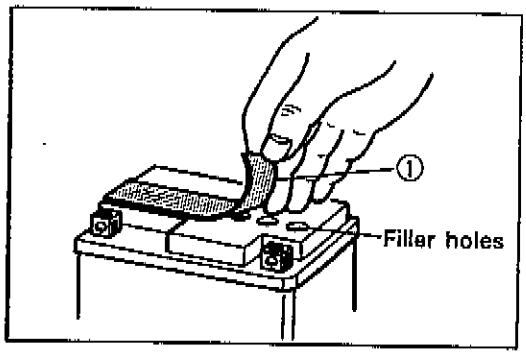
Type designation	YTX9-BS
Capacity	12V, 28.8 kC (8 Ah)/10HR
Standard electrolyte S.G.	1.320 at 20°C (68°F)



INITIAL CHARGING

Filling electrolyte

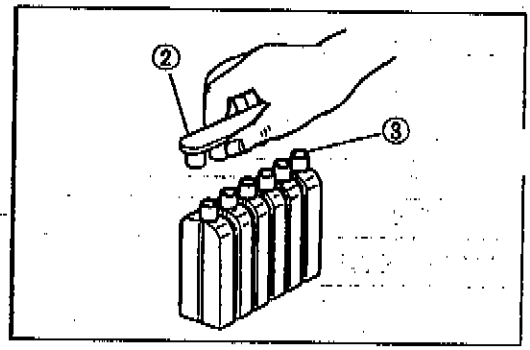
- Remove the aluminum tape ① sealing the battery electrolyte filler holes.



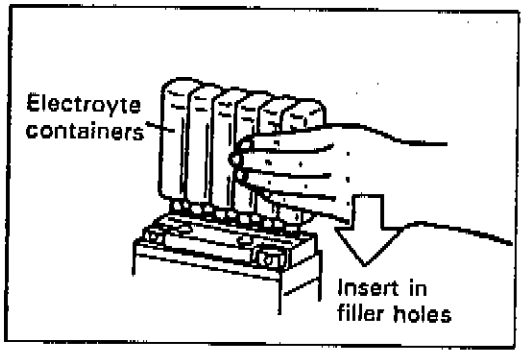
- Remove the caps ② .

NOTE:

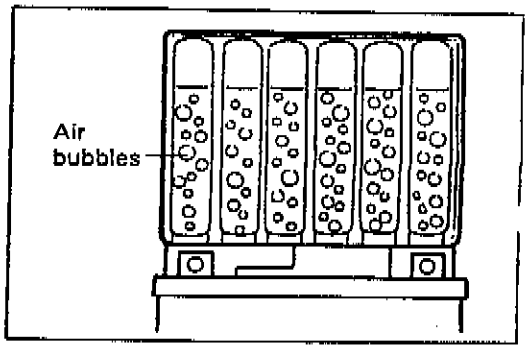
* *After filling the electrolyte completely, use the removed cap ② as the sealed caps of battery-filler holes.*
* *Do not remove or pierce the sealed areas ③ of the electrolyte container.*



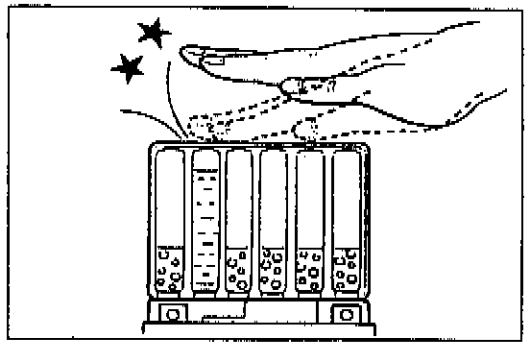
- Insert the nozzles of the electrolyte container into the battery's electrolyte filler holes, holding the container firmly so that it does not fall. Take precaution not to allow any of the fluid to spill.



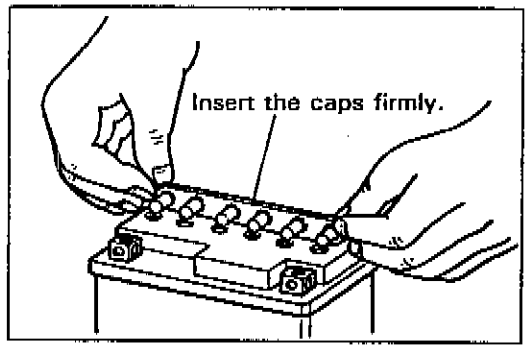
- Make sure air bubbles are coming up each electrolyte container, and leave in this position for about more than 20 minutes.



NOTE:
If no air bubbles are coming up from a filler port, tap the bottom of the two or three times.
Never remove the container from the battery.



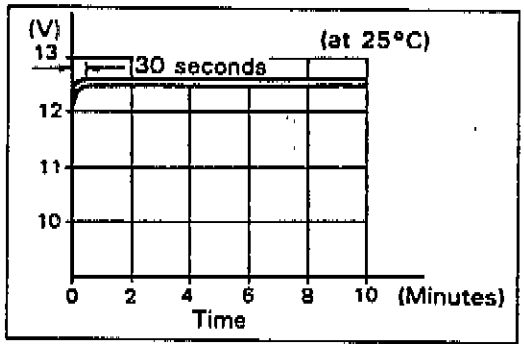
- After confirming that the electrolyte has entered the battery completely, remove the electrolyte containers from the battery. Wait for around 20 minutes.
- Insert the caps into the filler holes, pressing in firmly so that the top of the caps do not protrude above the upper surface of the battery's top cover.



⚠ CAUTION

*** Never use anything except the specified battery.**
*** Once install the caps to the battery; do not remove the caps.**

- Using SUZUKI pocket tester, measure the battery voltage. The tester should indicate more than 12.5—12.6V (DC) as shown in the Fig. If the battery voltage is lower than the specification, charge the battery with a battery charger. (Refer to the recharging operation.)



NOTE:
Initial charging for a new battery is recommended if two years have elapsed since the date of manufacture.

SERVICING

Visually inspect the surface of the battery container. If any signs of cracking or electrolyte leakage from the sides of the battery have occurred, replace the battery with a new one. If the battery terminals are found to be coated with rust or an acidic white powdery substance, then this can be cleaned away with sandpaper.

RECHARGING OPERATION

- Using the pocket tester, check the battery voltage. If the voltage reading is less than the 12.0V (DC), recharge the battery with a battery charger.

⚠ CAUTION

When recharging the battery, remove the battery from the motorcycle.

NOTE:

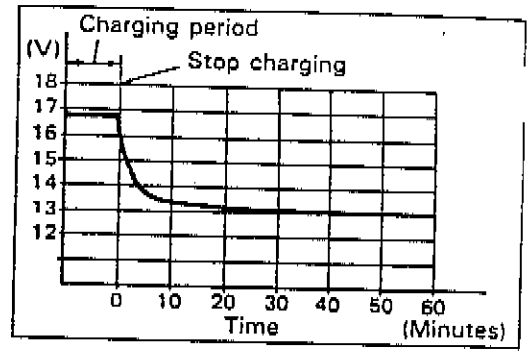
Do not remove the caps on the battery top while recharging.

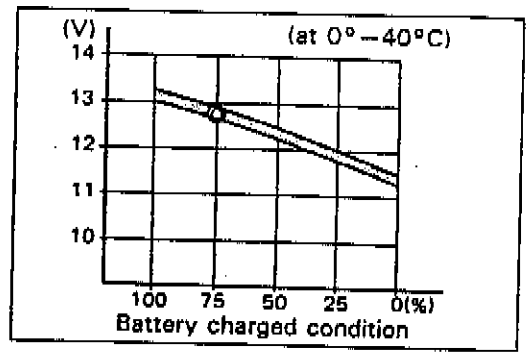
Recharging time: 4A for one hour or 0.9A for 5 hours

⚠ CAUTION

Be careful not to permit the charging current to exceed 4A at any time.

- After recharging, wait for more than 30 minutes and check the battery voltage with a pocket tester.
- If the battery voltage is less than the 12.5V, recharge the battery again.
- If battery voltage is still less than 12.5V, after recharging, replace the battery with a new one.
- When the motorcycle is not used for a long period, check the battery every 1 month to prevent the battery discharge.





SERVICING INFORMATION

CONTENTS

TROUBLESHOOTING 8- 1
WIRING DIAGRAM 8- 9
WIRE HARNESS, CABLE AND HOSE ROUTING 8-12
COWLING AND FRAME COVER SET UP 8-24
SPECIAL TOOLS 8-27
TIGHTENING TORQUE 8-30
SERVICE DATA 8-33

TROUBLESHOOTING

ENGINE

Complaint	Symptom and possible causes	Remedy
Engine will not start, or is hard to start.	**Compression too low**	
	1. Out of adjustment valve clearance.	Adjust.
	2. Worn valve guides or poor seating of valves.	Repair or replace.
	3. Mistiming valves.	Adjust.
	4. Excessively worn piston rings.	Replace.
	5. Worn-down cylinder bores.	Replace or rebore.
	6. Too slowly starter motor cranks.	See electrical section.
	7. Poor seating of spark plugs.	Retighten.
	Plugs not sparking	
	1. Fouled spark plugs.	Clean.
	2. Wet spark plugs.	Clean and dry.
	3. Defective ignition coil.	Replace.
	4. Open or short in high-tension cords.	Replace.
	5. Defective signal generator or ignitor unit.	Replace.
	No fuel reaching the carburetors	
	1. Clogged fuel tank vent hose.	Clean or replace.
	2. Clogged or defective fuel/cook.	Clean or replace.
	3. Defective fuel pump or ignitor unit.	Replace.
	4. Defective carburetor needle valve.	Replace.
	5. Clogged fuel hose or fuel filter.	Clean or replace.
Engine stalls easily.	1. Fouled spark plugs.	Clean.
	2. Defective signal generator or ignitor unit.	Replace.
	3. Clogged fuel hose.	Clean.
	4. Clogged jets in carburetors.	Clean.
	5. Out of adjustment valve clearance.	Adjust.
Noisy engine.	**Excessive valve chatter**	
	1. Too large valve clearance.	Adjust.
	2. Weakened or broken valve springs.	Replace.
	3. Worn tappet or camsurface.	Replace.
	4. Worn and burnt camshaft journal.	Replace.
	Noise seems to come from piston	
	1. Worn down pistons or cylinders.	Replace.
	2. Fouled with carbon combustion chambers.	Clean.
	3. Worn piston pins or piston pin bore.	Replace.
	4. Worn piston rings or ring grooves.	Replace.
	Noise seems to come from timing chain	
	1. Stretched chain.	Replace.
	2. Worn sprockets.	Replace.
	3. Not working tension adjuster.	Repair or replace.
	Noise seems to come from clutch	
	1. Worn splines of countershaft or hub.	Replace.
	2. Worn teeth of clutch plates.	Replace.
	3. Distorted clutch plates, driven and drive.	Replace.
	4. Worn clutch release bearing.	Replace.
	5. Weakened clutch dampers.	Replace the primary driven gear.

Complaint	Symptom and possible causes	Remedy
Noisy engine.	**Noise seems to come from crankshaft**	
	1. Due to wear rattling bearings.	Replace.
	2. Worn and burnt big-end bearings.	Replace.
	3. Worn and burnt journal bearings.	Replace.
	4. Too large thrust clearance.	Replace thrust bearing.
	Noise seems to come from transmission	
	1. Worn or rubbing gears.	Replace.
	2. Badly worn splines.	Replace.
	3. Worn or rubbing primary gears.	Replace.
	4. Badly worn bearings.	Replace.
	Noise seems to come from water pump	
	1. Too much play on pump shaft bearing.	Replace.
	2. Worn or damaged mechanical seal.	Replace.
	3. Touches pump case and impeller.	Replace.
Slipping clutch.	1. Out of adjustment or loss of play clutch control.	Adjust.
	2. Weakened clutch springs.	Replace.
	3. Worn or distorted pressure plate.	Replace.
	4. Distorted clutch plates, driven and drive.	Replace.
Dragging clutch.	1. Leakage of clutch fluid.	Repair.
	2. Worn or damaged clutch master cylinder/clutch release cylinder.	Replace.
	3. Damaged oil seal/clutch hose.	Replace.
	4. Some clutch springs weakened while others are not.	Replace.
	5. Distorted pressure plate or clutch plate.	Replace.
Transmission will not shift.	1. Broken gearshift cam.	Replace.
	2. Distorted gearshift forks.	Replace.
	3. Worn gearshift pawl.	Replace.
Transmission will not shift back.	1. Broken return spring on shift shaft.	Replace.
	2. Rubbing or stickly shift shaft.	Repair or replace.
	3. Distorted or worn gearshift forks.	Replace.
Transmission jumps out of gear.	1. Worn shifting gears on driveshaft or countershaft.	Replace.
	2. Distorted or worn gearshift forks.	Replace.
	3. Weakened stopper spring on gearshift stopper.	Replace.
	4. Worn gearshift pawl.	Replace.
Engine idles poorly.	1. Out of adjustment valve clearance.	Adjust.
	2. Poor seating of valves.	Replace or repair.
	3. Defective valve guides.	Replace.
	4. Worn tappet or camsurface.	Replace.
	5. Too wide spark plug gaps.	Adjust or replace.
	6. Defective ignition coil.	Replace.
	7. Defective signal generator or ignitor unit.	Replace.
	8. Out of adjustment in carburetors float-chamber fuel level.	Adjust.
	9. Clogged jets or imbalance of carburetors.	Clean or adjust.
	10. Defective fuel pump or ignitor unit.	Replace.

Complaint	Symptom and possible causes	Remedy
Engine runs poorly in high speed range.	1. Weakened valve springs. 2. Worn camshafts. 3. Valve timing out of adjustment. 4. Too narrow spark plug gaps. 5. Ignition not advanced sufficiently due to poorly working timing advance circuit. 6. Defective ignition coil. 7. Defective signal generator or ignitor unit. 8. Too low float-chamber fuel level. 9. Clogged air cleaner element. 10. Clogged fuel hose, resulting in inadequate fuel supply to carburetors. 11. Defective fuel pump or ignitor unit.	Replace. Replace. Adjust. Adjust. Replace ignitor unit. Replace. Replace. Adjust. Clean. Clean and prime. Replace.
Dirty or heavy exhaust smoke.	1. Too much engine oil in the engine. 2. Worn piston rings or cylinders. 3. Worn valve guides. 4. Scored or scuffed cylinder walls. 5. Worn valves stems. 6. Defective stem seal. 7. Worn oil ring side rails.	Check with inspection window drain out excess oil. Replace. Replace. Rebore or replace. Replace. Replace. Replace.
Engine lacks power.	1. Loss of valve clearance. 2. Weakened valve springs. 3. Out of adjustment valve timing. 4. Worn piston rings or cylinders. 5. Poor seating of valves. 6. Fouled spark plug. 7. Incorrect spark plug. 8. Clogged jets in carburetors. 9. Out of adjustment float-chamber fuel level. 10. Clogged air cleaner element. 11. Loose carburetor balancing screw. 12. Sucking air from intake pipe. 13. Too much engine oil. 14. Defective fuel pump or ignitor unit.	Adjust. Replace. Adjust. Replace. Repair. Clean or replace. Adjust or replace. Clean. Adjust. Clean. Retighten. Retighten or replace. Drain out excess oil. Replace.
Engine overheats.	1. Heavy carbon deposit on piston crowns. 2. Not enough oil in the engine. 3. Defective oil pump or clogged oil circuit. 4. Too low in float chambers fuel level. 5. Sucking air from intake pipes. 6. Use incorrect engine oil. 7. Defective cooling system.	Clean. Add oil. Replace or clean. Adjust. Retighten or replace. Change. See radiator section.

RADIATOR

Complaint	Symptom and possible causes	Remedy
Engine overheats.	1. Not enough cooling water.	Add coolant.
	2. Clogged with dirt or trashes radiator core.	Clean.
	3. Erratic thermostat, stuck in closed position.	Replace.
	4. Faulty cooling fan.	Repair or replace.
	5. Defective thermo-switch.	Replace.
	6. Clogged water passage.	Clean.
	7. Air trapped in the cooling circuit.	Bleed out air.
	8. Defective water pump.	Replace.
	9. Use incorrect coolant.	Replace.
Engine overcools.	1. Erratic thermostat, stuck in full-open position.	Replace.
	2. Defective thermo-switch.	Replace.
	3. Extremely cold weather.	Put on the radiator cover.

CARBURETOR

Complaint	Symptom and possible causes	Remedy
Trouble with starting.	1. Clogged starter jet.	Clean.
	2. Clogged starter pipe.	Clean.
	3. Air leaking from a joint between starter body and carburetor.	Check starter body and carburetor for tightness, adjust and replace gasket.
	4. Air leaking from carburetor's joint or vacuum gauge joint.	Check and adjust.
	5. Not operation properly starter plunger.	Check and adjust.
Idling or low-speed trouble.	1. Clogged or loose pilot jet, pilot air jet.	Check and clean.
	2. Air leaking from carburetor's joint, vacuum gauge joint, or starter.	Check and adjust.
	3. Clogged pilot outlet or bypass.	Check and clean.
	4. Not fully closed starter plunger.	Check and adjust.
Medium-or high speed trouble.	1. Clogged main jet or main air jet.	Check and clean.
	2. Clogged needle jet.	Check and clean.
	3. Not operating properly throttle valve.	Check throttle valve for operation.
	4. Clogged fuel filter.	Check and clean.
Overflow and fuel level fluctuations.	1. Worn or damaged needle valve.	Replace.
	2. Broken spring in needle valve.	Replace.
	3. Not working properly float.	Check and adjust.
	4. Foreign matter has adhered to needle valve.	Clean.
	5. Too high or low fuel level.	Adjust float height.
	6. Defective fuel pump or ignitor unit.	Replace.

CHASSIS

Complaint	Symptom and possible causes	Remedy
Heavy steering.	1. Overtightened steering stem nut. 2. Broken bearing in steering stem. 3. Distorted steering stem. 4. Not enough pressure in tires.	Adjust. Replace. Replace. Adjust.
Wobbly handlebars.	1. Loss of balance between right and left front forks. 2. Distorted front fork. 3. Distorted front axle or crooked tire.	Replace. Repair or replace. Replace.
Wobby front wheel.	1. Distorted wheel rim. 2. Worn front wheel bearings. 3. Defective or incorrect tire. 4. Loose axle, axle nut or axle pinch bolts. 5. Incorrect front fork oil level.	Replace. Replace. Replace. Retighten. Adjust.
Front suspension too soft.	1. Weakened springs. 2. Not enough fork oil. 3. Improperly set front fork spring adjuster.	Replace. Replenish. Adjust.
Front suspension too stiff.	1. Too viscous fork oil. 2. Too much fork oil. 3. Improperly set front fork spring adjuster.	Replace. Drain excess oil. Adjust.
Noisy front suspension.	1. Not enough fork oil. 2. Loose bolts on suspension.	Replenish. Retighten.
Wobbly rear wheel.	1. Distorted wheel rim. 2. Worn rear wheel bearing or swingarm bearings. 3. Defective or incorrect tire. 4. Worn swingarm and rear cushion related bearings. 5. Loose nuts or bolts on rear suspensions.	Replace. Replace. Replace. Replace. Retighten.
Rear suspension too soft.	1. Weakened shock absorber spring. 2. Improperly set rear suspension adjuster. 3. Leakage oil of shock absorber. 4. Leakage gas of shock absorber.	Replace. Adjust. Replace. Replace.
Rear suspension too stiff.	1. Improperly set rear suspension adjuster. 2. Bent shock absorber shaft. 3. Bent swingarm. 4. Worn swingarm and rear cushion related bearings.	Adjust. Replace. Replace. Replace.
Noisy rear suspension.	1. Loose nuts or bolts on rear suspension. 2. Worn swingarm and rear cushion related bearings.	Retighten. Replace.

BRAKES

Complaint	Symptom and possible causes	Remedy
Insufficient brake power.	1. Leakage of brake fluid from hydraulic system. 2. Worn pads. 3. Oil adhesion of engaging surface of pads. 4. Worn disc. 5. Air in hydraulic system.	Repair or replace. Replace. Clean disc and pads. Replace. Bleed air.
Brake squeaking.	1. Carbon adhesion on pad surface. 2. Tilted pad. 3. Damaged wheel bearing. 4. Loosen front-wheel axle or rear-wheel axle. 5. Worn pads. 6. Foreign material in brake fluid. 7. Clogged return port of master cylinder.	Repair surface with sandpaper. Modify pad fitting or replace. Replace. Tighten to specified torque. Replace. Replace brake fluid. Disassemble and clean master cylinder.
Excessive brake lever stroke.	1. Air in hydraulic system. 2. Insufficient brake fluid. 3. Improper quality of brake fluid.	Bleed air. Replenish fluid to specified level; bleed air. Replace with correct fluid.
Leakage of brake fluid.	1. Insufficient tightening of connection joints. 2. Cracked hose. 3. Worn piston and/or cup.	Tighten to specified torque. Replace. Replace piston and/or cup.

ELECTRICAL

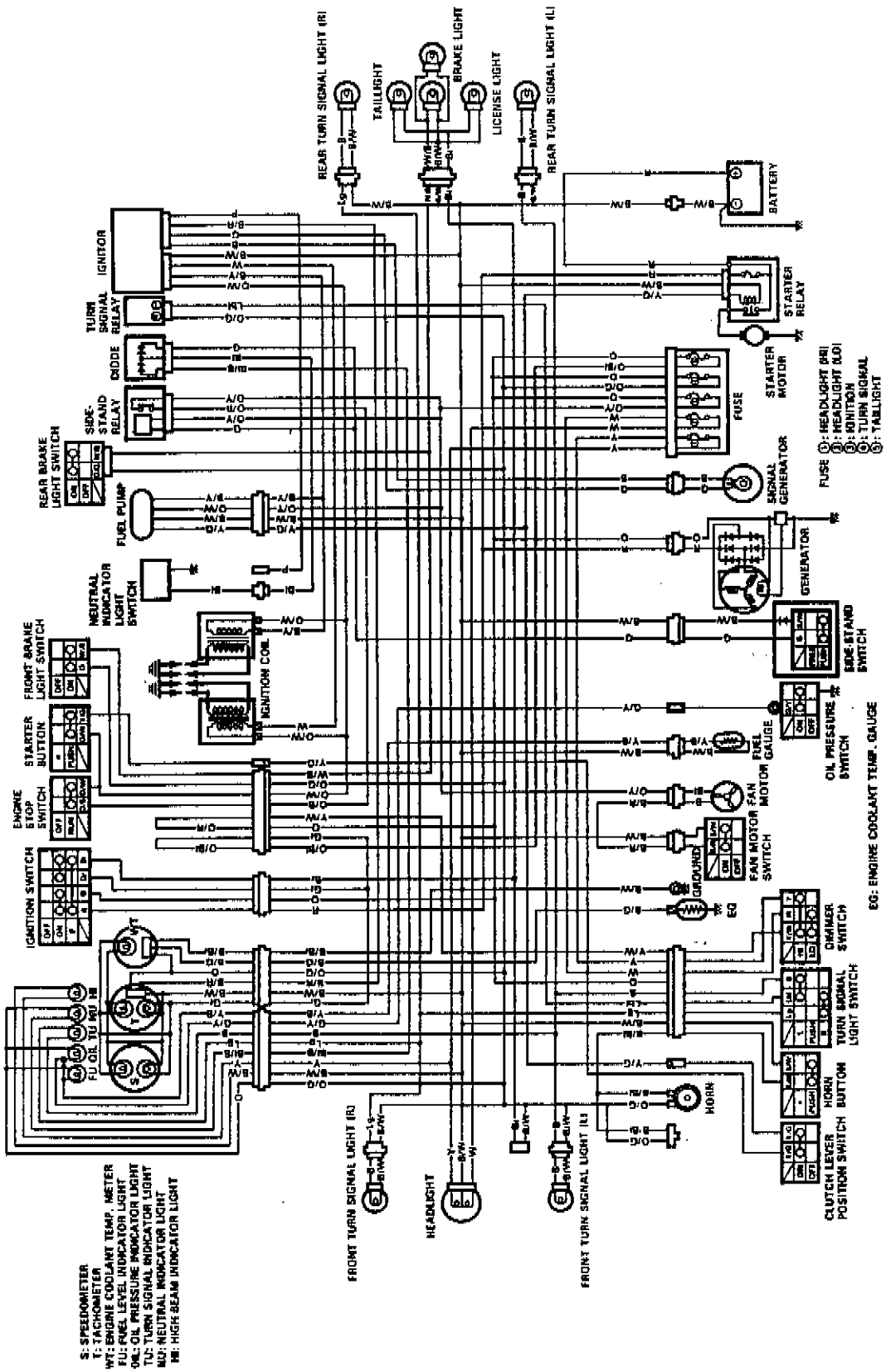
Complaint	Symptom and possible causes	Remedy
No sparking or poor sparking.	1. Defective ignition coil. 2. Defective spark plugs. 3. Defective signal generator or ignitor unit.	Replace. Replace. Replace.
Spark plug soon become fouled with carbon.	1. Mixture too rich. 2. Idling speed set too high. 3. Incorrect gasoline. 4. Dirty element in air cleaner. 5. Too cold spark plugs.	Adjust carburetors. Adjust carburetors. Change. Clean. Replace with hot type plugs.
Spark plugs become fouled too soon.	1. Worn piston rings. 2. Worn piston or cylinders. 3. Excessive clearance of valve stems in valve guides. 4. Worn stem oil seal.	Replace. Replace. Replace. Replace.
Spark plug electrodes overheat or burn.	1. Too hot spark plugs. 2. Overheated the engine. 3. Loose spark plugs. 4. Too lean mixture.	Replace with cold type plugs. Tune up. Retighten. Adjust carburetors.
Generator does not charge.	1. Open or short lead wires, or loose lead connections. 2. Shorted, grounded or open generator coils. 3. Shorted or panctured regulator/rectifiers.	Repair or replace or retighten. Replace. Replace.
Generator does charge, but charging rate is below the specification.	1. Lead wires tend to get shorted or open-circuited or loosely connected at terminals. 2. Grounded or open-circuited stator coils or generator. 3. Defective regulator/rectifier. 4. Defective cell plates in the battery.	Repair or retighten. Replace. Replace. Replace the battery.
Generator overcharges.	1. Internal short-circuit in the battery. 2. Damaged or defective resistor element in the regulator/rectifier. 3. Poorly grounded regulator/rectifier.	Replace the battery. Replace. Clean and tighten ground connection.
Unstable charging.	1. Lead wire insulation frayed due to vibration, resulting in intermittent shorting. 2. Internally shorted generator. 3. Defective regulator/rectifier.	Repair or replace. Replace. Replace.
Starter button is not effective.	1. Run down battery. 2. Defective switch contacts. 3. Not seating properly brushes on commutator in starter motor. 4. Defective starter relay/starter interlock switch.	Repair or replace. Replace. Repair or replace. Replace.

BATTERY

Complaint	Symptom and possible causes	Remedy
"Sulfation", acidic white powdery substance or spots on surfaces of cell plates.	1. Cracked battery case. 2. Battery has been left in a run-down condition for a long time.	Replace the battery. Replace the battery.
Battery runs down quickly.	1. Not correct the charging system. 2. Cell plates have lost much of their active material as a result of overcharging. 3. A short-circuit condition exists within the battery. 4. Too low battery voltage. 5. Too old battery.	Check the generator, regulator/rectifier and circuit connections and make necessary adjustments to obtain specified charging operation. Replace the battery, and correct the charging system. Replace the battery. Recharge the battery fully. Replace the battery.
Battery "sulfation".	1. Too low or too high charging rate. (When not in use batteries should be checked at least once a month to avoid sulfation.) 2. Left unused the battery for too long in cold climate.	Replace the battery. Replace the battery, if badly sulfated.
Battery discharges too rapidly.	Dirty container top and sides.	Clean.

WIRING DIAGRAM

For Canada and U.S.A.

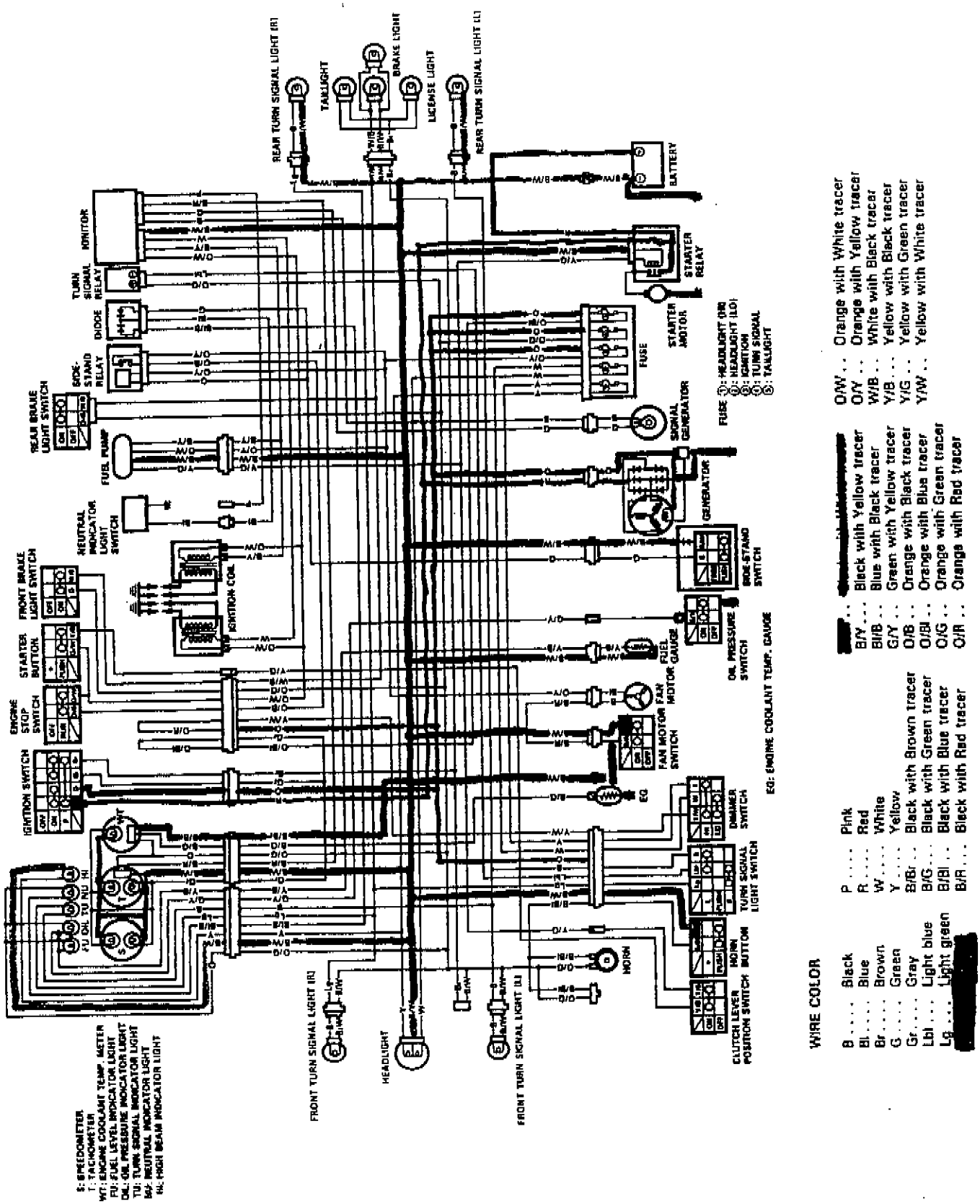


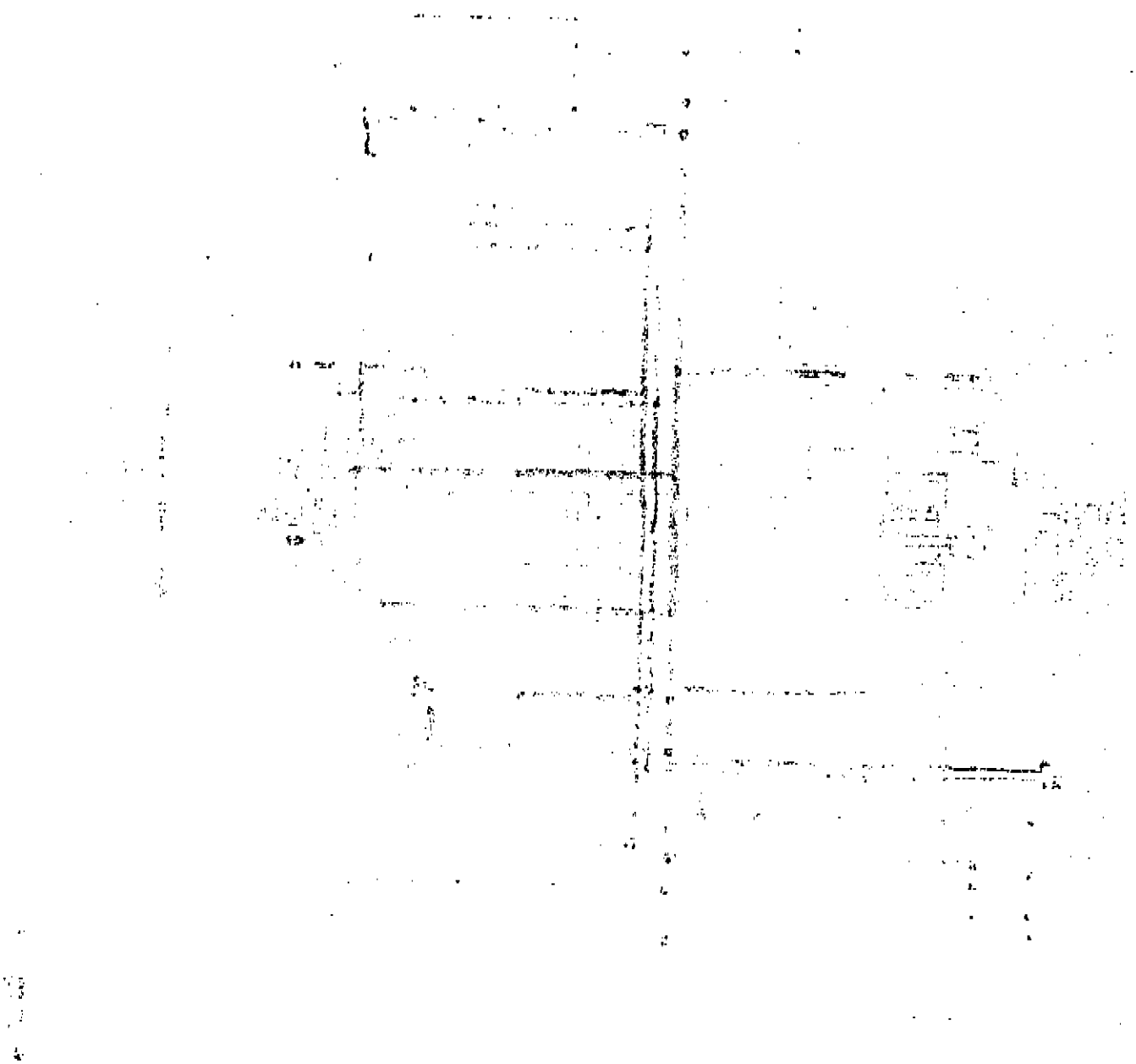
WIRE COLOR

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Bl	Blue	R	Red	B/Y	Black with Yellow tracer
Br	Brown	W	White	Bl/B ...	Blue with Black tracer
G	Green	Y	Yellow	G/Y ..	Green with Yellow tracer
Gr	Gray	B/Br ..	Black with Brown tracer	O/B ..	Orange with Black tracer
Lbl ...	Light blue	B/G ...	Black with Green tracer	O/Bl ...	Orange with Blue tracer
Lg	Light green	B/Bl ...	Black with Blue tracer	O/G ...	Orange with Green tracer
O	Orange	B/R ...	Black with Red tracer	O/R ..	Orange with Red tracer
				O/W ..	Orange with White tracer
				O/Y ..	Orange with Yellow tracer
				W/B ..	White with Black tracer
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				Y/G ..	Yellow with Green tracer
				Y/W ..	Yellow with White tracer

WIRING DIAGRAM

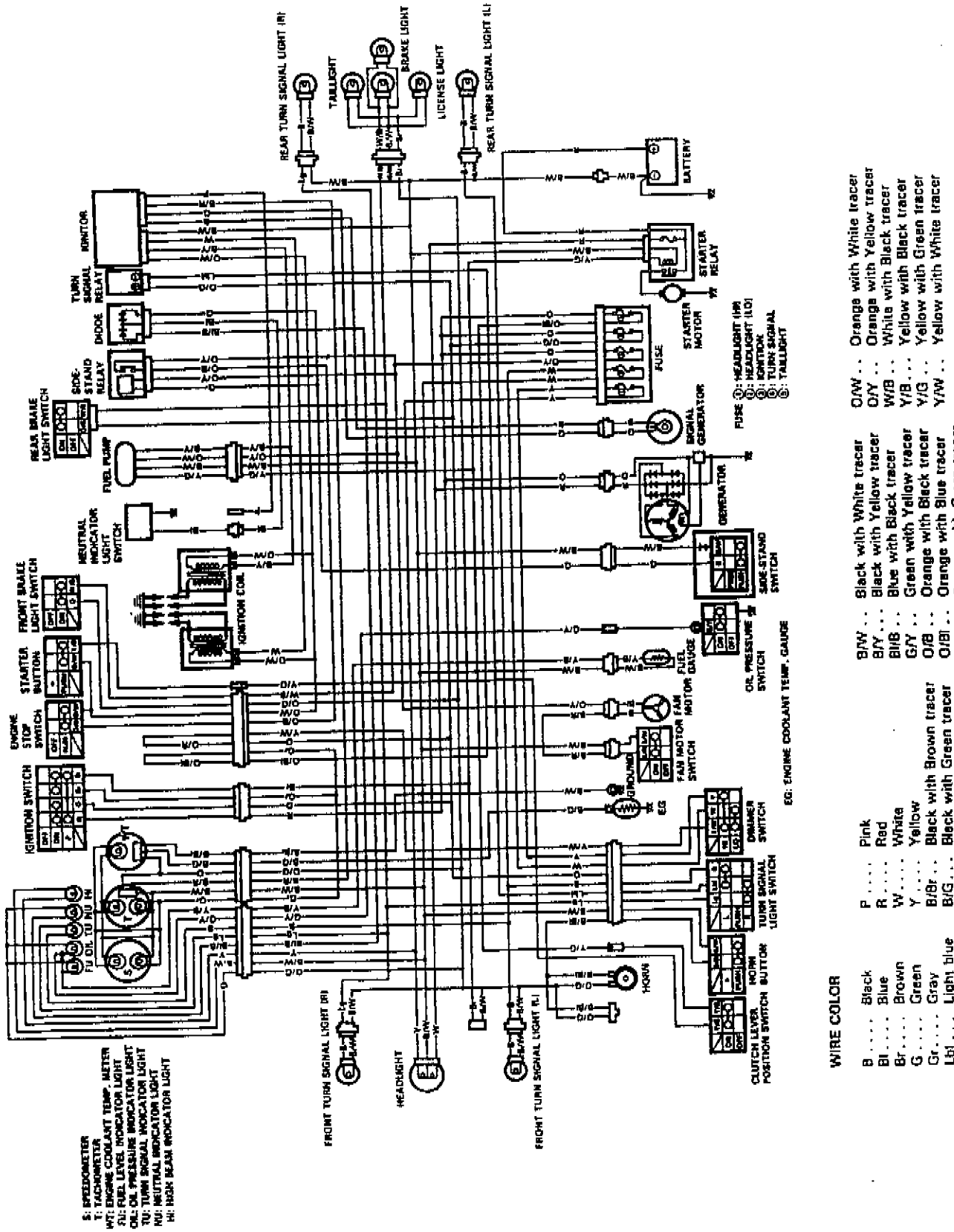
For Canada and U.S.A.





WIRING DIAGRAM

For Canada and U.S.A.



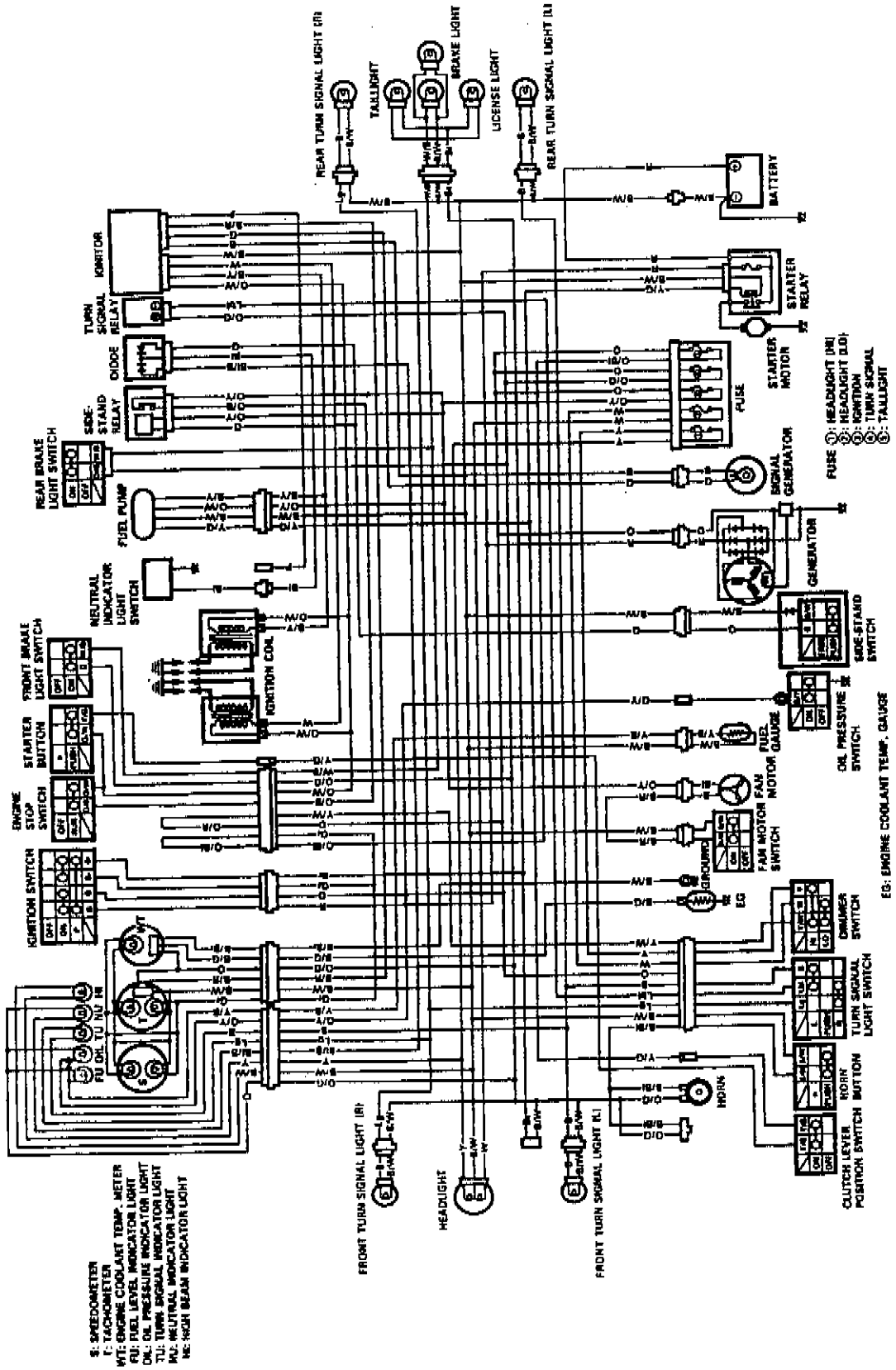
WIRE COLOR

B ..... Black	P ..... Pink	B/W .. Black with White tracer	O/W .. Orange with White tracer
Bl ..... Blue	R ..... Red	B/Y .. Black with Yellow tracer	O/Y .. Orange with Yellow tracer
Br ..... Brown	W ..... White	Bl/B .. Blue with Black tracer	W/B .. White with Black tracer
G ..... Green	Y ..... Yellow	G/Y .. Green with Yellow tracer	Y/B .. Yellow with Black tracer
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Lbl .... Light blue	B/G .... Black with Green tracer	O/Bl .. Orange with Blue tracer	Y/W .. Yellow with White tracer
Lg ..... Light green	B/Bl .. Black with Blue tracer	O/G .. Orange with Green tracer	
O ..... Orange	B/R .... Black with Red tracer	O/R .. Orange with Red tracer	



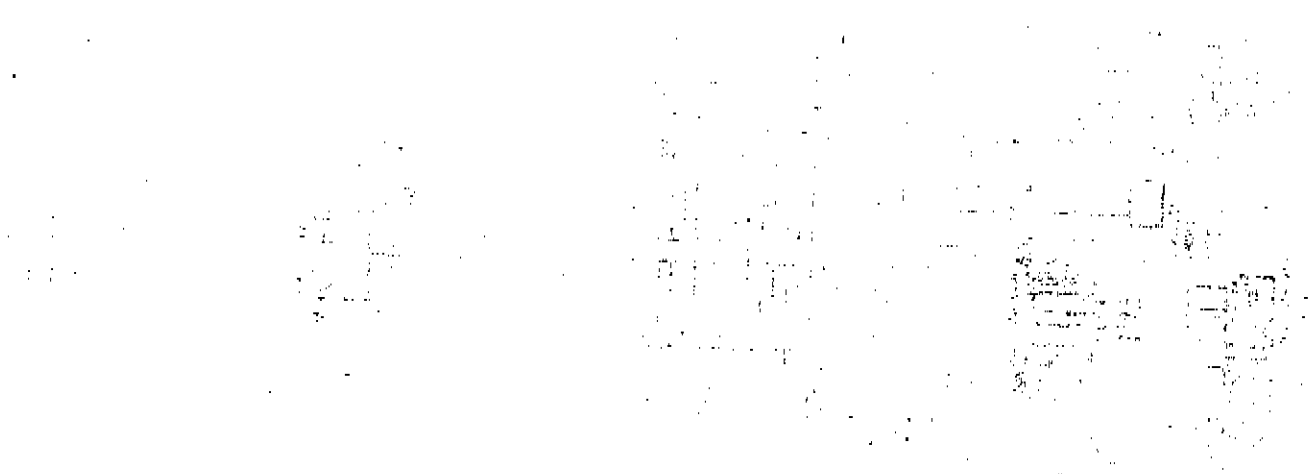
WIRING DIAGRAM

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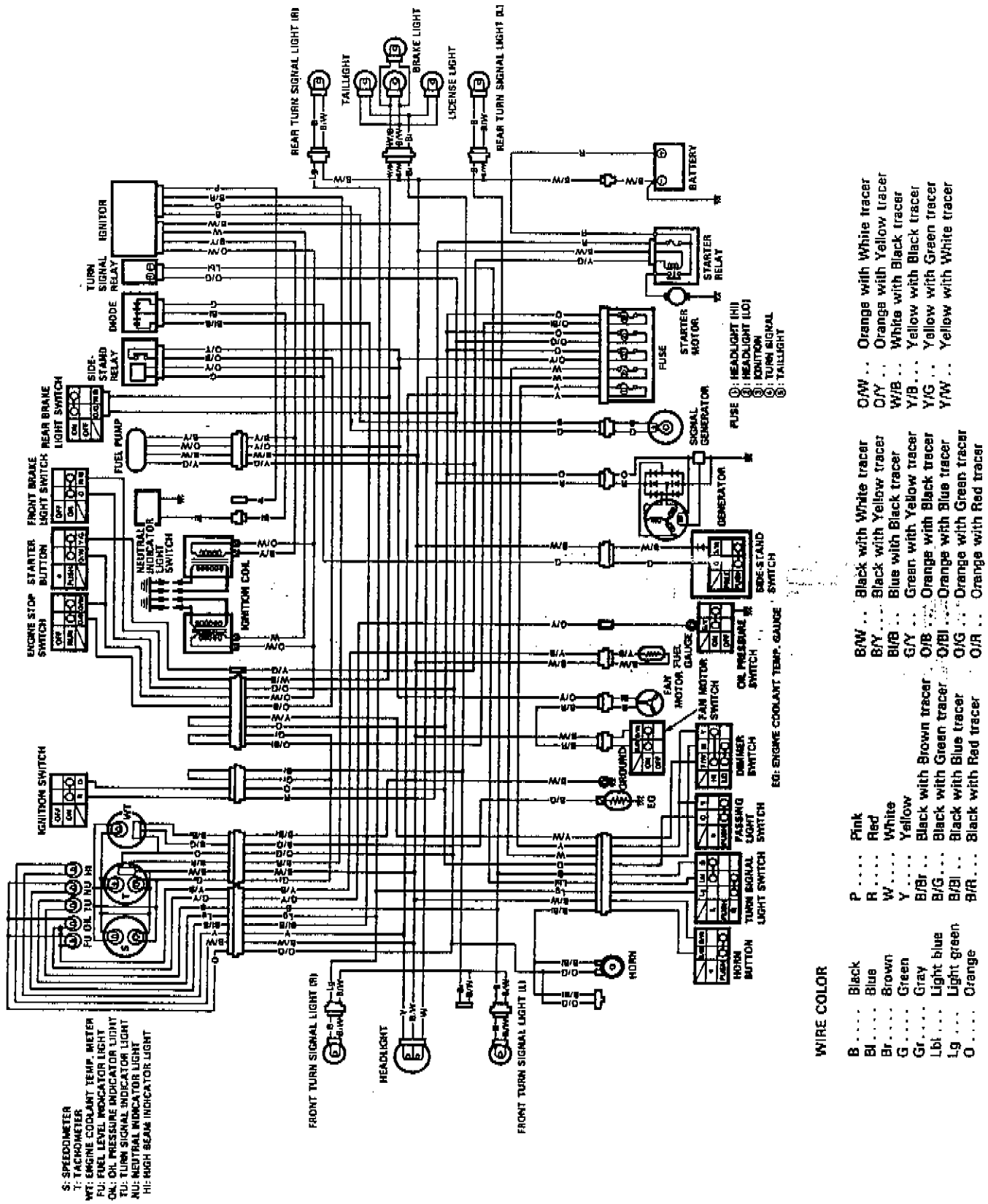


WIRE COLOR

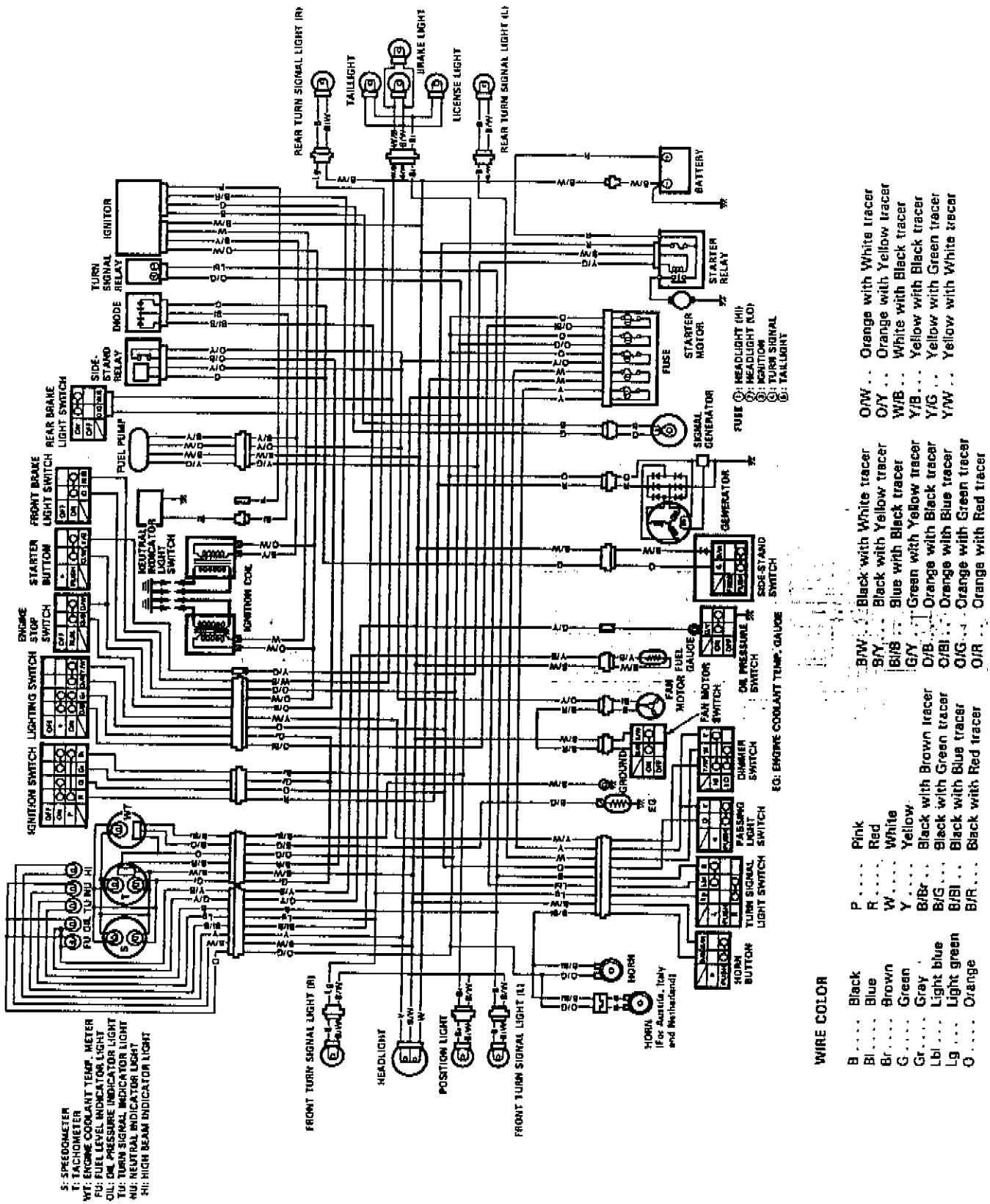
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Lbl . . .	Light blue	B/G . . .	Black with Green tracer	O/Bl . .	Orange with Blue tracer	Y/W . .	Yellow with White tracer
Lg . . .	Light green	B/Bl . .	Black with Blue tracer	O/G . .	Orange with Green tracer		
O	Orange	B/R . . .	Black with Red tracer	O/R . .	Orange with Red tracer		



For Australia

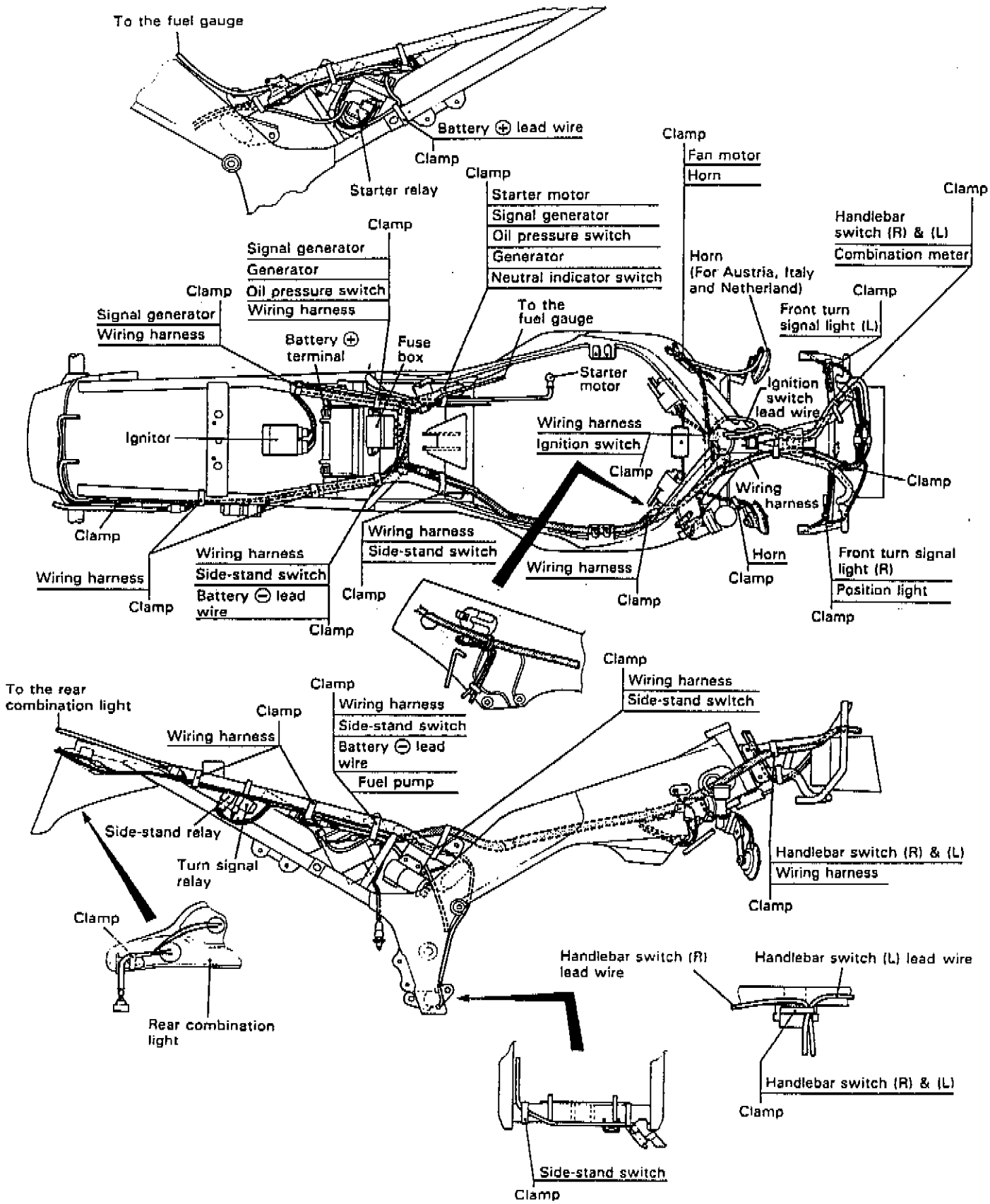


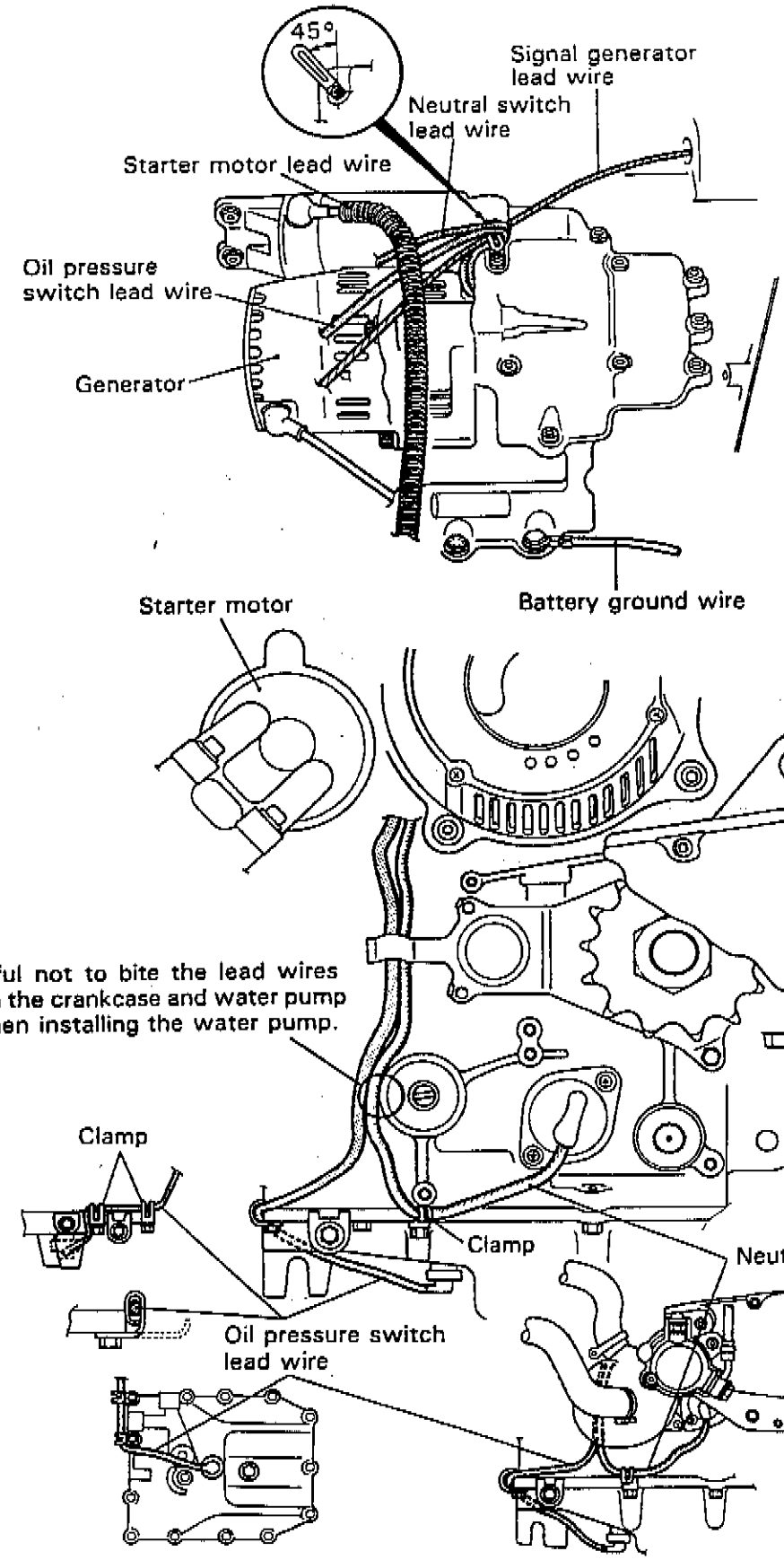
For The others



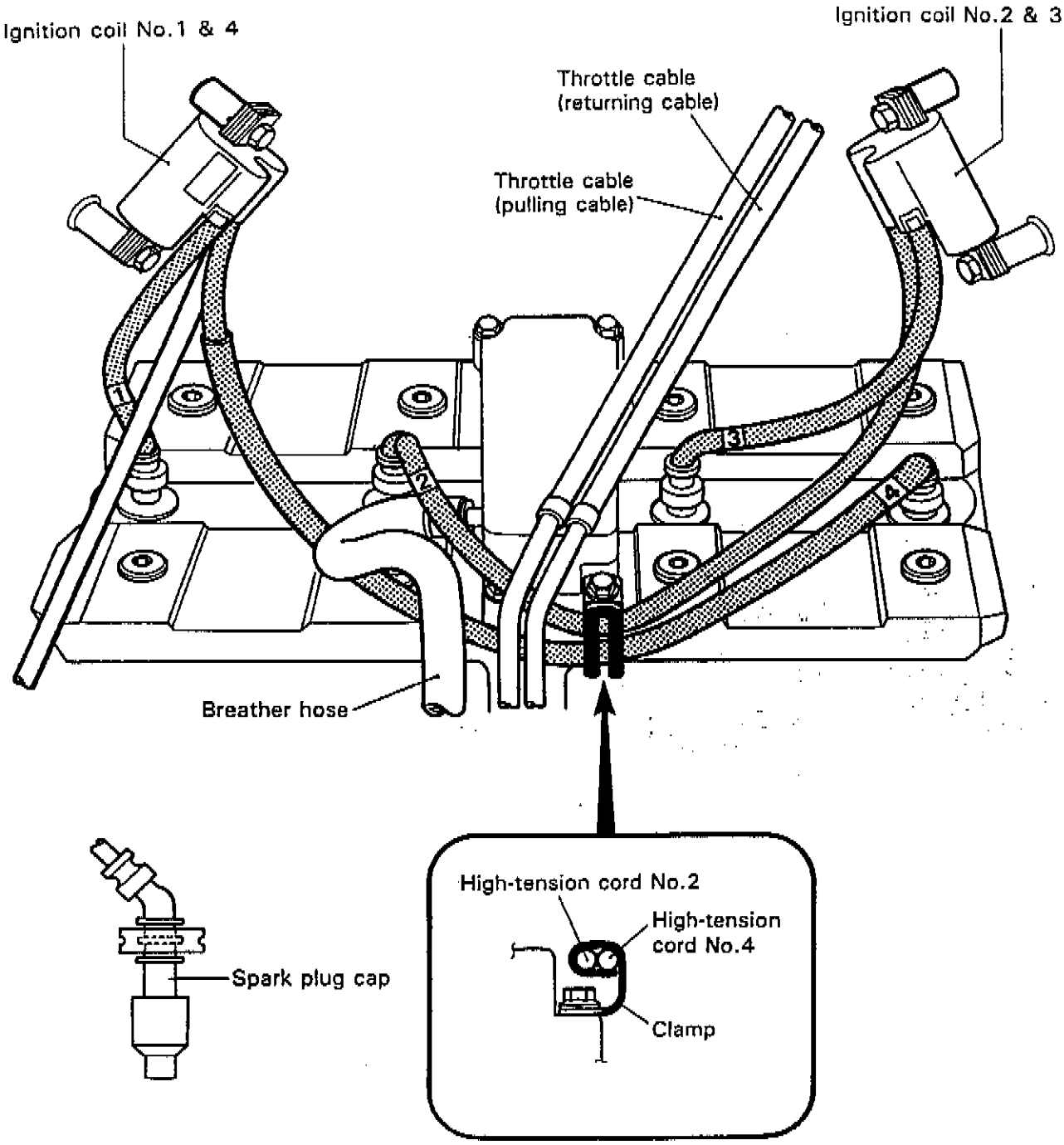
WIRE HARNESS, CABLE AND HOSE ROUTING

WIRE HARNESS ROUTING

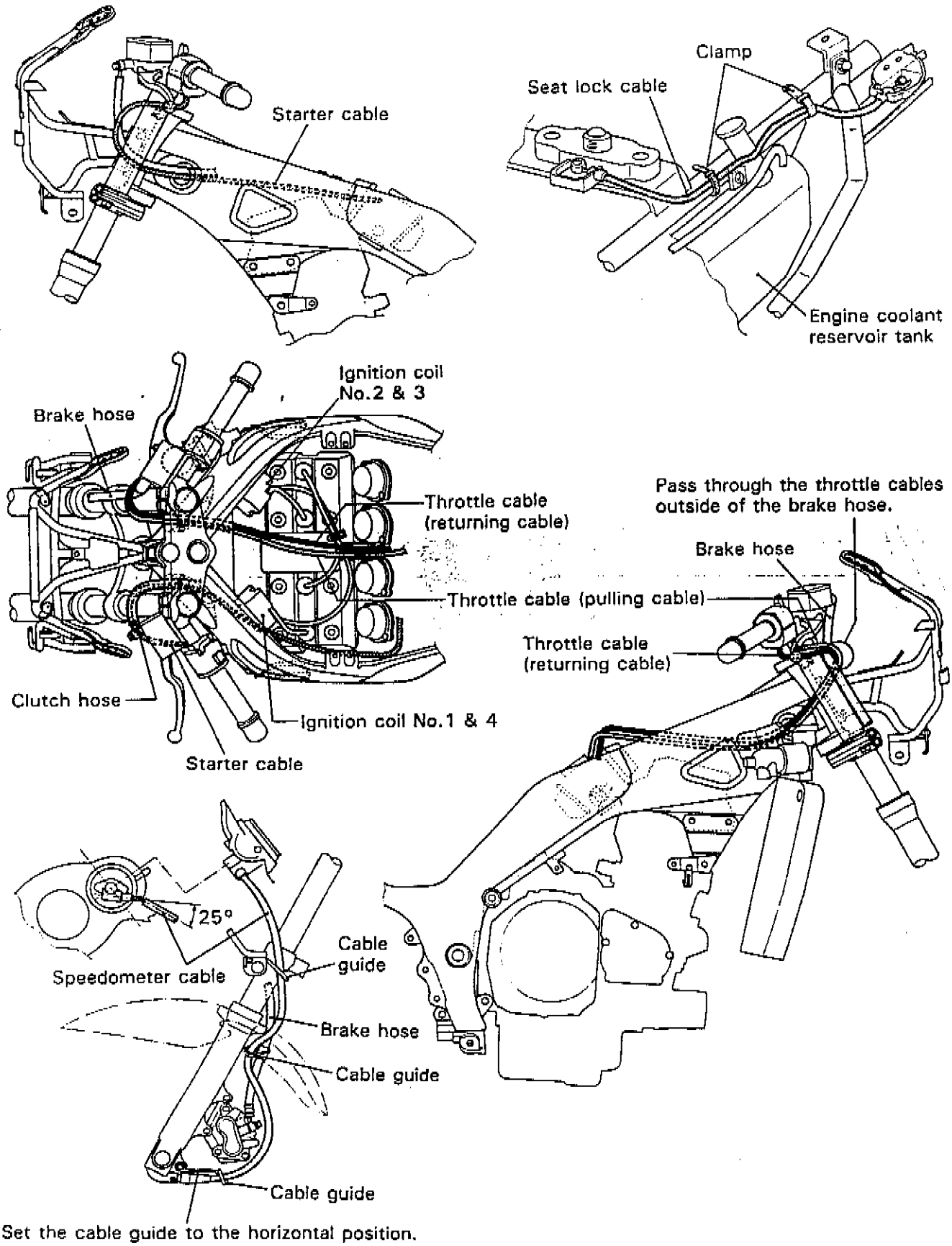



45°
Signal generator lead wire
Neutral switch lead wire
Starter motor lead wire
Oil pressure switch lead wire
Generator
Battery ground wire
Starter motor
Be careful not to bite the lead wires between the crankcase and water pump case when installing the water pump.
Clamp
Clamp
Neutral switch lead wire
Oil pressure switch lead wire

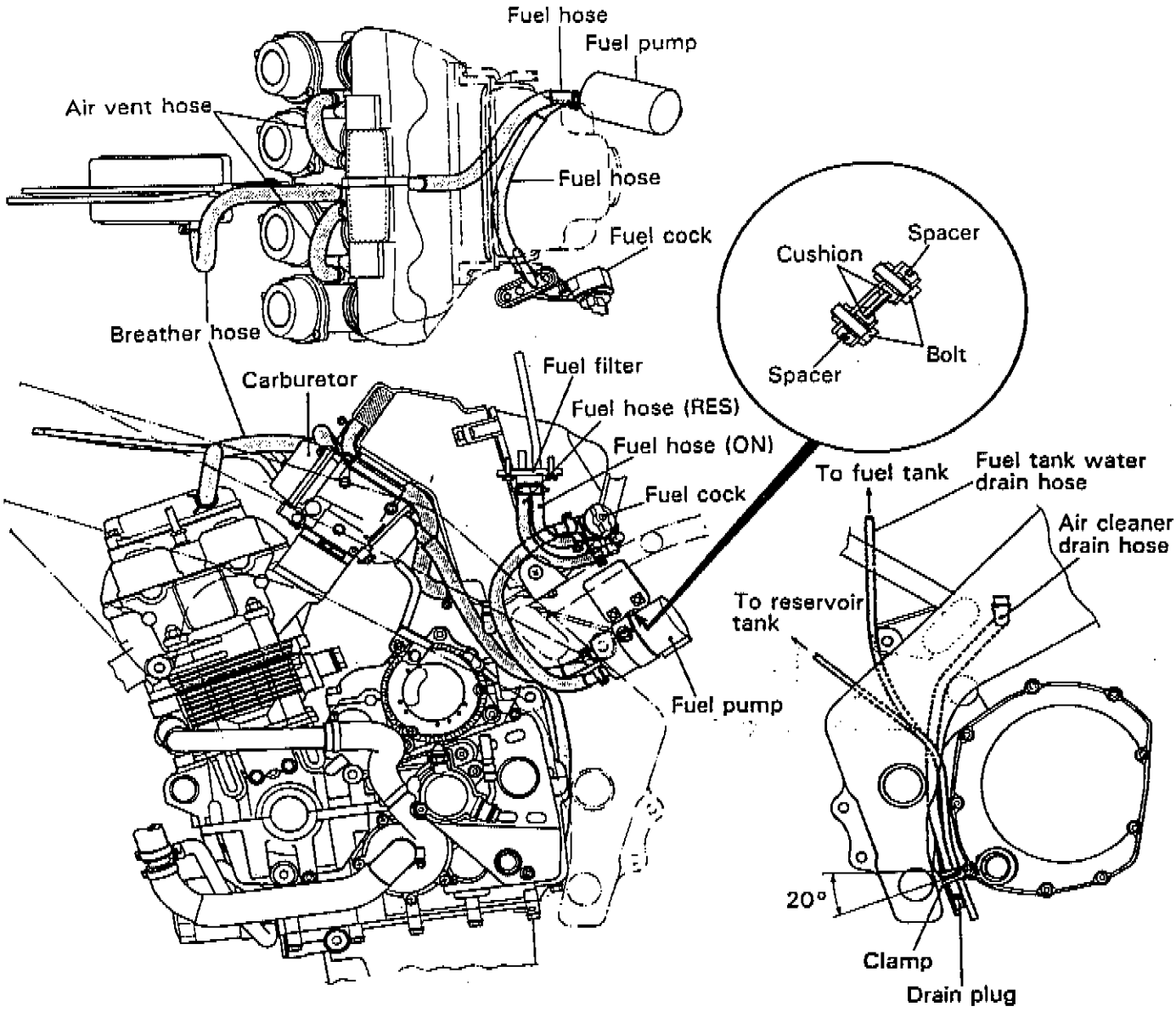
HIGH-TENSION CORD ROUTING

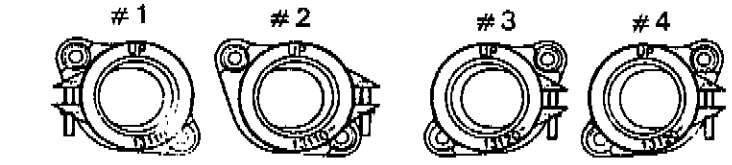


CABLE ROUTING



FUEL SYSTEM HOSE ROUTING

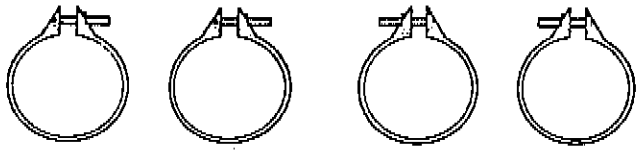




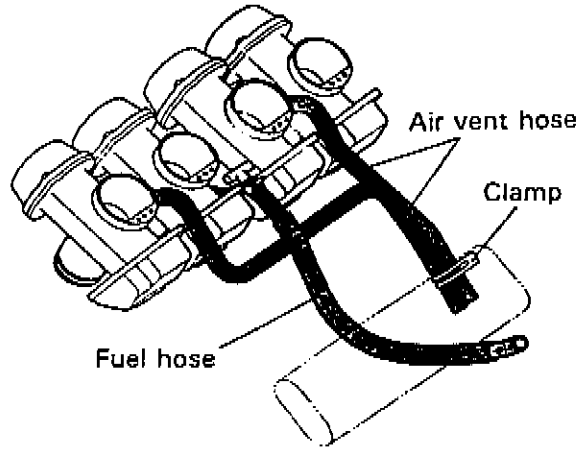
Carburetor clamp position (Engine side)

L.H

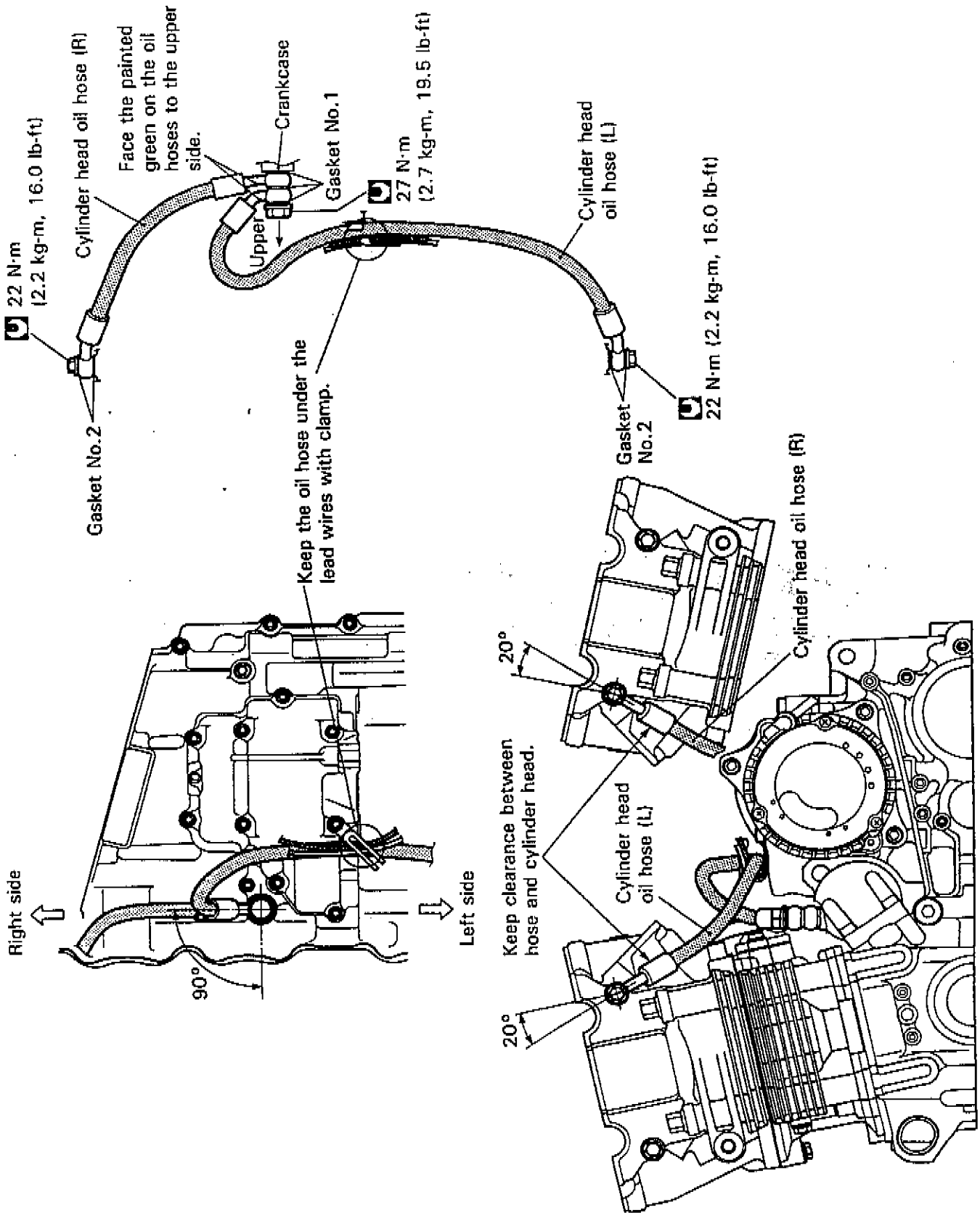
R.H



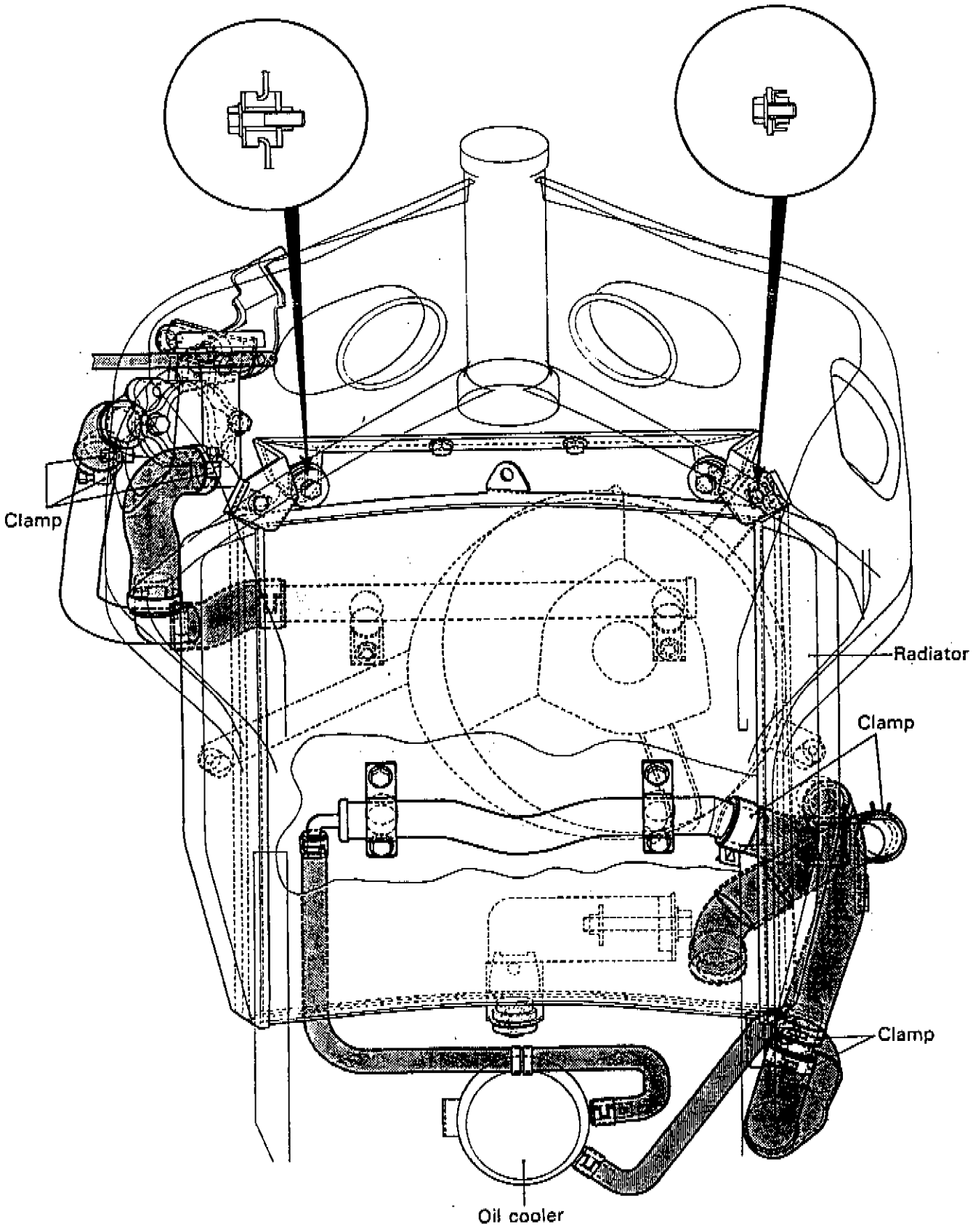
Carburetor clamp position (Air cleaner side)

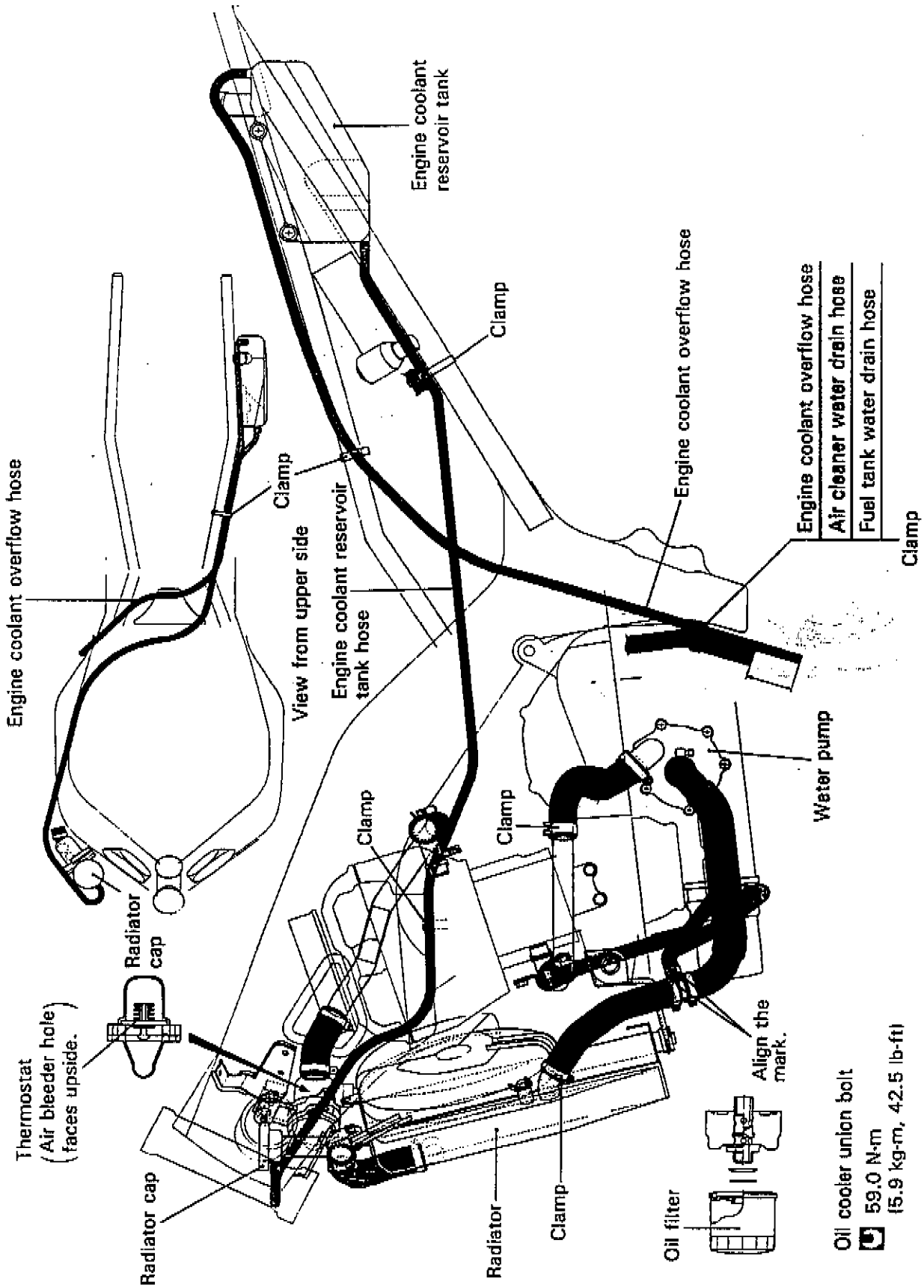


OIL HOSE ROUTING

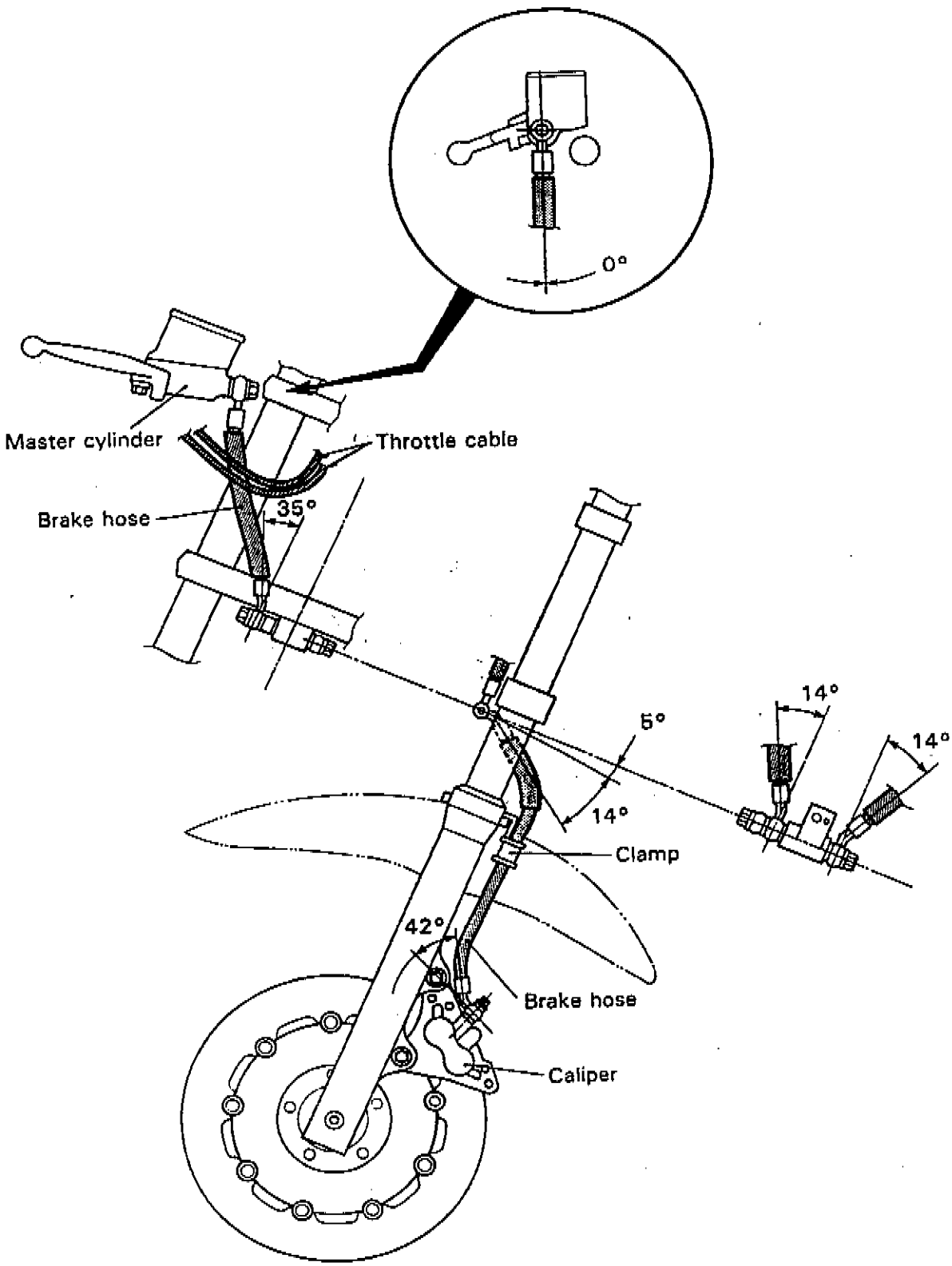


COOLING SYSTEM HOSE ROUTING

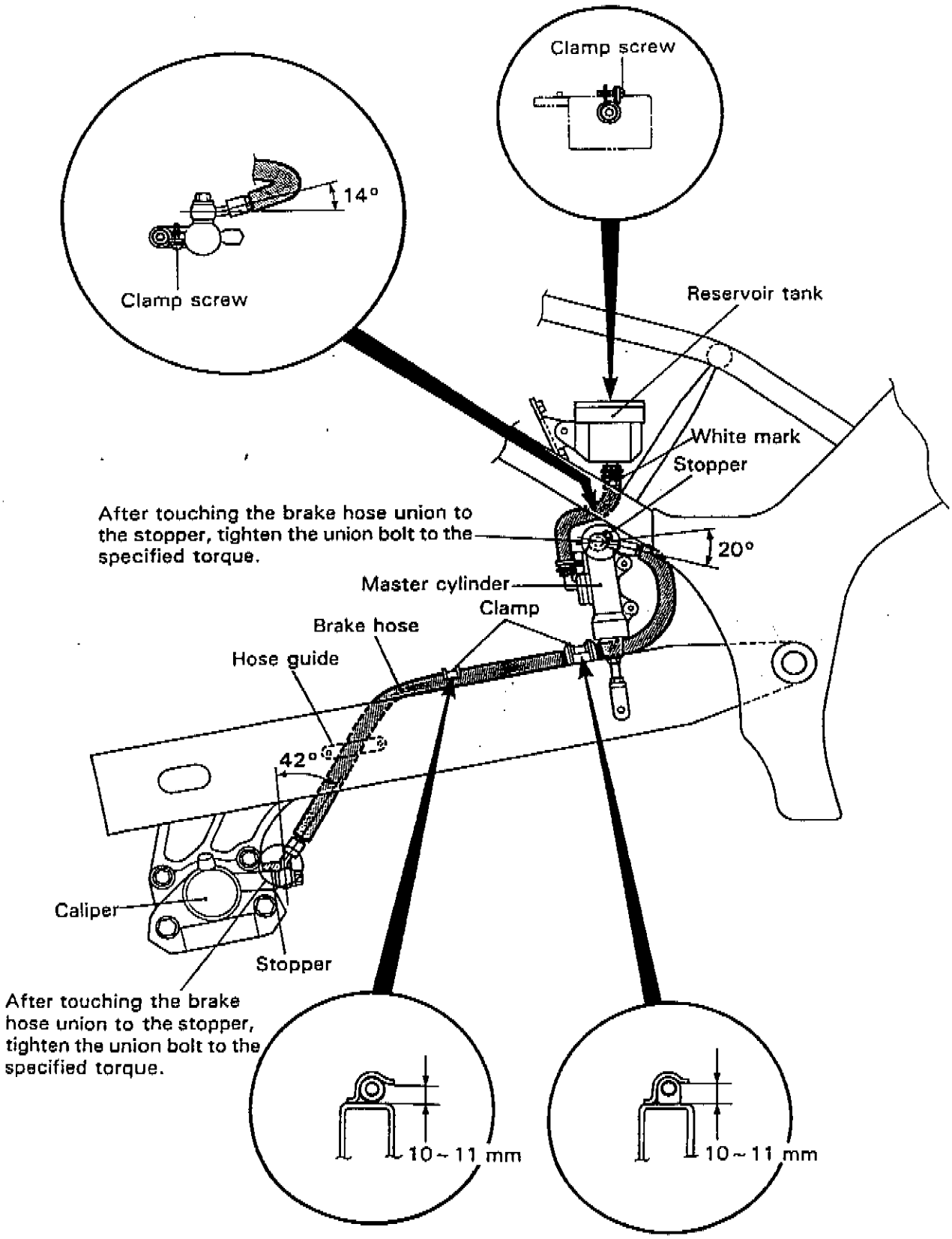



Engine coolant reservoir tank
Clamp
Engine coolant overflow hose
Clamp
Engine coolant reservoir tank hose
View from upper side
Engine coolant overflow hose
Engine coolant overflow hose
Air cleaner water drain hose
Fuel tank water drain hose
Clamp
Water pump
Clamp
Clamp
Radiator cap
Thermostat (Air bleeder hole faces upside.)
Radiator cap
Radiator
Clamp
Align the mark.
Oil filter
Oil cooler union bolt
59.0 N·m (5.9 kg-m, 42.5 lb-ft)

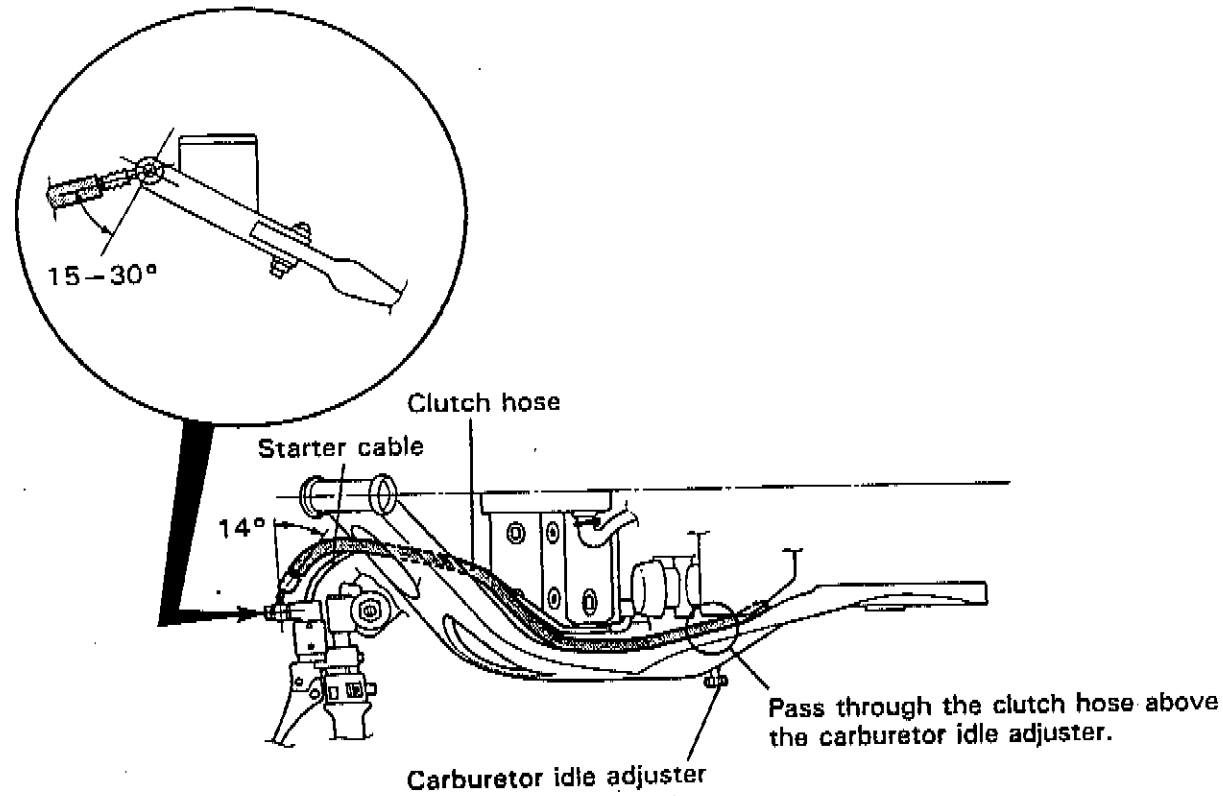
FRONT BRAKE HOSE ROUTING

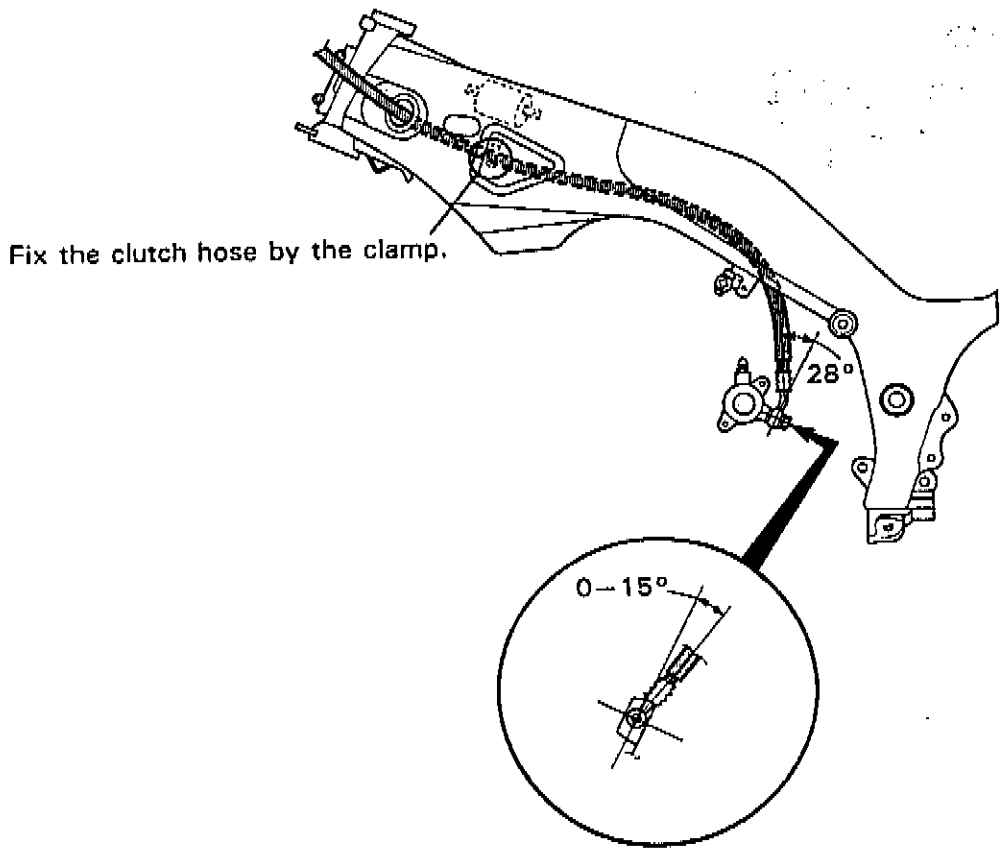


REAR BRAKE HOSE ROUTING

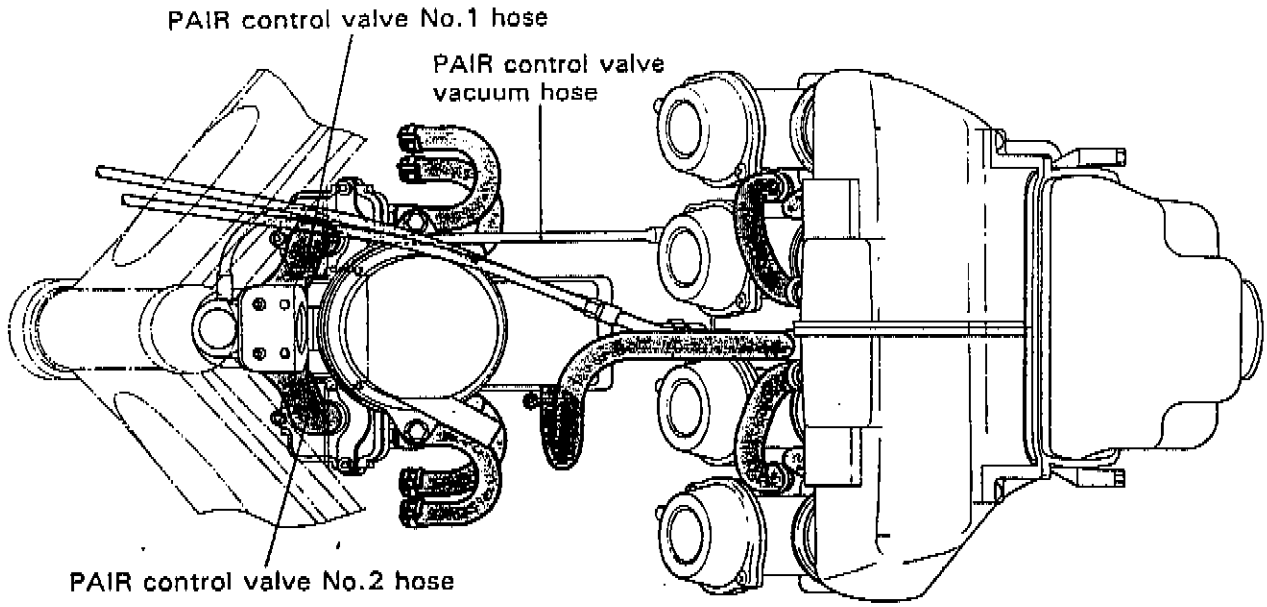


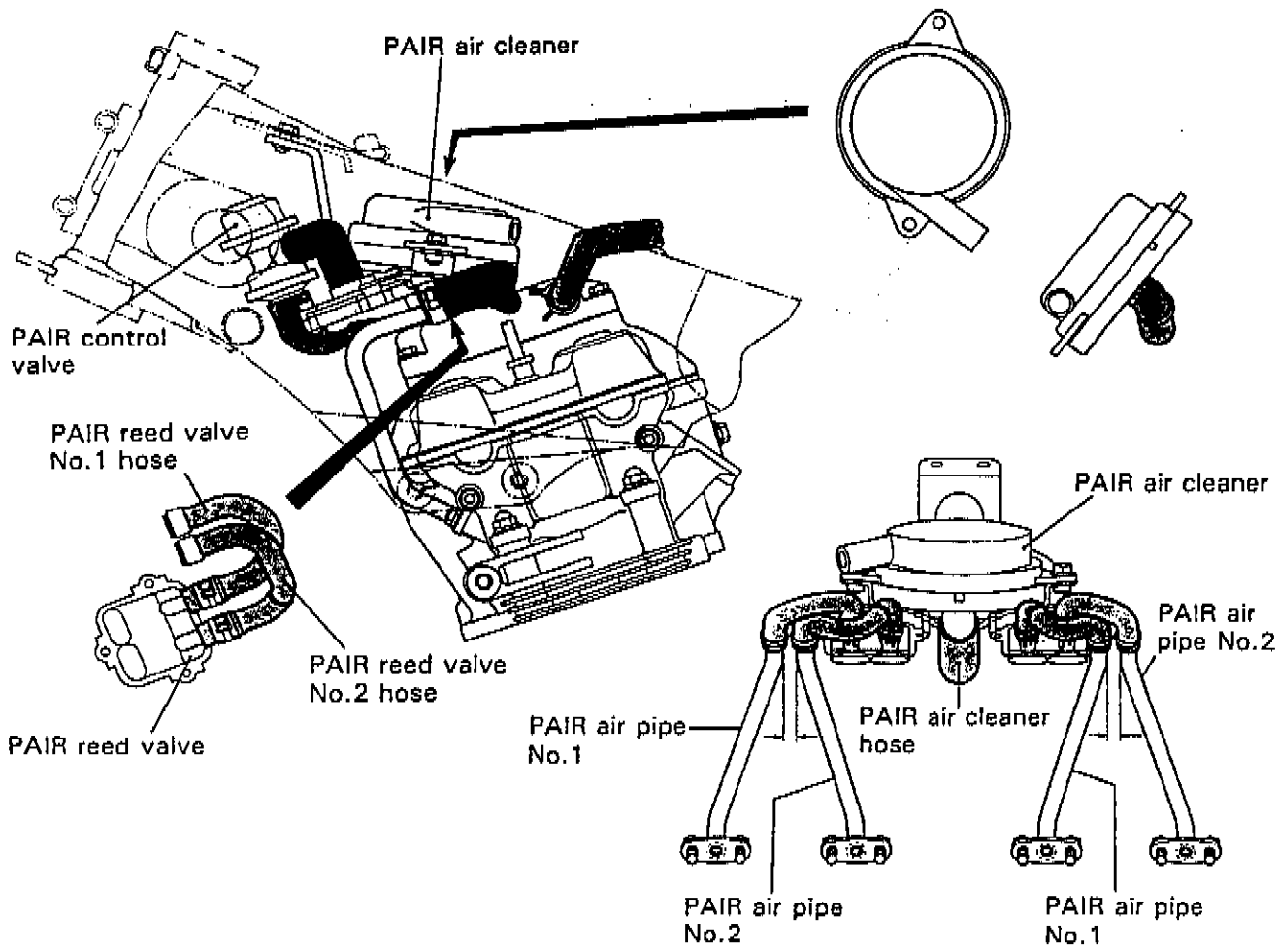
CLUTCH HOSE ROUTING





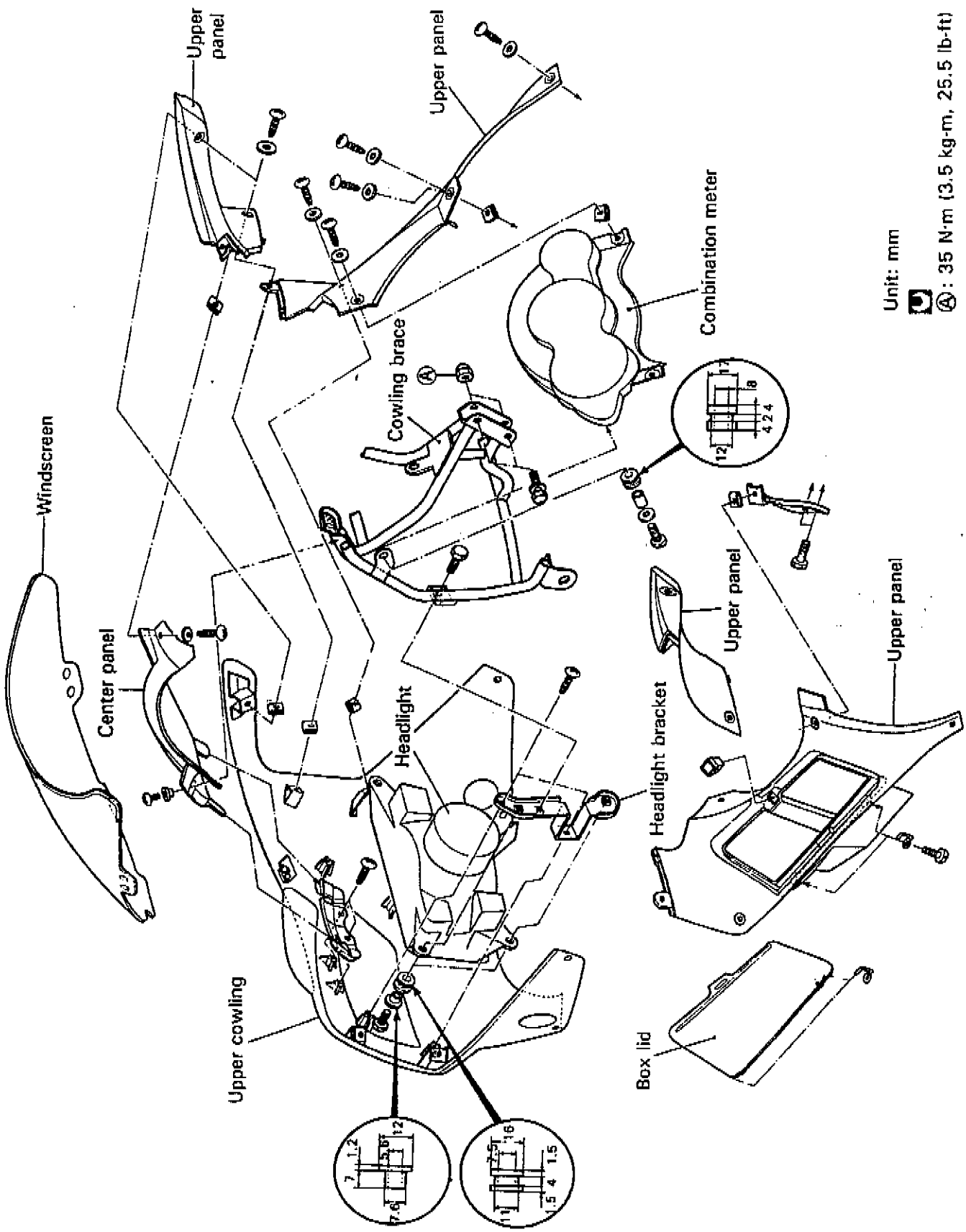
PAIR (AIR SUPPLY) SYSTEM HOSE ROUTING
(For Austria, Switzerland and U.S.A. (California only))

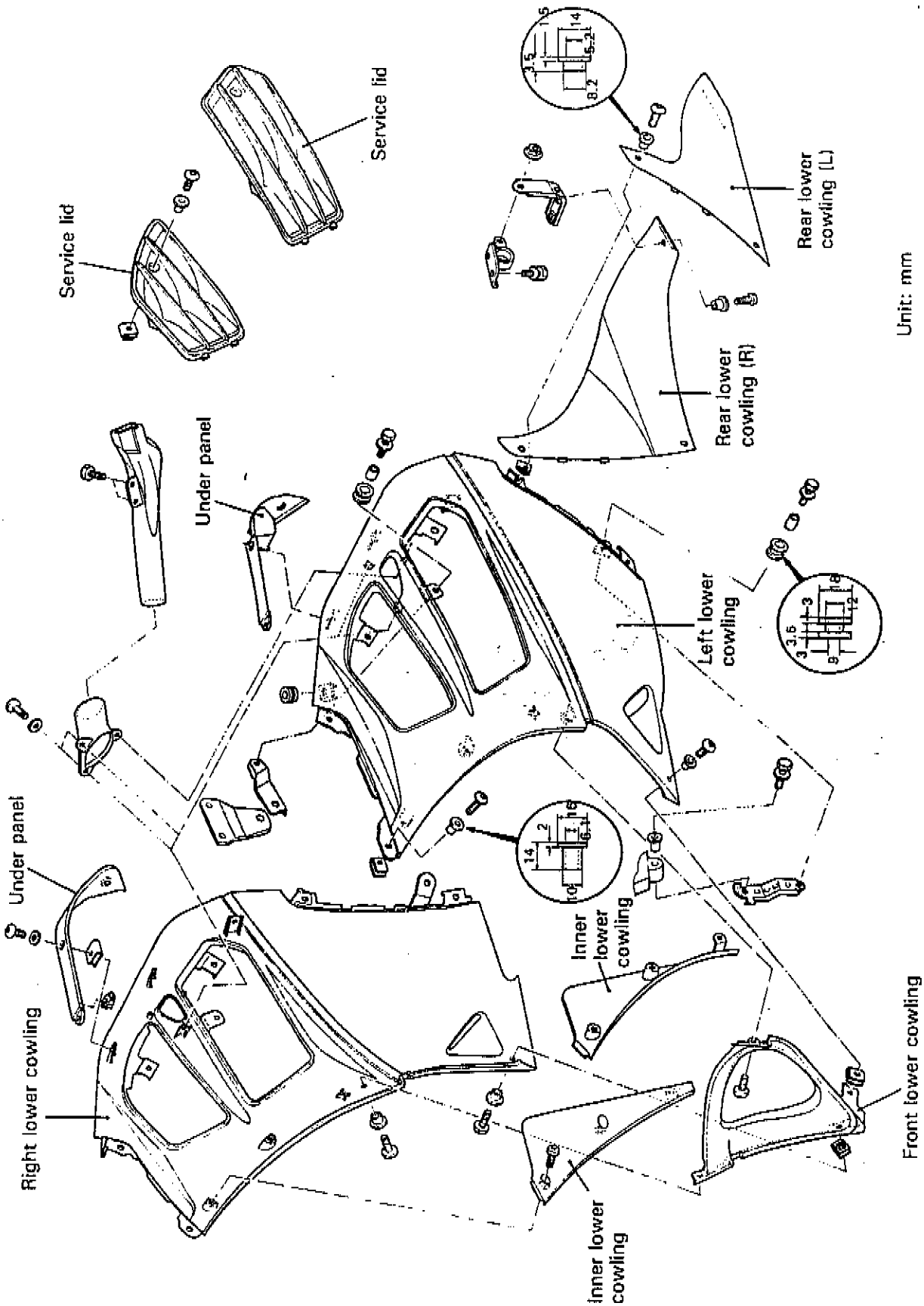




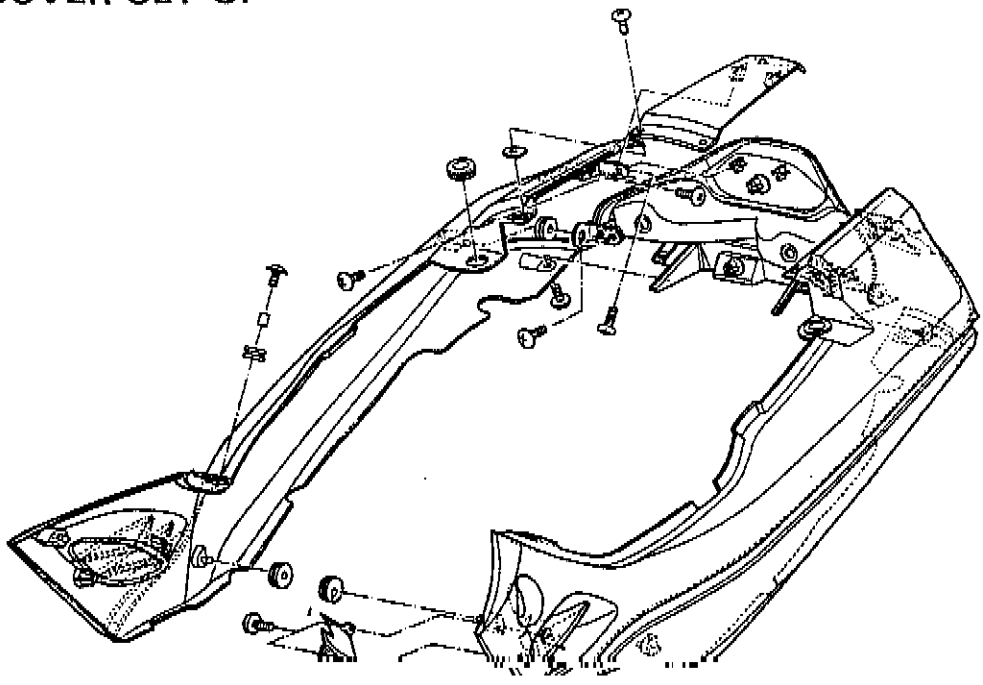
COWLING AND FRAME COVER SET UP

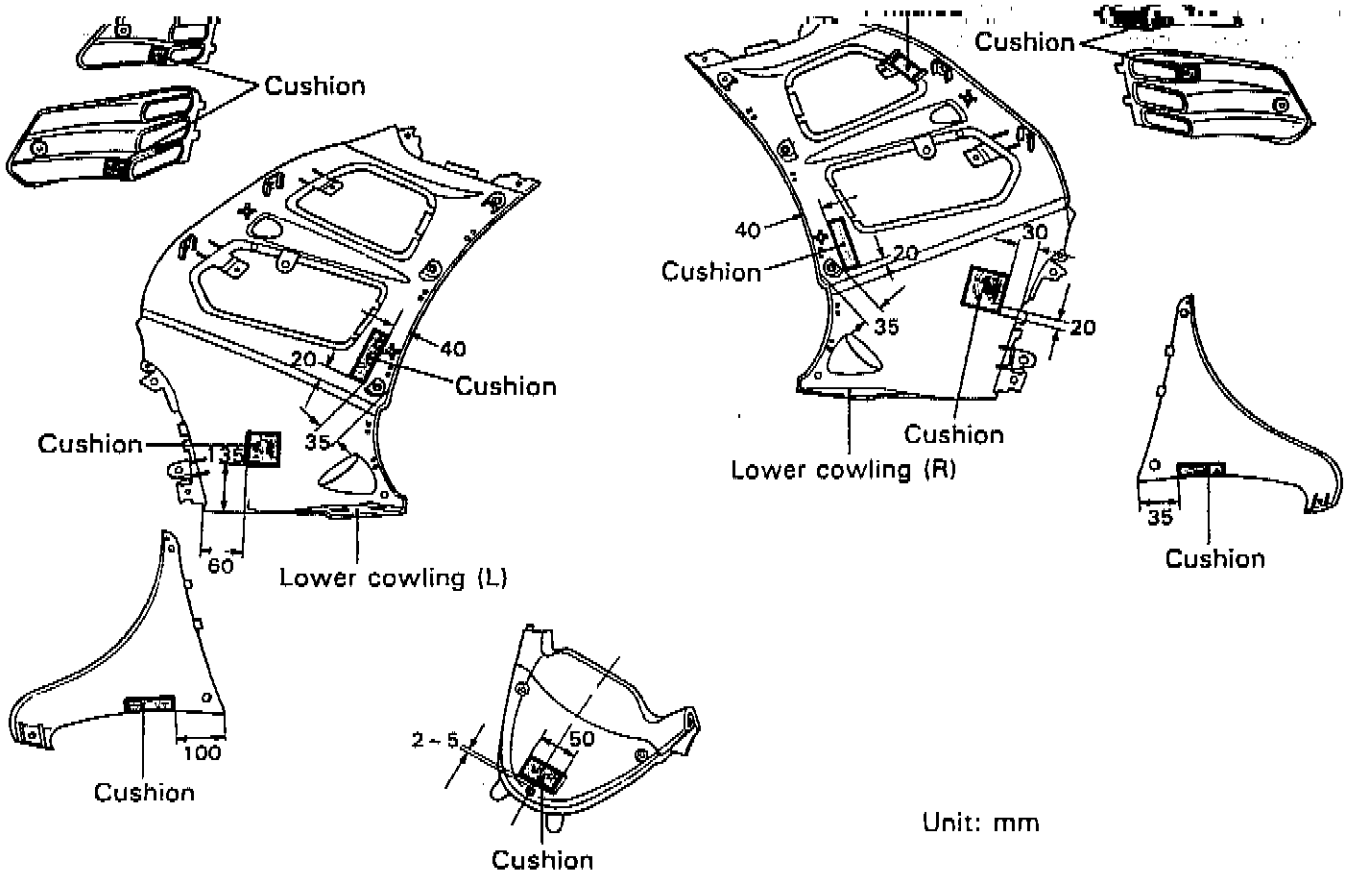
COWLING SET UP



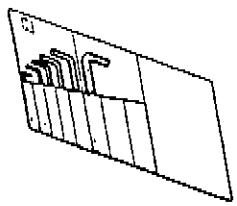
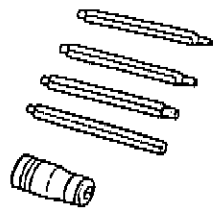
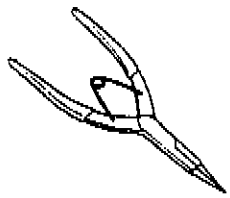
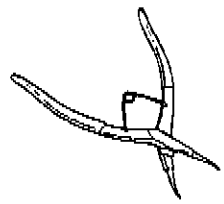
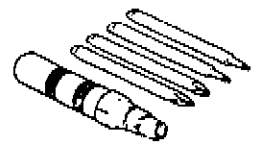
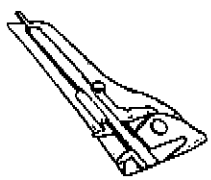
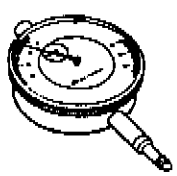
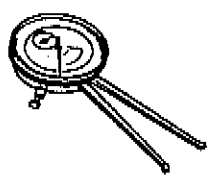
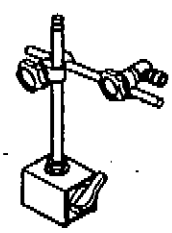
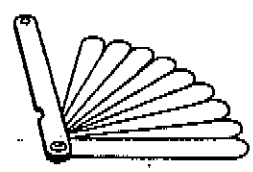
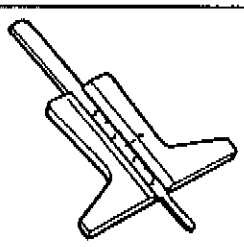
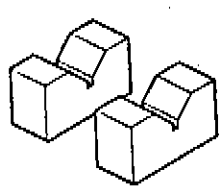
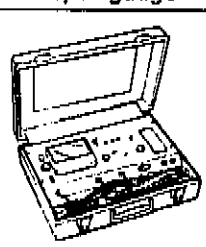
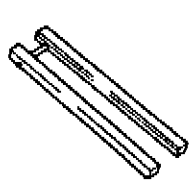
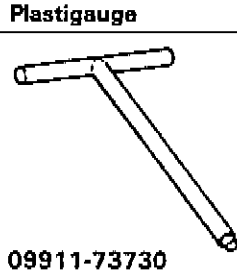
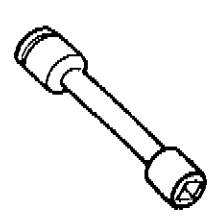
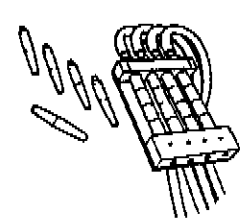
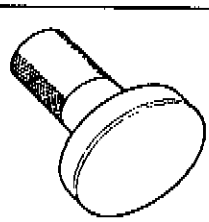
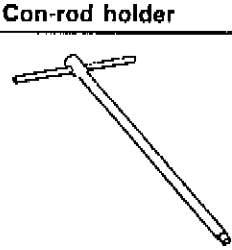
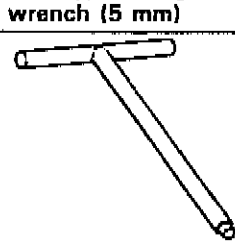
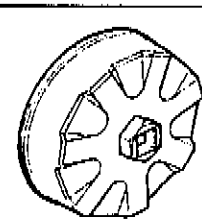

Service lid
Service lid
Rear lower cowling (L)
Rear lower cowling (R)
Under panel
Left lower cowling
Under panel
Inner lower cowling
Right lower cowling
Front lower cowling
Inner lower cowling
Unit: mm

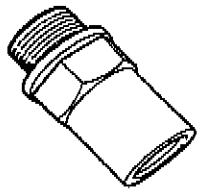
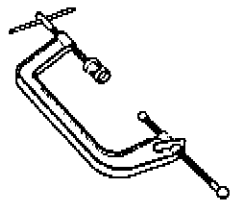
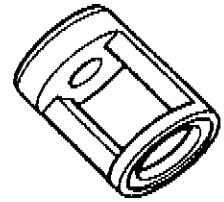
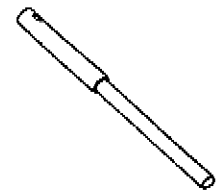
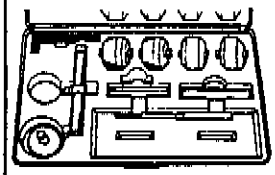
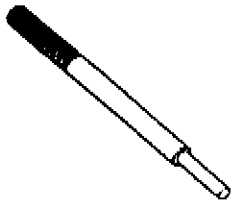
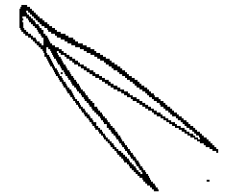
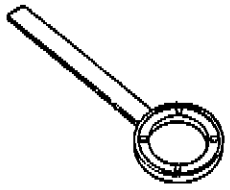
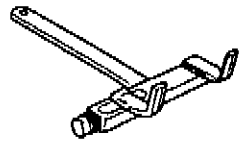
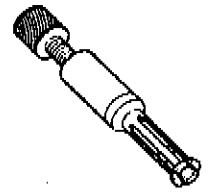
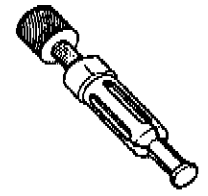
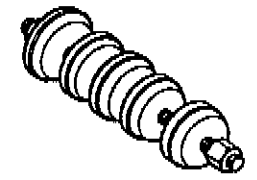
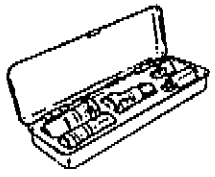
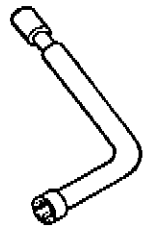
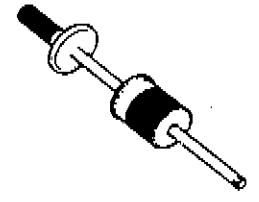
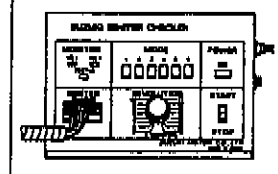
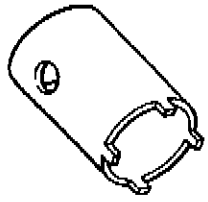
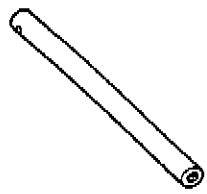
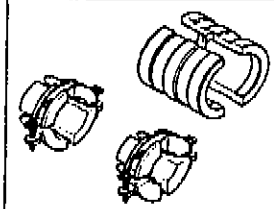
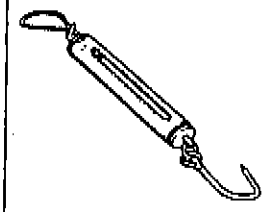
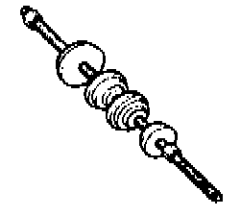
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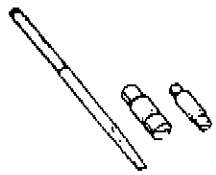
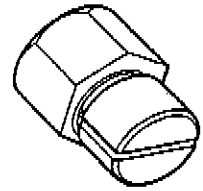
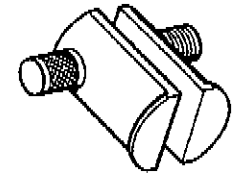
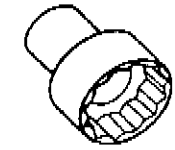
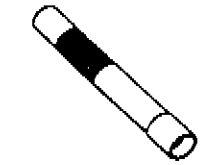
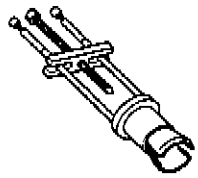
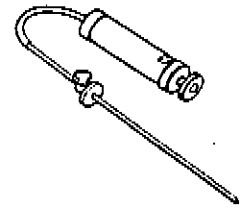
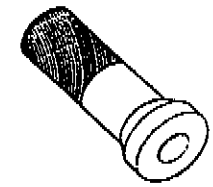




SPECIAL TOOLS

 09900-00401 "L" type hexagon wrench set	 09900-00410 Hexagon wrench set	 09900-06107 Snap ring pliers	 09900-06108 Snap ring pliers	 09900-09003 Impact driver set
 09900-20102 Vernier calipers (1/20 mm, 200 mm)	 09900-20202 Micrometer (1/100 mm, 25—50 mm)	 09900-20203 Micrometer (1/100 mm, 50—75 mm)	 09900-20205 Micrometer (1/1000 mm, 0—25 mm)	 09900-20508 Cylinder gauge set (1/100 mm, 40—80 mm)
 09900-20602 Dial gauge (1/1000 mm, 1 mm)	 09900-20605 Dial calipers (1/100 mm, 10—34 mm)	 09900-20606 Dial gauge (1/100 mm, 10 mm)	 09900-20701 Magnetic stand	 09900-20803 Thickness gauge
 09900-20805 Tire depth gauge	 09900-21304 V-block set (100 mm)	 09900-22301 Plastigauge	 09900-22403 Small bore gauge (18—35 mm)	 09900-25002 Pocket tester
 09900-28106 Electro tester	 09910-20116 Con-rod holder	 09911-73730 "T" type hexagon wrench (5 mm)	 09911-74520 Long socket (12 mm)	 09913-13121 Carburetor balancer
 09913-75520 Bearing installer	 09914-24510 T-handle	 09914-25811 "T" type hexagon wrench (6 mm)	 09915-40610 Oil filter wrench	 09915-64510 Compression gauge 09915-63310 (Adaptor)

 09915-74510 Oil pressure gauge 09915-77330 (for high pressure meter)	 09915-74540 Oil pressure gauge adaptor	 09916-14510 Valve lifter	 09916-14521 Valve lifter attachment	 09916-20640 Solid pilot (N-100-4.5)
 09916-21110 Valve seat cutter set	 See page 3-25. Valve seat cutter head (N-111, 116, 120, 121, 122,126)	 09916-33210 Valve guide reamer (4.5 mm)	 09916-34542 Valve guide reamer handle	 09916-34580 Valve guide reamer (10.8 mm)
 09916-43210 Valve guide remover/ installer	 09916-43230 Attachment	 09916-74521 Piston ring compressor body	 09916-74540 Piston ring compressor band (63—75 mm)	 09916-84511 Tweezers
 09920-34820 Clutch pressure plate holder	 09920-53740 Clutch sleeve hub holder	 09923-73210 Bearing puller (17—20 mm)	 09923-74510 Bearing puller (20—35 mm)	 09924-84510 Bearing installer set
 09930-10121 Spark plug socket wrench set	 09930-11910 Torx wrench	 09930-14530 Universal joint	 09930-30102 Sliding shaft	 09931-94430 Ignitor checker (Digital type)
 09940-14911 Steering stem nut wrench	 09940-52840 Front fork inner rod holder	 09940-52860 Front fork oil seal installer	 09940-92710 Spring scale	 09941-34513 Steering outer race installer

 09941-50111 Bearing remover	 09941-50120 Bearing remover attachment	 09941-54911 Bearing outer race remover	 09941-58010 50 mm socket wrench	 09941-74910 Steering bearing installer
 09941-84510 Bearing remover	 09943-74111 Front fork oil level gauge	 09951-16080 Bearing installer		

NOTE:
When ordering the special tool, please confirm whether it is available or not.

TIGHTENING TORQUE

ENGINE

ITEM	N·m	kg-m	lb-ft
Cylinder head cover bolt	14	1.4	10.0
Cylinder head bolt [M: 10]	43	4.3	31.0
Cylinder head bolt [M: 6]	10	1.0	7.0
Cylinder base nut	9	0.9	6.5
Camshaft journal holder bolt	10	1.0	7.0
Cam sprocket bolt	25	2.5	18.0
Oil hose mounting bolt [Cylinder side]	22	2.2	16.0
Oil hose mounting bolt [Crankcase side]	27	2.7	19.5
Cam chain tensioner mounting bolt	7	0.7	5.0
Cam chain tensioner spring holder bolt	35	3.5	25.5
Conrod bearing cap bolt	67	6.7	48.5
Starter clutch bolt	10	1.0	7.0
Signal generator bolt	25	2.5	18.0
Crankcase bolt [M: 6]	14	1.4	10.0
[M: 8] [M: 9]	26	2.6	19.0
Oil pump mounting bolt	10	1.0	7.0
Oil drain plug	23	2.3	16.5
Oil pan bolt	14	1.4	10.0
Gearshift cam stopper bolt	10	1.0	7.0
Gearshift cam stopper plate bolt	10	1.0	7.0
Gearshift arm stopper bolt	19	1.9	13.5
Clutch sleeve hub nut	150	15.0	108.5
Clutch diaphragm spring holder nut	100	10.0	72.5
Exhaust pipe bolt	23	2.3	16.5
Muffler mounting bolt	23	2.3	16.5
Engine sprocket nut	115	11.5	83.0
Engine sprocket nut stopper bolt	11	1.1	8.0
Engine mounting bolt [L: 30, 140 and 280]	79	7.9	57.0
Generator driven gear nut	50	5.0	36.0
Generator mounting bolt	25	2.5	18.0
Oil cooler mounting bolt	59	5.9	42.5
Oil pressure regulator	28	2.8	20.0
Oil pressure switch	14	1.4	10.0
Oil gallery plug [M: 16]	40	4.0	29.0
[M: 14]	28	2.8	20.0
[M: 10]	15	1.5	11.0
Crankcase plug [M: 22]	40	4.0	29.0
[M: 18]	28	2.8	20.0
Cooling fan thermo-switch	12	1.2	8.5

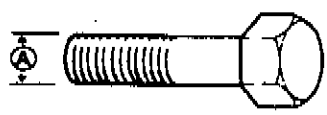
CHASSIS

ITEM	N·m	kg-m	lb-ft
Steering stem head bolt	65	6.5	47.0
Front fork upper clamp bolt	23	2.3	16.5
Front fork lower clamp bolt	23	2.3	16.5
Front fork cap bolt	23	2.3	16.5
Front fork inner rod lock nut	20	2.0	14.5
Front fork damper rod bolt	23	2.3	16.5
Front axle and nut	100	10.0	72.5
Front axle pinch bolt	23	2.3	16.5
Handlebar set bolt	23	2.3	16.5
Handlebar holder mounting nut	34	3.4	24.5
Cowling brace mounting nut	35	3.5	25.5
Front brake master cylinder mounting bolt	10	1.0	7.0
Front brake caliper mounting bolt	39	3.9	28.0
Front brake caliper pad mounting bolt	18	1.8	13.0
Front brake caliper housing bolt	23	2.3	16.5
Brake hose union bolt (Front & Rear)	23	2.3	16.5
Air bleeder valve (Front & Rear)	8	0.8	6.0
Brake disc bolt (Front & Rear)	23	2.3	16.5
Clutch master cylinder mounting bolt	10	1.0	7.0
Clutch hose union bolt	23	2.3	16.5
Front footrest bracket mounting bolt	25	2.5	18.0
Front footrest nut	54	5.4	39.0
Swingarm pivot nut	100	10.0	72.5
Rear shock absorber mounting nut (Upper & Lower)	50	5.0	36.0
Rear cushion lever/rod mounting nut	85	8.5	61.5
Rear brake caliper mounting bolt	25	2.5	18.0
Rear brake caliper pad mounting bolt	16	1.6	11.5
Rear brake caliper pad mounting bolt plug	3.5	0.35	2.5
Rear brake caliper housing bolt	33	3.3	24.0
Rear brake master cylinder mounting bolt	23	2.3	16.5
Rear brake master cylinder rod lock nut	18	1.8	13.0
Rear axle nut	100	10.0	72.5
Rear sprocket nut	60	6.0	43.5

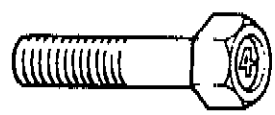
TIGHTENING TORQUE CHART

For other bolts and nuts listed previously, refer to this chart:

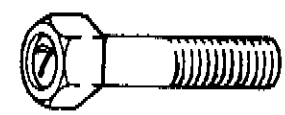
Bolt Diameter Ⓐ (mm)	Conventional or "4" marked bolt			"7" marked bolt		
	N·m	kg-m	lb-ft	N·m	kg-m	lb-ft
4	1.5	0.15	1.0	2	0.2	1.5
5	3	0.3	2.0	5	0.5	3.5
6	6	0.6	4.5	10	1.0	7.0
8	13	1.3	9.5	23	2.3	16.5
10	29	2.9	21.0	50	5.0	36.0
12	45	4.5	32.5	85	8.5	61.5
14	65	6.5	47.0	135	13.5	97.5
16	105	10.5	76.0	210	21.0	152.0
18	160	16.0	115.5	240	24.0	173.5



Conventional bolt



"4" marked bolt



"7" marked bolt

SERVICE DATA

VALVE + GUIDE

Unit: mm (in)

ITEM	STANDARD			LIMIT
Valve diam.	IN.	28 (1.10)		—
	EX.	24 (0.94)		—
Valve lift	IN.	E-03	7.3 (0.29)	—
		E-04	5.5 (0.22)	—
		E-18,33,39	7.3 (0.29)	—
		Others	8.7 (0.34)	—
	EX.	E-03	7.5 (0.30)	—
		E-04	7.0 (0.28)	—
		E-18,33,39	7.0 (0.28)	—
		Others	7.5 (0.30)	—
Tappet clearance (when cold)	IN.	0.10—0.20 (0.004—0.008)		—
	EX.	0.20—0.30 (0.008—0.010)		—
Valve guide to valve stem clearance	IN.	0.020—0.047 (0.0008—0.0019)		—
	EX.	0.030—0.057 (0.0012—0.0022)		—
Valve stem deflection	IN. & EX.	—		0.35 (0.014)
Valve guide I.D.	IN. & EX.	4.500—4.512 (0.1772—0.1776)		—
Valve stem O.D.	IN.	4.465—4.480 (0.1758—0.1764)		—
	EX.	4.455—4.470 (0.1754—0.1760)		—
Valve stem runout	IN. & EX.	—		0.05 (0.002)
Valve head thickness	IN. & EX.	—		0.5 (0.02)
Valve seat width	IN. & EX.	0.9—1.1 (0.035—0.043)		—
Valve head radial runout	IN. & EX.	—		0.03 (0.001)
Valve spring free length (IN. & EX.)	—			43.0 (1.69)
Valve spring tension (IN. & EX.)	18.6—21.4 kg (41.0—47.2 lbs) at length 38 mm (1.5 in)			—

CAMSHAFT + CYLINDER HEAD

Unit: mm (in)

ITEM	STANDARD			LIMIT
Cam height	IN.	E-03	35.292—35.348 (1.3894—1.3917)	35.00 (1.378)
		E-04	33.492—33.548 (1.3186—1.3208)	33.20 (1.307)
		E-18,33,39	35.292—35.348 (1.3894—1.3917)	35.00 (1.378)
		Others	36.692—36.748 (1.4446—1.4468)	36.40 (1.433)
	EX.	E-03	35.522—35.578 (1.3985—1.4007)	35.23 (1.387)
		E-04	34.952—35.008 (1.3761—1.3783)	34.66 (1.365)
		E-18,33,39	34.952—35.008 (1.3761—1.3783)	34.66 (1.365)
		Others	35.522—35.578 (1.3985—1.4007)	35.23 (1.387)
Camshaft journal oil clearance	IN. & EX.		0.032—0.066 (0.0013—0.0026)	0.150 (0.0059)
Camshaft journal holder I.D.	IN. & EX.		22.012—22.025 (0.8666—0.8671)	——
Camshaft journal O.D.	IN. & EX.		21.959—21.980 (0.8645—0.8654)	——
Camshaft runout	IN. & EX		——	0.10 (0.004)
Cam chain pin (at arrow "3")	13th pin			——
Cylinder head distortion	——			0.20 (0.008)

CYLINDER + PISTON + PISTON RING

Unit: mm (in)

ITEM	STANDARD			LIMIT
Compression pressure	1 000—1 500 kPa (10—15 kg/cm², 142—213 psi)			800 kPa (8 kg/cm², 114psi)
Compression pressure difference	——			200 kPa (2 kg/cm², 28 psi)
Piston to cylinder clearance	0.045—0.055 (0.0018—0.0022)			0.120 (0.0047)
Cylinder bore	73.000—73.015 (2.8740—2.8746)			73.085 (2.8774)
Piston diam.	72.950—72.965 (2.8720—2.8726) Measure at 15 mm (0.6 in) from the skirt end.			72.880 (2.8693)
Cylinder distortion	——			0.20 (0.008)
Piston ring free end gap	1st	R	Approx. 6.9 (0.27)	5.5 (0.22)
	2nd	R	Approx. 7.2 (0.28)	5.8 (0.23)
Piston ring end gap	1st		0.10—0.30 (0.004—0.012)	0.5 (0.02)
	2nd		0.35—0.50 (0.014—0.020)	1.0 (0.04)

ITEM	STANDARD		LIMIT
Piston ring to groove clearance	1st	—	0.18 (0.007)
	2nd	—	0.18 (0.007)
Piston ring groove width	1st	1.02—1.04 (0.040—0.041)	—
	2nd	1.02—1.04 (0.040—0.041)	—
	Oil	2.01—2.03 (0.079—0.080)	—
Piston ring thickness	1st	0.97—0.99 (0.038—0.039)	—
	2nd	0.97—0.99 (0.038—0.039)	—
Piston pin bore	19.002—19.008 (0.7481—0.7483)		19.030 (0.7492)
Piston pin O.D.	18.996—19.000 (0.7479—0.7480)		18.980 (0.7472)

CONROD + CRANKSHAFT

Unit: mm (in)

ITEM	STANDARD		LIMIT
Conrod small end I.D.	19.010—19.018 (0.7484—0.7487)		19.040 (0.7496)
Conrod big end side clearance	0.10—0.20 (0.004—0.008)		0.30 (0.010)
Conrod big end width	20.95—21.00 (0.825—0.827)		—
Crank pin width	21.10—21.15 (0.831—0.833)		—
Conrod big end oil clearance	0.032—0.056 (0.0013—0.0022)		0.080 (0.0031)
Crank pin O.D.	35.976—36.000 (1.4164—1.4173)		—
Crankshaft journal oil clearance	0.020—0.044 (0.0008—0.0017)		0.080 (0.0031)
Crankshaft journal O.D.	33.976—34.000 (1.3376—1.3386)		—
Crankshaft thrust clearance	0.055—0.110 (0.0022—0.0043)		—
Crankshaft thrust bearing thickness	Right side	2.425—2.450 (0.0955—0.0965)	—
	Left side	2.350—2.500 (0.0925—0.0984)	—
Crankshaft runout	—		0.05 (0.002)

OIL PUMP

ITEM	STANDARD	LIMIT
Oil pump reduction ratio	1.703 (72/46 x 37/34)	—
Oil pressure (at 60°C, 140°F)	Above 300 kPa (3.0 kg/cm², 43 psi) Below 600 kPa (6.0 kg/cm², 85 psi) at 3 000 r/min.	—

CLUTCH

Unit: mm (in)

ITEM	STANDARD	LIMIT
Drive plate thickness	2.52—2.68 (0.100—0.106)	2.22 (0.087)
Drive plate distortion	—	0.10 (0.004)
Clutch spring free height	—	3.1 (0.12)
Clutch master cylinder bore	14.000—14.043 (0.5511—0.5529)	—
Clutch master cylinder piston diam.	13.957—13.984 (0.5495—0.5506)	—
Clutch release cylinder bore	35.700—35.762 (1.4055—1.4079)	—
Clutch release cylinder piston diam.	35.650—35.675 (1.4035—1.4045)	—

THERMOSTAT + RADIATOR + FAN

ITEM		STANDARD		LIMIT
Thermostat valve opening temperature		74.5—78.5°C (166.1—173.3°F)		—
Thermostat valve lift		Over 7 mm (0.28 in) at 90°C (194°F)		—
Radiator cap valve opening pressure		110 kPa (1.1 kg/cm², 15.6 psi)		—
Cooling fan thermo-switch operating temperature	ON	Approx. 105°C (221°F)		—
	OFF	Approx. 100°C (212°F)		—
Engine coolant temperature gauge resistance		50°C (122°F)	Approx. 153.9 Ω	—
		80°C (176°F)	Approx. 51.9 Ω	—
		100°C (212°F)	Approx. 27.4 Ω	—
		120°C (248°F)	Approx. 16.1 Ω	—

TRANSMISSION + DRIVE CHAIN

Unit: mm (in) Except ratio

ITEM		STANDARD	LIMIT
Primary reduction ratio		1.565 (72/46)	—
Final reduction ratio		2.867 (43/15)	—
Gear ratios	Low	2.714 (38/14)	—
	2nd	1.809 (38/21)	—
	3rd	1.409 (31/22)	—
	4th	1.181 (26/22)	—
	Top	1.038 (27/26)	—
Shift fork to groove clearance		0.10—0.30 (0.004—0.012)	0.50 (0.020)
Shift fork groove width		5.00—5.10 (0.197—0.201)	—
Shift fork thickness		4.80—4.90 (0.189—0.193)	—

ITEM	STANDARD		LIMIT
Drive chain	Type	RK532GSV2	———
	Links	110 links, ENDLESS	———
	20-pitch length	———	319.4 (12.6)
Drive chain slack	25—35 (1.0—1.4)		———
Gearshift lever height	55 (2.2)		———

CARBURETOR

ITEM	SPECIFICATION	
	E-03	E-33
Carburetor type	MIKUNI BDST36SS	←
Bore size	36 mm	←
I.D. No.	31E1	31E4
Idle r/min.	1 200±100 r/min.	1 200±50 r/min.
Float height	6.9±1.0 mm (0.27±0.04 in)	←
Main jet (M.J.)	#112.5	←
Main air jet (M.A.J.)	0.9 mm	No.1 & 4 : 0.6 mm No.2 & 3 : 0.7 mm
Jet needle (J.N.)	5DV3	5DFT13
Needle jet (N.J.)	O-9	←
Throttle valve (Th.V.)	#120	#125
Pilot jet (P.J.)	#12.5	←
By-pass (B.P.)	0.8, 0.8, 0.8 mm	←
Pilot outlet (P.O.)	0.8 mm	0.7 mm
Valve seat (V.S.)	1.5 mm	←
Starter jet (G.S.)	#52.5	←
Pilot screw (P.S.)	PRE-SET	←
Throttle cable play	0.5—1.0 mm (0.02—0.04 in)	←

CARBURETOR

ITEM	SPECIFICATION		
	E-02,25,28,34	E-04	E-24
Carburetor type	MIKUNI BDST36SS	←	←
Bore size	36 mm	←	←
I.D. No.	31E0	31E6	31E7
Idle r/min.	1 200±100 r/min	←	←
Float height	6.9±1.0 mm (0.27±0.04 in)	←	←
Main jet (M.J.)	#112.5	←	←
Main air jet (M.A.J.)	No.1 & 4: 0.8 mm No.2 & 3: 0.9 mm	No.1 & 4: 0.7 mm No.2 & 3: 0.8 mm	No.1 & 4: 0.8 mm No.2 & 3: 0.9 mm
Jet needle (J.N.)	5DV1-3rd	←	←
Needle jet (N.J.)	O-9	←	←
Throttle valve (Th.V.)	#120	←	←

ITEM		SPECIFICATION		
		E-02,25,28,34	E-04	E-24
Pilot jet	(P.J.)	#12.5	←	←
By-pass	(B.P)	0.8, 0.8, 0.8 mm	←	←
Pilot outlet	(P.O.)	0.8 mm	←	←
Valve seat	(V.S.)	1.5 mm	←	←
Starter jet	(G.S.)	#50	←	←
Pilot screw	(P.S.)	PRE-SET (1-¼ turns back)	PRE-SET (1-½ turns back)	PRE-SET (1 turn back)
Pilot air jet	(P.A.J.)	#120	←	←
Throttle cable play		0.5—1.0 mm (0.02—0.04 in)	←	←

CARBURETOR

ITEM		SPECIFICATION		
		E-22	E-18	E-39
Carburetor type		MIKUNI BDST36SS	←	←
Bore size		36 mm	←	←
I.D. No.		31E2	31E3	31E8
Idle r/min.		1 200±100 r/min.	1 300$^{+100}_{-50}$ r/min.	1 300±100 r/min.
Float height		6.9±1.0 mm (0.27±0.04 in)	←	←
Main jet	(M.J.)	#115	#107.5	#105
Main air jet	(M.A.J.)	No.1 & 4: 0.8 mm No.2 & 3: 0.9 mm	No.1 & 4: 0.6 mm No.2 & 3: 0.7 mm	←
Jet needle	(J.N.)	5DV1-3rd	5DFT12-3rd	←
Needle jet	(N.J.)	O-9	←	←
Throttle valve	(Th.V.)	#120	←	←
Pilot jet	(P.J.)	#12.5	←	←
By-pass	(B.P)	0.8, 0.8, 0.8 mm	←	←
Pilot outlet	(P.O.)	0.8 mm	0.9 mm	←
Valve seat	(V.S.)	1.5 mm	←	←
Starter jet	(G.S.)	#50	#52.5	←
Pilot screw	(P.S.)	PRE-SET (1-⅛ turns back)	←	PRE-SET (1-¼ turns back)
Pilot air jet	(P.A.J.)	#120	#130	←
Throttle cable play		0.5—1.0 mm (0.02—0.04 in)	←	←

[E-15, 16 and 17 models are included in E-22 model.]
[E-21 and 53 models are included in E-34 model.]

ELECTRICAL

Unit: mm (in)

ITEM	SPCIFICATION		NOTE
Ignition timing	4° B.T.D.C. below 1 500 r/min.		E-03,18,33,39
	7° B.T.D.C. below 1 500 r/min.		Others
Firing order	1-2-4-3		
Spark plug	Type	NGK: CR9E ND: U27ESR-N	
	Gap	0.7—0.8 (0.028—0.032)	
Spark performance	Over 8 (0.3) at 1 atm.		

ITEM			SPECIFICATION		NOTE
Signal coil resistance			(Black—Green) Approx. 135—200 Ω		Tester range: (x 100 Ω)
Ignition coil resistance		Primary	⊕ tap— ⊖ tap Approx. 2.4—3.2 Ω		Tester range: (x 1 Ω)
		Secondary	Plug cap—Plug cap Approx. 30—40 kΩ		Tester range: (x 1 kΩ)
Generator			Slip ring O.D.	Limit: 14.0 (0.55)	ND
			Brush length	Limit: 4.5 (0.18)	
Generator Max. output			Approx. 405 W at 5 000 r/min		The rotation of the generator
Regulated voltage			Above 13.5 V at 5 000 r/min.		
Starter relay resistance			3—5 Ω		
Battery	Type designation		YTX9-BS		
	Capacity		12 V 28.8 kC (8 Ah)/10 HR		
	Standard electrolyte S.G.		1.320 at 20°C (68°F)		
Fuse size	Headlight	HI	15 A		
		LO	15 A		
	Turn signal		15 A		
	Ignition		10 A		
	Taillight		10 A		
	Main		30 A		

WATTAGE

Unit: W

ITEM		SPECIFICATION	
		E-03,24,28,33	The others
Headlight	HI	60	←
	LO	55	←
Position light			4
Taillight		5	←
Brake light		21 x 2	←
Turn signal light		21	←
Tachometer light		1.7 x 2	←
Speedometer light		1.7 x 2	←
Turn signal indicator light		3.4	←
High beam indicator light		3.4	←
Neutral indicator light		3.4	←
Oil pressure indicator light		3.4	←
Fuel level indicator light		3.4	←
License light		5	←
Engine coolant temp. meter light		1.7	←

BRAKE + WHEEL

Unit: mm (in)

ITEM		STANDARD		LIMIT
Rear brake pedal height			55 (2.2)	—
Brake disc thickness		Front	4.5 ± 0.2 (0.177 ± 0.008)	4.0 (0.16)
		Rear	5.0 ± 0.2 (0.197 ± 0.008)	4.5 (0.18)
Brake disc runout (Front & Rear)			—	0.30 (0.012)
Master cylinder bore		Front	15.870–15.913 (0.6248–0.6265)	—
		Rear	12.700–12.743 (0.5000–0.5017)	—
Master cylinder piston diam.		Front	15.827–15.854 (0.6231–0.6242)	—
		Rear	12.657–12.684 (0.4983–0.4993)	—
Brake caliper cylinder bore	Leading	Front	30.230–30.280 (1.1902–1.1921)	—
	Trailing		33.960–34.010 (1.3370–1.3390)	—
		Rear	38.180–38.256 (1.5031–1.5061)	—
Brake caliper piston diam.	Leading	Front	30.130–30.180 (1.1826–1.1882)	—
	Trailing		33.878–33.928 (1.3338–1.3357)	—
		Rear	38.098–38.148 (1.5000–1.5019)	—
Rear brake pad mounting pin diam.			5.9 (0.23)	5.6 (0.22)
Wheel rim runout (Front & Rear)		Axial	—	2.0 (0.08)
		Radial	—	2.0 (0.08)
Wheel axle runout		Front	—	0.25 (0.010)
		Rear	—	0.25 (0.010)
Tire size		Front	120/70 ZR17	—
		Rear	170/60 ZR17	—
Tire tread depth		Front	—	1.6 (0.06)
		Rear	—	2.0 (0.08)

SUSPENSION

Unit: mm (in)

ITEM	STANDARD		LIMIT	NOTE
Front fork stroke	120 (4.7)		—	
Front fork spring free length	—		303 (11.9)	
Front fork oil level	105 (4.1)		—	E-03,33
	99 (3.9)		—	The others
Front fork spring adjuster	3rd notch from top		—	
Rear shock absorber gas pressure	1 000 kPa (10 kg/cm², 142 psi)		—	
Rear shock absorber spring adjuster	4th position among 7		—	
Rear shock absorber damping force adjuster	Extension	1 click out	—	E-03,33
		2 clicks out	—	The others
	Compression	At punch mark (about 1 turn out)	—	E-03,33
		At punch mark (about ¼ turn out)	—	The others
Rear wheel travel	130 (5.1)		—	
Swingarm pivot shaft runout	—		0.3 (0.01)	

FUEL + OIL + ENGINE COOLANT

ITEM	SPECIFICATION		NOTE
Fuel type	Use only unleaded gasoline of at least 85 pump octane ($\frac{R+M}{2}$) or 91 octane or higher rated by the research method. Gasoline containing MTBE (Methyl Tertiary Butyl Ether), less than 10% ethanol, or less than 5% methanol with appropriate cosolvents and corrosion inhibitor is permissible.		E-03,33
	Use only unleaded gasoline of at least 87 pump octane ($\frac{R+M}{2}$ method) or 91 octane or higher rated by the Research Method.		E-28
	Gasoline used should be graded 85-95 octane or higher. An unleaded gasoline is recommended.		The others
Fuel tank including reserve	21.0 L (5.5/4.6 US/Imp gal)		
reserve	4.5 L (1.2/1.0 US/Imp gal)		
Engine oil type	SAE 10W/40, API SE or SF		
Engine oil capacity	Change	3 000 ml (3.2/2.6 US/Imp qt)	
	Filter change	3 300 ml (3.5/2.9 US/Imp qt)	
	Overhaul	3 900 ml (4.1/3.4 US/Imp qt)	

ITEM	SPECIFICATION	NOTE
Front fork oil type	Frok oil #10	
Front fork oil capacity (each leg)	459 ml (15.5/16.2 US/Imp oz)	E-03,33
	466 ml (15.8/16.4 US/Imp oz)	The others
Brake fluid type	DOT 4	
Engine coolant type	Use an anti-freeze/coolant compatible with aluminum radiator, mixed with distilled water only, at the ratio of 50:50.	
Engine coolant including reserve	2 450 ml (2.6/2.2 US/Imp qt)	

TIRE PRESSURE

COLD INFLATION TIRE PRESSURE	SOLO RIDING			DUAL RIDING		
	kPa	kg/cm²	psi	kPa	kg/cm²	psi
FRONT	250	2.50	36	250	2.50	36
REAR	250	2.50	36	290	2.90	42

EMISSION CONTROL INFORMATION

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9

EMISSION CONTROL CARBURETOR COMPONENTS

RF900R motorcycles are equipped with precision, manufactured carburetors for emission level control These carburetors require special mixture control components and other precision adjustments to function properly.

There are several carburetor mixture control components in each carburetor assembly. Three (3) of these components are machined to much closer tolerances than standard machined carburetor jets. These three (3) particular jets—MAIN JET, NEEDLE JET, PILOT JET—must not be replaced by standard jets. To aid in identifying these three (3) jets a different design of letter and number are used. If replacement of these close tolerance jets becomes necessary, be sure to replace them with the same type close tolerance jets marked as in the examples shown below.

The jet needle is also of special manufacture. Only one clip position is provided on the jet needle. If replacement becomes necessary the jet needle may only be replaced with an equivalent performing replacement component. Suzuki recommends that Genuine Suzuki Parts be utilized whenever possible for the best possible performance and durability.

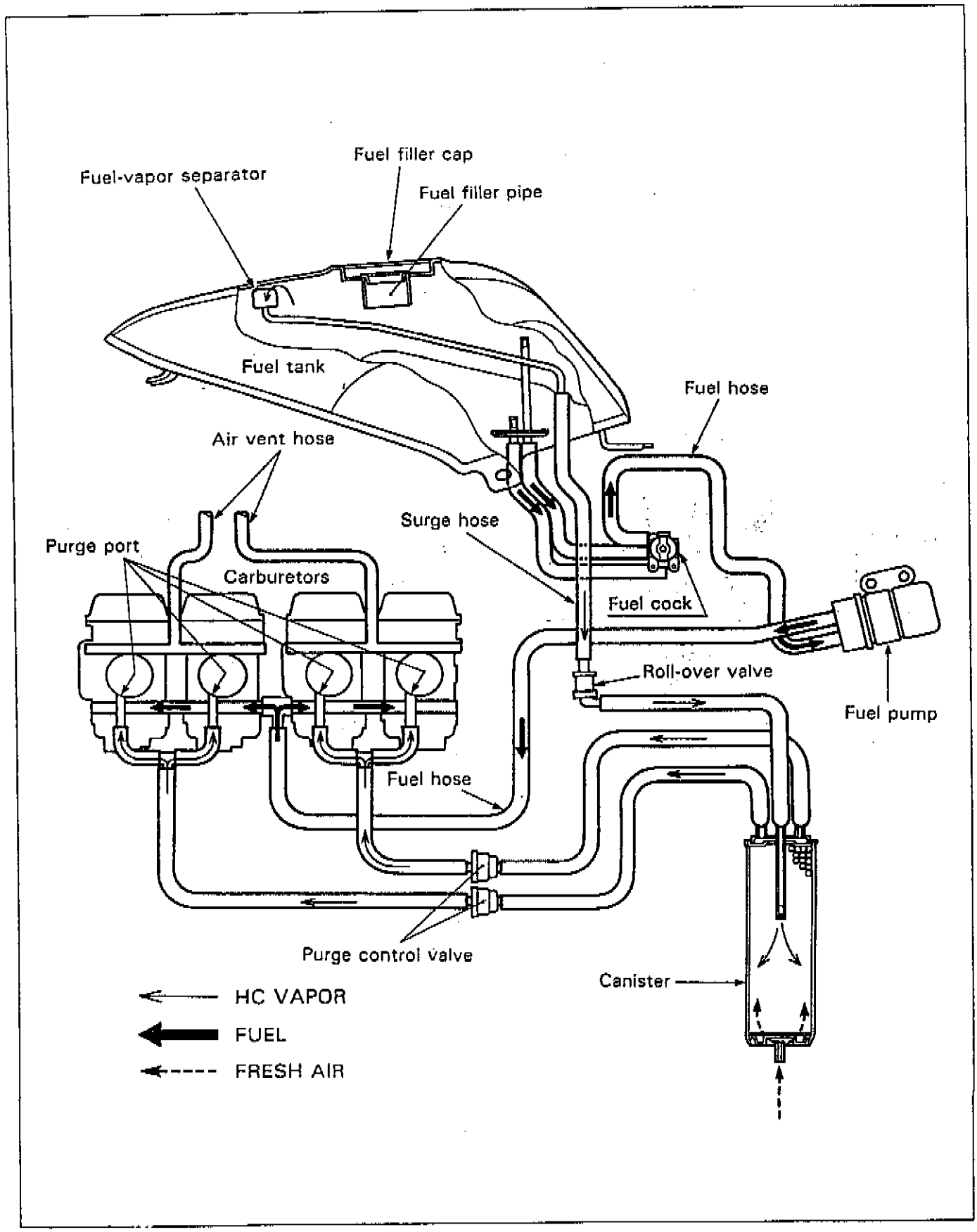
Conventional Figures Used on Standard Tolerance Jet Components	1	2	3	4	5	6	7	8	9	0
Emission Type Figures Used on Close Tolerance Jet Components	1	2	3	4	5	6	7	8	9	0

The carburetor specifications for the emission-controlled RF900R are as follows.

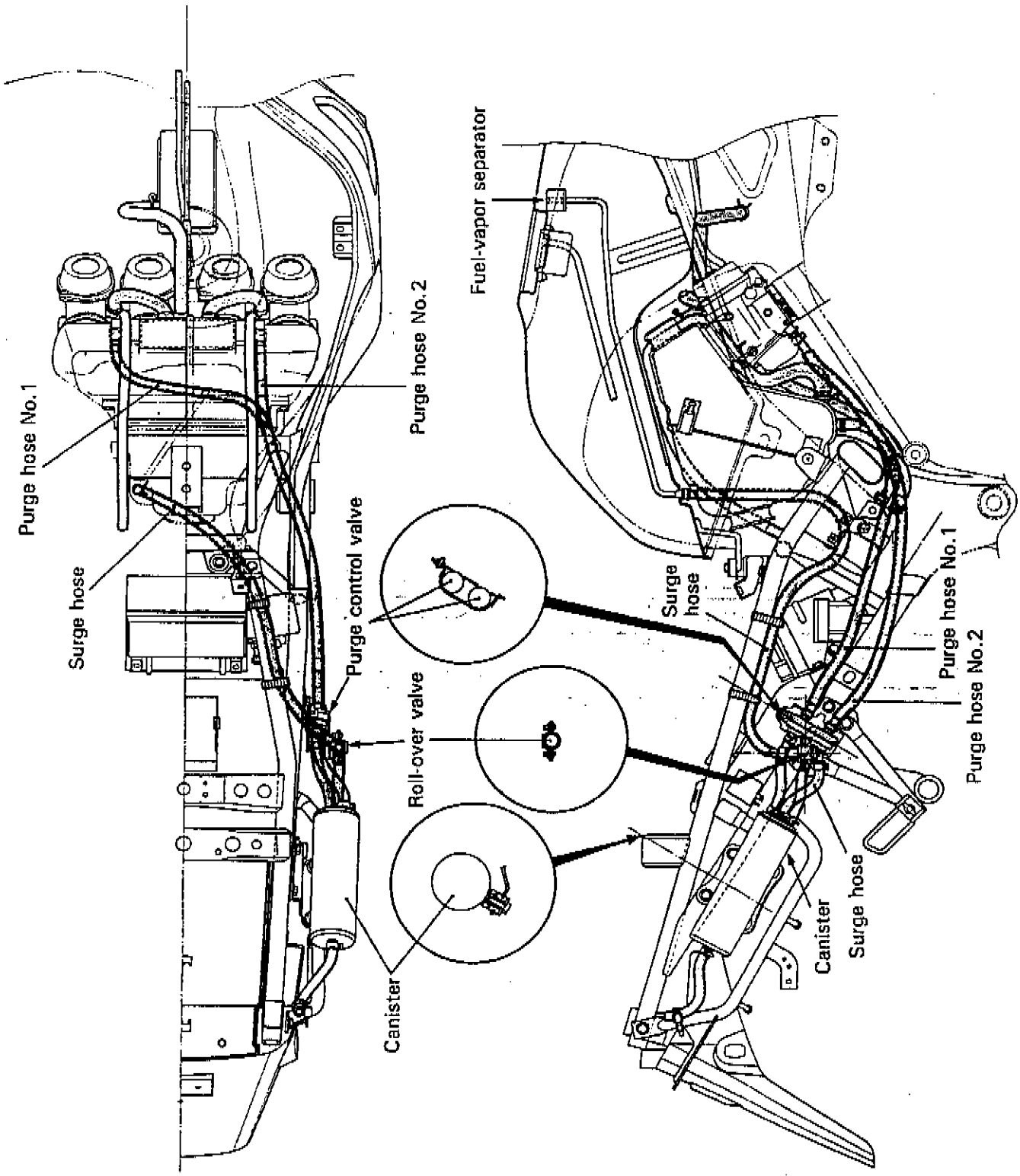
Carburetor I.D. No.	Main Jet	Needle Jet	Jet Needle	Pilot Jet	Pilot Screw
31E4 (California model only)	#112.5	0-9	5DFT13	#12.5	PRE-SET DO NOT ADJUST
31E1	#112.5	0-9	5DV3	#12.5	

The pilot screw is pre-set by the factory utilizing specialized testing and adjusting procedures. The pilot screw is not adjustable as the idle circuit is "sealed" after factory adjustment. Adjusting, interferring with, improper replacement, or resetting of any of the carburetor components may adversely affect carburetor performance and cause the motorcycle to exceed the exhaust emission level limits. If persons, who are unaware of these special carburetor servicing requirements tamper with the carburetors the Suzuki dealer should restore the carburetors to their original condition or if unable to effect repairs, contact the distributors representative for further technical information and assistance.

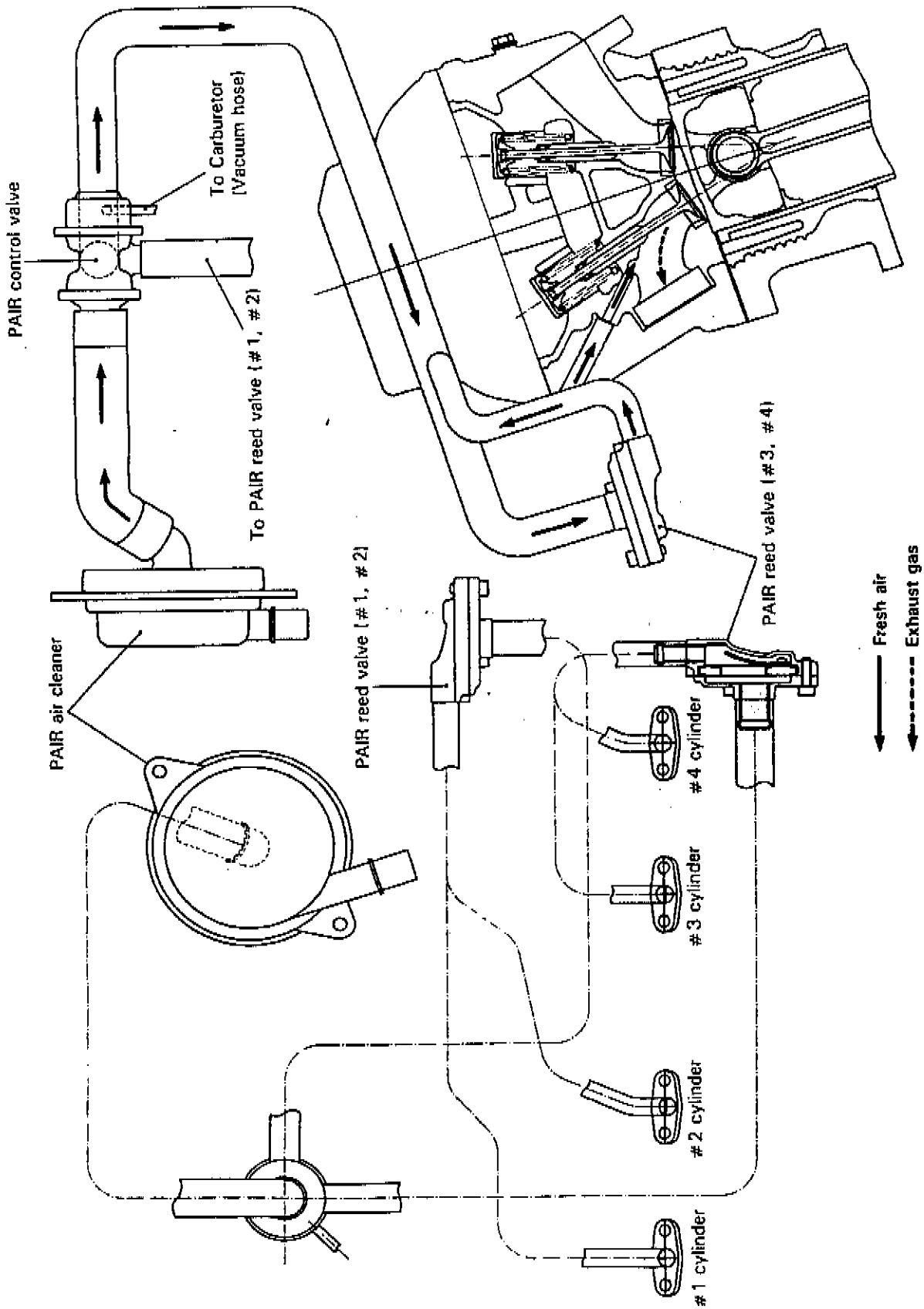
EVAPORATIVE EMISSION CONTROL SYSTEM
(California model only)



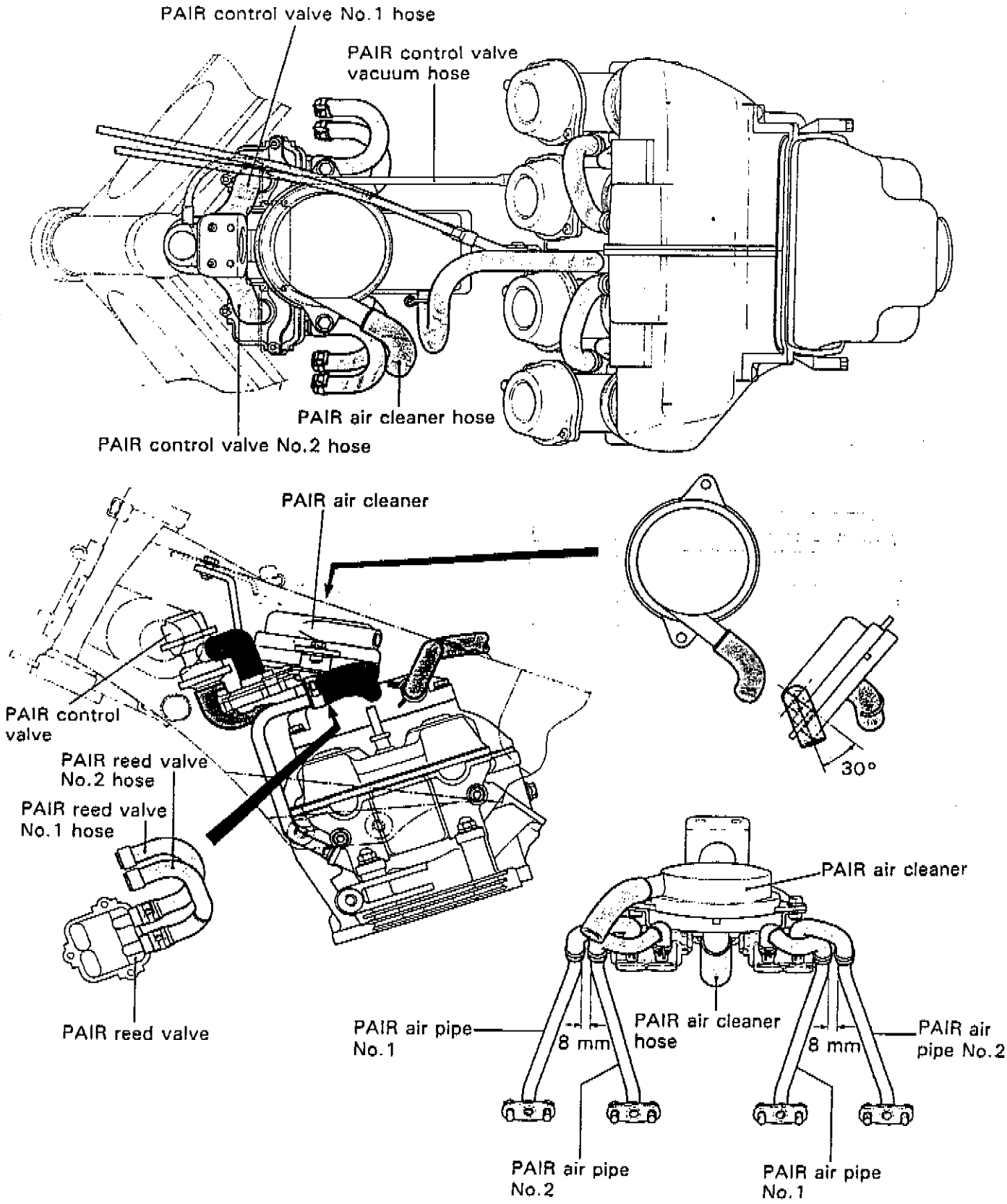
CANISTER HOSE ROUTING (California model only)



PAIR (AIR SUPPLY) SYSTEM DIAGRAM (California model only)



PAIR (AIR SUPPLY) SYSTEM HOSE ROUTING (California model only)



RF900RS ('95-MODEL)

This chapter describes service data, service specifications and servicing procedures which differ from those of the RF900RR ('94-model).

NOTE:
- *Any differences between RF900RR ('94-model) and RF900RS ('95-model) in specifications and service data are clearly indicated with the asterisk marks (*).*

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10

SPECIFICATIONS

DIMENSIONS AND DRY MASS

Overall length	2 130 mm (83.9 in)	For E-02,03,04,21,24, 25,28,33,34,53
	2 155 mm (84.8 in)	For E-15,16,17,18,22, 39
Overall width	730 mm (28.7 in)	
Overall height	1 165 mm (45.9 in)	
Wheelbase	1 440 mm (56.7 in)	
Ground clearance	115 mm (4.5 in)	
Dry mass	203 kg (447 lbs)	
	206 kg (454 lbs)	E-33 only

ENGINE

Type	Four-stroke, Water-cooled, DOHC, TSCC
Number of cylinders	4
Bore	73.0 mm (2.874 in)
Stroke	56.0 mm (2.205 in)
Piston displacement	937 cm^3 (57.2 cu. in)
Carburetor	MIKUNI BDST36
Air cleaner	Non-woven fabric element
Starter system	Electric starter
Lubrication system	Wet sump

TRANSMISSION

Clutch	Wet multi-plate type
Transmission	5-speed constant mesh
Gearshift pattern	1-down, 4-up
Primary reduction ratio	1.565 (72/46)
Final reduction ratio	2.866 (43/15)
Gear ratios, Low	2.714 (38/14)
2nd	1.809 (38/21)
3rd	1.409 (31/22)
4th	1.181 (26/22)
Top	1.038 (27/26)
Drive chain	TAKASAGO RK532GSV2, 110 links

CHASSIS

Front suspension	Telescopic, coil spring, oil damped, spring pre-load fully adjustable.
Rear suspension	Link type system, oil damped, coil spring, spring pre-load 7-way adjustable, rebound damping force 4-way adjustable and compression damping force fully adjustable.
Steering angle	30° (right & left)
Caster	65° 30'
Trail	102 mm (4.02 in)
Turning radius	3.2 m (10.5 ft)
Front brake	Disc brake, twin
Rear brake	Disc brake
Front tire size	120/70 ZR17, tubeless
Rear tire size	170/60 ZR17, tubeless
Front fork stroke	120 mm (4.7 in)
Rear wheel travel	130 mm (5.1 in)

ELECTRICAL

Ignition type	Electronic Ignition (Fully Transistorized)
Ignition timing	4° B.T.D.C. at 1500 r/min ... For E-03,18,33,39 7° B.T.D.C. at 1500 r/min ... For the others
Spark plug	N.G.K.: CR9E, NIPPONDENSO U27ESR-N
Battery	12V 28.8 kC (8 Ah)/10 HR
Generator	Three-phase A.C. Generator
Main fuse	30A
Fuse	15/15/15/10/10A
Headlight	12V 60/55W
Turn signal light	12V 21W
Parking or city light	12V 4W ..... Except for E-03,24,28,33
Taillight	12V 5W
Brake light	12V 21W x 2
License plate light	12V 5W
Speedometer light	12V 1.7W x 2
Tachometer light	12V 1.7W x 2
Engine coolant temp. meter light	12V 1.7W
Neutral indicator light	12V 3.4W
High beam indicator light	12V 3.4W
Turn signal indicator light	12V 3.4W
Oil pressure indicator light	12V 3.4W
Fuel level indicator light	12V 3.4W

CAPACITIES

Fuel tank, including reserve	21.0 L (5.5/4.6 US/Imp gal)
Engine oil, oil change	3 000 ml (3.2/2.6 US/Imp qt)
with filter change	3 300 ml (3.5/2.9 US/Imp qt)
overhaul	3 900 ml (4.1/3.4 US/Imp qt)
Front fork oil	459 ml (15.5/16.2 US/Imp oz) ... For E-03,33 466 ml (15.8/16.4 US/Imp oz) ... For the others
Engine coolant	2 450 ml (2.6/2.2 US/Imp qt)

These specifications are subject to change without notice.

(E-03: U.S.A. (except California)
E-33: California (U.S.A.))

SERVICE DATA

VALVE + GUIDE

Unit: mm (in)

ITEM	STANDARD			LIMIT
Valve diam.	IN.	28 (1.10)		—
	EX.	24 (0.94)		—
Valve lift	IN.	E-03	7.3 (0.29)	—
		E-04	5.5 (0.22)	—
		E-18,33,39	7.3 (0.29)	—
		Others	8.7 (0.34)	—
	EX.	E-03	7.5 (0.30)	—
		E-04	7.0 (0.28)	—
		E-18,33,39	7.0 (0.28)	—
		Others	7.5 (0.30)	—
Tappet clearance (when cold)	IN.	0.10—0.20 (0.004—0.008)		—
	EX.	0.20—0.30 (0.008—0.010)		—
Valve guide to valve stem clearance	IN.	0.020—0.047 (0.0008—0.0019)		—
	EX.	0.030—0.057 (0.0012—0.0022)		—
Valve stem deflection	IN. & EX.	—		0.35 (0.014)
Valve guide I.D.	IN. & EX.	4.500—4.512 (0.1772—0.1776)		—
Valve stem O.D.	IN.	4.465—4.480 (0.1758—0.1764)		—
	EX.	4.455—4.470 (0.1754—0.1760)		—
Valve stem runout	IN. & EX.	—		0.05 (0.002)
Valve head thickness	IN. & EX.	—		0.5 (0.02)
Valve seat width	IN. & EX.	0.9—1.1 (0.035—0.043)		—
Valve head radial runout	IN. & EX.	—		0.03 (0.001)
Valve spring free length (IN. & EX.)	—			43.0 (1.69)
Valve spring tension (IN. & EX.)	18.6—21.4 kg (41.0—47.2 lbs) at length 38 mm (1.5 in)			—

CAMSHAFT + CYLINDER HEAD

Unit: mm (in)

ITEM	STANDARD			LIMIT
Cam height	IN.	E-03	35.292—35.348 (1.3894—1.3917)	35.00 (1.378)
		E-04	33.492—33.548 (1.3186—1.3208)	33.20 (1.307)
		E-18,33,39	35.292—35.348 (1.3894—1.3917)	35.00 (1.378)
		Others	36.692—36.748 (1.4446—1.4468)	36.40 (1.433)
	EX.	E-03	35.522—35.578 (1.3985—1.4007)	35.23 (1.387)
		E-04	34.952—35.008 (1.3761—1.3783)	34.66 (1.365)
		E-18,33,39	34.952—35.008 (1.3761—1.3783)	34.66 (1.365)
		Others	35.522—35.578 (1.3985—1.4007)	35.23 (1.387)
Camshaft journal oil clearance	IN. & EX.		0.032—0.066 (0.0013—0.0026)	0.150 (0.0059)
Camshaft journal holder I.D.	IN. & EX.		22.012—22.025 (0.8666—0.8671)	—
Camshaft journal O.D.	IN. & EX.		21.959—21.980 (0.8645—0.8654)	—
Camshaft runout	IN. & EX		—	0.10 (0.004)
Cam chain pin (at arrow "3")	13th pin			—
Cylinder head distortion	—			0.20 (0.008)

CYLINDER + PISTON + PISTON RING

Unit: mm (in)

ITEM	STANDARD			LIMIT
Compression pressure	1 000—1 500 kPa (10—15 kg/cm², 142—213 psi)			800 kPa (8 kg/cm², 114psi)
Compression pressure difference	—			200 kPa (2 kg/cm², 28 psi)
Piston to cylinder clearance	0.045—0.055 (0.0018—0.0022)			0.120 (0.0047)
Cylinder bore	73.000—73.015 (2.8740—2.8746)			73.085 (2.8774)
Piston diam.	72.950—72.965 (2.8720—2.8726) Measure at 15 mm (0.6 in) from the skirt end.			72.880 (2.8693)
Cylinder distortion	—			0.20 (0.008)
Piston ring free end gap	1st	R	Approx. 6.9 (0.27)	5.5 (0.22)
	2nd	R	Approx. 7.2 (0.28)	5.8 (0.23)
Piston ring end gap	1st		0.10—0.30 (0.004—0.012)	0.5 (0.02)
	2nd		0.35—0.50 (0.014—0.020)	1.0 (0.04)

ITEM	STANDARD		LIMIT
Piston ring to groove clearance	1st	—	0.18 (0.007)
	2nd	—	0.18 (0.007)
Piston ring groove width	1st	1.02—1.04 (0.040—0.041)	—
	2nd	1.02—1.04 (0.040—0.041)	—
	Oil	2.01—2.03 (0.079—0.080)	—
Piston ring thickness	1st	0.97—0.99 (0.038—0.039)	—
	2nd	0.97—0.99 (0.038—0.039)	—
Piston pin bore	19.002—19.008 (0.7481—0.7483)		19.030 (0.7492)
Piston pin O.D.	18.996—19.000 (0.7479—0.7480)		18.980 (0.7472)

CONROD + CRANKSHAFT

Unit: mm (in)

ITEM	STANDARD		LIMIT
Conrod small end I.D.	19.010—19.018 (0.7484—0.7487)		19.040 (0.7496)
Conrod big end side clearance	0.10—0.20 (0.004—0.008)		0.30 (0.010)
Conrod big end width	20.95—21.00 (0.825—0.827)		—
Crank pin width	21.10—21.15 (0.831—0.833)		—
Conrod big end oil clearance	0.032—0.056 (0.0013—0.0022)		0.080 (0.0031)
Crank pin O.D.	35.976—36.000 (1.4164—1.4173)		—
Crankshaft journal oil clearance	0.020—0.044 (0.0008—0.0017)		0.080 (0.0031)
Crankshaft journal O.D.	33.976—34.000 (1.3376—1.3386)		—
Crankshaft thrust clearance	0.055—0.110 (0.0022—0.0043)		—
Crankshaft thrust bearing thickness	Right side	2.425—2.450 (0.0955—0.0965)	—
	Left side	2.350—2.500 (0.0925—0.0984)	—
Crankshaft runout	—		0.05 (0.002)

OIL PUMP

ITEM	STANDARD	LIMIT
Oil pump reduction ratio	1.703 (72/46 x 37/34)	—
Oil pressure (at 60°C, 140°F)	Above 300 kPa (3.0 kg/cm², 43 psi) Below 600 kPa (6.0 kg/cm², 85 psi) at 3 000 r/min.	—

CLUTCH

Unit: mm (in)

ITEM	STANDARD	LIMIT
Drive plate thickness	*2.92—3.08 (0.115—0.121)	—
Drive plate distortion	—	0.10 (0.004)
*Clutch spring free length	—	*43.3 (1.70)
Clutch master cylinder bore	14.000—14.043 (0.5511—0.5529)	—
Clutch master cylinder piston diam.	13.957—13.984 (0.5495—0.5506)	—
Clutch release cylinder bore	35.700—35.762 (1.4055—1.4079)	—
Clutch release cylinder piston diam.	35.650—35.675 (1.4035—1.4045)	—

THERMOSTAT + RADIATOR + FAN

ITEM		STANDARD		LIMIT
Thermostat valve opening temperature		74.5—78.5°C (166.1—173.3°F)		—
Thermostat valve lift		Over 7 mm (0.28 in) at 90°C (194°F)		—
Radiator cap valve opening pressure		110 kPa (1.1 kg/cm², 15.6 psi)		—
Cooling fan thermo-switch operating temperature	ON	Approx. 105°C (221°F)		—
	OFF	Approx. 100°C (212°F)		—
Engine coolant temperature gauge resistance		50°C (122°F)	Approx. 153.9 Ω	—
		80°C (176°F)	Approx. 51.9 Ω	—
		100°C (212°F)	Approx. 27.4 Ω	—
		120°C (248°F)	Approx. 16.1 Ω	—

TRANSMISSION + DRIVE CHAIN

Unit: mm (in) Except ratio

ITEM		STANDARD	LIMIT
Primary reduction ratio		1.565 (72/46)	—
Final reduction ratio		2.867 (43/15)	—
Gear ratios	Low	2.714 (38/14)	—
	2nd	1.809 (38/21)	—
	3rd	1.409 (31/22)	—
	4th	1.181 (26/22)	—
	Top	1.038 (27/26)	—
Shift fork to groove clearance		0.10—0.30 (0.004—0.012)	0.50 (0.020)
Shift fork groove width		5.00—5.10 (0.197—0.201)	—
Shift fork thickness		4.80—4.90 (0.189—0.193)	—

ITEM	STANDARD		LIMIT
Drive chain	Type	RK532GSV2	———
	Links	110 links, ENDLESS	———
	20-pitch length	———	319.4 (12.6)
Drive chain slack	25—35 (1.0—1.4)		———
Gearshift lever height	55 (2.2)		———

CARBURETOR

ITEM	SPECIFICATION	
	E-03	E-33
Carburetor type	MIKUNI BDST36SS	←
Bore size	36 mm	←
I.D. No.	31E1	31E4
Idle r/min.	1 200 ± 100 r/min.	1 200 ± 50 r/min.
Float height	6.9 ± 1.0 mm (0.27 ± 0.04 in)	←
Main jet (M.J.)	#112.5	←
Main air jet (M.A.J.)	0.9 mm	No.1 & 4 : 0.6 mm No.2 & 3 : 0.7 mm
Jet needle (J.N.)	5DV3	5DFT13
Needle jet (N.J.)	O-9	←
Throttle valve (Th.V.)	#120	#125
Pilot jet (P.J.)	#12.5	←
By-pass (B.P.)	0.8, 0.8, 0.8 mm	←
Pilot outlet (P.O.)	0.8 mm	0.7 mm
Valve seat (V.S.)	1.5 mm	←
Starter jet (G.S.)	#52.5	←
Pilot screw (P.S.)	PRE-SET	←
Throttle cable play	0.5—1.0 mm (0.02—0.04 in)	←

CARBURETOR

ITEM	SPECIFICATION		
	E-02,25,28,34	E-04	E-24
Carburetor type	MIKUNI BDST36SS	←	←
Bore size	36 mm	←	←
I.D. No.	31E0	31E6	31E7
Idle r/min.	1 200 ± 100 r/min	←	←
Float height	6.9 ± 1.0 mm (0.27 ± 0.04 in)	←	←
Main jet (M.J.)	#112.5	←	←
Main air jet (M.A.J.)	No.1 & 4: 0.8 mm No.2 & 3: 0.9 mm	No.1 & 4: 0.7 mm No.2 & 3: 0.8 mm	No.1 & 4: 0.8 mm No.2 & 3: 0.9 mm
Jet needle (J.N.)	5DV1-3rd	←	←
Needle jet (N.J.)	O-9	←	←
Throttle valve (Th.V.)	#120	←	←

ITEM		SPECIFICATION		
		E-02,25,28,34	E-04	E-24
Pilot jet	(P.J.)	#12.5	←	←
By-pass	(B.P)	0.8, 0.8, 0.8 mm	←	←
Pilot outlet	(P.O.)	0.8 mm	←	←
Valve seat	(V.S.)	1.5 mm	←	←
Starter jet	(G.S.)	#50	←	←
Pilot screw	(P.S.)	PRE-SET (1-¼ turns back)	PRE-SET (1-½ turns back)	PRE-SET (1 turn back)
Pilot air jet	(P.A.J.)	#120	←	←
Throttle cable play		0.5—1.0 mm (0.02—0.04 in)	←	←

CARBURETOR

ITEM		SPECIFICATION		
		E-22	E-18	E-39
Carburetor type		MIKUNI BDST36SS	←	←
Bore size		36 mm	←	←
I.D. No.		31E2	31E3	31E8
Idle r/min.		1 200 ± 100 r/min.	1 300 $^{+100}_{-50}$ r/min.	1 300 ± 100 r/min.
Float height		6.9 ± 1.0 mm (0.27 ± 0.04 in)	←	←
Main jet	(M.J.)	#115	#107.5	#105
Main air jet	(M.A.J.)	No.1 & 4: 0.8 mm No.2 & 3: 0.9 mm	No.1 & 4: 0.6 mm No.2 & 3: 0.7 mm	←
Jet needle	(J.N.)	5DV1-3rd	5DFT12-3rd	←
Needle jet	(N.J.)	O-9	←	←
Throttle valve	(Th.V.)	#120	←	←
Pilot jet	(P.J.)	#12.5	←	←
By-pass	(B.P)	0.8, 0.8, 0.8 mm	←	←
Pilot outlet	(P.O.)	0.8 mm	0.9 mm	←
Valve seat	(V.S.)	1.5 mm	←	←
Starter jet	(G.S.)	#50	#52.5	←
Pilot screw	(P.S.)	PRE-SET (1-⅛ turns back)	←	PRE-SET (1-¼ turns back)
Pilot air jet	(P.A.J.)	#120	#130	←
Throttle cable play		0.5—1.0 mm (0.02—0.04 in)	←	←

[E-15, 16 and 17 models are included in E-22 model.]
[E-21 and 53 models are included in E-34 model.]

ELECTRICAL

Unit: mm (in)

ITEM	SPCIFICATION		NOTE
Ignition timing	4° B.T.D.C. below 1 500 r/min.		E-03,18,33,39
	7° B.T.D.C. below 1 500 r/min.		Others
Firing order	1-2-4-3		
Spark plug	Type	NGK: CR9E ND: U27ESR-N	
	Gap	0.7—0.8 (0.028—0.032)	
Spark performance	Over 8 (0.3) at 1 atm.		

ITEM			SPECIFICATION		NOTE
Signal coil resistance			(Black—Green) Approx. 135—200 Ω		Tester range: (x 100 Ω)
Ignition coil resistance		Primary	⊕ tap— ⊖ tap Approx. 2.4—3.2 Ω		Tester range: (x 1 Ω)
		Secondary	Plug cap—Plug cap Approx. 30—40 kΩ		Tester range: (x 1 kΩ)
Generator			Slip ring O.D.	Limit: 14.0 (0.55)	ND
			Brush length	Limit: 4.5 (0.18)	
Generator Max. output			Approx. 405 W at 5 000 r/min		The rotation of the generator
Regulated voltage			Above 13.5 V at 5 000 r/min.		
Starter relay resistance			3—5 Ω		
Battery	Type designation		YTX9-BS		
	Capacity		12 V 28.8 kC (8 Ah)/10 HR		
	Standard electrolyte S.G.		1.320 at 20°C (68°F)		
Fuse size	Headlight	HI	15 A		
		LO	15 A		
	Turn signal		15 A		
	Ignition		10 A		
	Taillight		10 A		
	Main		30 A		

WATTAGE

Unit: W

ITEM		SPECIFICATION	
		E-03,24,28,33	The others
Headlight	HI	60	←
	LO	55	←
Position light			4
Taillight		5	←
Brake light		21 x 2	←
Turn signal light		21	←
Tachometer light		1.7 x 2	←
Speedometer light		1.7 x 2	←
Turn signal indicator light		3.4	←
High beam indicator light		3.4	←
Neutral indicator light		3.4	←
Oil pressure indicator light		3.4	←
Fuel level indicator light		3.4	←
License light		5	←
Engine coolant temp. meter light		1.7	←

BRAKE + WHEEL

Unit: mm (in)

ITEM		STANDARD		LIMIT
Rear brake pedal height			55 (2.2)	—
Brake disc thickness		Front	4.5 ± 0.2 (0.177 ± 0.008)	4.0 (0.16)
		Rear	5.0 ± 0.2 (0.197 ± 0.008)	4.5 (0.18)
Brake disc runout (Front & Rear)			—	0.30 (0.012)
Master cylinder bore		Front	15.870–15.913 (0.6248–0.6265)	—
		Rear	12.700–12.743 (0.5000–0.5017)	—
Master cylinder piston diam.		Front	15.827–15.854 (0.6231–0.6242)	—
		Rear	12.657–12.684 (0.4983–0.4993)	—
Brake caliper cylinder bore	Leading	Front	30.230–30.280 (1.1902–1.1921)	—
	Trailing		33.960–34.010 (1.3370–1.3390)	—
		Rear	38.180–38.256 (1.5031–1.5061)	—
Brake caliper piston diam.	Leading	Front	30.130–30.180 (1.1826–1.1882)	—
	Trailing		33.878–33.928 (1.3338–1.3357)	—
		Rear	38.098–38.148 (1.5000–1.5019)	—
Rear brake pad mounting pin diam.			5.9 (0.23)	5.6 (0.22)
Wheel rim runout (Front & Rear)		Axial	—	2.0 (0.08)
		Radial	—	2.0 (0.08)
Wheel axle runout		Front	—	0.25 (0.010)
		Rear	—	0.25 (0.010)
Tire size		Front	120/70 ZR17	—
		Rear	170/60 ZR17	—
Tire tread depth		Front	—	1.6 (0.06)
		Rear	—	2.0 (0.08)

SUSPENSION

Unit: mm (in)

ITEM	STANDARD		LIMIT	NOTE
Front fork stroke	120 (4.7)		—	
Front fork spring free length	—		303 (11.9)	
Front fork oil level	105 (4.1)		—	E-03,33
	99 (3.9)		—	The others
Front fork spring adjuster	3rd notch from top		—	
Rear shock absorber gas pressure	1 000 kPa (10 kg/cm², 142 psi)		—	
Rear shock absorber spring adjuster	4th position among 7		—	
Rear shock absorber damping force adjuster	Extension	1 click out	—	E-03,33
		2 clicks out	—	The others
	Compression	At punch mark (about 1 turn out)	—	E-03,33
		At punch mark (about ¼ turn out)	—	The others
Rear wheel travel	130 (5.1)		—	
Swingarm pivot shaft runout	—		0.3 (0.01)	

FUEL + OIL + ENGINE COOLANT

ITEM	SPECIFICATION		NOTE
Fuel type	Use only unleaded gasoline of at least 85 pump octane ($\frac{R+M}{2}$) or 91 octane or higher rated by the research method. Gasoline containing MTBE (Methyl Tertiary Butyl Ether), less than 10% ethanol, or less than 5% methanol with appropriate cosolvents and corrosion inhibitor is permissible.		E-03,33
	Use only unleaded gasoline of at least 87 pump octane ($\frac{R+M}{2}$ method) or 91 octane or higher rated by the Research Method.		E-28
	Gasoline used should be graded 85-95 octane or higher. An unleaded gasoline is recommended.		The others
Fuel tank including reserve	21.0 L (5.5/4.6 US/Imp gal)		
reserve	*4.0 L (1.1/0.9 US/Imp gal)		
Engine oil type	SAE 10W/40, API SE or SF		
Engine oil capacity	Change	3 000 ml (3.2/2.6 US/Imp qt)	
	Filter change	3 300 ml (3.5/2.9 US/Imp qt)	
	Overhaul	3 900 ml (4.1/3.4 US/Imp qt)	

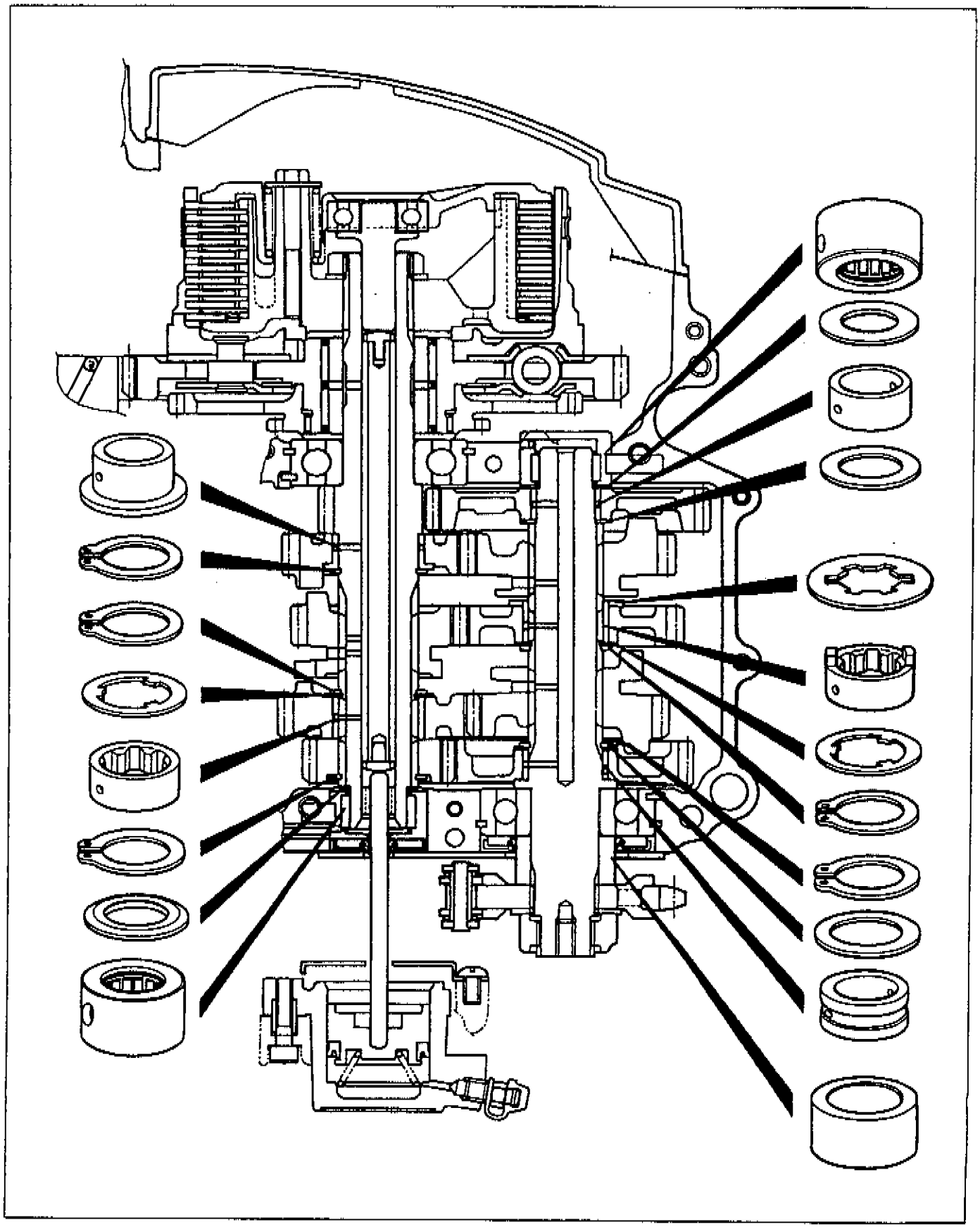
ITEM	SPECIFICATION	NOTE
Front fork oil type	Frok oil #10	
Front fork oil capacity (each leg)	459 ml (15.5/16.2 US/Imp oz)	E-03,33
	466 ml (15.8/16.4 US/Imp oz)	The others
Brake fluid type	DOT 4	
Engine coolant type	Use an anti-freeze/coolant compatible with aluminum radiator, mixed with distilled water only, at the ratio of 50:50.	
Engine coolant including reserve	2 450 ml (2.6/2.2 US/Imp qt)	

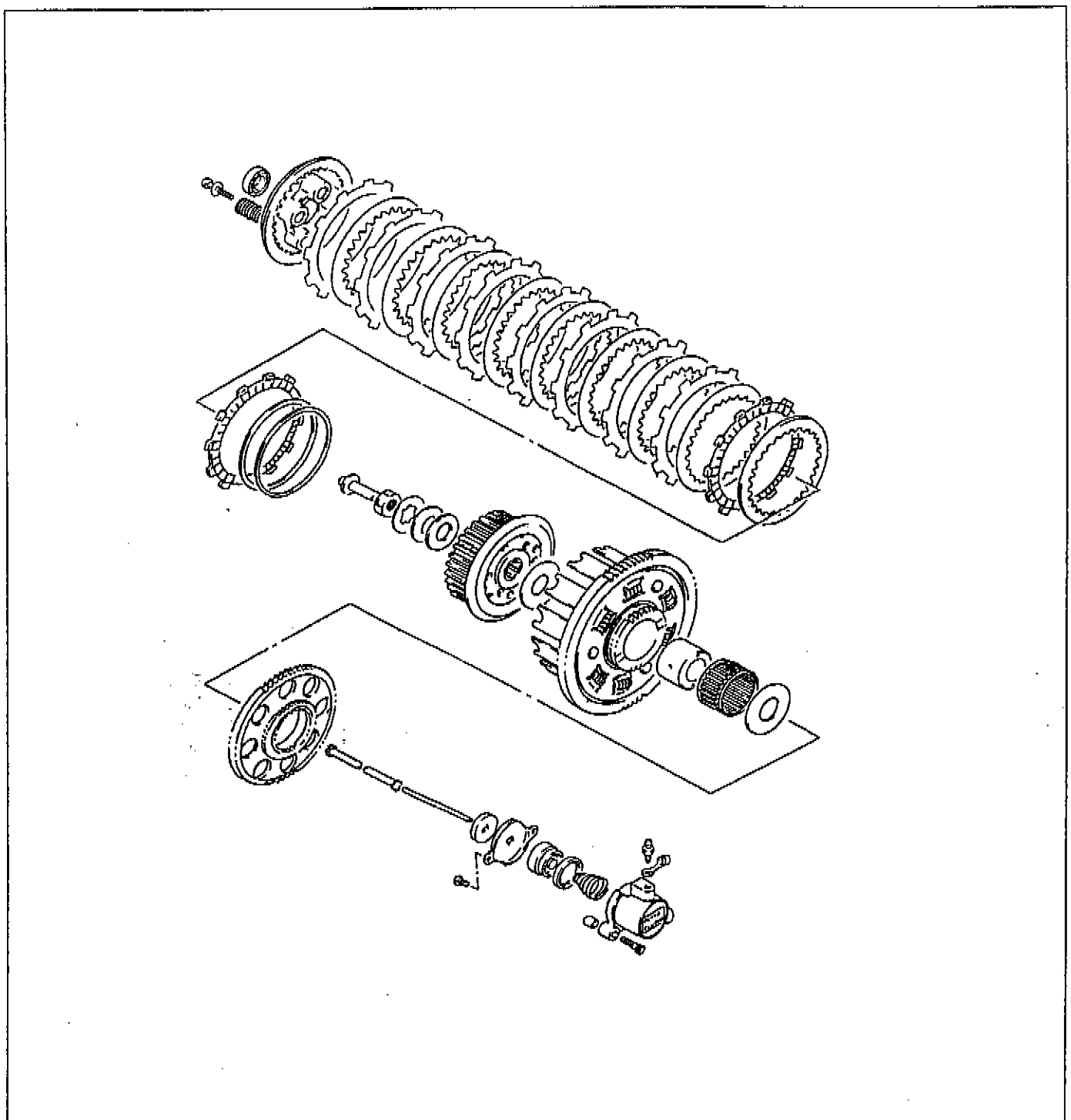
TIRE PRESSURE

COLD INFLATION TIRE PRESSURE	SOLO RIDING			DUAL RIDING		
	kPa	kg/cm²	psi	kPa	kg/cm²	psi
FRONT	250	2.50	36	250	2.50	36
REAR	250	2.50	36	290	2.90	42

SERVICE INFORMATION

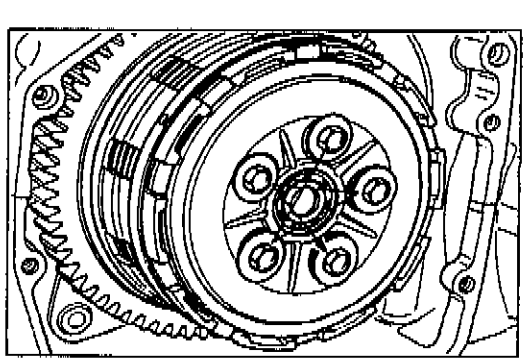
CLUTCH



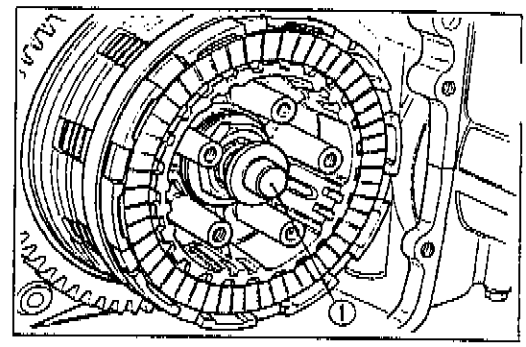


DISASSEMBLY

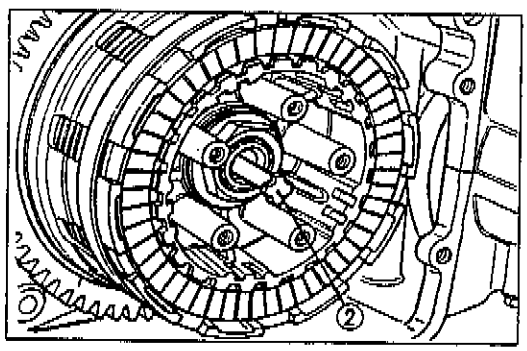
- Remove the clutch spring set bolts diagonally.
- Remove the clutch pressure plate.

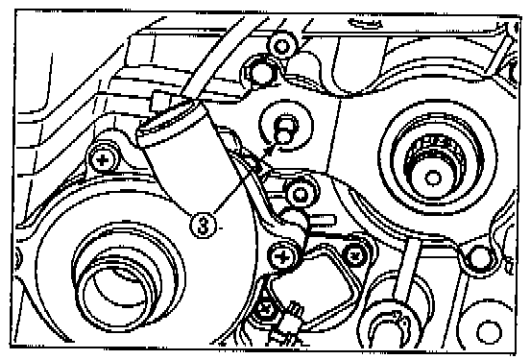


- Remove the clutch push piece ① and clutch push rods, ② and ③.

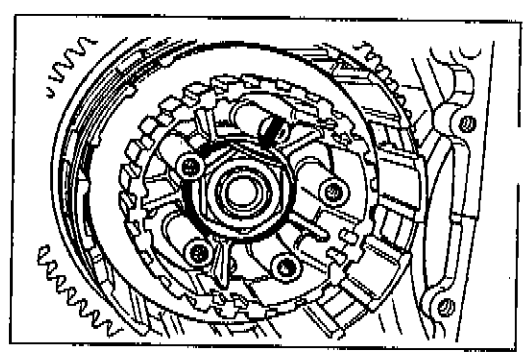


NOTE:
If it is difficult to draw out the push rod ②, use a magnetic hand or wire.



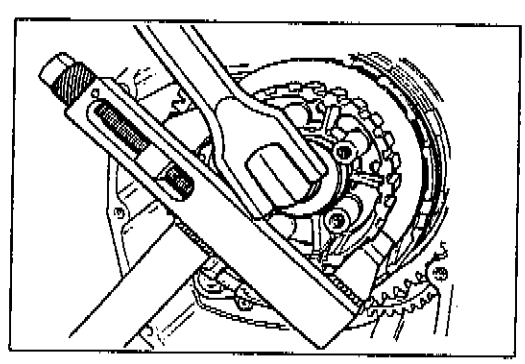


- Flatten the lock washer of the clutch sleeve nut.

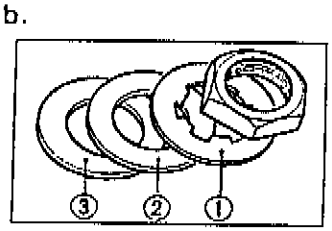


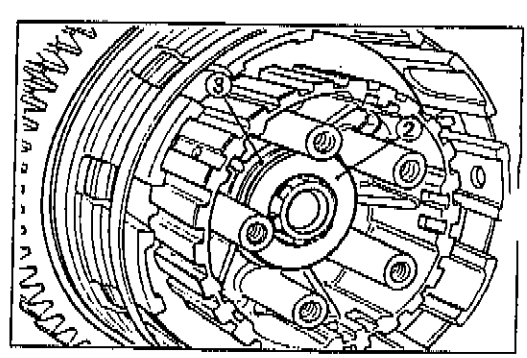
- After removing the several clutch plates, remove the clutch sleeve hub nut after firmly locking the clutch sleeve hub with the clutch sleeve hub holder.

TOOL 09920-53740: Clutch sleeve hub holder

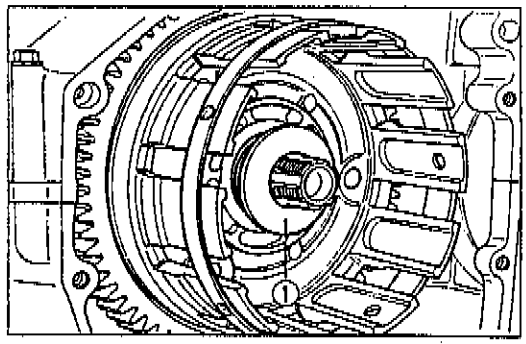


- Remove the lock washer ①, concaved washer ② and thrust washer ③.
- Remove the remainder of the clutch drive and driven plates along with the clutch sleeve hub.

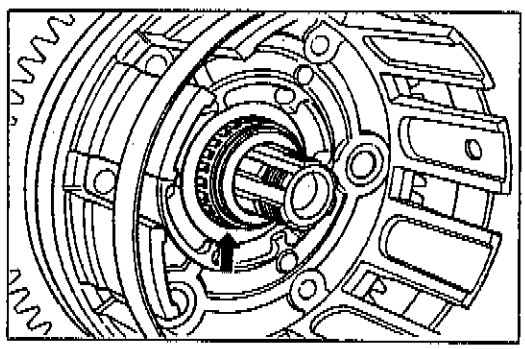




- Remove the thrust washer ①.



- With the spacer and bearing removed, the primary driven gear (integral with the clutch housing) is free to disengage from the primary drive gear.
- Remove the primary driven gear assembly with the generator/oil pump drive gears.



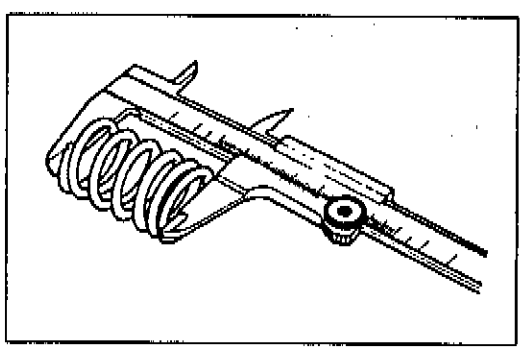
INSPECTION

CLUTCH SPRING FREE LENGTH

Measure the free length of each coil spring with a vernier calipers, and compare the elastic strength of each with the specified limit. Replace all the springs if any one of springs is not within the limit.

TOOL 09900-20102: Vernier calipers

Serivce Limit: 43.3 mm (1.70 in)

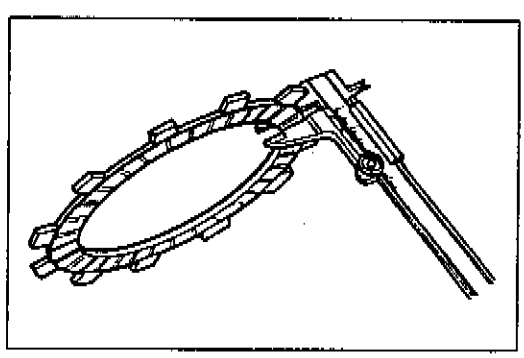


CLUTCH DRIVE PLATE

Measure the thickness of each drive plate with a vernier calipers. If each drive plate is not within the standard range, replace it with a new one.

TOOL 09900-20102: Vernier calipers

Standard (No.1 and No.2 drive plates)
Thickness: 2.92—3.08 mm (0.115—0.121 in)

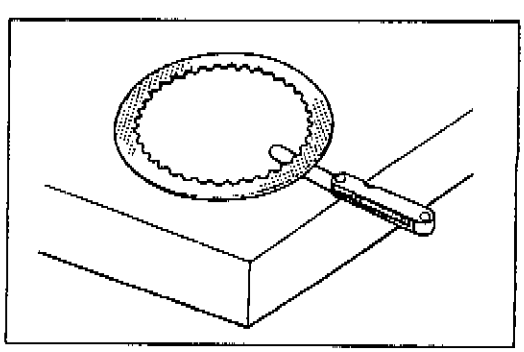


CLUTCH DRIVEN PLATE

Measure each driven plate for distortion with a thickness gauge.
Replace the driven plates which exceed the limit.

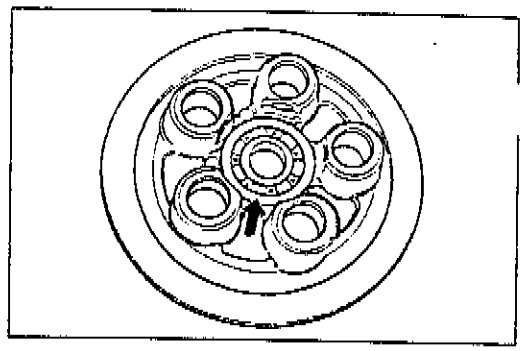
TOOL 09900-20803: Thickness gauge

Service Limit: 0.1 mm (0.004 in)



CLUTCH BEARING

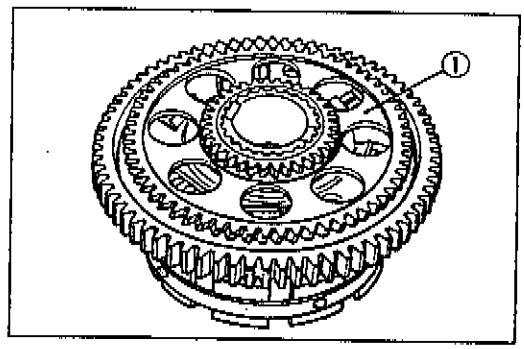
Rotate the bearing inner race by finger to inspect for abnormal play, noise and smooth rotation while the bearing is in the clutch pressure plate.
If there is anything unusual, replace the bearing with a new one.



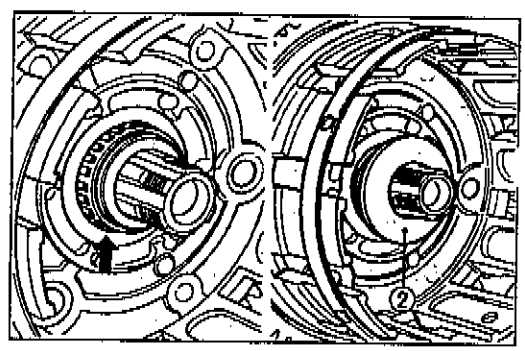
REASSEMBLY

Reassemble the clutch in the reverse order of disassembly.
Pay attention to the following points:

- Install the generator/oil pump drive gears ① onto the primary driven gear.



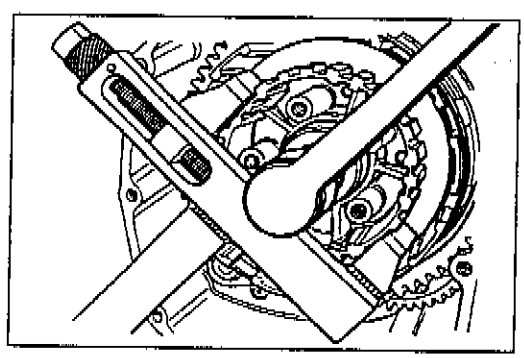
- Install the primary driven gear assembly onto the countershaft, and apply engine oil to the needle bearing and spacer.
- Install the thrust washer ② onto the countershaft.



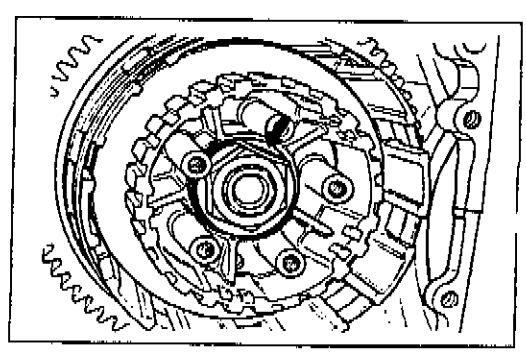
- Install the clutch sleeve hub onto the countershaft.
- Tighten the clutch sleeve hub nut to the specified torque by using the torque wrench and clutch sleeve hub holder.

TOOL 09920-53740: Clutch sleeve hub holder

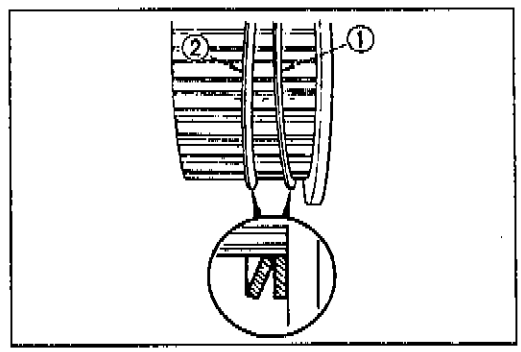
Clutch sleeve hub nut: 90 N·m (9.0 kg-m, 65.0 lb-ft)



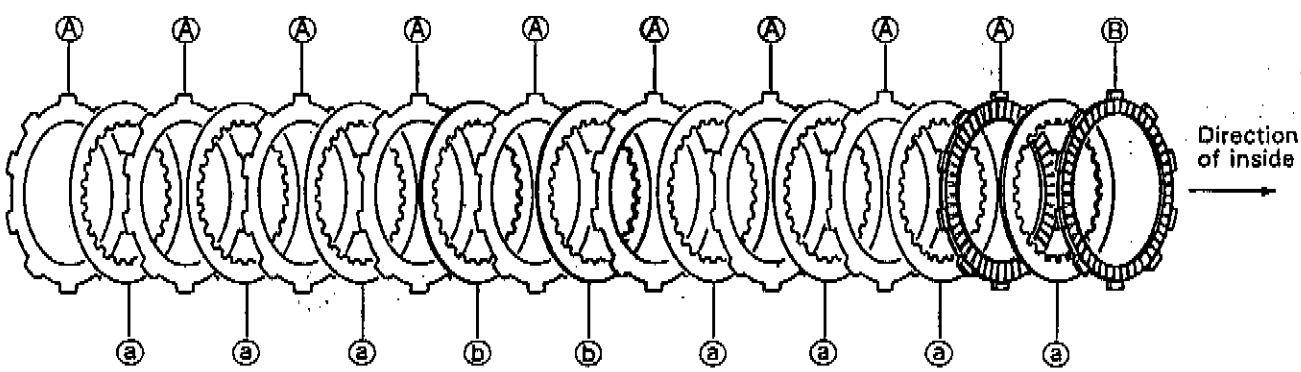
- After tightening the clutch sleeve hub nut, be sure to lock the nut by firmly bending the tongue of lock washer.



- Install the spring washer seat ① and spring washer ② onto the clutch sleeve hub correctly.



- Insert the clutch drive plates and driven plates one by one into the clutch sleeve hub in the prescribed order, No.2 drive plate first.

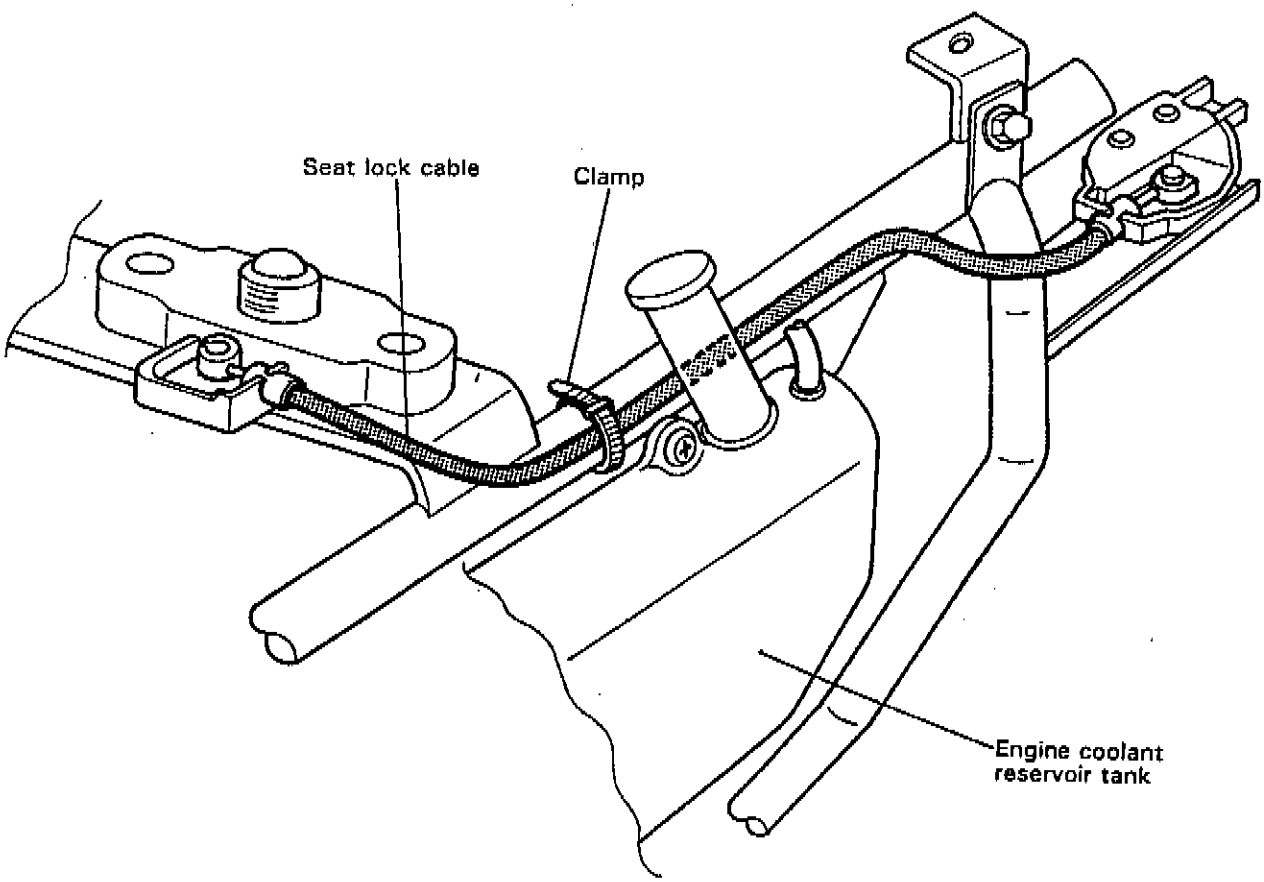


DRIVE PLATE:
Two kinds of the drive plate, No.1 and No.2, are equipped in the clutch system, they can be distinguished by the inside diameter.
Ⓐ No.1 Drive Plate (Inside Diameter): 101 mm (3.98 in) ..... 9 pcs
Ⓑ No.2 Drive Plate (Inside Diameter): 108 mm (4.25 in) ..... 1 pc

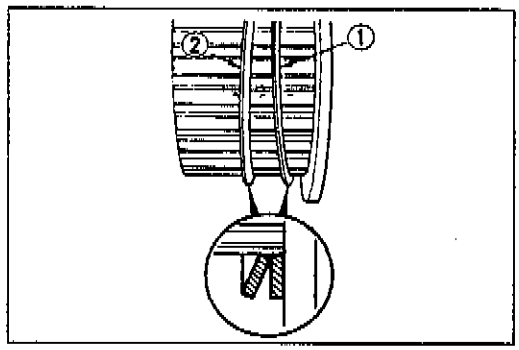
DRIVEN PLATE:
Two kinds of the driven plate, No.1 and No.2, are equipped in the clutch system, they can be distinguished by the thickness. (The spare part of the No.2 driven plate is not available individually.)
ⓐ No.1 Driven Plate (Thickness): 1.6 mm (0.06 in) ..... 7 pcs
ⓑ No.2 Driven Plate (Thickness): 2.0 mm (0.08 in) ..... 2 pcs

CABLE ROUTING

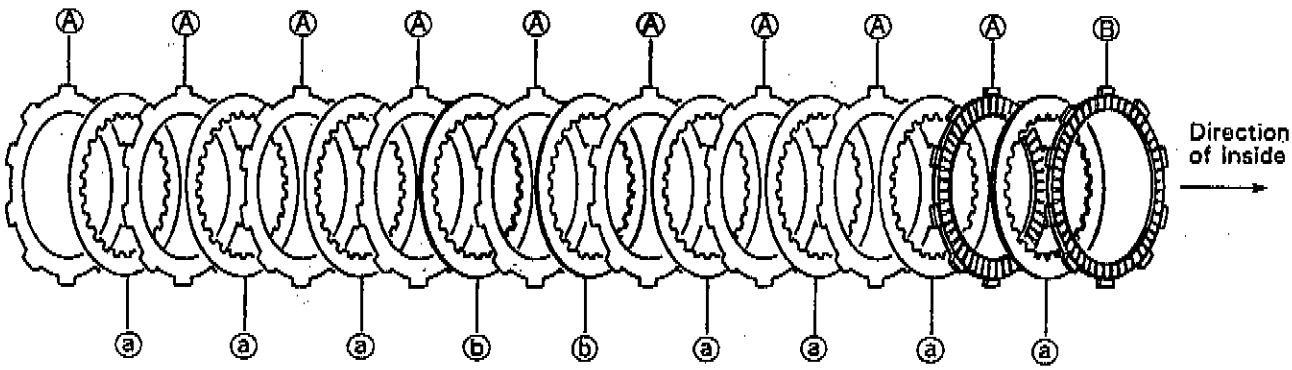
SEAT LOCK CABLE ROUTING



- Install the spring washer seat ① and spring washer ② onto the clutch sleeve hub correctly.



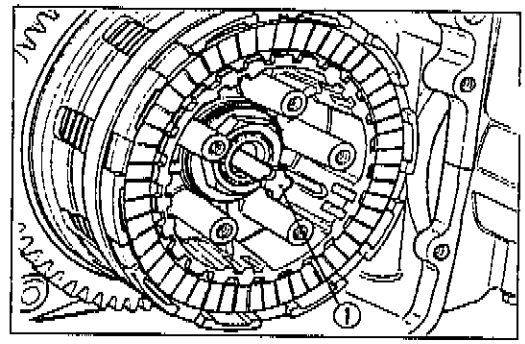
- Insert the clutch drive plates and driven plates one by one into the clutch sleeve hub in the prescribed order, No.2 drive plate first.

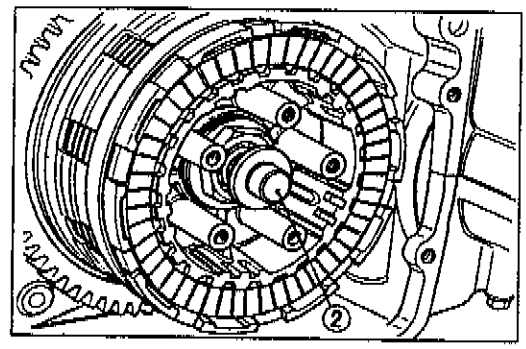


DRIVE PLATE:
Two kinds of the drive plate, No.1 and No.2, are equipped in the clutch system, they can be distinguished by the inside diameter.
Ⓐ No.1 Drive Plate (Inside Diameter): 101 mm (3.98 in) ..... 9 pcs
Ⓑ No.2 Drive Plate (Inside Diameter): 108 mm (4.25 in) ..... 1 pc

DRIVEN PLATE:
Two kinds of the driven plate, No.1 and No.2, are equipped in the clutch system, they can be distinguished by the thickness. (The spare part of the No.2 driven plate is not available individually.)
ⓐ No.1 Driven Plate (Thickness): 1.6 mm (0.06 in) ..... 7 pcs
ⓑ No.2 Driven Plate (Thickness): 2.0 mm (0.08 in) ..... 2 pcs

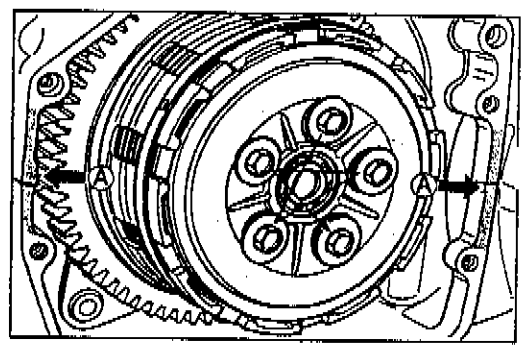
- Install the clutch push rod ① and clutch push piece ② into the countershaft.





- Put the clutch pressure plate onto the clutch sleeve hub.
- Put the clutch spring set bolts onto the clutch pressure plate properly.
- Tighten the clutch spring set bolts in the order.

NOTE:
Tighten the clutch spring set bolts in the manner indicated, tightening them by degrees until they attain a uniform tightness.



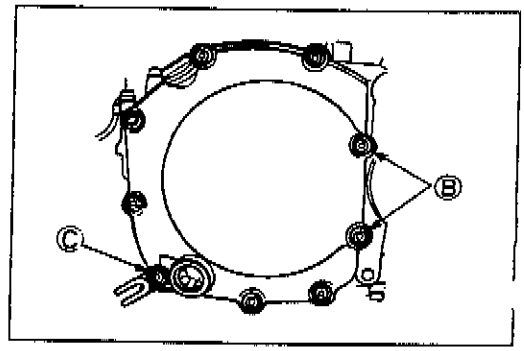
Clutch spring set bolt: 12 N·m (1.2 kg-m, 8.5 lb-ft)

- Coat SUZUKI BOND NO. 1207B lightly to the mating surfaces Ⓐbetween upper and lower crankcases as shown in the Fig.

99000-31140: SUZUKI BOND NO. 1207B

- Install the dowel pins, a new gasket and clutch cover.
- Tighten the cover bolts securely.

NOTE:
Fit the two gaskets to the clutch cover bolts Ⓑcorrectly as shown in the Fig.
Fit the hose clamp to the clutch cover bolt Ⓒcorrectly as shown in the Fig.



⚠CAUTION

Use only new gasket to prevent oil leakage.

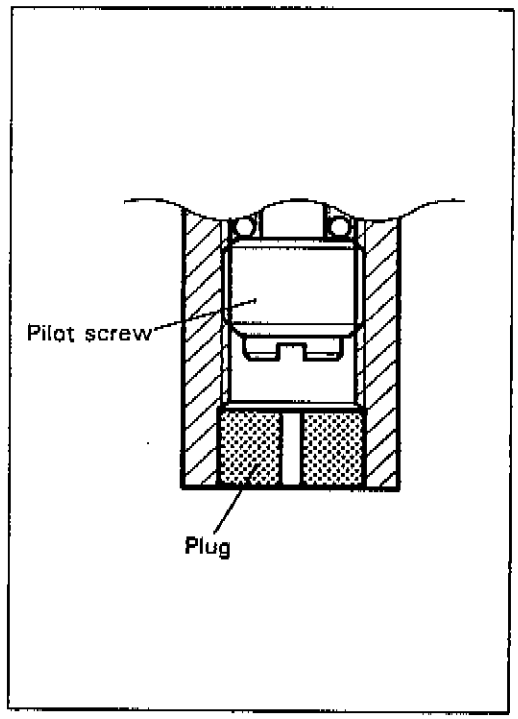
CARBURETOR

PILOT SCREW REMOVAL AND INSTALLATION

- Remove the plug by carefully punching a hole in it using an awl or suitable tool.
- Before removing the pilot screw, determine the setting by slowly turning it clockwise and count the number of turns required to lightly seat the screw. Turn the screw counterclockwise to remove it.

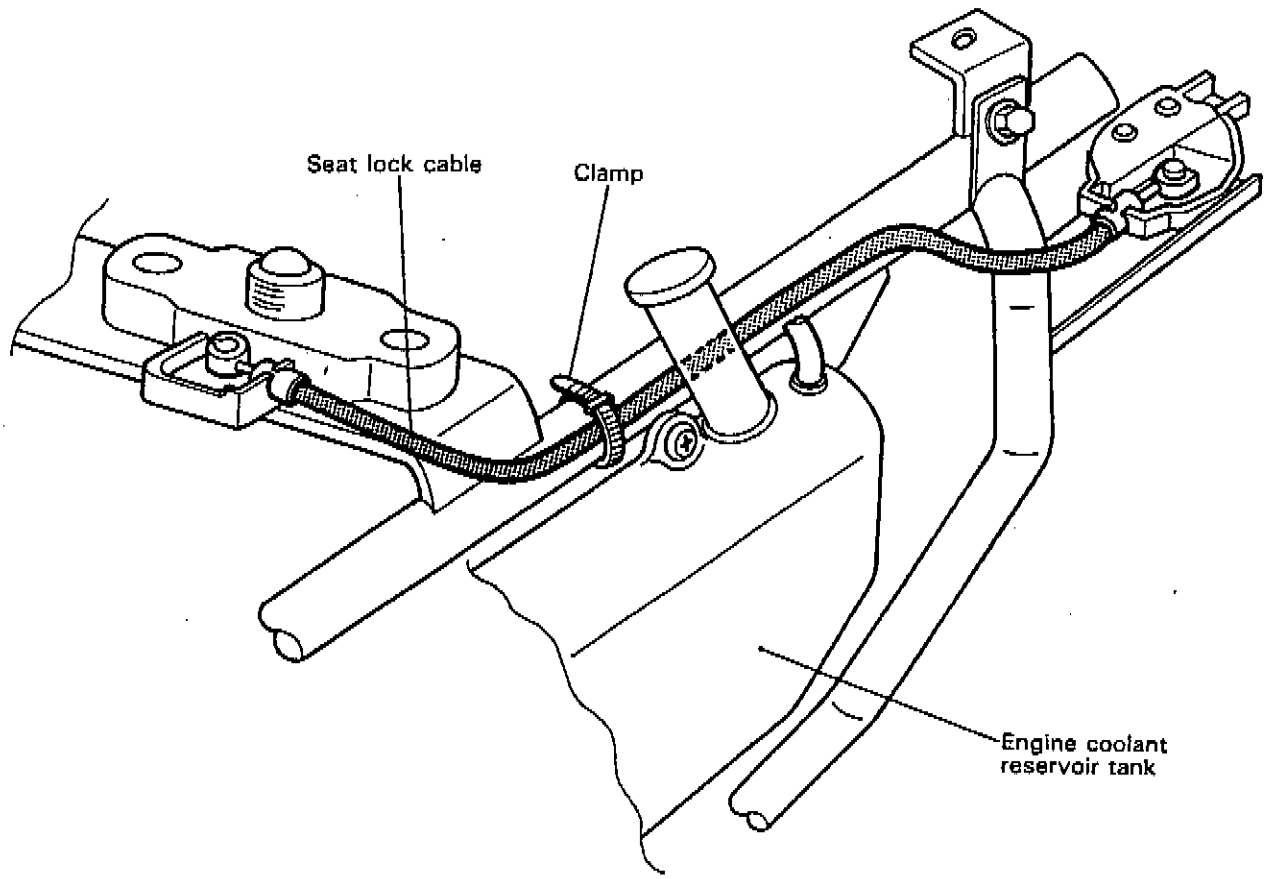
NOTE:
This counted number is important when reassembling pilot screw to original position.

- When installing the pilot screw, turn it in fully but not tightly. From that position turn it out the same number as counted during removal.
- Install the new plug in the pilot screw hole.



CABLE ROUTING

SEAT LOCK CABLE ROUTING



RF900RS ('95-MODEL)

This chapter describes service data, service specifications and servicing procedures which differ from those of the RF900RR ('94-model).

NOTE:
- *Any differences between RF900RR ('94-model) and RF900RS ('95-model) in specifications and service data are clearly indicated with the asterisk marks (*).*

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10

SPECIFICATIONS

DIMENSIONS AND DRY MASS

Overall length	2 130 mm (83.9 in)	For E-02,03,04,21,24, 25,28,33,34,53
	2 155 mm (84.8 in)	For E-15,16,17,18,22, 39
Overall width	730 mm (28.7 in)	
Overall height	1 165 mm (45.9 in)	
Wheelbase	1 440 mm (56.7 in)	
Ground clearance	115 mm (4.5 in)	
Dry mass	203 kg (447 lbs)	
	206 kg (454 lbs)	E-33 only

ENGINE

Type	Four-stroke, Water-cooled, DOHC, TSCC
Number of cylinders	4
Bore	73.0 mm (2.874 in)
Stroke	56.0 mm (2.205 in)
Piston displacement	937 cm^3 (57.2 cu. in)
Carburetor	MIKUNI BDST36
Air cleaner	Non-woven fabric element
Starter system	Electric starter
Lubrication system	Wet sump

TRANSMISSION

Clutch	Wet multi-plate type
Transmission	5-speed constant mesh
Gearshift pattern	1-down, 4-up
Primary reduction ratio	1.565 (72/46)
Final reduction ratio	2.866 (43/15)
Gear ratios, Low	2.714 (38/14)
2nd	1.809 (38/21)
3rd	1.409 (31/22)
4th	1.181 (26/22)
Top	1.038 (27/26)
Drive chain	TAKASAGO RK532GSV$_2$, 110 links

CHASSIS

Front suspension	Telescopic, coil spring, oil damped, spring pre-load fully adjustable.
Rear suspension	Link type system, oil damped, coil spring, spring pre-load 7-way adjustable, rebound damping force 4-way adjustable and compression damping force fully adjustable.
Steering angle	30° (right & left)
Caster	65° 30'
Trail	102 mm (4.02 in)
Turning radius	3.2 m (10.5 ft)
Front brake	Disc brake, twin
Rear brake	Disc brake
Front tire size	120/70 ZR17, tubeless
Rear tire size	170/60 ZR17, tubeless
Front fork stroke	120 mm (4.7 in)
Rear wheel travel	130 mm (5.1 in)

ELECTRICAL

Ignition type	Electronic Ignition (Fully Transistorized)
Ignition timing	4° B.T.D.C. at 1500 r/min ... For E-03,18,33,39 7° B.T.D.C. at 1500 r/min ... For the others
Spark plug	N.G.K.: CR9E, NIPPONDENSO U27ESR-N
Battery	12V 28.8 kC (8 Ah)/10 HR
Generator	Three-phase A.C. Generator
Main fuse	30A
Fuse	15/15/15/10/10A
Headlight	12V 60/55W
Turn signal light	12V 21W
Parking or city light	12V 4W ..... Except for E-03,24,28,33
Taillight	12V 5W
Brake light	12V 21W x 2
License plate light	12V 5W
Speedometer light	12V 1.7W x 2
Tachometer light	12V 1.7W x 2
Engine coolant temp. meter light	12V 1.7W
Neutral indicator light	12V 3.4W
High beam indicator light	12V 3.4W
Turn signal indicator light	12V 3.4W
Oil pressure indicator light	12V 3.4W
Fuel level indicator light	12V 3.4W

CAPACITIES

Fuel tank, including reserve	21.0 L (5.5/4.6 US/Imp gal)
Engine oil, oil change	3 000 ml (3.2/2.6 US/Imp qt)
with filter change	3 300 ml (3.5/2.9 US/Imp qt)
overhaul	3 900 ml (4.1/3.4 US/Imp qt)
Front fork oil	459 ml (15.5/16.2 US/Imp oz) ... For E-03,33 466 ml (15.8/16.4 US/Imp oz) ... For the others
Engine coolant	2 450 ml (2.6/2.2 US/Imp qt)

These specifications are subject to change without notice.

(E-03: U.S.A. (except California)
E-33: California (U.S.A.))

SERVICE DATA

VALVE + GUIDE

Unit: mm (in)

ITEM	STANDARD			LIMIT
Valve diam.	IN.	28 (1.10)		—
	EX.	24 (0.94)		—
Valve lift	IN.	E-03	7.3 (0.29)	—
		E-04	5.5 (0.22)	—
		E-18,33,39	7.3 (0.29)	—
		Others	8.7 (0.34)	—
	EX.	E-03	7.5 (0.30)	—
		E-04	7.0 (0.28)	—
		E-18,33,39	7.0 (0.28)	—
		Others	7.5 (0.30)	—
Tappet clearance (when cold)	IN.	0.10—0.20 (0.004—0.008)		—
	EX.	0.20—0.30 (0.008—0.010)		—
Valve guide to valve stem clearance	IN.	0.020—0.047 (0.0008—0.0019)		—
	EX.	0.030—0.057 (0.0012—0.0022)		—
Valve stem deflection	IN. & EX.	—		0.35 (0.014)
Valve guide I.D.	IN. & EX.	4.500—4.512 (0.1772—0.1776)		—
Valve stem O.D.	IN.	4.465—4.480 (0.1758—0.1764)		—
	EX.	4.455—4.470 (0.1754—0.1760)		—
Valve stem runout	IN. & EX.	—		0.05 (0.002)
Valve head thickness	IN. & EX.	—		0.5 (0.02)
Valve seat width	IN. & EX.	0.9—1.1 (0.035—0.043)		—
Valve head radial runout	IN. & EX.	—		0.03 (0.001)
Valve spring free length (IN. & EX.)	—			43.0 (1.69)
Valve spring tension (IN. & EX.)	18.6—21.4 kg (41.0—47.2 lbs) at length 38 mm (1.5 in)			—

CAMSHAFT + CYLINDER HEAD

Unit: mm (in)

ITEM	STANDARD			LIMIT
Cam height	IN.	E-03	35.292—35.348 (1.3894—1.3917)	35.00 (1.378)
		E-04	33.492—33.548 (1.3186—1.3208)	33.20 (1.307)
		E-18,33,39	35.292—35.348 (1.3894—1.3917)	35.00 (1.378)
		Others	36.692—36.748 (1.4446—1.4468)	36.40 (1.433)
	EX.	E-03	35.522—35.578 (1.3985—1.4007)	35.23 (1.387)
		E-04	34.952—35.008 (1.3761—1.3783)	34.66 (1.365)
		E-18,33,39	34.952—35.008 (1.3761—1.3783)	34.66 (1.365)
		Others	35.522—35.578 (1.3985—1.4007)	35.23 (1.387)
Camshaft journal oil clearance	IN. & EX.		0.032—0.066 (0.0013—0.0026)	0.150 (0.0059)
Camshaft journal holder I.D.	IN. & EX.		22.012—22.025 (0.8666—0.8671)	—
Camshaft journal O.D.	IN. & EX.		21.959—21.980 (0.8645—0.8654)	—
Camshaft runout	IN. & EX		—	0.10 (0.004)
Cam chain pin (at arrow "3")	13th pin			—
Cylinder head distortion	—			0.20 (0.008)

CYLINDER + PISTON + PISTON RING

Unit: mm (in)

ITEM	STANDARD			LIMIT
Compression pressure	1 000—1 500 kPa (10—15 kg/cm², 142—213 psi)			800 kPa (8 kg/cm², 114psi)
Compression pressure difference	—			200 kPa (2 kg/cm², 28 psi)
Piston to cylinder clearance	0.045—0.055 (0.0018—0.0022)			0.120 (0.0047)
Cylinder bore	73.000—73.015 (2.8740—2.8746)			73.085 (2.8774)
Piston diam.	72.950—72.965 (2.8720—2.8726) Measure at 15 mm (0.6 in) from the skirt end.			72.880 (2.8693)
Cylinder distortion	—			0.20 (0.008)
Piston ring free end gap	1st	R	Approx. 6.9 (0.27)	5.5 (0.22)
	2nd	R	Approx. 7.2 (0.28)	5.8 (0.23)
Piston ring end gap	1st		0.10—0.30 (0.004—0.012)	0.5 (0.02)
	2nd		0.35—0.50 (0.014—0.020)	1.0 (0.04)

ITEM	STANDARD		LIMIT
Piston ring to groove clearance	1st	—	0.18 (0.007)
	2nd	—	0.18 (0.007)
Piston ring groove width	1st	1.02—1.04 (0.040—0.041)	—
	2nd	1.02—1.04 (0.040—0.041)	—
	Oil	2.01—2.03 (0.079—0.080)	—
Piston ring thickness	1st	0.97—0.99 (0.038—0.039)	—
	2nd	0.97—0.99 (0.038—0.039)	—
Piston pin bore	19.002—19.008 (0.7481—0.7483)		19.030 (0.7492)
Piston pin O.D.	18.996—19.000 (0.7479—0.7480)		18.980 (0.7472)

CONROD + CRANKSHAFT

Unit: mm (in)

ITEM	STANDARD		LIMIT
Conrod small end I.D.	19.010—19.018 (0.7484—0.7487)		19.040 (0.7496)
Conrod big end side clearance	0.10—0.20 (0.004—0.008)		0.30 (0.010)
Conrod big end width	20.95—21.00 (0.825—0.827)		—
Crank pin width	21.10—21.15 (0.831—0.833)		—
Conrod big end oil clearance	0.032—0.056 (0.0013—0.0022)		0.080 (0.0031)
Crank pin O.D.	35.976—36.000 (1.4164—1.4173)		—
Crankshaft journal oil clearance	0.020—0.044 (0.0008—0.0017)		0.080 (0.0031)
Crankshaft journal O.D.	33.976—34.000 (1.3376—1.3386)		—
Crankshaft thrust clearance	0.055—0.110 (0.0022—0.0043)		—
Crankshaft thrust bearing thickness	Right side	2.425—2.450 (0.0955—0.0965)	—
	Left side	2.350—2.500 (0.0925—0.0984)	—
Crankshaft runout	—		0.05 (0.002)

OIL PUMP

ITEM	STANDARD	LIMIT
Oil pump reduction ratio	1.703 (72/46 x 37/34)	—
Oil pressure (at 60°C, 140°F)	Above 300 kPa (3.0 kg/cm², 43 psi) Below 600 kPa (6.0 kg/cm², 85 psi) at 3 000 r/min.	—

CLUTCH

Unit: mm (in)

ITEM	STANDARD	LIMIT
Drive plate thickness	*2.92—3.08 (0.115—0.121)	—
Drive plate distortion	—	0.10 (0.004)
*Clutch spring free length	—	*43.3 (1.70)
Clutch master cylinder bore	14.000—14.043 (0.5511—0.5529)	—
Clutch master cylinder piston diam.	13.957—13.984 (0.5495—0.5506)	—
Clutch release cylinder bore	35.700—35.762 (1.4055—1.4079)	—
Clutch release cylinder piston diam.	35.650—35.675 (1.4035—1.4045)	—

THERMOSTAT + RADIATOR + FAN

ITEM		STANDARD		LIMIT
Thermostat valve opening temperature		74.5—78.5°C (166.1—173.3°F)		—
Thermostat valve lift		Over 7 mm (0.28 in) at 90°C (194°F)		—
Radiator cap valve opening pressure		110 kPa (1.1 kg/cm², 15.6 psi)		—
Cooling fan thermo-switch operating temperature	ON	Approx. 105°C (221°F)		—
	OFF	Approx. 100°C (212°F)		—
Engine coolant temperature gauge resistance		50°C (122°F)	Approx. 153.9 Ω	—
		80°C (176°F)	Approx. 51.9 Ω	—
		100°C (212°F)	Approx. 27.4 Ω	—
		120°C (248°F)	Approx. 16.1 Ω	—

TRANSMISSION + DRIVE CHAIN

Unit: mm (in) Except ratio

ITEM		STANDARD	LIMIT
Primary reduction ratio		1.565 (72/46)	—
Final reduction ratio		2.867 (43/15)	—
Gear ratios	Low	2.714 (38/14)	—
	2nd	1.809 (38/21)	—
	3rd	1.409 (31/22)	—
	4th	1.181 (26/22)	—
	Top	1.038 (27/26)	—
Shift fork to groove clearance		0.10—0.30 (0.004—0.012)	0.50 (0.020)
Shift fork groove width		5.00—5.10 (0.197—0.201)	—
Shift fork thickness		4.80—4.90 (0.189—0.193)	—

ITEM	STANDARD		LIMIT
Drive chain	Type	RK532GSV2	—
	Links	110 links, ENDLESS	—
	20-pitch length	—	319.4 (12.6)
Drive chain slack	25—35 (1.0—1.4)		—
Gearshift lever height	55 (2.2)		—

CARBURETOR

ITEM		SPECIFICATION	
		E-03	E-33
Carburetor type		MIKUNI BDST36SS	←
Bore size		36 mm	←
I.D. No.		31E1	31E4
Idle r/min.		1 200±100 r/min.	1 200±50 r/min.
Float height		6.9±1.0 mm (0.27±0.04 in)	←
Main jet	(M.J.)	#112.5	←
Main air jet	(M.A.J.)	0.9 mm	No.1 & 4 : 0.6 mm No.2 & 3 : 0.7 mm
Jet needle	(J.N.)	5DV3	5DFT13
Needle jet	(N.J.)	O-9	←
Throttle valve	(Th.V.)	#120	#125
Pilot jet	(P.J.)	#12.5	←
By-pass	(B.P.)	0.8, 0.8, 0.8 mm	←
Pilot outlet	(P.O.)	0.8 mm	0.7 mm
Valve seat	(V.S.)	1.5 mm	←
Starter jet	(G.S.)	#52.5	←
Pilot screw	(P.S.)	PRE-SET	←
Throttle cable play		0.5—1.0 mm (0.02—0.04 in)	←

CARBURETOR

ITEM		SPECIFICATION		
		E-02,25,28,34	E-04	E-24
Carburetor type		MIKUNI BDST36SS	←	←
Bore size		36 mm	←	←
I.D. No.		31E0	31E6	31E7
Idle r/min.		1 200±100 r/min	←	←
Float height		6.9±1.0 mm (0.27±0.04 in)	←	←
Main jet	(M.J.)	#112.5	←	←
Main air jet	(M.A.J.)	No.1 & 4: 0.8 mm No.2 & 3: 0.9 mm	No.1 & 4: 0.7 mm No.2 & 3: 0.8 mm	No.1 & 4: 0.8 mm No.2 & 3: 0.9 mm
Jet needle	(J.N.)	5DV1-3rd	←	←
Needle jet	(N.J.)	O-9	←	←
Throttle valve	(Th.V.)	#120	←	←

ITEM		SPECIFICATION		
		E-02,25,28,34	E-04	E-24
Pilot jet	(P.J.)	#12.5	←	←
By-pass	(B.P)	0.8, 0.8, 0.8 mm	←	←
Pilot outlet	(P.O.)	0.8 mm	←	←
Valve seat	(V.S.)	1.5 mm	←	←
Starter jet	(G.S.)	#50	←	←
Pilot screw	(P.S.)	PRE-SET (1-¼ turns back)	PRE-SET (1-½ turns back)	PRE-SET (1 turn back)
Pilot air jet	(P.A.J.)	#120	←	←
Throttle cable play		0.5—1.0 mm (0.02—0.04 in)	←	←

CARBURETOR

ITEM		SPECIFICATION		
		E-22	E-18	E-39
Carburetor type		MIKUNI BDST36SS	←	←
Bore size		36 mm	←	←
I.D. No.		31E2	31E3	31E8
Idle r/min.		1 200±100 r/min.	1 300$^{+100}_{-50}$ r/min.	1 300±100 r/min.
Float height		6.9±1.0 mm (0.27±0.04 in)	←	←
Main jet	(M.J.)	#115	#107.5	#105
Main air jet	(M.A.J.)	No.1 & 4: 0.8 mm No.2 & 3: 0.9 mm	No.1 & 4: 0.6 mm No.2 & 3: 0.7 mm	←
Jet needle	(J.N.)	5DV1-3rd	5DFT12-3rd	←
Needle jet	(N.J.)	O-9	←	←
Throttle valve	(Th.V.)	#120	←	←
Pilot jet	(P.J.)	#12.5	←	←
By-pass	(B.P)	0.8, 0.8, 0.8 mm	←	←
Pilot outlet	(P.O.)	0.8 mm	0.9 mm	←
Valve seat	(V.S.)	1.5 mm	←	←
Starter jet	(G.S.)	#50	#52.5	←
Pilot screw	(P.S.)	PRE-SET (1-⅛ turns back)	←	PRE-SET (1-¼ turns back)
Pilot air jet	(P.A.J.)	#120	#130	←
Throttle cable play		0.5—1.0 mm (0.02—0.04 in)	←	←

[E-15, 16 and 17 models are included in E-22 model.]
[E-21 and 53 models are included in E-34 model.]

ELECTRICAL

Unit: mm (in)

ITEM	SPCIFICATION		NOTE
Ignition timing	4° B.T.D.C. below 1 500 r/min.		E-03,18,33,39
	7° B.T.D.C. below 1 500 r/min.		Others
Firing order	1-2-4-3		
Spark plug	Type	NGK: CR9E ND: U27ESR-N	
	Gap	0.7—0.8 (0.028—0.032)	
Spark performance	Over 8 (0.3) at 1 atm.		

ITEM			SPECIFICATION		NOTE
Signal coil resistance			(Black—Green) Approx. 135—200 Ω		Tester range: (x 100 Ω)
Ignition coil resistance		Primary	⊕ tap— ⊖ tap Approx. 2.4—3.2 Ω		Tester range: (x 1 Ω)
		Secondary	Plug cap—Plug cap Approx. 30—40 kΩ		Tester range: (x 1 kΩ)
Generator			Slip ring O.D.	Limit: 14.0 (0.55)	ND
			Brush length	Limit: 4.5 (0.18)	
Generator Max. output			Approx. 405 W at 5 000 r/min		The rotation of the generator
Regulated voltage			Above 13.5 V at 5 000 r/min.		
Starter relay resistance			3—5 Ω		
Battery	Type designation		YTX9-BS		
	Capacity		12 V 28.8 kC (8 Ah)/10 HR		
	Standard electrolyte S.G.		1.320 at 20°C (68°F)		
Fuse size	Headlight	HI	15 A		
		LO	15 A		
	Turn signal		15 A		
	Ignition		10 A		
	Taillight		10 A		
	Main		30 A		

WATTAGE

Unit: W

ITEM		SPECIFICATION	
		E-03,24,28,33	The others
Headlight	HI	60	←
	LO	55	←
Position light			4
Taillight		5	←
Brake light		21 x 2	←
Turn signal light		21	←
Tachometer light		1.7 x 2	←
Speedometer light		1.7 x 2	←
Turn signal indicator light		3.4	←
High beam indicator light		3.4	←
Neutral indicator light		3.4	←
Oil pressure indicator light		3.4	←
Fuel level indicator light		3.4	←
License light		5	←
Engine coolant temp. meter light		1.7	←

BRAKE + WHEEL

Unit: mm (in)

ITEM		STANDARD		LIMIT
Rear brake pedal height			55 (2.2)	—
Brake disc thickness		Front	4.5 ± 0.2 (0.177 ± 0.008)	4.0 (0.16)
		Rear	5.0 ± 0.2 (0.197 ± 0.008)	4.5 (0.18)
Brake disc runout (Front & Rear)			—	0.30 (0.012)
Master cylinder bore		Front	15.870–15.913 (0.6248–0.6265)	—
		Rear	12.700–12.743 (0.5000–0.5017)	—
Master cylinder piston diam.		Front	15.827–15.854 (0.6231–0.6242)	—
		Rear	12.657–12.684 (0.4983–0.4993)	—
Brake caliper cylinder bore	Leading	Front	30.230–30.280 (1.1902–1.1921)	—
	Trailing		33.960–34.010 (1.3370–1.3390)	—
		Rear	38.180–38.256 (1.5031–1.5061)	—
Brake caliper piston diam.	Leading	Front	30.130–30.180 (1.1826–1.1882)	—
	Trailing		33.878–33.928 (1.3338–1.3357)	—
		Rear	38.098–38.148 (1.5000–1.5019)	—
Rear brake pad mounting pin diam.			5.9 (0.23)	5.6 (0.22)
Wheel rim runout (Front & Rear)		Axial	—	2.0 (0.08)
		Radial	—	2.0 (0.08)
Wheel axle runout		Front	—	0.25 (0.010)
		Rear	—	0.25 (0.010)
Tire size		Front	120/70 ZR17	—
		Rear	170/60 ZR17	—
Tire tread depth		Front	—	1.6 (0.06)
		Rear	—	2.0 (0.08)

SUSPENSION

Unit: mm (in)

ITEM	STANDARD		LIMIT	NOTE
Front fork stroke	120 (4.7)		—	
Front fork spring free length	—		303 (11.9)	
Front fork oil level	105 (4.1)		—	E-03,33
	99 (3.9)		—	The others
Front fork spring adjuster	3rd notch from top		—	
Rear shock absorber gas pressure	1 000 kPa (10 kg/cm², 142 psi)		—	
Rear shock absorber spring adjuster	4th position among 7		—	
Rear shock absorber damping force adjuster	Extension	1 click out	—	E-03,33
		2 clicks out	—	The others
	Compression	At punch mark (about 1 turn out)	—	E-03,33
		At punch mark (about ¼ turn out)	—	The others
Rear wheel travel	130 (5.1)		—	
Swingarm pivot shaft runout	—		0.3 (0.01)	

FUEL + OIL + ENGINE COOLANT

ITEM	SPECIFICATION		NOTE
Fuel type	Use only unleaded gasoline of at least 85 pump octane ($\frac{R+M}{2}$) or 91 octane or higher rated by the research method. Gasoline containing MTBE (Methyl Tertiary Butyl Ether), less than 10% ethanol, or less than 5% methanol with appropriate cosolvents and corrosion inhibitor is permissible.		E-03,33
	Use only unleaded gasoline of at least 87 pump octane ($\frac{R+M}{2}$ method) or 91 octane or higher rated by the Research Method.		E-28
	Gasoline used should be graded 85-95 octane or higher. An unleaded gasoline is recommended.		The others
Fuel tank including reserve	21.0 L (5.5/4.6 US/Imp gal)		
reserve	*4.0 L (1.1/0.9 US/Imp gal)		
Engine oil type	SAE 10W/40, API SE or SF		
Engine oil capacity	Change	3 000 ml (3.2/2.6 US/Imp qt)	
	Filter change	3 300 ml (3.5/2.9 US/Imp qt)	
	Overhaul	3 900 ml (4.1/3.4 US/Imp qt)	

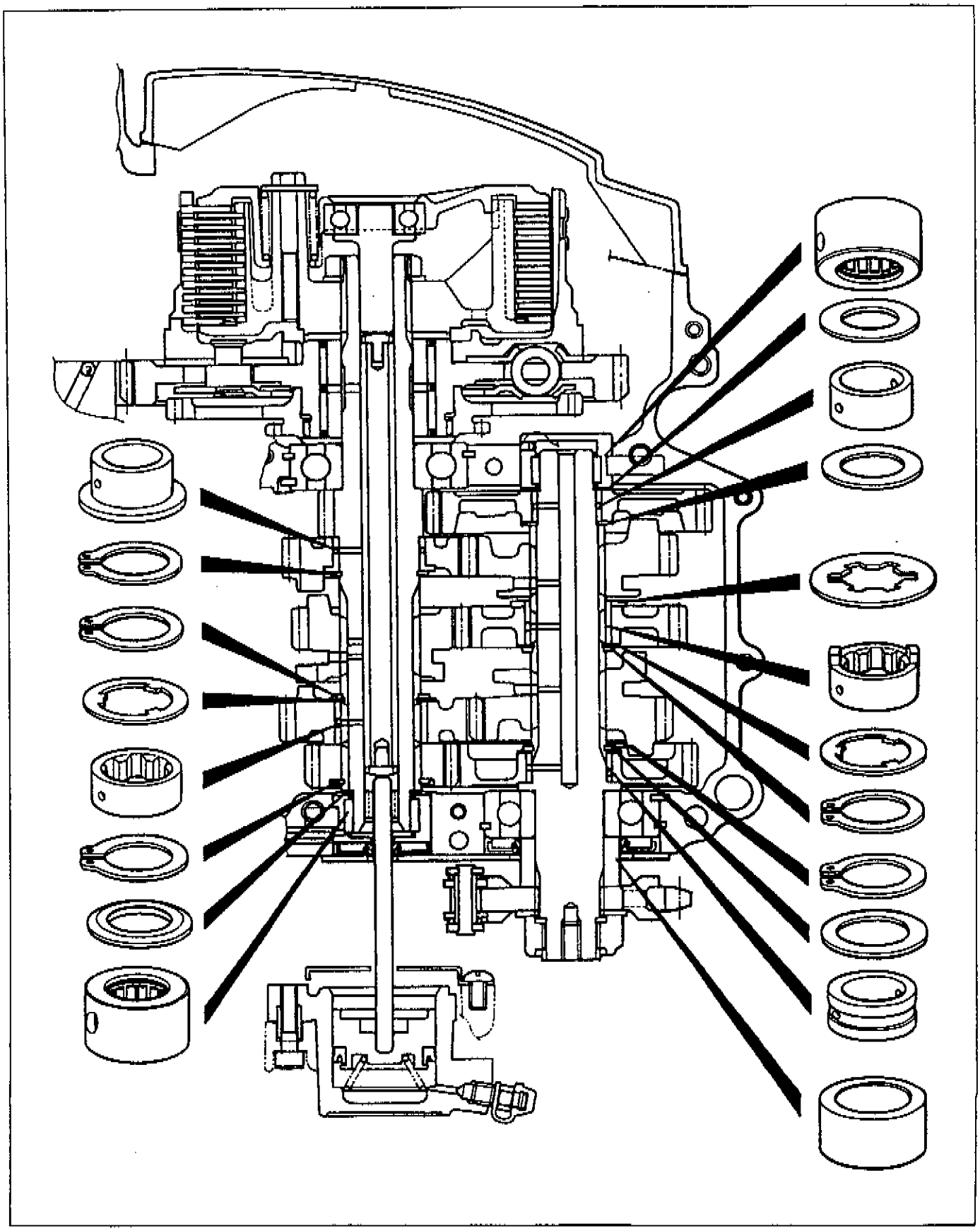
ITEM	SPECIFICATION	NOTE
Front fork oil type	Frok oil #10	
Front fork oil capacity (each leg)	459 ml (15.5/16.2 US/Imp oz)	E-03,33
	466 ml (15.8/16.4 US/Imp oz)	The others
Brake fluid type	DOT 4	
Engine coolant type	Use an anti-freeze/coolant compatible with aluminum radiator, mixed with distilled water only, at the ratio of 50:50.	
Engine coolant including reserve	2 450 ml (2.6/2.2 US/Imp qt)	

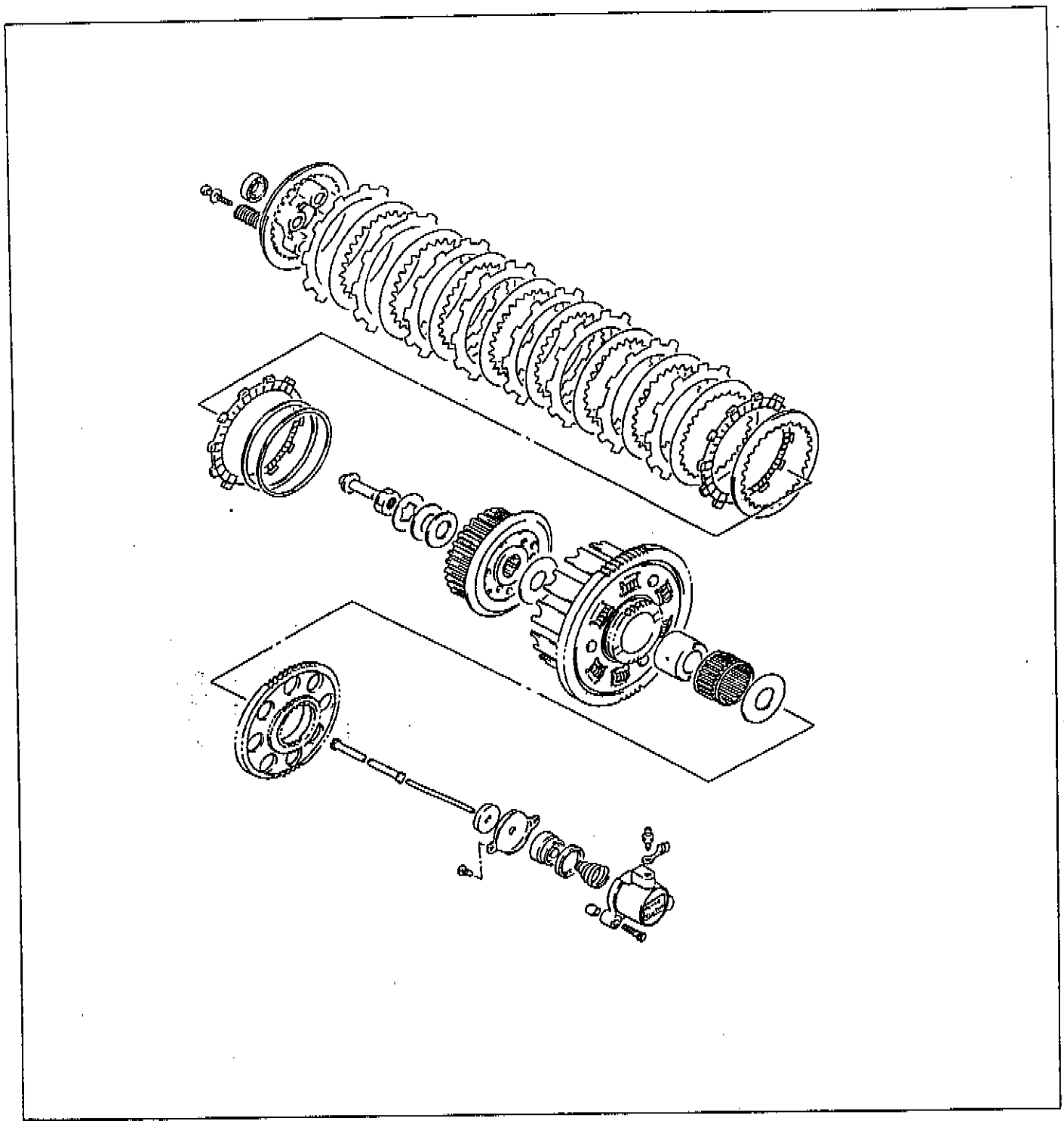
TIRE PRESSURE

COLD INFLATION TIRE PRESSURE	SOLO RIDING			DUAL RIDING		
	kPa	kg/cm²	psi	kPa	kg/cm²	psi
FRONT	250	2.50	36	250	2.50	36
REAR	250	2.50	36	290	2.90	42

SERVICE INFORMATION

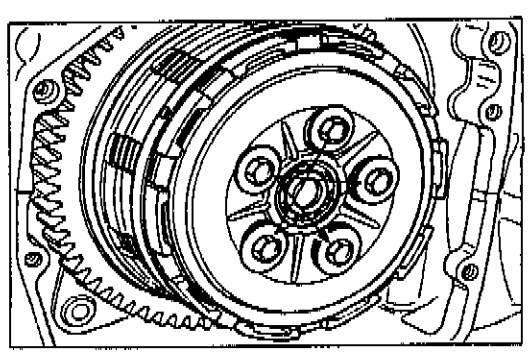
CLUTCH





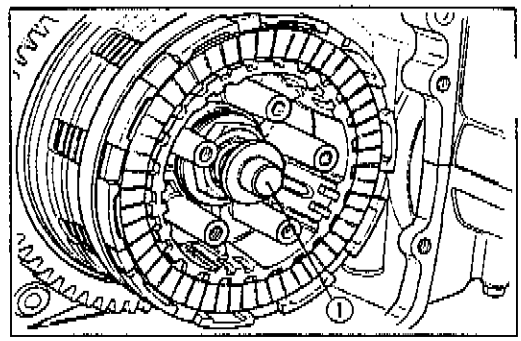
DISASSEMBLY

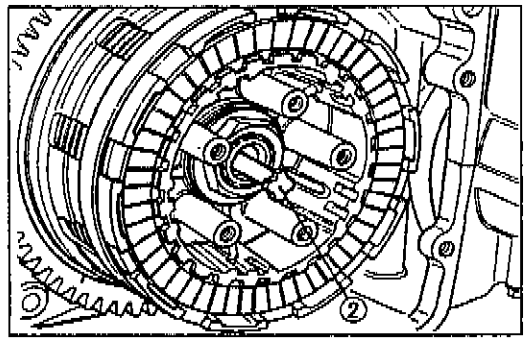
- Remove the clutch spring set bolts diagonally.
- Remove the clutch pressure plate.

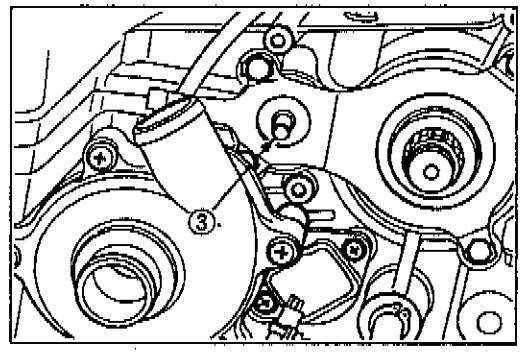


- Remove the clutch push piece ① and clutch push rods, ② and ③.

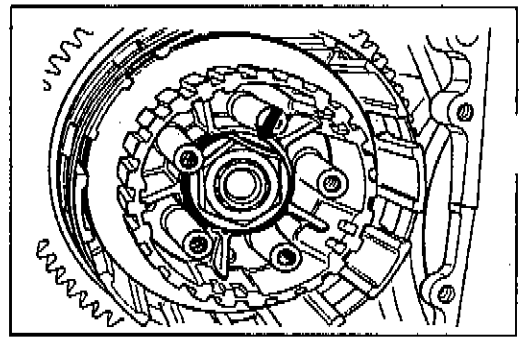
NOTE:
If it is difficult to draw out the push rod ②, use a magnetic hand or wire.





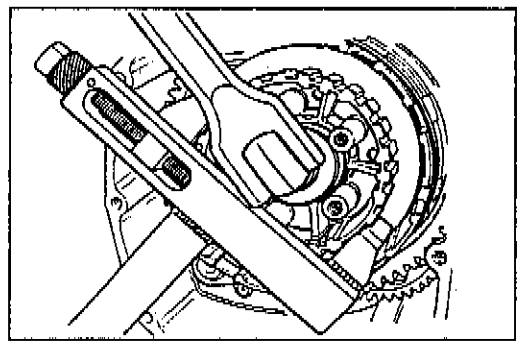


- Flatten the lock washer of the clutch sleeve nut.

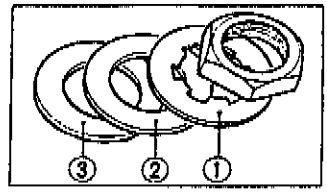


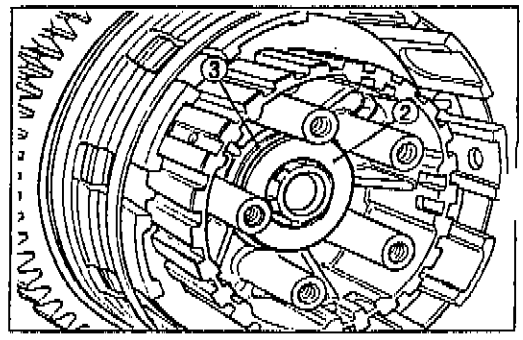
- After removing the several clutch plates, remove the clutch sleeve hub nut after firmly locking the clutch sleeve hub with the clutch sleeve hub holder.

TOOL 09920-53740: Clutch sleeve hub holder

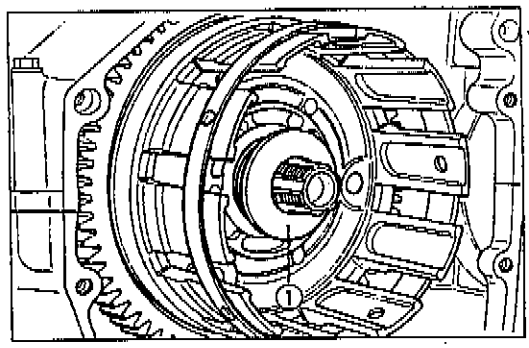


- Remove the lock washer ①, concaved washer ② and thrust washer ③.
- Remove the remainder of the clutch drive and driven plates along with the clutch sleeve hub.

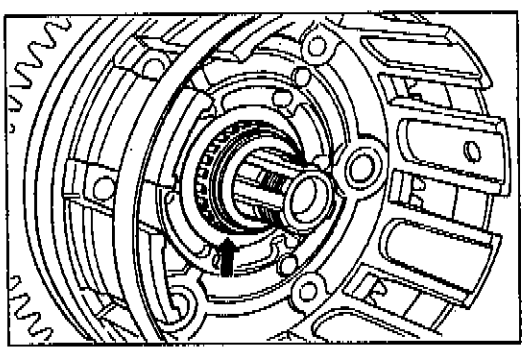




- Remove the thrust washer ①.



- With the spacer and bearing removed, the primary driven gear (integral with the clutch housing) is free to disengage from the primary drive gear.
- Remove the primary driven gear assembly with the generator/oil pump drive gears.



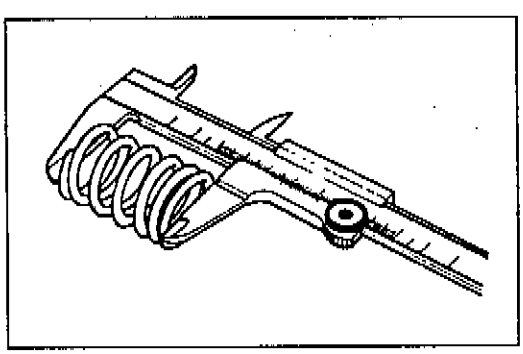
INSPECTION

CLUTCH SPRING FREE LENGTH

Measure the free length of each coil spring with a vernier calipers, and compare the elastic strength of each with the specified limit. Replace all the springs if any one of springs is not within the limit.

09900-20102: Vernier calipers

Serivce Limit: 43.3 mm (1.70 in)

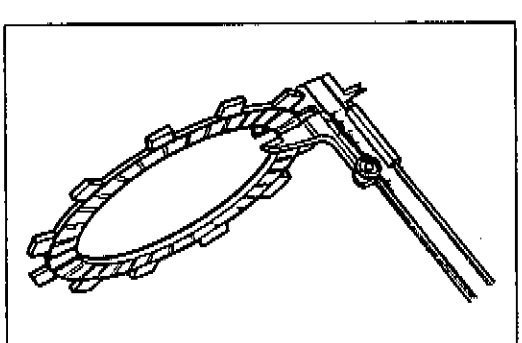


CLUTCH DRIVE PLATE

Measure the thickness of each drive plate with a vernier calipers. If each drive plate is not within the standard range, replace it with a new one.

09900-20102: Vernier calipers

Standard (No.1 and No.2 drive plates)
Thickness: 2.92—3.08 mm (0.115—0.121 in)

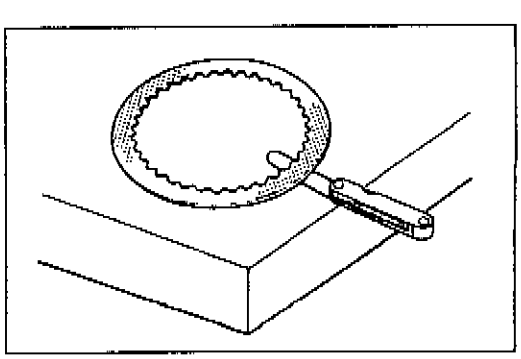


CLUTCH DRIVEN PLATE

Measure each driven plate for distortion with a thickness gauge.
Replace the driven plates which exceed the limit.

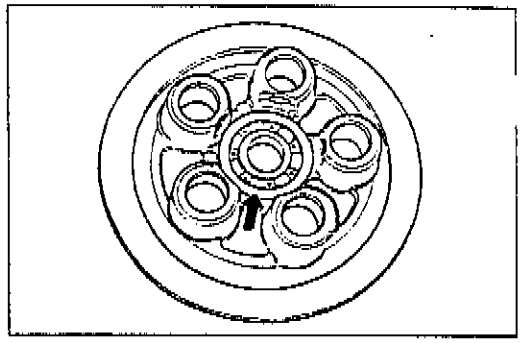
09900-20803: Thickness gauge

Service Limit: 0.1 mm (0.004 in)



CLUTCH BEARING

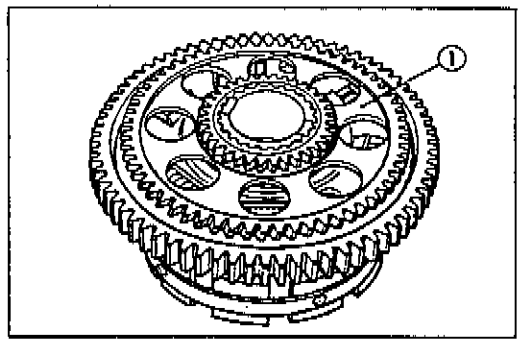
Rotate the bearing inner race by finger to inspect for abnormal play, noise and smooth rotation while the bearing is in the clutch pressure plate.
If there is anything unusual, replace the bearing with a new one.



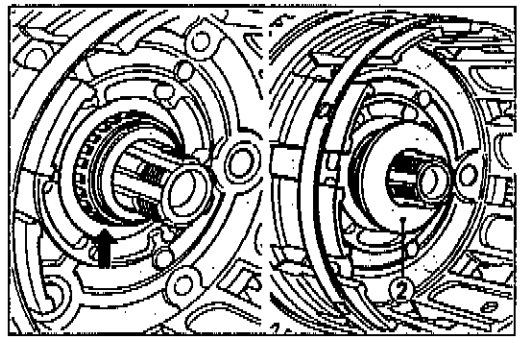
REASSEMBLY

Reassemble the clutch in the reverse order of disassembly.
Pay attention to the following points:

- Install the generator/oil pump drive gears ① onto the primary driven gear.



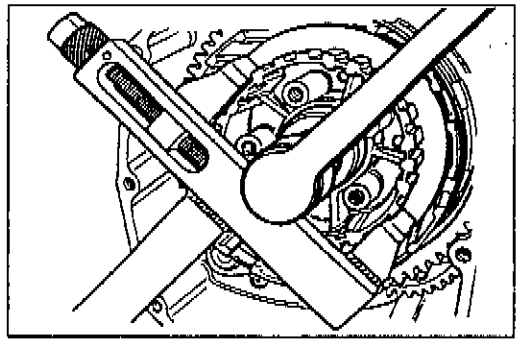
- Install the primary driven gear assembly onto the countershaft, and apply engine oil to the needle bearing and spacer.
- Install the thrust washer ② onto the countershaft.



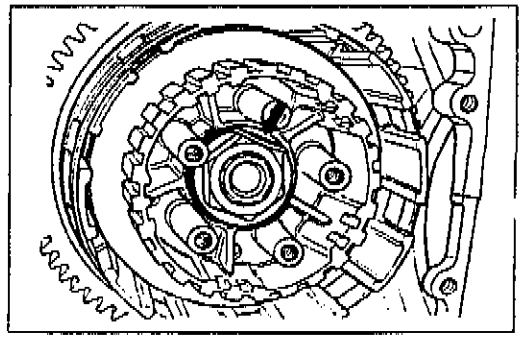
- Install the clutch sleeve hub onto the countershaft.
- Tighten the clutch sleeve hub nut to the specified torque by using the torque wrench and clutch sleeve hub holder.

TOOL 09920-53740: Clutch sleeve hub holder

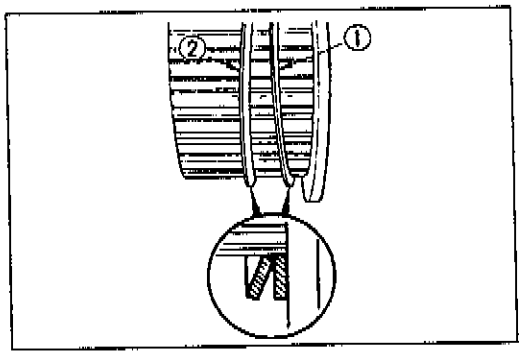
Clutch sleeve hub nut: 90 N·m (9.0 kg-m, 65.0 lb-ft)



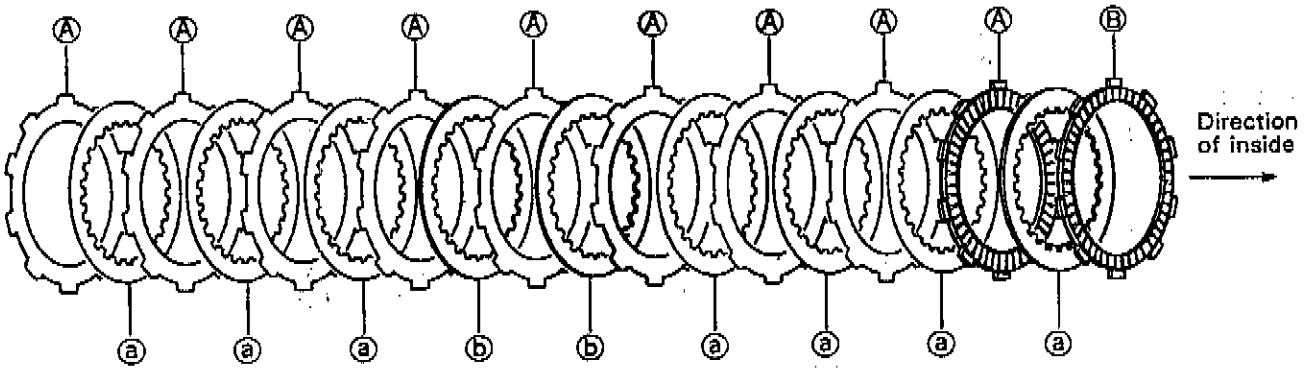
- After tightening the clutch sleeve hub nut, be sure to lock the nut by firmly bending the tongue of lock washer.



- Install the spring washer seat ① and spring washer ② onto the clutch sleeve hub correctly.



- Insert the clutch drive plates and driven plates one by one into the clutch sleeve hub in the prescribed order, No.2 drive plate first.

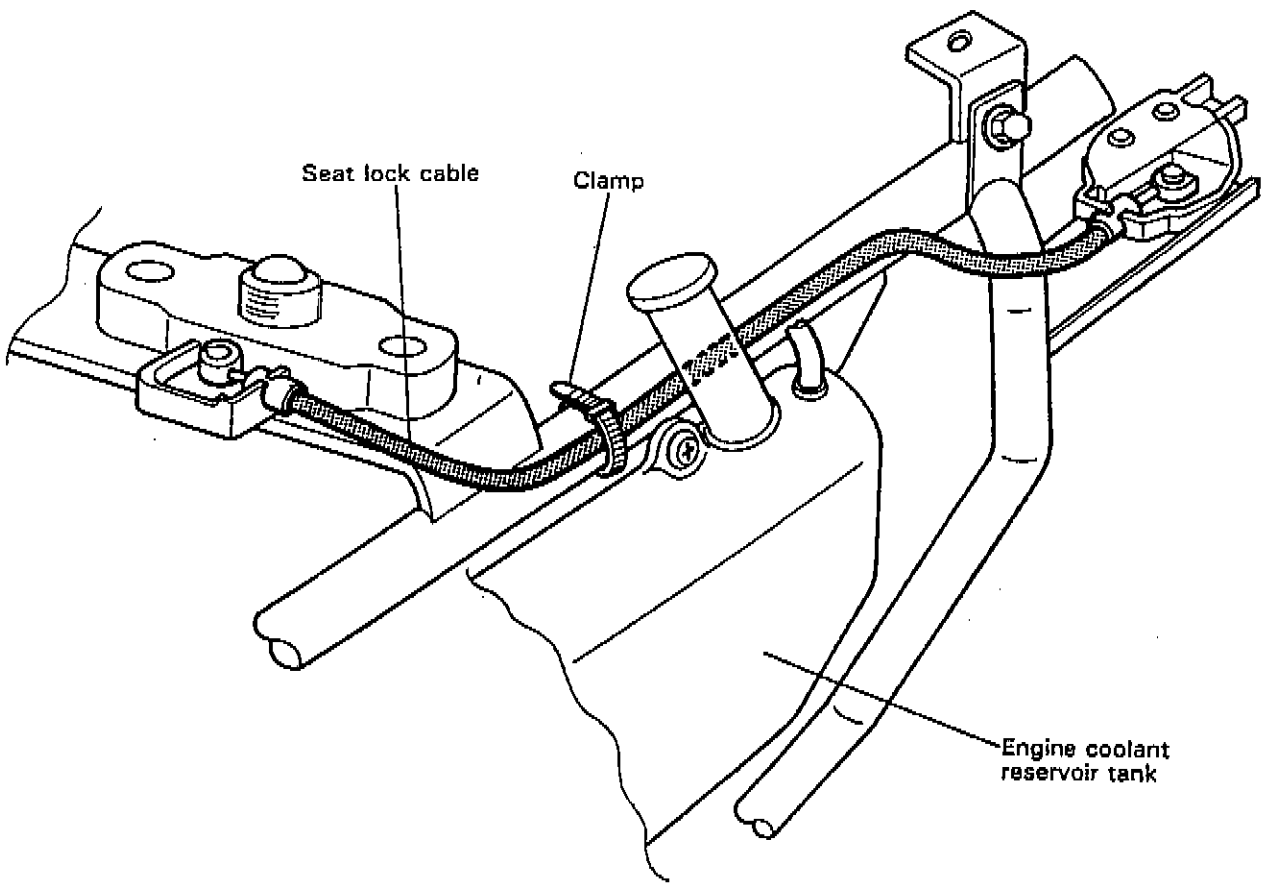


DRIVE PLATE:
Two kinds of the drive plate, No.1 and No.2, are equipped in the clutch system, they can be distinguished by the inside diameter.
Ⓐ No.1 Drive Plate (Inside Diameter): 101 mm (3.98 in) ..... 9 pcs
Ⓑ No.2 Drive Plate (Inside Diameter): 108 mm (4.25 in) ..... 1 pc

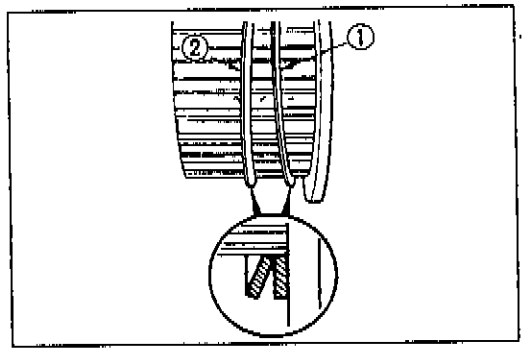
DRIVEN PLATE:
Two kinds of the driven plate, No.1 and No.2, are equipped in the clutch system, they can be distinguished by the thickness. (The spare part of the No.2 driven plate is not available individually.)
ⓐ No.1 Driven Plate (Thickness): 1.6 mm (0.06 in) ..... 7 pcs
ⓑ No.2 Driven Plate (Thickness): 2.0 mm (0.08 in) ..... 2 pcs

CABLE ROUTING

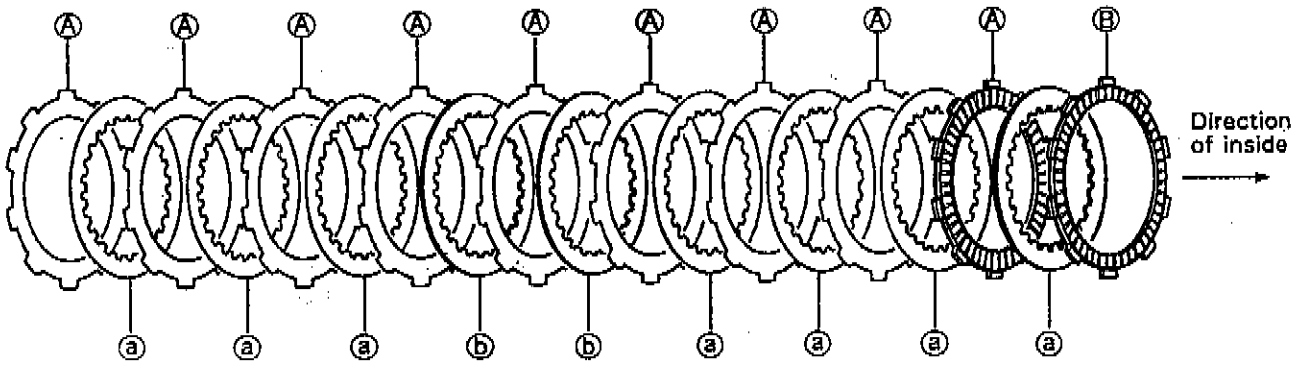
SEAT LOCK CABLE ROUTING



- Install the spring washer seat ① and spring washer ② onto the clutch sleeve hub correctly.



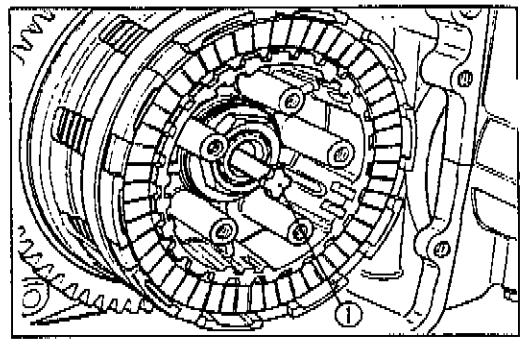
- Insert the clutch drive plates and driven plates one by one into the clutch sleeve hub in the prescribed order, No.2 drive plate first.

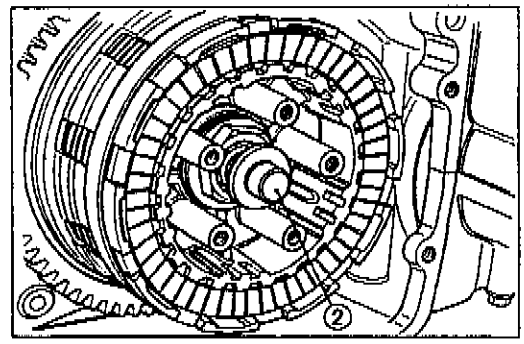


DRIVE PLATE:
Two kinds of the drive plate, No.1 and No.2, are equipped in the clutch system, they can be distinguished by the inside diameter.
Ⓐ No.1 Drive Plate (Inside Diameter): 101 mm (3.98 in) ..... 9 pcs
Ⓑ No.2 Drive Plate (Inside Diameter): 108 mm (4.25 in) ..... 1 pc

DRIVEN PLATE:
Two kinds of the driven plate, No.1 and No.2, are equipped in the clutch system, they can be distinguished by the thickness. (The spare part of the No.2 driven plate is not available individually.)
ⓐ No.1 Driven Plate (Thickness): 1.6 mm (0.06 in) ..... 7 pcs
ⓑ No.2 Driven Plate (Thickness): 2.0 mm (0.08 in) ..... 2 pcs

- Install the clutch push rod ① and clutch push piece ② into the countershaft.

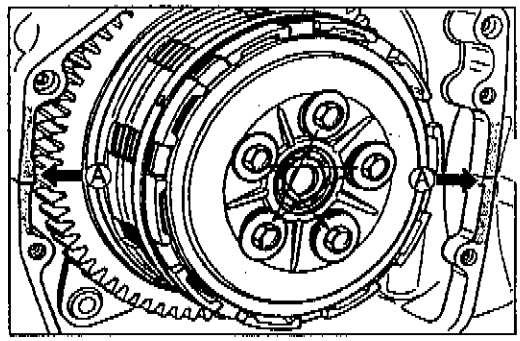




- Put the clutch pressure plate onto the clutch sleeve hub.
- Put the clutch spring set bolts onto the clutch pressure plate properly.
- Tighten the clutch spring set bolts in the order.

NOTE:
Tighten the clutch spring set bolts in the manner indicated, tightening them by degrees until they attain a uniform tightness.

Clutch spring set bolt: 12 N·m (1.2 kg-m, 8.5 lb-ft)

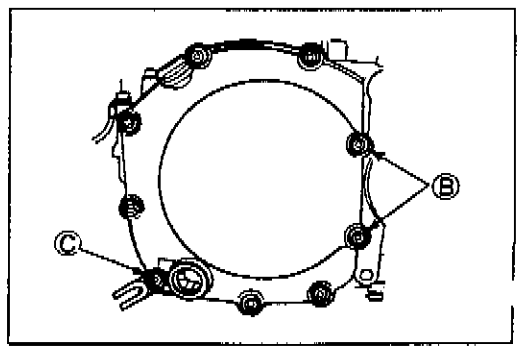


- Coat SUZUKI BOND NO. 1207B lightly to the mating surfaces Ⓐbetween upper and lower crankcases as shown in the Fig.

99000-31140: SUZUKI BOND NO. 1207B

- Install the dowel pins, a new gasket and clutch cover.
- Tighten the cover bolts securely.

NOTE:
Fit the two gaskets to the clutch cover bolts Ⓑcorrectly as shown in the Fig.
Fit the hose clamp to the clutch cover bolt Ⓒcorrectly as shown in the Fig.



⚠CAUTION

Use only new gasket to prevent oil leakage.

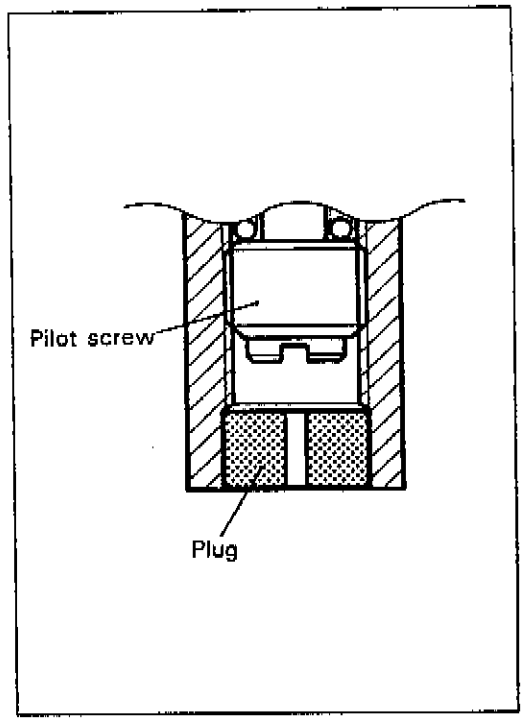
CARBURETOR

PILOT SCREW REMOVAL AND INSTALLATION

- Remove the plug by carefully punching a hole in it using an awl or suitable tool.
- Before removing the pilot screw, determine the setting by slowly turning it clockwise and count the number of turns required to lightly seat the screw. Turn the screw counterclockwise to remove it.

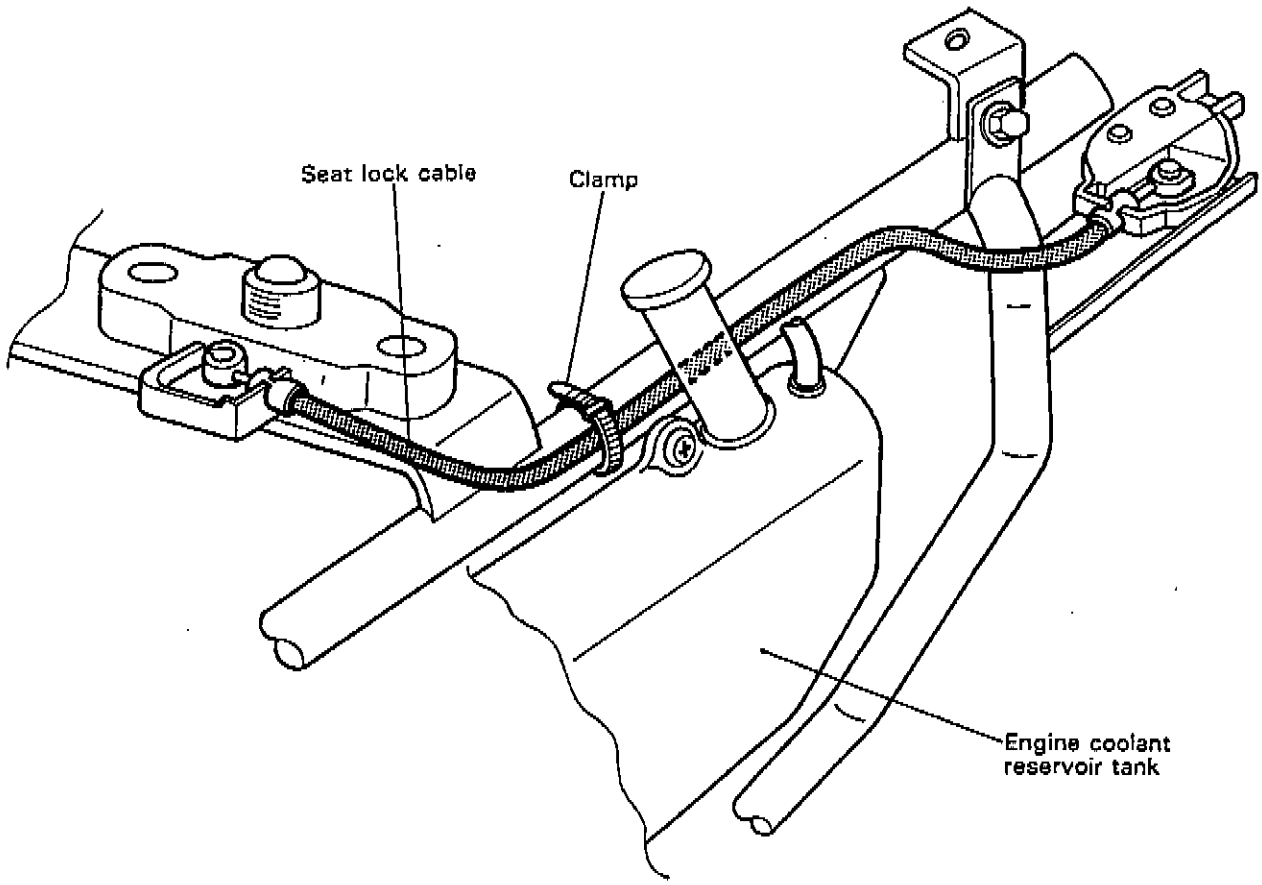
NOTE:
This counted number is important when reassembling pilot screw to original position.

- When installing the pilot screw, turn it in fully but not tightly. From that position turn it out the same number as counted during removal.
- Install the new plug in the pilot screw hole.



CABLE ROUTING

SEAT LOCK CABLE ROUTING



RF900RT ('96-MODEL)

This chapter describes service data, service specifications and servicing procedures which differ from those of the RF900RS ('95-model).

NOTE:
- *Any differences between RF900RS ('95-model) and RF900RT ('96-model) in specifications and service data are clearly indicated with the asterisk marks (*).*
- *Please refer to the chapters 1 through 10 for details which are not given in this chapter.*

CONTENTS

SPECIFICATIONS **11- 1**
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SERVICE INFORMATION **11-13**
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IGNITION UNIT **11-16**
REAR BRAKE AND TORQUE LINK ROD **11-17**
FRONT SUSPENSION **11-18**
SUSPENSION SETTING TABLE **11-18**
WIRE HARNESS ROUTING **11-19**

SPECIFICATIONS

DIMENSIONS AND DRY MASS

Overall length	2 130 mm (83.9 in)	For E-02,03,04,21,24, 25,28,33,34,53
	2 155 mm (84.8 in)	For E-15,16,17,18,22, 39
Overall width	730 mm (28.7 in)	
Overall height	1 165 mm (45.9 in)	
Wheelbase	1 440 mm (56.7 in)	
Ground clearance	115 mm (4.5 in)	
Dry mass	203 kg (447 lbs)	
	206 kg (454 lbs)	E-33 only

ENGINE

Type	Four-stroke, Water-cooled, DOHC, TSCC
Number of cylinders	4
Bore	73.0 mm (2.874 in)
Stroke	56.0 mm (2.205 in)
Piston displacement	937 cm^3 (57.2 cu. in)
Carburetor	MIKUNI BDST36
Air cleaner	Non-woven fabric element
Starter system	Electric starter
Lubrication system	Wet sump

TRANSMISSION

Clutch	Wet multi-plate type
Transmission	5-speed constant mesh
Gearshift pattern	1-down, 4-up
Primary reduction ratio	1.565 (72/46)
Final reduction ratio	2.866 (43/15)
Gear ratios, Low	2.714 (38/14)
2nd	1.809 (38/21)
3rd	1.409 (31/22)
4th	1.181 (26/22)
Top	1.038 (27/26)
Drive chain	TAKASAGO RK532GSV$_2$, 110 links

CHASSIS

Front suspension	*Telescopic, coil spring, oil damped, spring pre-load fully adjustable, rebound damping force fully adjustable.
Rear suspension	Link type system, oil damped, coil spring, spring pre-load 7-way adjustable, rebound damping force 4-way adjustable and compression damping force fully adjustable.
Steering angle	30° (right & left)
Caster	65° 30'
Trail	102 mm (4.02 in)
Turning radius	3.2 m (10.5 ft)
Front brake	Disc brake, twin
Rear brake	Disc brake
Front tire size	120/70 ZR17, tubeless
Rear tire size	170/60 ZR17, tubeless
Front fork stroke	120 mm (4.7 in)
Rear wheel travel	130 mm (5.1 in)

ELECTRICAL

Ignition type	Electronic Ignition (Fully Transistorized)
Ignition timing	4° B.T.D.C. at 1500 r/min ... For E-03,18,33,39 7° B.T.D.C. at 1500 r/min ... For the others
Spark plug	N.G.K.: CR9E, NIPPONDENSO U27ESR-N
Battery	12V 28.8 kC (8 Ah)/10 HR
Generator	Three-phase A.C. Generator
Main fuse	30A
Fuse	15/15/15/10/10A
Headlight	12V 60/55W
Turn signal light	12V 21W
Parking or city light	12V 4W ..... Except for E-03,24,28,33
Taillight	12V 5W
Brake light	12V 21W x 2
License plate light	12V 5W
Speedometer light	12V 1.7W x 2
Tachometer light	12V 1.7W x 2
Engine coolant temp. meter light	12V 1.7W
Neutral indicator light	12V 3.4W
High beam indicator light	12V 3.4W
Turn signal indicator light	12V 3.4W
Oil pressure indicator light	12V 3.4W
Fuel level indicator light	12V 3.4W

CAPACITIES

Fuel tank, including reserve	21.0 L (5.5/4.6 US/Imp gal)
Engine oil, oil change	3 000 ml (3.2/2.6 US/Imp qt)
with filter change	3 300 ml (3.5/2.9 US/Imp qt)
overhaul	3 900 ml (4.1/3.4 US/Imp qt)
Front fork oil	*466 ml (15.8/16.4 US/Imp oz)
Engine coolant	2 450 ml (2.6/2.2 US/Imp qt)

These specifications are subject to change without notice.

SERVICE DATA

VALVE + GUIDE

Unit: mm (in)

ITEM	STANDARD			LIMIT
Valve diam.	IN.	28 (1.10)		—
	EX.	24 (0.94)		—
Valve lift	IN.	E-03	7.3 (0.29)	—
		E-04	5.5 (0.22)	—
		E-18,33,39	7.3 (0.29)	—
		Others	8.7 (0.34)	—
	EX.	E-03	7.5 (0.30)	—
		E-04	7.0 (0.28)	—
		E-18,33,39	7.0 (0.28)	—
		Others	7.5 (0.30)	—
Tappet clearance (when cold)	IN.	0.10—0.20 (0.004—0.008)		—
	EX.	0.20—0.30 (0.008—0.010)		—
Valve guide to valve stem clearance	IN.	0.020—0.047 (0.0008—0.0019)		—
	EX.	0.030—0.057 (0.0012—0.0022)		—
Valve stem deflection	IN. & EX.	—		0.35 (0.014)
Valve guide I.D.	IN. & EX.	4.500—4.512 (0.1772—0.1776)		—
Valve stem O.D.	IN.	4.465—4.480 (0.1758—0.1764)		—
	EX.	4.455—4.470 (0.1754—0.1760)		—
Valve stem runout	IN. & EX.	—		0.05 (0.002)
Valve head thickness	IN. & EX.	—		0.5 (0.02)
Valve seat width	IN. & EX.	0.9—1.1 (0.035—0.043)		—
Valve head radial runout	IN. & EX.	—		0.03 (0.001)
Valve spring free length (IN. & EX.)	—			43.0 (1.69)
Valve spring tension (IN. & EX.)	18.6—21.4 kg (41.0—47.2 lbs) at length 38 mm (1.5 in)			—

CAMSHAFT + CYLINDER HEAD

Unit: mm (in)

ITEM	STANDARD			LIMIT
Cam height	IN.	E-03	35.292—35.348 (1.3894—1.3917)	35.00 (1.378)
		E-04	33.492—33.548 (1.3186—1.3208)	33.20 (1.307)
		E-18,33,39	35.292—35.348 (1.3894—1.3917)	35.00 (1.378)
		Others	36.692—36.748 (1.4446—1.4468)	36.40 (1.433)
	EX.	E-03	35.522—35.578 (1.3985—1.4007)	35.23 (1.387)
		E-04	34.952—35.008 (1.3761—1.3783)	34.66 (1.365)
		E-18,33,39	34.952—35.008 (1.3761—1.3783)	34.66 (1.365)
		Others	35.522—35.578 (1.3985—1.4007)	35.23 (1.387)
Camshaft journal oil clearance	IN. & EX.	0.032—0.066 (0.0013—0.0026)		0.150 (0.0059)
Camshaft journal holder I.D.	IN. & EX.	22.012—22.025 (0.8666—0.8671)		—
Camshaft journal O.D.	IN. & EX.	21.959—21.980 (0.8645—0.8654)		—
Camshaft runout	IN. & EX	—		0.10 (0.004)
Cam chain pin (at arrow "3")	13th pin			—
Cylinder head distortion	—			0.20 (0.008)

CYLINDER + PISTON + PISTON RING

Unit: mm (in)

ITEM	STANDARD			LIMIT
Compression pressure	1 000—1 500 kPa (10—15 kg/cm², 142—213 psi)			800 kPa (8 kg/cm², 114psi)
Compression pressure difference	—			200 kPa (2 kg/cm², 28 psi)
Piston to cylinder clearance	0.045—0.055 (0.0018—0.0022)			0.120 (0.0047)
Cylinder bore	73.000—73.015 (2.8740—2.8746)			73.085 (2.8774)
Piston diam.	72.950—72.965 (2.8720—2.8726) Measure at 15 mm (0.6 in) from the skirt end.			72.880 (2.8693)
Cylinder distortion	—			0.20 (0.008)
Piston ring free end gap	1st	R	Approx. 6.9 (0.27)	5.5 (0.22)
	2nd	R	Approx. 7.2 (0.28)	5.8 (0.23)
Piston ring end gap	1st		0.10—0.30 (0.004—0.012)	0.5 (0.02)
	2nd		0.35—0.50 (0.014—0.020)	1.0 (0.04)

ITEM	STANDARD		LIMIT
Piston ring to groove clearance	1st	—	0.18 (0.007)
	2nd	—	0.18 (0.007)
Piston ring groove width	1st	1.02—1.04 (0.040—0.041)	—
	2nd	1.02—1.04 (0.040—0.041)	—
	Oil	2.01—2.03 (0.079—0.080)	—
Piston ring thickness	1st	0.97—0.99 (0.038—0.039)	—
	2nd	0.97—0.99 (0.038—0.039)	—
Piston pin bore	19.002—19.008 (0.7481—0.7483)		19.030 (0.7492)
Piston pin O.D.	18.996—19.000 (0.7479—0.7480)		18.980 (0.7472)

CONROD + CRANKSHAFT

Unit: mm (in)

ITEM	STANDARD		LIMIT
Conrod small end I.D.	19.010—19.018 (0.7484—0.7487)		19.040 (0.7496)
Conrod big end side clearance	0.10—0.20 (0.004—0.008)		0.30 (0.010)
Conrod big end width	20.95—21.00 (0.825—0.827)		—
Crank pin width	21.10—21.15 (0.831—0.833)		—
Conrod big end oil clearance	0.032—0.056 (0.0013—0.0022)		0.080 (0.0031)
Crank pin O.D.	35.976—36.000 (1.4164—1.4173)		—
Crankshaft journal oil clearance	0.020—0.044 (0.0008—0.0017)		0.080 (0.0031)
Crankshaft journal O.D.	33.976—34.000 (1.3376—1.3386)		—
Crankshaft thrust clearance	0.055—0.110 (0.0022—0.0043)		—
Crankshaft thrust bearing thickness	Right side	2.425—2.450 (0.0955—0.0965)	—
	Left side	2.350—2.500 (0.0925—0.0984)	—
Crankshaft runout	—		0.05 (0.002)

OIL PUMP

ITEM	STANDARD	LIMIT
Oil pump reduction ratio	1.703 (72/46 x 37/34)	—
Oil pressure (at 60°C, 140°F)	Above 300 kPa (3.0 kg/cm², 43 psi) Below 600 kPa (6.0 kg/cm², 85 psi) at 3 000 r/min.	—

CLUTCH

Unit: mm (in)

ITEM	STANDARD	LIMIT
Drive plate thickness	2.92—3.08 (0.115—0.121)	—
Drive plate distortion	—	0.10 (0.004)
Clutch spring free length	—	43.3 (1.70)
Clutch master cylinder bore	14.000—14.043 (0.5511—0.5529)	—
Clutch master cylinder piston diam.	13.957—13.984 (0.5495—0.5506)	—
Clutch release cylinder bore	35.700—35.762 (1.4055—1.4079)	—
Clutch release cylinder piston diam.	35.650—35.675 (1.4035—1.4045)	—

THERMOSTAT + RADIATOR + FAN

ITEM		STANDARD		LIMIT
Thermostat valve opening temperature		74.5—78.5°C (166.1—173.3°F)		—
Thermostat valve lift		Over 7 mm (0.28 in) at 90°C (194°F)		—
Radiator cap valve opening pressure		110 kPa (1.1 kg/cm², 15.6 psi)		—
Cooling fan thermo-switch operating temperature	ON	Approx. 105°C (221°F)		—
	OFF	Approx. 100°C (212°F)		—
Engine coolant temperature gauge resistance		50°C (122°F)	Approx. 153.9 Ω	—
		80°C (176°F)	Approx. 51.9 Ω	—
		100°C (212°F)	Approx. 27.4 Ω	—
		120°C (248°F)	Approx. 16.1 Ω	—

TRANSMISSION + DRIVE CHAIN

Unit: mm (in) Except ratio

ITEM		STANDARD	LIMIT
Primary reduction ratio		1.565 (72/46)	—
Final reduction ratio		2.867 (43/15)	—
Gear ratios	Low	2.714 (38/14)	—
	2nd	1.809 (38/21)	—
	3rd	1.409 (31/22)	—
	4th	1.181 (26/22)	—
	Top	1.038 (27/26)	—
Shift fork to groove clearance		0.10—0.30 (0.004—0.012)	0.50 (0.020)
Shift fork groove width		5.00—5.10 (0.197—0.201)	—
Shift fork thickness		4.80—4.90 (0.189—0.193)	—

ITEM	STANDARD		LIMIT
Drive chain	Type	RK532GSV2	———
	Links	110 links, ENDLESS	———
	20-pitch length	———	319.4 (12.6)
Drive chain slack	25—35 (1.0—1.4)		———
Gearshift lever height	55 (2.2)		———

CARBURETOR

ITEM	SPECIFICATION		
	E-03	E-33	E-28
Carburetor type	MIKUNI BDST36SS	←	←
Bore size	36 mm	←	←
I.D. No.	31E1	31E4	31E0
Idle r/min.	1 200±100 r/min.	1 200±50 r/min.	1 200±100 r/min.
Float height	6.9±1.0 mm (0.27±0.04 in)	←	←
Main jet (M.J.)	#112.5	←	#112.5
Main air jet (M.A.J.)	0.9 mm	No.1 & 4 : 0.6 mm No.2 & 3 : 0.7 mm	No. 1 & 4 : 0.8 mm No. 2 & 3 : 0.9 mm
Jet needle (J.N.)	5DV3	5DFT13	5DV1-3rd
Needle jet (N.J.)	O-9	←	O-9
Throttle valve (Th.V.)	#120	#125	#120
Pilot jet (P.J.)	#12.5	←	#12.5
Starter jet (G.S.)	#52.5	←	#50
Pilot screw (P.S.)	PRE-SET	←	PRE-SET (1-¼ turns back)
Throttle cable play	0.5—1.0 mm (0.02—0.04 in)	←	←

CARBURETOR

ITEM	SPECIFICATION		
	E-02,25,34	E-04	E-24
Carburetor type	MIKUNI BDST36SS	←	←
Bore size	36 mm	←	←
I.D. No.	*31EA	*31EC	31E7
Idle r/min.	1 200±100 r/min	←	←
Float height	6.9±1.0 mm (0.27±0.04 in)	←	←
Main jet (M.J.)	#112.5	←	←
Main air jet (M.A.J.)	No.1 & 4: 0.8 mm No.2 & 3: 0.9 mm	No.1 & 4: 0.7 mm No.2 & 3: 0.8 mm	No.1 & 4: 0.8 mm No.2 & 3: 0.9 mm
Jet needle (J.N.)	5DV1-3rd	←	←
Needle jet (N.J.)	O-9	←	←
Throttle valve (Th.V.)	#120	←	←
Pilot jet (P.J.)	#12.5	←	←
Starter jet (G.S.)	#50	←	←

ITEM	SPECIFICATION		
	E-02,25,28,34	E-04	E-24
Pilot screw (P.S.)	PRE-SET (1-¼ turns back)	PRE-SET (1-½ turns back)	PRE-SET (1 turn back)
Throttle cable play	0.5—1.0 mm (0.02—0.04 in)	←	←

CARBURETOR

ITEM	SPECIFICATION		
	E-22	E-18	E-39
Carburetor type	MIKUNI BDST36SS	←	←
Bore size	36 mm	←	←
I.D. No.	*31ED	31E3	31E8
Idle r/min.	1 200 ± 100 r/min.	1 300 $^{+100}_{-50}$ r/min.	1 300 ± 100 r/min.
Float height	6.9 ± 1.0 mm (0.27 ± 0.04 in)	←	←
Main jet (M.J.)	#115	#107.5	#105
Main air jet (M.A.J.)	No.1 & 4: 0.8 mm No.2 & 3: 0.9 mm	No.1 & 4: 0.6 mm No.2 & 3: 0.7 mm	←
Jet needle (J.N.)	5DV1-3rd	5DFT12-3rd	←
Needle jet (N.J.)	O-9	←	←
Throttle valve (Th.V.)	#120	←	←
Pilot jet (P.J.)	#12.5	←	←
Starter jet (G.S.)	#50	#52.5	←
Pilot screw (P.S.)	PRE-SET (1-⅛ turns back)	←	PRE-SET (1-¼ turns back)
Throttle cable play	0.5—1.0 mm (0.02—0.04 in)	←	←

[E-15, 16 and 17 models are included in E-22 model.]
[E-21 and 53 models are included in E-34 model.]

*CARBURETOR

ITEM	SPECIFICATION
	E-37
Carburetor type	MIKUNI BDST36SS
Bore size	36 mm
I.D. No.	31EF
Idle r/min.	1 200 ± 100 r/min.
Float height	6.9 ± 1.0 mm (0.27 ± 0.04 in)
Main jet (M.J.)	#112.5
Main air jet (M.A.J.)	No.1 & 4: 0.8 mm No.2 & 3: 0.9 mm
Jet needle (J.N.)	5DV1-3rd
Needle jet (N.J.)	O-9
Throttle valve (Th.V.)	#120
Pilot jet (P.J.)	#12.5
Starter jet (G.S.)	#50
Pilot screw (P.S.)	PRE-SET (1-¼ turns back)
Throttle cable play	0.5—1.0 mm (0.02—0.04 in)

ELECTRICAL

Unit: mm'(in)

ITEM			SPCIFICATION	NOTE
Ignition timing			4° B.T.D.C. below 1 500 r/min.	E-03,18,33,39
			7° B.T.D.C. below 1 500 r/min.	Others
Firing order			1-2-4-3	
Spark plug		Type	NGK: CR9E ND: U27ESR-N	
		Gap	0.7—0.8 (0.028—0.032)	
Spark performance			Over 8 (0.3) at 1 atm.	
Signal coil resistance			(Black—Green) Approx. 135—200 Ω	Tester range: (x 100 Ω)
Ignition coil resistance		Primary	⊕ tap— ⊖ tap Approx. 2.4—3.2 Ω	Tester range: (x 1 Ω)
		Secondary	Plug cap—Plug cap Approx. 30—40 kΩ	Tester range: (x 1 kΩ)
Generator		Slip ring O.D.	Limit: 14.0 (0.55)	ND
		Brush length	Limit: 4.5 (0.18)	
Generator Max. output			Approx. 405 W at 5 000 r/min	The rotation of the generator
Regulated voltage			Above 13.5 V at 5 000 r/min.	
Starter relay resistance			3—5 Ω	
Battery	Type designation		YTX9-BS	
	Capacity		12 V 28.8 kC (8 Ah)/10 HR	
	Standard electrolyte S.G.		1.320 at 20°C (68°F)	
Fuse size	Headlight	HI	15 A	
		LO	15 A	
	Turn signal		15 A	
	Ignition		10 A	
	Taillight		10 A	
	Main		30 A	

WATTAGE

Unit: W

ITEM		SPECIFICATION	
		E-03,24,28,33	The others
Headlight	HI	60	←
	LO	55	←
Position light			4
Taillight		5	←
Brake light		21 x 2	←
Turn signal light		21	←
Tachometer light		1.7 x 2	←
Speedometer light		1.7 x 2	←
Turn signal indicator light		3.4	←
High beam indicator light		3.4	←
Neutral indicator light		3.4	←
Oil pressure indicator light		3.4	←
Fuel level indicator light		3.4	←
License light		5	←
Engine coolant temp. meter light		1.7	←

BRAKE + WHEEL

Unit: mm (in)

ITEM		STANDARD		LIMIT
Rear brake pedal height			55 (2.2)	—
Brake disc thickness		Front	4.5 ± 0.2 (0.177 ± 0.008)	4.0 (0.16)
		Rear	5.0 ± 0.2 (0.197 ± 0.008)	4.5 (0.18)
Brake disc runout (Front & Rear)			—	0.30 (0.012)
Master cylinder bore		Front	15.870–15.913 (0.6248–0.6265)	—
		Rear	12.700–12.743 (0.5000–0.5017)	—
Master cylinder piston diam.		Front	15.827–15.854 (0.6231–0.6242)	—
		Rear	12.657–12.684 (0.4983–0.4993)	—
Brake caliper cylinder bore	Leading	Front	30.230–30.280 (1.1902–1.1921)	—
	Trailing		33.960–34.010 (1.3370–1.3390)	—
		Rear	38.180–38.256 (1.5031–1.5061)	—
Brake caliper piston diam.	Leading	Front	30.130–30.180 (1.1826–1.1882)	—
	Trailing		33.878–33.928 (1.3338–1.3357)	—
		Rear	38.098–38.148 (1.5000–1.5019)	—
Rear brake pad mounting pin diam.			5.9 (0.23)	5.6 (0.22)
Wheel rim runout (Front & Rear)		Axial	—	2.0 (0.08)
		Radial	—	2.0 (0.08)
Wheel axle runout		Front	—	0.25 (0.010)
		Rear	—	0.25 (0.010)
Tire size		Front	120/70 ZR17	—
		Rear	170/60 ZR17	—
Tire tread depth		Front	—	1.6 (0.06)
		Rear	—	2.0 (0.08)

SUSPENSION

Unit: mm (in)

ITEM	STANDARD		LIMIT	NOTE
Front fork stroke	120 (4.7)		———	
Front fork spring free length	———		*282 (11.1)	
Front fork oil level	*113 (4.5)		———	
Front fork spring adjuster	*4th notch from top		———	
Front fork rebound damping force	*5/8 turn back from stiffest position		———	
Rear shock absorber gas pressure	1 000 kPa (10 kg/cm², 142 psi)		———	
Rear shock absorber spring adjuster	4th position among 7		———	
Rear shock absorber damping force adjuster	Extension	1 click out	———	E-03,33
		2 clicks out	———	The others
	Compression	At punch mark (about 1 turn out)	———	E-03,33
		At punch mark (about ¼ turn out)	———	The others
Rear wheel travel	130 (5.1)		———	
Swingarm pivot shaft runout	———		0.3 (0.01)	

FUEL + OIL + ENGINE COOLANT

ITEM	SPECIFICATION		NOTE
Fuel type	Use only unleaded gasoline of at least 85 pump octane ($\frac{R+M}{2}$) or 91 octane or higher rated by the research method. Gasoline containing MTBE (Methyl Tertiary Butyl Ether), less than 10% ethanol, or less than 5% methanol with appropriate cosolvents and corrosion inhibitor is permissible.		E-03,33
	Use only unleaded gasoline of at least 87 pump octane ($\frac{R+M}{2}$ method) or 91 octane or higher rated by the Research Method.		E-28
	Gasoline used should be graded 85-95 octane or higher. An unleaded gasoline is recommended.		The others
Fuel tank including reserve	21.0 L (5.5/4.6 US/Imp gal)		
reserve	4.0 L (1.1/0.9 US/Imp gal)		
Engine oil type	SAE 10W/40, API SE, SF or SG		
Engine oil capacity	Change	3 000 ml (3.2/2.6 US/Imp qt)	
	Filter change	3 300 ml (3.5/2.9 US/Imp qt)	
	Overhaul	3 900 ml (4.1/3.4 US/Imp qt)	

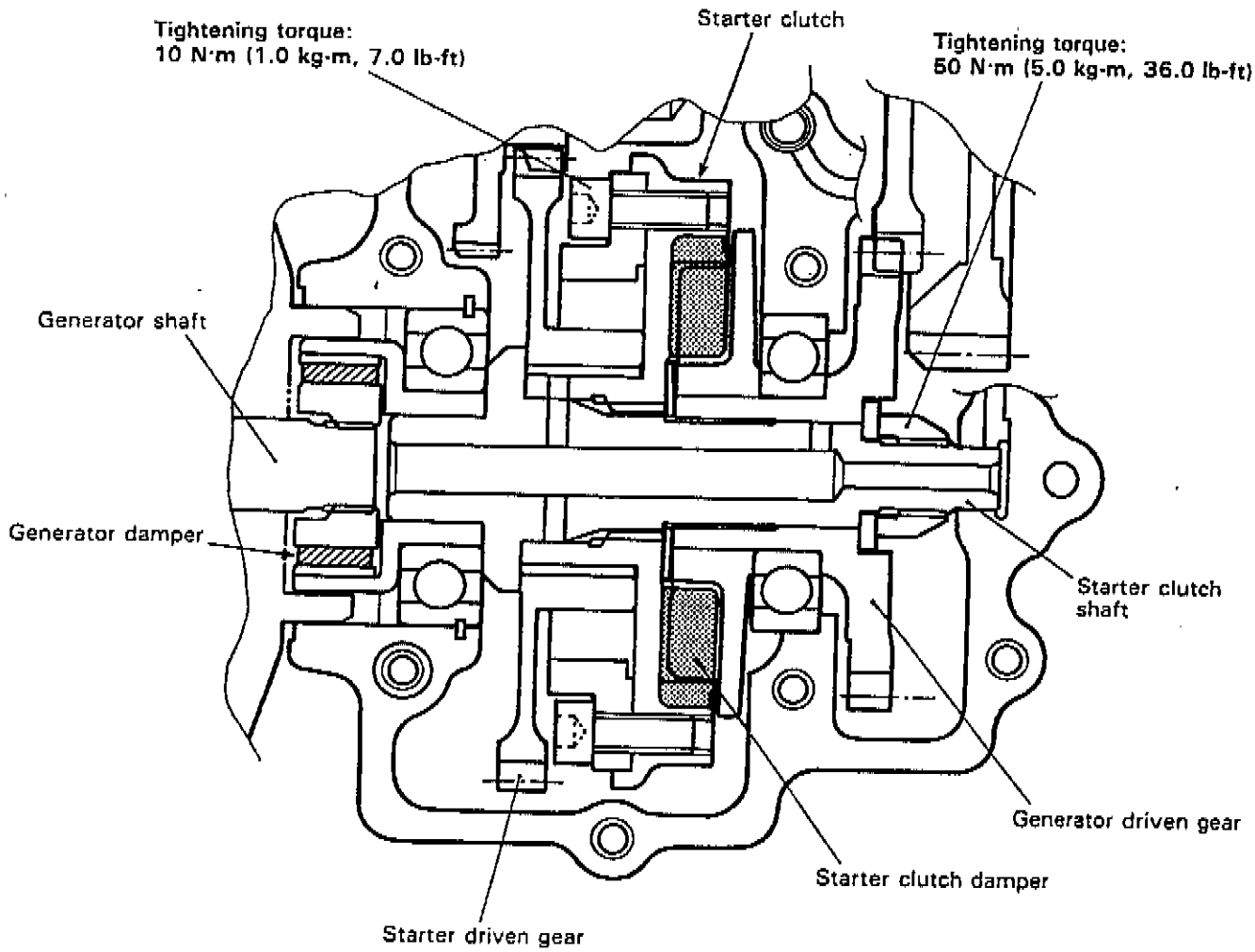
ITEM	SPECIFICATION	NOTE
Front fork oil type	Frok oil #10	
Front fork oil capacity (each leg)	*466 ml (15.8/16.4 US/Imp oz)	
Brake fluid type	DOT 4	
Engine coolant type	Use an anti-freeze/coolant compatible with aluminum radiator, mixed with distilled water only, at the ratio of 50:50.	
Engine coolant including reserve	2 450 ml (2.6/2.2 US/Imp qt)	

TIRE PRESSURE

COLD INFLATION TIRE PRESSURE	SOLO RIDING			DUAL RIDING		
	kPa	kg/cm²	psi	kPa	kg/cm²	psi
FRONT	250	2.50	36	250	2.50	36
REAR	250	2.50	36	290	2.90	42

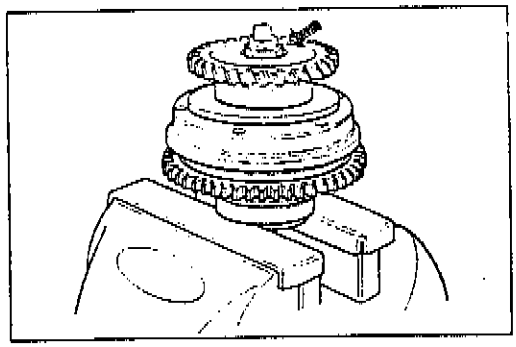
SERVICE INFORMATION

STARTER CLUTCH



DISASSEMBLY AND INSPECTION

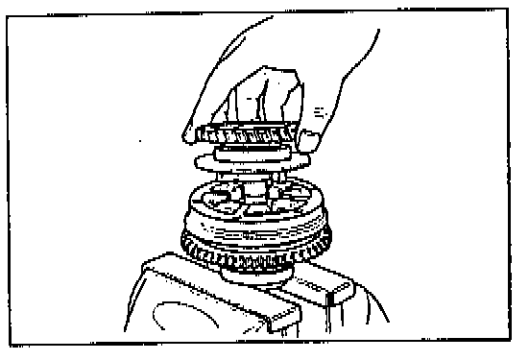
- Hold the starter clutch shaft to use a vise and appropriate pieces of soft metals, and remove the nut as shown in the Fig.



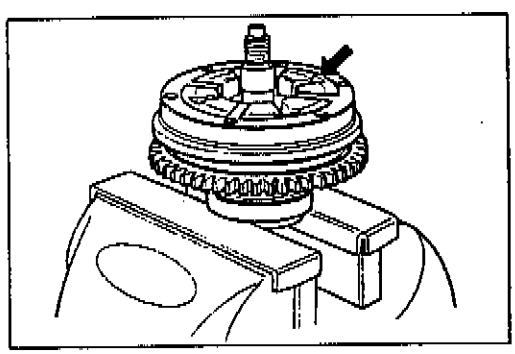
⚠ CAUTION

This is a left-hand thread nut.

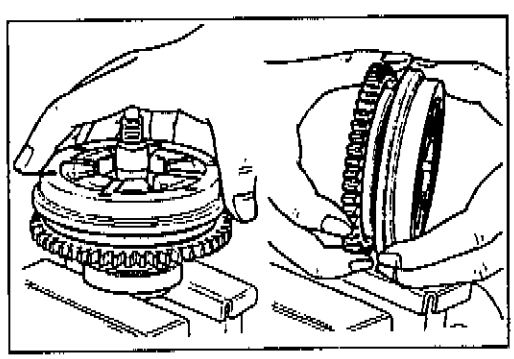
- Remove the generator driven gear assembly.



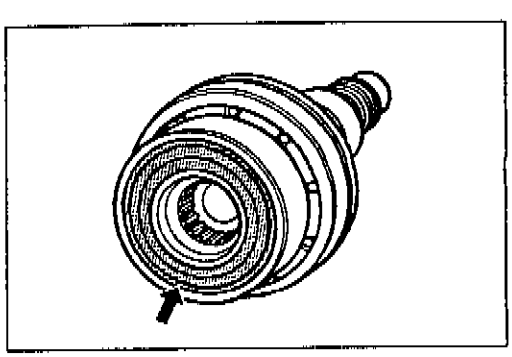
- Inspect the dampers for wear and damage.
  If any defects are found, replace the dampers as a set.
- Inspect the starter clutch and its contacting surface of the starter driven gear for wear or damage. If they are found to be damaged, replace them with new ones.



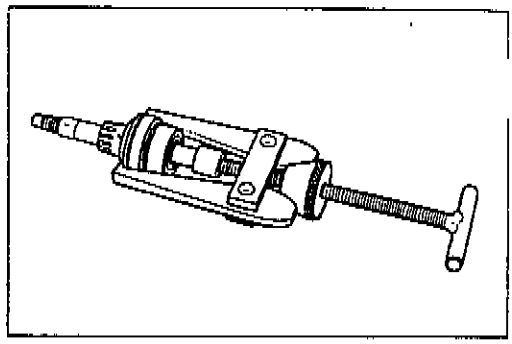
- Remove the starter clutch and its driven gear.
- Remove the driven gear from the starter clutch.



- Inspect the generator damper for damage.
  If any defects are found, replace the damper or starter clutch shaft assembly.



- Remove the bearing and generator damper from the starter clutch shaft with a bearing puller.

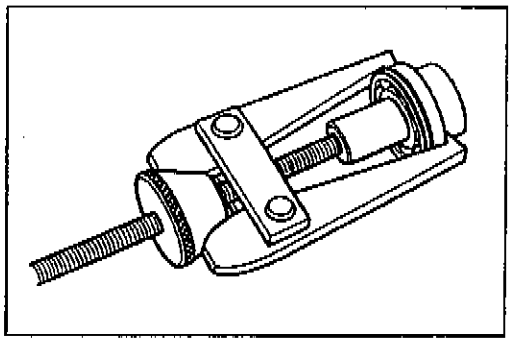


NOTE:
Before removing the bearing, rotate the outer race by hand to inspect for abnormal noise and smooth rotation.

⚠ CAUTION

The removed bearing should be replaced with a new one.

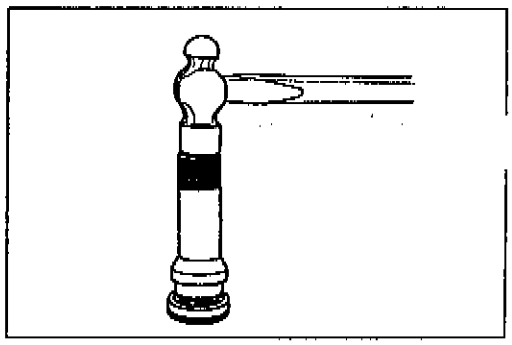
- Remove the bearing from the generator damper.



REASSEMBLY

Assemble the starter clutch in the reverse order of disassembly. Pay attention to the following points:

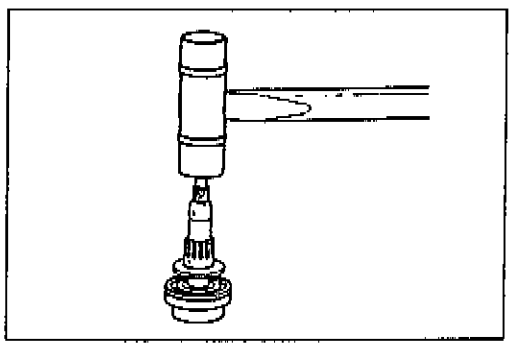
NOTE:
Apply engine oil to each starter clutch part before reassembling.



- Install the bearing to the generator damper with a bearing installer.

TOOL 09951-16080: Bearing installer

- Install the starter clutch shaft into the generator damper by tapping with a plastic mallet.

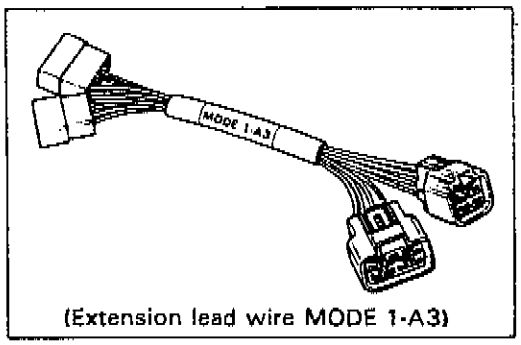


IGNITOR UNIT

INSPECTION

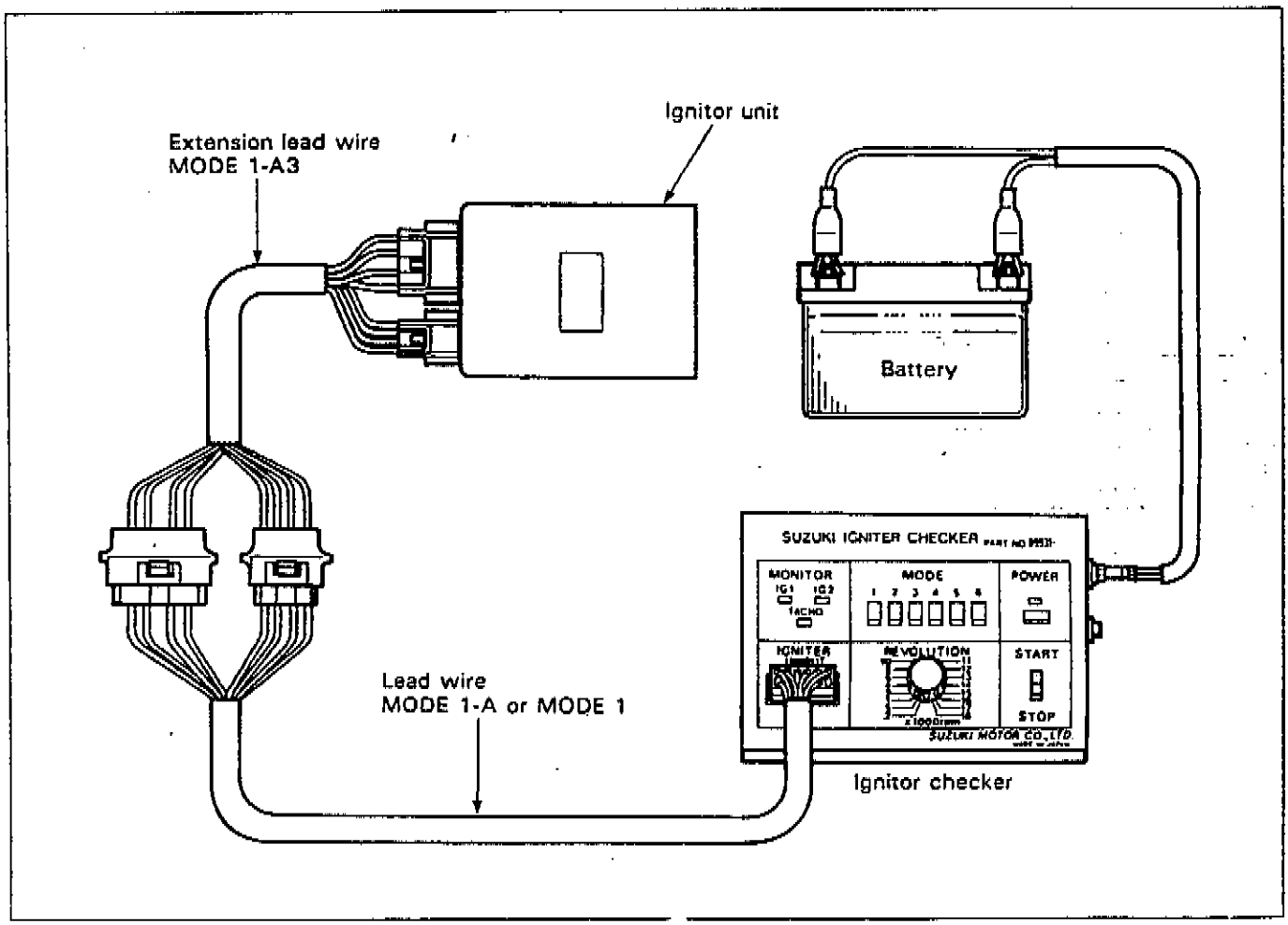
Check the ignitor unit with the special tools as shown below. Asterisk mark indicates the new special tool.

TOOL **09931-94490: Digital ignitor checker**
09931-94420: Lead wire MODE1
09931-94480: Lead wire MODE1-A
***09931-61740: Extension lead wire MODE 1-A3**

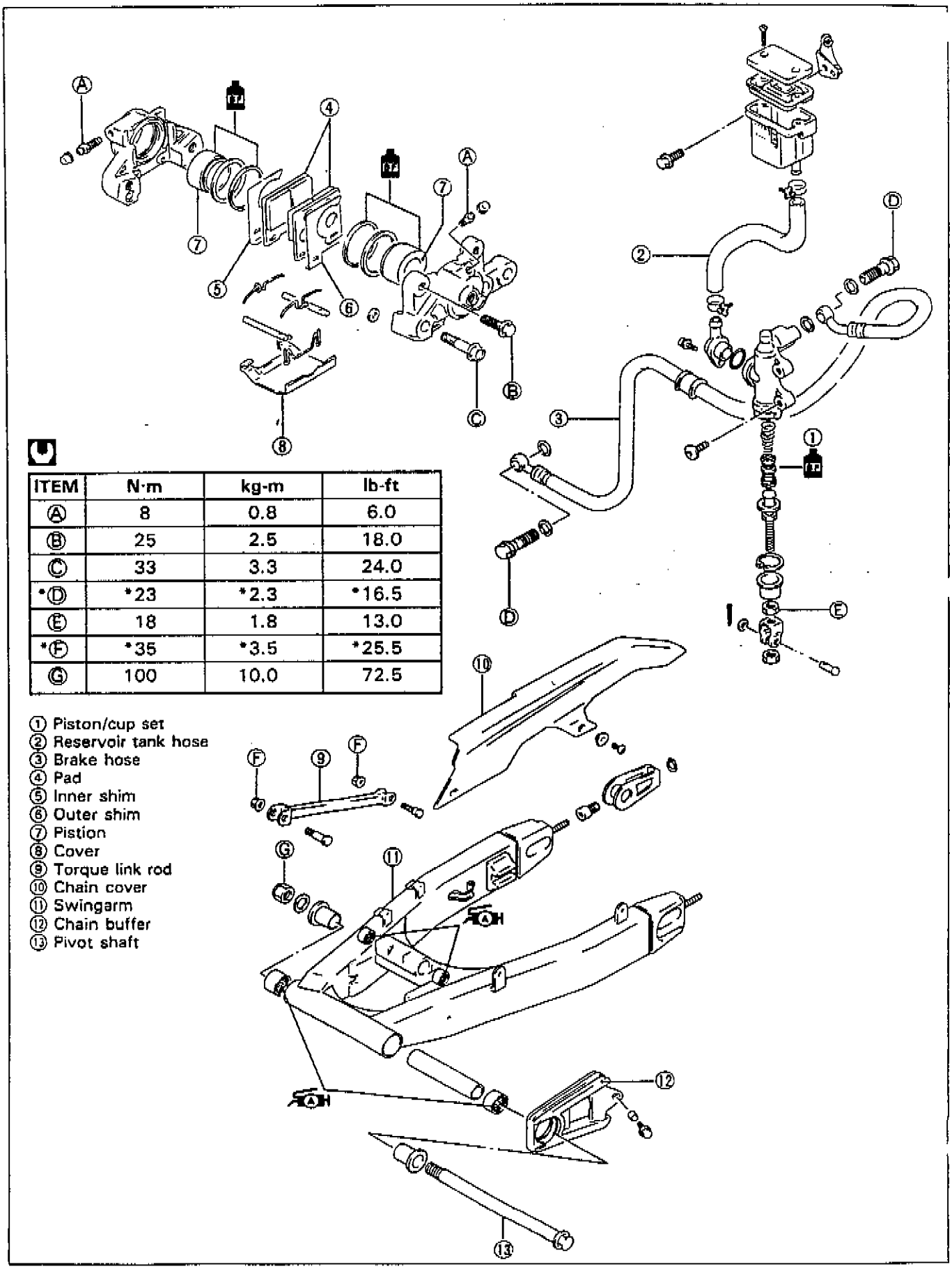


(Extension lead wire MODE 1-A3)

This new special tool is used as an extension lead wire to be connected to the MODE 1 or MODE 1-A lead wire for checking the ignitor unit. The checking procedure for ignitor unit is same as the '95-model.



REAR BRAKE AND TORQUE LINK ROD



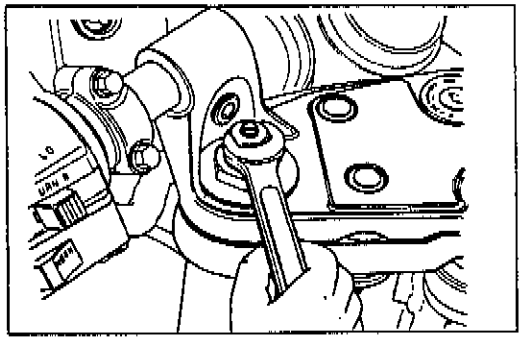
ITEM	N·m	kg-m	lb-ft
Ⓐ	8	0.8	6.0
Ⓑ	25	2.5	18.0
Ⓒ	33	3.3	24.0
*Ⓓ	*23	*2.3	*16.5
Ⓔ	18	1.8	13.0
*Ⓕ	*35	*3.5	*25.5
Ⓖ	100	10.0	72.5

① Piston/cup set
② Reservoir tank hose
③ Brake hose
④ Pad
⑤ Inner shim
⑥ Outer shim
⑦ Pistion
⑧ Cover
⑨ Torque link rod
⑩ Chain cover
⑪ Swingarm
⑫ Chain buffer
⑬ Pivot shaft

FRONT SUSPENSION

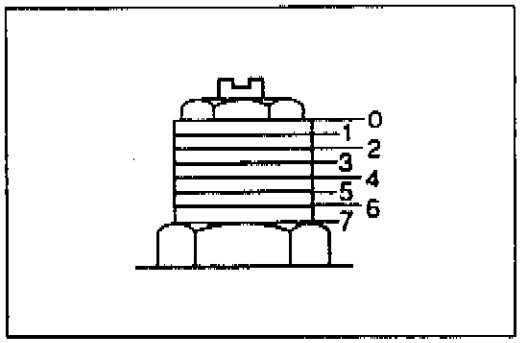
SPRING PRE-LOAD ADJUSTMENT

There are 7 grooved lines on the side of the spring adjuster. Position 0 provides the maximum spring pre-load and position 7 provides the minimum spring pre-load.



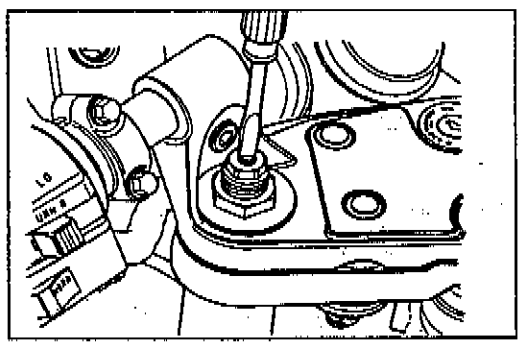
STANDARD SETTING

Item	Spring pre-road
Solo riding	4
Dual riding	4



DAMPING FORCE ADJUSTMENT

To set the rebound adjuster to the standard position, turn the adjuster clockwise until it stops and then turn it counterclockwise (5/8 turn) until the two punch marks align. Turn the adjuster clockwise from the standard position to stiffen the damping force. Turn the adjuster counterclockwise to soften the damping force. The damping force should be adjusted gradually, 1/8 turn at a time, to fine-tune the suspension.



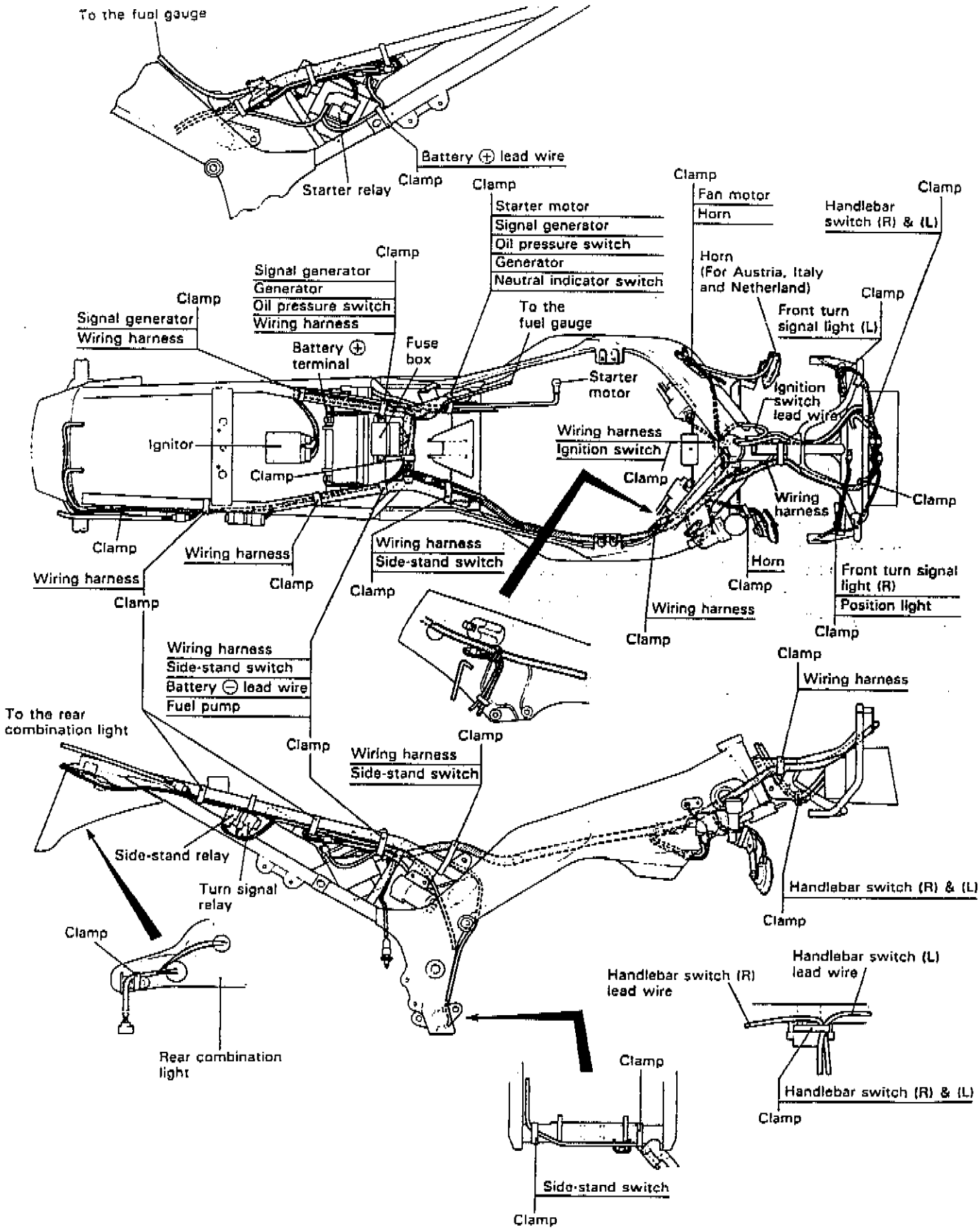
SUSPENSION SETTING SETTING

	Front		Rear		
	Spring pre-load	Rebound damping force	Spring pre-load	Damping force	
				Rebound	Compression
Softer	Position4	5/8 turn out from the standard position	3/7	Position1	Standard position
Standard	Position4	Standard position	4/7	Position1	Standard position
Stiffer	Position4	Standard position	5/7	Position1	Standard position
Dual riding	Position4	Standard position	6/7	Position2	Standard position

⚠ WARNING

Be sure to adjust the spring pre-load and damping force on both front forks equally. Setting one front fork harder than the other will affect the stability of the motorcycle.

WIRE HARNESS ROUTING



RF900RV ('97-MODEL)

NOTE:
The specifications and service data are the same as those of the T-MODEL.

CONTENTS

SPECIFICATIONS **12- 1**
SERVICE DATA **12- 2**

SPECIFICATIONS

DIMENSIONS AND DRY MASS

Overall length	2 130 mm (83.9 in)	For E-02,03,04,21,24, 25,28,33,34,53
	2 155 mm (84.8 in)	For E-15,16,17,18,22, 39
Overall width	730 mm (28.7 in)	
Overall height	1 165 mm (45.9 in)	
Wheelbase	1 440 mm (56.7 in)	
Ground clearance	115 mm (4.5 in)	
Dry mass	203 kg (447 lbs)	
	206 kg (454 lbs)	E-33 only

ENGINE

Type	Four-stroke, Water-cooled, DOHC, TSCC
Number of cylinders	4
Bore	73.0 mm (2.874 in)
Stroke	56.0 mm (2.205 in)
Piston displacement	937 cm^3 (57.2 cu. in)
Carburetor	MIKUNI BDST36
Air cleaner	Non-woven fabric element
Starter system	Electric starter
Lubrication system	Wet sump

TRANSMISSION

Clutch	Wet multi-plate type
Transmission	5-speed constant mesh
Gearshift pattern	1-down, 4-up
Primary reduction ratio	1.565 (72/46)
Final reduction ratio	2.866 (43/15)
Gear ratios, Low	2.714 (38/14)
2nd	1.809 (38/21)
3rd	1.409 (31/22)
4th	1.181 (26/22)
Top	1.038 (27/26)
Drive chain	TAKASAGO RK532GSV$_2$, 110 links

CHASSIS

Front suspension	Telescopic, coil spring, oil damped, spring pre-load fully adjustable, rebound damping force fully adjustable.
Rear suspension	Link type system, oil damped, coil spring, spring pre-load 7-way adjustable, rebound damping force 4-way adjustable and compression damping force fully adjustable.
Steering angle	30° (right & left)
Caster	65° 30'
Trail	102 mm (4.02 in)
Turning radius	3.2 m (10.5 ft)
Front brake	Disc brake, twin
Rear brake	Disc brake
Front tire size	120/70 ZR17, tubeless
Rear tire size	170/60 ZR17, tubeless
Front fork stroke	120 mm (4.7 in)
Rear wheel travel	130 mm (5.1 in)

ELECTRICAL

Ignition type	Electronic Ignition (Fully Transistorized)
Ignition timing	4° B.T.D.C. at 1500 r/min ... For E-03,18,33,39 7° B.T.D.C. at 1500 r/min ... For the others
Spark plug	N.G.K.: CR9E, NIPPONDENSO U27ESR-N
Battery	12V 28.8 kC (8 Ah)/10 HR
Generator	Three-phase A.C. Generator
Main fuse	30A
Fuse	15/15/15/10/10A
Headlight	12V 60/55W
Turn signal light	12V 21W
Parking or city light	12V 4W ..... Except for E-03,24,28,33
Taillight	12V 5W
Brake light	12V 21W x 2
License plate light	12V 5W
Speedometer light	12V 1.7W x 2
Tachometer light	12V 1.7W x 2
Engine coolant temp. meter light	12V 1.7W
Neutral indicator light	12V 3.4W
High beam indicator light	12V 3.4W
Turn signal indicator light	12V 3.4W
Oil pressure indicator light	12V 3.4W
Fuel level indicator light	12V 3.4W

CAPACITIES

Fuel tank, including reserve	21.0 L (5.5/4.6 US/Imp gal)
Engine oil, oil change	3 000 ml (3.2/2.6 US/Imp qt)
with filter change	3 300 ml (3.5/2.9 US/Imp qt)
overhaul	3 900 ml (4.1/3.4 US/Imp qt)
Front fork oil	466 ml (15.8/16.4 US/Imp oz)
Engine coolant	2 450 ml (2.6/2.2 US/Imp qt)

These specifications are subject to change without notice.

SERVICE DATA

VALVE + GUIDE

Unit: mm (in)

ITEM	STANDARD			LIMIT
Valve diam.	IN.	28 (1.10)		—
	EX.	24 (0.94)		—
Valve lift	IN.	E-03	7.3 (0.29)	—
		E-04	5.5 (0.22)	—
		E-18,33,39	7.3 (0.29)	—
		Others	8.7 (0.34)	—
	EX.	E-03	7.5 (0.30)	—
		E-04	7.0 (0.28)	—
		E-18,33,39	7.0 (0.28)	—
		Others	7.5 (0.30)	—
Tappet clearance (when cold)	IN.	0.10—0.20 (0.004—0.008)		—
	EX.	0.20—0.30 (0.008—0.010)		—
Valve guide to valve stem clearance	IN.	0.020—0.047 (0.0008—0.0019)		—
	EX.	0.030—0.057 (0.0012—0.0022)		—
Valve stem deflection	IN. & EX.	—		0.35 (0.014)
Valve guide I.D.	IN. & EX.	4.500—4.512 (0.1772—0.1776)		—
Valve stem O.D.	IN.	4.465—4.480 (0.1758—0.1764)		—
	EX.	4.455—4.470 (0.1754—0.1760)		—
Valve stem runout	IN. & EX.	—		0.05 (0.002)
Valve head thickness	IN. & EX.	—		0.5 (0.02)
Valve seat width	IN. & EX.	0.9—1.1 (0.035—0.043)		—
Valve head radial runout	IN. & EX.	—		0.03 (0.001)
Valve spring free length (IN. & EX.)	—			43.0 (1.69)
Valve spring tension (IN. & EX.)	18.6—21.4 kg (41.0—47.2 lbs) at length 38 mm (1.5 in)			—

CAMSHAFT + CYLINDER HEAD

Unit: mm (in)

ITEM	STANDARD			LIMIT
Cam height	IN.	E-03	35.292—35.348 (1.3894—1.3917)	35.00 (1.378)
		E-04	33.492—33.548 (1.3186—1.3208)	33.20 (1.307)
		E-18,33,39	35.292—35.348 (1.3894—1.3917)	35.00 (1.378)
		Others	36.692—36.748 (1.4446—1.4468)	36.40 (1.433)
	EX.	E-03	35.522—35.578 (1.3985—1.4007)	35.23 (1.387)
		E-04	34.952—35.008 (1.3761—1.3783)	34.66 (1.365)
		E-18,33,39	34.952—35.008 (1.3761—1.3783)	34.66 (1.365)
		Others	35.522—35.578 (1.3985—1.4007)	35.23 (1.387)
Camshaft journal oil clearance	IN. & EX.		0.032—0.066 (0.0013—0.0026)	0.150 (0.0059)
Camshaft journal holder I.D.	IN. & EX.		22.012—22.025 (0.8666—0.8671)	—
Camshaft journal O.D.	IN. & EX.		21.959—21.980 (0.8645—0.8654)	—
Camshaft runout	IN. & EX		—	0.10 (0.004)
Cam chain pin (at arrow "3")	13th pin			—
Cylinder head distortion	—			0.20 (0.008)

CYLINDER + PISTON + PISTON RING

Unit: mm (in)

ITEM	STANDARD			LIMIT
Compression pressure	1 000—1 500 kPa (10—15 kg/cm², 142—213 psi)			800 kPa (8 kg/cm², 114psi)
Compression pressure difference	—			200 kPa (2 kg/cm², 28 psi)
Piston to cylinder clearance	0.045—0.055 (0.0018—0.0022)			0.120 (0.0047)
Cylinder bore	73.000—73.015 (2.8740—2.8746)			73.085 (2.8774)
Piston diam.	72.950—72.965 (2.8720—2.8726) Measure at 15 mm (0.6 in) from the skirt end.			72.880 (2.8693)
Cylinder distortion	—			0.20 (0.008)
Piston ring free end gap	1st	R	Approx. 6.9 (0.27)	5.5 (0.22)
	2nd	R	Approx. 7.2 (0.28)	5.8 (0.23)
Piston ring end gap	1st		0.10—0.30 (0.004—0.012)	0.5 (0.02)
	2nd		0.35—0.50 (0.014—0.020)	1.0 (0.04)

ITEM	STANDARD		LIMIT
Piston ring to groove clearance	1st	—	0.18 (0.007)
	2nd	—	0.18 (0.007)
Piston ring groove width	1st	1.02—1.04 (0.040—0.041)	—
	2nd	1.02—1.04 (0.040—0.041)	—
	Oil	2.01—2.03 (0.079—0.080)	—
Piston ring thickness	1st	0.97—0.99 (0.038—0.039)	—
	2nd	0.97—0.99 (0.038—0.039)	—
Piston pin bore	19.002—19.008 (0.7481—0.7483)		19.030 (0.7492)
Piston pin O.D.	18.996—19.000 (0.7479—0.7480)		18.980 (0.7472)

CONROD + CRANKSHAFT

Unit: mm (in)

ITEM	STANDARD		LIMIT
Conrod small end I.D.	19.010—19.018 (0.7484—0.7487)		19.040 (0.7496)
Conrod big end side clearance	0.10—0.20 (0.004—0.008)		0.30 (0.010)
Conrod big end width	20.95—21.00 (0.825—0.827)		—
Crank pin width	21.10—21.15 (0.831—0.833)		—
Conrod big end oil clearance	0.032—0.056 (0.0013—0.0022)		0.080 (0.0031)
Crank pin O.D.	35.976—36.000 (1.4164—1.4173)		—
Crankshaft journal oil clearance	0.020—0.044 (0.0008—0.0017)		0.080 (0.0031)
Crankshaft journal O.D.	33.976—34.000 (1.3376—1.3386)		—
Crankshaft thrust clearance	0.055—0.110 (0.0022—0.0043)		—
Crankshaft thrust bearing thickness	Right side	2.425—2.450 (0.0955—0.0965)	—
	Left side	2.350—2.500 (0.0925—0.0984)	—
Crankshaft runout	—		0.05 (0.002)

OIL PUMP

ITEM	STANDARD	LIMIT
Oil pump reduction ratio	1.703 (72/46 x 37/34)	—
Oil pressure (at 60°C, 140°F)	Above 300 kPa (3.0 kg/cm², 43 psi) Below 600 kPa (6.0 kg/cm², 85 psi) at 3 000 r/min.	—

CLUTCH

Unit: mm (in)

ITEM	STANDARD	LIMIT
Drive plate thickness	2.92—3.08 (0.115—0.121)	—
Drive plate distortion	—	0.10 (0.004)
Clutch spring free length	—	43.3 (1.70)
Clutch master cylinder bore	14.000—14.043 (0.5511—0.5529)	—
Clutch master cylinder piston diam.	13.957—13.984 (0.5495—0.5506)	—
Clutch release cylinder bore	35.700—35.762 (1.4055—1.4079)	—
Clutch release cylinder piston diam.	35.650—35.675 (1.4035—1.4045)	—

THERMOSTAT + RADIATOR + FAN

ITEM		STANDARD		LIMIT
Thermostat valve opening temperature		74.5—78.5°C (166.1—173.3°F)		—
Thermostat valve lift		Over 7 mm (0.28 in) at 90°C (194°F)		—
Radiator cap valve opening pressure		110 kPa (1.1 kg/cm², 15.6 psi)		—
Cooling fan thermo-switch operating temperature	ON	Approx. 105°C (221°F)		—
	OFF	Approx. 100°C (212°F)		—
Engine coolant temperature gauge resistance		50°C (122°F)	Approx. 153.9 Ω	—
		80°C (176°F)	Approx. 51.9 Ω	—
		100°C (212°F)	Approx. 27.4 Ω	—
		120°C (248°F)	Approx. 16.1 Ω	—

TRANSMISSION + DRIVE CHAIN

Unit: mm (in) Except ratio

ITEM		STANDARD	LIMIT
Primary reduction ratio		1.565 (72/46)	—
Final reduction ratio		2.867 (43/15)	—
Gear ratios	Low	2.714 (38/14)	—
	2nd	1.809 (38/21)	—
	3rd	1.409 (31/22)	—
	4th	1.181 (26/22)	—
	Top	1.038 (27/26)	—
Shift fork to groove clearance		0.10—0.30 (0.004—0.012)	0.50 (0.020)
Shift fork groove width		5.00—5.10 (0.197—0.201)	—
Shift fork thickness		4.80—4.90 (0.189—0.193)	—

ITEM	STANDARD		LIMIT
Drive chain	Type	RK532GSV2	———
	Links	110 links, ENDLESS	———
	20-pitch length	———	319.4 (12.6)
Drive chain slack	25—35 (1.0—1.4)		———
Gearshift lever height	55 (2.2)		———

CARBURETOR

ITEM	SPECIFICATION		
	E-03	E-33	E-28
Carburetor type	MIKUNI BDST36SS	←	←
Bore size	36 mm	←	←
I.D. No.	31E1	31E4	31E0
Idle r/min.	1 200±100 r/min.	1 200±50 r/min.	1 200±100 r/min.
Float height	6.9±1.0 mm (0.27±0.04 in)	←	←
Main jet (M.J.)	#112.5	←	#112.5
Main air jet (M.A.J.)	0.9 mm	No.1 & 4 : 0.6 mm No.2 & 3 : 0.7 mm	No. 1 & 4 : 0.8 mm No. 2 & 3 : 0.9 mm
Jet needle (J.N.)	5DV3	5DFT13	5DV1-3rd
Needle jet (N.J.)	O-9	←	O-9
Throttle valve (Th.V.)	#120	#125	#120
Pilot jet (P.J.)	#12.5	←	#12.5
Starter jet (G.S.)	#52.5	←	#50
Pilot screw (P.S.)	PRE-SET	←	PRE-SET (1-¼ turns back)
Throttle cable play	0.5—1.0 mm (0.02—0.04 in)	←	←

CARBURETOR

ITEM	SPECIFICATION		
	E-02,25,34	E-04	E-24
Carburetor type	MIKUNI BDST36SS	←	←
Bore size	36 mm	←	←
I.D. No.	31EA	31EC	31E7
Idle r/min.	1 200±100 r/min	←	←
Float height	6.9±1.0 mm (0.27±0.04 in)	←	←
Main jet (M.J.)	#112.5	←	←
Main air jet (M.A.J.)	No.1 & 4: 0.8 mm No.2 & 3: 0.9 mm	No.1 & 4: 0.7 mm No.2 & 3: 0.8 mm	No.1 & 4: 0.8 mm No.2 & 3: 0.9 mm
Jet needle (J.N.)	5DV1-3rd	←	←
Needle jet (N.J.)	O-9	←	←
Throttle valve (Th.V.)	#120	←	←
Pilot jet (P.J.)	#12.5	←	←
Starter jet (G.S.)	#50	←	←

ITEM	SPECIFICATION		
	E-02,25,28,34	E-04	E-24
Pilot screw (P.S.)	PRE-SET (1-¼ turns back)	PRE-SET (1-½ turns back)	PRE-SET (1 turn back)
Throttle cable play	0.5—1.0 mm (0.02—0.04 in)	←	←

CARBURETOR

ITEM	SPECIFICATION		
	E-22	E-18	E-39
Carburetor type	MIKUNI BDST36SS	←	←
Bore size	36 mm	←	←
I.D. No.	31ED	31E3	31E8
Idle r/min.	1 200 ± 100 r/min.	1 300 $\pm^{100}_{50}$ r/min.	1 300 ± 100 r/min.
Float height	6.9 ± 1.0 mm (0.27 ± 0.04 in)	←	←
Main jet (M.J.)	#115	#107.5	#105
Main air jet (M.A.J.)	No.1 & 4: 0.8 mm No.2 & 3: 0.9 mm	No.1 & 4: 0.6 mm No.2 & 3: 0.7 mm	←
Jet needle (J.N.)	5DV1-3rd	5DFT12-3rd	←
Needle jet (N.J.)	O-9	←	←
Throttle valve (Th.V.)	#120	←	←
Pilot jet (P.J.)	#12.5	←	←
Starter jet (G.S.)	#50	#52.5	←
Pilot screw (P.S.)	PRE-SET (1-⅛ turns back)	←	PRE-SET (1-¼ turns back)
Throttle cable play	0.5—1.0 mm (0.02—0.04 in)	←	←

[E-15, 16 and 17 models are included in E-22 model.]
[E-21 and 53 models are included in E-34 model.]

CARBURETOR

ITEM	SPECIFICATION
	E-37
Carburetor type	MIKUNI BDST36SS
Bore size	36 mm
I.D. No.	31EF
Idle r/min.	1 200 ± 100 r/min.
Float height	6.9 ± 1.0 mm (0.27 ± 0.04 in)
Main jet (M.J.)	#112.5
Main air jet (M.A.J.)	No.1 & 4: 0.8 mm No.2 & 3: 0.9 mm
Jet needle (J.N.)	5DV1-3rd
Needle jet (N.J.)	O-9
Throttle valve (Th.V.)	#120
Pilot jet (P.J.)	#12.5
Starter jet (G.S.)	#50
Pilot screw (P.S.)	PRE-SET (1-¼ turns back)
Throttle cable play	0.5—1.0 mm (0.02—0.04 in)

ELECTRICAL

Unit: mm (in)

ITEM			SPCIFICATION	NOTE
Ignition timing			4° B.T.D.C. below 1 500 r/min.	E-03,18,33,39
			7° B.T.D.C. below 1 500 r/min.	Others
Firing order			1-2-4-3	
Spark plug		Type	NGK: CR9E ND: U27ESR-N	
		Gap	0.7—0.8 (0.028—0.032)	
Spark performance			Over 8 (0.3) at 1 atm.	
Signal coil resistance			(Black—Green) Approx. 135—200 Ω	Tester range: (x 100 Ω)
Ignition coil resistance		Primary	⊕ tap— ⊖ tap Approx. 2.4—3.2 Ω	Tester range: (x 1 Ω)
		Secondary	Plug cap—Plug cap Approx. 30—40 kΩ	Tester range: (x 1 kΩ)
Generator		Slip ring O.D.	Limit: 14.0 (0.55)	ND
		Brush length	Limit: 4.5 (0.18)	
Generator Max. output			Approx. 405 W at 5 000 r/min	The rotation of the generator
Regulated voltage			Above 13.5 V at 5 000 r/min.	
Starter relay resistance			3—5 Ω	
Battery	Type designation		YTX9-BS	
	Capacity		12 V 28.8 kC (8 Ah)/10 HR	
	Standard electrolyte S.G.		1.320 at 20°C (68°F)	
Fuse size	Headlight	HI	15 A	
		LO	15 A	
	Turn signal		15 A	
	Ignition		10 A	
	Taillight		10 A	
	Main		30 A	

WATTAGE

Unit: W

ITEM		SPECIFICATION	
		E-03,24,28,33	The others
Headlight	HI	60	←
	LO	55	←
Position light			4
Taillight		5	←
Brake light		21 x 2	←
Turn signal light		21	←
Tachometer light		1.7 x 2	←
Speedometer light		1.7 x 2	←
Turn signal indicator light		3.4	←
High beam indicator light		3.4	←
Neutral indicator light		3.4	←
Oil pressure indicator light		3.4	←
Fuel level indicator light		3.4	←
License light		5	←
Engine coolant temp. meter light		1.7	←

BRAKE + WHEEL

Unit: mm (in)

ITEM		STANDARD		LIMIT
Rear brake pedal height			55 (2.2)	—
Brake disc thickness		Front	4.5 ± 0.2 (0.177 ± 0.008)	4.0 (0.16)
		Rear	5.0 ± 0.2 (0.197 ± 0.008)	4.5 (0.18)
Brake disc runout (Front & Rear)			—	0.30 (0.012)
Master cylinder bore		Front	15.870–15.913 (0.6248–0.6265)	—
		Rear	12.700–12.743 (0.5000–0.5017)	—
Master cylinder piston diam.		Front	15.827–15.854 (0.6231–0.6242)	—
		Rear	12.657–12.684 (0.4983–0.4993)	—
Brake caliper cylinder bore	Leading	Front	30.230–30.280 (1.1902–1.1921)	—
	Trailing		33.960–34.010 (1.3370–1.3390)	—
		Rear	38.180–38.256 (1.5031–1.5061)	—
Brake caliper piston diam.	Leading	Front	30.130–30.180 (1.1826–1.1882)	—
	Trailing		33.878–33.928 (1.3338–1.3357)	—
		Rear	38.098–38.148 (1.5000–1.5019)	—
Rear brake pad mounting pin diam.			5.9 (0.23)	5.6 (0.22)
Wheel rim runout (Front & Rear)		Axial	—	2.0 (0.08)
		Radial	—	2.0 (0.08)
Wheel axle runout		Front	—	0.25 (0.010)
		Rear	—	0.25 (0.010)
Tire size		Front	120/70 ZR17	—
		Rear	170/60 ZR17	—
Tire tread depth		Front	—	1.6 (0.06)
		Rear	—	2.0 (0.08)

SUSPENSION

Unit: mm (in)

ITEM	STANDARD		LIMIT	NOTE
Front fork stroke	120 (4.7)		———	
Front fork spring free length	———		*282 (11.1)	
Front fork oil level	113 (4.5)		———	
Front fork spring adjuster	4th notch from top		———	
Front fork rebound damping force	5/8 turn back from stiffest position		———	
Rear shock absorber gas pressure	1 000 kPa (10 kg/cm², 142 psi)		———	
Rear shock absorber spring adjuster	4th position among 7		———	
Rear shock absorber damping force adjuster	Extension	1 click out	———	E-03,33
		2 clicks out	———	The others
	Compression	At punch mark (about 1 turn out)	———	E-03,33
		At punch mark (about 1/4 turn out)	———	The others
Rear wheel travel	130 (5.1)		———	
Swingarm pivot shaft runout	———		0.3 (0.01)	

FUEL + OIL + ENGINE COOLANT

ITEM	SPECIFICATION		NOTE
Fuel type	Use only unleaded gasoline of at least 85 pump octane ($\frac{R+M}{2}$) or 91 octane or higher rated by the research method. Gasoline containing MTBE (Methyl Tertiary Butyl Ether), less than 10% ethanol, or less than 5% methanol with appropriate cosolvents and corrosion inhibitor is permissible.		E-03,33
	Use only unleaded gasoline of at least 87 pump octane ($\frac{R+M}{2}$ method) or 91 octane or higher rated by the Research Method.		E-28
	Gasoline used should be graded 85-95 octane or higher. An unleaded gasoline is recommended.		The others
Fuel tank including reserve	21.0 L (5.5/4.6 US/Imp gal)		
reserve	4.0 L (1.1/0.9 US/Imp gal)		
Engine oil type	SAE 10W/40, API SE, SF or SG		
Engine oil capacity	Change	3 000 ml (3.2/2.6 US/Imp qt)	
	Filter change	3 300 ml (3.5/2.9 US/Imp qt)	
	Overhaul	3 900 ml (4.1/3.4 US/Imp qt)	

ITEM	SPECIFICATION	NOTE
Front fork oil type	Frok oil #10	
Front fork oil capacity (each leg)	466 ml (15.8/16.4 US/Imp oz)	
Brake fluid type	DOT 4	
Engine coolant type	Use an anti-freeze/coolant compatible with aluminum radiator, mixed with distilled water only, at the ratio of 50:50.	
Engine coolant including reserve	2 450 ml (2.6/2.2 US/Imp qt)	

TIRE PRESSURE

COLD INFLATION TIRE PRESSURE	SOLO RIDING			DUAL RIDING		
	kPa	kg/cm^2	psi	kPa	kg/cm^2	psi
FRONT	250	2.50	36	250	2.50	36
REAR	250	2.50	36	290	2.90	42

Prepared by

SUZUKI MOTOR CORPORATION

Motorcycle Service Department
4th Ed. February, 1997
1st Ed. January, 1994
Part No. 99500-39123-03E
Printed in Japan

A – 1

HOW TO USE MICROFICHE PARTS CATALOGUE

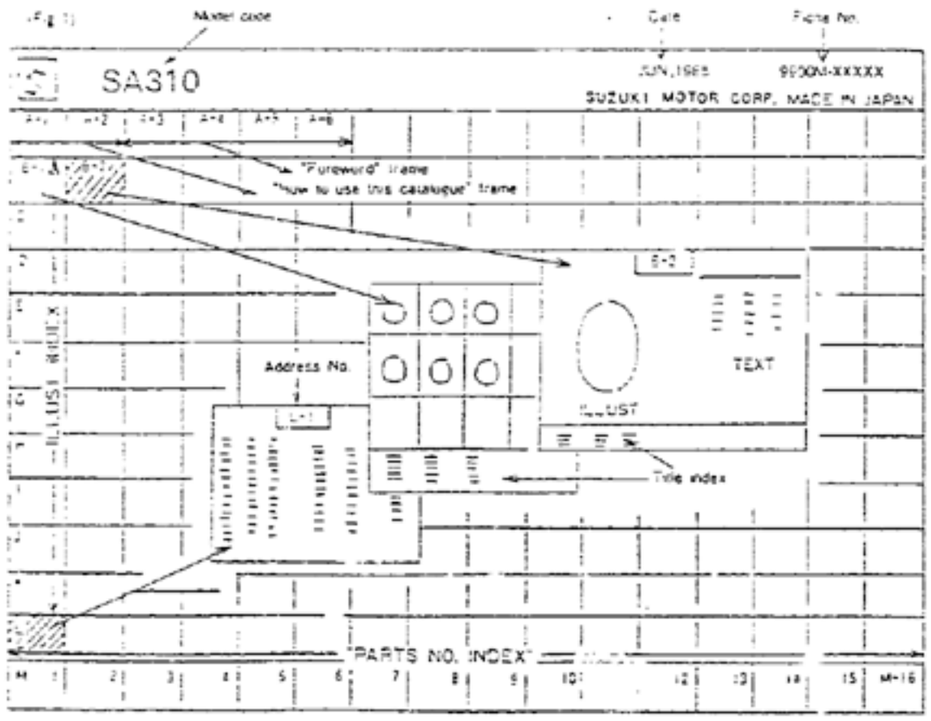
The microfiche parts catalogue we have newly prepared (hereinafter referred to as MICROCATALOGUEs) have the same contents as those contained in the usual book-type parts catalogues.

If you have a microfiche reader (hereinafter referred to as READERs), you can read the information contained on the microfiche film you have, but you will still be faced with the problem of how to find the wanted film frame. In the contents are arranged according to a certain rule, and if you learn this rule by heart, any frame of the microfiche film, containing the wanted information, can be found quickly, with the use of the index plate which is attached to the READER.

It is important that you always use the index plate when looking for a certain frame in the microfiche film.

A. Composition of the MICRO CATALOGUEs

Now, you are going to learn the arranging "rule" of information in the MICROCATALOGUEs, the "rule" determining which kinds of information are located at which parts of the microfiche films in the MICROCATALOGUEs with the help of the drawing below.



Let us explain Fig. 1

1) Our MICROCATALOGUEs consist of microfiche films each having 208 frames arranged in 13 horizontal rows (columns A through M) by 16 vertical columns (row 1 through 16).

2) The top space above the horizontal row A is the title space where the model code, catalogue date, and other information are printed.

3) File Number
Since each microfiche film contains only up to 416 pages of the book catalogues, two, three or more films are sometimes required to contain a complete catalogue. In these cases, each microfiche film composing a certain MICROCATALOGUE is indentified by a consecutive file number printed at the upper right hand corner.

4) Date
The date on which the MICROCATALOGUE is prepared is indicated.

5) "How to use this catalogue"
The frames identified by the address Nos. A-1, A-2 and A-3 contains the explanation on how to use the MICROCATALOGUE.

6) Foreword
The frames identified by the address Nos. A-4 and A-5 contain the same foreword as contained in the book-form catalogues.

7) Illust. index
All the frames in the leftmost vertical column except the top one (B-1 through K-1) contain illustration indexes.
Each index contains all the illustrations belonging to the respective blocks such as the engine block, electric block, and frame block, in reduced forms extracted from the MICROCATALOGUE proper, with the relevant titles and address Nos. shown.

8) Title index
In the space below the array of reduced illustration pages in each of the illustration index frames, the titles and the related address Nos. of all the reduced illustration pages shown in the upper space of that frame are listed to serve as title indices.
The same title indices are also listed in the lower space of each of the illustrated text frames.

9) Parts No. index
All the frames in the bottom horizontal column (1. .n only one sheet, it is recorded from indicater No.M1./2. In more than two sheet, it is recorded at the lower line of last sheet.) are for parts No. indices. All the parts Nos. contained in the MICRO CATALOGUE are arranged orderly together with the respective address Nos.

B. Indexing system

Along with information contained in microfiche films, the indexing system is a major factor. In our MICROCATALOGUEs, the following three indexing systems are utilized:

B-1 Indexing systems

1) Illust. index

The illust. indices are for finding parts of which the shapes are known.

NOTE: Sometimes, small parts are difficult to indentify in the illustrations by their shapes. For these parts, you should look for some larger parts to which the parts in question are attached.

2) Title index

This index system is for finding parts when the name of the principal parts to which they are related in known.

NOTE:1 For the titles of the illustration pages, only the name of the most representative piece in the page is adopted (for example, the name of an assembly part).
This means that the names of must small parts cannot be found in the parts name index list. You must always look for a major part to which the wanted parts belong, when looking for these parts, using the part name index list.

NOTE:2 When there are more titles than the title index space of one frame can accept in one catalogue, the titles are divided into several blocks (ex., engine block, frame block, etc.).

3) Parts No. Index

This index system is for finging parts when the part Nos. are known.

B-2 Indexing procedures

Now, let us explain the procedure for finding wanted frames with the help of the three indexing systems.

a. Finding wanted parts in the MICROCATALOGUE

a-1 How to find the parts Nos. of parts of which the shapes are known.

Procedure 1

Shift the fiche carrier until the B-1 square on the index plate is brougnt directly under the carrier needle.

Procedure 2

Now, the illust. index printed in the frame B-1 is projected on to the screen. Try to find an illustration in which the wanted part is shown, among the array of reduced illustrations projected.

Procedure 3

If you found an illustration in which the wanted part is shown, go on to Procedure 4. If the wanted part is not found in any of the illustrations in the frame B-1, shift the fiche carrier to C-1 and try to find an illustration in which the wanted part is shown among the arrayed reduced illustrations. If the wanted part is not found in any of the reduced illustrations, shift the fiche carrier to D-1, then to E-1 and so on to K-1.

Procedure 4

Make a note of the address No. of the illustration in which the wanted part is shown.

Procedure 5

Shift the fiche carrier until the square corresponding to the address No. found in the procedure 4 or 9 is brought under the carrier needle.

Procedure 6

Check the address No. of the projected square.

Procedure 7

Look for the wanted part in the illustration on the left half of the screen, and read the identification number of this part.

Procedure 8

Look for the obtained identification number in the text page in the right of the screen, and read the relevant information.
This is how one part is found with the help of the illust. index system.

a-2 To find another part proceed as follows:

1) If the shape of the next wanted part is known, again project the frame B-1 and go through the procedures 2 through 9.

2) If the name of the next wanted part is known, try to find the address No. in the title index list shown in the lower portion of the screen, and carry out the procedures 5. (Title index)

3) If the part No. of the next wanted part is known, project the L-1 or M-1 frame and read the address No. corresponding to the known part No. Then, carry out the procedures 5. (Part No. index)

Make full use of the three index systems in each case as explained above.

NOTE: After reading the required information, you should switch off the READER and put the microfiche back in the file.

A - 3

PREFACE

When it becomes necessary to replace parts on SUZUKI MOTORCYCLES, always use SUZUKI GENUINE PARTS which have passed a strict inspection which guarantees quality and performance.

This parts catalogue covers the list of all service parts for SUZUKI RF900RR, RF900RZS, RF900RT, RF900RV.

INSTRUCTIONS FOR QUOTING THE CATALOGUE

1. DIMENSIONS

Dimensions of the parts in this catalogue are indicated in unit millimeters.

2. ABBREVIATIONS

Abbreviations used in this catalogue are as follows:

AR	: As required	NT	: Number of teeth
ASSY	: Assembly	OPT	: Optional
E.No.	: Engine number	OS	: Over size
F.No.	: Frame number	STD	: Standard
d	: Diameter of material	T	: Thickness
ID	: Inside diameter	US	: Under size
OD	: Outside diameter	W	: Width
L	: Length		
LH	: Left hand side		
RH	: Right hand side		
~100045	: Up to F.No.JS1GT73A-100045		
100046~	: From F.No.JS1GT73A-100046		

12 x 34 x 5.6 ·····Figures in the description column show the dimensions of parts.
| | |
ID OD T(or W,L)

3. INNER PARTS OF ASSEMBLY

Part name with a dot (.) in front as shown in the description column indicates the component of the assembly also available individually.

4. MODIFICATION NOTICE

A parts bulletin will be sent to you on all occasions when changes in parts occur, including interchangeable modifications between new parts and old ones.

5. NOTE

5-1. There are some different parts from those of production models among spare parts for the administrative reasons and common use of them with other models.

5-2. In respect of rubber hoses and vinyl tubes, please be sure to use them by cutting off according to the length mentioned on parts catalogue or what is actually required on the vehicle.

5-3. Note that the drawings on the illustration page are for ready reference of spare parts number, not to be used as an assembly manual. When assembling, use "SUZUKI SERVICE MANUAL".

6. SERIAL FRAME NUMBER

RF900RR : JS1GT73A R2100001~
RF900RZS : JS1GT73A S2100001~
RF900RT : JS1GT73A T2100001~
RF900RV : JS1GT73A V2100001~

A - 4

PREFACE

Quand il devient nécessarie de remplacer des pièces sur SUZUKI MOTOCYCLETTES toujours utiliser les PIECES D'ORIGINE SUZUKI qui ont été soumises à des contrôles de qualité sévères leur garantissant qualité et performance impeccables.

Ce catalogue de pièces détachées couvre la liste de toutes les pièces de rechange pour SUZUKI RF900RR, RF900RZS, RF900RT, RF900RV.

INSTRUCTIONS POUR UTILISER LE CATALOGUE

1. DIMENSIONS

Les dimensions des pièces dans ce catalogue sont indiquées en unités de millimètres.

2. ABREVIATIONS

Les abréviations utilisées dans ce catalogue sont les suivantes:

AR	: Comme requis	NT	: Nombre de dents
ASSY	: Assemblage	OPT	: Sur option
E.No.	: Numéro du moteur	OS	: Sur-dimensionné
F.No.	: Numéro du châssis	T	: Epaisseur
ID	: Diamètre intérieur	US	: Sous-dimensionné
OD	: Diamètre extérieur	W	: Largeur
L	: Longueur		
LH	: Côté gauche		
RH	: Côte droit		
~100045	: Jusqu'à F.No.JS1GT73A-100045		
100046~	: Depuis F.No.JS1GT73A-100046		

12 x 34 x 5.6 ·····Les chiffres dans la colonne remarques montrent les dimensions des pieces comme suit.
| | |
ID OD T(or W,L)

3. PIECES INTERNES DE L'ASSEMBLAGE

Les numéros de pièces qui comportent un point (.) avant la désignation de piece détachée indique la pièce interne se rapportant à l'assemblage.

4. AVIS DE MODIFICATION

Un bulletin de pièces détachées vous sera envoyé à tout moment opportun quand des changements de pièces ont lieu, y compris les modifications de pièces interchangeables entre les nouvelles et anciennes pièces.

5. A NOTER

5-1. Il existe certaines pièces différentes de celles de rechange pour les modèles de production vu des raisons administratives et dont l'usage est commun avec celles d'autres modèles.

5-2. Concernant les durites en caoutchouc et les tuyaux en vinyle, ne pas manquer de les couper à la bonne longueur comme indiqué dans le catalogue des pièces détachées ou selon ce qui est utile pour le véhicule affecté.

5-3. Noter que les dessins à la page d'illustration servent à titre de référence pour les numéros de pièces détachées, et non pas comme référence pour l'assemblage. Pour cette dernière opération, se reporter au "MANUEL D'ENTRETIEN SUZUKI".

6. NUMERO DE SERIE DU CADRE

RF900RR : JS1GT73A R2100001~
RF900RZS : JS1GT73A S2100001~
RF900RT : JS1GT73A T2100001~
RF900RV : JS1GT73A V2100001~

A - 5

COLOR CHART
TABLEAU DES COULEURS

COLOR NO. NO DE COULEUR	COLOR DESCRIPTION DESCRIPTION DE COULEUR	COLOR NO. NO DE COULEUR	COLOR DESCRIPTION DESCRIPTION DE COULEUR
AF7	17U,19A	F3N	Y98,20G,1ZZ,1SZ,019
B7G	019,17U,0MT	G4H	0WP,019
B7H	1TU,1TC,0MT	G4Y	20F,019,17U
B8U	1SZ,33J	G4Z	0WP,019,17U
C03	17U,019	G5A	14B,019
D8A	Y22,0FP	G5B	24G,019
D8M	Y22,0FP,1NE,Z08	G5C	20F,019,17U,14B
D8N	Y22,0FP,1NE	G5D	0WP,019,17U,14B
D8P	Y22,1UM	G5E	20F,019,17U,14B,20G
D8R	Y22,0FP,1NE,1UM,019	G5F	0WP,019,17U,24G,20G
D9E	Y22,0MT	Y22	BOURGOGNE PURPLE METALLIC
E6M	33J,Y98	Y98	CANDY FOREST GREEN
F3C	1HU,17U	Z08	CHARMING RED
F3D	1HU,17U,163	0FP	TRADITIONAL SILVER METALLIC
F3E	Y98,33J,1ZZ	0JW	PEARL STILL WHITE
F3F	163,1HU	0MT	SILVER
F3G	1ZZ,33J	0WP	TRIAL GREEN METALLIC
F3H	0MT,33J	019	BLACK
F3J	0MT,33J,1SZ	1HU	DEEP PURPLE METALLIC
F3K	1HU,17U,163,1ZY	1NE	LUMINOUS ORANGE(TAPE)
F3L	Y98,33J,1ZZ,20G	1SZ	CAT PURPLE METALLIC
F3M	1HU,1ZY,163,0JW,019	1TC	PHANTOM PINK METALLIC

COLOR CHART
TABLEAU DES COULEURS

COLOR NO. NO DE COULEUR	COLOR DESCRIPTION DESCRIPTION DE COULEUR	COLOR NO. NO DE COULEUR	COLOR DESCRIPTION DESCRIPTION DE COULEUR
1TU	LIGHT PURPLE METALLIC		
1UM	LUMINOUS ORANGE NO.3(TAPE)		
1YL	SPARKLE PURPLE		
1YM	SPARKLE GRAY		
1ZY	URBAN LIGHT GRAY METALLIC		
1ZZ	URBAN MIDIAM GRAY METALLIC		
12R	TIGHT SILVER METALLIC		
13L	BRIGHT SILVER METALLIC		
14B	FANTASTIC COPPER GOLD METALLIC		
163	PHLOLINA YELLOW		
17U	URBAN GRAY METALLIC		
19A	CANDY ANTARES RED		
2JX	PEAL NOVELTY BLACK		
20F	CANDY PRESIDENT MAROON		
20G	CHARCOAL GRAY METALLIC		
24G	LEGATO GOLD METALLIC		
29F	EMPEROR BROWN METALLIC		
3DX	BLACK		
33J	PEARL NOVELTY BLACK		
35W	CHARCOAL GRAY METALLIC NO.2		
6VP	BLACK		
7AY	019,20F		

MILLIMETER → INCH CONVERSION CHART
TABLEAU DE CONVERSION DE MILLIMETRES → POUCES
CUADRO DE CONVERSION A UNIDAD DE MILIMETRO → PULGADA
MILLIMETER → ZOLL UMRECHNUNGSTABELLE

	0	1	2	3	4	5	6	7	8	9
00	.000	.039	.079	.118	.157	.197	.236	.276	.315	.354
10	.394	.433	.472	.512	.551	.591	.630	.669	.709	.748
20	.787	.827	.866	.906	.945	.984	1.024	1.063	1.102	1.142
30	1.181	1.220	1.260	1.299	1.339	1.378	1.417	1.457	1.496	1.535
40	1.575	1.614	1.654	1.693	1.732	1.772	1.811	1.850	1.890	1.929
50	1.969	2.008	2.047	2.087	2.126	2.165	2.205	2.214	2.283	2.323
60	2.362	2.402	2.441	2.480	2.520	2.559	2.598	2.638	2.677	2.717
70	2.756	2.795	2.835	2.874	2.913	2.953	2.992	3.031	3.071	3.110
80	3.150	3.189	3.228	3.268	3.307	3.346	3.386	3.425	3.465	3.504
90	3.543	3.583	3.622	3.661	3.701	3.740	3.780	3.819	3.858	3.898

How to read
Mode de lecture
Modo de leer
Anleitung

	0	1	2	3	4
00	---	---	---	---	---
10	---	---	---	---	---
20	---	---	---	0.906	---
30	---	---	---	---	---

23 millimeters equal 0.906 inch
23 millimètres égalent 0.906 pouce
23milímetros = 0.906 pulgada
23 millimeter entspricht 0.906 zoll

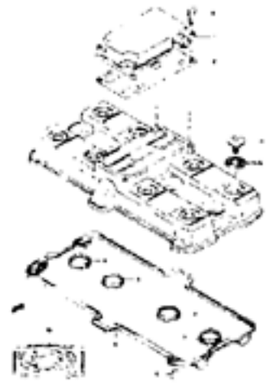
Contents are subject to change without notice or obligation.

Les matières traitées sont susceptibles d'être modifiées sans préavis obligation de notre part.

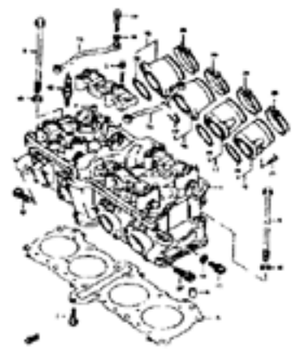
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Hnderungen vorbehalten.

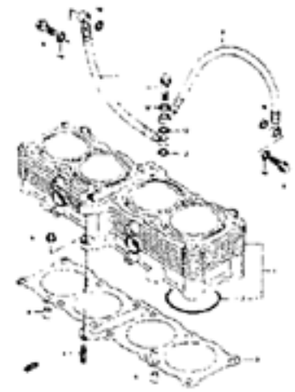
CYLINDER HEAD COVER B-02



CYLINDER HEAD B-03



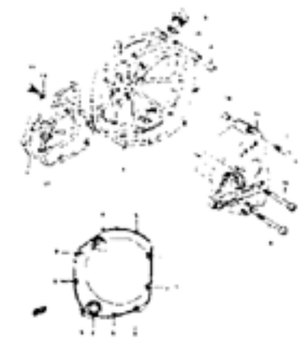
CYLINDER B-04



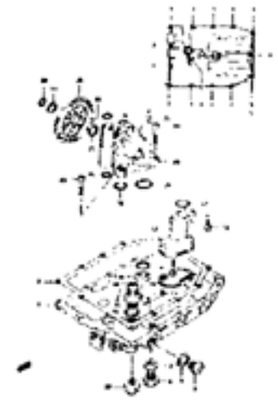
CRANKCASE B-05



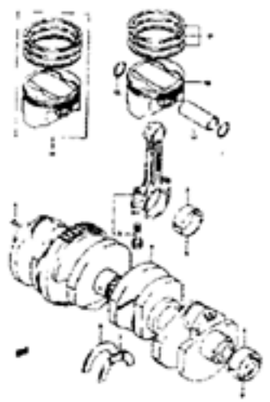
CRANKCASE COVER B-07



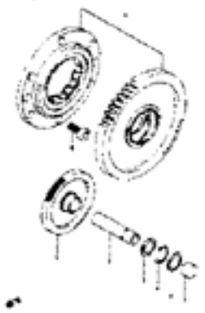
OIL PAN - OIL PUMP B-08



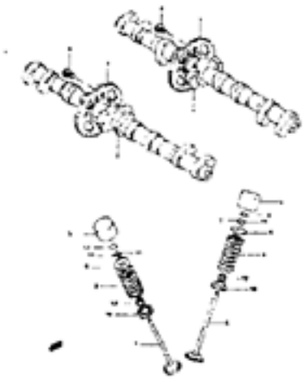
CRANKSHAFT B-09



STARTER CLUTCH B-11



CAM SHAFT - VALVE B-12

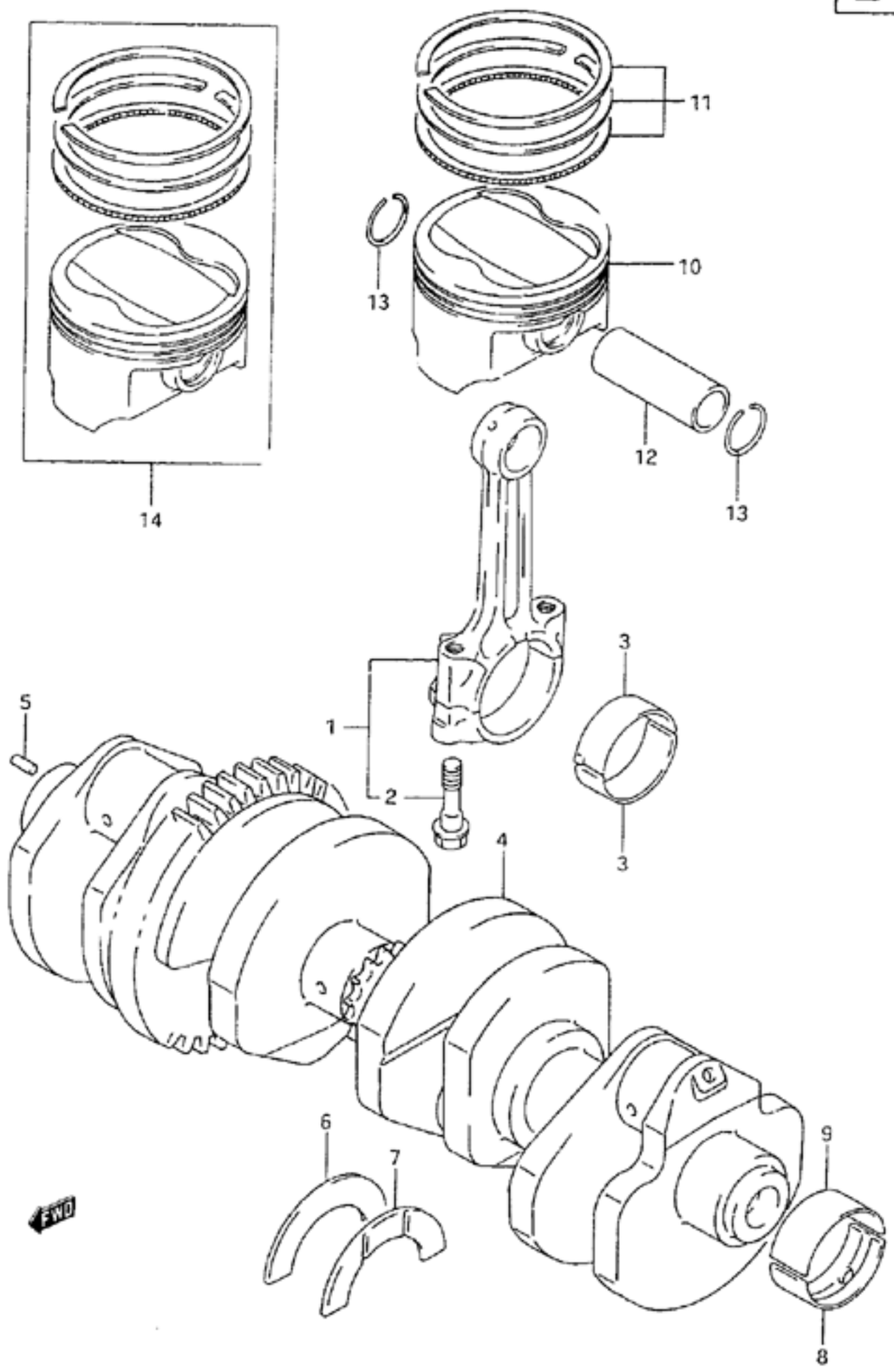


CAM CHAIN B-14



AIR CLEANER	C-06	COWLING BODY	H-02	FRAME COVER	G-02	FUEL PUMP	C-08	MUFFLER	C-07	REAR MASTER CYLINDE	J-09	STEERING STEM	I-04
ALTERNATOR	E-03	CRANKCASE COVER	B-07	FRAME	F-02	FUEL TANK	F-06	OIL COOLER - OIL FI	C-09	REAR SWINGING ARM	J-02	TAIL LAMP	E-12
BATTERY	E-06	CRANKCASE	B-05	FRONT BRAKE HOSE	I-07	GEAR SHIFTING	D-10	OIL PAN - OIL PUMP	B-08	REAR WHEEL	J-05	TRANSMISSION	D-08
CAM CHAIN	B-14	CRANKSHAFT	B-09	FRONT CALIPERS	I-06	HANDLE BAR	G-07	OPTIONAL	J-10	SEAT	H-15	TURNSIGNAL LAMP	E-11
CAM SHAFT - VALVE	B-12	CYLINDER HEAD COVER	B-02	FRONT DAMPER	I-02	HANDLE LEVER	G-08	RADIATOR HOSE	D-03	SIGNAL GENERATOR	E-05	UNDER COWLING BODY	H-06
CARBURETOR FITTINGS	C-05	CYLINDER HEAD	B-03	FRONT FENDER	G-06	HANDLE SWITCH	E-14	RADIATOR	D-02	SPEEDOMETER	E-08	WATER PUMP	C-10
CARBURETOR	C-02	CYLINDER	B-04	FRONT MASTER CYLIND	I-08	HEADLAMP	E-10	REAR CALIPER	J-07	STAND	F-03	WIRING HARNESS	E-13
CLUTCH CYLINDER	I-09	ELECTRICAL	E-07	FRONT WHEEL	I-05	INSTALLATION PARTS	H-05	REAR CUSHION LEVER	J-04	STARTER CLUTCH	B-11		
CLUTCH	D-05	FOOTREST	F-04	FUEL COCK	F-09	LABEL	H-14	REAR FENDER	G-09	STARTING MOTOR	E-02		

FIG.7



B - 10

9

FIG.7 (B-10) CRANKSHAFT

REF NO.	PART NO.	DESCRIPTION	Q'TY		REMARKS
10	12111-31E02-0F0	PISTON	4		
11	12140-31E60	RING SET, piston	4		
12	12151-17C00	PIN, piston	4		
13	09381-19001	CIRCLIP	8		
14-1	12100-31E00-050	PISTON SET (OS:0.5)	4	OPT	
14-2	12100-31E00-100	PISTON SET (OS:1.0)	4	OPT	

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AIR CLEANER.....	C-06	COWLING BODY.....	H-02	FRAME COVER.....	G-02	FUEL PUMP.....	C-08	MUFFLER.....	C-07	REAR MASTER CYLINDE	J-09	STEERING STEM.....	I-04
ALTERNATOR.....	E-03	CRANKCASE COVER....	B-07	FRAME.....	F-02	FUEL TANK.....	F-06	OIL COOLER - OIL FI	C-09	REAR SWINGING ARM..	J-07	TAIL LAMP.....	E-12
BATTERY.....	E-06	CRANKCASE.....	B-05	FRONT BRAKE HOSE...	I-07	GEAR SHIFTING.....	D-10	OIL PAN - OIL PUMP.	B-08	REAR WHEEL.....	J-05	TRANSMISSION.....	D-08
CAM CHAIN.....	B-14	CRANKSHAFT.....	B-09	FRONT CALIPERS.....	I-06	HANDLE BAR.....	G-07	OPTIONAL.....	J-10	SEAT.....	H-15	TURNSIGNAL LAMP....	E-11
CAM SHAFT - VALVE..	B-12	CYLINDER HEAD COVER	B-02	FRONT DAMPER.....	I-02	HANDLE LEVER.....	G-08	RADIATOR HOSE.....	D-03	SIGNAL GENERATOR...	E-05	UNDER COWLING BODY.	H-06
CARBURETOR FITTINGS	C-05	CYLINDER HEAD.....	B-03	FRONT FENDER.....	G-06	HANDLE SWITCH.....	E-14	RADIATOR.....	D-02	SPEEDOMETER.....	E-08	WATER PUMP.....	C-10
CARBURETOR.....	C-02	CYLINDER.....	B-04	FRONT MASTER CYLIND	I-08	HEADLAMP.....	E-10	REAR CALIPER.....	J-07	STAND.....	F-03	WIRING HARNESS.....	E-13
CLUTCH CYLINDER....	I-09	ELECTRICAL.....	E-07	FRONT WHEEL.....	I-05	INSTALLATION PARTS.	H-05	REAR CUSHION LEVER.	J-04	STARTER CLUTCH.....	B-11		
CLUTCH.....	D-05	FOOTREST.....	F-04	FUEL COCK.....	F-09	LABEL.....	H-14	REAR FENDER.....	G-09	STARTING MOTOR.....	E-02		

FIG.8

B - 11

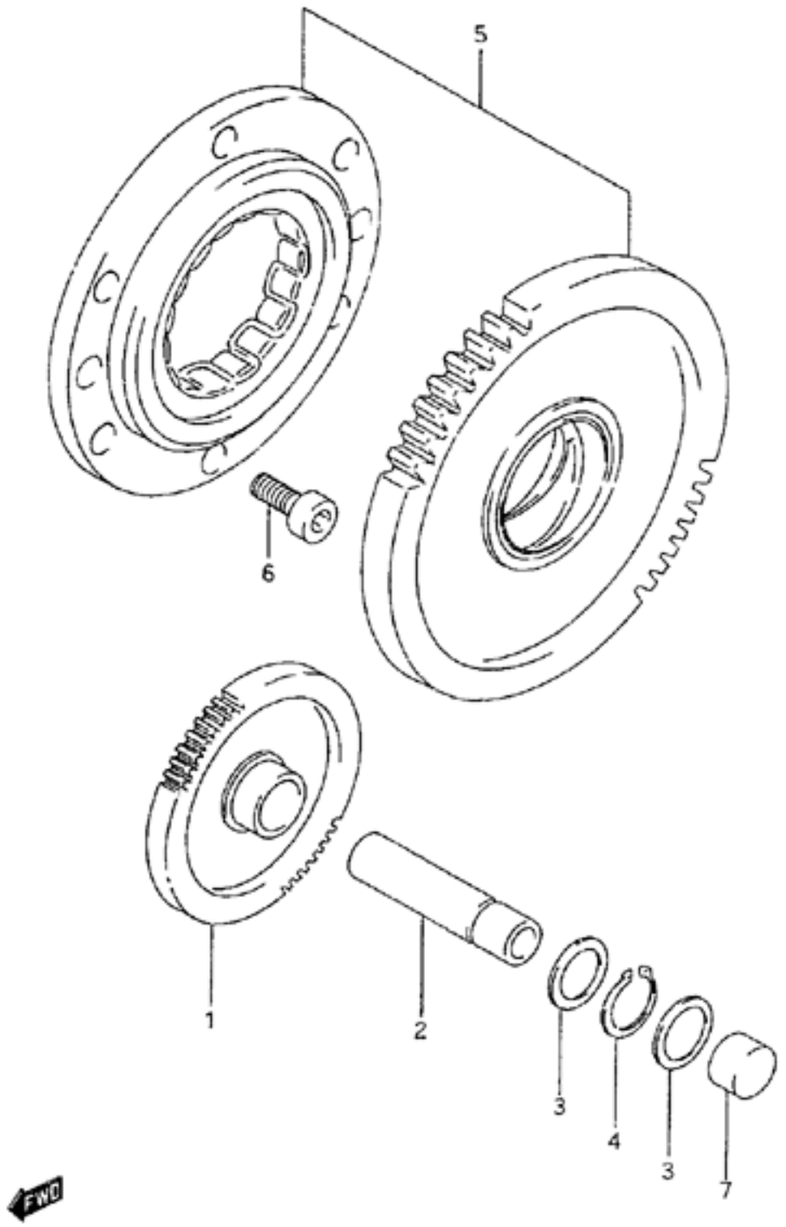


FIG.8 (B-11) STARTER CLUTCH

RBE NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1	12611-21E00	GEAR, starter idle (NT:12/56)	1	
2	12616-17E00	SHAFT, starter idle gear	1	
3-1	08221-12185	WASHER	2	model R/S/T
3-2	09181-12130	WASHER	2	model V
4	08331-31126	CIRCLIP	1	
5	12600-21811	CLUTCH SET, starter	1	
6-1	07130-06163	BOLT	4	model R
6-2	07130-06123	BOLT	4	model S/T/V
7	09241-12006	PLUG, starter idle shaft	1	

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AIR CLEANER.....	C-06	COWLING BODY.....	H-02	FRAME COVER.....	G-02	FUEL PUMP.....	C-08	MUFFLER.....	C-07	REAR MASTER CYLINDE	J-09	STEERING STEM.....	I-04
ALTERNATOR.....	E-03	CRANKCASE COVER....	B-07	FRAME.....	F-02	FUEL TANK.....	F-06	OIL COOLER - OIL FI	C-09	REAR SWINGING ARM..	J-02	TAIL LAMP.....	E-12
BATTERY.....	E-06	CRANKCASE.....	B-05	FRONT BRAKE HOSE...	I-07	GEAR SHIFTING.....	D-10	OIL PAN - OIL PUMP.	B-08	REAR WHEEL.....	J-05	TRANSMISSION.....	D-08
CAM CHAIN.....	B-14	CRANKSHAFT.....	B-09	FRONT CALIPERS.....	I-06	HANDLE BAR.....	G-07	OPTIONAL.....	J-10	SEAT.....	H-15	TURNSIGNAL LAMP....	E-11
CAM SHAFT - VALVE..	B-12	CYLINDER HEAD COVER	B-02	FRONT DAMPER.....	I-02	HANDLE LEVER.....	G-08	RADIATOR HOSE.....	D-03	SIGNAL GENERATOR...	E-05	UNDER COWLING BODY.	H-06
CARBURETOR FITTINGS	C-05	CYLINDER HEAD.....	B-03	FRONT FENDER.....	G-06	HANDLE SWITCH.....	E-14	RADIATOR.....	D-02	SPEEDOMETER.....	E-08	WATER PUMP.....	C-10
CARBURETOR.....	C-02	CYLINDER.....	B-04	FRONT MASTER CYLIND	I-08	HEADLAMP.....	E-10	REAR CALIPER.....	J-07	STAND.....	F-03	WIRING HARNESS.....	E-13
CLUTCH CYLINDER....	I-09	ELECTRICAL.....	E-07	FRONT WHEEL.....	I-05	INSTALLATION PARTS.	H-05	REAR CUSHION LEVER.	J-04	STARTER CLUTCH.....	B-11		
CLUTCH.....	D-05	FOOTREST.....	F-04	FUEL COCK.....	F-09	LABEL.....	H-14	REAR FENDER.....	G-09	STARTING MOTOR.....	E-02		

FIG.9

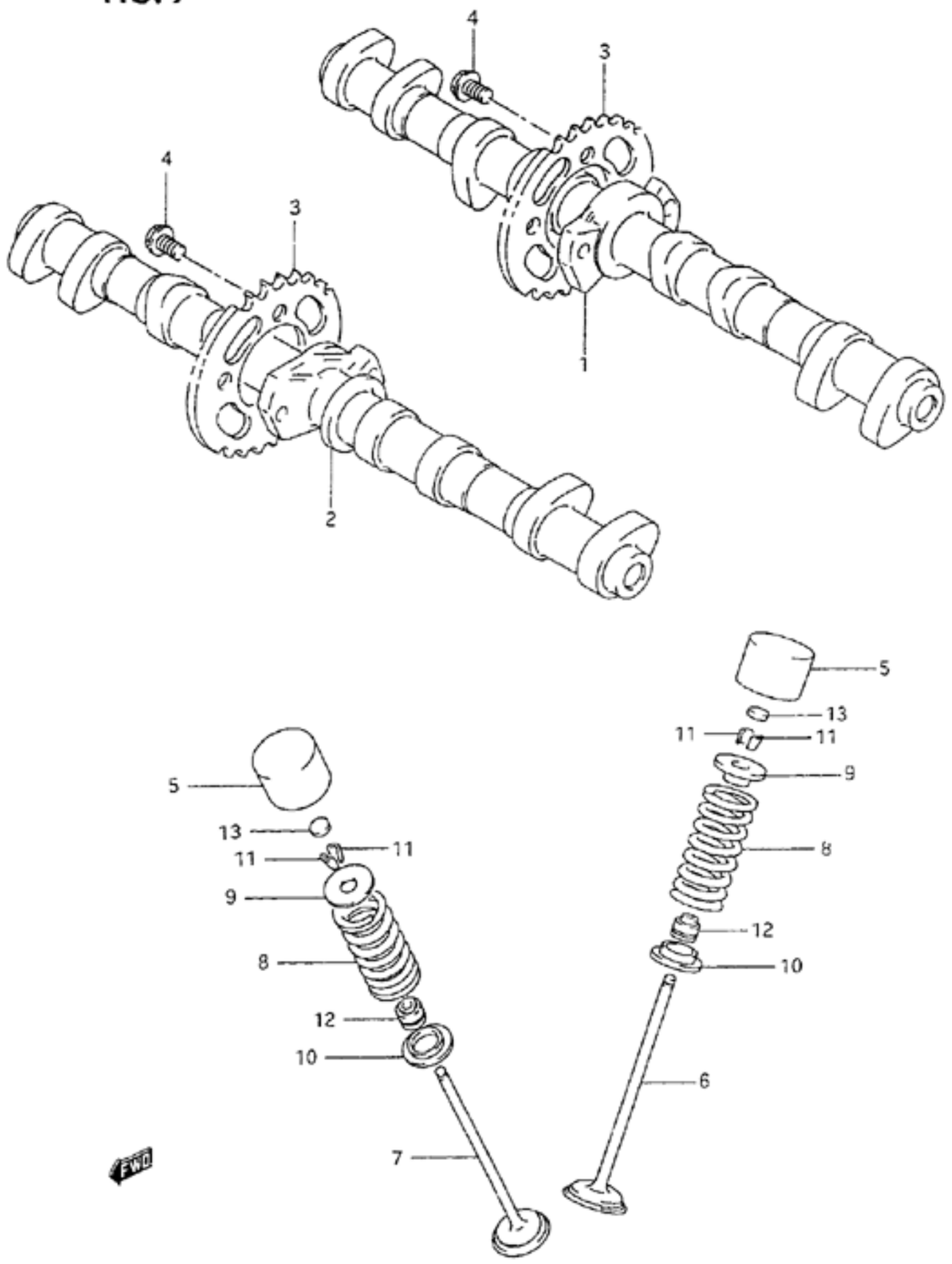


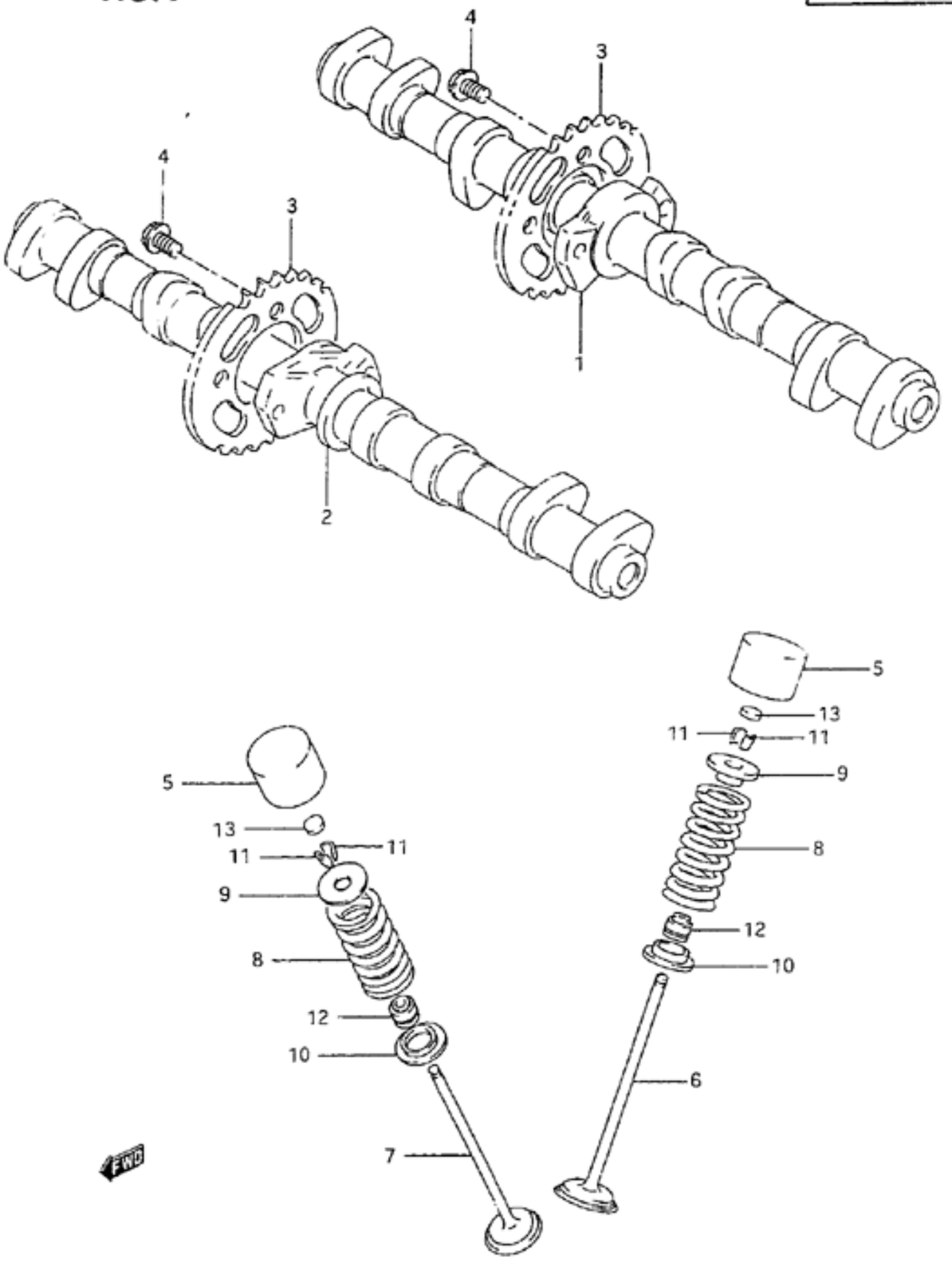
FIG.9 (B-12) CAM SHAFT - VALVE

REF NO.	PART NO	DESCRIPTION	Q'TY	REMARKS
1	12711-31E00	CAM SHAFT, intake	1	
2	12721-31E00	CAM SHAFT, exhaust	1	
3	12741-17E00	SPROCKET, cam shaft	2	
4	09103-07001	BOLT (7x11.5)	4	
5	12891-17E00	TAPPET	16	
6	12911-31E00	VALVE, intake	9	
7-1	12912-17E00	VALVE, exhaust	8	model R/S
7-2	12912-17E01	VALVE, exhaust	8	model T/V
8	12921-17E00	SPRING, valve	16	
9	12931-17E01	RETAINER, valve spring	16	
10	12933-17E00	SEAT, valve spring	16	
11	12932-32C00	COTTER, valve	32	
12	09289-04002	OIL SEAL (4.5x10x8)	16	
13-1	12892-05C00-120	SHIM, tappet (T:1.20)	16	
13-2	12892-05C00-125	SHIM, tappet (T:1.25)	16	
13-3	12892-05C00-130	SHIM, tappet (T:1.30)	16	
13-4	12892-05C00-135	SHIM, tappet (T:1.35)	16	
13-5	12892-05C00-140	SHIM, tappet (T:1.40)	16	
13-6	12892-05C00-145	SHIM, tappet (T:1.45)	16	
13-7	12892-05C00-150	SHIM, tappet (T:1.50)	16	
13-8	12892-05C00-155	SHIM, tappet (T:1.55)	16	
13-9	12892-05C00-160	SHIM, tappet (T:1.60)	16	
13-10	12892-05C00-165	SHIM, tappet (T:1.65)	16	
13-11	12892-05C00-170	SHIM, tappet (T:1.70)	16	
13-12	12892-05C00-175	SHIM, tappet (T:1.75)	16	
13-13	12892-05C00-180	SHIM, tappet (T:1.80)	16	
13-14	12892-05C00-185	SHIM, tappet (T:1.85)	16	
13-15	12892-05C00-190	SHIM, tappet (T:1.90)	16	
13-16	12892-05C00-195	SHIM, tappet (T:1.95)	16	
13-17	12892-05C00-200	SHIM, tappet (T:2.00)	16	
13-18	12892-05C00-205	SHIM, tappet (T:2.05)	16	
13-19	12892-05C00-210	SHIM, tappet (T:2.10)	16	
13-20	12892-05C00-215	SHIM, tappet (T:2.15)	16	
13-21	12892-05C00-220	SHIM, tappet (T:2.20)	16	

AIR CLEANER..... C-06	COWLING BODY..... H-02	FRAME COVER..... G-02	FUEL PUMP..... C-08	MUFFLER..... C-07	REAR MASTER CYLINDE J-09	STEERING STEM..... I-04
ALTERNATOR..... E-03	CRANKCASE COVER.... B-07	FRAME..... F-02	FUEL TANK..... F-06	OIL COOLER - OIL FI C-09	REAR SWINGING ARM.. J-02	TAIL LAMP..... E-12
BATTERY..... E-06	CRANKCASE..... B-05	FRONT BRAKE HOSE... I-07	GEAR SHIFTING..... D-10	OIL PAN - OIL PUMP. B-08	REAR WHEEL..... J-05	TRANSMISSION..... D-08
CAM CHAIN..... B-14	CRANKSHAFT..... B-09	FRONT CALIPERS..... I-06	HANDLE BAR..... G-07	OPTIONAL..... J-10	SEAT..... H-15	TURNSIGNAL LAMP.... E-11
CAM SHAFT - VALVE.. B-12	CYLINDER HEAD COVER B-02	FRONT DAMPER..... I-02	HANDLE LEVER..... G-08	RADIATOR HOSE..... D-03	SIGNAL GENERATOR... E-05	UNDER COWLING BODY. H-06
CARBURETOR FITTINGS C-05	CYLINDER HEAD..... B-03	FRONT FENDER..... G-06	HANDLE SWITCH..... E-14	RADIATOR..... D-02	SPEEDOMETER..... E-08	WATER PUMP..... C-10
CARBURETOR..... C-02	CYLINDER..... B-04	FRONT MASTER CYLIND I-08	HEADLAMP..... E-10	REAR CALIPER..... J-07	STAND..... F-03	WIRING HARNESS..... E-13
CLUTCH CYLINDER.... I-09	ELECTRICAL..... E-07	FRONT WHEEL..... I-05	INSTALLATION PARTS. H-05	REAR CUSHION LEVER. J-04	STARTER CLUTCH..... B-11	
CLUTCH..... D-05	FOOTREST..... F-04	FUEL COCK..... F-09	LABEL..... H-14	REAR FENDER..... G-09	STARTING MOTOR..... E-02	

FIG.9

B - 13



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FIG.9 (B-13) CAM SHAFT - VALVE

REF NO.	PART NO	DESCRIPTION	Q'TY	REMARKS
14	12800-05820	SHIM SET, tappet Inc. Ref.No.13-1-13-21 (5pcs. each) & No.15	1	OPT,Not shown
15	99000-69491	.CASE, tappet shim	1	OPT

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AIR CLEANER.....	C-06	COWLING BODY.....	H-02	FRAME COVER.....	G-02	FUEL PUMP.....	C-08	MUFFLER.....	C-07	REAR MASTER CYLINDE	J-09	STEERING STEM.....	I-04
ALTERNATOR.....	E-03	CRANKCASE COVER....	B-07	FRAME.....	F-02	FUEL TANK.....	F-06	OIL COOLER - OIL FI	C-09	REAR SWINGING ARM..	J-02	TAIL LAMP.....	E-12
BATTERY.....	E-06	CRANKCASE.....	B-05	FRONT BRAKE HOSE...	I-07	GEAR SHIFTING.....	D-10	OIL PAN - OIL PUMP.	B-08	REAR WHEEL.....	J-05	TRANSMISSION.....	D-08
CAM CHAIN.....	B-14	CRANKSHAFT.....	B-09	FRONT CALIPERS.....	I-06	HANDLE BAR.....	G-07	OPTIONAL.....	J-10	SEAT.....	H-15	TURNSIGNAL LAMP....	E-11
CAM SHAFT - VALVE..	B-12	CYLINDER HEAD COVER	B-02	FRONT DAMPER.....	I-02	HANDLE LEVER.....	G-08	RADIATOR HOSE.....	D-03	SIGNAL GENERATOR...	E-05	UNDER COWLING BODY.	H-06
CARBURETOR FITTINGS	C-05	CYLINDER HEAD.....	B-03	FRONT FENDER.....	G-06	HANDLE SWITCH.....	E-14	RADIATOR.....	D-02	SPEEDOMETER.....	E-08	WATER PUMP.....	C-10
CARBURETOR.....	C-02	CYLINDER.....	B-04	FRONT MASTER CYLIND	I-08	HEADLAMP.....	E-10	REAR CALIPER.....	J-07	STAND.....	F-03	WIRING HARNESS.....	E-13
CLUTCH CYLINDER....	I-09	ELECTRICAL.....	E-07	FRONT WHEEL.....	I-05	INSTALLATION PARTS.	H-05	REAR CUSHION LEVER.	J-04	STARTER CLUTCH.....	B-11		
CLUTCH.....	D-05	FOOTREST.....	F-04	FUEL COCK.....	F-09	LABEL.....	H-14	REAR FENDER.....	G-09	STARTING MOTOR.....	E-02		

FIG.10

B - 14

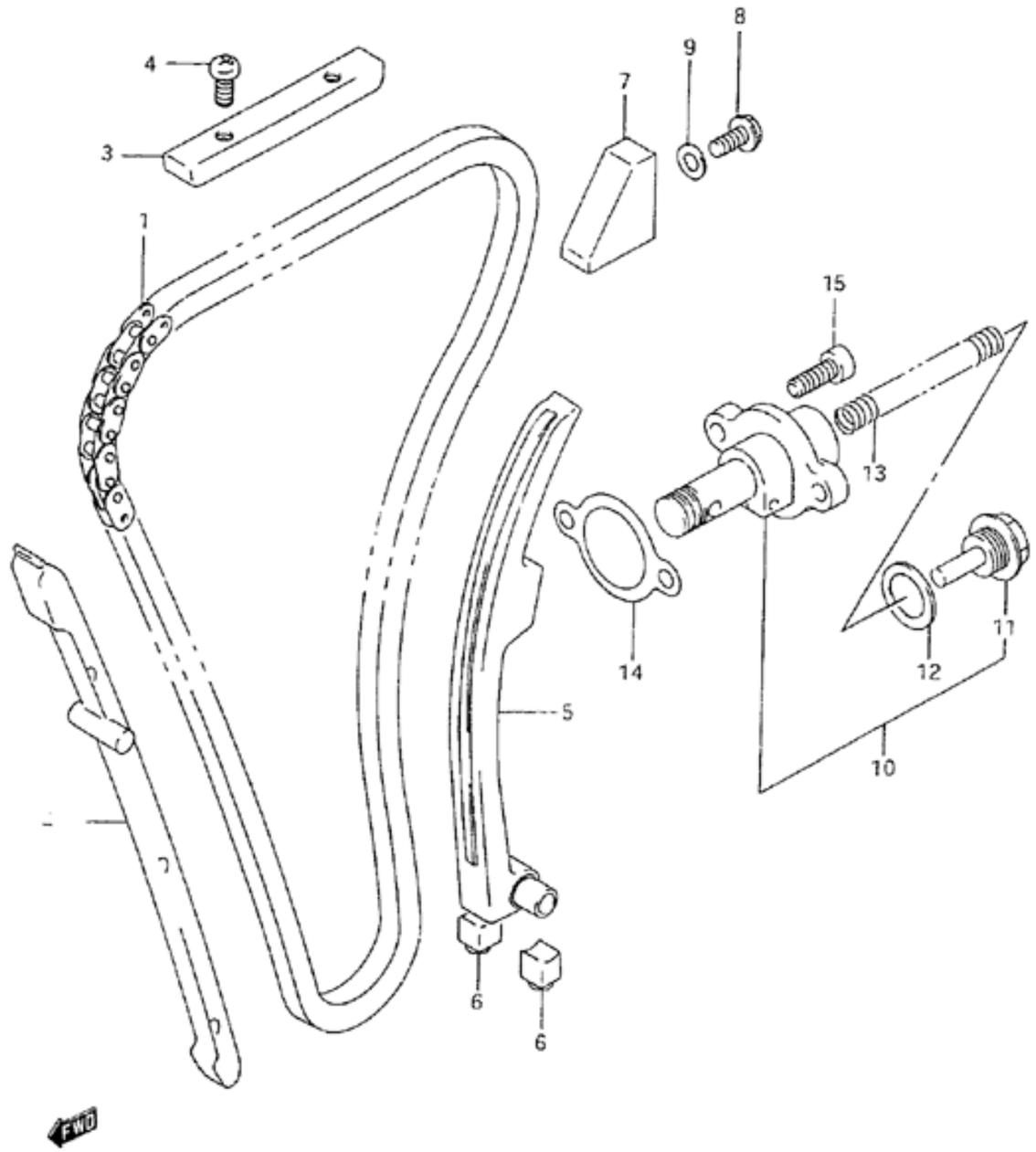
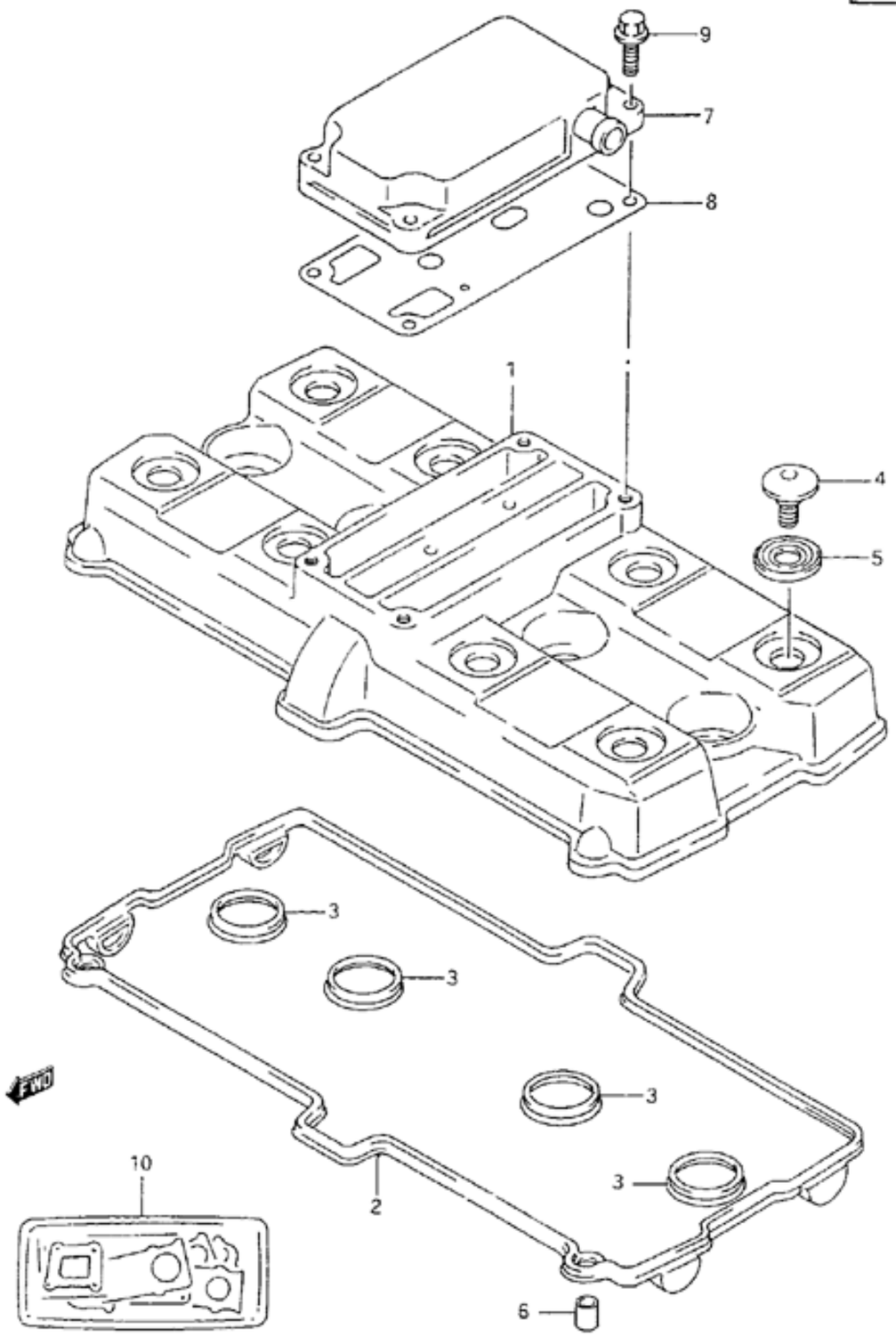


FIG.10 (B-14) CAM CHAIN

REF NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1-1	12760-46E00	CHAIN, cam shaft drive	1	model R
1-2	12760-46E01	CHAIN, cam shaft drive	1	model S/T/V
2-1	12771-46E00	GUIDE, cam chain No.1	1	model R/S
2-2	12771-46E20	GUIDE, cam chain No.1	1	model T/V
3	12782-18E00	GUIDE, cam chain No.2	1	
4	02112-05103	SCREW	2	
5-1	12810-46E00	TENSIONER, cam chain	1	model R/S
5-2	12810-46E20	TENSIONER, cam chain	1	model T/V
6	12814-34200	CUSHION	2	
7	12791-17E01	GUIDE, cam chain No.3	1	
8-1	01550-06123	BOLT	1	model R/S
8-2	01550-06163	BOLT	1	model T/V
9	09168-06023	WASHER	1	
10-1	12830-26D12	ADJUSTER ASSY, tensioner	1	model R/S
10-2	12830-46E00	ADJUSTER ASSY, tensioner	1	model T/V
11	12834-27A00	.PLUG	1	
12	12832-27A00	.GASKET	1	
13	12833-26D10	.SPRING	1	
14	12837-27A10	GASKET, adjuster	1	
15-1	09106-06062	BOLT (6x23)	2	model R/S
15-2	09106-06079	BOLT (6x22)	2	model T/V

FIG.1



B - 2

FIG.1 (B- 2) CYLINDER HEAD COVER

REF NO.	PART NO	DESCRIPTION	Q'TY	REMARKS
1	11171-31E00	COVER, cylinder head	1	
2	11173-21E00	GASKET, head cover No.1	1	
3	11178-17E00	GASKET, head cover No.2	4	
4	09106-07009	BOLT (L:5.5)	8	
5	09161-11008	WASHER	8	
6	09206-08001	PIN	2	
7	11176-31E00	COVER, breather	1	
8	11177-17E00	GASKET, breather cover	1	
9	01550-06253	BOLT	4	
10-1	11400-31890	GASKET SET	1	model R
10-2	11400-31891	GASKET SET	1	model S/T
10-3	11400-31892	GASKET SET	1	model V

AIR CLEANER..... C-06
ALTERNATOR..... E-03
BATTERY..... E-06
CAM CHAIN..... B-14
CAM SHAFT - VALVE.. B-12
CARBURETOR FITTINGS C-05
CARBURETOR..... C-02
CLUTCH CYLINDER.... I-09
CLUTCH..... D-05
COWLING BODY..... H-02
CRANKCASE COVER.... B-07
CRANKCASE..... B-05
CRANKSHAFT..... B-09
CYLINDER HEAD COVER B-02
CYLINDER HEAD..... B-03
CYLINDER..... B-04
ELECTRICAL..... E-07
FOOTREST..... F-04
FRAME COVER..... G-02
FRAME..... F-02
FRONT BRAKE HOSE... I-07
FRONT CALIPERS..... I-06
FRONT DAMPER..... I-02
FRONT FENDER..... G-06
FRONT MASTER CYLIND I-08
FRONT WHEEL..... I-05
FUEL COCK..... F-09
FUEL PUMP..... C-08
FUEL TANK..... F-06
GEAR SHIFTING..... D-10
HANDLE BAR..... G-07
HANDLE LEVER..... G-08
HANDLE SWITCH..... E-14
HEADLAMP..... E-10
INSTALLATION PARTS. H-05
LABEL..... H-14
MUFFLER..... C-07
OIL COOLER - OIL FI C-09
OIL PAN - OIL PUMP. B-08
OPTIONAL..... J-10
RADIATOR HOSE..... D-03
RADIATOR..... D-02
REAR CALIPER..... J-07
REAR CUSHION LEVER. J-04
REAR FENDER..... G-09
REAR MASTER CYLINDE J-09
REAR SWINGING ARM.. J-02
REAR WHEEL..... J-05
SEAT..... H-15
SIGNAL GENERATOR... E-05
SPEEDOMETER..... E-08
STAND..... F-03
STARTER CLUTCH..... B-11
STARTING MOTOR..... E-02
STEERING STEM..... I-04
TAIL LAMP..... E-12
TRANSMISSION..... D-08
TURNSIGNAL LAMP.... E-11
UNDER COWLING BODY. H-06
WATER PUMP..... C-10
WIRING HARNESS..... E-13

FIG.2

B - 3

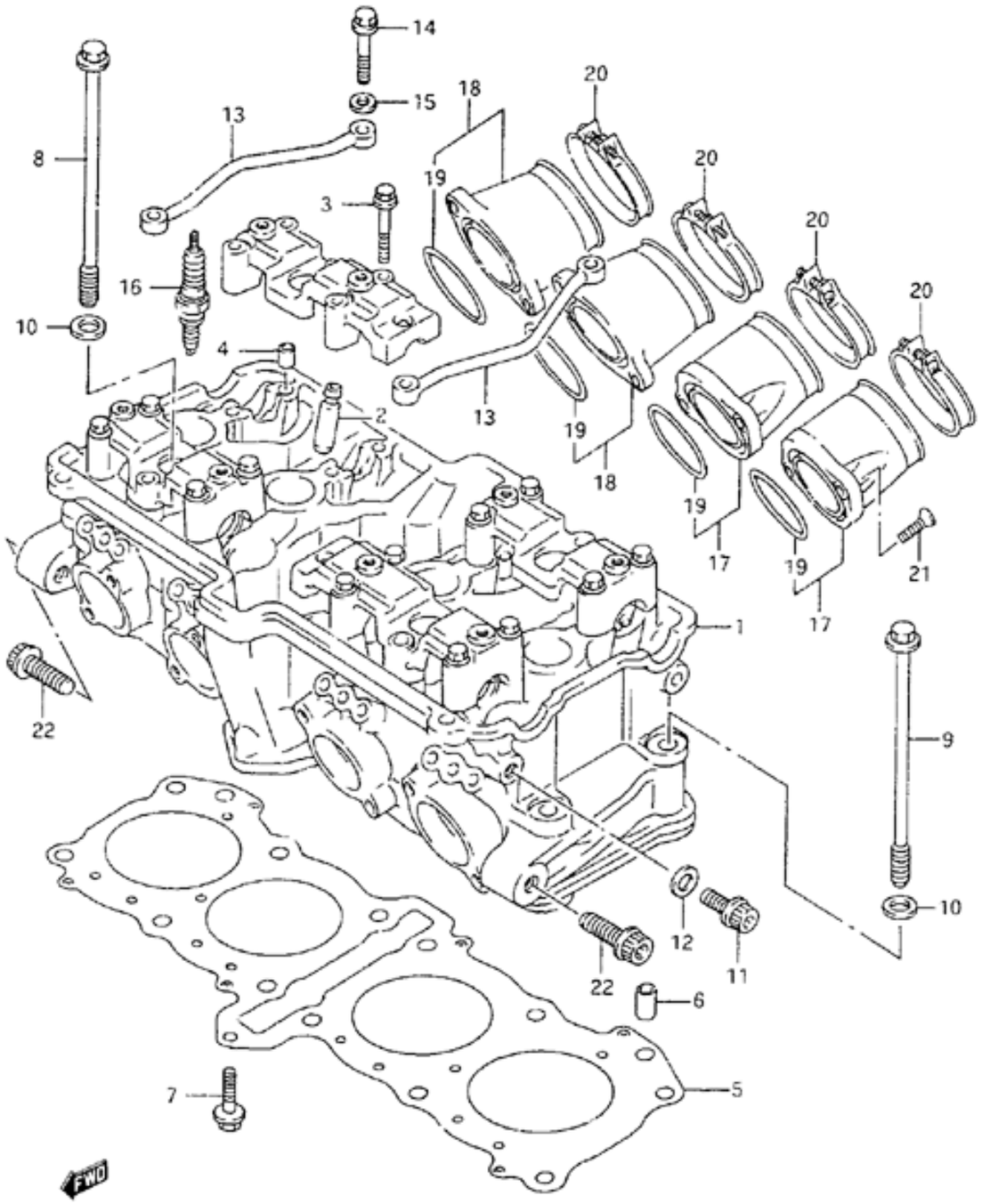


FIG.2 (B- 3) CYLINDER HEAD

REF NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1	11100-31E00	HEAD ASSY, cylinder	1	
2	11115-17E70	.GUIDE, valve	16	
3	09103-06165	.BOLT (6x45)	16	
4	09209-08001	.PIN	8	
5	11141-31E00	GASKET, cylinder head	1	
6	04211-11189	PIN	2	
7	01550-06303	BOLT	1	
8-1	09103-10270	BOLT (10x175)	8	-E.No.110822
8-2	09103-10276	BOLT (10x175)	8	E.No.110823-
9	09103-10276	BOLT (10x175)	4	
10	09160-10082	WASHER	12	
11	07120-08163	BOLT, oil gallery EX	2	
12	09168-08015	GASKET	2	
13	11131-17E00	PIPE, oil	2	
14	09103-06026	BOLT (6x39)	4	
15	08322-01063	WASHER	4	
16-1	09482-00458	SPARK PLUG (NGK,CR9E)	4	
16-2	09482-00459	SPARK PLUG (ND,U27ESR-N)	4	
16-3	09482-00456	SPARK PLUG (NGK,CR8E)	4	OPT
16-4	09482-00460	SPARK PLUG (NGK,CR10E)	4	OPT
16-5	09482-00457	SPARK PLUG (ND,U24ESR-N)	4	OPT
16-6	09482-00461	SPARK PLUG (ND,U31ESR-N)	4	OPT
17	13101-31E01	PIPE, intake No.1	2	
18	13102-31E01	PIPE, intake No.2	2	
19	09280-42003	.O RING (D:2.4,ID:41.7)	4	
20	09402-52208	CLAMP	4	
21-1	09126-06014	SCREW (6x16)	8	model R/S
21-2	09120-06010	SCREW (6x16)	8	model T/V
22	07120-10303	BOLT, engine mounting	2	

AIR CLEANER.....	C-06	COWLING BODY.....	H-02	FRAME COVER.....	G-02	FUEL PUMP.....	C-[illegible]	MUFFLER.....	C-07	REAR MASTER CYLINDE	J-09	STEERING STEM.....	I-04
ALTERNATOR.....	E-03	CRANKCASE COVER....	B-07	FRAME.....	F-02	FUEL TANK.....	F-06	OIL COOLER - OIL FI	C-09	REAR SWINGING ARM..	J-02	TAIL LAMP.....	E-12
BATTERY.....	E-06	CRANKCASE.....	B-05	FRONT BRAKE HOSE...	I-07	GEAR SHIFTING.....	D-10	OIL PAN - OIL PUMP.	B-08	REAR WHEEL.....	J-05	TRANSMISSION.....	D-08
CAM CHAIN.....	B-14	CRANKSHAFT.....	B-09	FRONT CALIPERS.....	I-06	HANDLE BAR.....	G-07	OPTIONAL.....	J-10	SEAT.....	H-15	TURNSIGNAL LAMP....	E-11
CAM SHAFT - VALVE..	B-12	CYLINDER HEAD COVER	B-02	FRONT DAMPER.....	I-02	HANDLE LEVER.....	G-08	RADIATOR HOSE.....	D-03	SIGNAL GENERATOR...	E-05	UNDER COWLING BODY.	H-06
CARBURETOR FITTINGS	C-05	CYLINDER HEAD.....	B-03	FRONT FENDER.....	G-06	HANDLE SWITCH.....	E-14	RADIATOR.....	D-02	SPEEDOMETER.....	E-08	WATER PUMP.....	C-10
CARBURETOR.....	C-02	CYLINDER.....	B-04	FRONT MASTER CYLIND	I-08	HEADLAMP.....	E-16	REAR CALIPER.....	J-07	STAND.....	F-03	WIRING HARNESS.....	E-13
CLUTCH CYLINDER....	I-09	ELECTRICAL.....	E-07	FRONT WHEEL.....	I-05	INSTALLATION PARTS.	H-05	REAR CUSHION LEVER.	J-04	STARTER CLUTCH.....	B-11		
CLUTCH.....	D-05	FOOTREST.....	F-04	FUEL COCK.....	F-09	LABEL.....	H-14	REAR FENDER.....	G-09	STARTING MOTOR.....	E-02		

FIG.3

B - 4

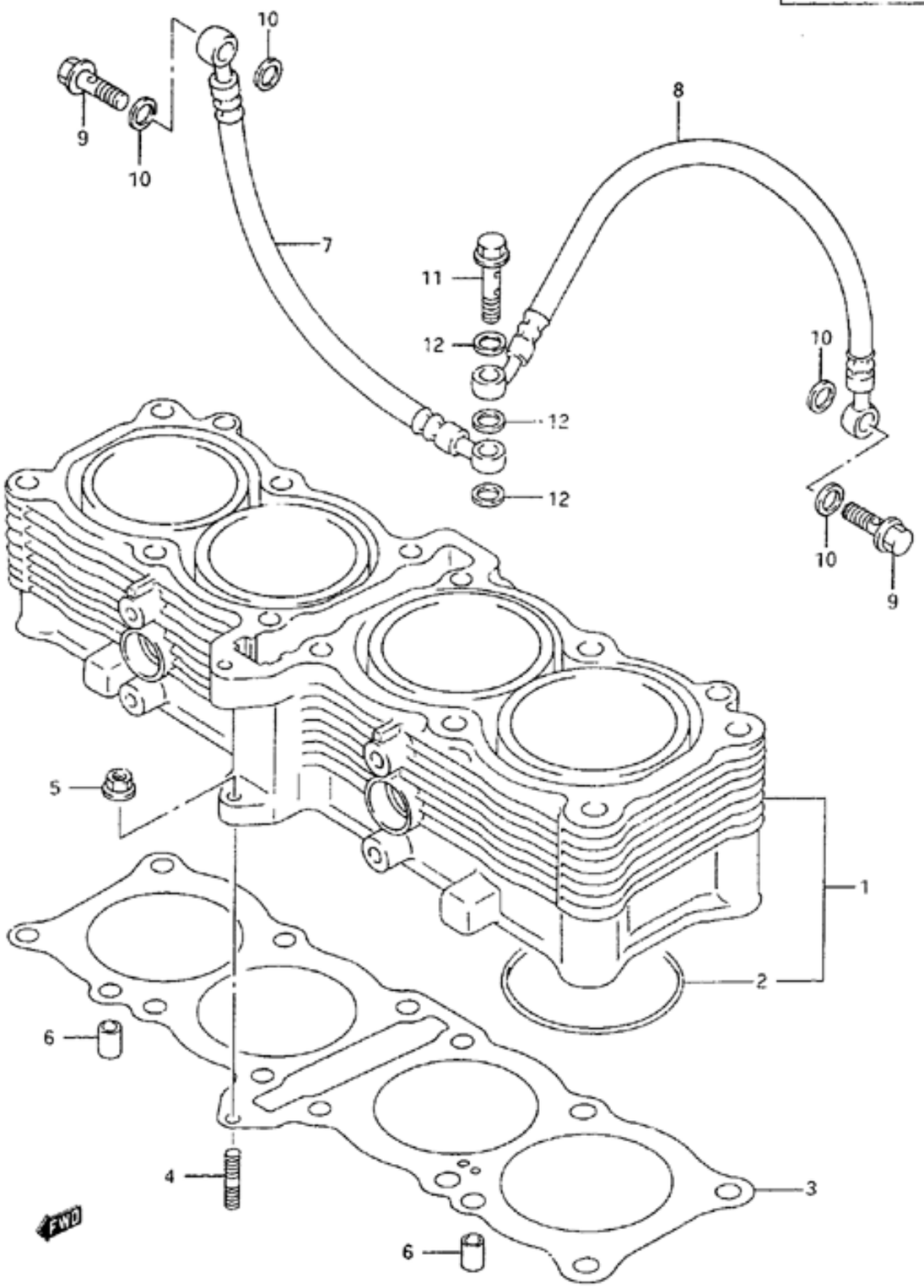


FIG.3 (B- 4) CYLINDER

REF NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1	11210-31E00	CYLINDER	1	
2	09280-71004	.C RING (D:2.6,ID:69.6)	4	
3	11241-31E00	GASKET, cylinder	1	
4	01421-06203	STUD BOLT	1	
5	08316-10063	NUT	1	
6	04211-11189	PIN	2	
7	11281-21E00	HOSE, oil RH	1	
8	11282-21E00	HOSE, oil LH	1	
9	11284-17E00	BOLT, oil hose union	2	
10	09168-08016	GASKET	4	
11	11285-32C00	BOLT, oil hose union	1	
12	09161-10009	GASKET	3	

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AIR CLEANER.....	C-06	COWLING BODY.....	H-02	FRAME COVER.....	G-02	FUEL PUMP.....	C-08	MUFFLER.....	C-07	REAR MASTER CYLINDE	J-09	STEERING STEM.....	I-04
ALTERNATOR.....	E-03	CRANKCASE COVER....	B-07	FRAME.....	F-02	FUEL TANK.....	F-06	OIL COOLER - OIL FI	C-09	REAR SWINGING ARM..	J-02	TAIL LAMP.....	E-12
BATTERY.....	E-06	CRANKCASE.....	B-05	FRONT BRAKE HOSE...	I-07	GEAR SHIFTING.....	D-10	OIL PAN - OIL PUMP.	B-08	REAR WHEEL.....	J-05	TRANSMISSION.....	D-08
CAM CHAIN.....	B-14	CRANKSHAFT.....	B-09	FRONT CALIPERS.....	I-06	HANDLE BAR.....	G-07	OPTIONAL.....	J-10	SEAT.....	H-15	TURNSIGNAL LAMP....	E-11
CAM SHAFT - VALVE..	B-12	CYLINDER HEAD COVER	B-02	FRONT DAMPER.....	I-02	HANDLE LEVER.....	G-08	RADIATOR HOSE.....	D-03	SIGNAL GENERATOR...	E-05	UNDER COWLING BODY.	H-06
CARBURETOR FITTINGS	C-05	CYLINDER HEAD.....	B-03	FRONT FENDER.....	G-06	HANDLE SWITCH.....	E-14	RADIATOR.....	D-02	SPEEDOMETER.....	E-08	WATER PUMP.....	C-10
CARBURETOR.....	C-02	CYLINDER.....	B-04	FRONT MASTER CYLIND	I-08	HEADLAMP.....	E-10	REAR CALIPER.....	J-07	STAND.....	F-03	WIRING HARNESS.....	E-13
CLUTCH CYLINDER....	I-09	ELECTRICAL.....	E-07	FRONT WHEEL.....	I-05	INSTALLATION PARTS.	H-05	REAR CUSHION LEVER.	J-04	STARTER CLUTCH.....	B-11		
CLUTCH.....	D-05	FOOTREST.....	F-04	FUEL COCK.....	F-09	LABEL.....	H-14	REAR FENDER.....	G-09	STARTING MOTOR.....	E-02		

FIG.4

B - 5

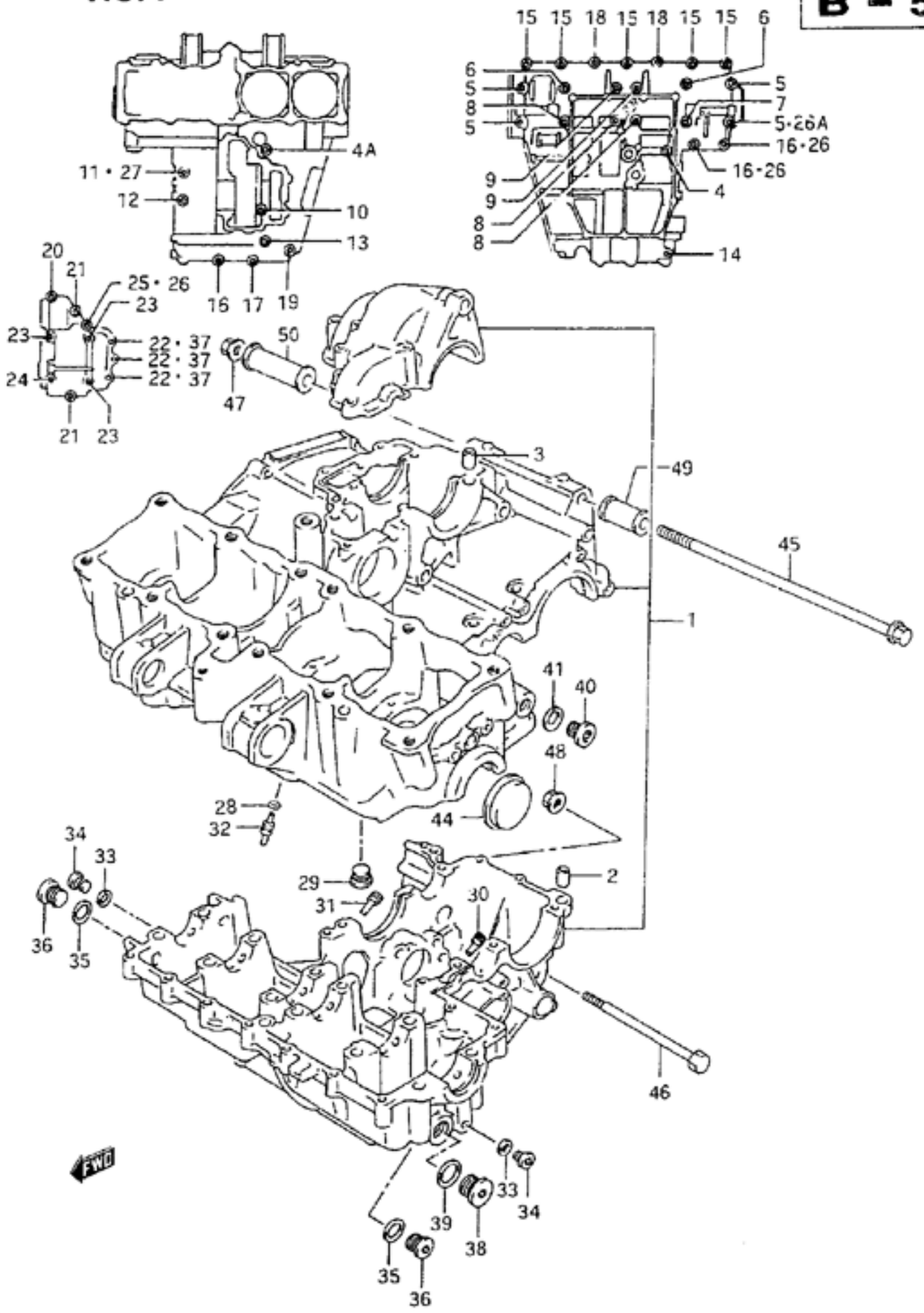


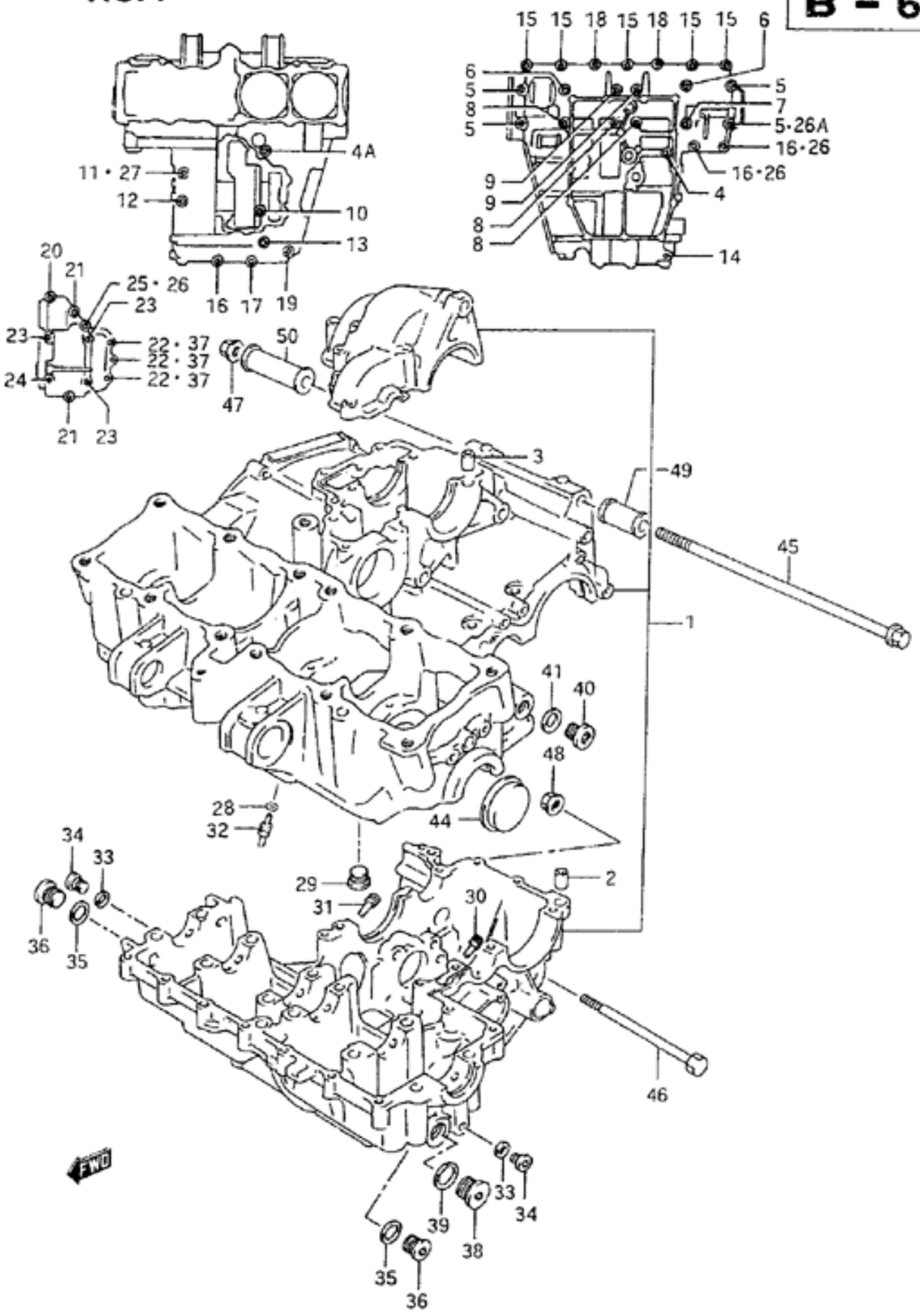
FIG.4 (B- 5) CRANKCASE

REF NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1-1	11302-46870	CRANKCASE SET	1	model R
1-2	11302-46872	CRANKCASE SET	1	model S
1-3	11302-46875	CRANKCASE SET	1	model T
1-4	11302-46876	CRANKCASE SET	1	model V
2	09206-13004	.PIN	4	
3	04211-09129	.PIN	2	
4	09103-06163	.BOLT (6x105)	1	
4A	09103-06067	.BOLT (6x105)	1	
5	09103-09007	.BOLT (9x80)	4	
6	09103-09008	.BOLT (9x95)	2	
7	09103-09009	.BOLT (9x105)	1	
8	09103-09010	.BOLT (9x115)	3	
9	09106-09001	.BOLT (9x60)	2	
10	07130-06753	.BOLT	1	
11	07130-08503	.BOLT	1	
12	07130-08603	.BOLT	1	
13	07130-08803	.BOLT	1	
14	01550-08603	.BOLT	1	
15	01550-06353	.BOLT	5	
16	01550-06403	.BOLT	3	
17	01550-06403	.BOLT	1	
18	01550-06503	.BOLT	2	
19	01550-06653	.BOLT	1	
20	07130-06253	.BOLT	1	
21	07130-06353	.BOLT	2	
22	07130-06403	.BOLT	3	
23	07130-06503	.BOLT	3	
24	07130-06603	.BOLT	1	
25	09103-06062	.BOLT (6x145)	1	
26	09168-06018	.GASKET	3	
26A	09168-10031	.GASKET	1	model S/T/V
27	09168-08016	.GASKET	1	
28	09280-04004	.O RING (D:1.2,ID:4.0)	4	
29	09248-18002	.PLUG, upper	1	
30	03493-24010	.JET, oil gallery mission L	1	

AIR CLEANER..... C-06	COWLING BODY..... H-02	FRAME COVER..... G-02	FUEL PUMP..... C-08	MUFFLER..... C-07	REAR MASTER CYLINDE J-09	STEERING STEM..... I-04
ALTERNATOR..... E-03	CRANKCASE COVER.... B-07	FRAME..... F-02	FUEL TANK..... F-06	OIL COOLER - OIL FI C-09	REAR SWINGING ARM.. J-02	TAIL LAMP..... E-12
BATTERY..... E-06	CRANKCASE..... B-05	FRONT BRAKE HOSE... I-07	GEAR SHIFTING..... D-10	OIL PAN - OIL PUMP. B-08	REAR WHEEL..... J-05	TRANSMISSION..... D-08
CAM CHAIN..... B-14	CRANKSHAFT..... B-09	FRONT CALIPERS..... I-06	HANDLE BAR..... G-07	OPTIONAL..... J-10	SEAT..... H-15	TURNSIGNAL LAMP.... E-11
CAM SHAFT - VALVE.. B-12	CYLINDER HEAD COVER B-02	FRONT DAMPER..... I-02	HANDLE LEVER..... G-08	RADIATOR HOSE..... D-03	SIGNAL GENERATOR... E-05	UNDER COWLING BODY. H-06
CARBURETOR FITTINGS C-05	CYLINDER HEAD..... B-03	FRONT FENDER..... G-06	HANDLE SWITCH..... E-14	RADIATOR..... D-02	SPEEDOMETER..... E-08	WATER PUMP..... C-10
CARBURETOR..... C-02	CYLINDER..... B-04	FRONT MASTER CYLIND I-08	HEADLAMP..... E-10	REAR CALIPER..... J-07	STAND..... F-03	WIRING HARNESS..... E-13
CLUTCH CYLINDER.... I-09	ELECTRICAL..... E-07	FRONT WHEEL..... I-05	INSTALLATION PARTS. H-05	REAR CUSHION LEVER. J-04	STARTER CLUTCH..... B-11	
CLUTCH..... D-05	FOOTREST..... F-04	FUEL COCK..... F-09	LABEL..... H-14	REAR FENDER..... G-09	STARTING MOTOR..... E-02	

FIG.4

B - 6



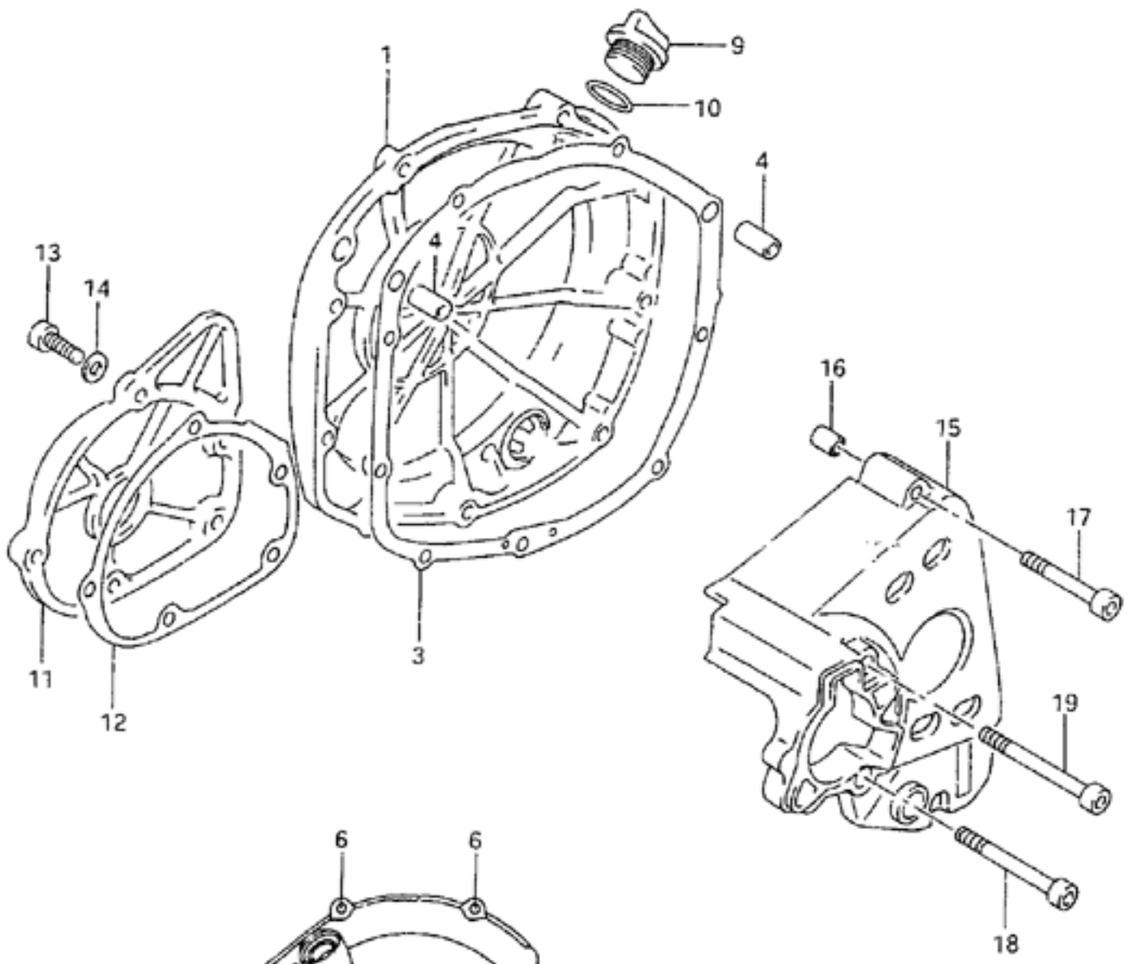
REF NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
		FIG.4 (B- 6) CRANKCASE		
31	09493-28012	.JET, oil gallery mission R	1	
32	09493-80008	.JET, oil gallery piston	4	
33-1	09168-10002	.GASKET	2	~E.No.110298
33-2	09168-10007	.GASKET	2	E.No.110299~
34-1	09248-10007	.PLUG, oil gallery	2	~E.No.110298
34-2	11315-17E00	.PLUG, oil gallery	2	E.No.110299~
35	09168-16002	.GASKET	2	
36	09248-16010	.PLUG, oil gallery	2	
37	09168-06024	.GASKET	3	
38	09248-22002	.PLUG, LH	1	
39	09168-22002	.GASKET	1	
40	09248-14010	.PLUG, oil gallery	1	
41	09168-14002	.GASKET	1	
42	12228-17E00-0D0	.BEARING, thrust RH (Green)	1	SEE ILLUSTRATION ON FIG.7 (B-9)
43-1	12228-17E00-0A0	.BEARING, thrust LH (Red)	1	SEE ILLUSTRATION ON FIG.7 (B-9)
43-2	12228-17E00-0B0	.BEARING, thrust LH (Black)	1	
43-3	12228-17E00-0C0	.BEARING, thrust LH (Blue)	1	
43-4	12228-17E00-0D0	.BEARING, thrust LH (Green)	1	
43-5	12228-17E00-0E0	.BEARING, thrust LH (Yellow)	1	
43-6	12228-17E00-0F0	.BEARING, thrust LH (White)	1	
44	09241-37002	PLUG, crankcase LH	1	
45	09103-10274	BOLT (10x280)	1	
46	09103-12045	BOLT (12x140)	1	
47	09159-10058	NUT	1	
48	08319-31128	NUT	1	
49	11611-21E00	SPACER, LH (L:45)	1	
50	11611-14210	SPACER, RH (L:65)	1	

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AIR CLEANER.....	C-06	COWLING BODY.....	H-02	FRAME COVER.....	G-02	FUEL PUMP.....	C-08	MUFFLER.....	C-07	REAR MASTER CYLINDE	J-09	STEERING STEM.....	I-04
ALTERNATOR.....	E-03	CRANKCASE COVER....	B-07	FRAME.....	F-02	FUEL TANK.....	F-06	OIL COOLER - OIL FI	C-09	REAR SWINGING ARM..	J-02	TAIL LAMP.....	E-12
BATTERY.....	E-06	CRANKCASE.....	B-05	FRONT BRAKE HOSE...	I-07	GEAR SHIFTING.....	D-10	OIL PAN - OIL PUMP.	B-08	REAR WHEEL.....	J-05	TRANSMISSION.....	D-08
CAM CHAIN.....	B-14	CRANKSHAFT.....	B-09	FRONT CALIPERS.....	I-06	HANDLE BAR.....	G-07	OPTIONAL.....	J-10	SEAT.....	H-15	TURNSIGNAL LAMP....	E-11
CAM SHAFT - VALVE..	B-12	CYLINDER HEAD COVER	B-02	FRONT DAMPER.....	I-02	HANDLE LEVER.....	G-08	RADIATOR HOSE.....	D-03	SIGNAL GENERATOR...	E-05	UNDER COWLING BODY.	H-06
CARBURETOR FITTINGS	C-05	CYLINDER HEAD.....	B-03	FRONT FENDER.....	G-06	HANDLE SWITCH.....	E-14	RADIATOR.....	D-02	SPEEDOMETER.....	E-08	WATER PUMP.....	C-10
CARBURETOR.....	C-02	CYLINDER.....	B-04	FRONT MASTER CYLIND	I-08	HEADLAMP.....	E-10	REAR CALIPER.....	J-07	STAND.....	F-03	WIRING HARNESS.....	E-13
CLUTCH CYLINDER....	I-09	ELECTRICAL.....	E-07	FRONT WHEEL.....	I-05	INSTALLATION PARTS.	H-05	REAR CUSHION LEVER.	J-04	STARTER CLUTCH.....	B-11		
CLUTCH.....	D-05	FOOTREST.....	F-04	FUEL COCK.....	F-09	LABEL.....	H-14	REAR FENDER.....	G-09	STARTING MOTOR.....	E-02		

FIG.5

B - 7



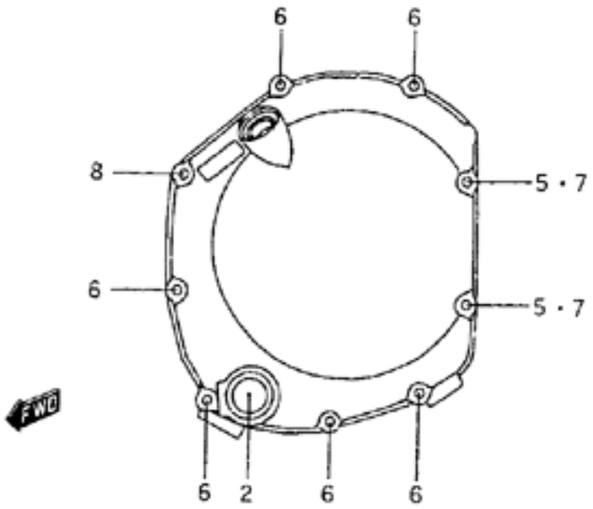


FIG.5 (B- 7) CRANKCASE COVER

REF NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1-1	11340-31E00	COVER, clutch	1	model R/S
1-2	11340-31E01	COVER, clutch	1	model T/V
2	11971-13210	LENS, oil level	1	
3	11482-17E00	GASKET, clutch cover	1	
4	04211-09189	PIN	2	
5	09168-06024	GASKET	2	
6	07130-06253	BOLT	6	
7	07130-06303	BOLT	2	
8	07130-06353	BOLT	1	
9-1	09259-20012	PLUG, engine oil filler	1	~E.No.110817
9-2	09259-20008	PLUG, engine oil filler	1	E.No.110818~
10	09280-17003	O RING (D:3.1,ID:16.8)	1	
11	11381-31E00	COVER, signal generator	1	
12	11491-17E01	GASKET, signal generator cover	1	
13	09106-06082	BOLT (6x23)	5	
14	09168-06024	GASKET	1	
15	11361-31E00	COVER, engine sprocket	1	
16	04211-09129	PIN	2	
17	07130-06503	BOLT	2	
18	07130-06703	BOLT	1	
19	07130-06803	BOLT	1	

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AIR CLEANER..... C-06	COWLING BODY..... H-02	FRAME COVER..... G-02	FUEL PUMP..... C-08	MUFFLER..... C-07	REAR MASTER CYLINDE J-09	STEERING STEM..... I-04
ALTERNATOR..... E-03	CRANKCASE COVER.... B-07	FRAME..... F-02	FUEL TANK..... F-06	OIL COOLER - OIL FI C-09	REAR SWINGING ARM.. J-02	TAIL LAMP..... E-12
BATTERY..... E-06	CRANKCASE..... B-05	FRONT BRAKE HOSE... I-07	GEAR SHIFTING..... D-10	OIL PAN - OIL PUMP. B-08	REAR WHEEL..... J-05	TRANSMISSION..... D-08
CAM CHAIN..... B-14	CRANKSHAFT..... B-09	FRONT CALIPERS..... I-06	HANDLE BAR..... G-07	OPTIONAL..... J-10	SEAT..... H-15	TURNSIGNAL LAMP.... E-11
CAM SHAFT - VALVE.. B-12	CYLINDER HEAD COVER B-02	FRONT DAMPER..... I-02	HANDLE LEVER..... G-08	RADIATOR HOSE..... D-03	SIGNAL GENERATOR... E-05	UNDER COWLING BODY. H-06
CARBURETOR FITTINGS C-05	CYLINDER HEAD..... B-03	FRONT FENDER..... G-06	HANDLE SWITCH..... E-14	RADIATOR..... D-02	SPEEDOMETER..... E-08	WATER PUMP..... C-10
CARBURETOR..... C-02	CYLINDER..... B-04	FRONT MASTER CYLIND I-08	HEADLAMP..... E-10	REAR CALIPER..... J-07	STAND..... F-03	WIRING HARNESS..... E-13
CLUTCH CYLINDER.... I-09	ELECTRICAL..... E-07	FRONT WHEEL..... I-05	INSTALLATION PARTS. H-05	REAR CUSHION LEVER. J-04	STARTER CLUTCH..... B-11	
CLUTCH..... D-05	FOOTREST..... F-04	FUEL COCK..... F-09	LABEL..... H-14	REAR FENDER..... G-09	STARTING MOTOR..... E-02	

FIG.6

B - 8

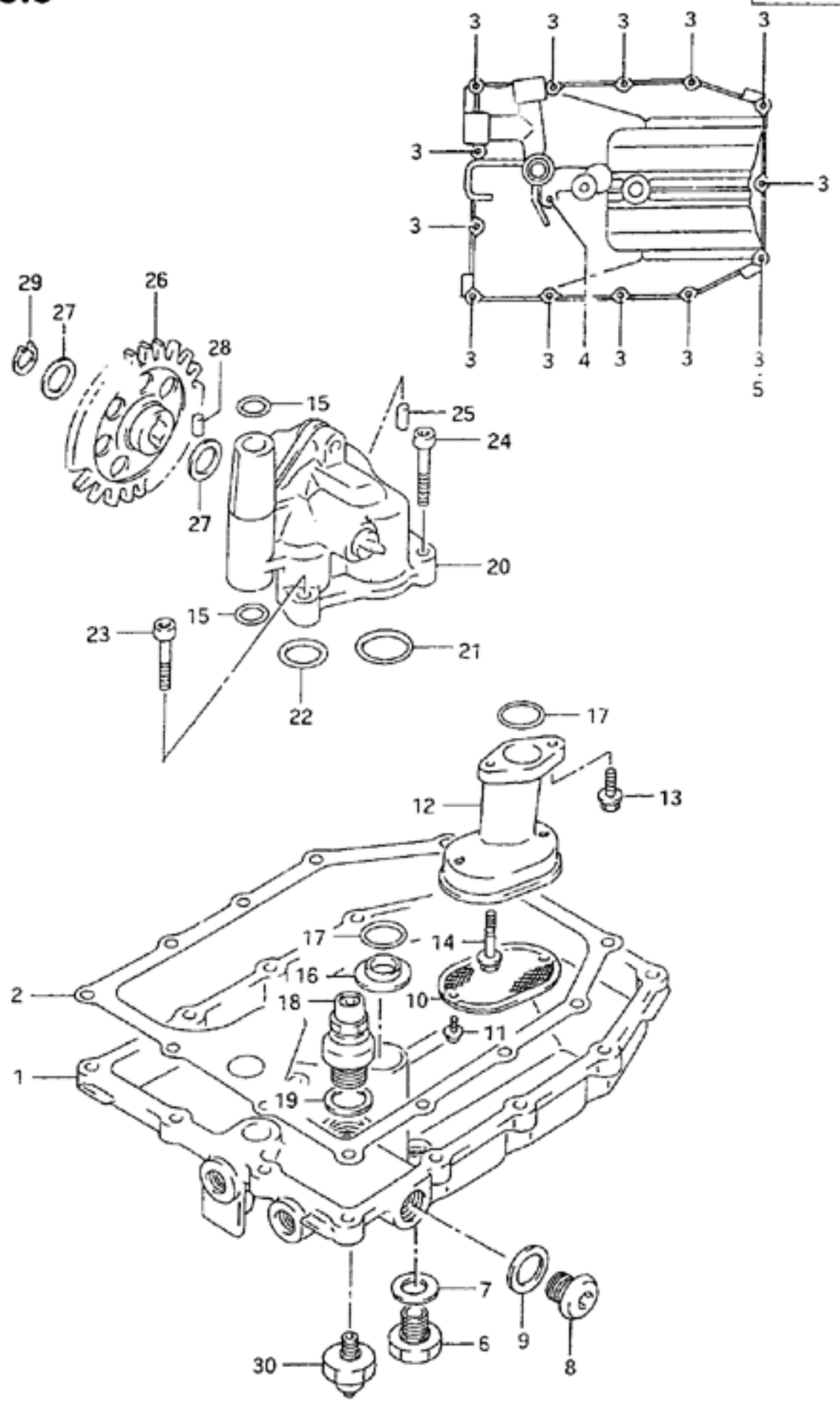


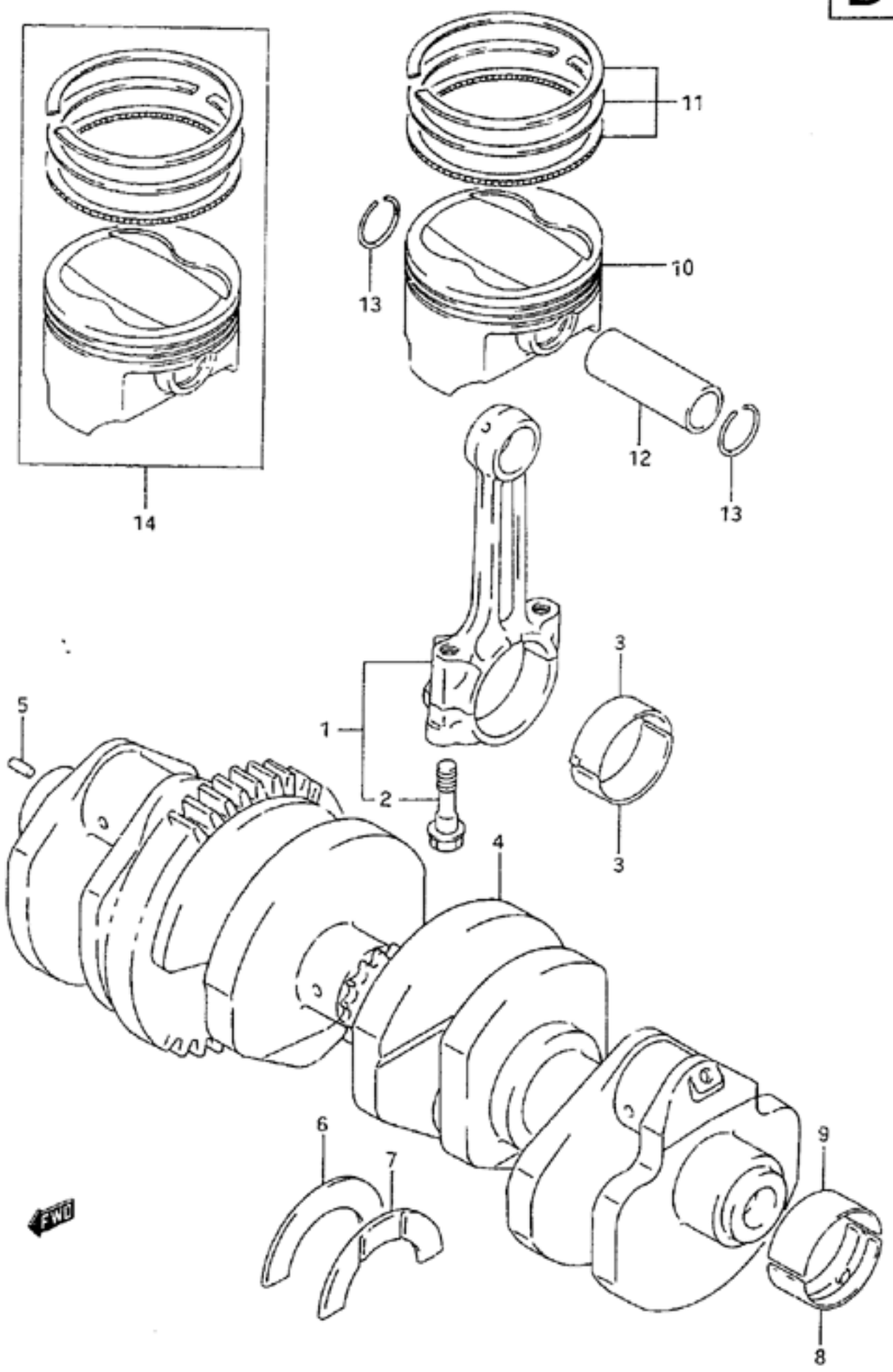
FIG.6 (B- 8) OIL PAN - OIL PUMP

REF NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1	11511-46E02	PAN, oil	1	
2	11489-17E01	GASKET, oil pan	1	
3	01547-06253	BOLT	13	
4	01547-06353	BOLT	1	
5	09168-06024	GASKET	1	
6	09247-14001	PLUG, Oil drain	1	
7	09168-14002	GASKET	1	
8	09248-16010	PLUG, oil gallery	3	
9	09168-16002	GASKET	3	
10	16520-38A00	STRAINER, engine oil	1	
11-1	02112-75123	BOLT	2	model R
11-2	01580-05123	BOLT	2	model S/T/V
12	16525-46E01	PROTECTOR, oil strainer	1	
13	01550-06203	BOLT	1	
14	01550-06553	BOLT	1	
15	09280-12012	O RING (D:2.4,ID:11.8)	2	
16	16529-27A01	GASKET, outlet	1	
17	09280-18009	O RING (D:3.2,ID:17.8)	2	
18-1	16440-17C00	VALVE ASSY, oil relief	1	model R/S
18-2	16440-17C01	VALVE ASSY, oil relief	1	model T/V
19	09168-16002	GASKET	1	
20	16400-46E00	PUMP ASSY, engine oil	1	
21	09280-26005	O RING (D:2.4,ID:26.2)	1	
22	09280-18009	O RING (D:3.2,ID:17.8)	1	
23	07130-06303	BOLT	1	
24	07130-06353	BOLT	2	
25	04211-09129	PIN	2	
26	16332-19C00	GEAR, oil pump driven	1	
27	08221-12205	WASHER	2	
28	09261-05006	PIN	1	
29	08331-31126	CIRCLIP	1	
30	37820-33000	SWITCH, oil pressure	1	

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AIR CLEANER..... C-06	COWLING BODY..... H-02	FRAME COVER..... G-02	FUEL PUMP..... C-08	MUFFLER..... C-07	REAR MASTER CYLINDE J-09	STEERING STEM..... I-04
ALTERNATOR..... E-03	CRANKCASE COVER.... B-07	FRAME..... F-02	FUEL TANK..... F-06	OIL COOLER - OIL FI C-09	REAR SWINGING ARM.. J-02	TAIL LAMP..... E-12
BATTERY..... E-06	CRANKCASE..... B-05	FRONT BRAKE HOSE... I-07	GEAR SHIFTING..... D-10	OIL PAN - OIL PUMP. B-08	REAR WHEEL..... J-05	TRANSMISSION..... D-08
CAM CHAIN..... B-14	CRANKSHAFT..... B-09	FRONT CALIPERS..... I-06	HANDLE BAR..... G-07	OPTIONAL..... J-10	SEAT..... H-15	TURNSIGNAL LAMP.... E-11
CAM SHAFT - VALVE.. B-12	CYLINDER HEAD COVER B-02	FRONT DAMPER..... I-02	HANDLE LEVER..... G-08	RADIATOR HOSE..... D-03	SIGNAL GENERATOR... E-05	UNDER COWLING BODY. H-06
CARBURETOR FITTINGS C-05	CYLINDER HEAD..... B-03	FRONT FENDER..... G-06	HANDLE SWITCH..... E-14	RADIATOR..... D-02	SPEEDOMETER..... E-08	WATER PUMP..... C-10
CARBURETOR..... C-02	CYLINDER..... B-04	FRONT MASTER CYLIND I-08	HEADLAMP..... E-10	REAR CALIPER..... J-07	STAND..... F-03	WIRING HARNESS..... E-13
CLUTCH CYLINDER.... I-09	ELECTRICAL..... E-07	FRONT WHEEL..... I-05	INSTALLATION PARTS. H-05	REAR CUSHION LEVER. J-04	STARTER CLUTCH..... B-11	
CLUTCH..... D-05	FOOTREST..... F-04	FUEL COCK..... F-09	LABEL..... H-14	REAR FENDER..... G-09	STARTING MOTOR..... E-02	

FIG.7



B - 9

8

FIG.7 (B- 9) CRANKSHAFT

REF NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1	12160-31E02	ROD ASSY, connecting	4	
2	12163-17C50	.BOLT	8	
3-1	12164-31E00-0A0	BEARING, crank pin (Green)	8	model R/S
3-2	12164-31E00-0B0	BEARING, crank pin (Black)	8	model R/S
3-3	12164-31E00-0C0	BEARING, crank pin (Brown)	8	model R/S
3-4	12164-31E00-0D0	BEARING, crank pin (Yellow)	8	model R/S
3-5	12164-31E50-0A0	BEARING, crank pin (Green)	8	model T/V
3-6	12164-31E50-0B0	BEARING, crank pin (Black)	8	model T/V
3-7	12164-31E50-0C0	BEARING, crank pin (Brown)	8	model T/V
3-8	12164-31E50-0D0	BEARING, crank pin (Yellow)	8	model T/V
4	12000-31810	CRANKSHAFT SET	1	
5	04221-04089	.PIN	1	
6	12228-17E00-0D0	.BEARING, thrust RH (Green)	1	
7-1	12228-17E00-0A0	.BEARING, thrust LH (Red)	1	
7-2	12228-17E00-0B0	.BEARING, thrust LH (Black)	1	
7-3	12228-17E00-0C0	.BEARING, thrust LH (Blue)	1	
7-4	12228-17E00-0D0	.BEARING, thrust LH (Green)	1	
7-5	12228-17E00-0E0	.BEARING, thrust LH (Yellow)	1	
7-6	12228-17E00-0F0	.BEARING, thrust LH (White)	1	
8-1	12229-31E00-0A0	BEARING, crankshaft (Green)	6	LOWER model R/S
8-2	12229-31E00-0B0	BEARING, crankshaft (Black)	6	model R/S
8-3	12229-31E00-0C0	BEARING, crankshaft (Brown)	6	model R/S
8-4	12229-31E00-0D0	BEARING, crankshaft (Yellow)	6	model R/S
8-5	12229-31E50-0A0	BEARING, crankshaft (Green)	6	model T/V
8-6	12229-31E50-0B0	BEARING, crankshaft (Black)	6	model T/V
8-7	12229-31E50-0C0	BEARING, crankshaft (Brown)	6	model T/V
8-8	12229-31E50-0D0	BEARING, crankshaft (Yellow)	6	model T/V
9-1	12229-31E10-0A0	BEARING, crankshaft (Green)	6	UPPER model R/S
9-2	12229-31E10-0B0	BEARING, crankshaft (Black)	6	model R/S
9-3	12229-31E10-0C0	BEARING, crankshaft (Brown)	6	model R/S
9-4	12229-31E10-0D0	BEARING, crankshaft (Yellow)	6	model R/S
9-5	12229-31E60-0A0	BEARING, crankshaft (Green)	6	model T/V
9-6	12229-31E60-0B0	BEARING, crankshaft (Black)	6	model T/V
9-7	12229-31E60-0C0	BEARING, crankshaft (Brown)	6	model T/V
9-8	12229-31E60-0D0	BEARING, crankshaft (Yellow)	6	model T/V

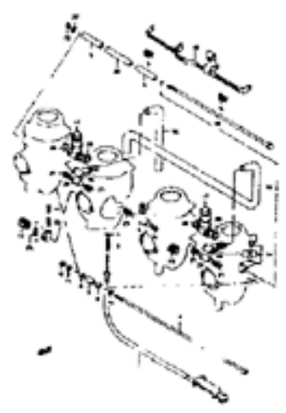
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AIR CLEANER..... C-06	COWLING BODY..... H-02	FRAME COVER..... G-02	FUEL PUMP..... C-08	MUFFLER..... C-07	REAR MASTER CYLINDE J-09	STEERING STEM..... I-04
ALTERNATOR..... E-03	CRANKCASE COVER.... B-07	FRAME..... F-02	FUEL TANK..... F-06	OIL COOLER - OIL FI C-09	REAR SWINGING ARM.. J-02	TAIL LAMP..... E-12
BATTERY..... E-06	CRANKCASE..... B-05	FRONT BRAKE HOSE... I-07	GEAR SHIFTING..... J-10	OIL PAN - OIL PUMP. B-08	REAR WHEEL..... J-05	TRANSMISSION..... D-08
CAM CHAIN..... B-14	CRANKSHAFT..... B-09	FRONT CALIPERS..... I-06	HANDLE BAR..... G-07	OPTIONAL..... J-10	SEAT..... H-15	TURNSIGNAL LAMP.... E-11
CAM SHAFT - VALVE.. B-12	CYLINDER HEAD COVER B-02	FRONT DAMPER..... I-02	HANDLE LEVER..... G-08	RADIATOR HOSE..... D-03	SIGNAL GENERATOR... E-05	UNDER COWLING BODY. H-06
CARBURETOR FITTINGS C-05	CYLINDER HEAD..... B-03	FRONT FENDER..... G-06	HANDLE SWITCH..... E-14	RADIATOR..... D-02	SPEEDOMETER..... E-08	WATER PUMP..... C-10
CARBURETOR..... C-02	CYLINDER..... B-04	FRONT MASTER CYLIND I-08	HEADLAMP..... E-10	REAR CALIPER..... J-07	STAND..... F-03	WIRING HARNESS..... E-13
CLUTCH CYLINDER.... I-09	ELECTRICAL..... E-07	FRONT WHEEL..... I-05	INSTALLATION PARTS. H-05	REAR CUSHION LEVER. J-04	STARTER CLUTCH..... B-11	
CLUTCH..... D-05	FOOTREST..... F-04	FUEL COCK..... F-09	LABEL..... H-14	REAR FENDER..... G-09	STARTING MOTOR..... E-02	

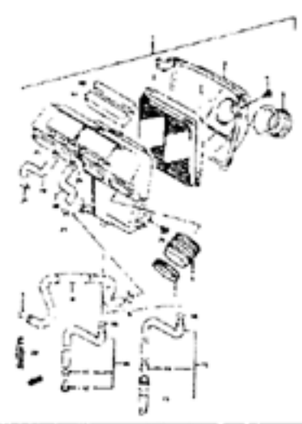
CARBURETOR C-02



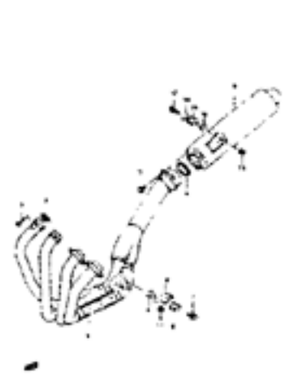
CARBURETOR FITTINGS C-05



AIR CLEANER C-06



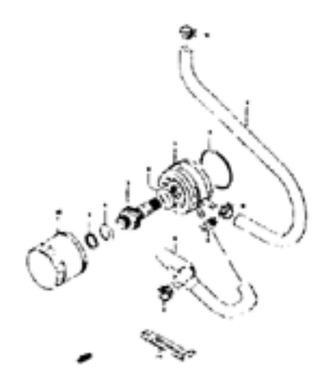
MUFFLER C-07



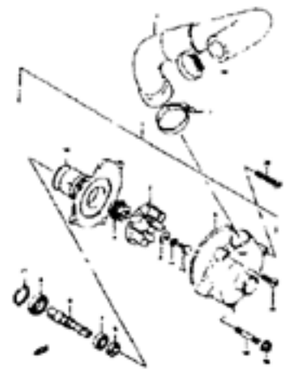
FUEL PUMP C-08



OIL COOLER - OIL FILTER C-09



WATER PUMP C-10



AIR CLEANER..... C-06
ALTERNATOR..... E-03
BATTERY..... E-06
CAM CHAIN..... B-14
CAM SHAFT - VALVE.. B-12
CARBURETOR FITTINGS C-05
CARBURETOR..... C-02
CLUTCH CYLINDER.... I-09
CLUTCH..... D-05
COWLING BODY..... H-02
CRANKCASE COVER.... B-07
CRANKCASE..... B-05
CRANKSHAFT..... B-09
CYLINDER HEAD COVER B-02
CYLINDER HEAD..... B-03
CYLINDER..... B-04
ELECTRICAL..... E-07
FOOTREST..... F-04
FRAME COVER..... G-02
FRAME..... F-02
FRONT BRAKE HOSE... I-07
FRONT CALIPERS..... I-06
FRONT DAMPER..... I-02
FRONT FENDER..... G-06
FRONT MASTER CYLIND I-08
FRONT WHEEL..... I-05
FUEL COCK..... F-09
FUEL PUMP..... C-08
FUEL TANK..... F-06
GEAR SHIFTING..... D-10
HANDLE BAR..... G-07
HANDLE LEVER..... G-08
HANDLE SWITCH..... E-14
HEADLAMP..... E-10
INSTALLATION PARTS. H-05
LABEL..... H-14
MUFFLER..... C-07
OIL COOLER - OIL FI C-09
OIL PAN - OIL PUMP. B-08
OPTIONAL..... J-10
RADIATOR HOSE..... D-03
RADIATOR..... D-02
REAR CALIPER..... J-07
REAR CUSHION LEVER. J-04
REAR FENDER..... G-09
REAR MASTER CYLINDE J-09
REAR SWINGING ARM.. J-02
REAR WHEEL..... J-05
SEAT..... H-15
SIGNAL GENERATOR... E-05
SPEEDOMETER..... E-08
STAND..... F-03
STARTER CLUTCH..... B-11
STARTING MOTOR..... E-02
STEERING STEM..... I-04
TAIL LAMP..... E-12
TRANSMISSION..... D-08
TURNSIGNAL LAMP.... E-11
UNDER COWLING BODY. H-06
WATER PUMP..... C-10
WIRING HARNESS..... E-13

FIG.17

C - 10

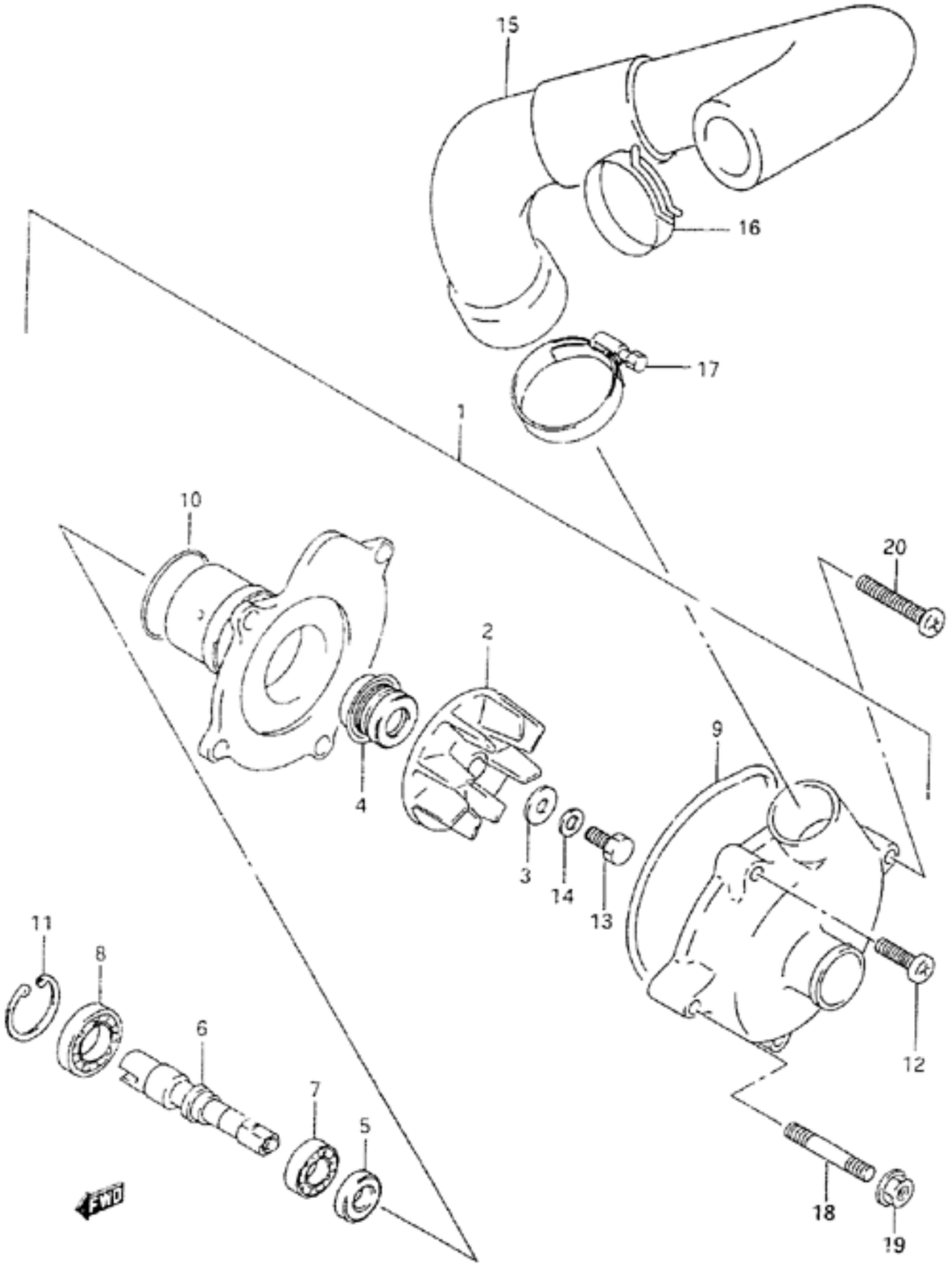


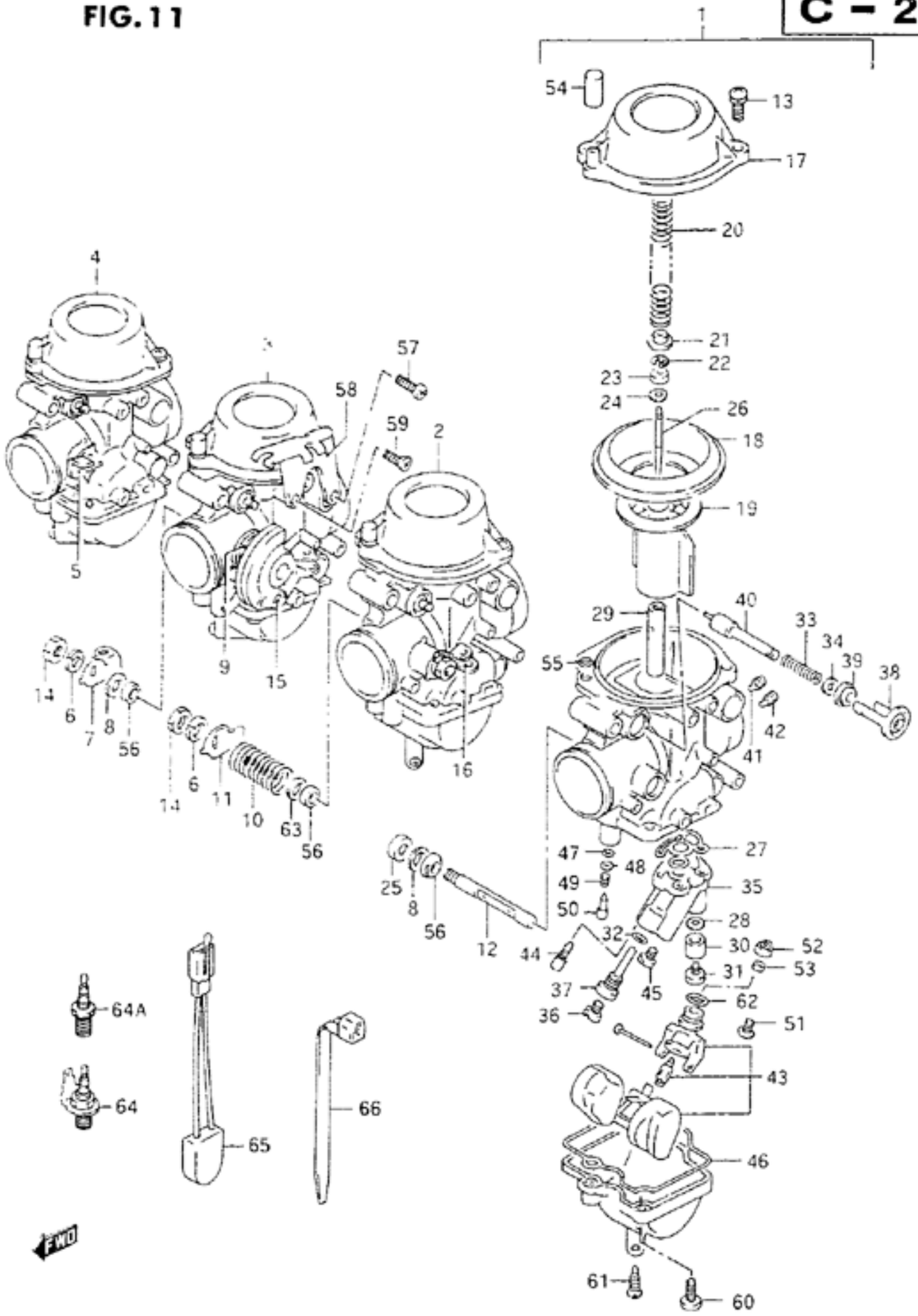
FIG.17 (C-10) WATER PUMP

REF NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1-1	17400-17E00	PUMP ASSY, water	1	model R
1-2	17400-17E01	PUMP ASSY, water	1	model S/T/V
2	17491-17E00	.IMPELLER, water pump	1	
3	09168-06025	.GASKET	1	
4	17470-46A00	.SEAL, mechanical	1	
5-1	17461-38A00	.OIL SEAL	1	model R/S
5-2	09283-10004	.OIL SEAL (10x21x5)	1	model T/V
6-1	17511-17E00	.SHAFT, water pump	1	for 17400-17E00
6-2	17511-17E01	.SHAFT, water pump	1	for 17400-17E01
7-1	08113-69010	.BEARING	1	for 17400-17E00
7-2	09262-10014	.BEARING (10x26x8)	1	for 17400-17E01
8-1	09262-15008	.BEARING	1	for 17400-17E00
8-2	09262-12001	.BEARING (12x28x8)	1	for 17400-17E01
9	17418-33400	.O RING	1	
10	17435-33400	.O RING	1	
11	08331-41286	.CIRCLIP	1	for 17400-17E00
12	02112-06163	.SCREW	2	
13	09100-06099	.BOLT (6x13)	1	
14	09164-06006	.LOCK WASHER	1	
15	17854-17E01	HOSE, water pump outlet	1	
16	09401-26404	CLAMP	1	
17-1	09402-33502	CLAMP	1	model R
17-2	09402-38511	CLAMP	1	model S/T/V
18	09108-06117	BOLT (6x12)	1	
19	08316-10063	NUT	1	
20	02112-06353	SCREW	2	

AIR CLEANER..... C-06
ALTERNATOR..... E-03
BATTERY..... E-06
CAM CHAIN..... B-14
CAM SHAFT - VALVE.. B-12
CARBURETOR FITTINGS C-05
CARBURETOR..... C-02
CLUTCH CYLINDER.... I-09
CLUTCH..... D-05
COWLING BODY..... H-02
CRANKCASE COVER.... B-07
CRANKCASE..... B-05
CRANKSHAFT..... B-09
CYLINDER HEAD COVER B-02
CYLINDER HEAD..... B-03
CYLINDER..... B-04
ELECTRICAL..... E-07
FOOTREST..... F-04
FRAME COVER..... G-02
FRAME..... F-02
FRONT BRAKE HOSE... I-07
FRONT CALIPERS..... I-06
FRONT DAMPER..... I-02
FRONT FENDER..... G-06
FRONT MASTER CYLIND I-08
FRONT WHEEL..... I-05
FUEL COCK..... F-09
FUEL PUMP..... C-08
FUEL TANK..... F-06
GEAR SHIFTING..... D-10
HANDLE BAR..... G-07
HANDLE LEVER..... G-08
HANDLE SWITCH..... E-14
HEADLAMP..... E-10
INSTALLATION PARTS. H-05
LABEL..... H-14
MUFFLER..... C-07
OIL COOLER - OIL FI C-09
OIL PAN - OIL PUMP. B-08
OPTIONAL..... J-10
RADIATOR HOSE..... D-03
RADIATOR..... D-02
REAR CALIPER..... J-07
REAR CUSHION LEVER. J-04
REAR FENDER..... G-09
REAR MASTER CYLINDE J-09
REAR SWINGING ARM.. J-02
REAR WHEEL..... J-05
SEAT..... H-15
SIGNAL GENERATOR... E-05
SPEEDOMETER..... E-08
STAND..... F-03
STARTER CLUTCH..... B-11
STARTING MOTOR..... E-02
STEERING STEM..... I-04
TAIL LAMP..... E-12
TRANSMISSION..... D-08
TURNSIGNAL LAMP.... E-11
UNDER COWLING BODY. H-06
WATER PUMP..... C-10
WIRING HARNESS..... E-13

FIG.11

C - 2



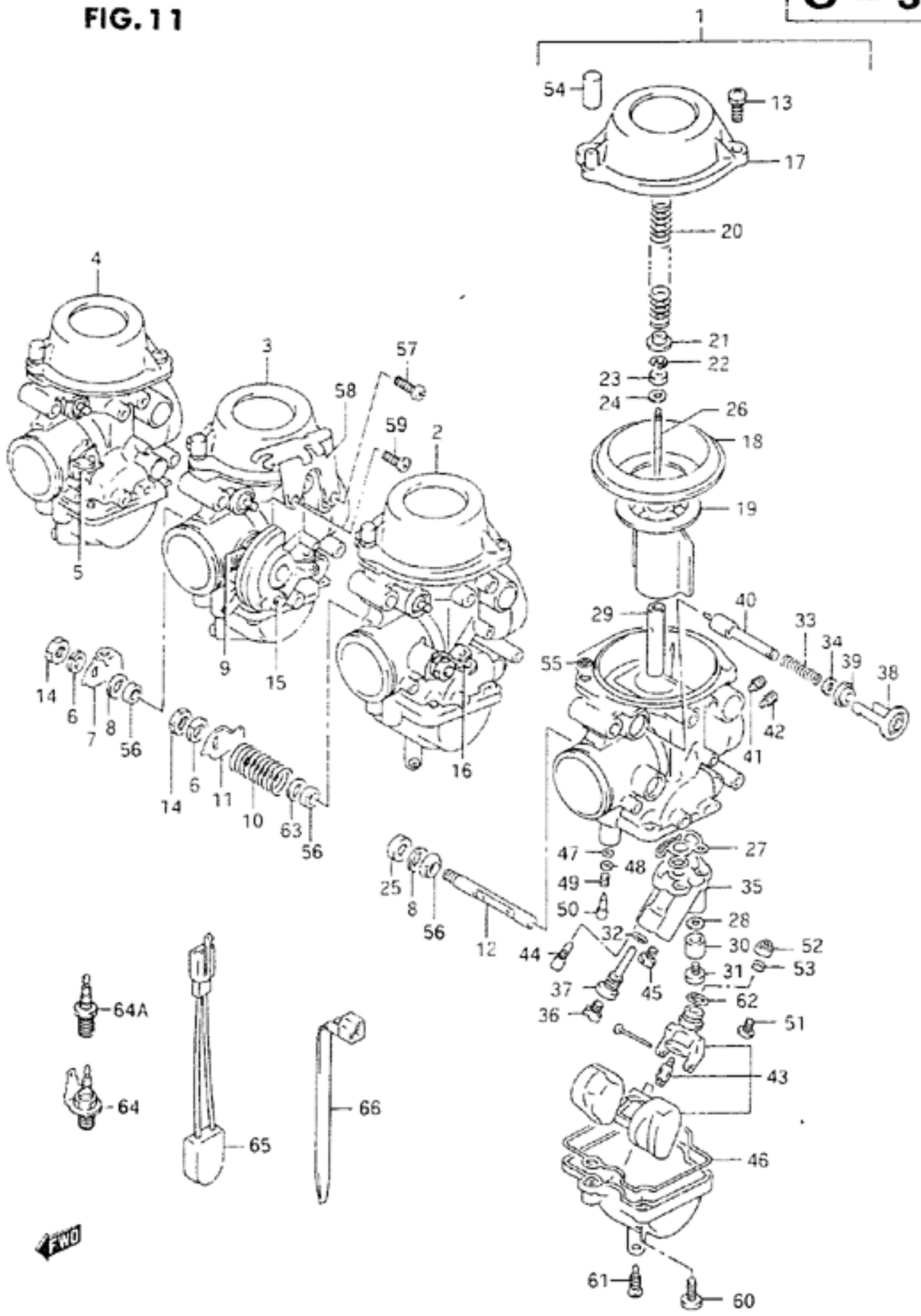
REF NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1-1	13201-31E00	CARBURETOR ASSY, LH	1	model R
1-2	13201-31E01	CARBURETOR ASSY, LH	1	model S/T/V
2-1	13202-31E00	CARBURETOR ASSY, ML	1	model R
2-2	13202-31E01	CARBURETOR ASSY, ML	1	model S/T/V
3-1	13203-31E00	CARBURETOR ASSY, MR	1	model R
3-2	13203-31E01	CARBURETOR ASSY, MR	1	model S/T/V
4-1	13204-31E00	CARBURETOR ASSY, RH	1	model R
4-2	13204-31E01	CARBURETOR ASSY, RH	1	model S/T/V
5	13550-21E30	.SHAFT, throttle	1	RH
6	09169-08012	.WASHER	2	ML,MR
7	13553-21E10	.LEVER, throttle	1	MR
8	13557-47070	.GASKET	4	
9	13573-21E10	.SPRING	1	MR
10	13573-21E00	.SPRING	1	ML
11	13550-21E10	.LEVER, throttle	1	ML
12	13550-21E00	.SHAFT, throttle	1	LH
13	02112-75163	.SCREW	8	
14	08310-00087	.NUT	2	ML,MR
15	13550-21E20	.SHAFT, throttle	1	MR
16	13553-21E00	.SHAFT, throttle	1	ML
17	13502-17E20	.COVER, diaphragm	4	
18	13507-17C01	.DIAPHRAGM	4	
19	13501-18E00	.VALVE, piston	4	
20	13417-31E00	.SPRING	4	
21	13382-42A00	.RING	4	
22	13394-40D20	.CLIP, needle	4	
23	13387-47010	.RING	4	
24	13382-4403J	.WASHER	4	
25	13574-32C00	.RING	2	LH,RH
26	13383-31E20	.NEEDLE, jet (5DV1-3)	4	
27	13251-33C00	.O RING	4	
28	13332-05A10	.WASHER	4	
29	09494-00810	.JET, needle (0-9)	4	
30	13331-21E40	.RING	4	
31	13602-06C20	.SCREW	4	

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AIR CLEANER..... C-06
ALTERNATOR..... E-03
BATTERY..... E-06
CAM CHAIN..... B-14
CAM SHAFT - VALVE.. B-12
CARBURETOR FITTINGS C-05
CARBURETOR..... C-02
CLUTCH CYLINDER.... I-09
CLUTCH..... D-05
COWLING BODY..... H-02
CRANKCASE COVER.... B-07
CRANKCASE..... B-05
CRANKSHAFT..... B-09
CYLINDER HEAD COVER B-02
CYLINDER HEAD..... B-03
CYLINDER..... B-04
ELECTRICAL..... E-07
FOOTREST..... F-04
FRAME COVER..... G-02
FRAME..... F-02
FRONT BRAKE HOSE... I-07
FRONT CALIPERS..... I-06
FRONT DAMPER..... I-02
FRONT FENDER..... G-06
FRONT MASTER CYLIND I-08
FRONT WHEEL..... I-05
FUEL COCK..... F-09
FUEL PUMP..... C-08
FUEL TANK..... F-06
GEAR SHIFTING..... D-10
HANDLE BAR..... G-07
HANDLE LEVER..... G-08
HANDLE SWITCH..... E-14
HEADLAMP..... E-10
INSTALLATION PARTS. H-05
LABEL..... H-14
MUFFLER..... C-07
OIL COOLER - OIL FI C-09
OIL PAN - OIL PUMP. B-08
OPTIONAL..... J-10
RADIATOR HOSE..... D-03
RADIATOR..... D-02
REAR CALIPER..... J-07
REAR CUSHION LEVER. J-04
REAR FENDER..... G-09
REAR MASTER CYLINDE J-09
REAR SWINGING ARM.. J-02
REAR WHEEL..... J-05
SEAT..... H-15
SIGNAL GENERATOR... E-05
SPEEDOMETER..... E-08
STAND..... F-03
STARTER CLUTCH..... B-11
STARTING MOTOR..... E-02
STEERING STEM..... I-04
TAIL LAMP..... E-12
TRANSMISSION..... D-08
TURNSIGNAL LAMP. .. E-11
UNDER COWLING BODY. H-06
WATER PUMP..... C-10
WIRING HARNESS..... E-13

FIG. 11

C - 3



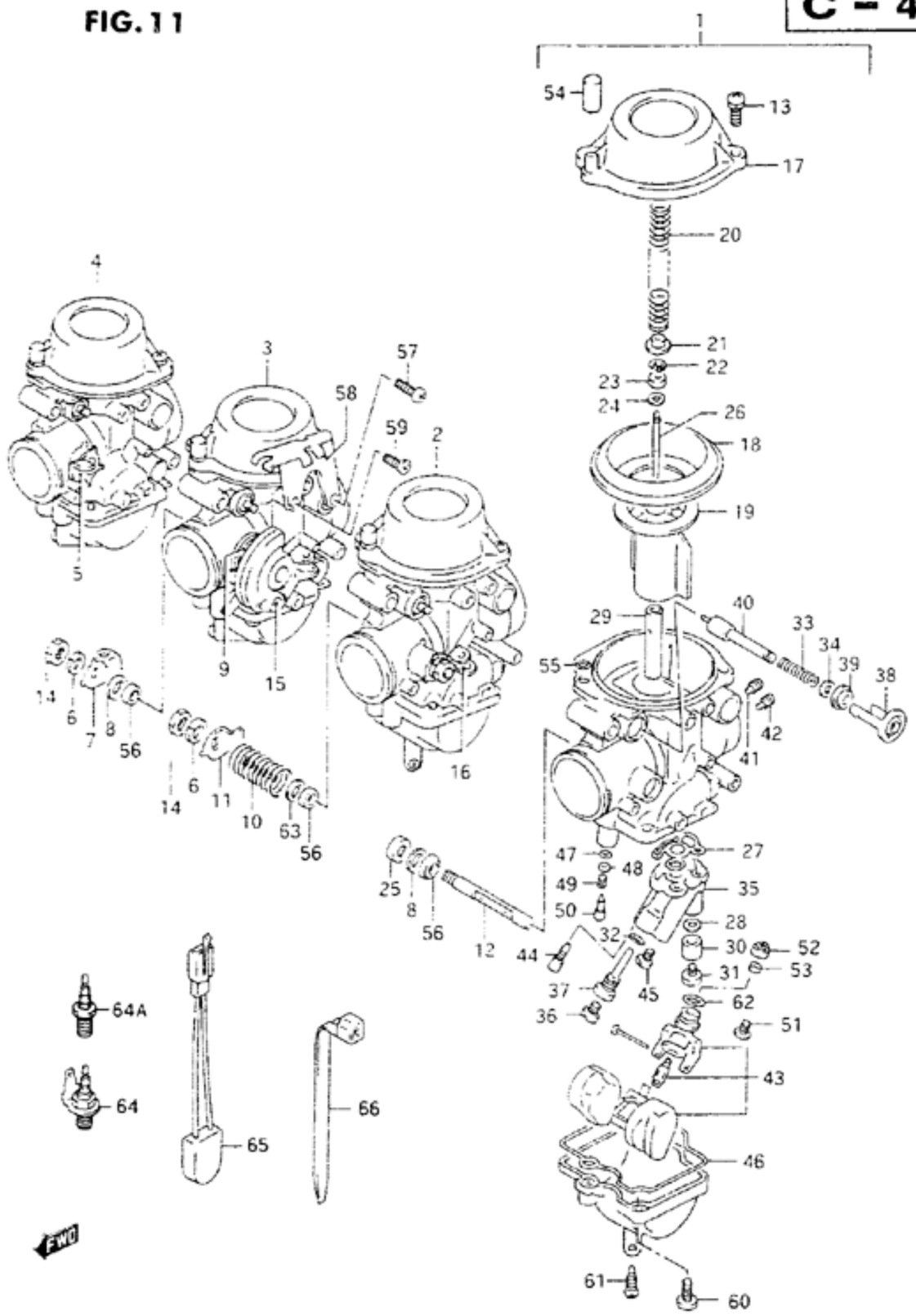
REF NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
32	13294-33C00	.O RING	4	
33	13417-26D00	.SPRING	4	
34	13432-47090	.WASHER	4	
35	13220-21E00	.HOLDER, jet	4	
36-1	09491-22025	.JET, main (112.5)	4	model R/S/T
36-2	09491-22014	.JET, main (112.5)	4	model V
37	13385-21E00	.HOLDER, jet	4	
38	13418-17C10	.HOLDER, guide	4	
39	13418-17C00	.CAP, starter	4	
40	13411-05320	.PLUNGER ASSY	4	
41-1	09493-80010	.JET, main air (0.8)	2	LH,RH
41-2	09493-18001	.JET, main air (0.9)	2	ML,MR
42	09493-24013	.JET, pilot air (120)	4	
43	13250-21E00	.FLOAT/NEEDLE VALVE ASSY	4	
44	09492-12008	.JET, pilot (12.5)	4	
45	09491-50006	.JET, starter (50)	4	
46	13258-33C00	.SEAL	4	
47	13295-29900	.O RING	4	
48	13291-29900	.WASHER	4	
49	13268-47070	.SPRING	4	
50	13279-47070	.SCREW, pilot (1.1/4)	4	
51	13602-05A10	.SCREW	4	
52	13376-84110	.FILTER	4	
53	13331-06C20	.RING	4	
54	13508-17C00	.CAP	4	
55	13251-06C10	.O RING	4	
56	13651-51010	.SEAL	6	LH,RH:1,ML,MR:2
57	13601-05148	.SCREW	1	MR
58	13627-31E00	.BRACKET	1	MR
59	02122-05103	.SCREW	1	MR
60	02112-05127	.SCREW	8	

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AIR CLEANER.....	C-06	COWLING BODY.....	H-02	FRAME COVER.....	G-02	FUEL PUMP.....	C-08	MUFFLER.....	C-07	REAR MASTER CYLINDE	J-09	STEERING STEM.....	I-04
ALTERNATOR.....	E-03	CRANKCASE COVER....	B-07	FRAME.....	F-02	FUEL TANK.....	F-06	OIL COOLER - OIL PI	C-09	REAR SWINGING ARM..	J-02	TAIL LAMP.....	E-12
BATTERY.....	E-06	CRANKCASE.....	B-05	FRONT BRAKE HOSE...	I-07	GEAR SHIFTING.....	D-10	OIL PAN - OIL PUMP.	B-08	REAR WHEEL.....	J-05	TRANSMISSION.....	D-08
CAM CHAIN.....	B-14	CRANKSHAFT.....	B-09	FRONT CALIPERS.....	I-06	HANDLE BAR.....	G-07	OPTIONAL.....	J-10	SEAT.....	H-15	TURNSIGNAL LAMP....	E-11
CAM SHAFT - VALVE..	B-12	CYLINDER HEAD COVER	B-02	FRONT DAMPER.....	I-02	HANDLE LEVER.....	G-08	RADIATOR HOSE.....	D-03	SIGNAL GENERATOR...	E-05	UNDER COWLING BODY.	H-06
CARBURETOR FITTINGS	C-05	CYLINDER HEAD.....	B-03	FRONT FENDER.....	G-06	HANDLE SWITCH.....	E-14	RADIATOR.....	D-02	SPEEDOMETER.....	E-08	WATER PUMP.....	C-10
CARBURETOR.....	C-02	CYLINDER.....	B-04	FRONT MASTER CYLIND	I-08	HEADLAMP.....	E-10	REAR CALIPER.....	J-07	STAND.....	F-03	WIRING HARNESS.....	E-13
CLUTCH CYLINDER....	I-09	ELECTRICAL.....	E-07	FRONT WHEEL.....	I-05	INSTALLATION PARTS.	H-05	REAR CUSHION LEVER.	J-04	STARTER CLUTCH.....	B-11		
CLUTCH.....	D-05	FOOTREST.....	F-04	FUEL COCK.....	F-09	LABEL.....	H-14	REAR FENDER.....	G-09	STARTING MOTOR.....	E-02		

FIG. 11

C - 4



REF NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
61	13247-13A00	.SCREW, drain	4	
62	13374-44080	.O RING	4	
63	13557-07000	.RING	1	ML
64	13650-25E00	HEATER ASSY, CARB	1	RH
64A	13651-25E00	HEATER, CARB	3	LH,ML,MR
65	13655-25E00	THERMO SWITCH, CARB heater	1	
66	09407-14403	CLAMP (L:125)	1	

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AIR CLEANER	C-06	COWLING BODY	H-02	FRAME COVER	G-02	FUEL PUMP	C-08	MUFFLER	C-07	REAR MASTER CYLINDE	J-09	STEERING STEM	I-04
ALTERNATOR	E-03	CRANKCASE COVER	B-07	FRAME	F-02	FUEL TANK	F-06	OIL COOLER - OIL FI	C-09	REAR SWINGING ARM	J-02	TAIL LAMP	E-12
BATTERY	E-06	CRANKCASE	B-05	FRONT BRAKE HOSE	I-07	GEAR SHIFTING	D-10	OIL PAN - OIL PUMP	B-08	REAR WHEEL	J-05	TRANSMISSION	D-08
CAM CHAIN	B-14	CRANKSHAFT	B-09	FRONT CALIPERS	I-06	HANDLE BAR	G-07	OPTIONAL	J-10	SEAT	H-15	TURNSIGNAL LAMP	E-11
CAM SHAFT - VALVE	B-12	CYLINDER HEAD COVER	B-02	FRONT DAMPER	I-02	HANDLE LEVER	G-08	RADIATOR HOSE	D-03	SIGNAL GENERATOR	E-05	UNDER COWLING BODY	H-06
CARBURETOR FITTINGS	C-05	CYLINDER HEAD	B-03	FRONT FENDER	G-06	HANDLE SWITCH	E-14	RADIATOR	D-02	SPEEDOMETER	E-08	WATER PUMP	C-10
CARBURETOR	C-02	CYLINDER	B-04	FRONT MASTER CYLIND	I-08	HEADLAMP	E-10	REAR CALIPER	J-07	STAND	F-03	WIRING HARNESS	E-13
CLUTCH CYLINDER	I-09	ELECTRICAL	E-07	FRONT WHEEL	I-05	INSTALLATION PARTS	H-05	REAR CUSHION LEVER	J-04	STARTER CLUTCH	B-11		
CLUTCH	D-05	FOOTREST	F-04	FUEL COCK	F-09	LABEL	H-14	REAR FENDER	G-09	STARTING MOTOR	E-02		

FIG. 12

C - 5

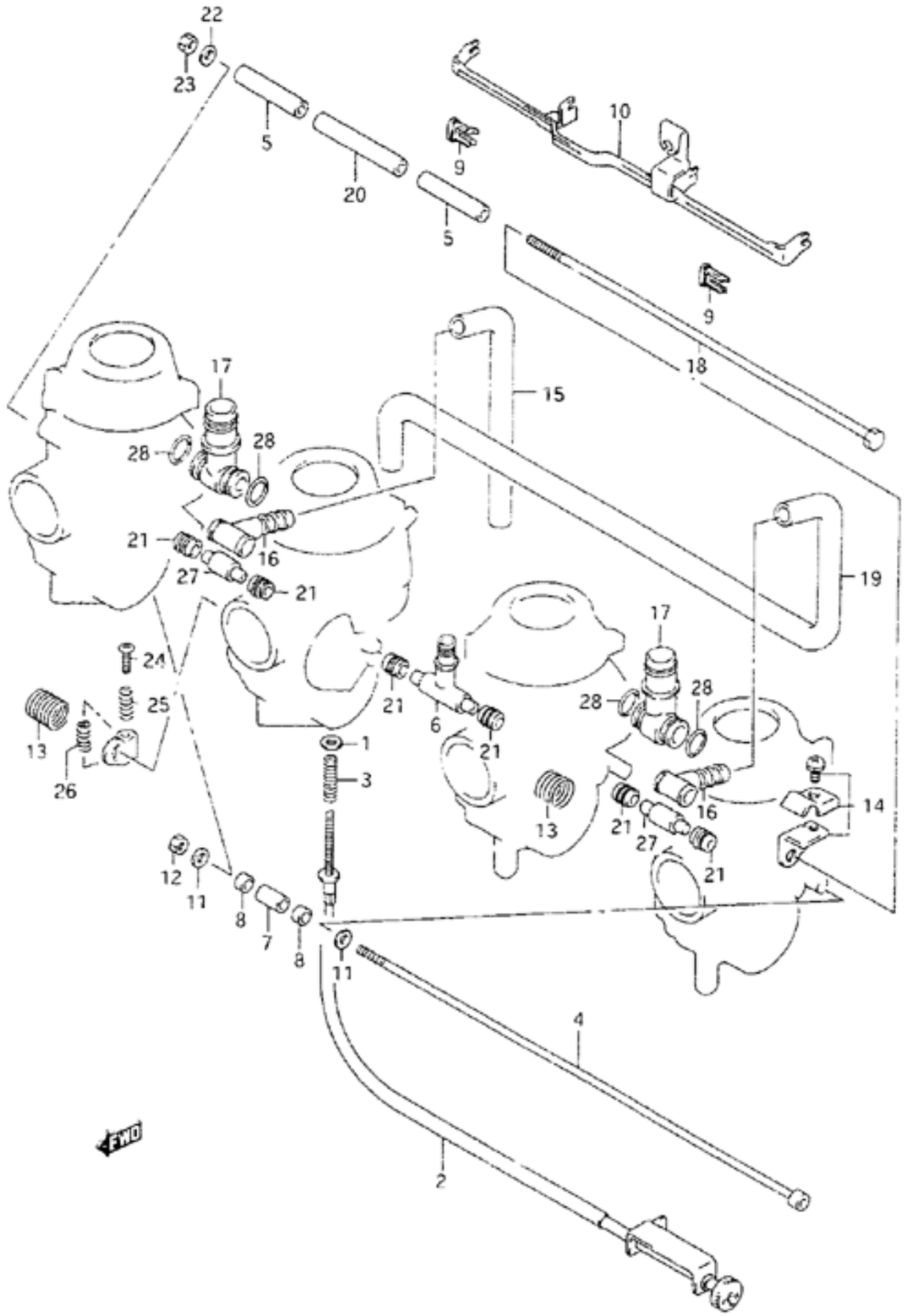


FIG.12 (C- 5) CARBURETOR FITTINGS

REF NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1	13427-38300	WASHER	1	
2	13267-21E00	ADJUSTER	1	
3	13271-33C00	SPRING	1	
4	13612-21E00	BOLT	1	
5	13331-21E00	RING	2	
6	13685-21E00	NIPPLE	1	
7	13331-21E20	RING	1	
8	13331-21E30	RING	2	
9	13439-17C00	HOLDER	2	
10	13413-31E00	LEVER, starter	1	
11	08322-01053	WASHER	2	
12	08310-00053	NUT	1	
13	13573-06C10	SPRING	2	
14	13624-33C00	BRACKET ASSY	1	
15	13683-21E10	HOSE (ID:9xOD:13)	1	
16	13683-34C00	HOSE	2	
17	13685-33C00	NIPPLE	2	
18	13612-21E10	BOLT	1	
19	13683-21E00	HOSE (ID:9xOD:13)	1	
20	13331-21E10	RING	1	
21	13673-44B00	SEAL	6	
22	08322-01063	WASHER	1	
23	08310-00063	NUT	1	
24	13267-44B00	SCREW	3	
25	13271-44B00	SPRING	3	
26	13268-96110	SPRING	3	
27	13685-21E10	PIPE	2	
28-1	13509-33C00	O RING	4	model R
28-2	09280-10005	O RING (D:1.9,ID:9.8)	4	model S/T/V

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AIR CLEANER.....	C-06	COWLING BODY.....	H-02	FRAME COVER.....	G-02	FUEL PUMP.....	C-08	MUFFLER.....	C-07	REAR MASTER CYLINDE	J-09	STEERING STEM.....	I-04
ALTERNATOR.....	E-03	CRANKCASE COVER....	B-07	FRAME.....	F-02	FUEL TANK.....	F-06	OIL COOLER - OIL FI	C-09	REAR SWINGING ARM..	J-02	TAIL LAMP.....	E-12
BATTERY.....	E-06	CRANKCASE.....	B-05	FRONT BRAKE HOSE...	I-07	GEAR SHIFTING.....	D-10	OIL PAN - OIL PUMP.	B-08	REAR WHEEL.....	J-05	TRANSMISSION.....	D-08
CAM CHAIN.....	B-14	CRANKSHAFT.....	B-09	FRONT CALIPERS.....	I-06	HANDLE BAR.....	G-07	OPTIONAL.....	J-10	SEAT.....	H-15	TURNSIGNAL LAMP....	E-11
CAM SHAFT - VALVE..	B-12	CYLINDER HEAD COVER	B-02	FRONT DAMPER.....	I-02	HANDLE LEVER.....	G-08	RADIATOR HOSE.....	D-03	SIGNAL GENERATOR...	E-05	UNDER COWLING BODY.	H-06
CARBURETOR FITTINGS	C-05	CYLINDER HEAD.....	B-03	FRONT FENDER.....	G-06	HANDLE SWITCH.....	E-14	RADIATOR.....	D-02	SPEEDOMETER.....	E-08	WATER PUMP.....	C-10
CARBURETOR.....	C-02	CYLINDER.....	B-04	FRONT MASTER CYLIND	I-08	HEADLAMP.....	E-10	REAR CALIPER.....	J-07	STAND.....	F-03	WIRING HARNESS.....	E-13
CLUTCH CYLINDER....	I-09	ELECTRICAL.....	E-07	FRONT WHEEL.....	I-05	INSTALLATION PARTS.	H-05	REAR CUSHION LEVER.	J-04	STARTER CLUTCH.....	B-11		
CLUTCH.....	D-05	FOOTREST.....	F-04	FUEL COCK.....	F-09	LABEL.....	H-14	REAR FENDER.....	G-09	STARTING MOTOR.....	E-02		

FIG.13

C - 6

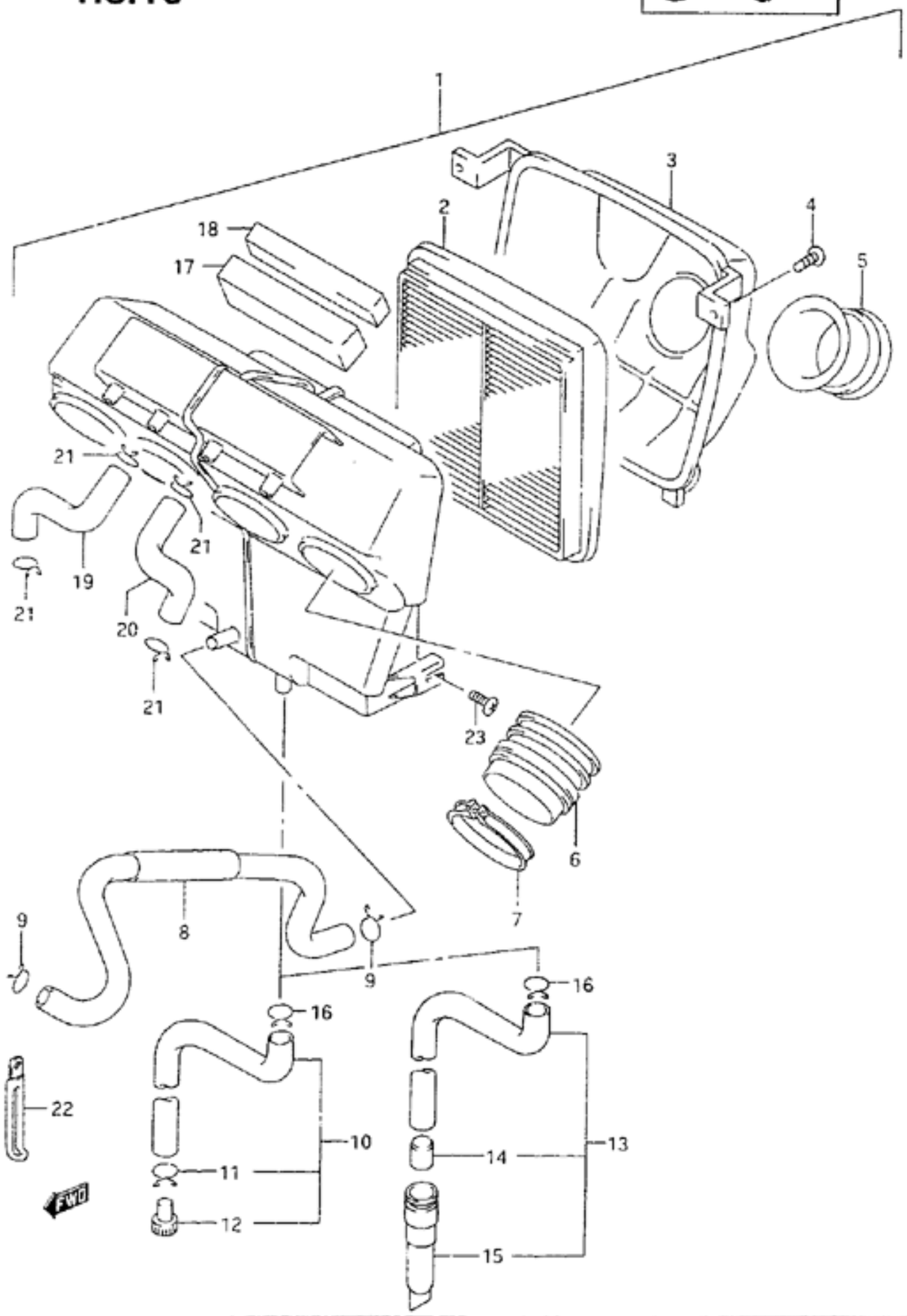


FIG.13 (C- 6) AIR CLEANER

REF NO.	PART NO	DESCRIPTION	Q'TY	REMARKS
1-1	13700-31E00	CLEANER ASSY, air	1	model R
1-2	13700-31E01	CLEANER ASSY, air	1	model S
1-3	13700-31E02	CLEANER ASSY, air	1	model T/V
2	13780-21E00	.FILTER, air	1	
3	13740-21E00	.CAP, air cleaner	1	
4-1	02142-05164	.SCREW	2	model R
4-2	02142-05163	.SCREW	2	model S/T/V
5	13891-17E00	.TUBE, inlet	1	
6	13881-31E00	.TUBE, outlet	4	
7	09402-58208	.CLAMP	4	
8	13850-21E00	.TUBE, breather	1	
9	09401-16401	.CLIP	2	
10	13870-21428	.TUBE, drain	1	model R
11	13824-18910	..CLIP	1	model R
12	13877-38A00	..STOPPER, drain	1	model R
13	13870-21628	.TUBE, drain	1	model S/T/V
14	13789-00020	..FILTER, drain	1	model S/T/V
15	13872-00A00-010	..CAP, TUB drain	1	model S/T/V
16	09401-13409	.CLIP	1	
17	13783-21E01	.FILTER, carb air,No.1	1	
18	13784-21E01	.FILTER, carb air,No.2	1	
19	13855-21E00	.TUBE, carb air R	1	
20	13856-21E00	.TUBE, carb air L	1	
21	09401-16401	.CLIP	4	
22	09404-06433	CLAMP, drain tube	1	
23	02142-06123	SCREW	2	

AIR CLEANER..... C-06
ALTERNATOR..... E-03
BATTERY..... E-06
CAM CHAIN..... B-14
CAM SHAFT - VALVE.. B-12
CARBURETOR FITTINGS C-05
CARBURETOR..... C-02
CLUTCH CYLINDER.... I-09
CLUTCH..... D-05
COWLING BODY..... H-02
CRANKCASE COVER.... B-07
CRANKCASE..... B-05
CRANKSHAFT..... B-09
CYLINDER HEAD COVER B-02
CYLINDER HEAD..... B-03
CYLINDER..... B-04
ELECTRICAL..... E-07
FOOTREST..... F-04
FRAME COVER..... G-02
FRAME..... F-02
FRONT BRAKE HOSE... I-07
FRONT CALIPERS..... I-06
FRONT DAMPER..... I-02
FRONT FENDER..... G-06
FRONT MASTER CYLIND I-08
FRONT WHEEL..... I-05
FUEL COCK..... F-09
FUEL PUMP..... C-08
FUEL TANK..... F-06
GEAR SHIFTING..... D-10
HANDLE BAR..... G-07
HANDLE LEVER..... G-08
HANDLE SWITCH..... E-14
HEADLAMP..... E-10
INSTALLATION PARTS. H-05
LABEL..... H-14
MUFFLER..... C-07
OIL COOLER - OIL FI C-09
OIL PAN - OIL PUMP. B-08
OPTIONAL..... J-10
RADIATOR HOSE..... D-03
RADIATOR..... D-02
REAR CALIPER..... J-07
REAR CUSHION LEVER. J-04
REAR FENDER..... G-09
REAR MASTER CYLINDE J-09
REAR SWINGING ARM.. J-02
REAR WHEEL..... J-05
SEAT..... H-15
SIGNAL GENERATOR... E-05
SPEEDOMETER..... E-08
STAND..... F-03
STARTER CLUTCH..... B-11
STARTING MOTOR..... E-02
STEERING STEM..... I-04
TAIL LAMP..... E-12
TRANSMISSION..... D-08
TURNSIGNAL LAMP.... E-11
UNDER COWLING BODY. H-06
WATER PUMP..... C-10
WIRING HARNESS..... E-13

FIG. 14

C – 7

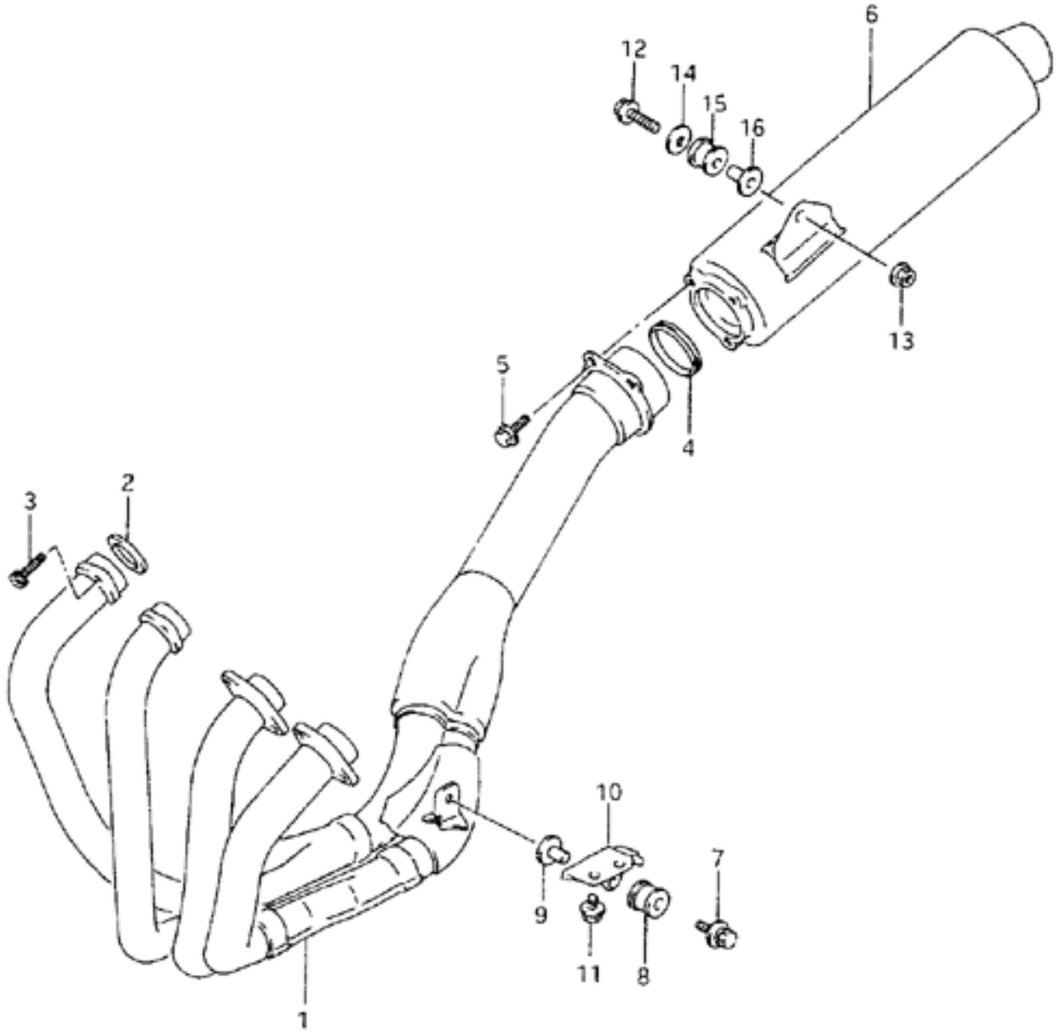


FIG.14 (C- 7) MUFFLER

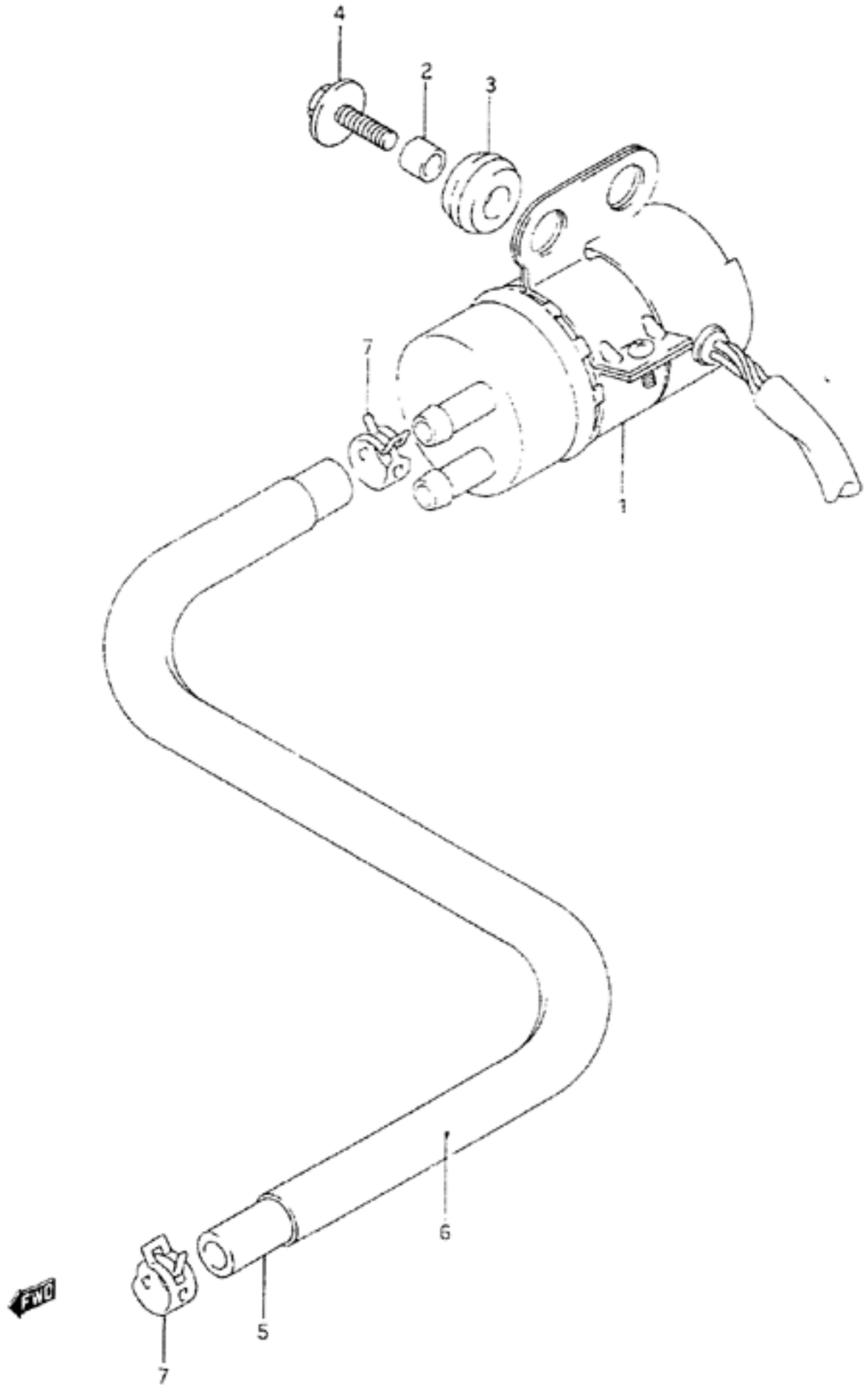
REF NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1	14100-31E00	PIPE, exhaust RH	1	
2	14181-17E00	GASKET, exhaust pipe	4	
3	07130-0P253	BOLT	8	
4	14181-31E00	GASKET, muffler joint	1	
5	09106-08132	BOLT, muffler joint (8x20)	3	
6-1	14310-31E01-H01	BODY, muffler	1	model R
6-2	14310-31E50-H01	BODY, muffler	1	model S/T/V
7	09118-08152	BOLT (8x45)	1	
8	09320-12064	CUSHION	1	
9	09180-08152	SPACER (8.6x12x26.5)	1	
10	14770-31E00	BRACKET, muffler	1	
11	01550-08163	BOLT	2	
12	01550-08457	BOLT	1	
13-1	08361-25083	NUT	1	model R/S
13-2	08361-25088	NUT	1	model T/V
14	09160-08106	WASHER (8.1x33x1.6)	1	
15	09320-12049	CUSHION	1	
16	09180-08156	SPACER (8.6x12x25.5)	1	

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AIR CLEANER..... C-06	COWLING BODY..... H-02	FRAME COVER..... G-02	FUEL PUMP..... C-08	MUFFLER..... C-07	REAR MASTER CYLINDE J-09	STEERING STEM..... I-04
ALTERNATOR..... E-03	CRANKCASE COVER.... B-07	FRAME..... F-02	FUEL TANK..... F-06	OIL COOLER - OIL FI C-09	REAR SWINGING ARM.. J-02	TAIL LAMP..... E-12
BATTERY..... E-06	CRANKCASE..... B-05	FRONT BRAKE HOSE... I-07	GEAR SHIFTING..... D-10	OIL PAN - OIL PUMP. B-08	REAR WHEEL..... J-05	TRANSMISSION..... D-08
CAM CHAIN..... B-14	CRANKSHAFT..... B-09	FRONT CALIPERS..... I-06	HANDLE BAR..... G-07	OPTIONAL..... J-10	SEAT..... H-15	TURNSIGNAL LAMP.... E-11
CAM SHAFT - VALVE.. B-12	CYLINDER HEAD COVER B-02	FRONT DAMPER..... I-02	HANDLE LEVER..... C-08	RADIATOR HOSE..... D-03	SIGNAL GENERATOR... E-05	UNDER COWLING BODY. H-06
CARBURETOR FITTINGS C-05	CYLINDER HEAD..... B-03	FRONT FENDER..... G-06	HANDLE SWITCH E-14	RADIATOR..... D-02	SPEEDOMETER..... E-08	WATER PUMP..... C-10
CARBURETOR..... C-02	CYLINDER..... B-04	FRONT MASTER CYLIND I-08	HEADLAMP..... E-10	REAR CALIPER..... J-07	STAND..... F-03	WIRING HARNESS..... E-13
CLUTCH CYLINDER.... I-09	ELECTRICAL..... E-07	FRONT WHEEL..... I-05	INSTALLATION PARTS. H-05	REAR CUSHION LEVER. J-04	STARTER CLUTCH..... B-11	
CLUTCH..... D-05	FOOTREST..... F-04	FUEL COCK..... F-09	LABEL..... H-14	REAR FENDER..... G-09	STARTING MOTOR..... E-02	

FIG. 15

C - 8



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FIG.15 (C- 8) FUEL PUMP

REF NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1	15100-21E01	PUMP ASSY, fuel	1	
2-1	09180-06011	SPACER (6.1x9x9)	2	model R/S/T
2-2	09180-06263	SPACER (6.5x9x9)	2	model V
3	09320-09009	CUSHION	2	
4	09116-06010	BOLT (6x20)	2	
5-1	09354-70133-600	HOSE (7x13x600)	1	L:600→370,model R/S/T
5-2	09355-70125-600	HOSE (7x12x600)	1	L:600→380,model V
6	09351-14152-600	PROTECTOR (14.5x15.5x600)	1	L:600→330
7-1	09401-12404	CLIP	2	model R
7-2	09401-11407	CLIP	2	model S/T/V

AIR CLEANER.....	C-06	COWLING BODY.....	H-02	FRAME COVER.....	G-02	FUEL PUMP.....	C-08	MUFFLER.....	C-07	REAR MASTER CYLINDE	J-09	STEERING STEM.....	I-04
ALTERNATOR.....	E-03	CRANKCASE COVER....	B-07	FRAME.....	F-02	FUEL TANK.....	F-06	OIL COOLER - OIL FI	C-09	REAR SWINGING ARM..	J-02	TAIL LAMP.....	E-12
BATTERY.....	E-06	CRANKCASE.....	B-05	FRONT BRAKE HOSE...	I-07	GEAR SHIFTING.....	D-10	OIL PAN - OIL PUMP.	B-08	REAR WHEEL.....	J-05	TRANSMISSION.....	D-08
CAM CHAIN.....	B-14	CRANKSHAFT.....	B-09	FRONT CALIPERS.....	I-06	HANDLE BAR.....	G-07	OPTIONAL.....	J-10	SEAT.....	H-15	TURNSIGNAL LAMP....	E-11
CAM SHAFT - VALVE..	B-12	CYLINDER HEAD COVER	B-02	FRONT DAMPER.....	I-02	HANDLE LEVER.....	G-08	RADIATOR HOSE.....	D-03	SIGNAL GENERATOR...	E-05	UNDER COWLING BODY.	H-06
CARBURETOR FITTINGS	C-05	CYLINDER HEAD.....	B-03	FRONT FENDER.....	G-06	HANDLE SWITCH.....	E-14	RADIATOR.....	D-02	SPEEDOMETER.....	E-08	WATER PUMP.....	C-10
CARBURETOR.....	C-02	CYLINDER.....	B-04	FRONT MASTER CYLIND	I-08	HEADLAMP.....	E-10	REAR CALIPER.....	J-07	STAND.....	F-03	WIRING HARNESS.....	E-13
CLUTCH CYLINDER....	I-09	ELECTRICAL.....	E-07	FRONT WHEEL.....	I-05	INSTALLATION PARTS.	H-05	REAR CUSHION LEVER.	J-04	STARTER CLUTCH.....	B-11		
CLUTCH.....	D-05	FOOTREST.....	F-04	FUEL COCK.....	F-09	LABEL.....	H-14	REAR FENDER.....	G-09	STARTING MOTOR.....	E-02		

FIG.16

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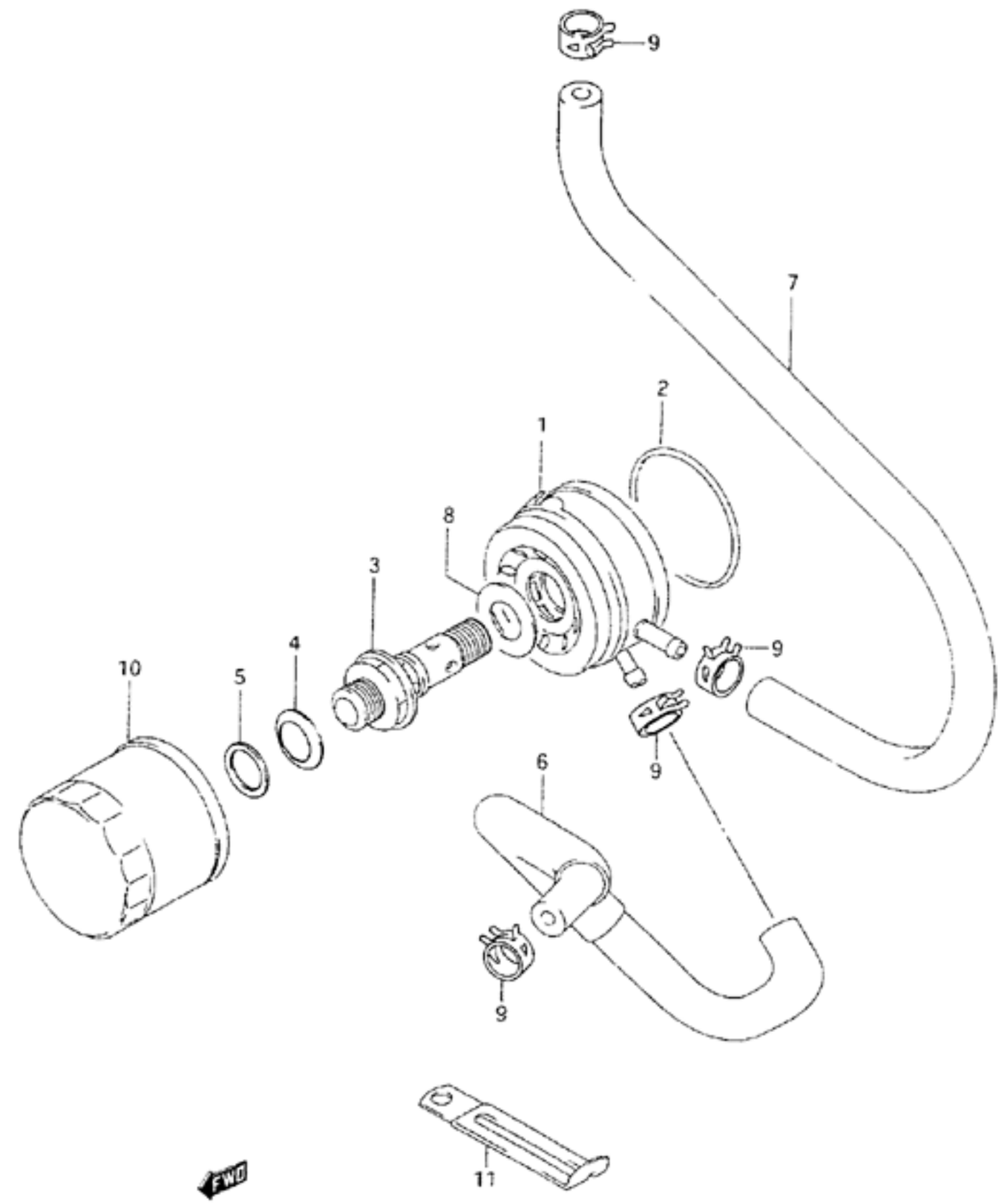
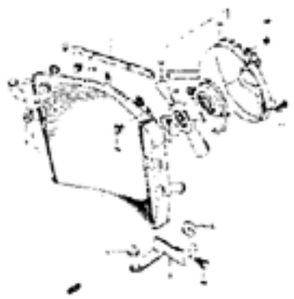
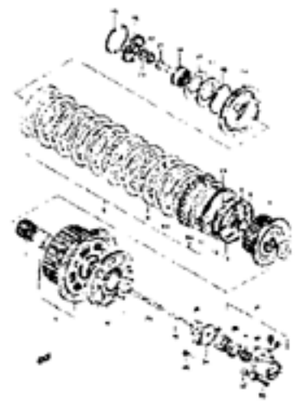
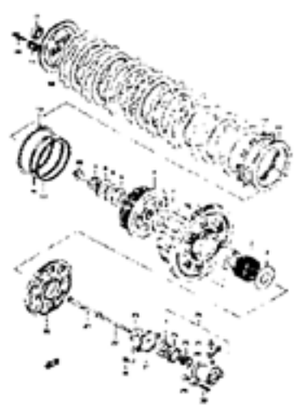
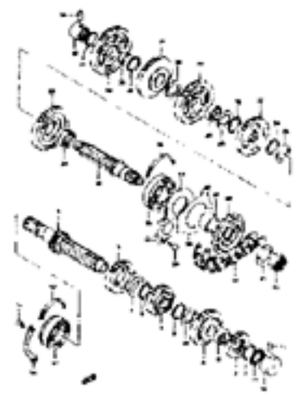


FIG.16 (C- 9) OIL COOLER - OIL FILTER

REF NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1	16600-17E00	COOLER ASSY, oil	1	
2	09280-64003	O RING (D:3.1,ID:63.9)	1	
3	16591-33C00	BOLT, oil cooler union	1	
4	16513-31E00	WASHER, oil filter wave	1	
5	08211-20261	WASHER, oil filter	1	
6	16461-31E00	HOSE, oil cooler,water in	1	
7	16471-17E02	HOSE, oil cooler,water out	1	
8	08221-22355	WASHER	1	
9	09401-13410	CLAMP	4	
10	16510-06B01	FILTER ASSY, engine oil	1	
11-1	09404-06402	CLAMP	1	model R
11-2	09404-06429	CLAMP	1	model S/T/V

AIR CLEANER.....	C-06	COWLING BODY.....	H-02	FRAME COVER.....	G-02	FUEL PUMP.....	C-08	MUFFLER.....	C-07	REAR MASTER CYLINDE	J-09	STEERING STEM.....	I-04
ALTERNATOR.....	E-03	CRANKCASE COVER....	B-07	FRAME.....	F-02	FUEL TANK.....	F-06	OIL COOLER - OIL FI	C-09	REAR SWINGING ARM..	J-02	TAIL LAMP.....	E-12
BATTERY.....	E-06	CRANKCASE.....	B-05	FRONT BRAKE HOSE...	I-07	GEAR SHIFTING.....	D-10	OIL PAN - OIL PUMP.	B-08	REAR WHEEL.....	J-05	TRANSMISSION.....	D-08
CAM CHAIN.....	B-14	CRANKSHAFT.....	B-09	FRONT CALIPERS.....	I-06	HANDLE BAR.....	G-07	OPTIONAL.....	J-10	SEAT.....	H-15	TURNSIGNAL LAMP....	E-11
CAM SHAFT - VALVE..	B-12	CYLINDER HEAD COVER	B-02	FRONT DAMPER.....	I-02	HANDLE LEVER.....	G-08	RADIATOR HOSE.....	D-03	SIGNAL GENERATOR...	E-05	UNDER COWLING BODY.	H-06
CARBURETOR FITTINGS	C-05	CYLINDER HEAD.....	B-03	FRONT FENDER.....	G-06	HANDLE SWITCH.....	E-14	RADIATOR.....	D-02	SPEEDOMETER.....	E-08	WATER PUMP.....	C-10
CARBURETOR.....	C-02	CYLINDER.....	B-04	FRONT MASTER CYLIND	I-08	HEADLAMP.....	E-10	REAR CALIPER.....	J-07	STAND.....	F-03	WIRING HARNESS.....	E-13
CLUTCH CYLINDER....	I-09	ELECTRICAL.....	E-07	FRONT WHEEL.....	I-05	INSTALLATION PARTS.	H-05	REAR CUSHION LEVER.	J-04	STARTER CLUTCH.....	B-11		
CLUTCH.....	D-05	FOOTREST.....	F-04	FUEL COCK.....	F-09	LABEL.....	H-14	REAR FENDER.....	G-09	STARTING MOTOR.....	E-02		

RADIATOR D-02	RADIATOR HOSE D-03	CLUTCH (MODEL R) D-05	CLUTCH (MODEL S/T/V) D-07	TRANSMISSION D-08	GEAR SHIFTING D-10
					

AIR CLEANER.....	C-06	COWLING BODY.....	H-02	FRAME COVER.....	G-02	FUEL PUMP.....	C-08	MUFFLER.....	C-07	REAR MASTER CYLINDE	J-09	STEERING STEM.....	I-04
ALTERNATOR.....	E-03	CRANKCASE COVER....	B-07	FRAME.....	F-02	FUEL TANK.....	F-06	OIL COOLER - OIL FI	C-09	REAR SWINGING ARM..	J-02	TAIL LAMP.....	E-12
BATTERY.....	E-06	CRANKCASE.....	B-05	FRONT BRAKE HOSE...	I-07	GEAR SHIFTING.....	D-10	OIL PAN - OIL PUMP.	B-08	REAR WHEEL.....	J-01	TRANSMISSION.....	D-08
CAM CHAIN.....	B-14	CRANKSHAFT.....	B-09	FRONT CALIPERS.....	I-06	HANDLE BAR.....	G-07	OPTIONAL.....	J-10	SEAT.....	H-15	TURNSIGNAL LAMP....	E-11
CAM SHAFT - VALVE..	B-12	CYLINDER HEAD COVER	B-02	FRONT DAMPER.....	I-02	HANDLE LEVER.....	G-08	RADIATOR HOSE.....	D-03	SIGNAL GENERATOR...	E-05	UNDER COWLING BODY.	H-06
CARBURETOR FITTINGS	C-05	CYLINDER HEAD... ..	B-03	FRONT FENDER.....	G-06	HANDLE SWITCH.....	E-14	RADIATOR.....	D-02	SPEEDOMETER.....	E-08	WATER PUMP.....	C-10
CARBURETOR.....	C-02	CYLINDER.....	B-04	FRONT MASTER CYLIND	I-08	HEADLAMP.....	E-10	REAR CALIPER.....	J-07	STAND.....	F-03	WIRING HARNESS.....	E-13
CLUTCH CYLINDER....	I-09	ELECTRICAL.....	E-07	FRONT WHEEL.....	I-05	INSTALLATION PARTS.	H-05	REAR CUSHION LEVER.	J-04	STARTER CLUTCH.....	B-11		
CLUTCH.....	D-05	FOOTREST.....	F-04	FUEL COCK.....	F-09	LABEL.....	H-14	REAR FENDER.....	G-09	STARTING MOTOR.....	E-02		

FIG. 22

D - 10

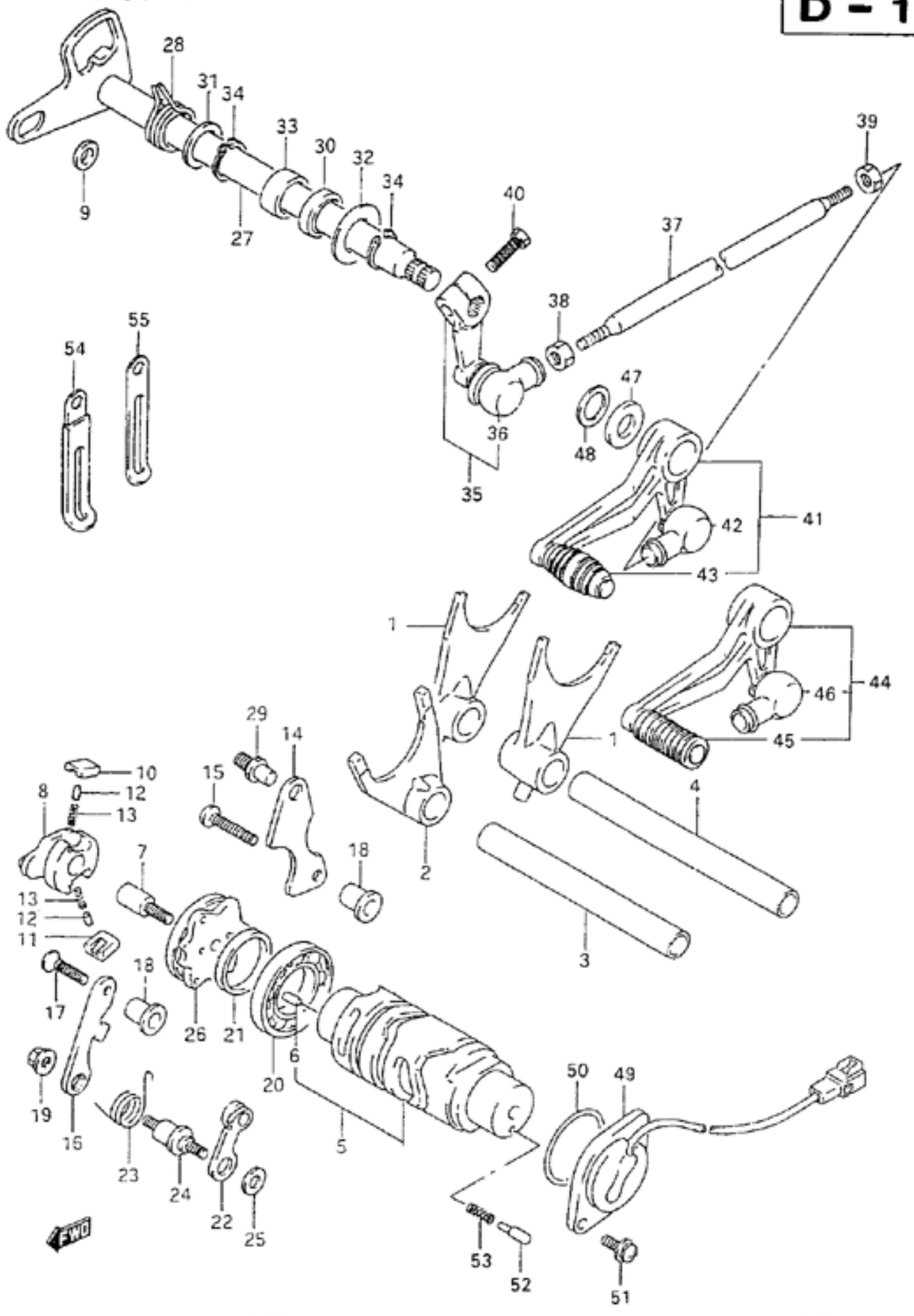


FIG.22 (D-10) GEAR SHIFTING

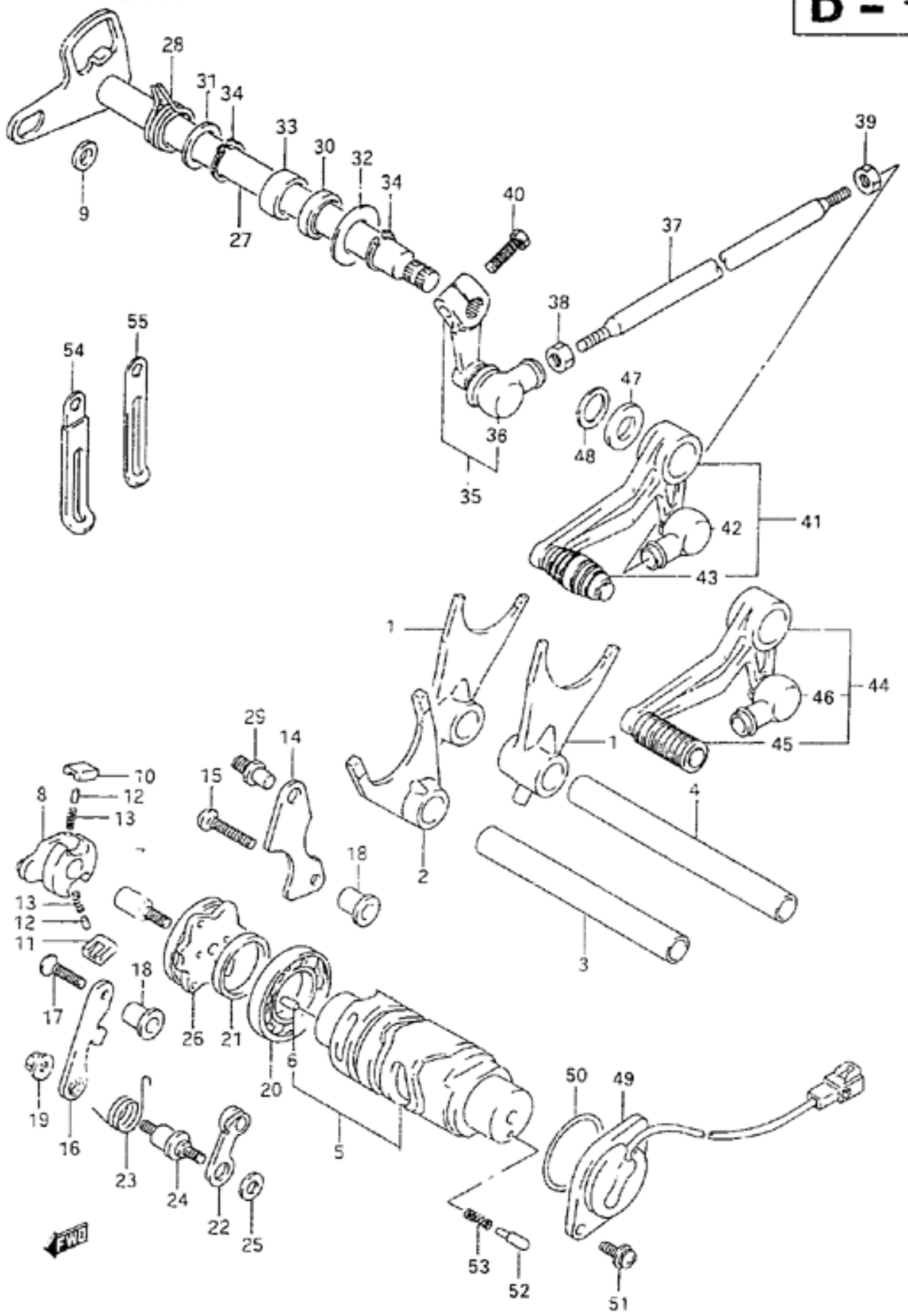
REF NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1	25211-17E00	FORK, gear shifting No.1	2	
2	25231-46E00	FORK, gear shifting No.3	1	
3	25411-26D01	SHAFT, fork (L:110)	1	
4	25411-27A00	SHAFT, fork (L:128)	1	
5	25310-46E00	CAM, gear shifting	1	
6	04221-04089	.PIN	2	
7	25312-12C00	PIN, shift cam driven gear	1	
8-1	25322-33C00	SHIFTER, cam	1	model R/S/T
8-2	25322-33C01	SHIFTER, cam	1	model V
9	09180-07014	ROLLER	1	
10	25323-34201	PAWL, No.1	1	
11	25324-34201	PAWL, No.2	1	
12	09261-05003	PIN	2	
13	09440-04003	SPRING	2	
14	25331-26D00	LIFTER, pawl	1	
15	02112-06303	SCREW	1	
16	25341-17E00	GUIDE, cam	1	
17	02122-06303	SCREW	1	
18	09180-06202	SPACER	2	
19	08316-10063	NUT	1	
20	09262-25006	BEARING (25x47x8)	1	
21	09160-25059	WASHER (25x32x3)	1	
22	25350-26D01	STOPPER, cam	1	
23-1	25355-26D20	SPRING	1	model R/S
23-2	25355-26D21	SPRING	1	model T/V
24	25356-12C00	SUPPORT, stopper	1	
25	08211-06141	WASHER	1	
26	25380-12B00	PLATE, stopper	1	
27	25510-17E10	SHAFT, gear shifting	1	
28-1	09444-20002	SPRING	1	model R/S
28-2	09444-20003	SPRING	1	model T/V
29	25671-01000	STOPPER, arm	1	
30	09283-14006	OIL SEAL	1	

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AIR CLEANER.....	C-06	COWLING BODY.....	H-02	FRAME COVER.....	G-02	FUEL PUMP.....	C-08	MUFFLER.....	C-07	REAR MASTER CYLINDE	J-09	STEERING STEM.....	I-04
ALTERNATOR.....	E-03	CRANKCASE COVER....	B-07	FRAME.....	F-02	FUEL TANK.....	F-06	OIL COOLER - OIL FI	C-09	REAR SWINGING ARM..	J-02	TAIL LAMP.....	E-12
BATTERY.....	E-06	CRANKCASE.....	B-05	FRONT BRAKE HOSE...	I-07	GEAR SHIFTING.....	D-10	OIL PAN - OIL PUMP.	B-08	REAR WHEEL.....	J-05	TRANSMISSION.....	D-08
CAM CHAIN.....	B-14	CRANKSHAFT.....	B-09	FRONT CALIPERS.....	I-06	HANDLE BAR.....	G-07	OPTIONAL.....	J-10	SEAT.....	H-15	TURNSIGNAL LAMP....	E-11
CAM SHAFT - VALVE..	B-12	CYLINDER HEAD COVER	B-02	FRONT DAMPER.....	I-02	HANDLE LEVER.....	G-08	RADIATOR HOSE.....	D-03	SIGNAL GENERATOR...	E-05	UNDER COWLING BODY.	H-06
CARBURETOR FITTINGS	C-05	CYLINDER HEAD.....	B-03	FRONT FENDER.....	G-06	HANDLE SWITCH.....	E-14	RADIATOR.....	D-02	SPEEDOMETER.....	E-08	WATER PUMP.....	C-10
CARBURETOR.....	C-02	CYLINDER.....	B-04	FRONT MASTER CYLIND	I-08	HEADLAMP.....	E-10	REAR CALIPER.....	J-07	STAND.....	F-03	WIRING HARNESS.....	E-13
CLUTCH CYLINDER....	I-09	ELECTRICAL.....	E-07	FRONT WHEEL.....	I-05	INSTALLATION PARTS.	H-05	REAR CUSHION LEVER.	J-04	STARTER CLUTCH.....	B-11		
CLUTCH.....	D-05	FOOTREST.....	F-04	FUEL COCK.....	F-09	LABEL.....	H-14	REAR FENDER.....	G-09	STARTING MOTOR.. ..	E-02		

FIG. 22

D - 11



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FIG.22 (D-11) GEAR SHIFTING

REF NO.	PART NO	DESCRIPTION	Q'TY	REMARKS
31-1	08211-14221	WASHER, RH	1	model R/S/T
31-2	09181-14167	WASHER, RH (14x22x1.0)	1	model V
32	09160-14016	WASHER, LH	1	
33	09263-14027	BEARING (14x20x12)	1	
34	08331-31146	CIRCLIP	2	
35	25520-19C02	ARM, gear shift link	1	
36	25526-47000	.COVER, dust	1	
37-1	25525-21E00	ROD, gear shift link (L:185)	1	model R
37-2	25525-21E10	ROD, rear shift link (L:185)	1	model S/T/V
38	09140-06011	NUT	1	
39	08310-00067	NUT	1	
40	01500-06257	BOLT	1	
41	25600-17C03	LEVER ASSY, gear shifting	1	model R/S/T
42	25526-47000	.COVER, dust	1	model R/S/T
43	25652-16500	.RUBBER	1	model R/S/T
44	25600-33E00	LEVER ASSY, gear shift	1	model V
45	25652-20C00	.RUBBER	1	model V
46	25526-47000	.COVER, dust	1	model V
47	09160-14052	WASHER (14x27x4)	1	
48	09160-18022	WASHER (18x24x1)	1	
49	37720-48B00	BODY, gear shifting switch	1	
50	09280-35006	O RING (D:2.4,ID:35.5)	1	
51	02112-75163	SCREW	2	
52	09209-05011	CONTACT	1	
53	09440-04010	SPRING	1	
54-1	09404-06402	CLAMP (L:50)	3	model R/S
54-2	09404-06429	CLAMP (L:60)	3	model T/V
55-1	09404-06426	CLAMP (L:95)	1	model R/S
55-2	09404-06433	CLAMP (L:95)	1	model T/V

RF900RV E28

AIR CLEANER..... C-06
ALTERNATOR..... E-03
BATTERY..... E-06
CAM CHAIN..... B-14
CAM SHAFT - VALVE.. B-12
CARBURETOR FITTINGS C-05
CARBURETOR..... C-02
CLUTCH CYLINDER.... I-09
CLUTCH..... D-05
COWLING BODY..... H-02
CRANKCASE COVER.... B-07
CRANKCASE..... B-05
CRANKSHAFT..... B-09
CYLINDER HEAD COVER B-02
CYLINDER HEAD..... B-03
CYLINDER..... B-04
ELECTRICAL..... E-07
FOOTREST..... F-04
FRAME COVER..... G-02
FRAME..... F-02
FRONT BRAKE HOSE... I-07
FRONT CALIPERS. ... I-06
FRONT DAMPER..... I-02
FRONT FENDER..... G-06
FRONT MASTER CYLIND I-08
FRONT WHEEL..... I-05
FUEL COCK..... F-09
FUEL PUMP..... C-08
FUEL TANK..... F-06
GEAR SHIFTING..... D-10
HANDLE BAR..... G-07
HANDLE LEVER..... G-08
HANDLE SWITCH..... E-14
HEADLAMP..... E-10
INSTALLATION PARTS. H-05
LABEL..... H-14
MUFFLER..... C-07
OIL COOLER - OIL FI C-09
OIL PAN - OIL PUMP. B-08
OPTIONAL..... J-10
RADIATOR HOSE..... D-03
RADIATOR..... D-02
REAR CALIPER..... J-07
REAR CUSHION LEVER. J-04
REAR FENDER..... G-09
REAR MASTER CYLINDE J-09
REAR SWINGING ARM.. J-02
REAR WHEEL..... J-05
SEAT..... H-15
SIGNAL GENERATOR... E-05
SPEEDOMETER..... E-08
STAND..... F-03
STARTER CLUTCH..... B-11
STARTING MOTOR..... E-02
STEERING STEM..... I-04
TAIL LAMP..... E-12
TRANSMISSION..... D-08
TURNSIGNAL LAMP.... E-11
UNDER COWLING BODY. H-06
WATER PUMP..... C-10
WIRING HARNESS..... E-13

FIG. 18

D - 2

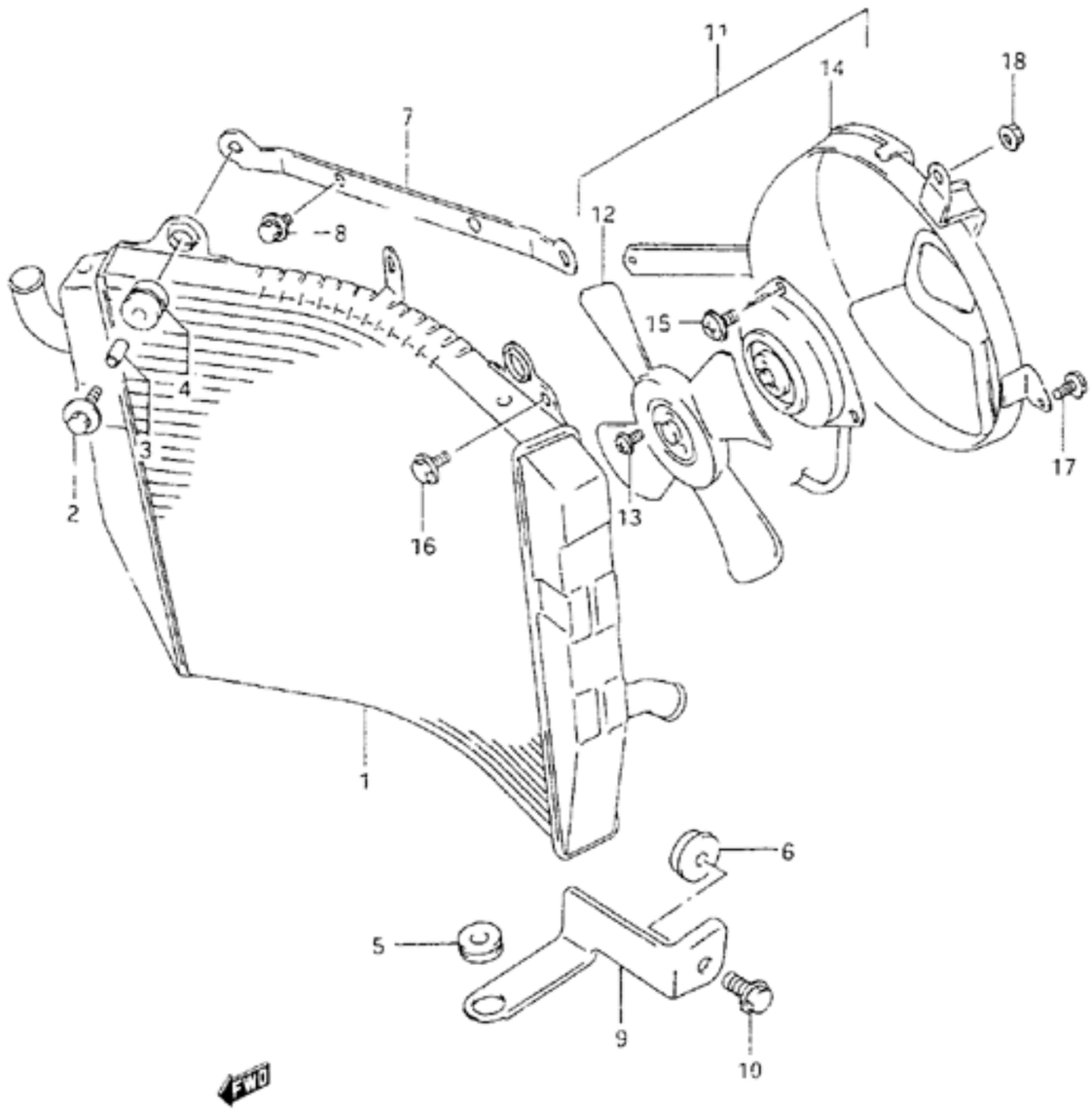


FIG.18 (D- 2) RADIATOR

REF NO.	PART NO	DESCRIPTION	Q'TY	REMARKS
1	17710-21E00	RADIATOR ASSY, water	1	
2	09116-06147	BOLT (6x25)	2	
3	09180-07004	SPACER (6.5x10.5x12)	2	
4	17787-19A00	CUSHION, radiator upper	2	
5	09320-12053	CUSHION, radiator lower	1	
6	17761-21E00	SPACER, radiator lower	1	
7-1	17740-21E00	BRACKET, radiator upper	1	model R
7-2	17740-21E01	BRACKET, radiator upper	1	model S/T/V
8	01580-06163	BOLT	2	
9-1	17750-21E01	BRACKET, radiator lower	1	model R
9-2	17750-21E02	BRACKET, radiator lower	1	model S/T/V
10	01550-08553	BOLT	1	
11	17800-21E01	FAN ASSY, radiator	1	
12	17820-17E00	.FAN ASSY	1	
13	02112-04063	.BOLT	3	
14	17770-21E00	.SHROUD ASSY, fan	1	
15	02112-15083	.SCREW	3	
16	01550-06123	BOLT	1	
17	01550-06103	BOLT	2	
18	08316-10063	NUT	1	

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AIR CLEANER.....	C-06	COWLING BODY.....	H-02	FRAME COVER.....	G-02	FUEL PUMP.....	C-08	MUFFLER.....	C-07	REAR MASTER CYLINDE	J-09	STEERING STEM.....	I-04
ALTERNATOR.....	E-03	CRANKCASE COVER....	B-07	FRAME.....	F-02	FUEL TANK.....	F-06	OIL COOLER - OIL FI	C-09	REAR SWINGING ARM..	J-02	TAIL LAMP.....	E-12
BATTERY.....	E-06	CRANKCASE.....	B-05	FRONT BRAKE HOSE...	I-07	GEAR SHIFTING.....	D-10	OIL PAN - OIL PUMP.	B-08	REAR WHEEL.....	J-05	TRANSMISSION.....	D-08
CAM CHAIN.....	B-14	CRANKSHAFT.....	B-09	FRONT CALIPERS.....	I-06	HANDLE BAR.....	G-07	OPTIONAL.....	J-10	SEAT.....	H-15	TURNSIGNAL LAMP....	E-11
CAM SHAFT - VALVE..	B-12	CYLINDER HEAD COVER	B-02	FRONT DAMPER.....	I-02	HANDLE LEVER.....	G-08	RADIATOR HOSE.....	D-03	SIGNAL GENERATOR...	E-05	UNDER COWLING BODY.	H-06
CARBURETOR FITTINGS	C-05	CYLINDER HEAD.....	B-03	FRONT FENDER.....	G-06	HANDLE SWITCH.....	E-14	RADIATOR.....	D-02	SPEEDOMETER.....	E-08	WATER PUMP.....	C-10
CARBURETOR.....	C-02	CYLINDER.....	B-04	FRONT MASTER CYLIND	I-08	HEADLAMP.....	E-10	REAR CALIPER.....	J-07	STAND.....	F-03	WIRING HARNESS.....	E-13
CLUTCH CYLINDER....	I-09	ELECTRICAL.....	E-07	FRONT WHEEL.....	I-05	INSTALLATION PARTS.	H-05	REAR CUSHION LEVER.	J-04	STARTER CLUTCH.....	B-11		
CLUTCH.....	D-05	FOOTREST.....	F-04	FUEL COCK.....	F-09	LABEL.....	H-14	REAR FENDER.....	G-09	STARTING MOTOR.....	E-02		

FIG.19

D - 3

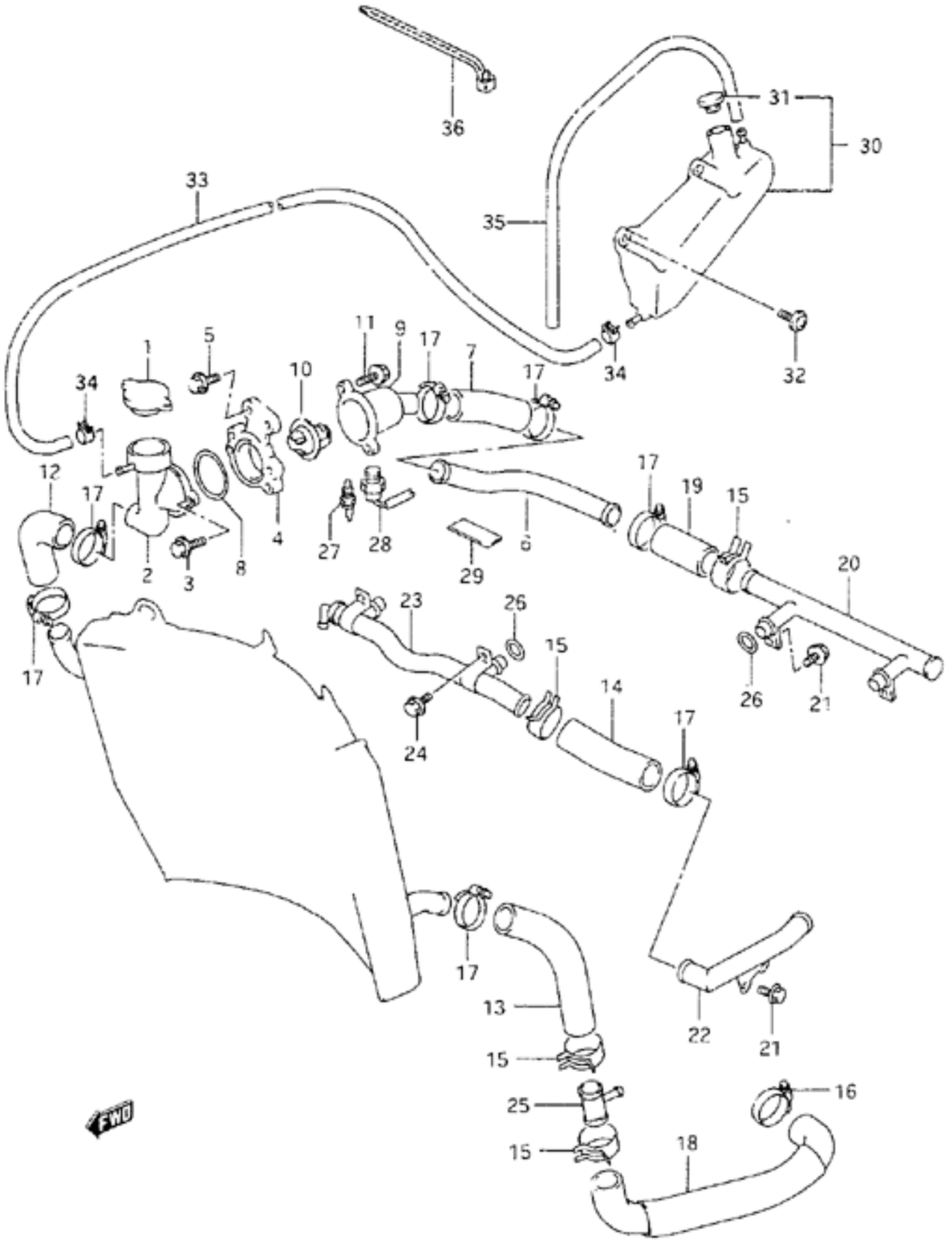


FIG.19 (D- 3) RADIATOR HOSE

REF NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1	17730-12C01	CAP, radiator,1.1	1	
2	17791-32C00	CONDUCTION, radiator	1	
3	01550-06163	BOLT	2	
4	17792-12C00	BRACKET, conduction	1	
5	01550-06103	BOLT	2	
6	17831-21E02	PIPE, conduction inlet	1	
7-1	17851-24D00	HOSE, conduction inlet	1	model R
7-2	17856-17E50	HOSE, conduction inlet	1	model S/T/V
8	09280-44005	O RING (D:2.4,ID:43.2)	1	
9	17662-21E00	CONNECTOR, thermostat inlet	1	
10	17670-32C01	THERMOSTAT, water	1	
11	01550-06203	BOLT	2	
12	17851-21E00	HOSE, radiator inlet	1	
13	17852-17E00	HOSE, radiator outlet	1	
14	17856-17E50	HOSE, head inlet joint	1	
15	09401-26404	CLAMP, water hose No.1	4	
16-1	09402-33502	CLAMP, water hose No.2	1	model R
16-2	09402-38511	CLAMP, water hose No.2	1	model S/T/V
17-1	09402-30502	CLAMP, water hose No.3	7	model R
17-2	09402-32511	CLAMP, water hose No.3	7	model S/T/V
18	17853-17E00	HOSE, water pump inlet	1	
19	17856-31E00	HOSE, head outlet	1	
20	17880-21E02	PIPE, head outlet	1	
21	01550-06123	BOLT	4	
22	17860-17E00	PIPE, cylinder side	1	
23	17870-31E00	PIPE, cylinder inlet	1	
24	09103-06083	BOLT (6x12)	4	
25	17890-17E01	UNION, hose joint	1	
26	09280-18009	O RING (D:3.2,ID:17.8)	4	
27	34850-50A00	GAUGE ASSY, water temperature	1	
28	17680-45000	SWITCH, radiator fan	1	
29-1	94476-17E00	CUSHION, conduction pipe	1	model R
29-2	51553-15D40	CUSHION, conduction pipe	1	model S/T/V

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AIR CLEANER..... C-06
ALTERNATOR..... E-03
BATTERY..... E-06
CAM CHAIN..... B-14
CAM SHAFT - VALVE.. B-12
CARBURETOR FITTINGS C-05
CARBURETOR..... C-02
CLUTCH CYLINDER.... I-09
CLUTCH..... D-05
COWLING BODY..... H-02
CRANKCASE COVER.... B-07
CRANKCASE..... B-05
CRANKSHAFT..... B-09
CYLINDER HEAD COVER B-02
CYLINDER HEAD..... B-03
CYLINDER..... B-04
ELECTRICAL..... E-07
FOOTREST..... F-04
FRAME COVER..... G-02
FRAME..... F-02
FRONT BRAKE HOSE... I-07
FRONT CALIPERS..... I-06
FRONT DAMPER..... I-02
FRONT FENDER..... G-06
FRONT MASTER CYLIND I-08
FRONT WHEEL..... I-05
FUEL COCK..... F-09
FUEL PUMP..... C-08
FUEL TANK..... F-06
GEAR SHIFTING..... D-10
HANDLE BAR..... G-07
HANDLE LEVER..... G-08
HANDLE SWITCH..... E-14
HEADLAMP..... E-10
INSTALLATION PARTS. H-05
LABEL..... H-14
MUFFLER..... C-07
OIL COOLER - OIL FI C-09
OIL PAN - OIL PUMP. B-08
OPTIONAL..... J-10
RADIATOR HOSE..... D-03
RADIATOR..... D-02
REAR CALIPER..... J-07
REAR CUSHION LEVER. J-04
REAR FENDER..... G-09
REAR MASTER CYLINDE J-09
REAR SWINGING ARM.. J-02
REAR WHEEL..... J-05
SEAT..... H-15
SIGNAL GENERATOR... E-05
SPEEDOMETER..... E-08
STAND..... F-03
STARTER CLUTCH..... B-11
STARTING MOTOR..... E-02
STEERING STEM..... I-04
TAIL LAMP..... E-12
TRANSMISSION..... D-08
TURNSIGNAL LAMP.... E-11
UNDER COWLING BODY. H-06
WATER PUMP..... C-10
WIRING HARNESS..... E-13

FIG. 19

D – 4

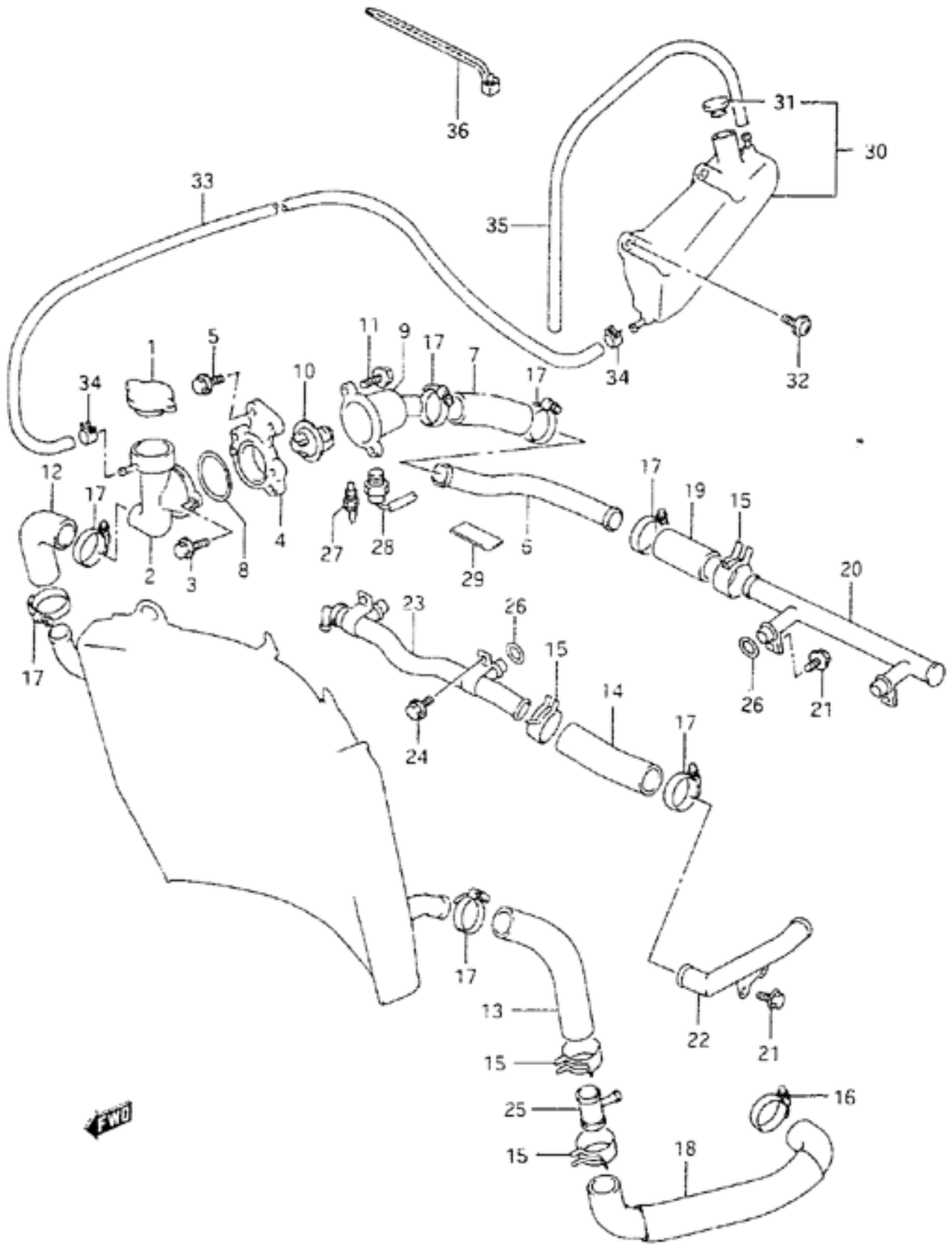


FIG.19 (D- 4) RADIATOR HOSE

REF NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
30	17910-31E00	TANK ASSY, reservoir	1	
31	17932-12C00	.CAP, reservoir tank	1	
32	09136-06022	SCREW (6x16)	2	
33-1	17981-21E00	HOSE, reservoir tank inlet	1	model R/S/T
33-2	17981-21810	HOSE, reservoir tank inlet	1	model V
34	09401-08411	CLIP	2	
35-1	17982-31E00	HOSE, over flow	1	model R
35-2	17981-21E00	HOSE, over flow	1	model S/T
35-3	17981-21810	HOSE, over flow	1	model V
36	09407-18403	CLAMP	1	

RF900RV E28

AIR CLEANER.....	C-06	COWLING BODY.....	H-02	FRAME COVER.....	G-02	FUEL PUMP.....	C-08	MUFFLER.....	C-07	REAR MASTER CYLINDE	J-09	STEERING STEM.....	I-04
ALTERNATOR.....	E-03	CRANKCASE COVER....	B-07	FRAME.....	F-02	FUEL TANK.....	F-06	OIL COOLER - OIL FI	C-09	REAR SWINGING ARM..	J-02	TAIL LAMP.....	E-12
BATTERY.....	E-06	CRANKCASE.....	B-05	FRONT BRAKE HOSE...	I-07	GEAR SHIFTING.....	D-10	OIL PAN - OIL PUMP.	B-08	REAR WHEEL.....	J-05	TRANSMISSION.....	D-08
CAM CHAIN.....	B-14	CRANKSHAFT.....	B-09	FRONT CALIPERS.....	I-06	HANDLE BAR.....	G-07	OPTIONAL.....	J-10	SEAT.....	H-15	TURNSIGNAL LAMP....	E-11
CAM SHAFT - VALVE..	B-12	CYLINDER HEAD COVER	B-02	FRONT DAMPER.....	I-02	HANDLE LEVER.....	G-08	RADIATOR HOSE.....	D-03	SIGNAL GENERATOR...	E-05	UNDER COWLING BODY.	H-06
CARBURETOR FITTINGS	C-05	CYLINDER HEAD.....	B-03	FRONT FENDER.....	G-06	HANDLE SWITCH.....	E-14	RADIATOR.....	D-02	SPEEDOMETER.....	E-08	WATER PUMP.....	C-10
CARBURETOR.....	C-02	CYLINDER.....	B-04	FRONT MASTER CYLIND	I-08	HEADLAMP.....	E-10	REAR CALIPER.....	J-07	STAND.....	F-03	WIRING HARNESS.....	E-13
CLUTCH CYLINDER....	I-09	ELECTRICAL.....	E-07	FRONT WHEEL.....	I-05	INSTALLATION PARTS.	H-05	REAR CUSHION LEVER.	J-04	STARTER CLUTCH.....	B-11		
CLUTCH.....	D-05	FOOTREST.....	F-04	FUEL COCK.....	F-09	LABEL.....	H-14	REAR FENDER.....	G-09	STARTING MOTOR.....	E-02		

FIG. 20

D - 5

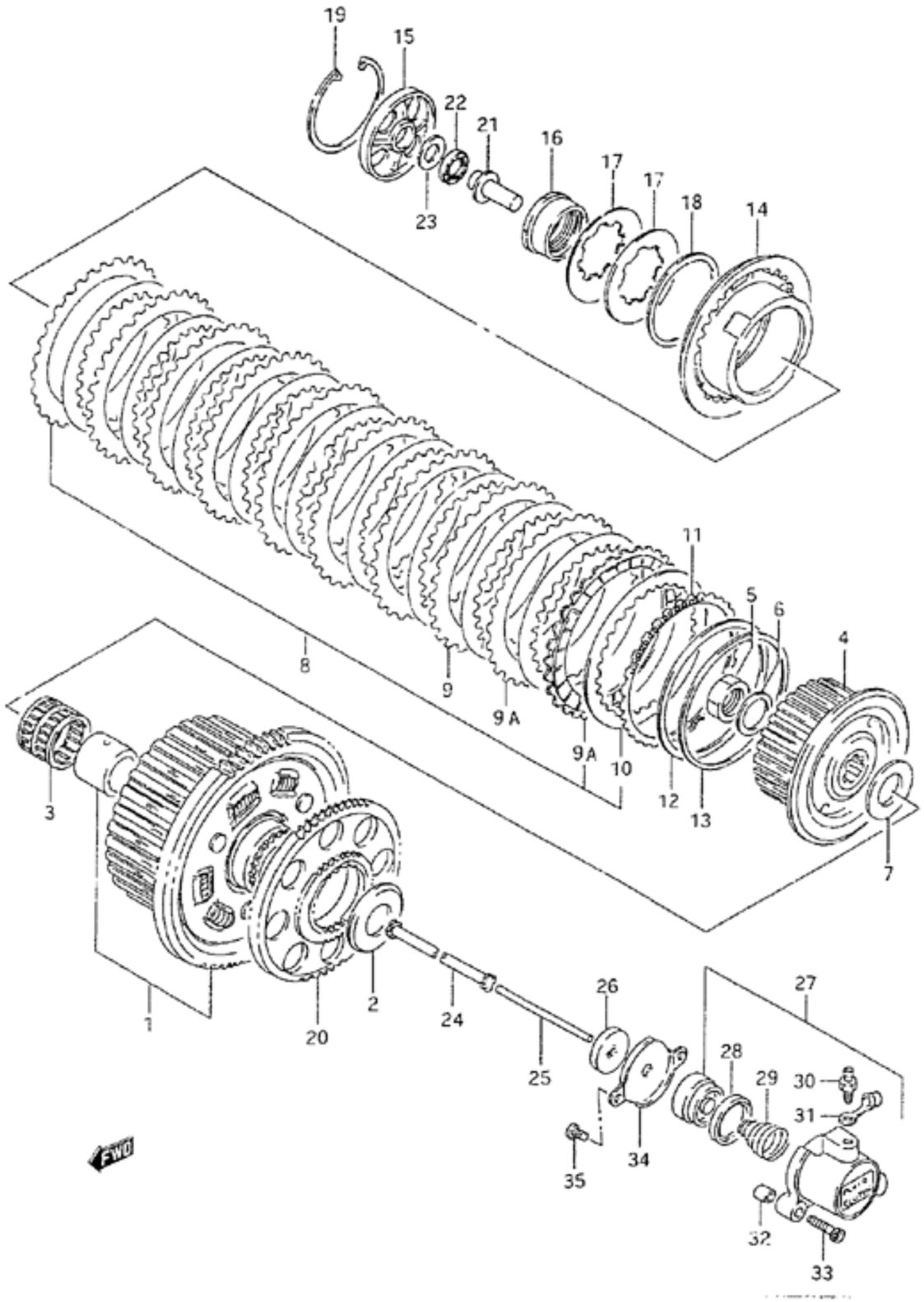


FIG.20 (D- 5) CLUTCH (model R)

REF NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1	21200-40831	GEAR, primary driven (NT:72)	1	
2	09160-25067	WASHER	1	
3	09263-35017	BEARING (35x40x35.8)	1	
4	21410-46E00	HUB, sleeve	1	
5	09159-24008	NUT	1	
6	09164-24006	WASHER	1	
7	09160-25056	WASHER (25x50x2.5)	1	
8	21400-40C01	PLATE ASSY, clutch	1	
9	21441-48B00	.PLATE, drive No.1 (T:2.6)	8	
9A	21441-48B10	.PLATE, drive No.2 (T:2.6)	2	
10	21451-48B00	.PLATE, driven (T:2.0)	10	
11	21442-46E00	PLATE, drive (T:2.6)	1	
12	09164-00007	WAVE WASHER	1	
13	21471-40C01	SEAT, clutch plate	1	
14	21462-40C02	DISC, pressure	1	
15	21463-40C01	LIFTER, clutch pressure disk	1	
16	21611-40C01	HOLDER, clutch spring	1	
17	09164-47001	SPRING	2	
18	21623-40C00	SEAT, clutch spring	1	
19	09381-84002	CIRCLIP	1	
20	22721-21E01	GEAR, alternator drive	1	NT:34/61
21	23121-07A00	PIECE, push	1	
22	09263-15003	BEARING (15x28x2)	1	
23	09160-15045	WASHER (15.5x28x1)	1	
24	23110-27A00	ROD, push RH	1	
25	23111-24A01	ROD, push LH (L:108.5)	1	
26	09285-06015	OIL SEAL	1	

Refer to FIG.20A(D-7) for model S/T/V

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AIR CLEANER..... C-06
ALTERNATOR..... E-03
BATTERY..... E-06
CAM CHAIN..... B-14
CAM SHAFT - VALVE.. B-12
CARBURETOR FITTINGS C-05
CARBURETOR..... C-02
CLUTCH CYLINDER.... I-09
CLUTCH..... D-05
COWLING BODY..... H-02
CRANKCASE COVER.... B-07
CRANKCASE..... B-05
CRANKSHAFT..... B-09
CYLINDER HEAD COVER B-02
CYLINDER HEAD..... B-03
CYLINDER..... B-04
ELECTRICAL..... E-07
FOOTREST..... F-04
FRAME COVER..... G-02
FRAME..... F-02
FRONT BRAKE HOSE... I-07
FRONT CALIPERS..... I-06
FRONT DAMPER..... I-02
FRONT FENDER..... G-06
FRONT MASTER CYLIND I-08
FRONT WHEEL..... I-05
FUEL COCK..... F-09
FUEL PUMP..... C-08
FUEL TANK..... F-06
GEAR SHIFTING..... D-10
HANDLE BAR..... G-07
HANDLE LEVER..... G-08
HANDLE SWITCH..... E-14
HEADLAMP..... E-10
INSTALLATION PARTS. H-05
LABEL..... H-14
MUFFLER..... C-07
OIL COOLER - OIL FI C-09
OIL PAN - OIL PUMP. B-08
OPTIONAL..... J-10
RADIATOR HOSE..... D-03
RADIATOR..... D-02
REAR CALIPER..... J-07
REAR CUSHION LEVER. J-04
REAR FENDER..... G-09
REAR MASTER CYLINDE J-09
REAR SWINGING ARM.. J-02
REAR WHEEL..... J-05
SEAT..... H-15
SIGNAL GENERATOR... E-05
SPEEDOMETER..... E-08
STAND..... F-03
STARTER CLUTCH..... B-11
STARTING MOTOR..... E-02
STEERING STEM..... I-04
TAIL LAMP..... E-12
TRANSMISSION..... D-08
TURNSIGNAL LAMP..... E-11
UNDER COWLING BODY. H-06
WATER PUMP..... C-10
WIRING HARNESS..... E-13

FIG. 20

D - 6

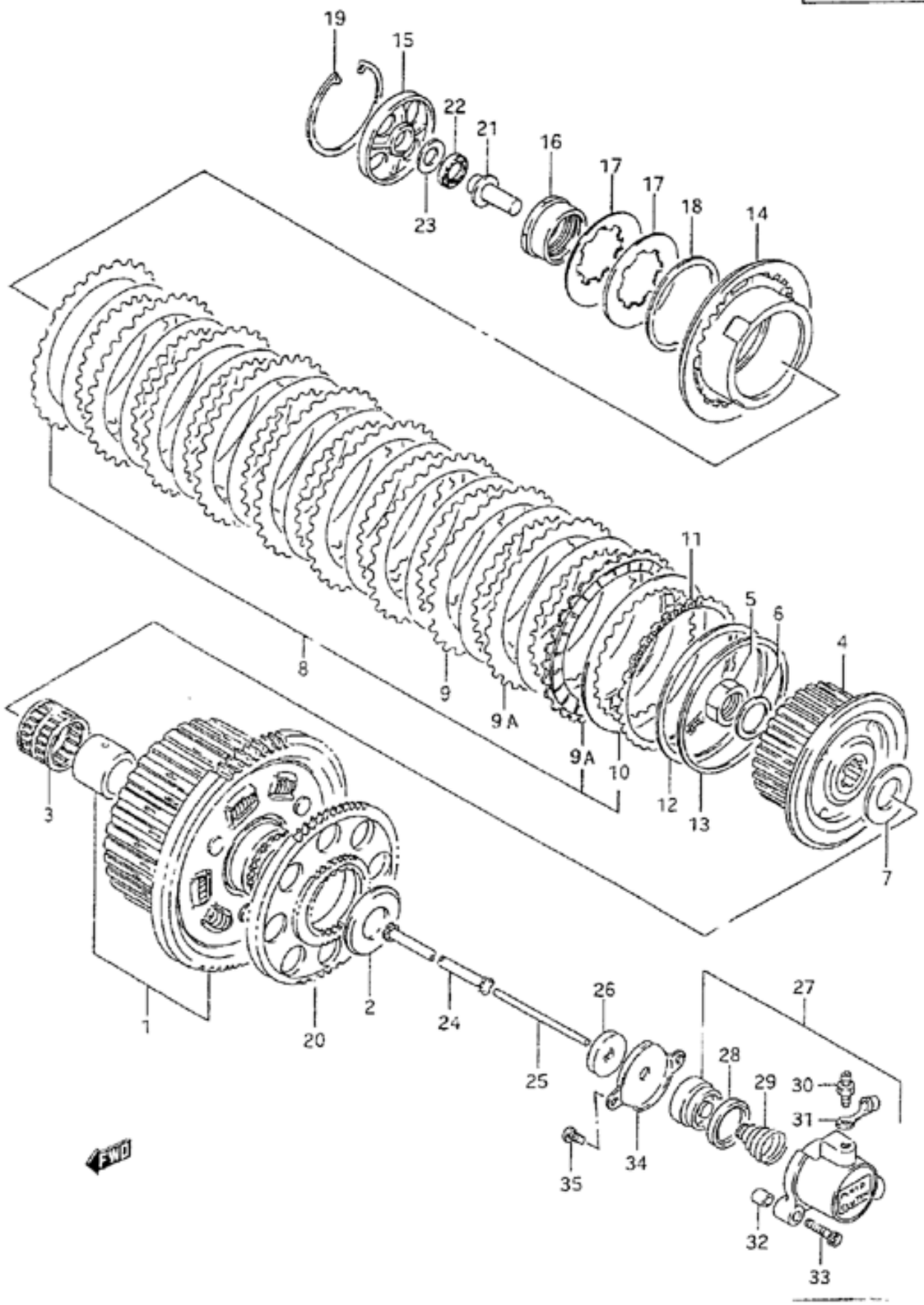


FIG.20 (D- 6) CLUTCH (model R)

REF NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
27	23160-06B02	CYLINDER, clutch release	1	
28	23163-06B00	.CUP	1	
29	23164-05A00	.SPRING	1	
30	59121-01A00	.BLEEDER	1	
31	59122-01A00	.CAP, bleeder	1	
32	04211-09129	PIN	2	
33	07130-06253	BOLT	2	
34	23117-46E00	COVER, cylinder	1	
35	02112-06103	SCREW	2	

Refer to FIG.20A(D-7) for model S/T/V

RF900RV E28

AIR CLEANER..... C-06
ALTERNATOR..... E-03
BATTERY..... E-06
CAM CHAIN..... B-14
CAM SHAFT - VALVE.. B-12
CARBURETOR FITTINGS C-05
CARBURETOR..... C-02
CLUTCH CYLINDER.... I-09
CLUTCH..... D-05
COWLING BODY..... H-02
CRANKCASE COVER.... B-07
CRANKCASE..... B-05
CRANKSHAFT..... B-09
CYLINDER HEAD COVER B-02
CYLINDER HEAD..... B-03
CYLINDER..... B-04
ELECTRICAL..... E-07
FOOTREST..... F-04
FRAME COVER..... G-02
FRAME..... F-02
FRONT BRAKE HOSE... I-07
FRONT CALIPERS..... I-06
FRONT DAMPER..... I-02
FRONT FENDER..... G-06
FRONT MASTER CYLIND I-08
FRONT WHEEL..... I-05
FUEL COCK..... F-09
FUEL PUMP..... C-08
FUEL TANK..... F-06
GEAR SHIFTING..... D-10
HANDLE BAR..... G-07
HANDLE LEVER..... G-08
HANDLE SWITCH..... E-14
HEADLAMP..... E-10
INSTALLATION PARTS. H-05
LABEL..... H-14
MUFFLER..... C-07
OIL COOLER - OIL FI C-09
OIL PAN - OIL PUMP. B-08
OPTIONAL..... J-10
RADIATOR HOSE..... D-03
RADIATOR..... D-02
REAR CALIPER..... J-07
REAR CUSHION LEVER. J-04
REAR FENDER..... G-09
REAR MASTER CYLINDE J-09
REAR SWINGING ARM.. J-02
REAR WHEEL..... J-05
SEAT..... H-15
SIGNAL GENERATOR... E-05
SPEEDOMETER..... E-08
STAND..... F-03
STARTER CLUTCH..... B-11
STARTING MOTOR..... E-02
STEERING STEM..... I-04
TAIL LAMP..... E-12
TRANSMISSION..... D-08
TURNSIGNAL LAMP.... E-11
UNDER COWLING BODY. H-06
WATER PUMP..... C-10
WIRING HARNESS..... E-13

FIG. 20A

D - 7

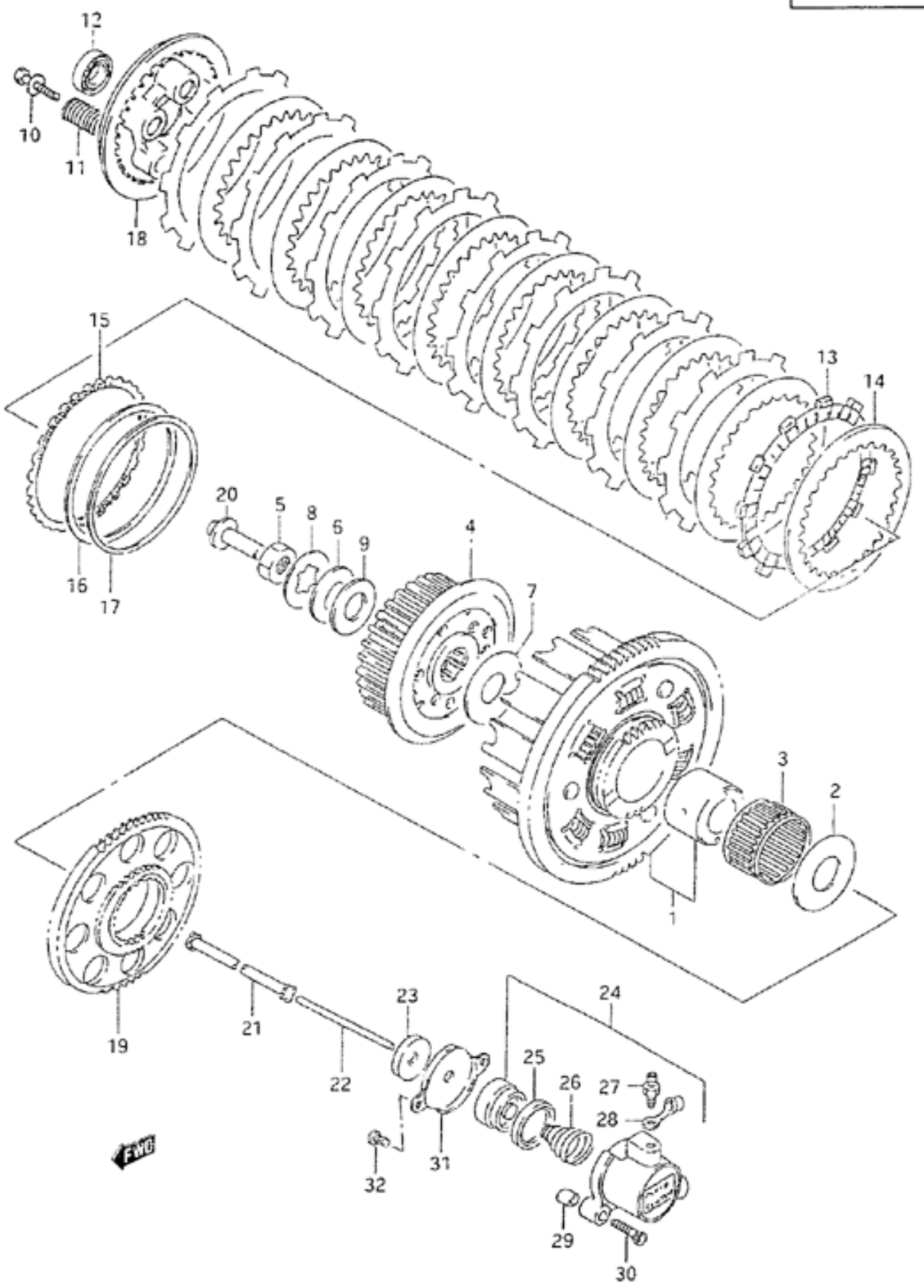


FIG.20A(D- 7) CLUTCH (model S/T/V)

REF NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1-1	21200-31850	GEAR ASSY, primary driven	1	model S
1-2	21200-31860	GEAR ASSY, primary driven	1	model T/V
2	09160-25067	WASHER	1	
3	09263-35017	BEARING (35x40x35.8)	1	
4	21410-31E00	HUB, clutch sleeve	1	
5	09140-24012	NUT	1	
6	09164-25001	WASHER	1	
7	09160-25056	WASHER	1	
8	09167-25007	LOCK WASHER	1	
9	08211-25441	THRUST WASHER	1	
10	21412-31E00	BOLT, clutch spring	5	
11	21413-31E00	SPRING, clutch	5	
12	08110-62020	BEARING	1	
13	21441-31E00	PLATE, clutch sleeve	9	
14	21451-31E00	PLATE, clutch driven No.1	9	
15	21442-31E00	PLATE, clutch drive	1	
16-1	21472-31E00	WASHER, clutch plate wave	1	model S
16-2	21472-31E01	WASHER, clutch plate wave	1	model T/V
17	21471-31E00	SEAT, clutch plate wave washer	1	
18	21462-31E00	DISK, clutch pressure	1	
19	22721-21E01	GEAR, generator drive	1	
20	23121-31E00	PIECE, clutch push	1	
21	23110-27A00	ROD, clutch	1	
22	23111-30001	ROD, clutch push	1	
23	09285-06015	OIL SEAL	1	
24	23160-06B02	CYLINDER, clutch release	1	
25	23163-06B00	.CUP	1	
26	23164-05A00	.SPRING	1	
27	59121-01A00	.BLEEDER	1	
28	59122-01A00	.CAP, bleeder	1	
29	04211-09129	KNOCK PIN (H:12)	2	
30	07130-06253	BOLT	2	
31	23117-46E00	COVER, clutch release cylinder	1	
32	02112-06103	SCREW	2	

AIR CLEANER	C-06	COWLING BODY	H-02	FRAME COVER	G-02	FUEL PUMP	C-08	MUFFLER	C-07	REAR MASTER CYLINDE	J-09	STEERING STEM	I-04
ALTERNATOR	E-03	CRANKCASE COVER	B-07	FRAME	F-02	FUEL TANK	F-06	OIL COOLER - OIL FI	C-09	REAR SWINGING ARM	J-02	TAIL LAMP	E-12
BATTERY	E-06	CRANKCASE	B-05	FRONT BRAKE HOSE	I-07	GEAR SHIFTING	D-10	OIL PAN - OIL PUMP	B-08	REAR WHEEL	J-05	TRANSMISSION	D-08
CAM CHAIN	B-14	CRANKSHAFT	B-09	FRONT CALIPERS	I-06	HANDLE BAR	G-07	OPTIONAL	J-10	SEAT	H-15	TURNSIGNAL LAMP	E-11
CAM SHAFT - VALVE	B-12	CYLINDER HEAD COVER	B-02	FRONT DAMPER	I-02	HANDLE LEVER	G-08	RADIATOR HOSE	D-03	SIGNAL GENERATOR	E-05	UNDER COWLING BODY	H-06
CARBURETOR FITTINGS	C-05	CYLINDER HEAD	B-03	FRONT FENDER	G-06	HANDLE SWITCH	E-14	RADIATOR	D-02	SPEEDOMETER	E-08	WATER PUMP	C-10
CARBURETOR	C-02	CYLINDER	B-04	FRONT MASTER CYLIND	I-08	HEADLAMP	E-10	REAR CALIPER	J-07	STAND	F-03	WIRING HARNESS	F-13
CLUTCH CYLINDER	I-09	ELECTRICAL	E-07	FRONT WHEEL	I-05	INSTALLATION PARTS	H-05	REAR CUSHION LEVER	J-04	STARTER CLUTCH	B-11		
CLUTCH	D-05	FOOTREST	F-04	FUEL COCK	F-09	LABEL	H-14	REAR FENDER	G-09	STARTING MOTOR	E-02		

FIG.21

D - 8

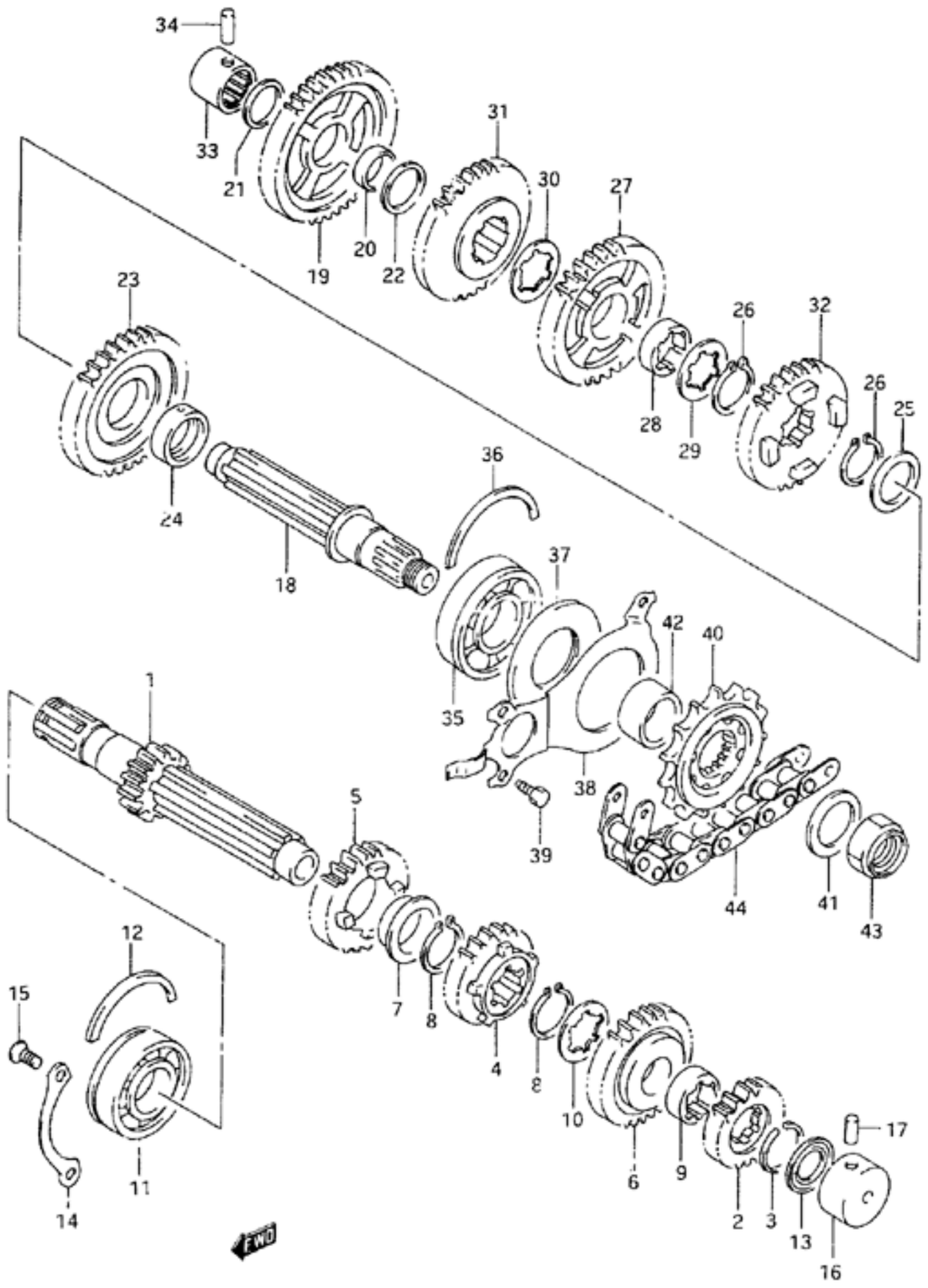


FIG.21 (D- 8) TRANSMISSION

REF NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1-1	24120-26D10	COUNTERSHAFT (NT:14)	1	model R
1-2	24120-26D20	COUNTERSHAFT (NT:14)	1	model S/T/V
2	24221-26D00	GEAR, 2nd drive (NT:21)	1	
3	09380-28008	CIRCLIP	1	
4	24231-26D02	GEAR, 3RD drive (NT:22)	1	
5	24241-26D10	GEAR, 4th drive (NT:22)	1	
6	24251-26D01	GEAR, 5th drive (NT:26)	1	
7	09301-28001	BUSH, 4th drive gear	1	
8	08331-31286	CIRCLIP	2	
9	24332-24A00	BUSH, 5th drive gear	1	
10	09167-28001	WASHER, 5th drive gear	1	
11	09262-25105	BEARING, RH	1	
12-1	09390-62006	C RING	1	model R
12-2	09390-62012	C RING	1	model S/T/V
13	09285-20006	OIL SEAL	1	
14	24741-27A00	HOLDER, bearing	1	
15	02122-06163	SCREW	2	
16	09263-20082	BEARING, LH (20x34x17.5)	1	
17	04221-07129	PIN	1	
18	24131-46E10	SHAFT, drive	1	
19	24311-26D10	GEAR, 1st driven (NT:38)	1	
20	09300-22005	BUSH	1	
21-1	08211-20341	WASHER, RH	1	model R/S/T
21-2	09181-20251	WASHER, RH (20x34x1.0)	1	model V
22-1	08211-22341	WASHER, LH	1	model R/S/T
22-2	09181-22223	WASHER, LH (22x34x1.0)	1	model V
23	24321-26D01	GEAR, 2nd driven (NT:38)	1	
24	09300-28002	BUSH	1	
25-1	08211-28381	WASHER	1	model R/S/T
25-2	09181-28195	WASHER (28x38x1.0)	1	model V
26	08331-31286	CIRCLIP	2	
27	24331-26D10	GEAR, 3rd driven (NT:31)	1	

AIR CLEANER..... C-06	COWLING BODY..... H-02	FRAME COVER..... G-02	FUEL PUMP..... C-08	MUFFLER..... C-07	REAR MASTER CYLINDE J-09	STEERING STEM..... I-04
ALTERNATOR..... E-03	CRANKCASE COVER.... B-07	FRAME..... F-02	FUEL TANK..... F-06	OIL COOLER - OIL FI C-09	REAR SWINGING ARM.. J-02	TAIL LAMP..... E-12
BATTERY..... E-06	CRANKCASE..... B-05	FRONT BRAKE HOSE... I-07	GEAR SHIFTING..... D-10	OIL PAN - OIL PUMP. B-08	REAR WHEEL..... J-05	TRANSMISSION..... D-08
CAM CHAIN..... B-14	CRANKSHAFT..... B-09	FRONT CALIPERS..... I-06	HANDLE BAR..... G-07	OPTIONAL..... J-10	SEAT..... H-15	TURNSIGNAL LAMP.... E-11
CAM SHAFT - VALVE.. B-12	CYLINDER HEAD COVER B-02	FRONT DAMPER..... I-02	HANDLE LEVER..... G-08	RADIATOR HOSE..... D-03	SIGNAL GENERATOR... E-05	UNDER COWLING BODY. H-06
CARBURETOR FITTINGS C-05	CYLINDER HEAD..... B-03	FRONT FENDER..... G-06	HANDLE SWITCH..... E-14	RADIATOR..... D-02	SPEEDOMETER..... E-08	WATER PUMP..... C-10
CARBURETOR..... C-02	CYLINDER..... B-04	FRONT MASTER CYLIND I-08	HEADLAMP..... E-10	REAR CALIPER..... J-07	STAND..... F-03	WIRING HARNESS..... E-13
CLUTCH CYLINDER.... I-09	ELECTRICAL..... E-07	FRONT WHEEL..... I-05	INSTALLATION PARTS. H-05	REAR CUSHION LEVER. J-04	STARTER CLUTCH..... B-11	
CLUTCH..... D-05	FOOTREST..... F-04	FUEL COCK..... F-09	LABEL..... H-14	REAR FENDER..... G-09	STARTING MOTOR..... E-02	

FIG. 21

D - 9

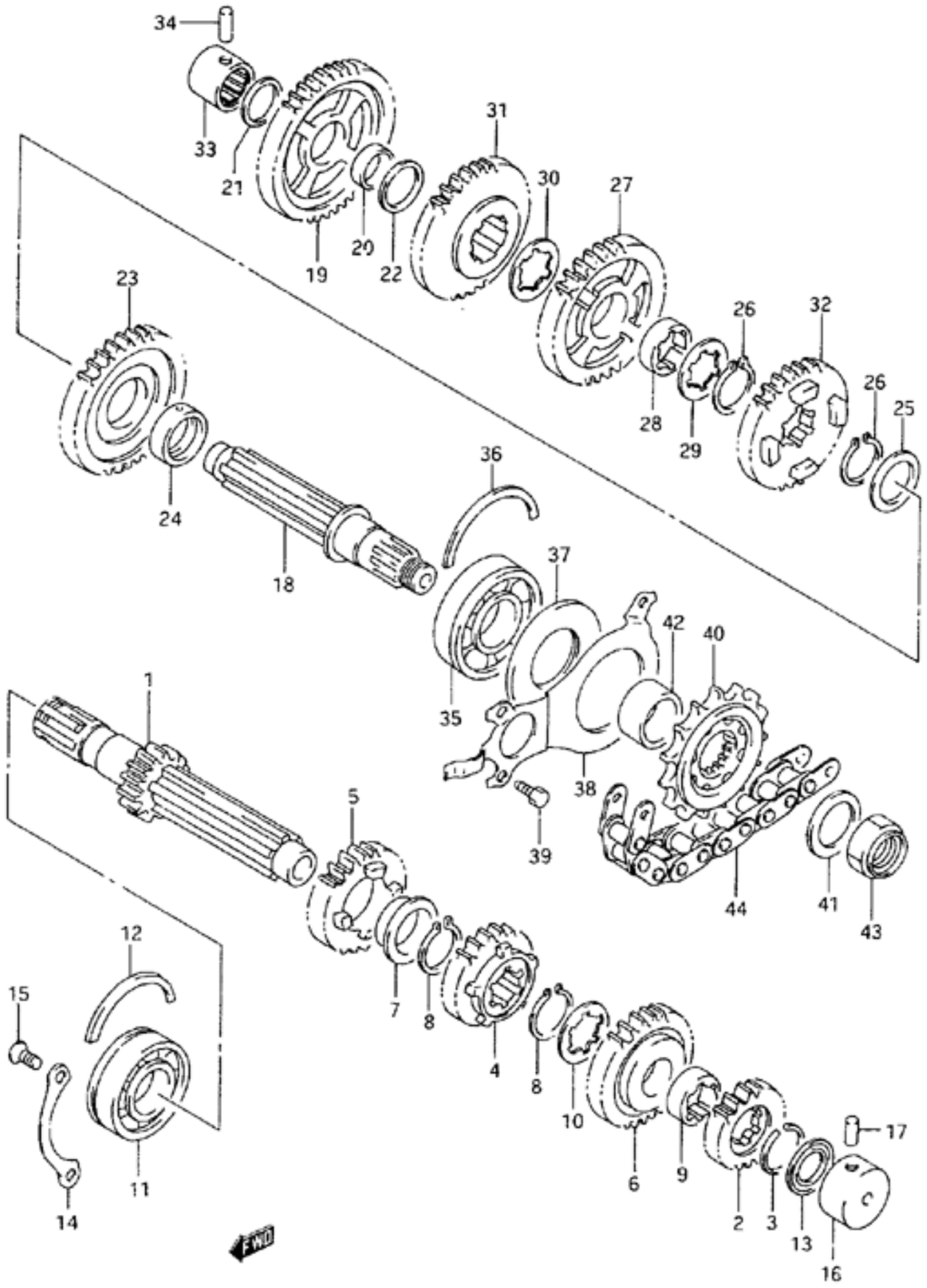


FIG.21 (D- 9) TRANSMISSION

REF NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
28	24332-48B00	BUSH	1	
29	09167-28001	WASHER, LH (T:1)	1	
30	09167-29008	WASHER, RH (T:2)	1	
31-1	24341-26D10	GEAR, 4th driven (NT:26)	1	model R
31-2	24341-26D11	GEAR, 4th driven (NT:26)	1	model S/T/V
32-1	24351-26D20	GEAR, 5th driven	1	model R/S
32-2	24351-26D21	GEAR, 5th driven	1	model T/V
33	09263-20040	BEARING, RH (20x34x20)	1	
34	04221-07209	PIN (L:20)	1	
35	09262-28025	BEARING, LH (28x70x18)	1	
36	09390-70001	C RING	1	
37	09283-36008	OIL SEAL (36x70x6)	1	
38	24751-17E00	PLATE, oil seal	1	
39	01500-06123	SCREW	4	
40	27510-48B00	SPROCKET, engine (NT:15)	1	
41-1	08211-25402	WASHER	1	model R/S/T
41-2	09181-25268	WASHER (25x40x1.5)	1	model V
42	09180-25098	SPACER (25x36x17.7)	1	
43	09159-20004	NUT	1	
44	27600-40C20-110	CHAIN, drive (RK532GSV2,110LE)	1	

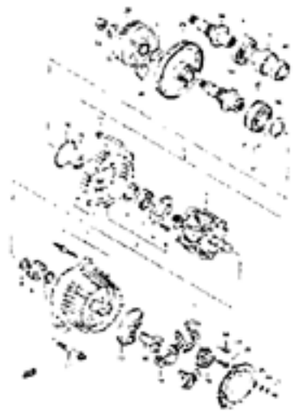
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AIR CLEANER..... C-06	COWLING BODY..... H-02	FRAME COVER..... G-02	FUEL PUMP..... C-08	MUFFLER..... C-07	REAR MASTER CYLINDE J-09	STEERING STEM..... I-04
ALTERNATOR..... E-03	CRANKCASE COVER.... B-07	FRAME..... F-02	FUEL TANK..... F-06	OIL COOLER - OIL FI C-09	REAR SWINGING ARM.. J-02	TAIL LAMP..... E-12
BATTERY..... E-06	CRANKCASE..... B-05	FRONT BRAKE HOSE... I-07	GEAR SHIFTING..... D-10	OIL PAN - OIL PUMP. B-08	REAR WHEEL..... J-05	TRANSMISSION..... D-08
CAM CHAIN..... B-14	CRANKSHAFT..... B-09	FRONT CALIPERS..... I-06	HANDLE BAR..... G-07	OPTIONAL..... J-10	SEAT..... H-15	TURNSIGNAL LAMP.... E-11
CAM SHAFT - VALVE.. B-12	CYLINDER HEAD COVER B-02	FRONT DAMPER..... I-02	HANDLE LEVER..... G-08	RADIATOR HOSE..... D-03	SIGNAL GENERATOR... E-05	UNDER COWLING BODY. H-06
CARBURETOR FITTINGS C-05	CYLINDER HEAD..... B-03	FRONT FENDER..... G-06	HANDLE SWITCH..... E-14	RADIATOR..... D-02	SPEEDOMETER..... E-08	WATER PUMP..... C-10
CARBURETOR..... C-02	CYLINDER..... B-04	FRONT MASTER CYLIND I-08	HEADLAMP..... E-10	REAR CALIPER..... J-07	STAND..... F-03	WIRING HARNESS..... E-13
CLUTCH CYLINDER.... I-09	ELECTRICAL..... E-07	FRONT WHEEL..... I-05	INSTALLATION PARTS. H-05	REAR CUSHION LEVER. J-04	STARTER CLUTCH..... B-11	
CLUTCH..... D-05	FOOTREST..... F-04	FUEL COCK..... F-09	LABEL..... H-14	REAR FENDER..... G-09	STARTING MOTOR..... E-02	

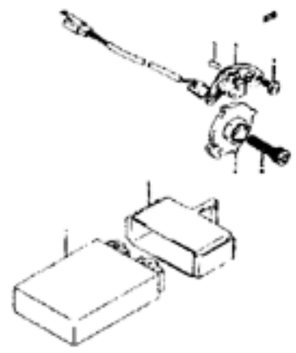
STARTING MOTOR E-02



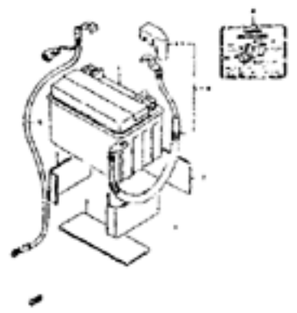
ALTERNATOR E-03



SIGNAL GENERATOR E-05



BATTERY E-06



ELECTRICAL E-07



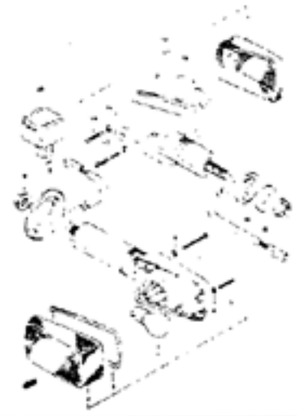
SPEEDOMETER E-08



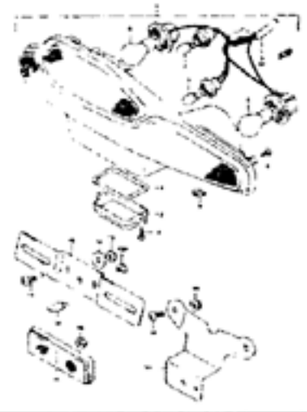
HEADLAMP E-10



TURNSIGNAL LAMP E-11



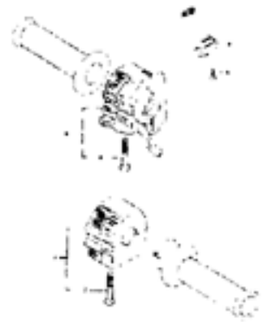
TAIL LAMP E-12



WIRING HARNESS E-13



HANDLE SWITCH E-14



AIR CLEANER	C-06	COWLING BODY	H-02	FRAME COVER	G-02	FUEL PUMP	C-08	MUFFLER	C-07	REAR MASTER CYLINDE	J-09	STEERING STEM	I-04
ALTERNATOR	E-03	CRANKCASE COVER	B-07	FRAME	F-02	FUEL TANK	F-06	OIL COOLER - OIL FI	C-09	REAR SWINGING ARM	J-02	TAIL LAMP	E-12
BATTERY	E-06	CRANKCASE	B-05	FRONT BRAKE HOSE	I-07	GEAR SHIFTING	D-10	OIL PAN - OIL PUMP	B-08	REAR WHEEL	J-05	TRANSMISSION	D-08
CAM CHAIN	B-14	CRANKSHAFT	B-09	FRONT CALIPERS	I-06	HANDLE BAR	G-07	OPTIONAL	J-10	SEAT	H-15	TURNSIGNAL LAMP	E-11
CAM SHAFT - VALVE	B-12	CYLINDER HEAD COVER	B-02	FRONT DAMPER	I-02	HANDLE LEVER	G-08	RADIATOR HOSE	D-03	SIGNAL GENERATOR	E-05	UNDER COWLING BODY	H-06
CARBURETOR FITTINGS	C-05	CYLINDER HEAD	B-03	FRONT FENDER	G-06	HANDLE SWITCH	E-14	RADIATOR	D-02	SPEEDOMETER	E-08	WATER PUMP	C-10
CARBURETOR	C-02	CYLINDER	B-04	FRONT MASTER CYLIND	I-08	[illegible]	E-10	REAR CALIPER	J-07	STAND	F-03	WIRING HARNESS	E-15
CLUTCH CYLINDER	I-09	ELECTRICAL	E-07	FRONT WHEEL	I-05	INSTALLATION PARTS	H-05	REAR CUSHION LEVER	J-04	STARTER CLUTCH	B-11		
CLUTCH	D-05	FOOTREST	F-04	FUEL COCK	[illegible]	LABEL	H-14	REAR FENDER	G-09	STARTING MOTOR	E-02		

FIG.29

E - 10

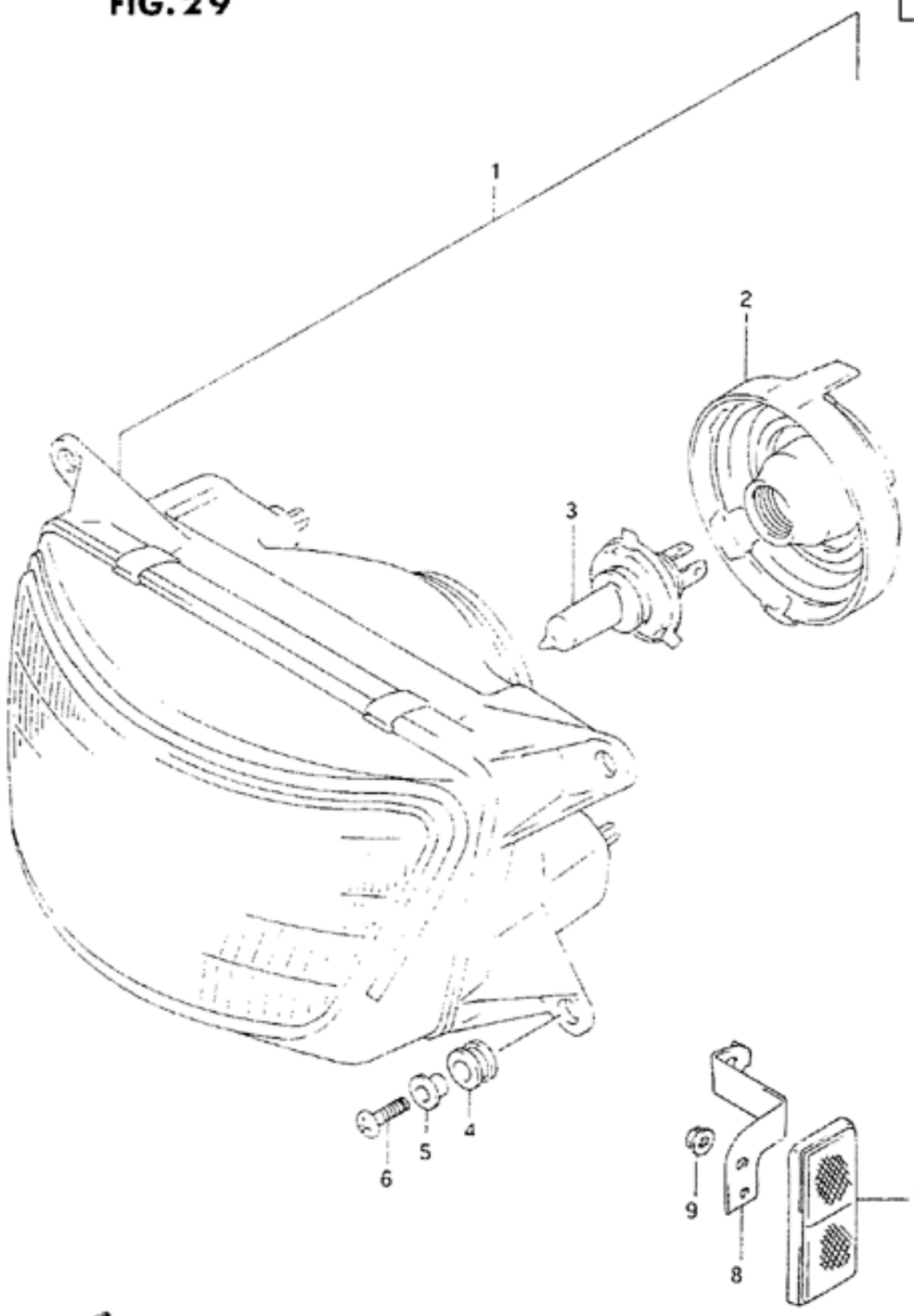


FIG.29 (E-10) HEADLAMP

REF NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1	35100-21E00-999	HEADLAMP ASSY	1	
2	35173-48B00	.COVER, socket	1	
3	09471-12060	BULB (12V,60/55W)	1	
4	09320-07014	CUSHION	4	
5	09169-05018	WASHER	4	
6	02112-05163	SCREW	4	
7	35950-14A00	REFLECTOR, front side	2	
8-1	35956-40C01	BRACKET, RH	1	
8-2	35957-40C01	BRACKET, LH	1	
9	08310-00053	NUT	2	

AIR CLEANER..... C-06
ALTERNATOR..... E-03
BATTERY..... E-06
CAM CHAIN..... B-14
CAM SHAFT - VALVE.. B-12
CARBURETOR FITTINGS C-05
CARBURETOR..... C-02
CLUTCH CYLINDER.... I-09
CLUTCH..... D-05
COWLING BODY..... H-02
CRANKCASE COVER.... B-07
CRANKCASE..... B-05
CRANKSHAFT..... B-09
CYLINDER HEAD COVER B-02
CYLINDER HEAD..... B-03
CYLINDER..... B-04
ELECTRICAL..... E-07
FOOTREST..... F-04
FRAME COVER..... G-02
FRAME..... F-02
FRONT BRAKE HOSE... I-07
FRONT CALIPERS..... I-06
FRONT DAMPER..... I-02
FRONT FENDER..... G-06
FRONT MASTER CYLIND I-08
FRONT WHEEL..... I-05
FUEL COCK..... F-09
FUEL PUMP..... C-08
FUEL TANK..... F-06
GEAR SHIFTING..... D-10
HANDLE BAR..... G-07
HANDLE LEVER..... G-08
HANDLE SWITCH..... E-14
HEADLAMP..... E-10
INSTALLATION PARTS. H-05
LABEL..... H-14
MUFFLER..... C-07
OIL COOLER - OIL FI C-09
OIL PAN - OIL PUMP. B-08
OPTIONAL..... J-10
RADIATOR HOSE..... D-03
RADIATOR..... D-02
REAR CALIPER..... J-07
REAR CUSHION LEVER. J-04
REAR FENDER..... G-09
REAR MASTER CYLINDE J-09
REAR SWINGING ARM.. J-02
REAR WHEEL..... J-05
SEAT..... H-15
SIGNAL GENERATOR... E-05
SPEEDOMETER..... E-08
STAND..... F-03
STARTER CLUTCH..... B-11
STARTING MOTOR..... E-02
STEERING STEM..... I-04
TAIL LAMP..... E-12
TRANSMISSION..... D-08
TURNSIGNAL LAMP.... E-11
UNDER COWLING BODY. H-06
WATER PUMP..... C-10
WIRING HARNESS..... E-13

FIG.30

E - 11

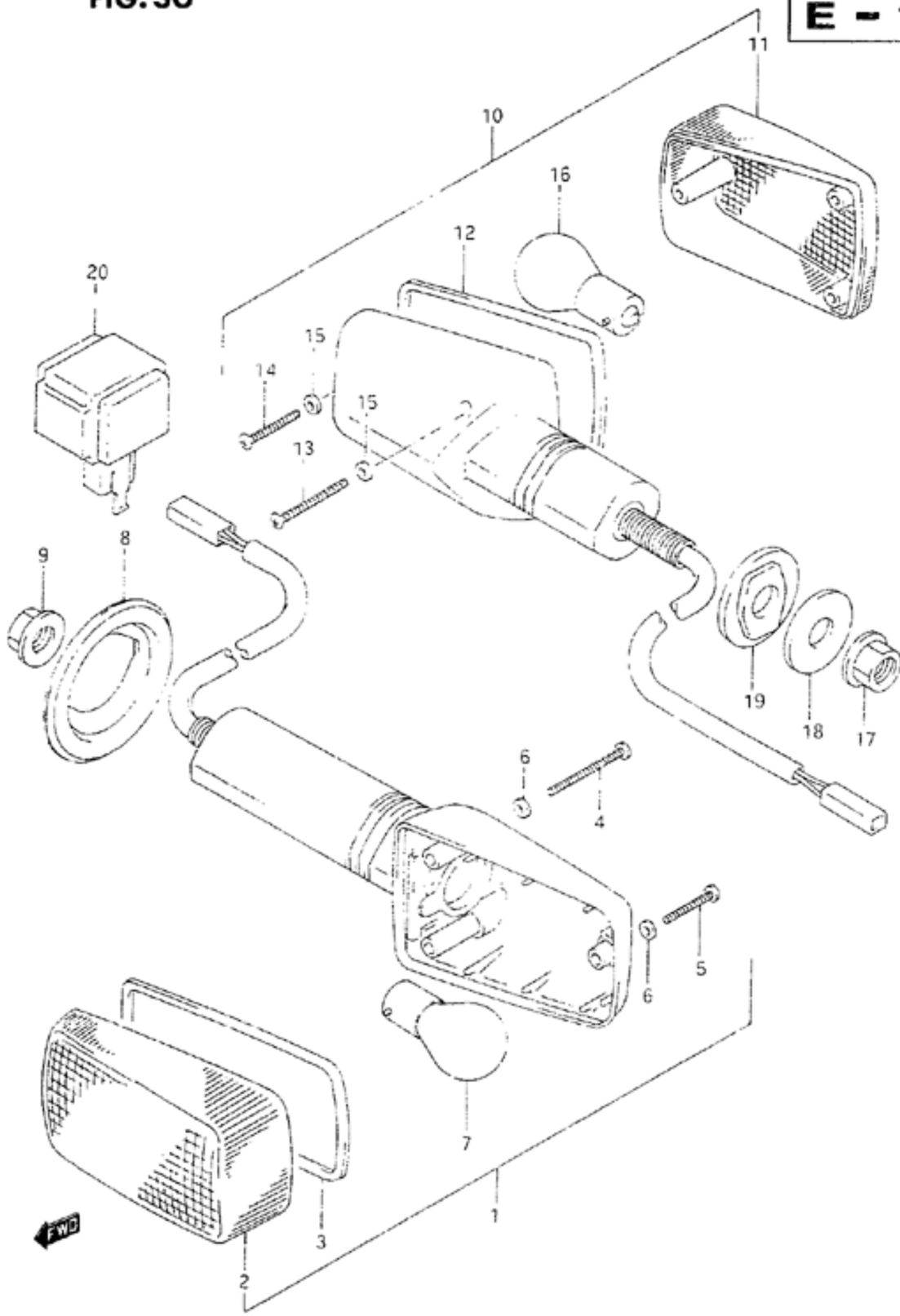


FIG.30 (E-11) TURNSIGNAL LAMP

RBE NO.	PART NO	DESCRIPTION	Q'TY	REMARKS
1-1	35601-29E10	LAMP ASSY, front turnsignal	2	model R/S
1-2	35601-29E30	LAMP ASSY, front turnsidnal	2	model T/V
2	35612-17C20	.LENS	2	
3	35613-27A00	.GASKET	2	
4	35623-27A00	.TAPPING SCREW	4	
5	35725-40511	.TAPPING SCREW	2	
6	35627-27A02	.GASKET	6	
7	09471-12045	.BULB (12V,21W)	2	
8	35674-27A01	GROMMET	2	
9	08316-10103	NUT	2	
10	35603-21EC0	LAMP ASSY, rear turnsignal	2	
11	35652-17C20	.LENS	2	
12	35613-27A00	.GASKET	2	
13	35623-27A00	.TAPPING SCREW	4	
14	35725-40511	.TAPPING SCREW	2	
15	35627-27A02	.GASKET	6	
16	09471-12045	.BULB (12V,21W)	2	
17-1	08316-10103	NUT	2	model R
17-2	08310-00103	NUT	2	model S/T/V
18	09160-10501	WASHER	2	
19	35695-17C00	SPACER	2	
20	38610-45D01	RELAY ASSY, turnsignal	1	

AIR CLEANER..... C-06
ALTERNATOR..... E-03
BATTERY..... E-06
CAM CHAIN..... B-14
CAM SHAFT - VALVE.. B-12
CARBURETOR FITTINGS C-05
CARBURETOR..... C-02
CLUTCH CYLINDER.... I-09
CLUTCH..... D-05
COWLING BODY..... H-02
CRANKCASE COVER.... B-07
CRANKCASE..... B-05
CRANKSHAFT..... B-09
CYLINDER HEAD COVER B-02
CYLINDER HEAD..... B-03
CYLINDER..... B-04
ELECTRICAL..... E-07
FOOTREST..... F-04
FRAME COVER..... G-02
FRAME..... F-02
FRONT BRAKE HOSE... I-07
FRONT CALIPERS..... I-06
FRONT DAMPER..... I-02
FRONT FENDER..... G-06
FRONT MASTER CYLIND I-08
FRONT WHEEL..... I-05
FUEL COCK..... F-09
FUEL PUMP..... C-08
FUEL TANK..... F-06
GEAR SHIFTING..... D-10
HANDLE BAR..... G-07
HANDLE LEVER..... G-08
HANDLE SWITCH..... E-14
HEADLAMP..... E-10
INSTALLATION PARTS. H-05
LABEL..... H-14
MUFFLER..... C-07
OIL COOLER - OIL FI C-09
OIL PAN - OIL PUMP. B-08
OPTIONAL..... J-10
RADIATOR HOSE..... D-03
RADIATOR..... D-02
REAR CALIPER..... J-07
REAR CUSHION LEVER. J-04
REAR FENDER..... G-09
REAR MASTER CYLINDE J-09
REAR SWINGING ARM.. J-02
REAR WHEEL..... J-05
SEAT..... H-15
SIGNAL GENERATOR... E-05
SPEEDOMETER..... E-08
STAND..... F-03
STARTER CLUTCH..... B-11
STARTING MOTOR..... E-02
STEERING STEM..... I-04
TAIL LAMP..... E-12
TRANSMISSION..... D-08
TURNSIGNAL LAMP.... E-11
UNDER COWLING BODY. H-06
WATER PUMP..... C-10
WIRING HARNESS..... E-13

FIG.31

E - 12

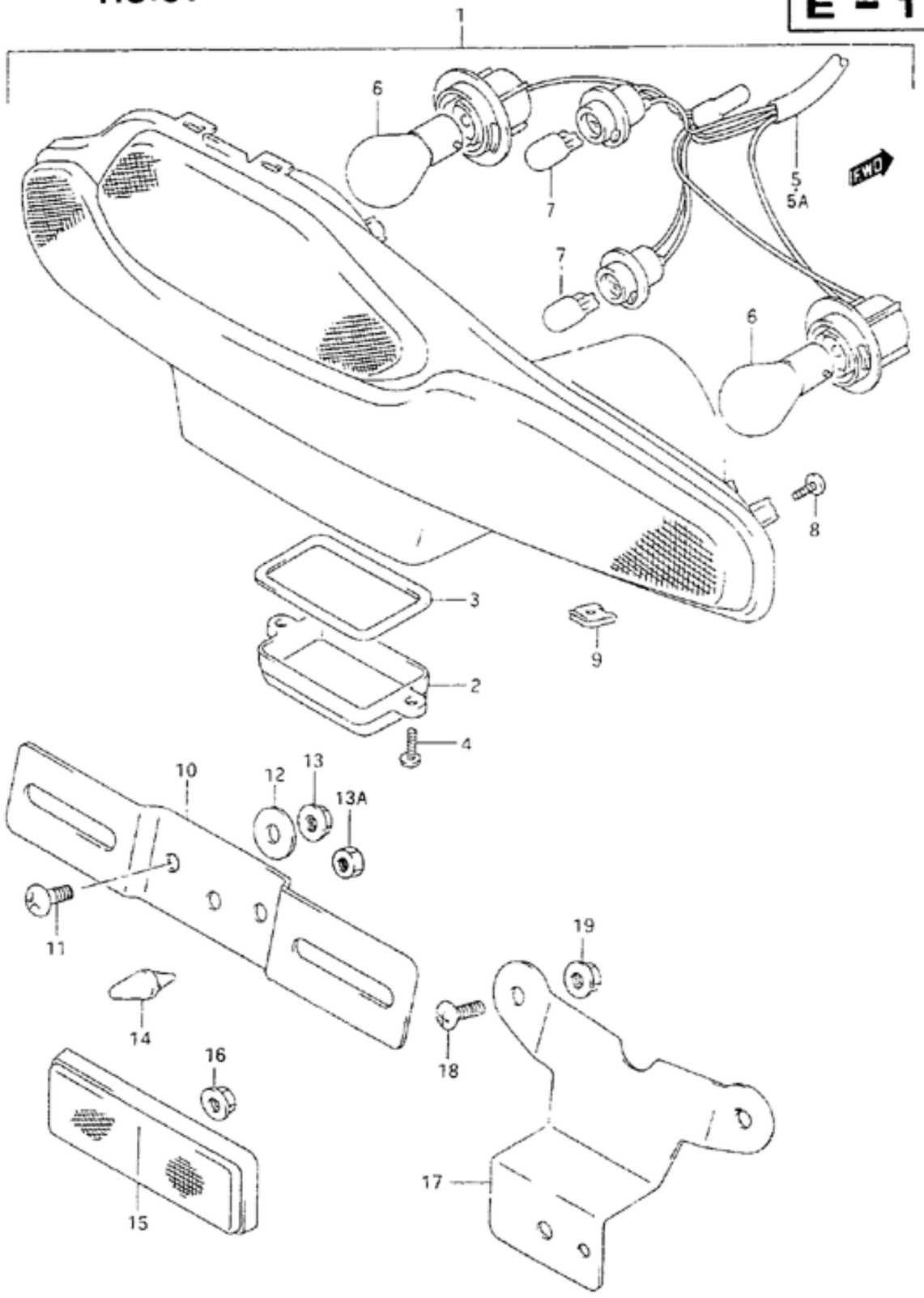


FIG.31 (E-12) TAIL LAMP

REF NO.	PART NO	DESCRIPTION	Q'TY	REMARKS
1-1	35710-21E00	LAMP ASSY, rear combination	1	model R/S
1-2	35710-21E01	LAMP ASSY, rear combination	1	model T/V
2	35912-21E00	.LENS, license	1	
3	35913-26D00	.GASKET	1	model R/S
4	03211-04123	.SCREW, license	2	
5	35718-21E00	.SOCKET ASSY	1	model R/S
5A	35718-21E01	.SOCKET ASSY	1	model T
6	09471-12045	.BULB (12V,21W)	2	
7	09471-12081	.BULB (12V,5W)	2	
8	03511-14123	SCREW	6	
9-1	09148-05021	NUT	2	model R
9-2	09148-05038	NUT	2	model S/T/V
10	35927-31E30	BRACKET, license plate	1	
11-1	02112-06123	SCREW	2	model R
11-2	02142-06123	SCREW	2	model S/T/V
12-1	09160-06096	WASHER (6.5x26x2.3)	2	model R/S/T
12-2	09160-06088	WASHER (6.5x20x1.60)	2	model V
13	08310-00063	NUT	2	model R/S
13A	08316-10063	NUT	2	model T/V
14	09321-06026	CUSHION	1	
15	35970-24D60	REFLECTOR, rear	3	
16	08310-00053	NUT	3	
17	35974-21E00	BRACKET, rear reflector	1	
18	02142-06123	SCREW	2	
19	08316-10063	NUT	2	

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AIR CLEANER.....	C-06	COWLING BODY.....	H-02	FRAME COVER.....	G-02	FUEL PUMP.....	C-08	MUFFLER.....	C-07	REAR MASTER CYLINDE	J-09	STEERING STEM.....	I-04
ALTERNATOR.....	E-03	CRANKCASE COVER....	B-07	FRAME.....	F-02	FUEL TANK.....	F-06	OIL COOLER - OIL FI	C-09	REAR SWINGING ARM..	J-02	TAIL LAMP.....	E-12
BATTERY.....	E-06	CRANKCASE.....	B-05	FRONT BRAKE HOSE...	I-07	GEAR SHIFTING.....	D-10	OIL PAN - OIL PUMP.	B-08	REAR WHEEL.....	J-05	TRANSMISSION.....	D-08
CAM CHAIN.....	B-14	CRANKSHAFT.....	B-09	FRONT CALIPERS.....	I-06	HANDLE BAR.....	G-07	OPTIONAL.....	J-10	SEAT.....	H-15	TURNSIGNAL LAMP....	E-11
CAM SHAFT - VALVE..	B-12	CYLINDER HEAD COVER	B-02	FRONT DAMPER.....	I-02	HANDLE LEVER.....	G-08	RADIATOR HOSE.....	D-03	SIGNAL GENERATOR...	E-05	UNDER COWLING BODY.	H-06
CARBURETOR FITTINGS	C-05	CYLINDER HEAD.....	B-03	FRONT FENDER.....	G-06	HANDLE SWITCH.....	E-14	RADIATOR.....	D-02	SPEEDOMETER.....	E-08	WATER PUMP.....	C-10
CARBURETOR.....	C-02	CYLINDER.....	B-04	FRONT MASTER CYLIND	I-08	HEADLAMP.....	E-10	REAR CALIPER.....	J-07	STAND.....	F-03	WIRING HARNESS.....	E-13
CLUTCH CYLINDER....	I-09	ELECTRICAL.....	E-07	FRONT WHEEL.....	I-05	INSTALLATION PARTS.	H-05	REAR CUSHION LEVER.	J-04	STARTER CLUTCH.....	B-11		
CLUTCH.....	D-05	FOOTREST.....	F-04	FUEL COCK.....	F-09	LABEL.....	H-14	REAR FENDER.....	G-09	STARTING MOTOR.....	E-02		

FIG.32

E - 13

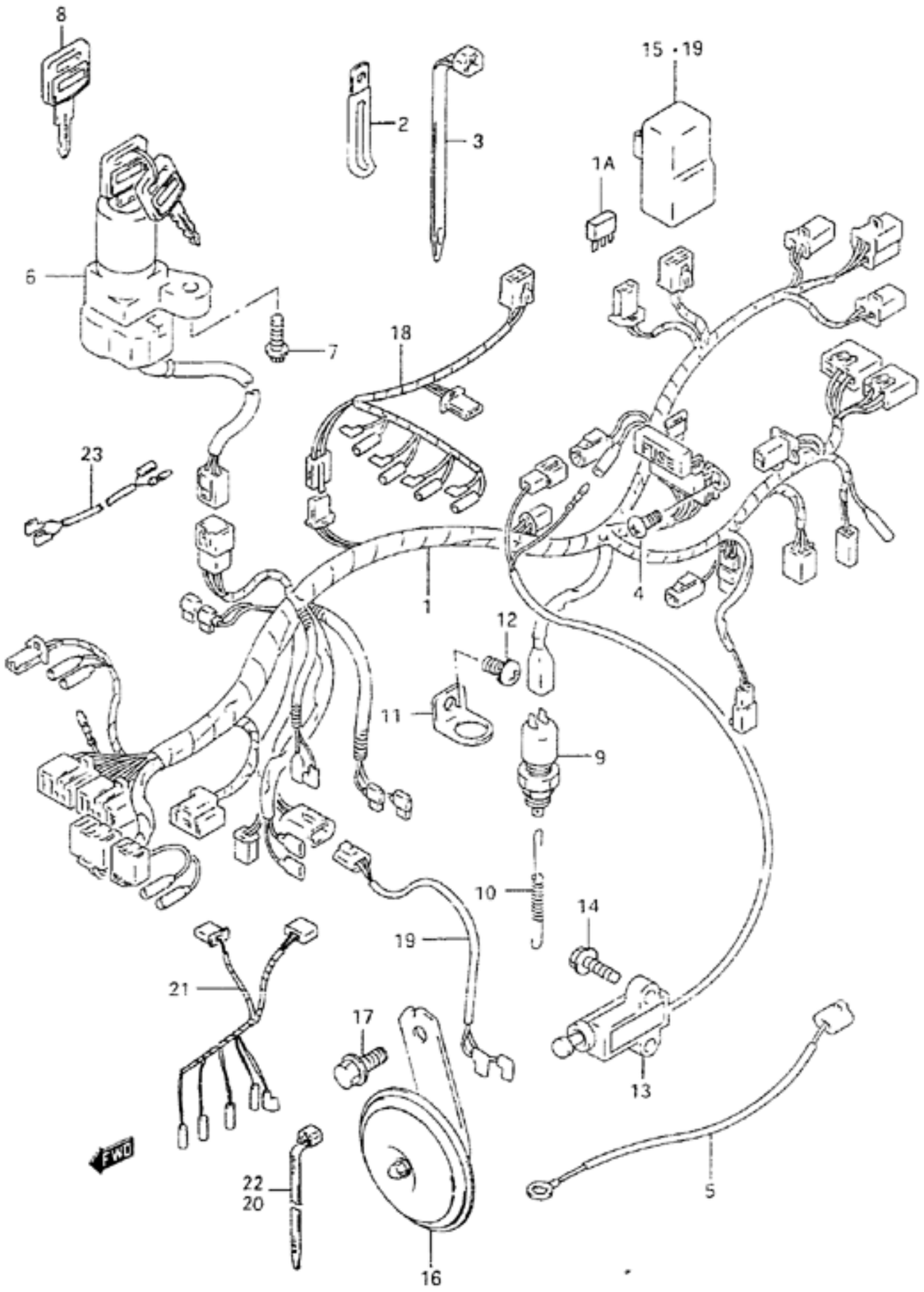


FIG.32 (E-13) WIRING HARNESS

REF NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1-1	36610-21E10	HARNESS, wiring	1	model R
1-2	36610-21E11	HARNESS, wiring	1	model S
1-3	36610-21E20	HARNESS, wiring	1	model T/V
1A	36611-38A00	.DIODE	1	
2-1	09404-06206	CLAMP	1	model R/S
2-2	09404-06429	CLAMP	1	model T/V
3-1	09407-11402	CLAMP	1	
3-2	09407-14403	CLAMP (L:125)	10	
3-3	09407-18403	CLAMP (L:165)	6	
4	02142-06123	SCREW, fuse box	2	
5	36851-17E10	WIRE, oil switch lead	1	
6	37100-26D02	LOCK ASSY, steering	1	
7	09139-06026	BOLT	2	
8	37146-26D10	KEY, blank	1	OPT
9	37740-24A00	SWITCH ASSY, stop lamp	1	
10	09443-06012	SPRING	1	
11	43251-21E00	BRACKET, stop switch	1	
12	02142-06083	SCREW	1	
13-1	37840-44A20	SWITCH ASSY, side stand	1	model R
13-2	37840-44X50	SWITCH ASSY, side stand	1	model S/T/V
14	01550-06203	BOLT	2	
15	38740-24X50	RELAY ASSY, side stand	1	
16-1	38502-21E00	HORN ASSY, low	1	model R/S
16-2	38502-21E01	HORN ASSY, low	1	model T/V
17	01550-08163	BOLT	1	
18	36859-21E00	WIRE, CARB heater lead	1	model S
19	38740-24X50	RELAY ASSY, CARB heater	1	model S
20	09407-14403	CLAMP, CARB heater	1	model S
21	36856-21E00	WIRE, CARB heater lead	1	model T/V
22	09407-11401	CLAMP, CARB heater	1	model T/V
23	36852-19000	WIRE, clutch switch lead	1	model V

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AIR CLEANER..... C-06
ALTERNATOR..... E-03
BATTERY..... E-06
CAM CHAIN..... B-14
CAM SHAFT - VALVE.. B-12
CARBURETOR FITTINGS C-05
CARBURETOR..... C-02
CLUTCH CYLINDER.... I-09
CLUTCH..... D-05
COWLING BODY..... H-02
CRANKCASE COVER.... B-07
CRANKCASE..... B-05
CRANKSHAFT..... B-09
CYLINDER HEAD COVER B-02
CYLINDER HEAD..... B-03
CYLINDER..... B-04
ELECTRICAL..... E-07
FOOTREST..... F-04
FRAME COVER..... G-02
FRAME..... F-02
FRONT BRAKE HOSE... I-07
FRONT CALIPERS..... I-06
FRONT DAMPER..... I-02
FRONT FENDER..... G-06
FRONT MASTER CYLIND I-08
FRONT WHEEL..... I-05
FUEL COCK..... F-09
FUEL PUMP..... C-08
FUEL TANK..... F-06
GEAR SHIFTING..... D-10
HANDLE BAR..... G-07
HANDLE LEVER..... G-08
HANDLE SWITCH..... E-14
HEADLAMP..... E-10
INSTALLATION PARTS. H-05
LABEL..... H-14
MUFFLER..... C-07
OIL COOLER - OIL FI C-09
OIL PAN - OIL PUMP. B-08
OPTIONAL..... J-10
RADIATOR HOSE..... D-03
RADIATOR..... D-02
REAR CALIPER..... J-07
REAR CUSHION LEVER. J-04
REAR FENDER..... G-09
REAR MASTER CYLINDE J-09
REAR SWINGING ARM.. J-02
REAR WHEEL..... J-05
SEAT..... H-15
SIGNAL GENERATOR... E-05
SPEEDOMETER..... E-08
STAND..... F-03
STARTER CLUTCH..... B-11
STARTING MOTOR..... E-02
STEERING STEM..... I-04
TAIL LAMP..... E-12
TRANSMISSION..... D-08
TURNSIGNAL LAMP.... E-11
UNDER COWLING BODY. H-06
WATER PUMP..... C-10
WIRING HARNESS..... E-13

FIG. 33

E - 14

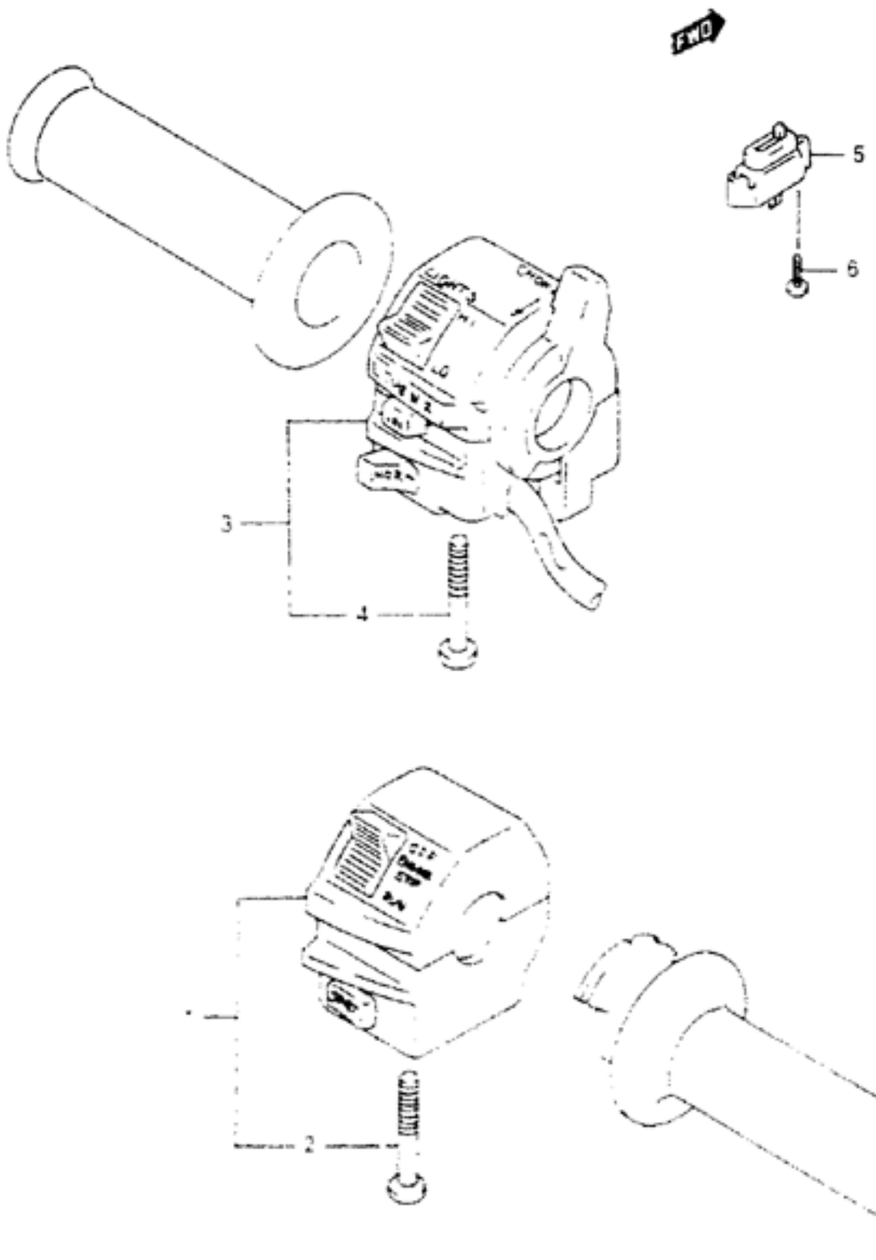


FIG.33 (E-14) HANDLE SWITCH

REF NO.	PART NO	DESCRIPTION	Q'TY	REMARKS
1-1	37200-17E31	SWITCH ASSY, handle RH	1	model R/S
1-2	37200-17E40	SWITCH ASSY, handle RH	1	model T
1-3	37200-17E41	SWITCH ASSY, haNdle RH	1	model V
2	02112-05455	.SCREW	2	
3	37400-17E31	SWITCH ASSY, handle LH	1	
4	02112-05455	.SCREW	2	
5	37560-38A00	SWITCH ASSY, clutch	1	
6	37564-26E00	SCREW	2	

AIR CLEANER..... C-06
ALTERNATOR..... E-03
BATTERY..... E-06
CAM CHAIN..... B-14
CAM SHAFT - VALVE.. B-12
CARBURETOR FITTINGS C-05
CARBURETOR..... C-02
CLUTCH CYLINDER.... I-09
CLUTCH..... D-05
COWLING BODY..... H-02
CRANKCASE COVER.... B-07
CRANKCASE..... B-05
CRANKSHAFT..... B-09
CYLINDER HEAD COVER B-02
CYLINDER HEAD..... B-03
CYLINDER..... B-04
ELECTRICAL..... E-07
...STREST..... F-04
FRAME COVER..... G-02
FRAME..... F-02
FRONT BRAKE HOSE... I-07
FRONT CALIPER..... I-06
FRONT DAMPER..... I-02
FRONT FENDER..... G-06
FRONT MASTER CYLIND I-08
FRONT WHEEL..... I-05
FUEL COCK..... F-09
FUEL PUMP..... C-08
FUEL TANK..... F-06
GEAR SHIFTING..... D-10
HANDLE BAR..... G-07
HANDLE LEVER..... G-08
HANDLE SWITCH..... E-14
HEADLAMP..... E-10
INSTALLATION PARTS. H-05
LABEL..... H-14
MUFFLER..... C-07
OIL COOLER - OIL FI C-09
OIL PAN - OIL PUMP. B-08
OPTIONAL..... J-10
RADIATOR HOSE..... D-03
RADIATOR..... D-02
REAR CALIPER..... J-07
REAR CUSHION LEVER. J-04
REAR FENDER..... G-09
REAR MASTER CYLINDE J-09
REAR SWINGING ARM.. J-02
REAR WHEEL..... J-05
SEAT..... H-15
SIGNAL GENERATOR... E-05
SPEEDOMETER..... E-08
STAND..... F-05
STARTER CLUTCH..... B-11
STARTING MOTOR..... E-02
STEERING STEM..... I-04
TAIL LAMP..... E-12
TRANSMISSION..... D-08
TURNSIGNAL LAMP.... F-11
UNDER COWLING BODY. H-06
WATER PUMP..... C-10
W.RING HARNESS..... E-11

FIG.23

E - 2

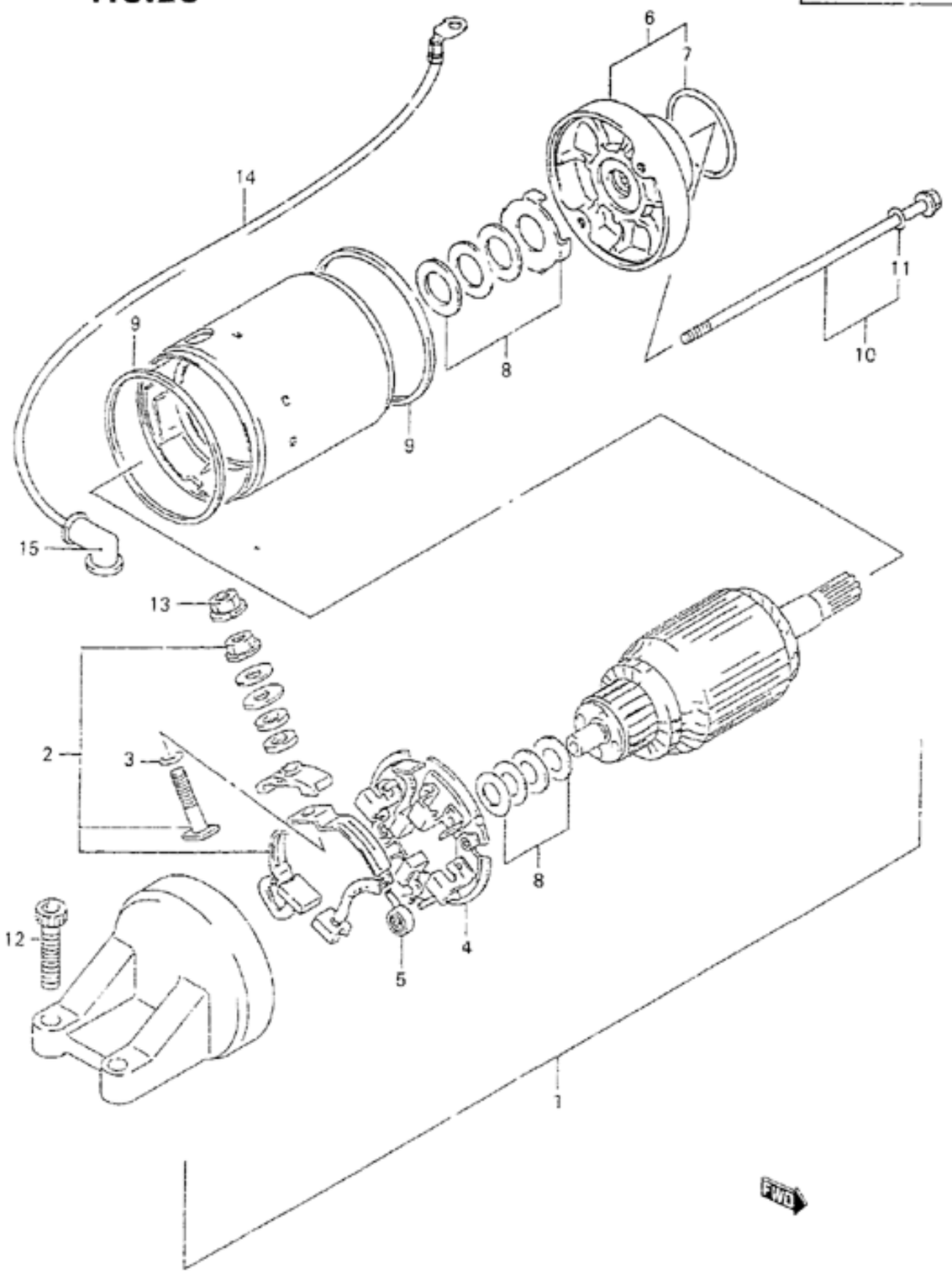


FIG.23 (E- 2) STARTING MOTOR

REF NO.	PART NO	DESCRIPTION	Q'TY	REMARKS
1	31100-46E00	MOTOR, starting	1	
2	31130-19B10	.TERMINAL SET, brush	1	
	31143-49040	.O RING	1	
4	31132-46E00	.BRUSH HOLDER SET	1	
5	31135-31300	.SPRING, brush	2	
6	31150-46E00	.BRACKET ASSY, front	1	
7	31156-48B00	..O RING	1	
8	31170-19B10	.WASHER SET	1	
9	31264-31300	.O RING	2	
10	31280-19B10	.BOLT ASSY	2	
11	31143-49040	..O RING	2	
12	09128-06024	BOLT	2	
13	08361-35068	NUT	1	
14	33810-21E00	WIRE, starter motor	1	
15	31861-48B10	.CAP	1	

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AIR CLEANER..... C-06
ALTERNATOR..... E-03
BATTERY..... E-06
CAM CHAIN..... B-14
CAM SHAFT - VALVE.. B-12
CARBURETOR FITTINGS C-05
CARBURETOR..... C-02
CLUTCH CYLINDER.... I-09
CLUTCH..... D-05
COWLING BODY..... H-02
CRANKCASE COVER.... B-07
CRANKCASE..... B-05
CRANKSHAFT..... B-09
CYLINDER HEAD COVER B-02
CYLINDER HEAD..... B-03
CYLINDER..... B-04
ELECTRICAL..... E-07
FOOTREST..... F-04
FRAME COVER..... G-02
FRAME..... F-02
FRONT BRAKE HOSE... I-07
FRONT CALIPERS..... I-06
FRONT DAMPER..... I-02
FRONT FENDER..... G-06
FRONT MASTER CYLIND I-08
FRONT WHEEL..... I-05
FUEL COCK..... F-09
FUEL PUMP..... C-08
FUEL TANK..... F-06
GEAR SHIFTING..... D-10
HANDLE BAR..... G-07
HANDLE LEVER..... G-08
HANDLE SWITCH..... E-14
HEADLAMP..... E-10
INSTALLATION PARTS. H-05
LABEL..... H-14
MUFFLER..... C-07
OIL COOLER - OIL FI C-09
OIL PAN - OIL PUMP. B-08
OPTIONAL..... J-10
RADIATOR HOSE..... D-03
RADIATOR..... D-02
REAR CALIPER..... J-07
REAR CUSHION LEVER. J-04
REAR FENDER..... G-09
REAR MASTER CYLINDE J-09
REAR SWINGING ARM.. J-02
REAR WHEEL..... J-05
SEAT..... H-15
SIGNAL GENERATOR... E-05
SPEEDOMETER..... E-08
STAND..... F-03
STARTER CLUTCH..... B-11
STARTING MOTOR..... E-02
STEERING STEM..... I-04
TAIL LAMP..... E-12
TRANSMISSION..... D-08
TURNSIGNAL LAMP.... E-11
UNDER COWLING BODY. H-06
WATER PUMP..... C-10
WIRING HARNESS..... E-13

FIG. 24

E - 3

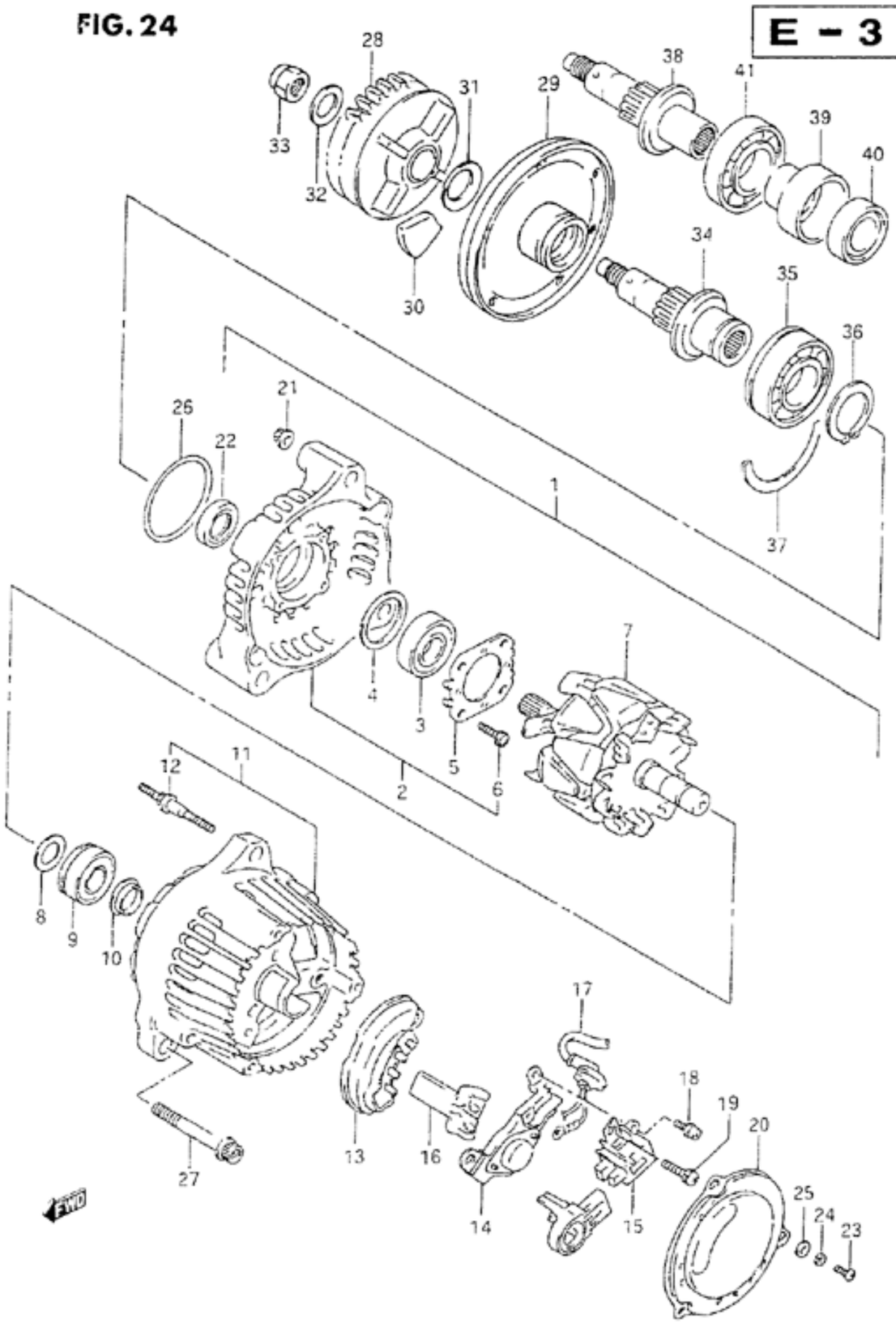


FIG.24 (E- 3) ALTERNATOR

REF NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1-1	31400-17E20	ALTERNATOR ASSY	1	model R
1-2	31400-17E30	ALTERNATOR ASSY	1	model S/T/V
2	31580-17E00	.FRAME, drive end	1	
3	31612-06B00	..BEARING	1	
4	31613-48B00	..COVER, bearing	1	
5	31585-85251	..RETAINER, bearing	1	
6	31586-17E00	..SCREW, bearing retainer	4	
7-1	31710-17E20	.ROTOR ASSY	1	model R
7-2	31710-17E30	.ROTOR ASSY	1	model S/T/V
8	31613-82610	.COVER (1)	1	
9	31612-48B00	.BEARING	1	
10	31613-27A10	.COVER (2)	1	
11	31611-17E00	.FRAME, end	1	
12	31587-85250	..STUD BOLT	2	
13	31621-27A00	.HOLDER, rectifier	1	
14	32500-27A00	.REGULATOR	1	
15	31656-48B00	.HOLDER, brush	1	
16	31687-17E00	.COVER, rectifier	1	
17	31480-17E00	.LEAD WIRE	1	
18	02112-04063	.SCREW	2	
19	31688-27A00	.SCREW (5x17)	3	
20	31614-17E00	.COVER	1	
21	08310-00053	.NUT	2	
22	31780-27X50	.OIL SEAL SET	1	
23	02112-05085	.SCREW	3	
24	08321-01053	.LOCK WASHER	3	
25	08322-01053	.WASHER	3	
26	31156-17E00	O RING	1	
27	07120-08653	BOLT	3	
28	22730-21E00	GEAR, generator driven (NT:30)	1	
29	22734-21E00	HOUSING, damper	1	
30	21231-17E10	DAMPER	8	

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AIR CLEANER..... C-06
ALTERNATOR..... E-03
BATTERY..... E-06
CAM CHAIN..... B-14
CAM SHAFT - VALVE.. B-12
CARBURETOR FITTINGS C-05
CARBURETOR..... C-02
CLUTCH CYLINDER.... I-09
CLUTCH..... D-05
COWLING BODY..... H-02
CRANKCASE COVER.... B-07
CRANKCASE..... B-05
CRANKSHAFT..... B-09
CYLINDER HEAD COVER B-02
CYLINDER HEAD..... B-03
CYLINDER..... B-04
ELECTRICAL..... E-07
FOOTREST..... F-04
FRAME COVER..... G-02
FRAME..... F-02
FRONT BRAKE HOSE... I-07
FRONT CALIPERS..... I-06
FRONT DAMPER..... I-02
FRONT FENDER..... G-06
FRONT MASTER CYLIND I-08
FRONT WHEEL..... I-05
FUEL COCK..... F-09
FUEL PUMP..... C-08
FUEL TANK..... F-06
GEAR SHIFTING..... D-10
HANDLE BAR..... G-07
HANDLE LEVER..... G-08
HANDLE SWITCH..... E-14
HEADLAMP..... E-10
INSTALLATION PARTS. H-05
LABEL..... H-14
MUFFLER..... C-07
OIL COOLER - OIL FI C-09
OIL PAN - OIL PUMP. B-08
OPTIONAL..... J-10
RADIATOR HOSE..... D-03
RADIATOR..... D-02
REAR CALIPER..... J-07
REAR CUSHION LEVER. J-04
REAR FENDER..... G-09
REAR MASTER CYLINDE J-09
REAR SWINGING ARM.. J-02
REAR WHEEL..... J-05
SEAT..... H-15
SIGNAL GENERATOR... E-05
SPEEDOMETER..... E-08
STAND..... F-03
STARTER CLUTCH..... B-11
STARTING MOTOR..... E-02
STEERING STEM..... I-04
TAIL LAMP..... E-12
TRANSMISSION..... D-08
TURNSIGNAL LAMP.... E-11
UNDER COWLING BODY. H-06
WATER PUMP..... C-10
WIRING HARNESS..... E-13

FIG. 24

E - 4

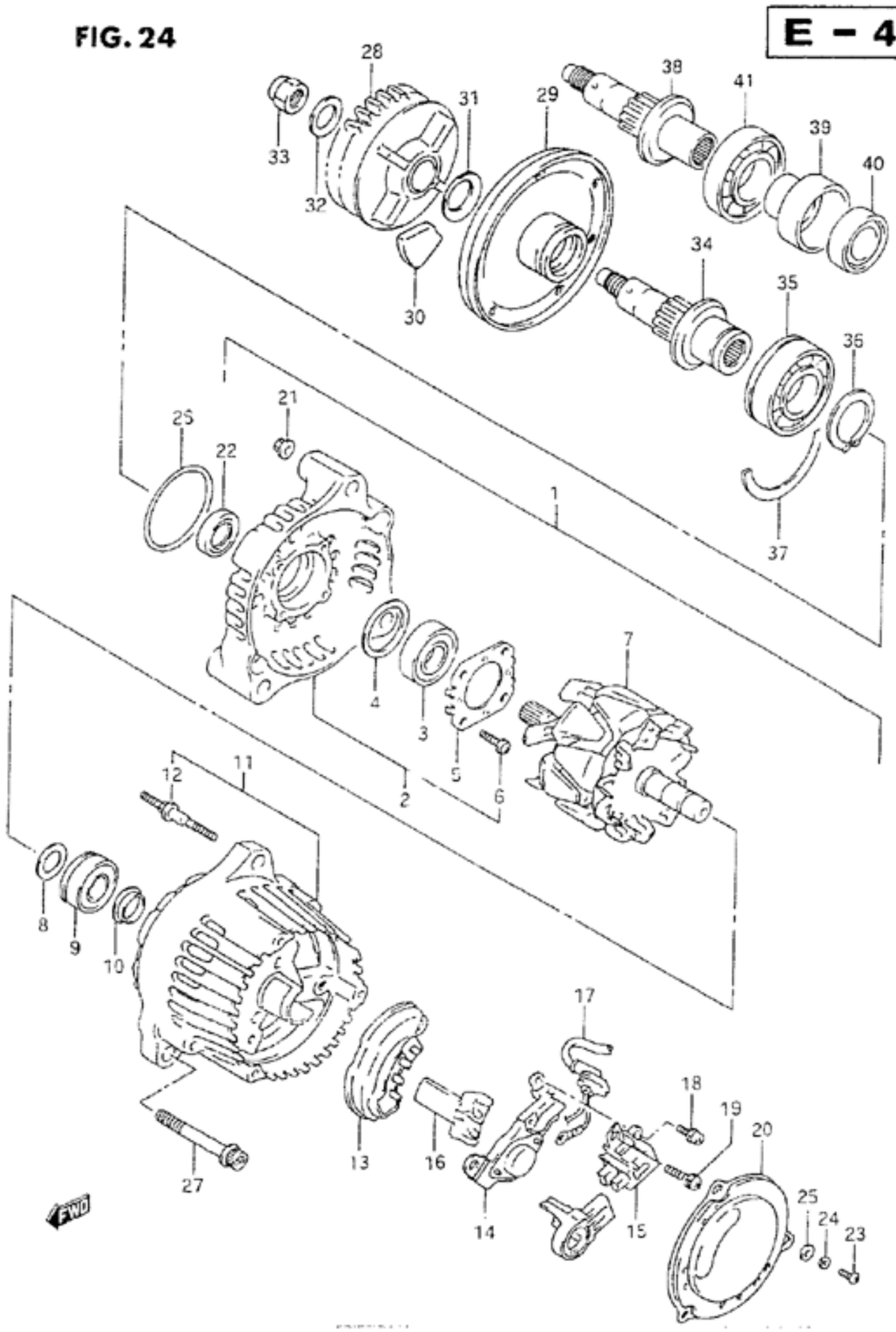


FIG.24 (E- 4) ALTERNATOR

REF NO.	PART NO	DESCRIPTION	Q'TY	REMARKS
31	09164-18006	WAVE WASHER	1	
32	08211-12243	WASHER	1	
33	09159-12010	NUT	1	
34	22732-21E00	SHAFT, generator drive	1	model R/S
35	09262-25110	BEARING	1	model R/S
36	08331-31256	CIRCLIP	1	model R/S
37	09390-52003	C RING	1	
38	22732-46E00	SHAFT, generator drive	1	model T/V
39	22736-46E00	HUB, generator drive	1	model T/V
40	22740-46E00	COUPLING, generator	1	model T/V
41	09262-25116	BEARING, generator drive	1	model T/V

RF900RV E28

AIR CLEANER.....	C-06	COWLING BODY.....	H-02	FRAME COVER.....	G-02	FUEL PUMP.....	C-08	MUFFLER.....	C-07	REAR MASTER CYLINDE	J-09	STEERING STEM.....	I-04
ALTERNATOR.....	E-03	CRANKCASE COVER....	B-07	FRAME.....	F-02	FUEL TANK.....	F-06	OIL COOLER - OIL FI	C-09	REAR SWINGING ARM..	J-02	TAIL LAMP.....	E-12
BATTERY.....	E-06	CRANKCASE.....	B-05	FRONT BRAKE HOSE...	I-07	GEAR SHIFTING.....	D-10	OIL PAN - OIL PUMP.	B-08	REAR WHEEL.....	J-05	TRANSMISSION.....	D-08
CAM CHAIN.....	B-14	CRANKSHAFT.....	B-09	FRONT CALIPERS.....	I-06	HANDLE BAR.....	G-07	OPTIONAL.....	J-10	SEAT.....	H-15	TURNSIGNAL LAMP....	E-11
CAM SHAFT - VALVE..	B-12	CYLINDER HEAD COVER	B-02	FRONT DAMPER.....	I-02	HANDLE LEVER.....	G-08	RADIATOR HOSE.....	D-03	SIGNAL GENERATOR...	E-05	UNDER COWLING BODY.	H-[illegible]
CARBURETOR FITTINGS	C-05	CYLINDER HEAD.....	B-03	FRONT FENDER.....	G-06	HANDLE SWITCH.....	E-14	RADIATOR.....	D-02	SPEEDOMETER.....	E-08	WATER PUMP.....	C-[illegible]
CARBURETOR.....	C-02	CYLINDER.....	B-04	FRONT MASTER CYLIND	I-08	HEADLAMP.....	E-10	REAR CALIPER.....	J-07	STAND.....	F-03	WIRING HARNESS.....	E-13
CLUTCH CYLINDER....	I-09	ELECTRICAL.....	E-07	FRONT WHEEL.....	I-05	INSTALLATION PARTS.	H-05	REAR CUSHION LEVER.	J-04	STARTER CLUTCH.....	B-11		
CLUTCH.....	D-05	FOOTREST.....	F-04	FUEL COCK.....	F-09	LABEL.....	H-14	REAR FENDER.....	G-09	STARTING MOTOR.....	E-02		

FIG.25

E - 5

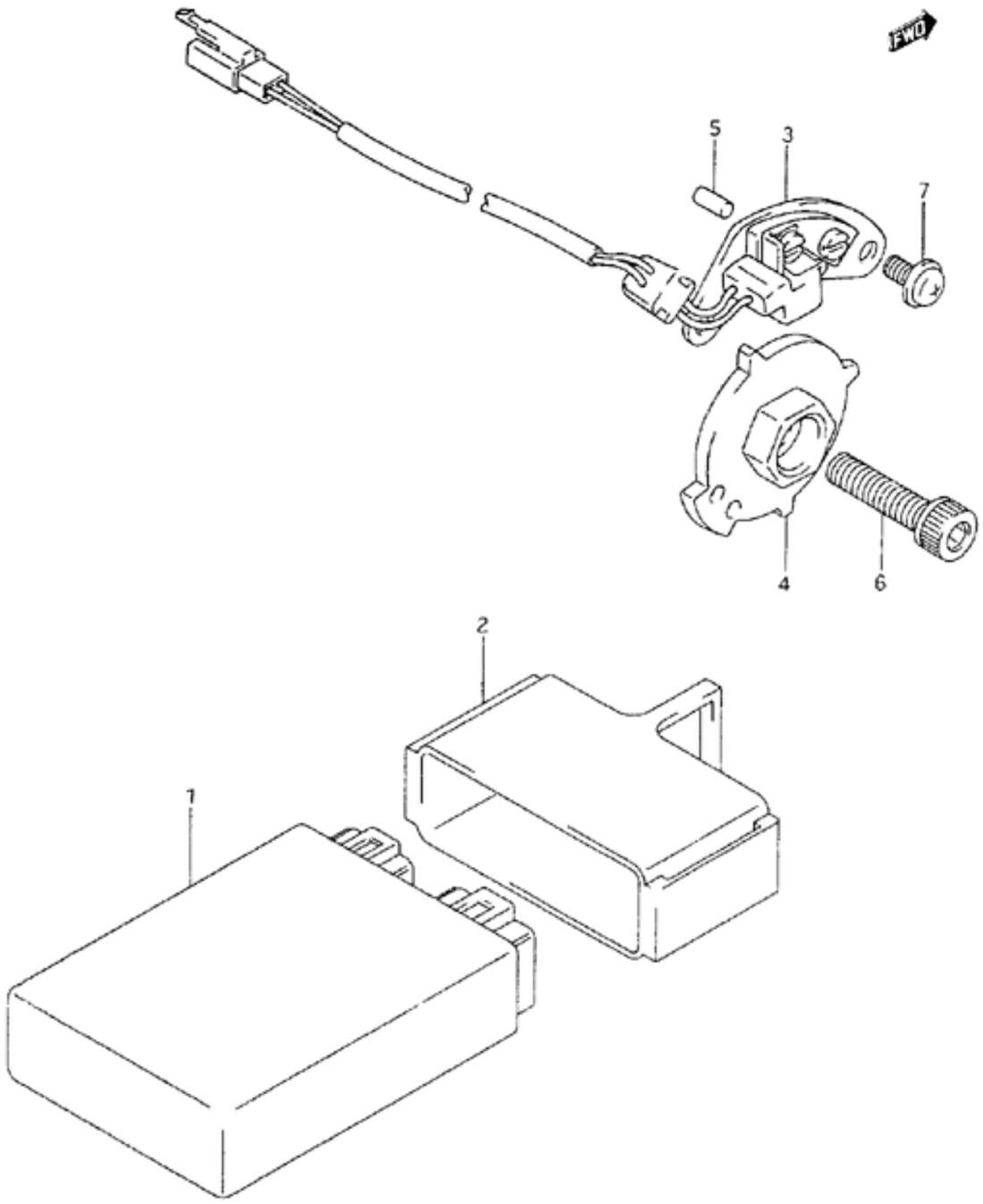


FIG.25 (E- 5) SIGNAL GENERATOR

REF NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1-1	32900-31E00	IGNITER	1	model R/S
1-2	32900-31E80	IGNITER	1	model T/V
2	32980-40C01	CUSHION	1	
3	33110-17E00	SIGNAL GENERATOR ASSY	1	
4	33120-17E20	ROTOR, signal	1	
5	04221-04089	PIN	1	
6	07130-08303	BOLT	1	
7	02112-05103	SCREW	2	

AIR CLEANER.....	C-06	COWLING BODY.....	H-02	FRAME COVER.....	G-02	FUEL PUMP.....	C-08	MUFFLER.....	C-07	REAR MASTER CYLINDE	J-09	STEERING STEM.....	I-04
ALTERNATOR.....	E-03	CRANKCASE COVER....	B-07	FRAME.....	F-02	FUEL TANK.....	F-06	OIL COOLER - OIL FI	C-09	REAR SWINGING ARM..	J-02	TAIL LAMP.....	E-12
BATTERY.....	E-06	CRANKCASE.....	B-05	FRONT BRAKE HOSE...	I-07	GEAR SHIFTING.....	D-10	OIL PAN - OIL PUMP.	B-08	REAR WHEEL.....	J-05	TRANSMISSION.....	D-08
CAM CHAIN.....	B-14	CRANKSHAFT.....	B-09	FRONT CALIPERS.....	I-06	HANDLE BAR.....	G-07	OPTIONAL.....	J-10	SEAT.....	H-15	TURNSIGNAL LAMP....	E-11
CAM SHAFT - VALVE..	B-12	CYLINDER HEAD COVER	B-02	FRONT DAMPER.....	I-02	HANDLE LEVER.....	G-08	RADIATOR HOSE.....	D-03	SIGNAL GENERATOR...	E-05	UNDER COWLING BODY.	H-06
CARBURETOR FITTINGS	C-05	CYLINDER HEAD.....	B-03	FRONT FENDER.....	G-06	HANDLE SWITCH.....	E-14	RADIATOR.....	D-02	SPEEDOMETER.....	E-08	WATER PUMP.....	C-10
CARBURETOR.....	C-02	CYLINDER.....	B-04	FRONT MASTER CYLIND	I-08	HEADLAMP.....	E-10	REAR CALIPER.....	J-07	STAND.....	F-03	WIRING HARNESS.....	E-13
CLUTCH CYLINDER....	I-09	ELECTRICAL.....	E-07	FRONT WHEEL.....	I-05	INSTALLATION PARTS.	H-05	REAR CUSHION LEVER.	J-04	STARTER CLUTCH.....	B-11		
CLUTCH.....	D-05	FOOTREST.....	F-04	FUEL COCK.....	F-09	LABEL.....	H-14	REAR FENDER.....	G-09	STARTING MOTOR.....	E-02		

FIG. 26

E - 6

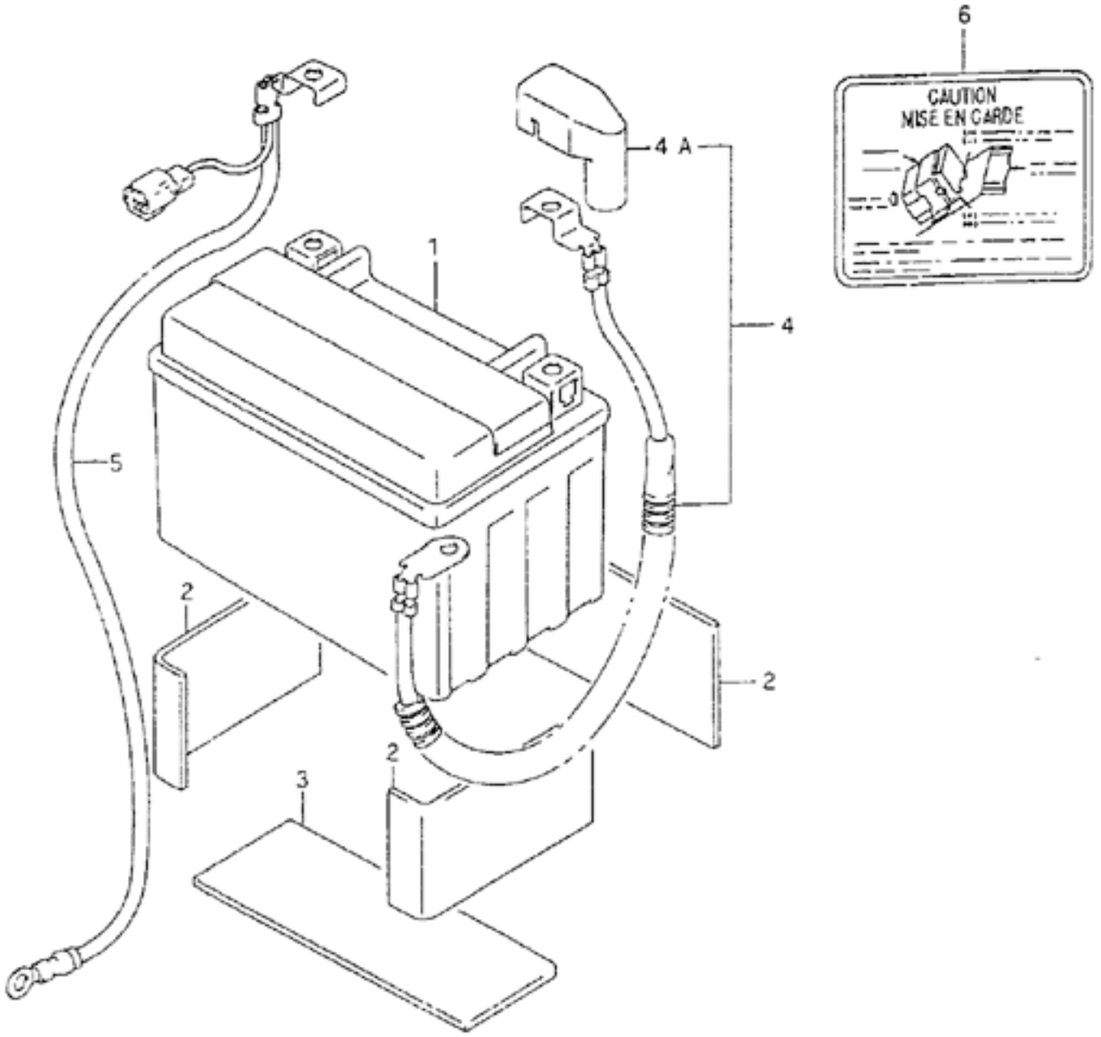


FIG.26 (E- 6) BATTERY

REF NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1	33610-32C10	BATTERY (12V,10AH)	1	
2	33651-37000	CUSHION	3	cut as required profile (50x115)
3	33652-47D00	CUSHION	1	(45x90)
4	33820-21E00	LEAD WIRE (+)	1	
4A	33624-33C10	.CAP, battery plus	1	
5	33860-46E00	LEAD WIRE (-)	1	
6	33690-17E00	PLATE, battery caution	1	

AIR CLEANER.....	C-06	COWLING BODY.....	H-02	FRAME COVER.....	G-02	FUEL PUMP.....	C-08	MUFFLER.....	C-07	REAR MASTER CYLINDE	J-09	STEERING STEM.....	I-04
ALTERNATOR.....	E-03	CRANKCASE COVER....	B-07	FRAME.....	F-02	FUEL TANK.....	F-06	OIL COOLER - OIL FI	C-09	REAR SWINGING ARM..	J-02	TAIL LAMP.....	E-12
BATTERY.....	E-06	CRANKCASE.....	B-05	FRONT BRAKE HOSE...	I-07	GEAR SHIFTING.....	D-10	OIL PAN - OIL PUMP.	B-08	REAR WHEEL.....	J-05	TRANSMISSION.....	D-08
CAM CHAIN.....	B-14	CRANKSHAFT.....	B-09	FRONT CALIPERS.....	I-06	HANDLE BAR.....	G-07	OPTIONAL.....	J-10	SEAT.....	H-15	TURNSIGNAL LAMP....	E-11
CAM SHAFT - VALVE..	B-12	CYLINDER HEAD COVER	B-02	FRONT DAMPER.....	I-02	HANDLE LEVER.....	G-08	RADIATOR HOSE.....	D-03	SIGNAL GENERATOR...	E-05	UNDER COWLING BODY.	H-06
CARBURETOR FITTINGS	C-05	CYLINDER HEAD.....	B-03	FRONT FENDER.....	G-06	HANDLE SWITCH.....	E-14	RADIATOR.....	D-02	SPEEDOMETER.....	E-08	WATER PUMP.....	C-10
CARBURETOR.....	C-02	CYLINDER.....	B-04	FRONT MASTER CYLIND	I-08	HEADLAMP.....	E-10	REAR CALIPER.....	J-07	STAND.....	F-03	WIRING HARNESS.....	C-13
CLUTCH CYLINDER....	I-09	ELECTRICAL.....	E-07	FRONT WHEEL.....	I-05	INSTALLATION PARTS.	H-05	REAR CUSHION LEVER.	J-04	STARTER CLUTCH.....	B-11		
CLUTCH.....	D-05	FOOTREST.....	F-04	FUEL COCK.....	F-09	LABEL.....	H-14	REAR FENDER.....	G-09	STARTING MOTOR.....	E-02		

FIG.27

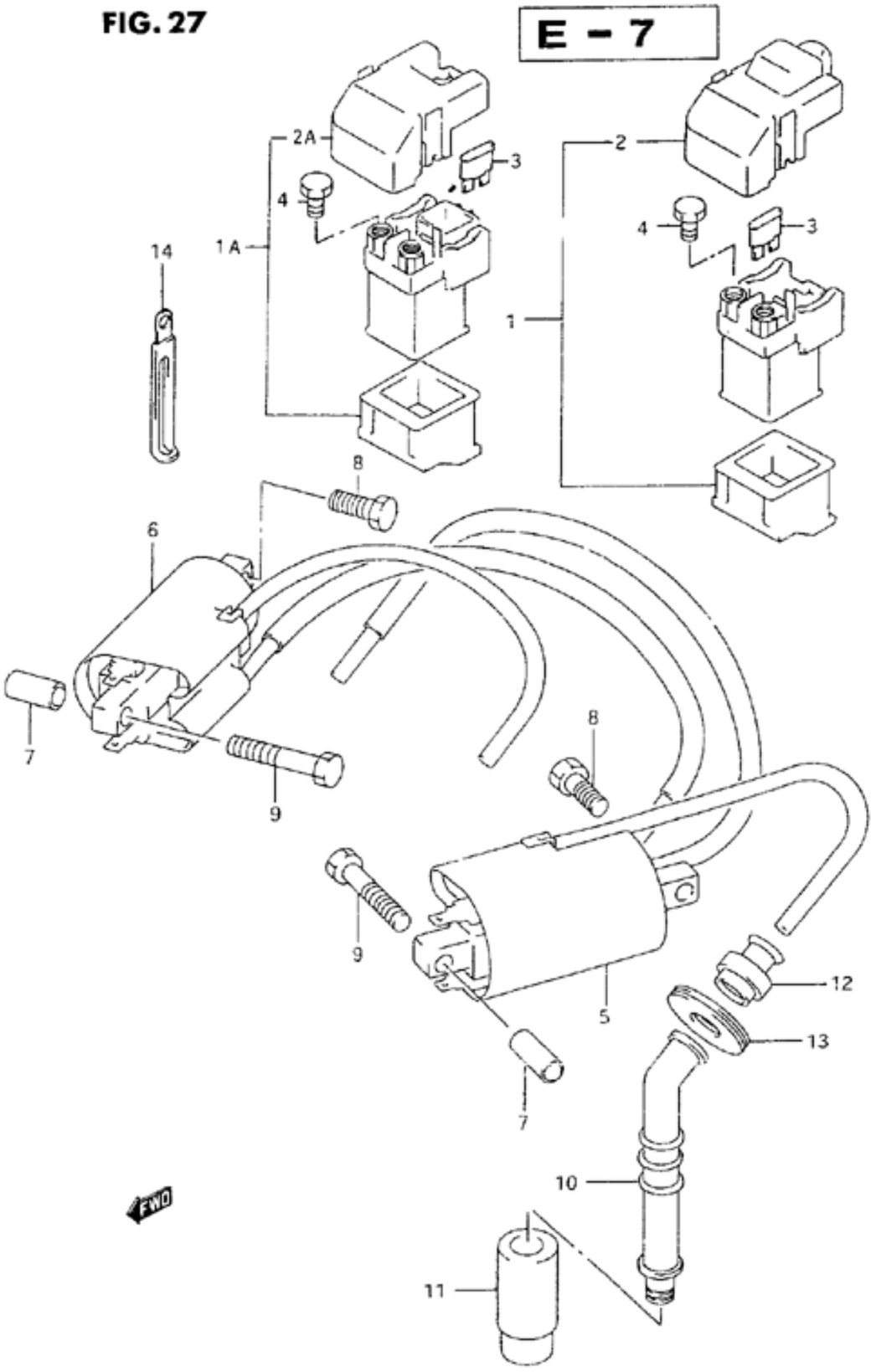


FIG.27 (E- 7) ELECTRICAL

REF NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1	31800-21E10	RELAY, starting motor	1	model R/S
1A	31800-21E20	RELAY, starting motor	1	model T/V
2	31861-21E10	.COVER	1	model R/S
2A	31861-21E20	.COVER	1	model T/V
3	09481-30101	.FUSE (30A)	2	
4	09128-06013	BOLT	2	
5	33410-21E00	COIL, ignition No.1	1	
6	33420-21E00	COIL, ignition No.2	1	
7	09180-06244	SPACER	2	
8	01500-06203	BOLT, ignition coil No.1	2	
9	09100-06123	BOLT, Ignition coil No.2	2	
10-1	33510-17E10	CAP, spark plug	4	model R
10-2	33510-17E11	CAP, spark plug	4	model S/T/V
11	33541-20C00	SEAL, plug	4	
12	33542-38B00	SEAL, hightension cord	4	
13	33543-17E01	COVER	4	
14-1	09404-06404	CLAMP, high tension (L:95)	1	model R/S
14-2	09404-06431	CLAMP, high tension (L:80)	1	model T/V

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AIR CLEANER.....	C-06	COWLING BODY.....	H-02	FRAME COVER.....	G-02	FUEL PUMP.....	C-08	MUFFLER.....	C-07	REAR MASTER CYLINDE	J-09	STEERING STEM.....	I-04
ALTERNATOR.....	E-03	CRANKCASE COVER....	B-07	FRAME.....	F-02	FUEL TANK.....	F-06	OIL COOLER - OIL FI	C-09	REAR SWINGING ARM..	J-02	TAIL LAMP.....	E-12
BATTERY.....	E-06	CRANKCASE.....	B-05	FRONT BRAKE HOSE...	I-07	GEAR SHIFTING.....	D-10	OIL PAN - OIL PUMP.	B-08	REAR WHEEL.....	J-05	TRANSMISSION.....	D-08
CAM CHAIN.....	B-14	CRANKSHAFT.....	B-09	FRONT CALIPERS.....	I-06	HANDLE BAR.....	G-07	OPTIONAL.....	J-10	SEAT.....	H-15	TURNSIGNAL LAMP....	E-11
CAM SHAFT - VALVE..	B-12	CYLINDER HEAD COVER	B-02	FRONT DAMPER.....	I-02	HANDLE LEVER.....	G-08	RADIATOR HOSE.....	D-03	SIGNAL GENERATOR...	E-05	UNDER COWLING BODY.	H-06
CARBURETOR FITTINGS	C-05	CYLINDER HEAD.....	B-03	FRONT FENDER.....	G-06	HANDLE SWITCH.....	E-14	RADIATOR.....	D-02	SPEEDOMETER.....	E-08	WATER PUMP.....	C-10
CARBURETOR.....	C-02	CYLINDER.....	B-04	FRONT MASTER CYLIND	I-08	HEADLAMP.....	E-10	REAR CALIPER.....	J-07	STAND.....	F-03	WIRING HARNESS.....	E-13
CLUTCH CYLINDER....	I-09	ELECTRICAL.....	E-07	FRONT WHEEL.....	I-05	INSTALLATION PARTS.	H-05	REAR CUSHION LEVER.	J-04	STARTER CLUTCH.....	B-11		
CLUTCH.....	D-05	FOOTREST.....	F-04	FUEL COCK.....	F-09	LABEL.....	H-14	REAR FENDER.....	G-09	STARTING MOTOR.....	E-02		

FIG. 28

E - 8

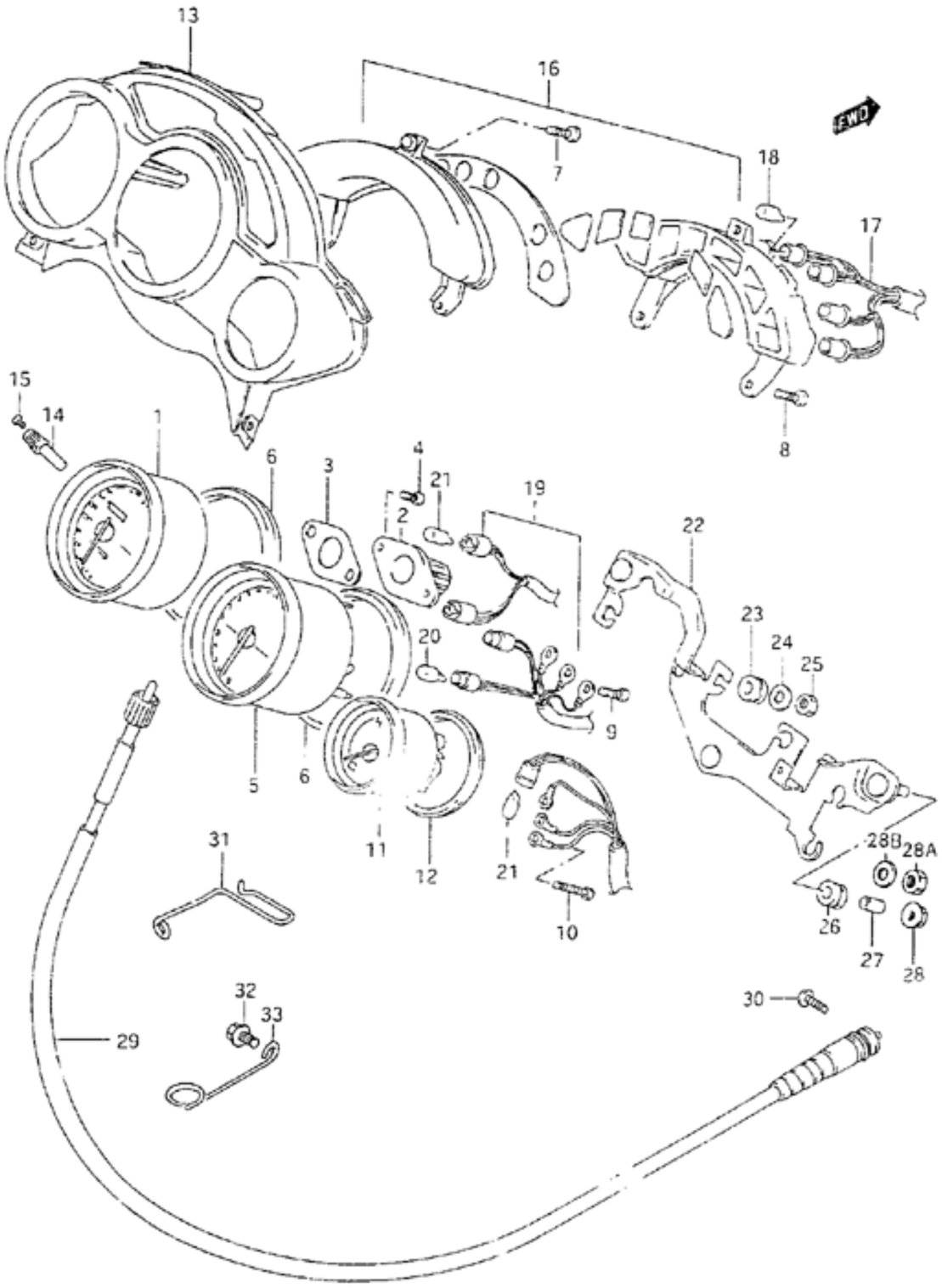


FIG.28 (E- 8) SPEEDOMETER

REF NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1	34120-31E10	SPEEDOMETER (Kilo)	1	
2	34131-48B10	BOX, meter gear	1	
3	34132-17C00	GASKET	1	
4	02112-74103	SCREW	2	
5	34210-31E10	TACHOMETER	1	
6	34191-21E10	DAMPER	2	
7-1	34183-14A00	SCREW (4x14)	1	model R
7-2	34184-12B00	SCREW (4x14)	1	model S/T/V
8	34183-21E01	SCREW (4x20)	3	
9-1	34249-17E10	SCREW (3x10)	3	model R
9-2	34149-19D00	SCREW (3x10)	3	model S/T/V
10	34383-09400	SCREW (3x22)	3	
11	34420-31E10	METER, temp	1	
12	34191-21E20	DAMPER	1	
13	34190-21E10	HOOD, meter	1	
14	34124-21E10	KNOB	1	
15-1	34981-13A00	SCREW	1	model R
15-2	09139-02003	SCREW (2x6)	1	model S/T/V
16	36380-21E10	BOX ASSY, pilot	1	
17	36394-21E11	CORD ASSY, pilot bulb	1	
18	09471-12082	BULB (12V,3.4W)	5	
19	34170-21E10	CORD ASSY	1	
20	09471-12100	BULB (12V,1.7W)	2	
21	09471-12108	BULB (12V,1.7W)	3	
22-1	34950-21E11	BRACKET, meter	1	model R
22-2	34950-21E12	BRACKET, meter	1	model S/T/V
23	34189-21E10	CUSHION	6	
24-1	34727-41410	WASHER	6	model R
24-2	09160-04017	WASHER	6	model S/T/V
25	08310-00047	NUT	6	

AIR CLEANER..... C-06
ALTERNATOR..... E-03
BATTERY..... E-06
CAM CHAIN..... B-14
CAM SHAFT - VALVE.. B-12
CARBURETOR FITTINGS C-05
CARBURETOR..... C-02
CLUTCH CYLINDER.... I-09
CLUTCH..... D-05
COWLING BODY..... H-02
CRANKCASE COVER.... B-07
CRANKCASE..... B-05
CRANKSHAFT..... B-09
CYLINDER HEAD COVER B-02
CYLINDER HEAD..... B-03
CYLINDER..... B-04
ELECTRICAL..... E-07
FOOTREST..... F-04
FRAME COVER..... G-02
FRAME..... F-02
FRONT BRAKE HOSE... I-07
FRONT CALIPERS..... I-06
FRONT DAMPER..... I-02
FRONT FENDER..... G-06
FRONT MASTER CYLIND I-08
FRONT WHEEL..... I-05
FUEL COCK..... F-09
FUEL PUMP..... C-08
FUEL TANK..... F-06
GEAR SHIFTING..... D-10
HANDLE BAR..... G-07
HANDLE LEVER..... G-08
HANDLE SWITCH..... E-14
HEADLAMP..... E-10
INSTALLATION PARTS. H-05
LABEL..... H-14
MUFFLER..... C-07
OIL COOLER - OIL FI C-09
OIL PAN - OIL PUMP. B-08
OPTIONAL..... J-10
RADIATOR HOSE..... D-03
RADIATOR..... D-02
REAR CALIPER..... J-07
REAR CUSHION LEVER. J-04
REAR FENDER..... G-09
REAR MASTER CYLINDE J-09
REAR SWINGING ARM.. J-02
REAR WHEEL..... J-05
SEAT..... H-15
SIGNAL GENERATOR... E-05
SPEEDOMETER..... E-08
STAND..... F-03
STARTER CLUTCH..... B-11
STARTING MOTOR..... E-02
STEERING STEM..... I-04
TAIL LAMP..... E-12
TRANSMISSION..... D-08
TURNSIGNAL LAMP.... E-11
UNDER COWLING BODY. H-06
WATER PUMP..... C-10
WIRING HARNESS..... E-13

FIG.46B

H - 9

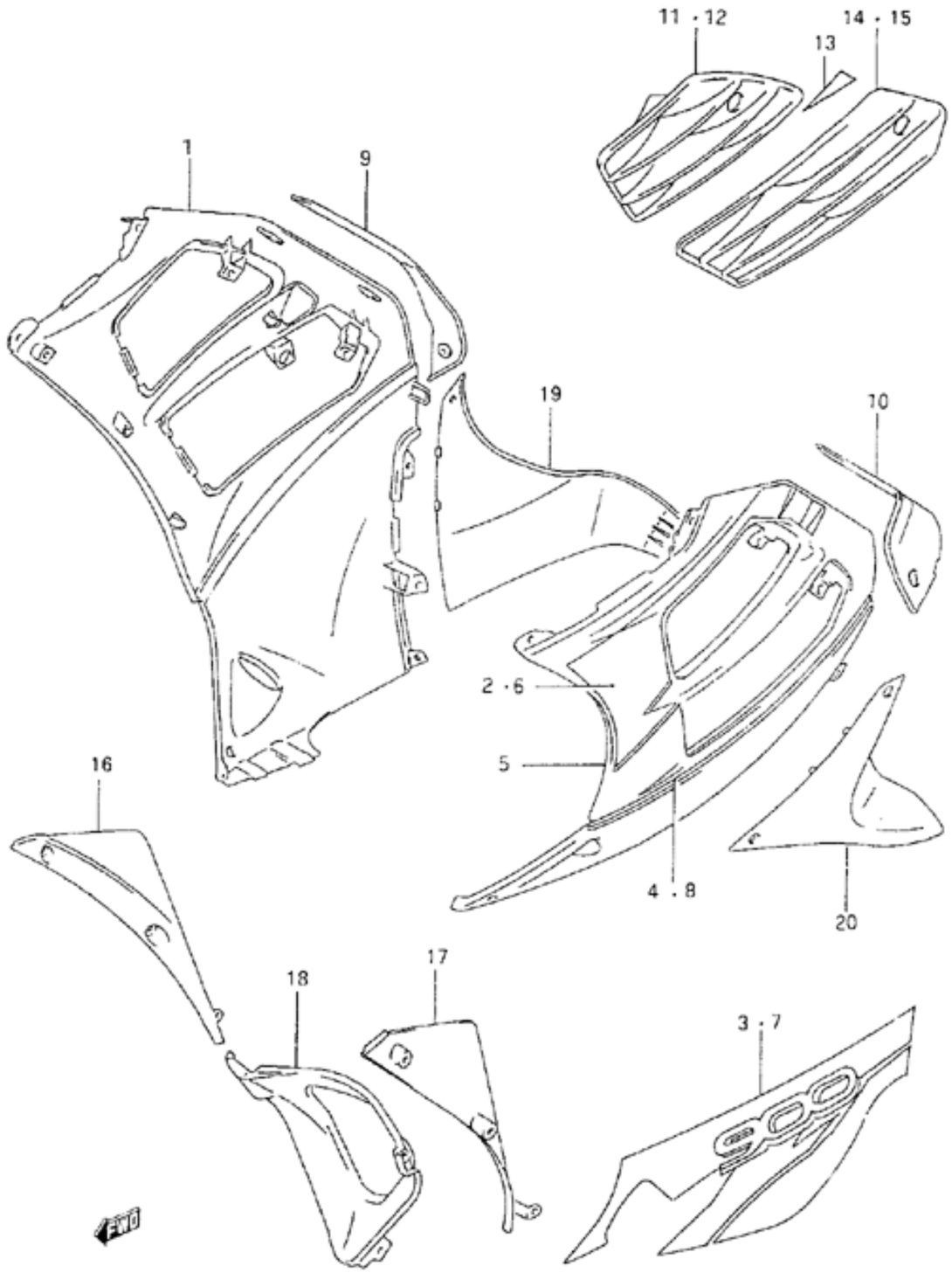


FIG.46B(H- 9) UNDER COWLING BODY (model T)

REF NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1-1	94407-31E20-1HU	WOWLING, under RH (Purple)	1	for F3C
1-2	94407-31E20-Y98	WOWLING, under RH (Green)	1	for E6M
2-1	68180-31E10-F3K	.TAPE SET, under RH	1	for 1HU
2-2	68180-31E10-F3L	.TAPE SET, under RH	1	for Y98
3-1	68185-31E10-F3M	.TAPE, lower RH	1	for 1HU
3-2	68185-31E10-F3N	.TAPE, lower RH	1	for Y98
4	68185-21E00-33J	.TAPE, striping RH (Black)	1	
5-1	94408-31E20-1HU	COWLING, under LH (Purple)	1	for F3C
5-2	94408-31E20-Y98	COWLING, under LH (Green)	1	for E6M
6-1	68190-31E10-F3K	.TAPE SET, under LH	1	for 1HU
6-2	68190-31E10-F3L	.TAPE SET, under LH	1	for Y98
7-1	68195-31E10-F3M	.TAPE, lower LH	1	for 1HU
7-2	68195-31E10-F3N	.TAPE, lower LH	1	for Y98
8	68195-21E00-33J	.TAPE, striping LH (Black)	1	
9	94420-21E00	PANEL, under RH	1	
10	94426-21E00	PANEL, under LH	1	
11-1	94430-31E00-163	COVER, upper RH (Yellow)	1	for F3C
11-2	94430-31E00-1ZZ	COVER, upper RH (Gray)	1	for E6M
12-1	94440-31E00-163	COVER, upper LH (Yellow)	1	for F3C
12-2	94440-31E00-1ZZ	COVER, upper LH (Gray)	1	for E6M
13-1	68186-31E00-17U	.TAPE, RH (Gray)	1	for 163
13-2	68186-31E00-33J	.TAPE, RH (Black)	1	for 1ZZ
13-3	68196-31E00-17U	.TAPE, LH (Gray)	1	for 163
13-4	68196-31E00-33J	.TAPE, LH (Black)	1	for 1ZZ
14-1	94671-21E01-1HU	COVER, lower RH (Purple)	1	for F3C
14-2	94671-21E01-Y98	COVER, lower RH (Green)	1	for E6M
15-1	94681-21E01-1HU	COVER, lower LH (Purple)	1	for F3C
15-2	94681-21E01-Y98	COVER, lower LH (Green)	1	for E6M

Color : F3C = 1HU(Purple), 17U(Gray)
E6M = 33J(Black), Y98(Green)

Refer to FIG.46C(H-11) for model V
Refer to FIG.47 (H-12) for UNDER COWLING INSTALLATION PARTS

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AIR CLEANER.....	C-06	COWLING BODY.....	H-02	FRAME COVER.....	G-02	FUEL PUMP.....	C-08	MUFFLER.....	C-07	REAR MASTER CYLINDE	J-09	STEERING STEM.....	I-04
ALTERNATOR.....	E-03	CRANKCASE COVER....	B-07	FRAME.....	F-02	FUEL TANK.....	F-06	OIL COOLER - OIL FI	C-09	REAR SWINGING ARM..	J-02	TAIL LAMP.....	E-12
BATTERY.....	E-06	CRANKCASE.....	B-05	FRONT BRAKE HOSE...	I-07	GEAR SHIFTING.....	D-10	OIL PAN - OIL PUMP.	B-08	REAR WHEEL.....	J-05	TRANSMISSION.....	D-08
CAM CHAIN.....	B-14	CRANKSHAFT.....	B-09	FRONT CALIPERS.....	I-06	HANDLE BAR.....	G-07	OPTIONAL.....	J-10	SEAT.....	H-15	TURNSIGNAL LAMP....	E-11
CAM SHAFT - VALVE..	B-12	CYLINDER HEAD COVER	B-02	FRONT DAMPER.....	I-02	HANDLE LEVER.....	G-08	RADIATOR HOSE.....	D-03	SIGNAL GENERATOR...	E-05	UNDER COWLING BODY.	H-06
CARBURETOR FITTINGS	C-05	CYLINDER HEAD.....	B-03	FRONT FENDER.....	G-06	HANDLE SWITCH.....	E-14	RADIATOR.....	D-02	SPEEDOMETER.....	E-08	WATER PUMP.....	C-10
CARBURETOR.....	C-02	CYLINDER.....	B-04	FRONT MASTER CYLIND	I-08	HEADLAMP.....	E-10	REAR CALIPER.....	J-07	STAND.....	F-03	WIRING HARNESS.....	E-13
CLUTCH CYLINDER....	I-09	ELECTRICAL.....	E-07	FRONT WHEEL.....	I-05	INSTALLATION PARTS.	H-05	REAR CUSHION LEVER.	J-04	STARTER CLUTCH.....	B-11		
CLUTCH.....	D-05	FOOTREST.....	F-04	FUEL COCK.....	F-09	LABEL.....	H-14	REAR FENDER.....	G-09	STARTING MOTOR.....	E-02		

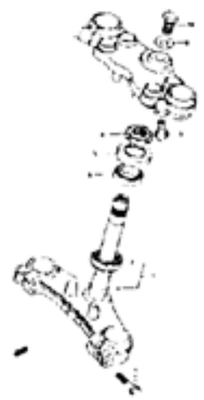
FRONT DAMPER (MODEL R/S) I-02



FRONT DAMPER (MODEL T/V) I-03



STEERING STEM I-04



FRONT WHEEL I-05



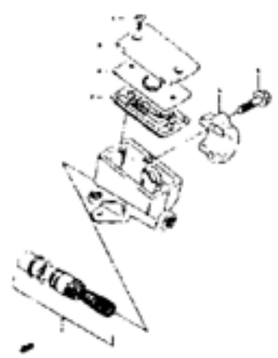
FRONT CALIPERS I-06



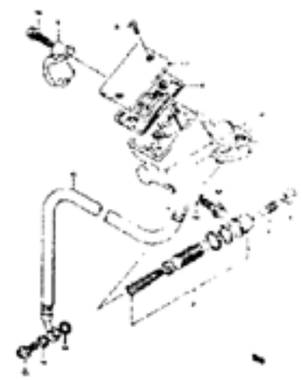
FRONT BRAKE HOSE I-07



FRONT MASTER CYLINDER I-08



CLUTCH CYLINDER I-09



AIR CLEANER..... C-06
ALTERNATOR..... E-03
BATTERY..... E-06
CAM CHAIN..... B-14
CAM SHAFT - VALVE.. B-12
CARBURETOR FITTINGS C-05
CARBURETOR..... C-02
CLUTCH CYLINDER.... I-09
CLUTCH..... D-05
COWLING BODY..... H-02
CRANKCASE COVER.... B-07
CRANKCASE..... B-05
CRANKSHAFT..... B-09
CYLINDER HEAD COVER B-02
CYLINDER HEAD..... B-03
CYLINDER..... B-04
ELECTRICAL..... E-07
FOOTREST..... F-04
FRAME COVER..... G-02
FRAME..... F-02
FRONT BRAKE HOSE... I-07
FRONT CALIPERS..... I-06
FRONT DAMPER..... I-02
FRONT FENDER..... G-06
FRONT MASTER CYLIND I-08
FRONT WHEEL..... I-05
FUEL COCK..... F-09
FUEL PUMP..... C-08
FUEL TANK..... F-06
HANDLE BAR..... G-07
HANDLE LEVER..... G-08
HANDLE SWITCH..... E-14
HEADLAMP..... E-10
INSTALLATION PARTS. H-05
LABEL..... H-14
MUFFLER..... C-07
OIL COOLER - OIL FI C-09
OPTIONAL..... J-10
RADIATOR HOSE..... D-03
RADIATOR..... D-02
REAR CALIPER..... J-07
REAR CUSHION LEVER. J-04
REAR FENDER..... G-09
REAR MASTER CYLINDE J-09
REAR SWINGING ARM.. J-02
REAR WHEEL..... J-05
SEAT..... H-15
SIGNAL GENERATOR... E-05
SPEEDOMETER..... E-08
STAND..... F-03
STARTER CLUTCH..... B-11
STARTING MOTOR..... E-02
STEERING STEM..... I-04
TAIL LAMP..... E-12
TRANSMISSION..... D-08
TURNSIGNAL LAMP.... E-11
UNDER COWLING BODY. H-06
WATER PUMP..... C-10
WIRING HARNESS..... E-13

FIG.50

I - 2

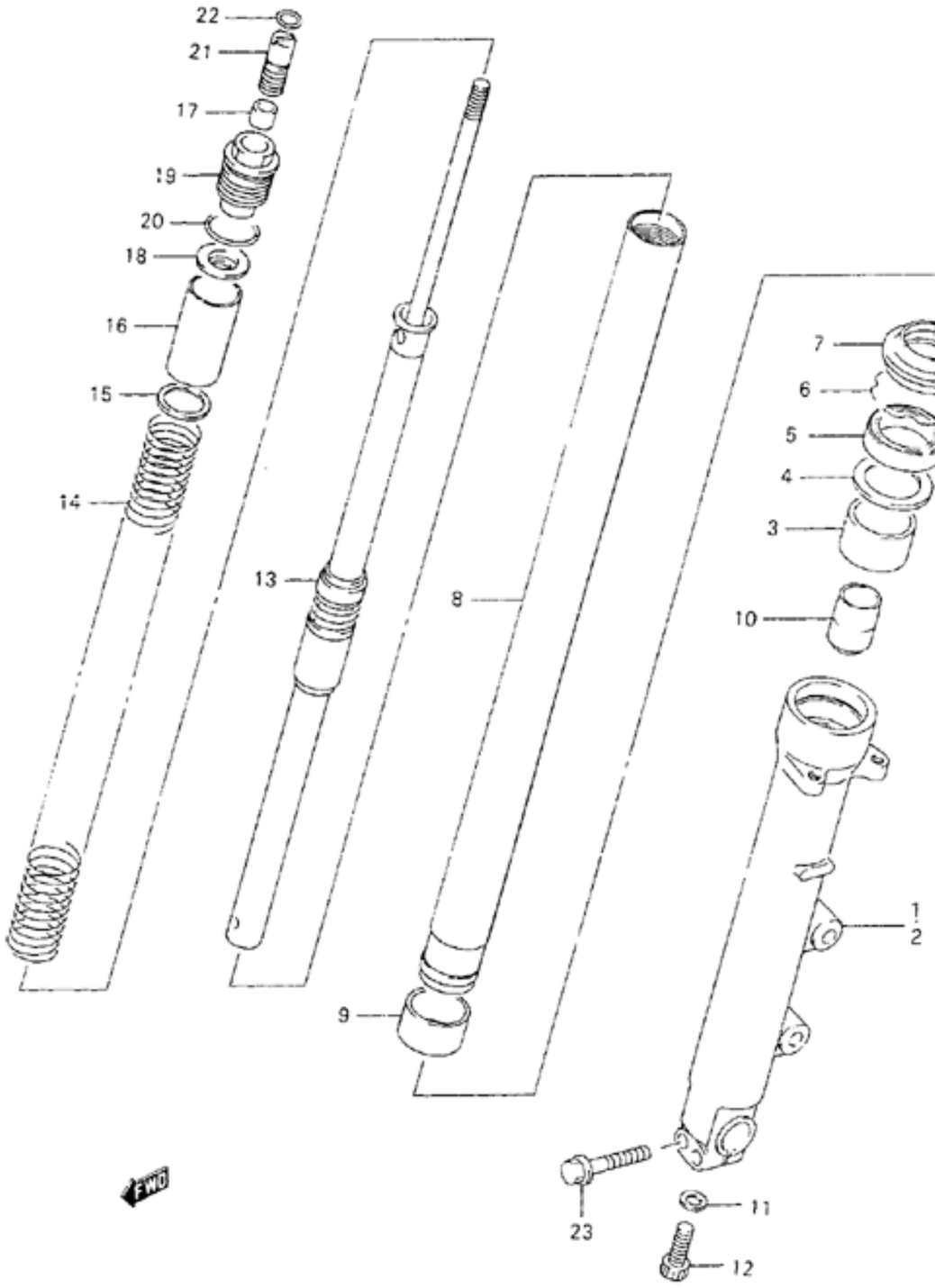


FIG.50 (i- 2) FRONT DAMPER (model R/S)

REF NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
	51103-31E00	DAMPER ASSY, front fork RH	1	
	51104-31E00	DAMPER ASSY, front fork LH	1	
1	51130-31E00	.TUBE, outer RH	1	
2	51140-31E00	.TUBE, outer LH	1	
3	51152-31E00	.BUSH, guide	2	
4	51168-17C00	.SPACER, seal	2	
5	51153-14D00	.SEAL, oil	2	
6	51556-38B00	.RING, stopper	2	
7	51173-29E00	.DUST SEAL	2	
8	51110-31E00	.TUBE, inner	2	
9	51121-17C00	.BUSH, slide	2	
10	51195-31E00	.PIECE, oil lock	2	
11	51148-36011	.GASKET	2	
12	51147-48130	.BOLT	2	
13	52110-31E00	.ROD, damper	2	
14	51171-31E00	.SPRING, main	2	
15	51186-17C00	.SEAT, spring lower	2	
16	51176-17C00	.SPACER, spring	2	
17	51827-17C00	.NUT, lod	2	
18	51172-17C00	.SEAT, spring lower	2	
19	51189-14D00	.BOLT, fork	2	
20-1	51834-17C00	.O RING	2	model R
20-2	09280-14003	.O RING	2	model S
21	51185-31E00	.ADJUSTER, spring	2	
22	51117-17C00	.O RING	2	
23	01550-08457	.BOLT, axle holder RH	2	

Refer to FIG.50A(i-3) for model T/V

AIR CLEANER.....	C-06	COWLING BODY.....	H-02	FRAME COVER.....	G-02	FUEL PUMP.....	C-08	MUFFLER.....	C-07	REAR MASTER CYLINDE	J-09	STEERING STEM.....	I-04
ALTERNATOR.....	E-03	CRANKCASE COVER....	B-07	FRAME.....	F-02	FUEL TANK.....	F-06	OIL COOLER - OIL FI	C-09	REAR SWINGING ARM..	J-02	TAIL LAMP.....	E-12
BATTERY.....	E-06	CRANKCASE.....	B-05	FRONT BRAKE HOSE...	I-07	GEAR SHIFTING.....	D-10	OIL PAN - OIL PUMP.	B-08	REAR WHEEL.....	J-05	TRANSMISSION.....	D-08
CAM CHAIN.....	B-14	CRANKSHAFT.....	B-09	FRONT CALIPERS.....	I-06	HANDLE BAR.....	G-07	OPTIONAL.....	J-10	SEAT.....	H-15	TURNSIGNAL LAMP....	E-11
CAM SHAFT - VALVE..	B-12	CYLINDER HEAD COVER	B-02	FRONT DAMPER.....	I-02	HANDLE LEVER.....	G-08	RADIATOR HOSE.....	D-03	SIGNAL GENERATOR...	E-05	UNDER COWLING BODY.	H-06
CARBURETOR FITTINGS	C-05	CYLINDER HEAD.....	B-03	FRONT FENDER.....	G-06	HANDLE SWITCH.....	E-14	RADIATOR.....	D-02	SPEEDOMETER.....	E-08	WATER PUMP.....	C-10
CARBURETOR.....	C-02	CYLINDER.....	B-04	FRONT MASTER CYLIND	I-08	HEADLAMP.....	E-10	REAR CALIPER.....	J-07	STAND.....	F-03	WIRING HARNESS.....	E-13
CLUTCH CYLINDER....	I-09	ELECTRICAL.....	E-07	FRONT WHEEL.....	I-05	INSTALLATION PARTS.	H-05	REAR CUSHION LEVER.	J-04	STARTER CLUTCH.....	B-11		
CLUTCH.....	D-05	FOOTREST.....	F-04	FUEL COCK.....	F-09	LABEL.....	H-14	REAR FENDER.....	G-09	STARTING MOTOR.....	E-02		

FIG.50A

I - 3

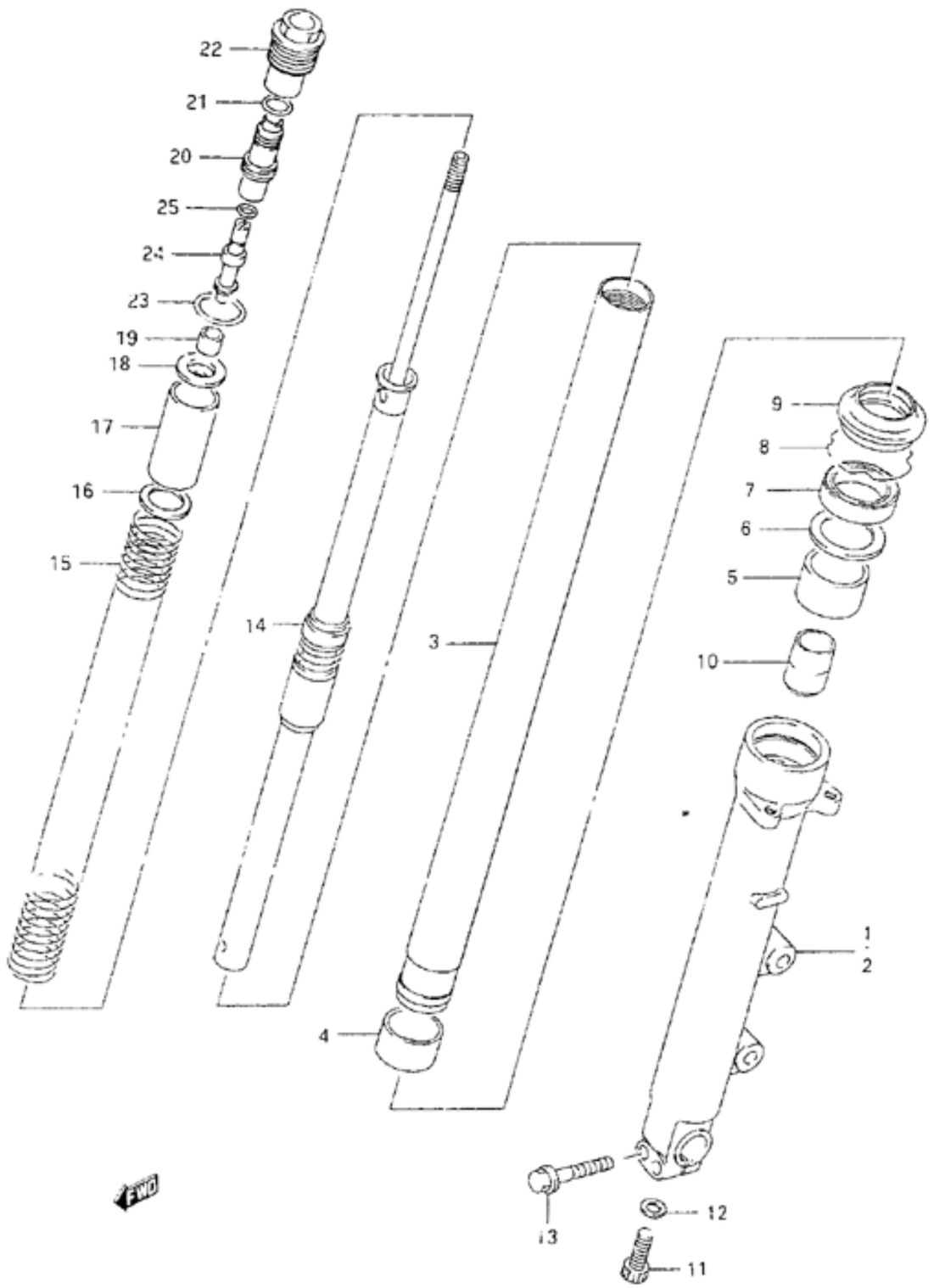


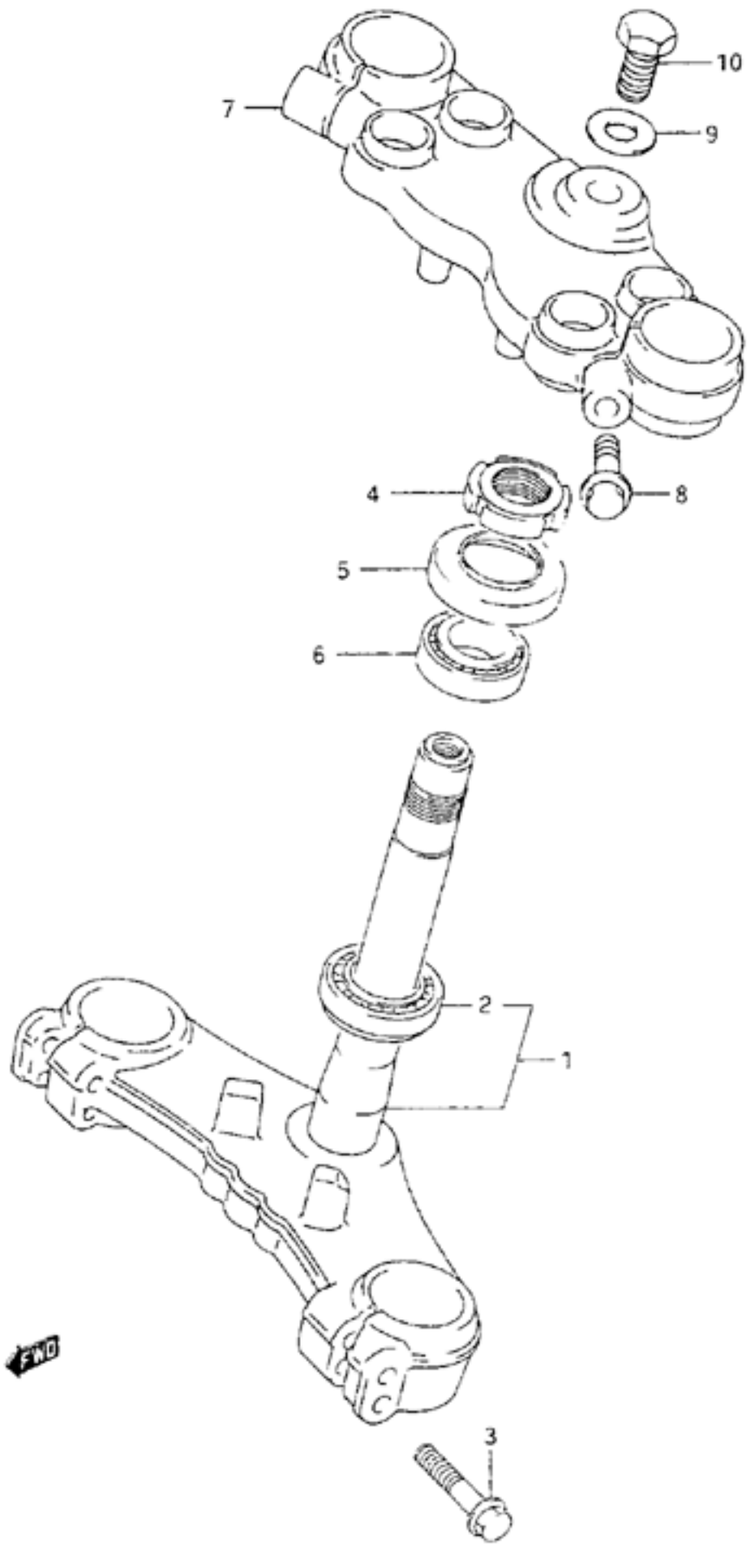
FIG.50A(i- 3) FRONT DAMPER (model T/V)

REF NO.	PART NO	DESCRIPTION	Q'TY	REMARKS
	51103-31E20	DAMPER ASSY, front fork RH	1	
	51104-31E20	DAMPER ASSY, front fork LH	1	
1	51130-31E00	.TUBE, outer RH	1	
2	51140-31E00	.TUBE, outer LH	1	
3	51110-31E20	.TUBE, inner	2	
4	51121-17C00	.BUSH, slide	2	
5	51152-31E00	.BUSH, guide	2	
6	51168-17C00	.SPACER, seal	2	
7	51153-14D00	.OIL SEAL	2	
8	51556-38B00	.RING, stopper	2	
9	51173-29E00	.DUST SEAL	2	
10	51195-31E00	.PIECE, oil lock	2	
11	51147-48130	.BOLT, cylinder	2	
12	51148-36011	.GASKET	2	
13	01550-08457	.BOLT, RH	2	
14	52110-31E20	.ROD, damper	2	
15	51171-31E20	.SPRING	2	
16	51186-17C00	.SEAT, spring lower	2	
17	51176-17C00	.SPACER, spring	2	
18	51172-17C00	.SEAT, spring upper	2	
19	51827-17C00	.NUT	2	
20	51185-31E20	.ADJUSTER, spring	2	
21	09280-14003	.O RING (ID:13.8,D:2.40)	2	
22	51189-17C00	.BOLT, fork	2	
23	51117-17C00	.O RING	2	
24	51821-31E20	.PIECE, adjuster	2	
25	09280-03002	.O RING (ID:3.8,D:1.90)	2	

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AIR CLEANER..... C-06
ALTERNATOR..... E-03
BATTERY..... E-06
CAM CHAIN..... B-14
CAM SHAFT - VALVE.. B-12
CARBURETOR FITTINGS C-05
CARBURETOR..... C-02
CLUTCH CYLINDER.... I-09
CLUTCH..... D-05
COWLING BODY..... H-02
CRANKCASE COVER.... B-07
CRANKCASE..... B-05
CRANKSHAFT..... B-09
CYLINDER HEAD COVER B-01
CYLINDER HEAD..... B-03
CYLINDER..... B-04
ELECTRICAL..... E-07
FOOTREST..... F-04
FRAME COVER..... G-02
FRAME..... F-02
FRONT BRAKE HOSE... I-07
FRONT CALIPERS..... I-06
FRONT DAMPER..... I-02
FRONT FENDER..... G-06
FRONT MASTER CYLIND I-08
FRONT WHEE..... I-05
FUEL COCK..... F-09
FUEL PUMP..... C-08
FUEL TANK..... F-06
GEAR SHIFTING..... D-10
HANDLE BAR..... G-07
HANDLE LEVER..... G-08
HANDLE SWITCH..... E-14
HEADLAMP..... E-10
INSTALLATION PARTS. H-05
LABEL..... H-14
MUFFLER..... C-07
OIL COOLER - OIL FI C-09
OIL PAN - OIL PUMP. B-08
OPTIONAL..... J-10
RADIATOR HOSE..... D-03
RADIATOR..... D-02
REAR CALIPER..... J-07
REAR CUSHION LEVER. J-04
REAR FENDER..... G-09
REAR MASTER CYLINDE J-09
REAR SWINGING ARM.. J-02
REAR WHEEL..... J-05
SEAT..... H-15
SIGNAL GENERATOR... E-05
SPEEDOMETER..... E-08
STAND..... F-03
STARTER CLUTCH..... B-11
STARTING MOTOR..... E-02
STEERING STEM..... I-04
TAIL LAMP..... E-12
TRANSMISSION..... D-08
TURNSIGNAL LAMP.... E-11
UNDER COWLING BODY. H-06
WATER PUMP..... C-10
WIRING HARNESS..... E-13

FIG.51



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FIG.51 (i- 4) STEERING STEM

REF NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1	51410-31E01	STEM, steering	1	
2	09265-30009	.BEARING (30x55x17)	1	
3	01550-08407	BOLT, lower	4	
4	51631-28000	NUT, steering stem	1	
5	51643-49002	DUST COVER, steering upper	1	
6	09265-25019	BEARING (25x47x15)	1	
7	51311-31E00	HEAD, steering stem	1	
8	01550-08353	BOLT, upper	2	
9	51356-43530	WASHER	1	
10	51352-43530	BOLT, stem head	1	

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AIR CLEANER..... C-06
ALTERNATOR..... E-03
BATTERY..... E-06
CAM CHAIN..... B-14
CAM SHAFT - VALVE.. B-12
CARBURETOR FITTINGS C-05
CARBURETOR..... C-02
CLUTCH CYLINDER.... I-09
CLUTCH..... D-05
COWLING BODY..... H-02
CRANKCASE COVER.... B-07
CRANKCASE..... B-05
CRANKSHAFT..... B-09
CYLINDER HEAD COVER B-02
CYLINDER HEAD..... B-03
CYLINDER..... B-04
ELECTRICAL..... E-07
FOOTREST..... F-04
FRAME COVER..... G-02
FRAME..... F-02
FRONT BRAKE HOSE... I-07
FRONT CALIPERS..... I-06
FRONT DAMPER..... I-02
FRONT FENDER..... G-06
FRONT MASTER CYLIND I-08
FRONT WHEEL..... I-05
FUEL COCK..... F-09
FUEL PUMP..... C-08
FUEL TANK..... F-06
GEAR SHIFTING..... D-10
HANDLE BAR..... G-07
HANDLE LEVER..... G-08
HANDLE SWITCH..... E-14
HEADLAMP..... E-10
INSTALLATION PARTS. H-05
LABEL..... H-14
MUFFLER..... C-07
OIL COOLER - OIL FI C-09
OIL PAN - OIL PUMP. B-08
OPTIONAL..... J-10
RADIATOR HOSE..... D-03
RADIATOR..... D-02
REAR CALIPER..... J-07
REAR CUSHION LEVER. J-04
REAR FENDER..... G-09
REAR MASTER CYLINDE J-09
REAR SWINGING ARM.. J-02
REAR WHEEL..... J-05
SEAT..... H-15
SIGNAL GENERATOR... E-05
SPEEDOMETER..... E-08
STAND..... F-03
STARTER CLUTCH..... B-11
STARTING MOTOR..... E-02
STEERING STEM..... I-04
TAIL LAMP..... E-12
TRANSMISSION..... D-08
TURNSIGNAL LAMP.... E-11
UNDER COWLING BODY. H-06
WATER PUMP..... C-10
WIRING HARNESS..... E-13

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FIG.52

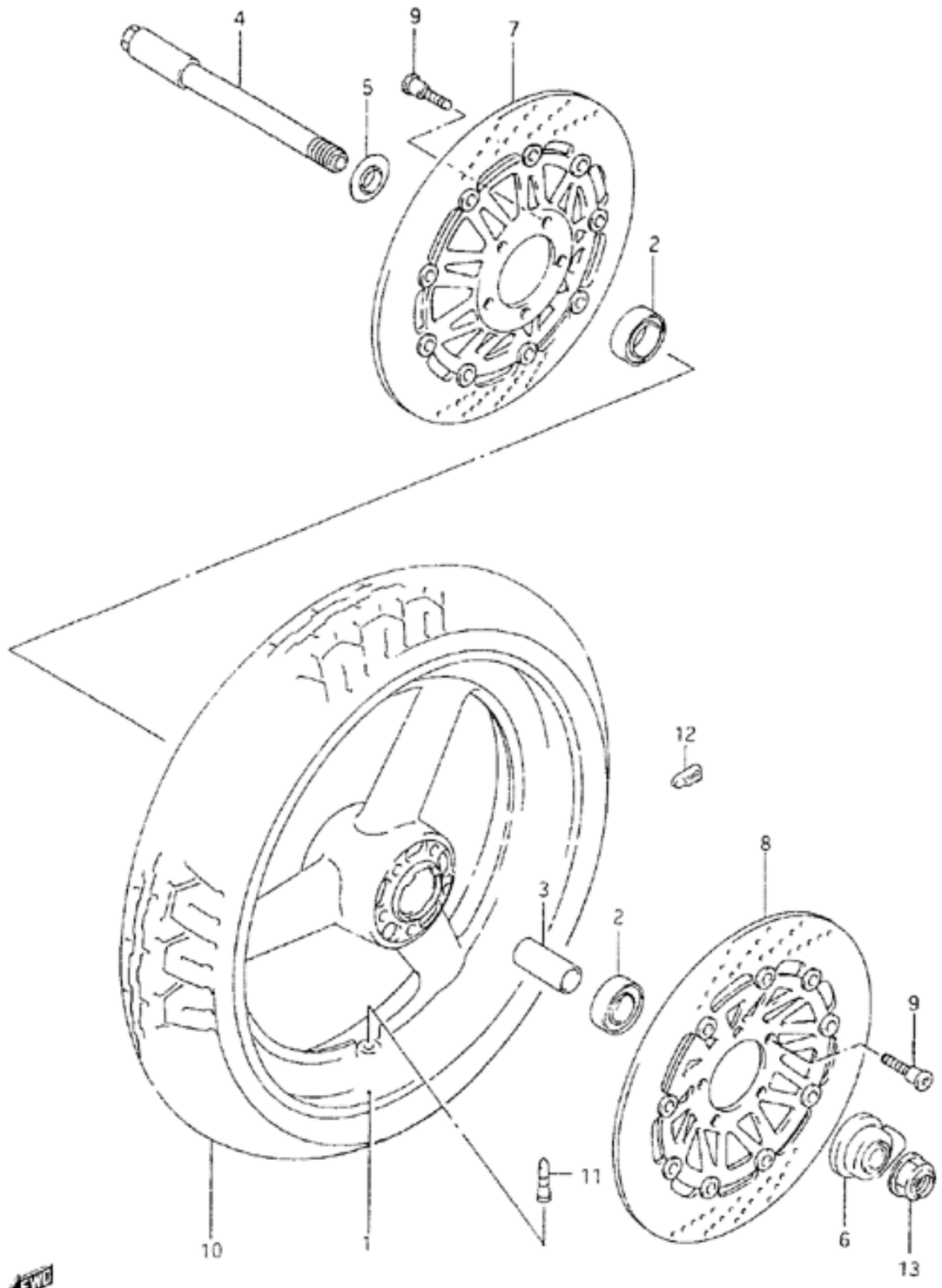


FIG.52 (i- 5) FRONT WHEEL

REF NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1-1	54111-17E11-1TU	WHEEL, front (17xMT3.50) (Purple)	1	for 33J
1-2	54111-17E11-35W	WHEEL, front (17xMT3.50) (Gray)	1	for 19A
1-3	54111-17E11-Y22	WHEEL, front (17xMT3.50) (Purple)	1	for D8A
1-4	54111-17E11-12R	WHEEL, front (17xMT3.50) (Silver)	1	for F3C,E6M,7AY,G4H
2	08123-62047	BEARING	2	
3	09180-20103	SPACER (20.8x27.2x74)	1	
4	54711-31E00	AXLE, front	1	
5	54740-17C00	SPACER, bearing RH	1	
6	54600-17C01	BOX ASSY, speedometer gear	1	
7-1	59210-31E00	DISC, front brake RH	1	model R/S/T
7-2	59210-31E01	DISC, front brake RH	1	model V
8-1	59220-31E00	DISC, front brake LH	1	model R/S/T
8-2	59220-31E01	DISC, front brake LH	1	model V
9	09106-08125	BOLT	10	
10	55110-31E00	TIRE, front (120/70 ZR17) (DUNLOP)	1	
11	43130-24A11	VALVE ASSY, wheel rim TR412	1	
12-1	55411-00A00	BALANCER (10g)	0-3	
12-2	55412-00A01	BALANCER (20g)	0-3	
12-3	55413-00A01	BALANCER (30g)	0-3	
13	09159-20006	NUT	1	

Color : 19A (Red)
33J (Black)
D8A = Y22(Purple), 0FP(Silver)
F3C = 1HU(Purple), 17U(Gray)
E6M = 1ZV(Green), 1OR(White), 1RR(Gold)
7AY = 019(Black), 20F(Maroon)
G4H = 019(Black), 0WP(Green)

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AIR CLEANER.....	C-06	COWLING BODY.....	H-02	FRAME COVER.....	G-07	FUEL PUMP.....	C-08	MUFFLER.....	C-07	REAR MASTER CYLINDE	J-09	STEERING STEM.....	I-04
ALTERNATOR.....	E-03	CRANKCASE COVER....	B-07	FRAME.....	F-02	FUEL TANK.....	F-06	OIL COOLER - OIL FI	C-09	REAR SWINGING ARM..	J-02	TAIL LAMP.....	E-12
BATTERY.....	E-06	CRANKCASE.....	B-05	FRONT BRAKE HOSE...	I-07	GEAR SHIFTING.....	D-10	OIL PAN - OIL PUMP.	B-08	REAR WHEEL.....	J-05	TRANSMISSION.....	D-08
CAM CHAIN.....	B-14	CRANKSHAFT.....	B-09	FRONT CALIPERS.....	I-06	HANDLE BAR.....	G-07	OPTIONAL.....	J-10	SEAT.....	H-15	TURNSIGNAL LAMP....	E-11
CAM SHAFT - VALVE..	B-12	CYLINDER HEAD COVER	B-02	FRONT DAMPER.....	I-02	HANDLE LEVER.....	G-08	RADIATOR HOSE.....	D-03	SIGNAL GENERATOR...	E-05	UNDER COWLING BODY.	H-06
CARBURETOR FITTINGS	C-05	CYLINDER HEAD.....	B-03	FRONT FENDER.....	G-06	HANDLE SWITCH.....	E-14	RADIATOR.....	D-02	SPEEDOMETER.....	E-08	WATER PUMP.....	C-10
CARBURETOR.....	C-02	CYLINDER.....	B-04	FRONT MASTER CYLIND	I-08	HEADLAMP.....	E-10	REAR CALIPER.....	J-07	STAND.....	F-03	WIRING HARNESS.....	E-13
CLUTCH CYLINDER....	I-09	ELECTRICAL.....	E-07	FRONT WHEEL.....	I-05	INSTALLATION PARTS.	H-05	REAR CUSHION LEVER.	J-04	STARTER CLUTCH.....	B-11		
CLUTCH.....	D-05	FOOTREST.....	F-04	FUEL COCK.....	F-09	LABEL.....	H-14	REAR FENDER.....	G-09	STARTING MOTOR.....	E-02		

FIG.53

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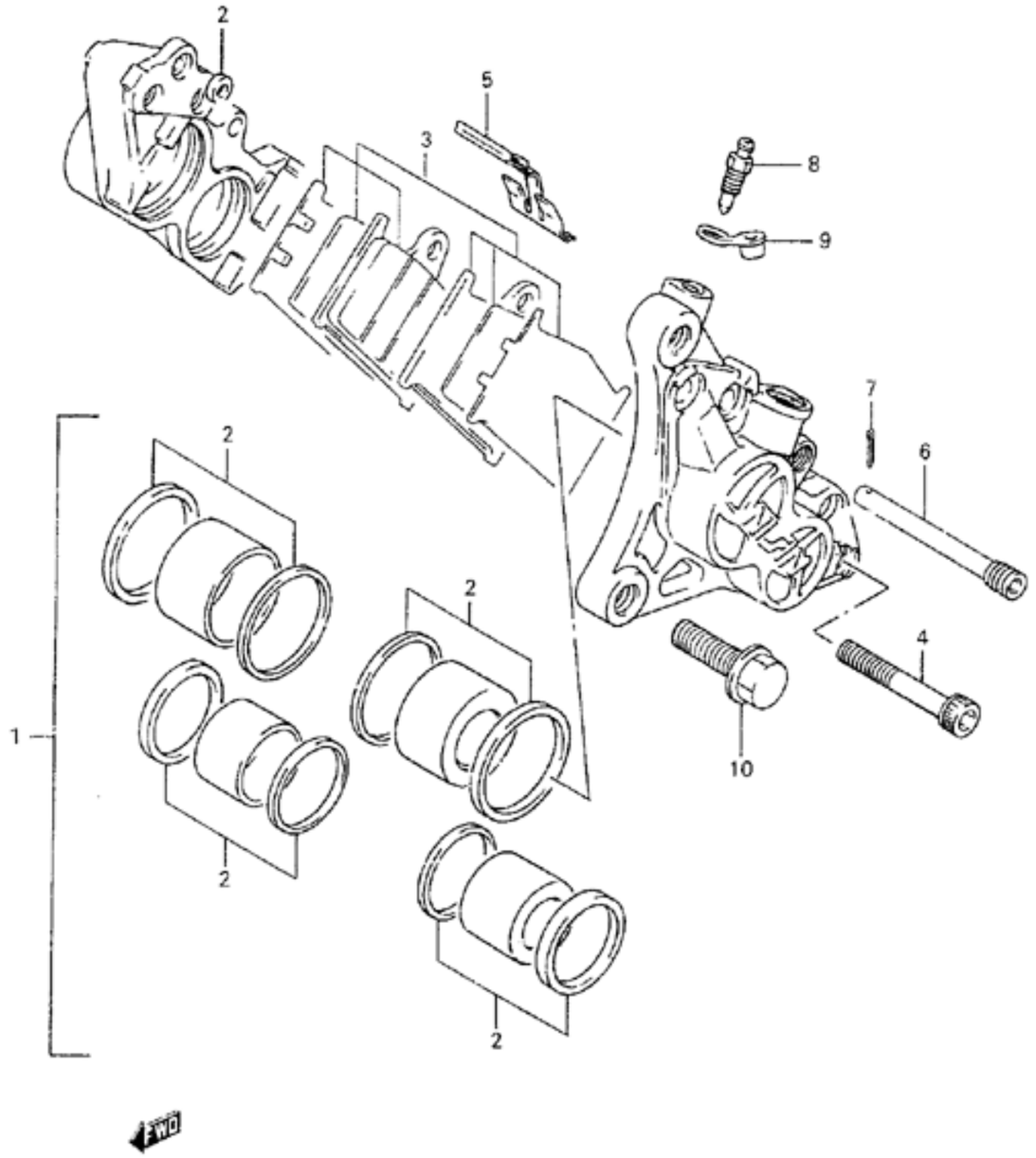


FIG.53 (i- 6) FRONT CALIPERS

REF NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
	59100-17E10	CALIPER ASSY, RH	1	
	59300-17E10	CALIPER ASSY, LH	1	
1	59100-17830	.PISTON SET	2	
2	59100-17870	..SEAL SET, piston	2	
3	59300-17811	.PAD SET	2	
4	59145-33C00	.BOLT, housing	8	
5	59315-17C00	.SPRING	2	
6	59345-33C00	.PIN	2	
7	04111-16208	.PIN, cotter	2	
8	59121-01A00	.BLEEDER	2	
9	59122-01A00	.CAP	2	
10	01550-10303	BOLT	4	

AIR CLEANER..... C-06
ALTERNATOR..... E-03
BATTERY..... E-06
CAM CHAIN..... B-14
CAM SHAFT - VALVE.. B-12
CARBURETOR FITTINGS C-05
CARBURETOR..... C-02
CLUTCH CYLINDER.... I-09
CLUTCH..... D-05
COWLING BODY..... H-02
CRANKCASE COVER.... B-07
CRANKCASE..... B-05
CRANKSHAFT..... B-09
CYLINDER HEAD COVER B-02
CYLINDER HEAD..... B-03
CYLINDER..... B-04
ELECTRICAL..... E-07
FOOTREST..... F-04
FRAME COVER..... G-02
FRAME..... F-02
FRONT BRAKE HOSE... I-07
FRONT CALIPERS..... I-06
FRONT DAMPER..... I-02
FRONT FENDER..... G-06
FRONT MASTER CYLIND I-08
FRONT WHEEL..... I-05
FUEL COCK..... F-09
FUEL PUMP..... C-08
FUEL TANK..... F-06
GEAR SHIFTING..... D-10
HANDLE BAR..... G-07
HANDLE LEVER..... G-08
HANDLE SWITCH..... E-14
HEADLAMP..... E-10
INSTALLATION PARTS. H-05
LABEL..... H-14
MUFFLER..... C-07
OIL COOLER - OIL FI C-09
OIL PAN - OIL PUMP. B-08
OPTIONAL..... J-10
RADIATOR HOSE..... D-03
RADIATOR..... D-02
REAR CALIPER..... J-07
REAR CUSHION LEVER. J-04
REAR FENDER..... G-09
REAR MASTER CYLINDE J-09
REAR SWINGING ARM.. J-02
REAR WHEEL..... J-05
SEAT..... H-15
SIGNAL GENERATOR... E-05
SPEEDOMETER..... E-08
STAND..... F-03
STARTER CLUTCH..... B-11
STARTING MOTOR..... E-02
STEERING STEM..... I-04
TAIL LAMP..... E-12
TRANSMISSION..... D-08
TURNSIGNAL LAMP.... E-11
UNDER COWLING BODY. H-06
WATER PUMP..... C-10
WIRING HARNESS..... E-13

FIG.54

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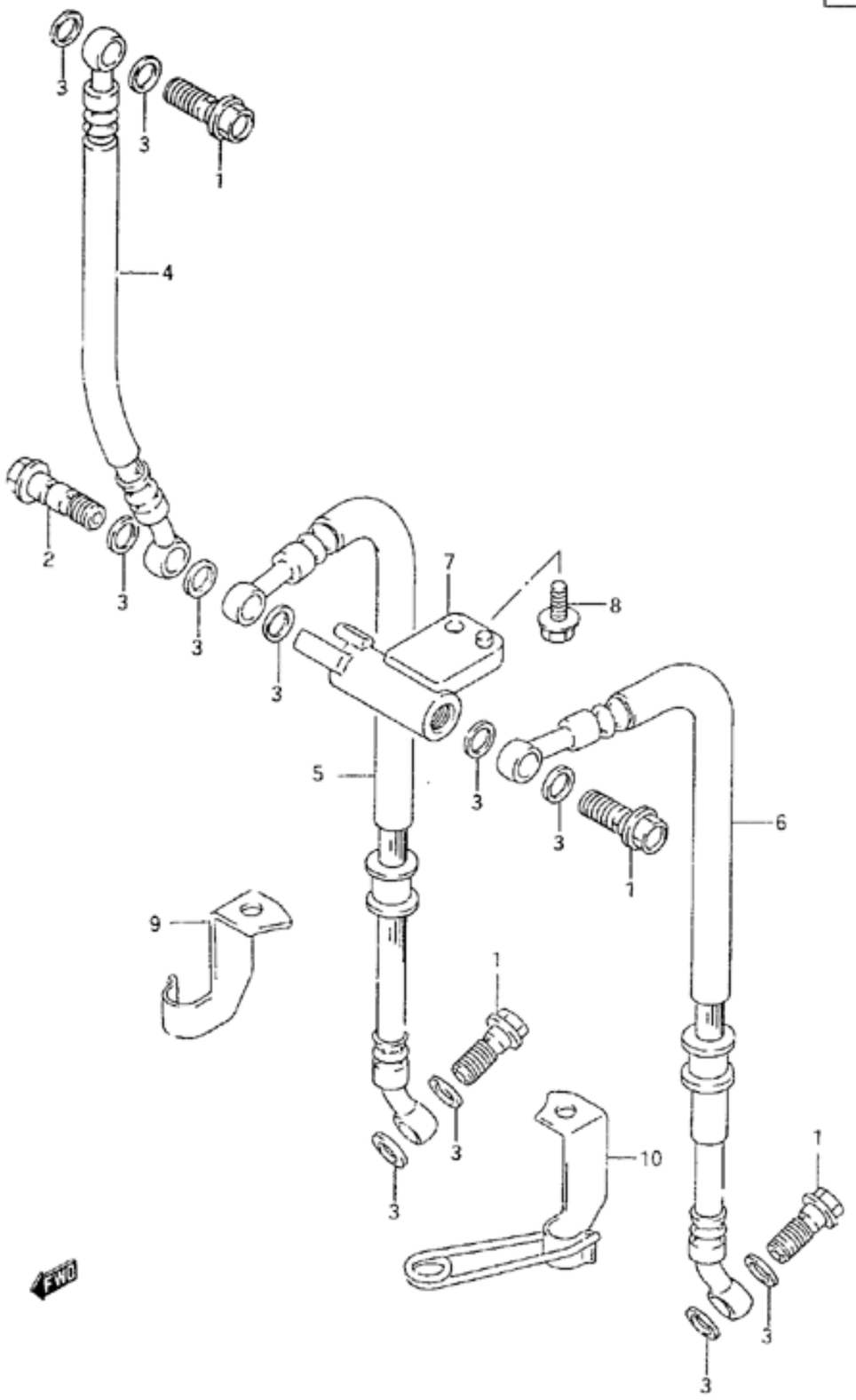


FIG.54 (I- 7) FRONT BRAKE HOSE

REF NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1-1	09360-10039	BOLT (10x1.00x22)	4	model R/S/T
1-2	09360-10041	BOLT (10x1.00x22)	4	model V
2-1	09360-10018	BOLT (10x1.00x36)	1	model R/S/T
2-2	09360-10043	BOLT (10x1.00x36)	1	model V
3	09161-10009	WASHER	11	
4	59480-21E00	HOSE, front brake No.1	1	
5	59240-31E00	HOSE, front brake No.2 RH	1	
6	59440-31E00	HOSE, front brake No.2 LH	1	
7	59491-17E00	JOINT, brake hose	1	
8	01550-06163	BOLT	1	
9	59268-07D00	CLAMP, brake hose RH	1	
10	59260-07D00	CLAMP, brake hose LH	1	

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AIR CLEANER..... C-06
ALTERNATOR..... E-03
BATTERY..... E-06
CAM CHAIN..... B-14
CAM SHAFT - VALVE.. B-12
CARBURETOR FITTINGS C-05
CARBURETOR..... C-02
CLUTCH CYLINDER.... I-09
CLUTCH..... D-05
COWLING BODY..... H-02
CRANKCASE COVER.... B-07
CRANKCASE..... B-05
CRANKSHAFT..... B-09
CYLINDER HEAD COVER B-02
CYLINDER HEAD..... B-03
CYLINDER..... B-04
ELECTRICAL..... E-07
FOOTREST..... F-04
FRAME COVER..... G-02
FRAME..... F-02
FRONT BRAKE HOSE... I-07
FRONT CALIPERS..... I-06
FRONT DAMPER..... I-02
FRONT FENDER..... G-06
FRONT MASTER CYLIND I-08
FRONT WHEEL..... I-05
FUEL COCK..... F-09
FUEL PUMP..... C-08
FUEL TANK..... F-06
GEAR SHIFTING..... D-10
HANDLE BAR..... G-07
HANDLE LEVER..... G-08
HANDLE SWITCH..... E-14
HEADLAMP..... E-10
INSTALLATION PARTS. H-05
LABEL..... H-14
MUFFLER..... C-07
OIL COOLER - OIL FI C-09
OIL PAN - OIL PUMP. B-08
OPTIONAL..... J-10
RADIATOR HOSE..... D-03
RADIATOR..... D-02
REAR CALIPER..... J-07
REAR CUSHION LEVER. J-04
REAR FENDER..... G-09
REAR MASTER CYLINDE J-09
REAR SWINGING ARM.. J-02
REAR WHEEL..... J-05
SEAT..... H-15
SIGNAL GENERATOR... E-05
SPEEDOMETER..... E-08
STAND..... F-03
STARTER CLUTCH..... B-11
STARTING MOTOR..... E-02
STEERING STEM..... I-04
TAIL LAMP..... E-12
TRANSMISSION..... D-08
TURNSIGNAL LAMP.... E-11
UNDER COWLING BODY. H-06
WATER PUMP..... C-10
WIRING HARNESS..... E-13

FIG. 55

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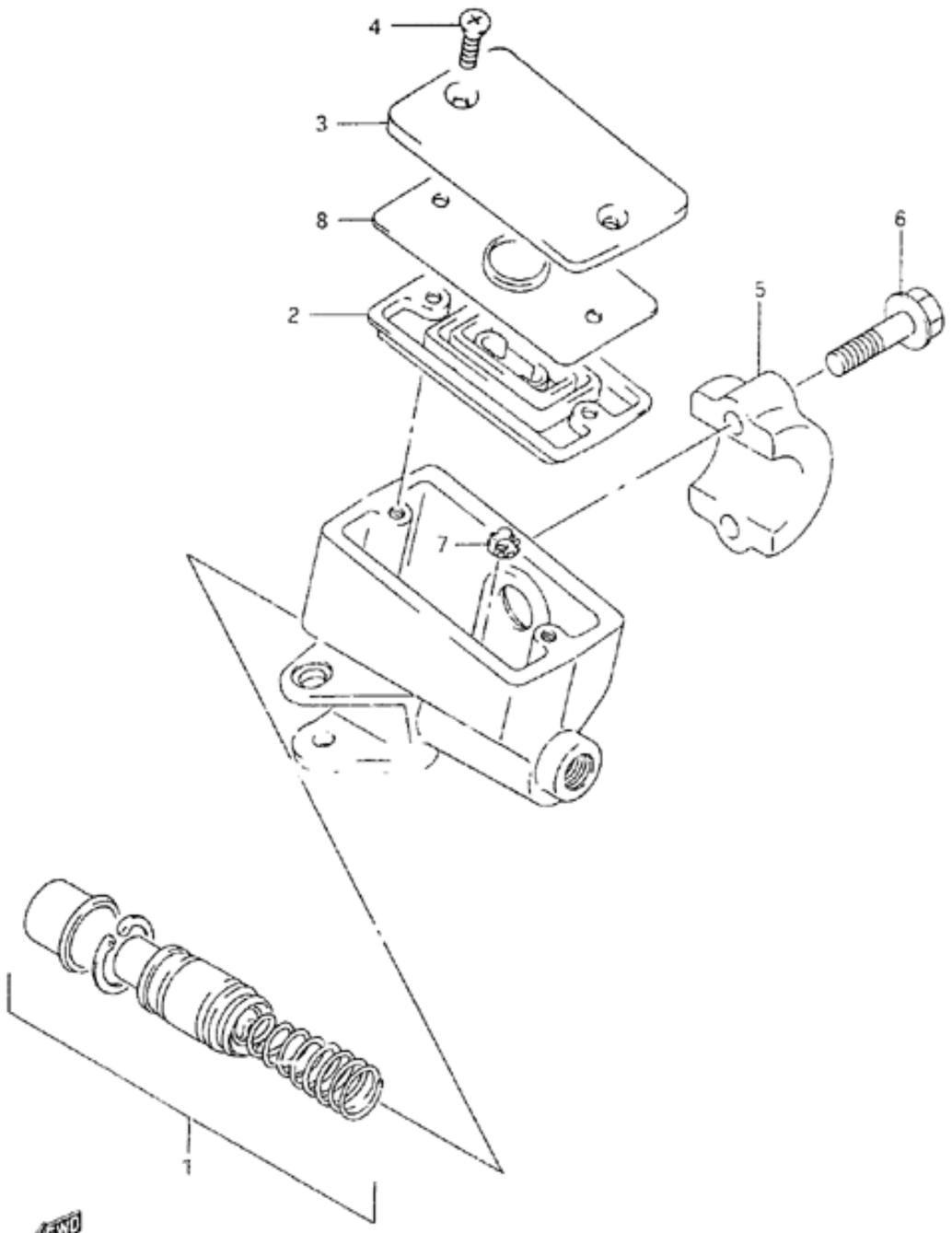


FIG.55 (i- 8) FRONT MASTER CYLINDER

REF NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
	59600-20C00	CYLINDER ASSY, front master	1	
1	59600-45860	.PISTON/CUP SET	1	
2	59667-49460	.DIAPHRAGM	1	
3	59669-41C00	.CAP	1	
4	69689-49300	.SCREW	2	
5	59671-19B00	.HOLDER	1	
6	59675-19C00	.BOLT, holder set	2	
7	59664-48B00	.PROTECTOR	1	
8	59668-41C00	.PLATE	1	

AIR CLEANER.....	C-06	COWLING BODY.....	H-02	FRAME COVER.....	G-02	FUEL PUMP.....	C-08	MUFFLER.....	C-07	REAR MASTER CYLINDE	J-09	STEERING STEM.....	I-04
ALTERNATOR.....	E-03	CRANKCASE COVER....	B-07	FRAME.....	F-02	FUEL TANK.....	F-06	OIL COOLER - OIL FI	C-09	REAR SWINGING ARM..	J-02	TAIL LAMP.....	E-12
BATTERY.....	E-06	CRANKCASE.....	B-05	FRONT BRAKE HOSE...	I-07	GEAR SHIFTING.....	D-10	OIL PAN - OIL PUMP.	B-08	REAR WHEEL.....	J-05	TRANSMISSION.....	D-08
CAM CHAIN.....	B-14	CRANKSHAFT.....	B-09	FRONT CALIPERS.....	I-06	HANDLE BAR.....	G-07	OPTIONAL.....	J-10	SEAT.....	H-15	TURNSIGNAL LAMP....	E-11
CAM SHAFT - VALVE..	B-12	CYLINDER HEAD COVER	B-02	FRONT DAMPER.....	I-02	HANDLE LEVER.....	G-08	RADIATOR HOSE.....	D-03	SIGNAL GENERATOR...	E-05	UNDER COWLING BODY.	H-06
CARBURETOR FITTINGS	C-05	CYLINDER HEAD.....	B-03	FRONT FENDER.....	G-06	HANDLE SWITCH.....	E-14	RADIATOR.....	D-02	SPEEDOMETER.....	E-08	WATER PUMP.....	C-10
CARBURETOR.....	C-02	CYLINDER.....	B-04	FRONT MASTER CYLIND	I-08	HEADLAMP.....	E-10	REAR CALIPER.....	J-07	STAND.....	F-03	WIRING HARNESS.....	E-15
CLUTCH CYLINDER....	J-09	ELECTRICAL.....	C-07	FRONT WHEEL.....	I-05	INSTALLATION PARTS.	H-05	REAR CUSHION LEVER.	J-04	STARTER CLUTCH.....	B-11		
CLUTCH.....	D-05	FOOTREST.....	F-04	FUEL COCK.....	F-09	LABEL.....	H-14	REAR FENDER.....	G-09	STARTING MOTOR.....	E-02		

FIG. 56

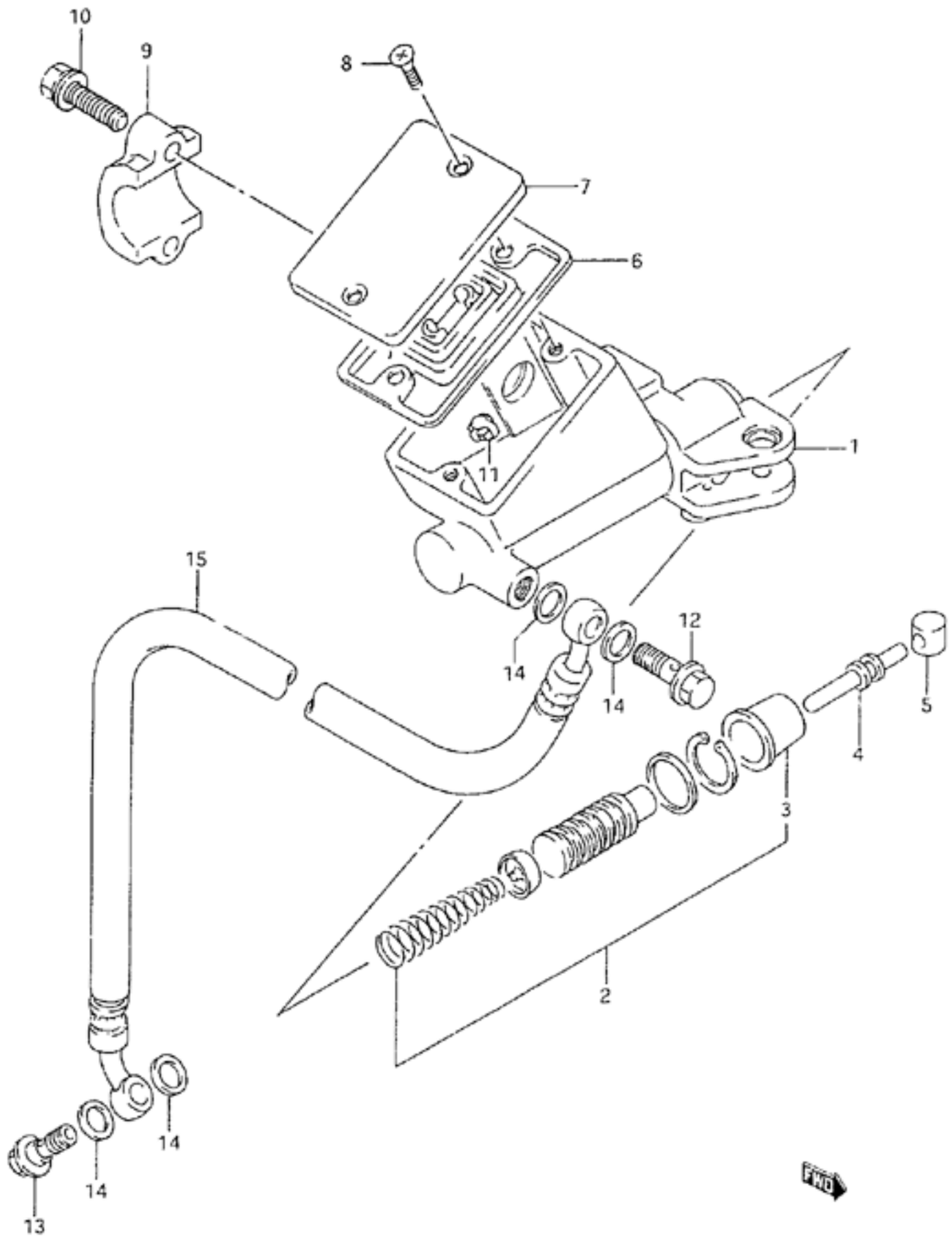


FIG .6 (i- 9) CLUTCH CYLINDER

REF NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1	59800-46E00	CYLINDER ASSY, clutch master	1	
2	59800-08810	.PISTON & CUP SET	1	
3	59666-44300	..BOOT	1	
4	59871-08A00	.PUSH ROD	1	
5	59872-08A00	.BUSH	1	
6	59667-44B00	.DIAPHRAGM	1	
7	69669-24A01	.CAP	1	
8	69689-49300	.SCREW	2	
9	59671-36500	.HOLDER	1	
10	59675-19C00	.BOLT	2	
11	59664-48B00	.PROTECTOR	1	
12	09360-10040	BOLT, upper (10x1.25x22)	1	
13	09360-10039	BOLT (10x1.00x22)	1	
14	09161-10009	WASHER	4	
15	59910-31E00	HOSE, clutch	1	

AIR CLEANER..... C-06
ALTERNATOR..... E-03
BATTERY..... E-06
CAM CHAIN..... B-14
CAM SHAFT - VALVE.. B-12
CARBURETOR FITTINGS C-05
CARBURETOR..... C-02
CLUTCH CYLINDER.... I-09
CLUTCH..... D-05
COWLING BODY..... H-02
CRANKCASE COVER.... B-07
CRANKCASE..... B-05
CRANKSHAFT..... B-09
CYLINDER HEAD COVER B-02
CYLINDER HEAD..... B-03
CYLINDER..... B-04
ELECTRICAL..... E-07
FOOTREST..... F-04
FRAME COVER..... G-02
FRAME..... F-02
FRONT BRAKE HOSE... I-07
FRONT CALIPERS..... I-06
FRONT DAMPER..... I-02
FRONT FORK..... G-06
FRONT MASTER CYLIND I-08
FRONT WHEEL..... I-05
FUEL COCK..... F-09
FUEL PUMP..... C-08
FUEL TANK..... F-06
GEAR SHIFTING..... D-10
HANDLE BAR..... G-07
HANDLE LEVER..... G-08
HANDLE SWITCH..... G-14
HEADLAMP..... E-10
INSTALLATION PARTS. H-05
LABEL..... H-14
MUFFLER..... C-07
OIL COOLER - OIL FI C-09
OIL PAN - OIL PUMP. B-08
OPTIONAL..... J-10
RADIATOR HOSE..... D-03
RADIATOR..... D-02
REAR CALIPER..... J-07
REAR CUSHION LEVER. J-04
REAR FENDER..... G-09
REAR MASTER CYLINDE J-09
REAR SWINGING ARM.. J-02
REAR WHEEL..... J-05
SEAT..... H-15
SIGNAL GENERATOR... E-05
SPEEDOMETER..... E-08
STAND..... F-03
STARTER CLUTCH..... B-11
STARTING MOTOR..... E-02
STEERING STEM..... I-04
TAIL LAMP..... E-12
TRANSMISSION..... D-08
TURNSIGNAL LAMP.... E-11
UNDER COWLING BODY. H-06
WATER PUMP..... C-10
WIRING HARNESS..... E-13

REAR SWINGING ARM (MODEL R/S) J-02



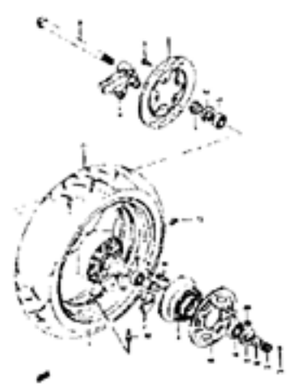
REAR SWINGING ARM (MODEL T/V) J-03



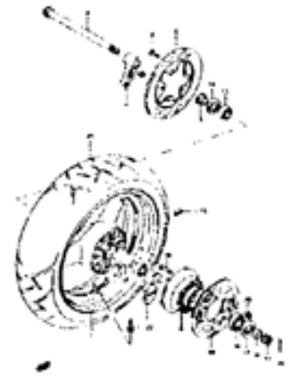
REAR CUSHION LEVER J-04



REAR WHEEL (MODEL R/S) J-05



REAR WHEEL (MODEL T/V) J-06



REAR CALIPER (MODEL R/S) J-07



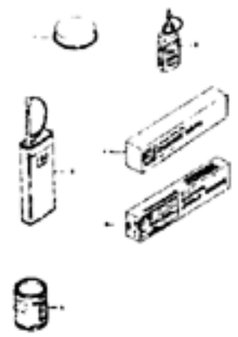
REAR CALIPER (MODEL T/V) J-08



REAR MASTER CYLINDER J-09



OPTICNAL J-10



AIR CLEANER..... C-01
ALTERNATOR..... E-03
BATTERY..... E-06
CAM CHAIN..... B-14
CAM SHAFT - VALVE. B-12
CARBURETOR FITTINGS C-05
CARBURETOR..... C-02
CLUTCH CYLINDER.... I-09
CLUTCH..... D-05
COWLING BODY..... H-02
CRANKCASE COVER.... B-07
CRANKCASE..... B-05
CRANKSHAFT..... B-09
CYLINDER HEAD COVER B-02
CYLINDER HEAD..... B-03
CYLINDER..... B-04
ELECTRICAL..... E-07
FOOTREST..... F-04
FRAME COVER..... G-02
FRAME..... F-02
FRONT BRAKE HOSE... I-07
FRONT CALIPERS..... I-06
FRONT DAMPER..... I-02
FRONT FENDER..... G-06
FRONT MASTER CYLIND I-08
FRONT WHEEL..... I-05
FUEL COCK..... F-09
FUEL PUMP..... C-08
FUEL TANK..... F-06
GEAR SHIFTING..... D-10
HANDLE BAR..... G-07
HANDLE LEVER..... G-08
HANDLE SWITCH..... E-14
HEADLAMP..... E-10
INSTALLATION PARTS. H-05
LABEL..... H-14
MUFFLER..... C-07
OIL COOLER - OIL FI C-09
OIL PAN - OIL PUMP. B-08
OPTIONAL..... J-10
RADIATOR HOSE..... D-03
RADIATOR..... D-02
REAR CALIPER..... J-07
REAR CUSHION LEVER. J-04
REAR FENDER..... G-09
REAR MASTER CYLINDE J-09
REAR SWINGING ARM.. J-02
REAR WHEEL..... J-05
SEAT..... H-15
SIGNAL GENERATOR... E-05
SPEEDOMETER..... E-08
STAND..... F-03
STARTER CLUTCH..... B-11
STARTING MOTOR..... E-02
STEERING STEM..... I-04
TAIL LAMP..... E-12
TRANSMISSION..... D-08
TURNSIGNAL LAMP.... E-11
UNDER COWLING BODY. H-06
WATER PUMP..... C-10
WIRING HARNESS..... E-13

J - 10

FIG.62

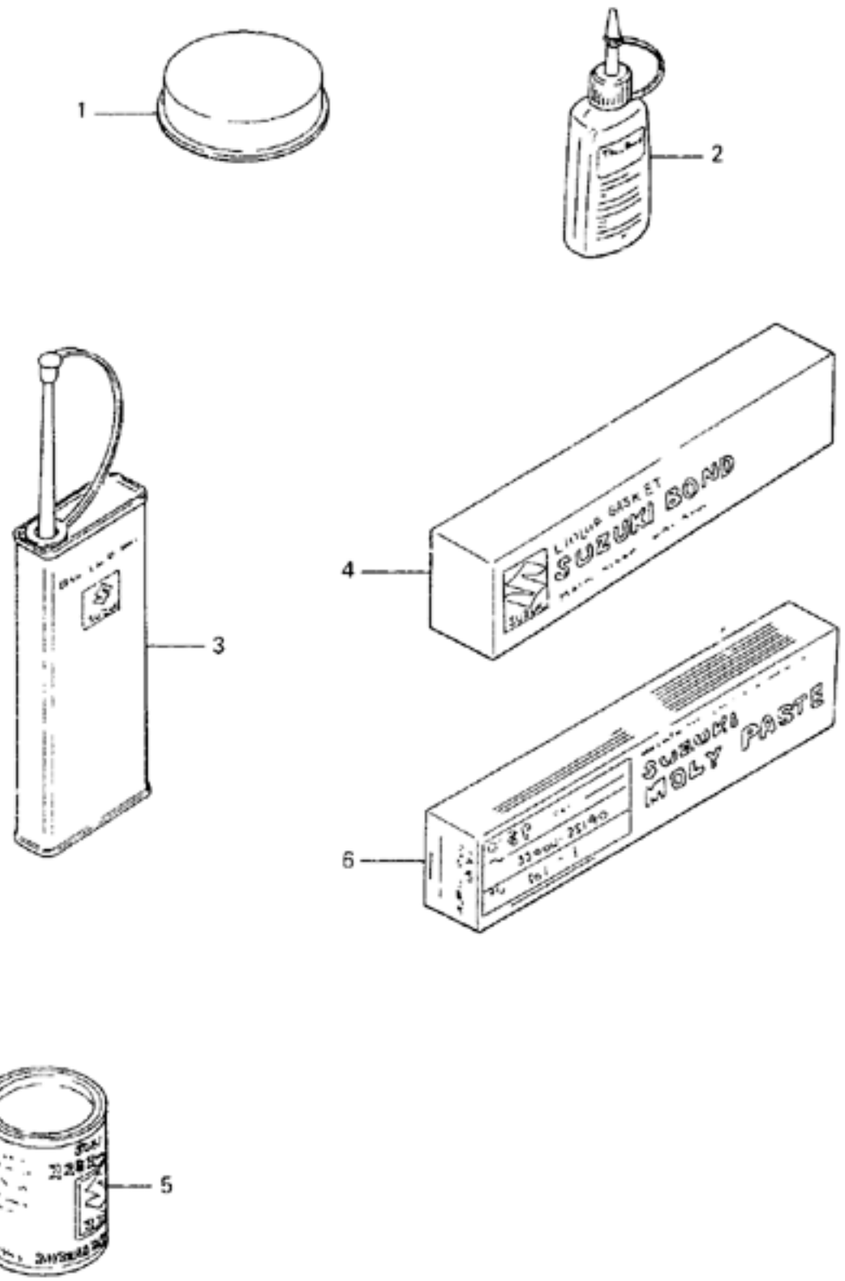


FIG.62 (J-10) OPTIONAL

REF NO.	PART NO.	DESCRIPTION	Q'TY		REMARKS
1	99000-25110	SUZUKI PBC GREASE	1	20g	
2-1	99104-32020	THREAD LOCK SUPER (1333)	1	50g	
2-2	99104-32030	THREAD LOCK SUPER (1363A)	1	50g	
2-3	99000-32050	THREAD LOCK SUPER (1342)	1	50g	
2-4	99000-32100	THREAD LOCK SUPER (1305)	1	50g	
2-5	99000-32130	THREAD LOCK SUPER (1360)	1	50g	
3	99000-32040	THREAD LOCK CEMENT	1	200g	
4	99000-31140	SUZUKI BOND (1207B)	1	100g	
5	99000-25030	SUZUKI SUPER GREASE	1	150g	
6	99000-25140	SUZUKI MOLY PASTE	1	50g	

AIR CLEANER..... C-06
ALTERNATOR..... E-03
BATTERY..... E-06
CAM CHAIN..... B-14
CAM SHAFT - VALVE.. B-12
CARBURETOR FITTINGS C-05
CARBURETOR..... C-02
CLUTCH CYLINDER.... I-09
CLUTCH..... D-05
COWLING BODY..... H-02
CRANKCASE COVER.... B-07
CRANKCASE..... B-05
CRANKSHAFT..... B-09
CYLINDER HEAD COVER B-02
CYLINDER HEAD..... B-03
CYLINDER..... B-04
ELECTRICAL..... E-07
FOOTREST..... F-04
FRAME COVER..... G-02
FRAME..... F-02
FRONT BRAKE HOSE... I-07
FRONT CALIPERS..... I-06
FRONT DAMPER..... I-02
FRONT FENDER..... G-06
FRONT MASTER CYLIND I-08
FRONT WHEEL..... I-05
FUEL COCK..... F-09
FUEL PUMP..... C-08
FUEL TANK..... F-06
GEAR SHIFTING..... D-10
HANDLE BAR..... G-07
HANDLE LEVER..... G-08
HANDLE SWITCH..... E-14
HEADLAMP..... E-10
INSTALLATION PARTS. H-05
LABEL..... H-14
MUFFLER..... C-07
OIL COOLER - OIL FI C-09
OIL PAN - OIL PUMP. B-08
OPTIONAL..... J-10
RADIATOR HOSE..... D-03
RADIATOR..... D-02
REAR CALIPER..... J-07
REAR CUSHION LEVER. J-04
REAR FENDER..... G-09
REAR MASTER CYLINDE J-09
REAR SWINGING ARM.. J-02
REAR WHEEL..... J-05
SEAT..... H-15
SIGNAL GENERATOR... E-05
SPEEDOMETER..... E-08
STAND..... F-03
STARTER CLUTCH..... B-11
STARTING MOTOR..... E-02
STEERING STEM..... I-04
TAIL LAMP..... E-12
TRANSMISSION..... D-08
TURNSIGNAL LAMP.... E-11
UNDER COWLING BODY. H-06
WATER PUMP..... C-10
WIRING HARNESS..... E-13

FIG.57

J - 2

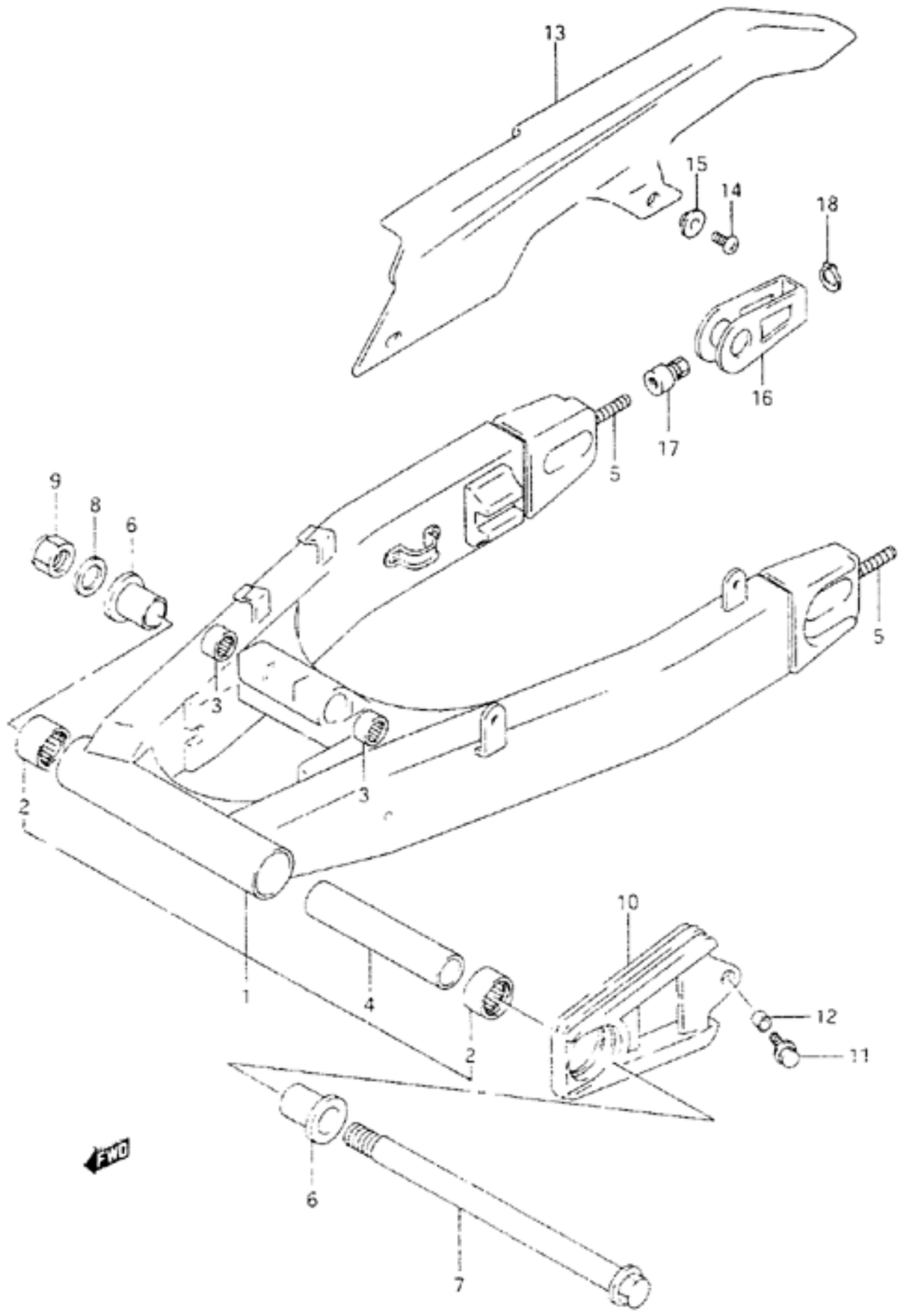


FIG.57 (J- 2) REAR SWINGING ARM (model R/S)

REF NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1	61000-31E01	SWINGING ARM ASSY, rear	1	
2	09263-25059	.BEARING, pivot (25x33x35)	2	
3	09263-17037	.BEARING, rod (17x24x25)	2	
4	61287 -1E00	.SPACER	1	
5	61431-40C00	.BOLT	2	
6	61251-31E00	SPACER, bearing	2	
7	61211-31E00	SHAFT, pivot	1	
8	09160-18026	WASHER	1	
9	09159-18007	NUT	1	
10	61273-17E02	BUFFER, chain touch defense	1	
11	09116-06111	BOLT	1	
12	09180-06002	SPACER	1	
13	61310-45D11	CASE, chain	1	
14	02142-06123	SCREW	2	
15	09169-06026	WASHER	2	
16	61411-40C00	ADJUSTER, chain	2	
17-1	61415-40C00	NUT, chain adjuster	2	model R →61415-22D00
17-2	61415-22D00	NUT, chain adjuster	2	model S
18	08331-31136	CIRCLIP	2	

Refer to FIG.57A(J-3) for model T/V

AIR CLEANER	C-06	COWLING BODY	H-02	FRAME COVER	G-02	FUEL PUMP	C-08	MUFFLER	C-07	REAR MASTER CYLINDE	J-09	STEERING STEM	I-04
ALTERNATOR	E-03	CRANKCASE COVER	B-07	FRAME	F-02	FUEL TANK	F-06	OIL COOLER - OIL FI	C-09	REAR SWINGING ARM	J-02	TAIL LAMP	E-12
BATTERY	E-06	CRANKCASE	B-05	FRONT BRAKE HOSE	I-07	GEAR SHIFTING	D-10	OIL PAN - OIL P MP.	B-08	REAR WHEEL	J-05	TRANSMISSION	D-08
CAM CHAIN	B-14	CRANKSHAFT	B-09	FRONT CALIPERS	I-06	HANDLE BAR	G-07	OPTIONAL	J-10	SEAT	H-15	TURNSIGNAL LAMP	E-11
CAM SHAFT - VALVE	B-12	CYLINDER HEAD COVER	B-02	FRONT DAMPER	I-02	HANDLE LEVER	G-08	RADIATOR HOSE	D-03	SIGNAL GENERATOR	E-05	UNDER COWLING BODY.	H-06
CARBURETOR FITTINGS	C-05	CYLINDER HEAD	B-03	FRONT FENDER	G-06	HANDLE SWITCH	E-14	RADIATOR	D-02	SPEEDOMETER	E-08	WATER PUMP	C-10
CARBURETOR	C-02	CYLINDER	B-04	FRONT MASTER CYLIND	I-08	HEADLAMP	E-10	REAR CALIPER	J-07	STAND	F-03	WIRING HARNESS	E-13
CLUTCH CYLINDER	I-09	ELECTRICAL	E-07	FRONT WHEEL	I-05	INSTALLATION PARTS.	H-05	REAR CUSHION LEVER.	J-04	STARTER CLUTCH	B-11		
CLUTCH	D-05	FOOTREST	F-04	FUEL COCK	F-09	LABEL	H-14	REAR FENDER	G-09	STARTING MOTOR	E-02		

FIG.57A

J - 3

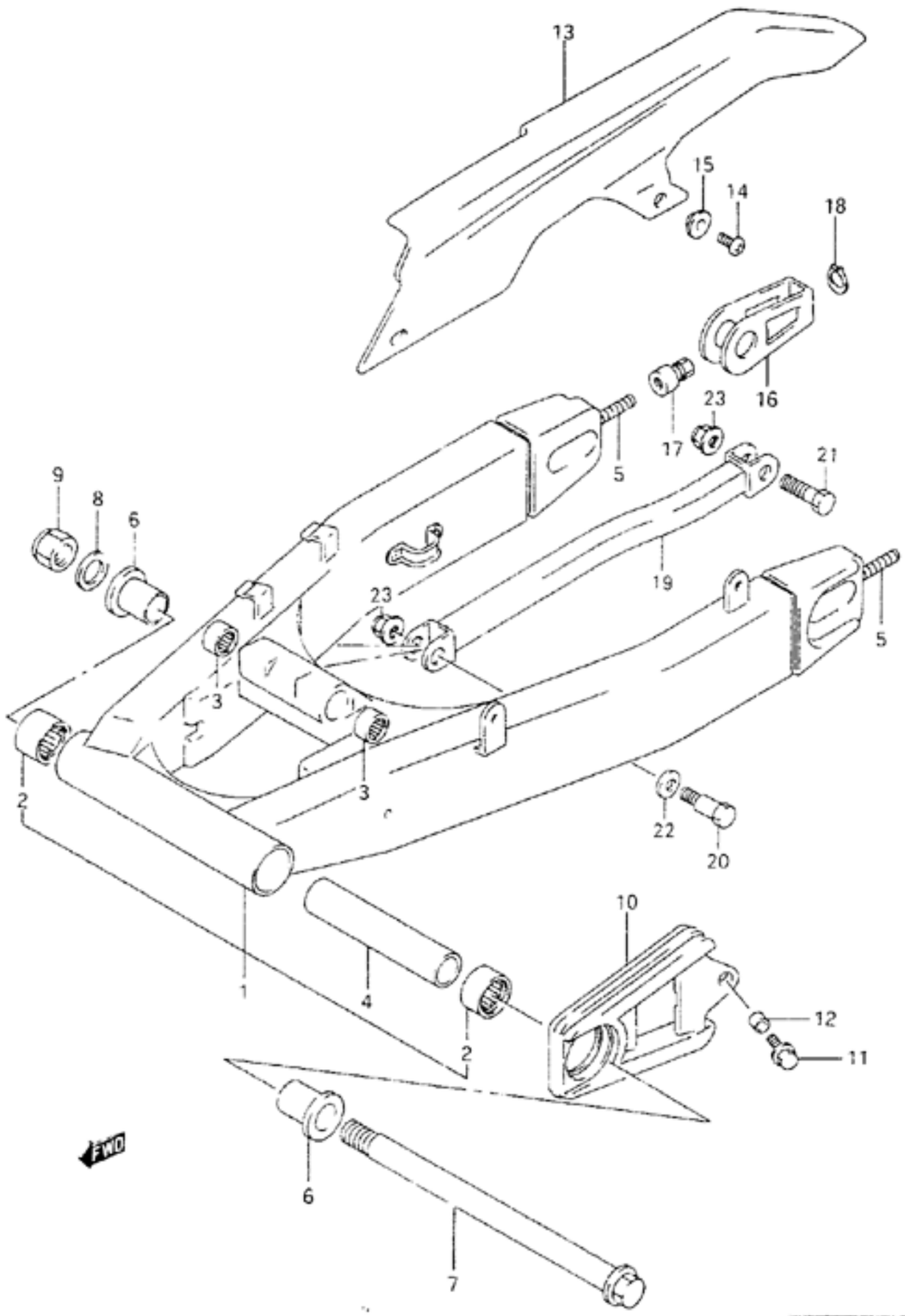


FIG.57A(J- 3) REAR SWINGING ARM (model T/V)

REF NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1	61000-31E10	SWINGING ARM ASSY, rear	1	
2	09263-25059	.BEARING, pivot (25x33x35)	2	
3	09263-17037	.BEARING, rod (17x24x25)	2	
4	61282-31E00	.SPACER	1	
5	61431-40C00	.BOLT	2	
6	61251-31E00	SPACER, bearing	2	
7	61211-31E00	SHAFT, pivot	1	
8	09160-18026	WASHER	1	
9	09159-18007	NUT	1	
10	61273-17E02	BUFFER, chain touch defense	1	
11	09116-06111	BOLT	1	
12	09180-06283	SPACER	1	
13	61310-45D12	CASE, chain	1	
14	02142-06123	SCREW	2	
15	09169-06026	WASHER	2	
16	61411-40C00	ADJUSTER, chain	2	
17	61415-22D00	NUT, chain adjuster	2	
18	08331-31136	CIRCLIP	2	
19	64310-27E00-019	TORQUELINK, rear (Black)	1	
20	09111-10051	BOLT, front (10x39)	1	
21	09100-10187	BOLT, rear (10x34)	1	
22	09160-12011	WASHER, front	1	
23	08319-31107	NUT	2	

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AIR CLEANER..... C-06
ALTERNATOR..... E-03
BATTERY..... E-06
CAM CHAIN..... B-14
CAM SHAFT - VALVE.. B-12
CARBURETOR FITTINGS C-05
CARBURETOR..... C-02
CLUTCH CYLINDER.... I-09
CLUTCH..... D-05
COWLING BODY..... H-02
CRANKCASE COVER.... B-07
CRANKCASE..... B-05
CRANKSHAFT..... B-09
CYLINDER HEAD COVER B-02
CYLINDER HEAD..... B-03
CYLINDER..... B-04
ELECTRICAL..... E-07
FOOTREST..... F-04
FRAME COVER..... G-02
FRAME..... F-02
FRONT BRAKE HOSE... I-07
FRONT CALIPERS..... I-06
FRONT DAMPER..... I-02
FRONT FENDER..... G-06
FRONT MASTER CYLIND I-08
FRONT WHEEL..... I-05
FUEL COCK..... F-09
FUEL PUMP..... C-08
FUEL TANK..... F-06
GEAR SHIFTING..... D-10
HANDLE BAR..... G-07
HANDLE LEVER..... G-08
HANDLE SWITCH..... E-14
HEADLAMP..... E-10
INSTALLATION PARTS. H-05
LABEL..... H-14
MUFFLER..... C-07
OIL COOLER - OIL FI C-09
OIL PAN - OIL PUMP. B-08
OPTIONAL..... J-10
RADIATOR HOSE..... D-03
RADIATOR..... D-02
REAR CALIPER..... J-07
REAR CUSHION LEVER. J-04
REAR FENDER..... G-09
REAR MASTER CYLINDE J-09
REAR SWINGING ARM.. J-02
REAR WHEEL..... J-05
SEAT..... H-15
SIGNAL GENERATOR... E-05
SPEEDOMETER..... E-08
STAND..... F-03
STARTER CLUTCH..... B-11
STARTING MOTOR..... E-02
STEERING STEM..... I-04
TAIL LAMP..... E-12
TRANSMISSION..... D-08
TURNSIGNAL LAMP.... E-11
UNDER COWLING BODY. H-06
WATER PUMP..... C-10
WIRING HARNESS..... E-13

FIG.58

J - 4

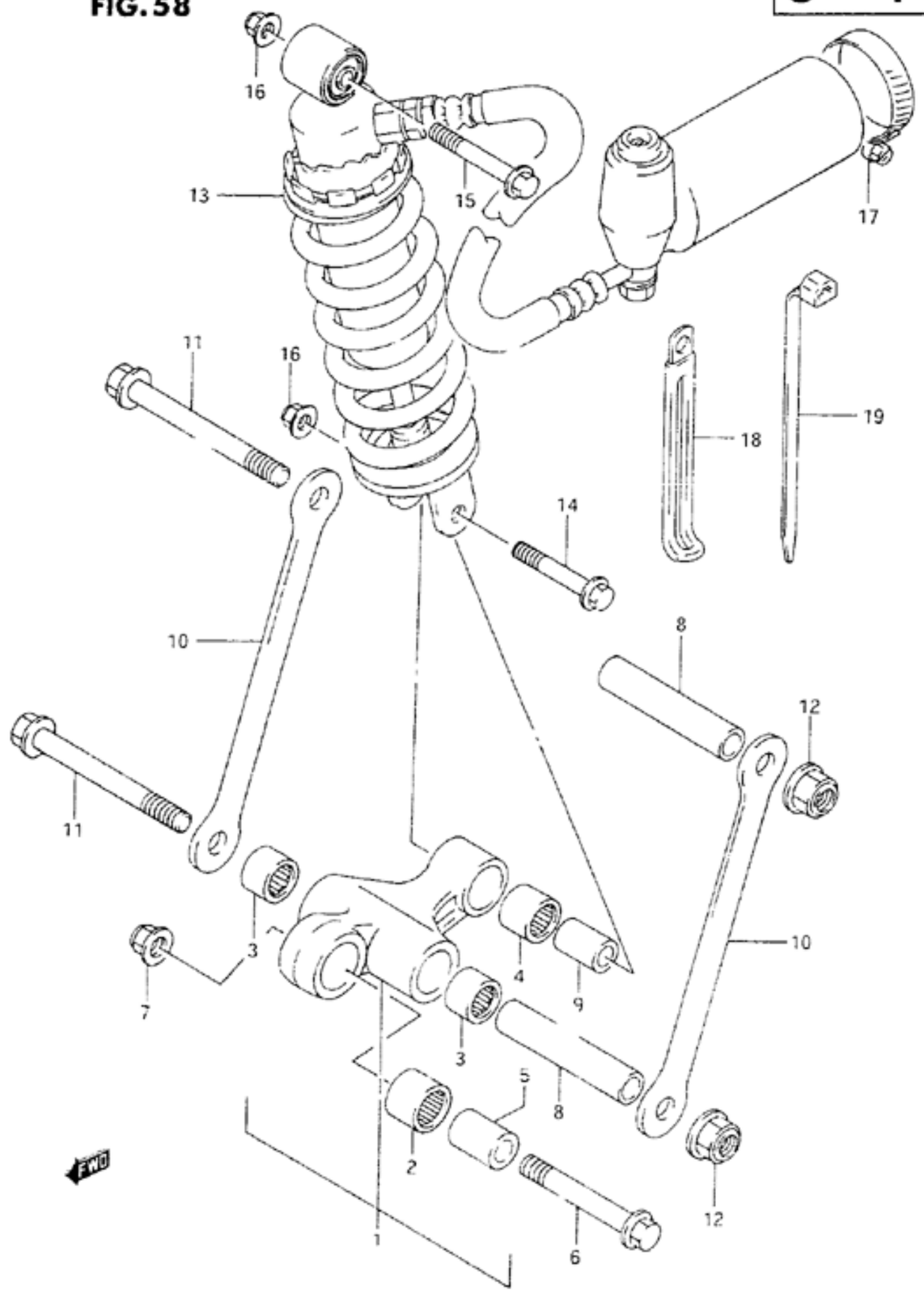


FIG.58 (J- 4) REAR CUSHION LEVER

REF NO.	PART NO	DESCRIPTION	Q'TY	REMARKS
1	62600-33871	LEVER SET, rear cushion	1	
2	09263-20064	.BEARING (20x27x26)	1	
3	09263-17037	.BEARING (17x24x25)	2	
4	09263-17034	.BEARING, rear (17x24x26)	1	
5	62684-05C00	SPACER, lever front	1	
6	62668-42A02	BOLT, lever front	1	
7	08319-31128	NUT	1	
8	09180-12122	SPACER (12x17x85)	2	
9	62684-40A10	SPACER, lever rear	1	
10	62641-37D00	ROD, rear cushion lever	2	
11	09103-12037	BOLT (12x115)	2	
12	08319-31128	NUT	2	
13	62100-31E01	ABSORBER ASSY, rear shock	1	
14	09103-10027	BOLT, lower (10x58)	1	
15	09103-10064	BOLT, upper (10x50)	1	
16	08319-31107	NUT	2	
17	09402-50511	CLAMP, tank	2	
18-1	09404-08405	CLAMP, hose	1	model R/S
18-2	09404-08419	CLAMP, hose	1	model T/V
19	09407-18403	CLAMP, hose	1	

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AIR CLEANER..... C-06
ALTERNATOR..... E-03
BATTERY..... E-06
CAM CHAIN..... B-14
CAM SHAFT - VALVE.. B-12
CARBURETOR FITTINGS C-05
CARBURETOR..... C-02
CLUTCH CYLINDER.... I-09
CLUTCH..... D-05
COWLING BODY..... H-02
CRANKCASE COVER.... B-07
CRANKCASE..... B-05
CRANKSHAFT..... B-09
CYLINDER HEAD COVER B-02
CYLINDER HEAD..... B-03
CYLINDER..... B-04
ELECTRICAL..... E-07
FOOTREST..... F-04
FRAME COVER..... G-02
FRAME..... F-02
FRONT BRAKE HOSE... I-07
FRONT CALIPERS..... I-06
FRONT DAMPER..... I-02
FRONT FENDER..... G-06
FRONT MASTER CYLIND I-08
FRONT WHEEL..... I-05
FUEL COCK..... F-09
FUEL PUMP..... C-08
FUEL TANK..... F-06
GEAR SHIFTING..... D-10
HANDLE BAR..... G-07
HANDLE LEVER..... G-08
HANDLE SWITCH..... E-14
HEADLAMP..... E-10
INSTALLATION PARTS. H-05
LABEL..... H-14
MUFFLER..... C-07
OIL COOLER - OIL FI C-09
OIL PAN - OIL PUMP. B-08
OPTIONAL..... J-10
RADIATOR HOSE..... D-03
RADIATOR..... D-02
REAR CALIPER..... J-07
REAR CUSHION LEVER. J-04
REAR FENDER..... G-09
REAR MASTER CYLINDE J-09
REAR SWINGING ARM.. J-02
REAR WHEEL..... J-05
SEAT..... H-15
SIGNAL GENERATOR... E-05
SPEEDOMETER..... E-08
STAND..... F-03
STARTER CLUTCH..... B-11
STARTING MOTOR..... E-02
STEERING STEM..... I-04
TAIL LAMP..... E-12
TRANSMISSION..... D-08
TURNSIGNAL LAMP.... E-11
UNDER COWLING BODY. H-06
WATER PUMP..... C-10
WIRING HARNESS..... E-13

FIG.59

J - 5

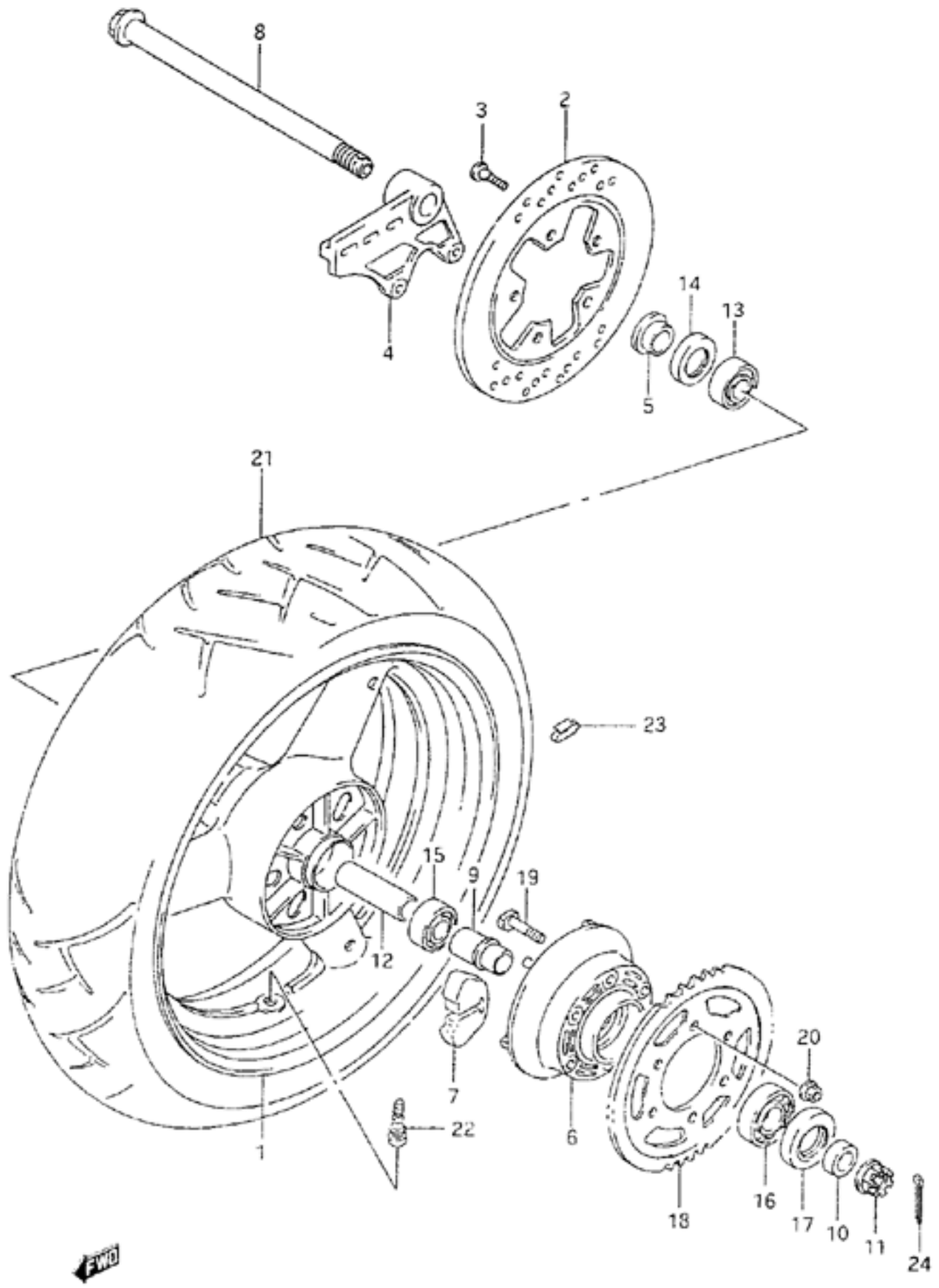


FIG.59 (J- 5) REAR WHEEL (model R/S)

REF NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1-1	64111-17E10-1TU	WHEEL, rear (17xMT5.50) (Purple)	1	for 33J
1-2	64111-17E10-35W	WHEEL, rear (17xMT5.50) (Gray)	1	for 19A
1-3	64111-17E10-Y22	WHEEL, rear (17xMT5.50) (Purple)	1	for D8A
2	69211-21E00	DISC, rear brake	1	
3	09106-08125	BOLT	5	
4-1	69721-31E00	BRACKET, rear calipers	1	model R
4-2	69721-17E10	BRACKET, rear calipers	1	model S
5	64741-17E00	SPACER, RH	1	
6	64611-17E00	DRUM, sprocket	1	
7	64651-17E00	SHOCK ABSORBER, drum	6	
8	64711-17E10	AXLE, rear	1	
9	64733-48B00	RETAINER, drum	1	
10	64751-46E00	SPACER, LH	1	
11	09141-20004	NUT	1	
12	64731-40C00	SPACER, bearing	1	
13	09262-20114	BEARING, RH (20x47x14)	1	
14	09285-28001	SEAL, oil RH (28x47x7)	1	
15	09262-20042	BEARING, LH (20x47x14)	1	
16	09262-25114	BEARING, drum (25x62x17)	1	
17	09285-35001	OIL SEAL (35x62x8)	1	
18	64511-31E00	SPROCKET, rear (NT:43)	1	
19	09119-10037	BOLT	6	
20	08319-31107	NUT	6	
21	65110-31E00	TIRE, rear (170/60 ZR17) DUNLOP	1	
22	43130-24A11	VALVE ASSY, wheel rim TR412	1	
23-1	55411-00A00	BALANCER (10g)	0-3	
23-2	55412-00A01	BALANCER (20g)	0-3	
23-3	55413-00A01	BALANCER (30g)	0-3	
24	04111-40408	PIN, cotter	1	

Color : 19A (Red)
Color : 33J (Black)
Color : D8A = Y22(Purple), UFP(Silver)

Refer to FIG.59A(J-6) for model T/V

AIR CLEANER..... C-06
ALTERNATOR..... E-03
BATTERY..... E-06
CAM CHAIN..... B-14
CAM SHAFT - VALVE.. B-12
CARBURETOR FITTINGS C-05
CARBURETOR..... C-02
CLUTCH CYLINDER.... I-09
CLUTCH..... D-05
COWLING BODY..... H-02
CRANKCASE COVER.... B-07
CRANKCASE..... B-05
CRANKSHAFT..... B-09
CYLINDER HEAD COVER B-02
CYLINDER HEAD..... B-03
CYLINDER..... B-04
ELECTRICAL..... E-07
FOOTREST..... F-04
FRAME COVER..... G-02
FRAME..... F-02
FRONT BRAKE HOSE... I-07
FRONT CALIPERS..... I-06
FRONT DAMPER..... I-02
FRONT FENDER..... G-06
FRONT MASTER CYLIND I-08
FRONT WHEEL..... I-05
FUEL COCK..... F-09
FUEL PUMP..... C-08
FUEL TANK..... F-06
GEAR SHIFTING..... D-10
HANDLE BAR..... G-07
HANDLE LEVER..... G-08
HANDLE SWITCH..... E-14
HEADLAMP..... E-10
INSTALLATION PARTS. H-05
LABEL..... H-14
MUFFLER..... C-07
OIL COOLER - OIL FI C-09
OIL PAN - OIL PUMP. B-08
OPTIONAL..... J-10
RADIATOR HOSE..... D-03
RADIATOR..... D-02
REAR CALIPER..... J-07
REAR CUSHION LEVER. J-04
REAR FENDER..... G-09
REAR MASTER CYLINDE J-09
REAR SWINGING ARM.. J-02
REAR WHEEL..... J-05
SEAT..... H-15
SIGNAL GENERATOR... E-05
SPEEDOMETER..... E-08
STAND..... F-03
STARTER CLUTCH..... B-11
STARTING MOTOR..... E-02
STEERING STEM..... I-04
TAIL LAMP..... E-12
TRANSMISSION..... D-08
TURNSIGNAL LAMP.... E-11
UNDER COWLING BODY. H-06
WATER PUMP..... C-10
WIRING HARNESS..... E-13

FIG.59A

J - 6

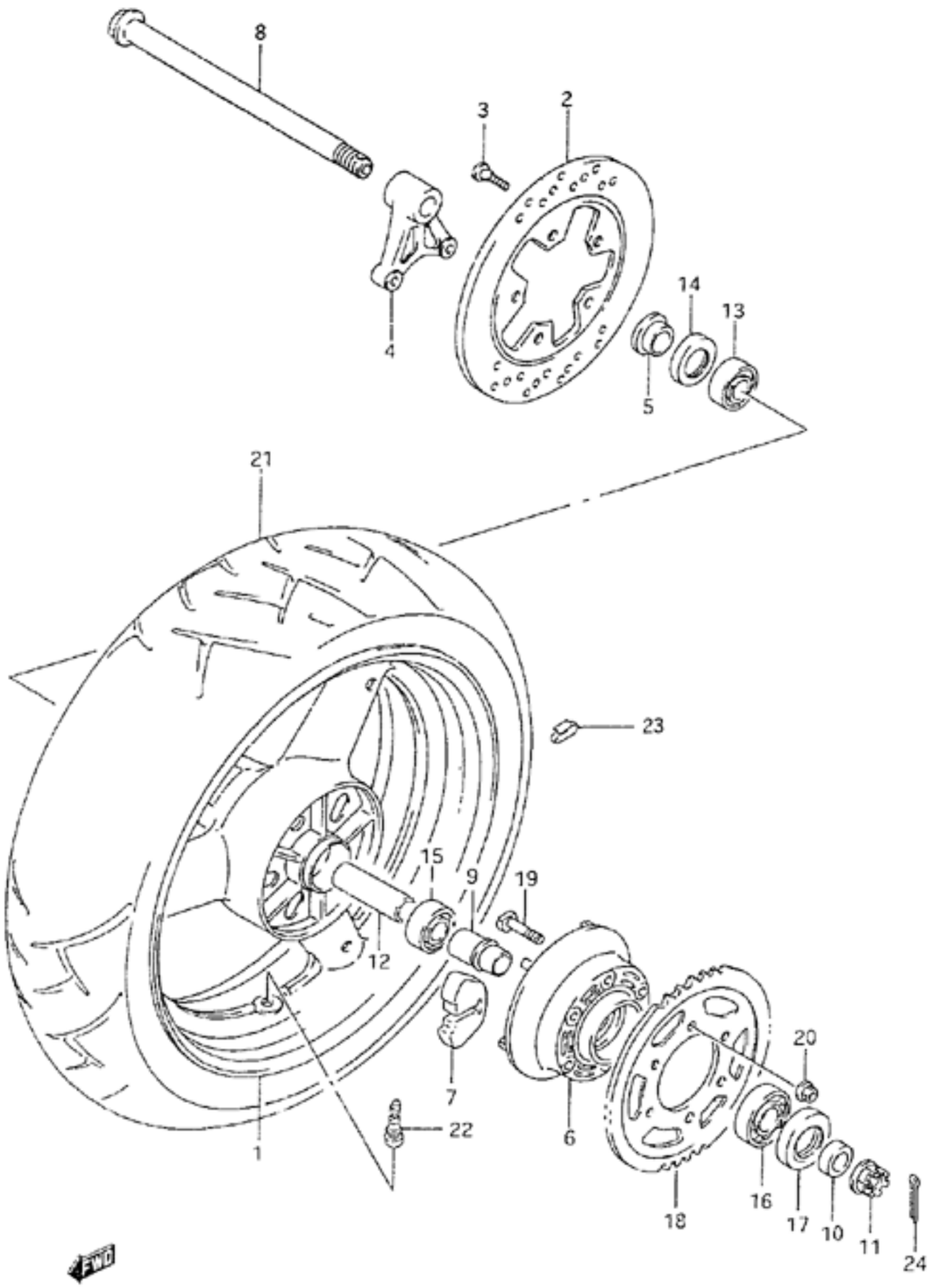


FIG.59A(J- 6) REAR WHEEL (model T/V)

REF NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1	64111-17E11-12R	WHEEL, rear (17xMT5.50) (Silver)	1	for F3C,E6M,7AY,G4H
2	69211-21E00	DISC, rear brake	1	
3	09106-08125	BOLT	5	
4	69721-46E00	BRACKET, rear calipers	1	
5	64741-17E00	SPACER, RH	1	
6	64611-17E00	DRUM, sprocket	1	
7	64651-17E00	SHOCK ABSORBER, drum	6	
8	64711-17E10	AXLE, rear	1	
9	64733-48B00	RETAINER, drum	1	
10	64751-46E00	SPACER, LH	1	
11	09141-20004	NUT	1	
12	64731-40C00	SPACER, bearing	1	
13	09262-20114	BEARING, RH (20x47x14)	1	
14	09285-28001	SEAL, oil RH (28x47x7)	1	
15	09262-20042	BEARING, LH (20x47x14)	1	
16	09262-25114	BEARING, drum (25x62x17)	1	
17	09285-35001	OIL SEAL (35x62x8)	1	
18	64511-31E00	SPROCKET, rear (NT:43)	1	
19	09119-10037	BOLT	6	
20	08319-31107	NUT	6	
21	65110-31E00	TIRE, rear (170/60 ZR17) DUNLOP	1	
22	43130-24A11	VALVE ASSY, wheel rim TR412	1	
23-1	55411-00A00	BALANCER (10g)	0-3	
23-2	55412-00A01	BALANCER (20g)	0-3	
23-3	55413-00A01	BALANCER (30g)	0-3	
24	04111-40408	PIN, cotter	1	

AIR CLEANER.....	C-06	COWLING BODY.....	H-02	FRAME COVER.....	G-02	FUEL PUMP.....	C-08	MUFFLER.....	C-07	REAR MASTER CYLINDE	J-09	STEERING STEM.....	I-04
ALTERNATOR.....	E-03	CRANKCASE COVER....	B-07	FRAME.....	F-02	FUEL TANK.....	F-06	OIL COOLER - OIL FI	C-09	REAR SWINGING ARM..	J-02	TAIL LAMP.....	E-12
BATTERY.....	E-06	CRANKCASE.....	B-05	FRONT BRAKE HOSE...	I-07	GEAR SHIFTING.....	D-10	OIL PAN - OIL PUMP.	B-08	REAR WHEEL.....	J-05	TRANSMISSION.....	D-08
CAM CHAIN.....	B-14	CRANKSHAFT.....	B-09	FRONT CALIPERS.....	I-06	HANDLE BAR.....	G-07	OPTIONAL.....	J-10	SEAT.....	H-15	TURNSIGNAL LAMP....	E-11
CAM SHAFT - VALVE..	B-12	CYLINDER HEAD COVER	B-02	FRONT DAMPER.....	I-02	HANDLE LEVER.....	G-08	RADIATOR HOSE.....	D-03	SIGNAL GENERATOR...	E-05	UNDER COWLING BODY.	H-06
CARBURETOR FITTINGS	C-05	CYLINDER HEAD.....	B-03	FRONT FENDER.....	G-06	HANDLE SWITCH.....	E-14	RADIATOR.....	D-02	SPEEDOMETER.....	E-08	WATER PUMP.....	C-10
CARBURETOR.....	C-02	CYLINDER.....	B-04	FRONT MASTER CYLIND	I-08	HEADLAMP.....	E-10	REAR CALIPER.....	J-07	STAND.....	F-03	WIRING HARNESS.....	E-13
CLUTCH CYLINDER....	I-09	ELECTRICAL.....	E-07	FRONT WHEEL.....	I-05	INSTALLATION PARTS.	H-05	REAR CUSHION LEVER.	J-04	STARTER CLUTCH.....	B-11		
CLUTCH.....	D-05	FOOTREST.....	F-04	FUEL COCK.....	F-09	LABEL.....	H-14	REAR FENDER.....	G-09	STARTING MOTOR.....	E-02		

FIG.60

J - 7

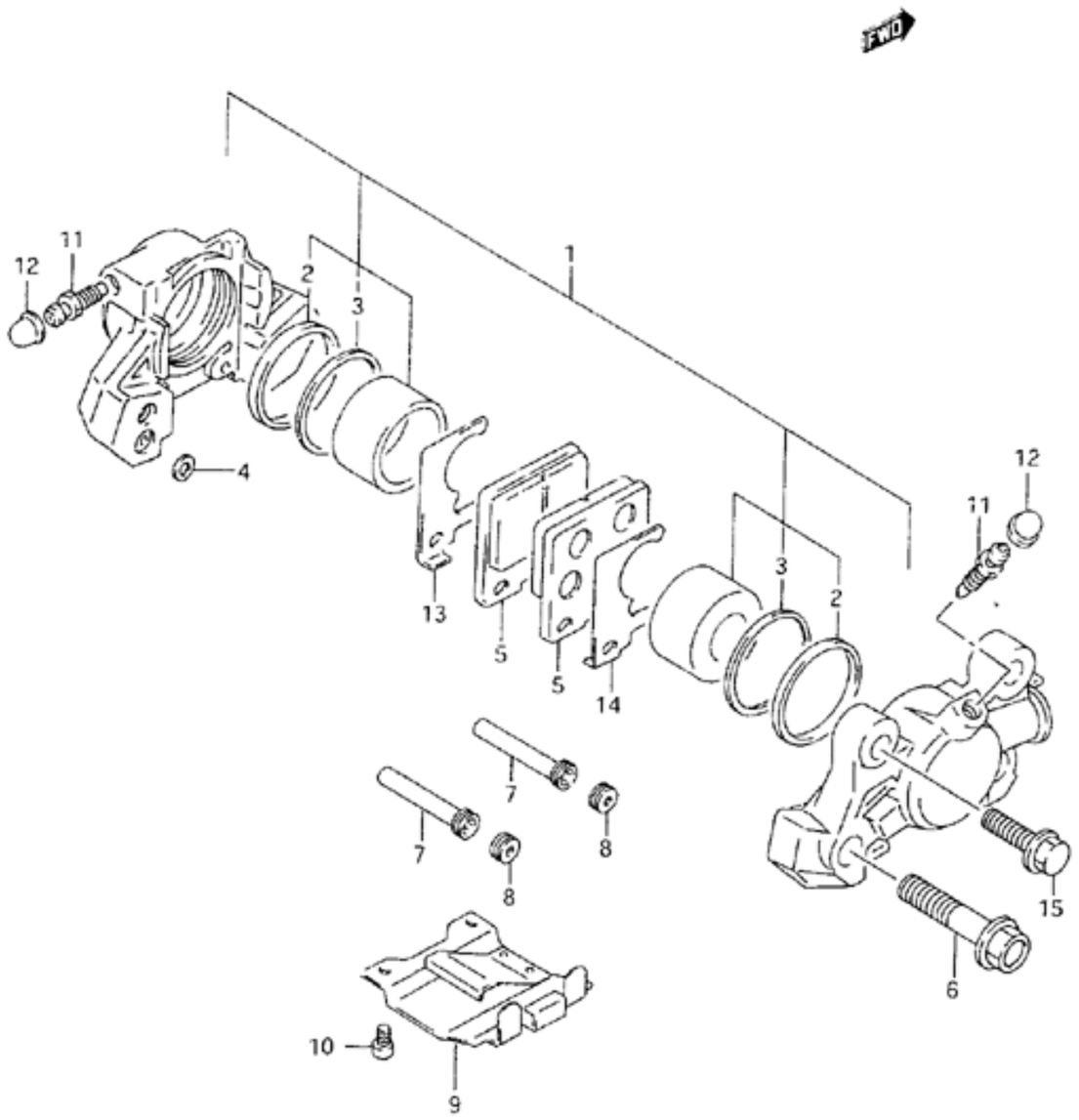


FIG.60 (J- 7) REAR CALIPER (model R/S)

REF NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
	69100-31E30	CALIPER ASSY, rear	1	
1	69100-32810	.PISTON SET	1	
2	59107-18410	..SEAL	2	
3	69108-32800	..BOOT	2	
4	69107-34200	..SEAL	1	
5	69130-31E00	.PAD	2	→6910C 3185
6-1	59145-17C00	.BOLT	2	model R
6-2	59145-16700	.BOLT	2	model S
7	69141-31E00	.PIN	2	
8	69146-31E00	.PLUG, pad pin	2	
9	69151-31E00	.COVER	1	
10	59153-22D00	.SCREW	2	
11	59121-18410	.BLEEDER	2	
12	55156-66310	.CAP	2	
13	69133-31E00	.SHIM, inner	1	
14	69134-31E00	.SHIM, outer	1	
15	01550-08303	BOLT	2	

Refer to FIG.60A(J-8) for model T/V

RF900RV E28

AIR CLEANER.....	C-06	COWLING BODY.....	H-02	FRAME COVER.....	G-02	FUEL PUMP.....	C-08	MUFFLER.....	C-07	REAR MASTER CYLINDE	J-09	STEERING STEM.....	I-04
ALTERNATOR.....	E-03	CRANKCASE COVER....	B-07	FRAME.....	F-02	FUEL TANK.....	F-06	OIL COOLER - OIL FI	C-09	REAR SWINGING ARM..	J-02	TAIL LAMP.....	E-12
BATTERY.....	E-06	CRANKCASE.....	B-05	FRONT BRAKE HOSE...	I-07	GEAR SHIFTING.....	D-10	OIL PAN - OIL PUMP.	B-08	REAR WHEEL.....	J-05	TRANSMISSION.....	D-08
CAM CHAIN.....	B-14	CRANKSHAFT.....	B-09	FRONT CALIPERS.....	I-06	HANDLE BAR.....	G-07	OPTIONAL.....	J-10	SEAT.....	H-15	TURNSIGNAL LAMP....	E-11
CAM SHAFT - VALVE..	B-12	CYLINDER HEAD COVER	B-02	FRONT DAMPER.....	I-02	HANDLE LEVER.....	G-08	RADIATOR HOSE.....	D-03	SIGNAL GENERATOR...	E-05	UNDER COWLING BODY.	H-06
CARBURETOR FITTINGS	C-05	CYLINDER HEAD.....	B-03	FRONT FENDER.....	G-06	HANDLE SWITCH.....	E-14	RADIATOR.....	D-02	SPEEDOMETER.....	E-08	WATER PUMP.....	C-10
CARBURETOR.....	C-02	CYLINDER.....	B-04	FRONT MASTER CYLIND	I-08	HEADLAMP.....	E-10	REAR CALIPER.....	J-07	STAND.....	F-03	WIRING HARNESS.....	E-13
CLUTCH CYLINDER....	I-09	ELECTRICAL.....	E-07	FRONT WHEEL.....	I-05	INSTALLATION PARTS.	H-05	REAR CUSHION LEVER.	J-04	STARTER CLUTCH.....	B-11		
CLUTCH.....	D-05	FOOTREST.....	F-04	FUEL COCK.....	F-09	LABEL.....	H-14	REAR FENDER.....	G-09	STARTING MOTOR.....	E-02		

FIG.60A

J - 8

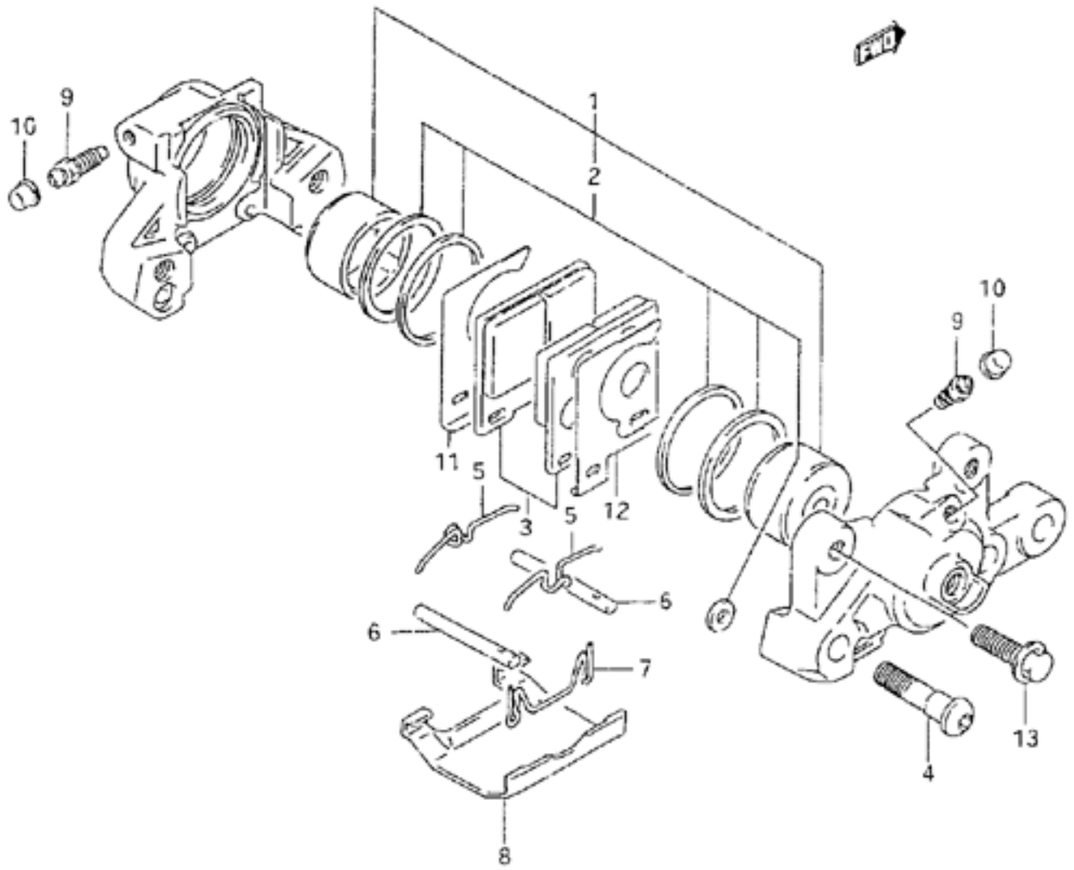


FIG.60A(J- 8) REAR CALIPER (model T/V)

REF NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
	69100-05C50	CALIPER ASSY, rear	1	
1-1	69100-32810	.PISTON SET	1	model T ~F.No.103357
1-2	69100-05850	.PISTON SET	1	model T F.No.103358~ model V
2	69100-32820	..SEAL SET, piston	1	
3	69100-21820	.PAD SET	1	
4-1	59145-16700	.BOLT	2	model T ~F.No.103357
4-2	59145-05C50	.BOLT	2	model T F.No.103358~ model V
5	59143-16700	.SPRING	2	
6	69141-46E01	.PIN	2	
7	69142-46E01	.CLIP	1	
8	59151-16701	.COVER	1	
9	59121-18410	.BLEEDER	2	
10	55156-6E310	.CAP	2	
11	59371-20C00	.SHIM, inner	1	
12	59381-20C00	.SHIM, outer	1	
13	01550-08303	BOLT	2	

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AIR CLEANER.....	C-06	COWLING BODY.....	H-02	FRAME COVER.....	G-02	FUEL PUMP.....	C-08	MUFFLER.....	C-07	REAR MASTER CYLINDE	J-09	STEERING STEM.....	I-04
ALTERNATOR.....	E-03	CRANKCASE COVER....	B-07	FRAME.....	F-02	FUEL TANK.....	F-06	OIL COOLER - OIL FI	C-09	REAR SWINGING ARM..	J-02	TAIL LAMP.....	E-12
BATTERY.....	E-06	CRANKCASE.....	B-05	FRONT BRAKE HOSE...	I-07	GEAR SHIFTING.....	D-10	OIL PAN - OIL PUMP.	B-08	REAR WHEEL.....	J-05	TRANSMISSION.....	D-08
CAM CHAIN.....	B-14	CRANKSHAFT.....	B-09	FRONT CALIPERS.....	I-06	HANDLE BAR.....	G-07	OPTIONAL.....	J-10	SEAT.....	H-15	TURNSIGNAL LAMP....	E-11
CAM SHAFT - VALVE..	B-12	CYLINDER HEAD COVER	B-02	FRONT DAMPER.....	I-02	HANDLE LEVER.....	G-08	RADIATOR HOSE.....	D-03	SIGNAL GENERATOR...	E-05	UNDER COWLING BODY.	H-06
CARBURETOR FITTINGS	C-05	CYLINDER HEAD.....	B-03	FRONT FENDER.....	G-06	HANDLE SWITCH.....	E-14	RADIATOR.....	D-02	SPEEDOMETER.....	E-08	WATER PUMP.....	C-10
CARBURETOR.....	C-02	CYLINDER.....	B-04	FRONT MASTER CYLIND	I-08	HEADLAMP.....	E-10	REAR CALIPER.....	J-07	STAND.....	F-03	WIRING HARNESS.....	E-13
CLUTCH CYLINDER....	I-09	ELECTRICAL.....	E-07	FRONT WHEEL.....	I-05	INSTALLATION PARTS.	H-05	REAR CUSHION LEVER.	J-04	STARTER CLUTCH.....	B-11		
CLUTCH.....	D-05	FOOTREST.....	F-04	FUEL COCK.....	F-09	LABEL.....	H-14	REAR FENDER.....	G-09	STARTING MOTOR.....	E-02		

FIG.61

J - 9

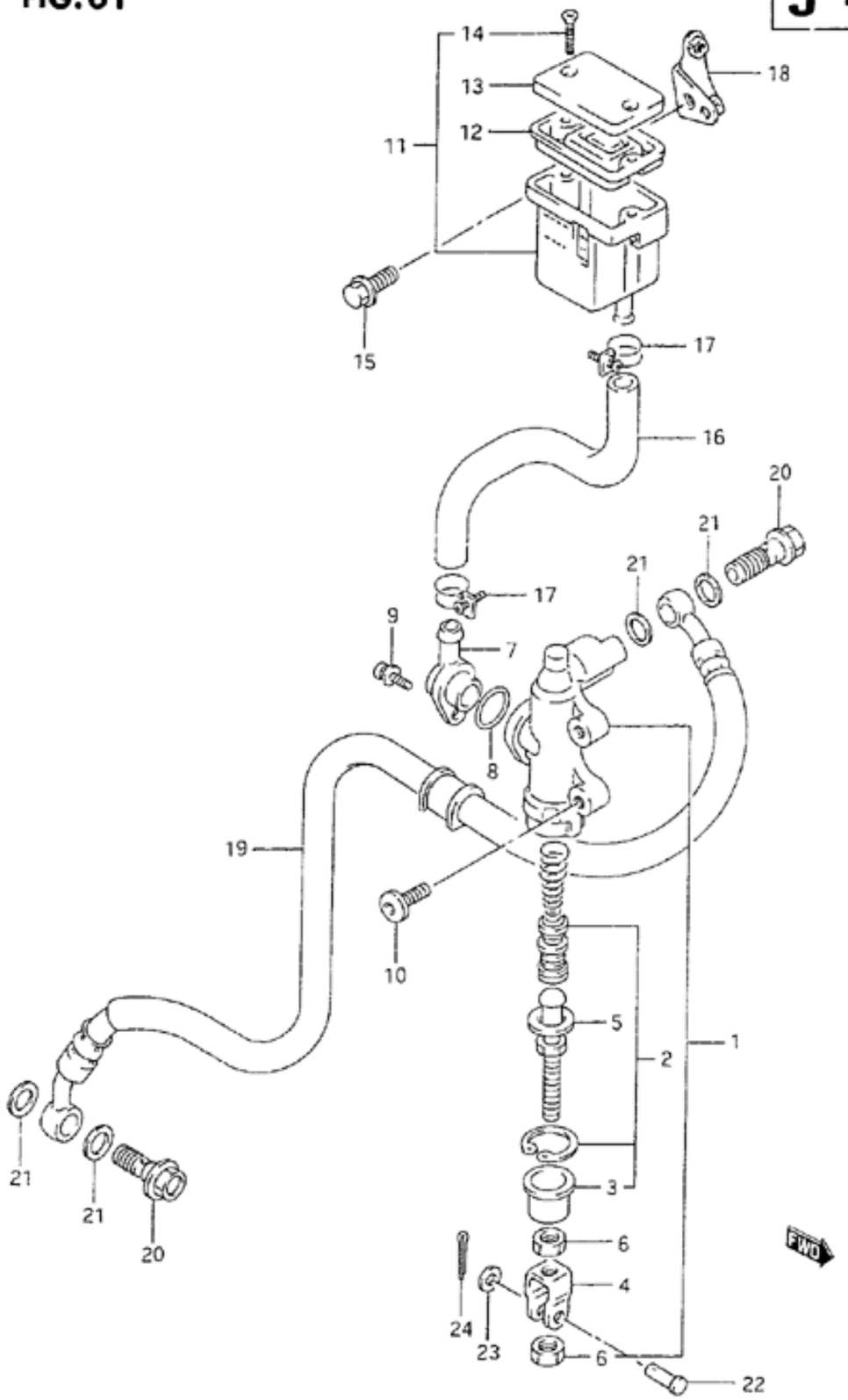


FIG.61 (J- 9) REAR MASTER CYLINDER

REF NO.	PART NO.	DESCRIPTION	Q'TY	REMARKS
1	69600-17C01	CYLINDER ASSY, rear master	1	
2	69600-04820	.PISTON / CAP SET	1	
3	69691-00A00	..BOOT	1	
4	69692-27A30	.YOKE	1	
5	69670-48B00	.ROD, push	1	
6	69693-05A00	.NUT	2	
7	69672-05A00	.CONNECTOR	1	
8	69686-34200	.O RING	1	
9	02112-74123	.SCREW	1	
10	09106-08118	BOLT	2	
11	69740-38B21	TANK ASSY, rear reservoir	1	
12	59667-04700	.DIAPHRAGM	1	
13	59669-05D00	.CAP	1	
14	69689-04A00	.SCREW	2	
15	01550-06123	BOLT	1	
16	69731-21E00	HOSE, reservoir tank	1	
17-1	09400-16302	CLAMP	2	model R/S
17-2	09401-13413	CLAMP	2	model T/V
18	69750-21E00	PLATE, reservoir tank	1	
19-1	69480-21E01	HOSE, rear brake	1	model R/S
19-2	69480-31E00	HOSE, rear brake	1	model T/V
20-1	09360-10039	BOLT (10x1.00x22)	2	model R/S/T
20-2	09360-10041	BOLT (10x1.00x22)	2	model V
21	09161-10009	WASHER (10x15x1.5)	4	
22	09200-06037	PIN	1	
23	08322-01063	WASHER	1	
24	04111-20158	PIN, cotter	1	

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AIR CLEANER..... C-06	COWLING BODY..... H-02	FRAME COVER..... G-02	FUEL PUMP..... C-08	MUFFLER..... C-07	REAR MASTER CYLINDE J-09	STEERING STEM..... I-04
ALTERNATOR..... E-03	CRANKCASE COVER.... B-07	FRAME..... F-02	FUEL TANK..... F-06	OIL COOLER - OIL FI C-09	REAR SWINGING ARM.. J-02	TAIL LAMP..... E-12
BATTERY..... E-06	CRANKCASE..... B-05	FRONT BRAKE HOSE... I-07	GEAR SHIFTING..... D-10	OIL PAN - OIL PUMP. B-08	REAR WHEEL..... J-05	TRANSMISSION..... D-08
CAM CHAIN..... B-14	CRANKSHAFT..... B-09	FRONT CALIPERS..... I-06	HANDLE BAR..... G-07	OPTIONAL..... J-10	SEAT..... H-15	TURNSIGNAL LAMP.... E-11
CAM SHAFT - VALVE.. B-12	CYLINDER HEAD COVER B-02	FRONT DAMPER..... I-02	HANDLE LEVER..... G-08	RADIATOR HOSE..... D-03	SIGNAL GENERATOR... E-05	UNDER COWLING BODY. H-06
CARBURETOR FITTINGS C-05	CYLINDER HEAD..... B-03	FRONT FENDER..... G-06	HANDLE SWITCH..... E-14	RADIATOR..... D-02	SPEEDOMETER..... E-08	WATER PUMP..... C-10
CARBURETOR..... C-02	CYLINDER..... B-04	FRONT MASTER CYLIND I-08	HEADLAMP..... E-10	REAR CALIPER..... J-07	STAND..... F-03	WIRING HARNESS..... E-13
CLUTCH CYLINDER.... I-09	ELECTRICAL..... E-07	FRONT WHEEL..... I-05	INSTALLATION PARTS. H-05	REAR CUSHION LEVER. J-04	STARTER CLUTCH..... B-11	
CLUTCH..... D-05	FOOTREST..... F-04	FUEL COCK..... F-09	LABEL..... H-14	REAR FENDER..... G-09	STARTING MOTOR..... E-02	

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10000

PART NO.	ADDRESS NO.
11100-31E00	B-3
11115-17E70	B-3
11131-17E00	B-3
11141-31E00	B-3
11171-31E00	B-2
11173-21E00	B-2
11176-31E00	B-2
11177-17E00	B-2
11178-17E00	B-2
11210-31E00	B-4
11241-31E00	B-4
11281-21E00	B-4
11282-21E00	B-4
11284-17E00	B-4
11285-32C00	B-4
11302-46870	B-5
11302-46872	B-5
11302-46875	B-5
11302-46876	B-5
11315-17E00	B-6
11340-31E00	B-7
11340-31E01	B-7
11361-31E00	B-7
11381-31E00	B-7
11400-31890	B-2
11400-31891	B-2
11400-31892	B-2
11482-17E00	B-7
11489-17E01	B-8
11491-17E01	B-7
11511-46E02	B-8
11611-14210	B-6
11611-21E00	B-6
11971-33210	B-7
12000-31810	B-9
12100-31E00-050	B-10
12100-31E00-100	B-10
12111-31E02-0F0	B-10
12140-31E60	B-10
12151-17C00	B-10
12160-31E02	B-9
12163-17C50	B-9
12164-31E00-0A0	B-9
12164-31E00-0B0	B-9
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12229-31E60-0D0	B-9
12600-21811	B-11
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12616-17E00	B-11
12711-31E00	B-12
12721-31E00	B-12
12741-17E00	B-12
12760-46E00	B-14
12760-46E01	B-14
12771-46E00	B-14
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12782-18E00	B-14
12791-17E01	B-14
12800-05B20	B-13
12810-46E00	B-14
12810-46E20	B-14
12814-34200	B-14
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12830-46E00	B-14
12832-27A00	B-14
12833-26D10	B-14
12834-27A00	B-14
12837-27A10	B-14
12891-17E00	B-12
12892-05C00-120	B-12
12892-05C00-125	B-12
12892-05C00-130	B-12
12892-05C00-135	B-12
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12892-05C00-215	B-12
12892-05C00-220	B-12
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12912-17E00	B-12
12912-17E01	B-12
12921-17E00	B-12
12931-17E01	B-12
12932-32C00	B-12
12933-17E00	B-12
13101-31E01	B-3
13102-31E01	B-3
13201-31E00	C-2
13201-31E01	C-2
13202-31E00	C-2
13202-31E01	C-2
13203-31E00	C-2
13203-31E01	C-2
13204-31E00	C-2
13204-31E01	C-2
13220-21E00	C-3
13247-13A00	C-4
13250-21E00	C-3
13251-06C10	C-3
13251-33C00	C-2
13258-33C00	C-3
13267-21E00	C-5
13267-44B00	C-5
13268-47070	C-3
13268-96110	C-5
13271-33C00	C-5
13271-44B00	C-5
13279-47070	C-3
13291-29900	C-3
13294-33C00	C-3
13295-29900	C-3
13331-06C20	C-3
13331-21E00	C-5
13331-21E10	C-5
13331-21E20	C-5
13331-21E30	C-5
13331-21E40	C-2
13332-05A10	C-2
13374-44080	C-4
13376-84110	C-3
13382-42A00	C-2
13382-44030	C-2
13383-31E20	C-2
13385-21E00	C-3
13387-47010	C-2
13394-40D20	C-2
13411-05320	C-3
13413-31E00	C-5
13417-26D00	C-3
13417-31E00	C-2
13418-17C00	C-3
13418-17C10	C-3
13427-38300	C-5
13432-47090	C-3
13439-17C00	C-5
13501-18E00	C-2
13502-17E20	C-2
13507-17C01	C-2
13508-17C00	C-3
13509-33C00	C-5
13550-21E00	C-2
13550-21E10	C-2
13550-21E20	C-2
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13553-21E00	C-2
13553-21E10	C-2
13557-07D00	C-4
13557-47070	C-2
13573-06C10	C-5
13573-21E00	C-2
13573-21E10	C-2
13574-32C00	C-2
13601-05148	C-3
13602-05A10	C-3
13602-06C20	C-2
13612-21E00	C-5
13612-21E10	C-5
13624-33C00	C-5
13627-31E00	C-3
13650-25E00	C-4
13651-25E00	C-4
13651-51010	C-3
13655-25E00	C-4
13673-44B00	C-5
13683-21E00	C-5
13683-21E10	C-5
13683-34C00	C-5
13685-21E00	C-5
13685-21E10	C-5
13685-33C00	C-5
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13780-21E00	C-6
13783-21E01	C-6
13784-21E01	C-6
13789-00020	C-6
13824-18910	C-6
13850-21E00	C-6
13855-21E00	C-6
13856-21E00	C-6
13870-21428	C-6
13870-21628	C-6
13872-00A00-010	C-6
13877-38A00	C-6
13881-31E00	C-6
13891-17E00	C-6
14100-31E00	C-7
14181-17E00	C-7
14181-31E00	C-7
14310-31E01-H01	C-7
14310-31E50-H01	C-7
14770-31E00	C-7
15100-21E01	C-9
16332-19C00	B-8
16400-46E00	B-8
16440-17C00	B-8
16440-17C01	B-8
16461-31E00	C-9
16471-17E02	C-9
16510-06B01	C-9
16513-31E00	C-9
16520-38A00	B-8
16525-46E01	B-8
16529-27A01	B-8
16591-33C00	C-9
16600-17E00	C-9
17400-17E00	C-10
17400-17E01	C-10
17418-33400	C-10
17435-33400	C-10
17461-38A00	C-10
17470-46A00	C-10
17491-17E00	C-10
17511-17E00	C-10
17511-17E01	C-10
17662-21E00	D-3
17670-32C01	D-3
17680-45D00	D-3
17710-21E00	D-2

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PART NO.	ADDRESS NO.	PART NO.	ADDRESS NO.	PART NO.	ADDRESS NO.
17730-12C01	D-3	21441-48B00	D-5	24321-26D01	D-8
17740-21E00	D-2	21441-48B10	D-5	24331-26D10	D-8
17740-21E01	D-2	21442-31E00	D-7	24332-24A00	D-8
17750-21E01	D-2	21442-46E00	D-5	24332-48B00	D-9
17750-21E02	D-2	21451-31E00	D-7	24341-26D10	D-9
17761-21E00	D-2	21451-48B00	D-5	24341-26D11	D-9
17770-21E00	D-2	21462-31E00	D-7	24351-26D20	D-9
17787-19A00	D-2	21462-40C02	D-5	24351-26D21	D-9
17791-32C00	D-3	21463-40C01	D-5	24741-27A00	D-8
17792-12C00	D-3	21471-31E00	D-7	24751-17E00	D-9
17800-21E01	D-2	21471-40C01	D-5	25211-17E00	D-10
17820-17E00	D-2	21472-31E00	D-7	25231-46E00	D-10
17831-21E02	D-3	21472-31E01	D-7	25310-46E00	D-10
17851-21E00	D-3	21611-40C01	D-5	25312-12C00	D-10
17851-24D00	D-3	21623-40C00	D-5	25322-33C00	D-10
17852-17E00	D-3	22721-21E01	D-5	25322-33C01	D-10
17853-17E00	D-3		D-7	25323-34201	D-10
17854-17E01	C-10	22730-21E00	E-3	25324-34201	D-10
17856-17E50	D-3	22732-21E00	E-4	25331-26D00	D-10
17856-31E00	D-3	22732-46E00	E-4	25341-17E00	D-10
17860-17E00	D-3	22734-21E00	E-3	25350-26D01	D-10
17870-31E00	D-3	22736-46E00	E-4	25355-26D20	D-10
17880-21E02	D-3	22740-46E00	E-4	25355-26D21	D-10
17890-17E01	D-3	23110-27A00	D-5	25356-12C00	D-10
17910-31E00	D-4		D-7	25380-12B00	D-10
17932-12C00	D-4	23111-24A01	D-5	25411-26D01	D-10
17981-21E00	D-4	23111-30001	D-7	25411-27A00	D-10
17981-21810	D-4	23117-46E00	D-6	25510-17E10	D-10
17982-31E00	D-4		D-7	25520-19C02	D-11
		23121-07A00	D-5	25525-21E00	D-11
		23121-31E00	D-7	25525-21E10	D-11
		23160-06B02	D-6	25526-47600	D-11
			D-7	25600-17C03	D-11
20000		23163-06B00	D-6	25660-33E00	D-11
			D-7	25652-16500	D-11
21200-31850	D-7	23164-05A00	D-6	25652-20C00	D-11
21200-31860	D-7		D-7	25671-01000	D-10
21200-40831	D-5	24120-26D10	D-8	27510-48B00	D-9
21231-17E10	E-3	24120-26D20	D-8	27600-40C20-110	D-9
21400-40C01	D-5	24131-46E10	D-8		
21410-31E00	D-7	24221-26D00	D-8		
21410-46E00	D-5	24231-26D02	D-8		
21412-31E00	D-7	24241-26D10	D-8		
21413-31E00	D-7	24251-26D01	D-8		
21441-31E00	D-7	24311-26D10	D-8	30000	

PART NO.	ADDRESS NO.	PART NO.	ADDRESS NO.	PART NO.	ADDRESS NO.
31100-46E00	E-2	33420-21E00	E-7	35603-21EC0	E-11
31130-19B10	E-2	33510-17E10	E-7	35612-17C20	E-11
31132-46E00	E-2	33510-17E11	E-7	35613-27A00	E-11
31135-31300	E-2	33541-20C00	E-7	35623-27A00	E-11
31143-49040	E-2	33542-38B00	E-7	35627-27A02	E-11
31150-46E00	E-2	33543-17E01	E-7	35652-17C20	E-11
31156-17E00	E-3	33610-32C10	E-6	35674-27A01	E-11
31156-48B00	E-2	33624-33C10	E-6	35695-17C00	E-11
31170-19B10	E-2	33651-37000	E-6	35710-21E00	E-12
31264-31300	E-2	33652-47D00	E-6	35710-21E01	E-12
31280-19B10	E-2	33690-17E00	E-6	35718-21E00	E-12
31400-17E20	E-3	33810-21E00	E-2	35718-21E01	E-12
31400-17E30	E-3	33820-21E00	E-6	35725-40511	E-11
31480-17E00	E-3	33860-46E00	E-6	35912-21E00	E-12
31580-17E00	E-3	34120-31E10	E-8	35913-26D00	E-12
31585-85251	E-3	34124-21E10	E-8	35927-31E30	E-12
31586-17E00	E-3	34131-48B10	E-8	35950-14A00	E-10
31587-85250	E-3	34132-17C00	E-8	35956-40C01	E-10
31611-17E00	E-3	34149-19D00	E-8	35957-40C01	E-10
31612-06B00	E-3	34170-21E10	E-8	35970-24D60	E-12
31612-48B00	E-3	34183-14A00	E-8	35974-21E00	E-12
31613-27A10	E-3	34183-21E01	E-8	36380-21E10	E-8
31613-48B00	E-3	34184-12B00	E-8	36394-21E11	E-8
31613-82610	E-3	34189-21E10	E-8	36610-21E10	E-13
31614-17E00	E-3	34190-21E10	E-8	36610-21E11	E-13
31621-27A00	E-3	34191-21E10	E-8	36610-21E20	E-13
31656-48B00	E-3	34191-21E20	E-8	36611-38A00	E-13
31687-17E00	E-3	34210-31E10	E-8	36851-17E10	E-13
31688-27A00	E-3	34249-17E10	E-8	36852-19D00	E-13
31710-17E20	E-3	34383-09400	E-8	36856-21E00	E-13
31710-17E30	E-3	34420-31E10	E-8	36859-21E00	E-13
31780-27X50	E-3	34727-41410	E-8	37100-26D02	E-13
31800-21E10	E-7	34810-40C01	F-9	37146-26D10	E-13
31800-21E20	E-7	34825-40C00	F-9	37200-17E31	E-14
31861-21E10	E-7	34850-50A00	D-3	37200-17E40	E-14
31861-21E20	E-7	34910-31E00	E-9	37200-17E41	E-14
31861-48B10	E-2	34938-21E00	E-9	37400-17E31	E-14
32500-27A00	E-3	34939-17D00	E-9	37560-38A00	E-14
32851-10D00	F-4	34950-21E11	E-8	37564-26E00	E-14
32900-31E00	E-5	34950-21E12	E-8	37720-48B00	D-11
32900-31E80	E-5	34981-13A00	E-8	37740-24A00	E-13
32980-40C01	E-5	35100-21E00-999	E-10	37820-33D00	B-8
33110-17E00	E-5	35173-48B00	E-10	37840-44A20	E-13
33120-17E20	E-5	35601-29E10	E-11	37840-44X50	E-13
33410-21E00	E-7	35601-29E30	E-11	38502-21E00	E-13

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PART NO.	ADDRESS NO.
38502-21E01	E-13
38610-45D01	E-11
38740-24X50	E-13
40000	
41100-31E00-19A	F-2
41100-31E00-33J	F-2
41100-31E21-0FP	F-2
41540-21E00	F-2
41540-21E11	F-2
41561-21E00	F-2
41891-21E02	F-2
41892-21E02	F-2
41911-31E01	F-2
41921-31E01	F-2
42310-31E00	F-3
43110-10D00	F-3
43111-31E01	F-3
43130-24A11	I-5
	J-5
	J-6
43214-17C01	F-4
43251-21E00	E-13
43261-17C00	F-3
43511-21F00	F-4
43511-31E00	F-4
43521-21E00	F-4
43521-40C00	F-4
43530-31E10	F-4
43534-46E00	F-4
43536-31E00	F-4
43536-31E01	F-4
43540-31E00	F-4
43550-40C11	F-5
43550-46E00	F-4
43560-32C00	F-3
43570-31E10	F-4
43576-48B01	F-4
43585-21E00	F-2
43585-47D01	F-2
43600-31E00	F-5
43610-40C00	F-5
43620-40C00	F-5
43642-40C00	F-5
43700-31E00	F-5
43979-31E10	F-2
43980-31E10	F-2
44100-31E00-19A	F-6
44100-31E00-33J	F-6
44100-31E30-D8A	F-6
44100-31E50-E6M	F-7
44100-31E50-F3C	F-7
44100-31E70-0WP	F-8
44100-31E70-2UF	F-8
44191-21E00	F-6
44192-21E00	F-7
	F-8
	F-6
	F-7
	F-8
44193-21E00	F-6
	F-7
	F-8
44201-01831	F-6
44201-01832	F-6
	F-7
	F-8
44300-21E00	F-9
44306-21E00	F-9
44307-21E00	F-9
44330-21E00	F-9
44330-21E10	F-9
44348-49170	F-9
44391-21E00	F-9
44431-21E00	F-9
44511-32C00	F-6
44511-32C01	F-6
	F-7
	F-8
44530-21E02	F-6
	F-7
	F-8
45100-31E00-6VP	H-15
45119-17E00	H-15
45148-31E00	H-15
45149-31E00	H-15
45149-31300	F-6
	F-7
	F-8
	H-15
45210-22D01	H-15
45220-13601	H-15
45280-12D00	H-15
46211-31E00-0FP	H-15
46211-31E00-019	H-15
46211-31E00-17U	H-15
46211-31E00-19A	H-15
46211-31E00-33J	H-15
47100-31E00-19A	G-2
47100-31E00-33J	G-2
47100-31E10-0FP	G-3
47100-31E20-17U	G-4
47100-31E20-33J	G-4
47100-31E30-019	G-4
47100-31E30-3DX	G-4
47117-31E00	G-2
	G-3
	G-4
47161-21E00	G-2
	G-3
	G-5
47191-21E00	G-2
	G-3
	G-5
47192-21E00	G-2
	G-3
	G-5
47193-21E00	G-2
	G-3
	G-5
47200-31E00-19A	G-2
47200-31E00-33J	G-2
47200-31E10-0FP	G-3
47200-31E20-17U	G-4
47200-31E20-33J	G-4
47200-31E30-019	G-4
47200-31E30-3DX	G-4
47217-31E00	G-2
	G-3
	G-4

PART NO.	ADDRESS NO.
47217-31E00	G-5
47311-31E00-0FP	G-3
47311-31E00-019	G-5
47311-31E00-17U	G-5
47311-31E00-19A	G-2
47311-31E00-33J	G-2
	G-5
47511-31E00	G-2
	G-3
	G-5
47611-31E00	G-2
	G-3
	G-5
50000	
51103-31E00	I-2
51103-31E20	I-3
51104-31E00	I-2
51104-31E20	I-3
51110-31E00	I-2
51110-31E20	I-3
51117-17C00	I-2
51121-17C00	I-2
	I-3
51130-31E00	I-2
	I-3
51140-31E00	I-2
	I-3
51147-48130	I-2
51148-36011	I-3
	I-2
	I-3
51152-31E00	I-2
	I-3
51153-14D00	I-2
	I-3
51168-17C00	I-2
	I-3
51171-31E00	I-2
51171-31E20	I-3
51172-17C00	I-2
	I-3
51173-29E00	I-2
	I-3
51176-17C00	I-2
	I-3
51185-31E00	I-2
51185-31E20	I-3
51186-17C00	I-2
	I-3
51189-14D00	I-2
51189-17C00	I-3
51195-31E00	I-2
	I-3
51311-31E00	I-4
51352-43530	I-4
51356-43530	I-4
51410-31E01	I-4
51553-15D40	D-3
51556-38B00	I-2
	I-3
51631-28000	I-4
51643-49002	I-4
51821-31E20	I-3
51827-17C00	I-2
	I-3
51834-17C00	I-2
52110-31E00	I-2
52110-31E20	I-3
53111-17C11-0FP	G-6
53111-17C11-019	G-6
53111-17C11-17U	G-6
53111-17C11-19A	G-6
53111-17C11-33J	G-6
53111-17C21-0FP	G-6
53111-17C21-019	G-6
53111-17C21-17U	G-6
53111-17C21-19A	G-6
53111-17C21-33J	G-6
53114-31E00	G-6
53145-17C11	G-6
53210-17C00	G-6
53300-17810	G-6
54111-17E11-Y22	I-5
54111-17E11-1TU	I-5
54111-17E11-12R	I-5
54111-17E11-35W	I-5
54600-17C01	I-5
54711-31E00	I-5
54740-17C00	I-5
55110-31E00	I-5
55156-66310	J-7
	J-8
55411-00A00	I-5
	J-5
	J-6
55412-00A01	I-5
	J-5
	J-6
55413-00A01	I-5
	J-5
	J-6
56110-31E10	G-7
56110-31E11	G-7
56150-31E10	G-7
56150-31E11	G-7
56200-01831	G-7
56211-31E00	G-7
56240-01D00	G-7
56243-01D00	G-7
56271-49310	G-7
56274-20C00	G-7
56274-49310	G-7
56275-34401	G-7
56500-31E00	G-7
56600-31E00	G-7
56619-12C00	G-7
57110-22D01	G-8
57110-22D02	G-8
57211-22D00	G-8
57211-22D01	G-8
57215-33400	G-7
57300-40C01	G-8
57420-32C00	G-8
57430-40C00	G-8
57431-05A00	G-8
57431-17C00	G-8
57437-32C01	G-8
57438-32C00	G-8

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PART NO.	ADDRESS NO.	PART NO.	ADDRESS NO.	PART NO.	ADDRESS NO.
57460-17C00	G-8	59600-20C00	I-8	62600-33871	J-4
57465-17C00	G-8	59600-45860	I-8	62641-37D00	J-4
57560-18D10	G-8	59664-48B00	I-8	62668-42A02	J-4
57621-38A02	G-8		I-9	62684-05C00	J-4
58300-31E00	G-7	59666-44300	I-9	62684-40A10	J-4
58300-31E01	G-7	59667-04700	J-9	63111-21E01	G-9
58300-31E10	G-7	59667-44B00	I-9	63115-06C00	G-9
58300-31E11	G-7	59667-49460	I-8	63251-31E00	G-9
58410-21E00	G-7	59668-41C00	I-8	63251-31E01	G-9
59100-17E10	I-6	59669-05D00	J-9	63411-21E00	G-9
59100-17830	I-6	59669-41C00	I-8	63415-10D00	G-9
59100-17870	I-6	59671-19B00	I-8	64111-17E10-Y22	J-5
59107-18410	J-7	59671-36500	I-9	64111-17E10-1TU	J-5
59121-01A00	D-6	59675-19C00	I-8	64111-17E10-35W	J-5
	D-7		I-9	64111-17E11-12R	J-6
	I-6	59800-08810	I-9	64310-27E00-019	J-3
59121-18410	J-7	59800-46E00	I-9	64511-31E00	J-5
	J-8	59871-08A00	I-9		J-6
59122-01A00	D-6	59892-08A00	I-9	64611-17E00	J-5
	D-7	59910-31E00	I-9		J-6
	I-6			64651-17E00	J-5
59143-16700	J-8				J-6
59145-05C50	J-8			64711-17E10	J-5
59145-16700	J-7				J-6
	J-8	60000		64731-40C00	J-5
59145-17C00	J-7	61000-31E01	J-2		J-6
59145-33C00	I-6	61000-31E10	J-3	64733-48B00	J-5
59151-16701	J-8	61211-31E00	J-2		J-6
59153-22D00	J-7		J-3	64741-17E00	J-5
59210-31E00	I-5	61251-31E00	J-2		J-6
59210-31E01	I-5		J-3	64751-46E00	J-5
59220-31E00	I-5	61273-17E02	J-2		J-6
59220-31E01	I-5		J-3	65110-31E00	J-5
59240-31E00	I-7	61282-31E00	J-2		J-6
59260-07D00	I-7		J-3	68110-31E00-D8M	F-6
59268-07D00	I-7	61310-45D11	J-2	68110-31E10-D8M	F-6
59300-17E10	I-6	61310-45D12	J-3	68110-31E20-1ZZ	F-7
59300-17811	I-6	61411-40C00	J-2	68110-31E20-163	F-7
59315-17C00	I-6		J-3	68110-31E30-C03	F-8
59345-33C00	I-6	61415-22D00	J-2	68111-01D00-0FP	F-6
59371-20C00	J-8		J-3		F-8
59381-20C00	J-8	61415-40C00	J-2	68111-01D00-0JW	F-7
59440-31E00	I-7	61431-40C00	J-2	68111-01D00-13L	F-7
59480-21E00	I-7		J-3	68111-01D00-17U	F-6
59491-17E00	I-7	62100-31E01	J-4	68111-01D00-29F	F-6

PART NO.	ADDRESS NO.	PART NO.	ADDRESS NO.	PART NO.	ADDRESS NO.
68130-31E00-B7G	G-2	68185-21E00-1TU	H-6	68685-31E00-D8N	H-8
68130-31E00-B7H	G-2	68185-21E00-33J	H-9	68695-31E00-D8N	H-8
68130-31E00-D9E	G-3		H-11	69100-05C50	J-8
68130-31E00-F3H	G-4	68185-31E01-D8R	H-8	69100-05850	J-8
68130-31E00-F3J	G-4	68185-31E10-F3M	H-9	69100-21820	J-8
68130-31E10-D8M	G-3	68185-31E10-F3N	H-9	69100-31E00	J-7
68130-31E20-F3D	G-4	68185-31E10-G5E	H-11	69100-32810	J-7
68130-31E20-F3E	G-4	68185-31E10-G5F	H-11		J-8
68130-31E30-G4Y	G-4	68186-31E00-17U	H-9	69100-32820	J-8
68130-31E30-G4Z	G-4	68186-31E00-33J	H-9	69107-34200	J-7
68131-31E00-AF7	G-2	68190-31E01-D8M	H-8	69108-32B00	J-7
68131-31E00-B8U	G-2	68190-31E10-F3K	H-9	69130-31E00	J-7
68131-31E00-D8P	G-3	68190-31E10-F3L	H-9	69133-31E00	J-7
68131-31E00-F3F	G-4	68190-31E20-G5C	H-11	69134-31E00	J-7
68131-31E00-F3G	G-4	68190-31E20-G5D	H-11	69141-31E00	J-7
68131-31E00-G5A	G-4	68195-21E00-0MT	H-8	69141-46E01	J-8
	G-5	68195-21E00-019	H-6	69142-46E01	J-8
68131-31E00-G5B	G-4	68195-21E00-1TU	H-6	69146-31E00	J-7
	G-5	68195-21E00-33J	H-9	69151-31E00	J-7
68140-31E00-B7G	G-2		H-11	69211-21E00	J-5
68140-31E00-B7H	G-2	68195-31E01-D8R	H-8		J-6
68140-31E00-D9E	G-3	68195-31E10-F3M	H-9	69480-21E01	J-9
68140-31E00-F3H	G-4	68195-31E10-F3N	H-9	69480-31E00	J-9
	G-5	68195-31E10-G5E	H-11	69600-04820	J-9
68140-31E00-F3J	G-4	68195-31E10-G5F	H-11	69600-17C01	J-9
68140-31E10-D8M	G-3	68196-31E00-17U	H-9	69669-24A01	I-9
68140-31E20-F3D	G-4	68196-31E00-33J	H-9	69670-48B00	J-9
68140-31E20-F3E	G-4	68270-31E00-D8M	H-3	69672-05A00	J-9
68140-31E30-G4Y	G-5	68270-31E10-F3K	H-4	69686-34200	J-9
68140-31E30-G4Z	G-5	68270-31E10-F3L	H-4	69689-04A00	J-9
68180-31E01-D8M	H-8	68270-31E10-G5C	H-4	69689-49300	I-8
68180-31E10-F3K	H-9	68270-31E10-G5D	H-4		I-9
68180-31E10-F3L	H-9	68280-31E00-D8M	H-3	69691-00A00	J-9
68180-31E20-G5C	H-11	68280-31E10-E6M	H-4	69692-27A30	J-9
68180-31E20-G5D	H-11	68280-31E10-F3C	H-4	69693-05A00	J-9
68181-31E00-1YL	H-6	68280-31E10-G4H	H-4	69721-17E10	J-5
68181-31E00-1YM	H-6	68280-31E10-7AY	H-4	69721-31E00	J-5
68185-05C10-0FP	H-3	68318-26601	H-14	69721-46E00	J-6
	H-4	68319-33E10	H-14	69731-21E00	J-9
68185-05C10-0JW	H-4	68319-40C10	H-14	69740-38B21	J-9
68185-05C10-13L	H-4	68332-31E00	H-14	69750-21E00	J-9
68185-05C10-17U	H-2	68332-31E01	H-14		
68185-05C10-29F	H-2	68612-48B00	H-14		
68185-21E00-0MT	H-8	68612-48B10	H-14		
68185-21E00-019	H-6	68613-40C00	H-14		

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PART NO.	ADDRESS NO.
70000	
73170-50A00	H-2
	H-3
	H-4
90000	
94400-21E00-19A	H-2
94400-21E00-2JX	H-2
94400-31E00-Y22	H-3
94400-31E10-Y98	H-4
94400-31E10-0WP	H-4
94400-31E10-1HU	H-4
94400-31E10-20F	H-4
94407-31E00-19A	H-6
94407-31E00-33J	H-6
94407-31E10-0FP	H-8
94407-31E20-Y98	H-9
94407-31E20-1HU	H-9
94407-31E30-0WP	H-11
94407-31E30-20F	H-11
94408-31E00-19A	H-6
94408-31E00-33J	H-6
94408-31E10-0FP	H-8
94408-31E20-Y98	H-9
94408-31E20-1HU	H-9
94408-31E30-0WP	H-11
94408-31E30-20F	H-11
94418-21E00	H-5
94420-21E00	H-6
	H-8
	H-9
	H-11
94423-21E00	H-2
	H-3
	H-4
94424-21E00	H-2

PART NO.	ADDRESS NO.
	H-3
	H-4
94426-21E00	H-6
	H-8
	H-9
	H-11
94427-21E00	H-2
	H-3
	H-4
94428-21E00	H-5
94430-21E00-Y22	H-8
94430-21E00-17U	H-11
94430-21E00-19A	H-6
94430-21E00-33J	H-6
94430-31E00-1ZZ	H-9
94430-31E00-163	H-9
94440-21E00-Y22	H-8
94440-21E00-17U	H-11
94440-21E00-19A	H-6
94440-21E00-33J	H-6
94440-31E00-1ZZ	H-9
94440-31E00-163	H-9
94450-31E00-Y22	H-8
94456-21E00	H-2
	H-3
	H-4
94457-21E10	H-2
	H-3
	H-4
94460-31E00-Y22	H-8
94461-21E00-019	H-7
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94462-21E00-019	H-7
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94472-21E00-Y98	H-10
94472-21E00-0WP	H-11
94472-21E00-1HU	H-10
94472-21E00-20F	H-11
94476-17E00	D-3
94482-21E00-Y98	H-10
94482-21E00-0WP	H-11

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94482-21E00-20F	H-11
94484-32B00	H-12
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94498-21E00-019	H-7
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94510-31E00	H-5
94510-31E10	H-5
94531-31E00	H-13
94541-31E00	H-13
94550-21E00	H-5
94553-21E00	H-2
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94561-21E00	H-5
94576-41C00	G-7
94610-21E00	H-2
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94620-21E00	H-5
94630-21E00	H-2
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94631-33C01	H-2
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94637-21E00	H-2
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94640-21E00	H-2
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94642-06C00	H-13
94650-21E00	H-2
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94660-21E00-19A	H-7
94660-21E00-33J	H-7
94670-21E01-19A	H-6
94670-21E01-33J	H-6
94671-21E01-Y98	H-9
94671-21E01-0FP	H-8
94671-21E01-0WP	H-11

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94671-21E01-1HU	H-9
94671-21E01-20F	H-11
94681-21E01-Y98	H-9
94681-21E01-0FP	H-8
94681-21E01-0WP	H-11
94681-21E01-1HU	H-9
94681-21E01-19A	H-7
94681-21E01-20F	H-11
94681-21E01-33J	H-7
94690-21E00-19A	H-7
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99000-32040	J-10
99000-32050	J-10
99000-32100	J-10
99000-32130	J-10
99000-69491	B-13
99011-31E50-GSW	H-14
99011-31E51-GSW	H-14
99011-31E52-01R	H-14
99011-31E53-GSW	H-14
99104-32020	J-10
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01421-06203	B-4
01500-06123	D-9
01500-06203	E-7
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01547-06353	B-8
01550-06103	D-2
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01550-06123	B-14
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01550-06163	B-14
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01550-06203	B-8
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01550-06253	B-2
01550-06303	B-3
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01550-06353	B-5
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01550-08353	I-4
01550-08407	I-4
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01550-08603	B-5
01550-10303	I-6
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01580-05123	B-8
01580-06163	D-2
02112-04063	D-2
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02112-05085	E-3
02112-05103	B-14
	E-5
02112-05127	C-3
02112-05163	E-9
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02112-05455	E-14
02112-06103	D-6
	D-7
02112-06123	E-12
02112-06163	C-10
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02142-05163	C-6
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02142-06123	C-6	07130-06123	B-11	08310-0006*	C-5
	E-12	07130-06163	B-11		E-12
	E-13	07130-06253	B-5	08310-00067	D-11
	F-9		B-7	08310-00087	C-2
	J-2		D-6	08310-00103	E-11
	J-3		D-7	08310-00123	F-4
03211-04123	E-12	07130-06303	B-7	08316-10063	B-4
03241-05163	H-5		B-8		C-10
	H-12	07130-06353	B-5		D-2
03241-15163	G-3		B-7		D-10
	G-5		B-8		E-12
03511-14123	E-12	07130-06403	B-5		G-8
03541-05103	H-5	07130-06503	B-5	08316-10083	H-5
	H-12		B-7	08316-10103	E-11
03541-14123	G-2	07130-06603	B-5		G-7
	G-3	07130-06703	B-7	08316-20063	H-13
	G-5	07130-06753	B-5	08319-21065	G-8
03541-15103	H-2	07130-06803	B-7	08319-31063	H-5
	H-3	07130-08253	C-7	08319-31065	G-8
	H-4	07130-08303	E-5	08319-31107	J-3
04111-16208	I-6		H-15		J-4
04111-20158	J-9	07130-08307	G-7		J-5
04111-20208	G-7	07130-08503	B-5		J-6
04111-25158	F-4	07130-08603	B-5	08319-31128	B-6
04111-40408	J-5	07130-08803	B-5		F-4
	J-6	08110-62020	D-7		J-4
04211-09129	B-5	08113-69010	C-10	08321-01053	E-3
	B-7	08123-62047	I-5	08322-01053	C-5
	B-8	08211-06141	D-10		E-3
	D-6	08211-12243	E-4	08322-01063	B-3
	D-7	08211-14221	D-11		C-5
04211-09189	B-7	08211-20261	C-9		J-9
04211-11189	B-3	08211-20341	D-8	08331-31126	B-8
	B-4	08211-22341	D-8		B-11
04221-04089	B-9	08211-25402	D-9	08331-311.3	J-2
	D-10	08211-25441	D-7		J-3
	E-5	08211-28381	D-8	08331-31146	D-11
04221-07129	D-8	08221-12185	B-11	08331-31256	E-4
04221-07209	D-9	08221-12205	B-8	08331-31286	D-8
06111-07004	F-5	08221-22355	C-9	08331-41286	C-10
07120-08163	B-3	08310-00047	E-8	08332-11063	F-5
07120-08653	E-3	08310-00053	C-5	08361-25083	C-7
07120-10303	B-3		E-3	08361-25088	C-7
	F-2		E-10	08361-35068	E-2
07130-05167	F-3		E-12	09100-06099	C-10

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09100-06123	E-7	09116-06111	J-2	09159-20004	D-9
09100-10187	J-3		J-3	09159-20006	I-5
09103-06026	B-3	09116-06115	H-12	09159-24008	D-5
09103-06062	B-5	09116-06131	G-3	09160-04017	E-8
09103-06067	B-5		G-5	09160-06028	E-9
09103-06083	D-3	09116-06147	D-2	09160-06088	E-12
09103-06163	B-5	09118-08152	C-7	09160-06096	E-12
09103-06165	B-3	09119-10037	J-5	09160-08021	F-4
09103-07001	B-12		J-6	09160-08057	H-15
09103-08222	H-5	09120-06010	B-3	09160-08106	C-7
09103-09007	B-5	09126-06014	B-3	09160-10031	F-5
09103-09008	B-5	09128-06006	F-9	09160-10070	F-2
09103-09009	B-5	09128-06013	E-7	09160-10082	B-3
09103-09010	B-5	09128-06024	E-2	09160-10094	G-7
09103-10027	J-4	09128-06057	F-9	09160-10501	E-11
09103-10064	J-4	09136-06022	D-4	09160-12011	J-3
09103-10270	B-3	09136-06102	G-2	09160-14016	D-11
09103-10274	B-6	09139-02003	E-8	09160-14052	D-11
09103-10276	B-3	09139-05022	H-12	09160-15045	D-5
09103-12037	J-4		H-13	09160-18022	D-11
09103-12045	B-6	09139-05024	H-13		F-3
09106-05017	F-6	09139-05032	G-6	09160-18026	J-2
	F-7	09139-0602-	E-13		J-3
	F-8	09139-06075	H-15	09160-25056	D-5
09106-06079	B-14	09139-06092	H-15		D-7
09106-06082	B-7	09139-06007	G-6	09160-25059	D-10
	B-14	09140-06011	D-11	09160-25067	D-5
09106-07009	B-2	09140-06027	E-9		D-7
09106-08106	F-5	09140-24012	D-7	09161-05017	G-2
09106-08118	J-9	09141-20004	J-5		G-3
09106-08125	I-5		J-6		G-5
	J-5	09148-05013	H-5		H-5
	J-6	09148-05021	E-12		H-12
09106-08129	F-4		G-2		H-13
09106-08132	C-7		G-3	09161-10009	B-4
09106-09001	B-5		G-5		I-7
09106-10055	G-7	09148-05038	E-12		I-9
09108-06117	C-10		H-5		J-9
09111-10027	F-3		H-12	09161-11008	B-2
09111-10051	J-3	09159-06076	E-9	09164-00007	D-5
09116-06010	C-8	09159-10027	F-3	09164-06006	C-10
09116-06056	H-12	09159-10058	B-6	09164-08015	F-4
09116-06109	H-2	09159-12010	E-4	09164-08020	H-5
	H-3	09159-18007	J-2	09164-18006	E-4
	H-4		J-3	09164-24006	D-5

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09164-25001	D-7	09180-07014	D-10	09262-25116	E-4
09164-47001	D-5	09180-08149	F-4	09262-28025	D-9
09167-25007	D-7	09180-08152	C-7	09263-14027	D-11
09167- 3001	D-8	09180-08156	C-7	09263-15003	D-5
	D-9	09180-12122	J-4	09263-17034	J-4
09167-28008	D-9	09180-20103	I-5	09263-17037	J-2
09168-06018	B-5	09180-25098	D-9		J-3
09168-06023	B-14	09181-12130	B-11		J-4
09168-06024	B-6	09181-14167	D-11	09263-20040	D-9
	B-7	09181-20251	D-8	09263-20064	J-4
	B-8	09181-22223	D-8	09263-20082	D-8
09168-06025	C-10	09181-25268	D-9	09263-25059	J-2
09168-06026	F-9	09181-28195	D-8		J-3
09168-08015	B-3	09200-06037	J-9	09263-35017	D-5
09168-08016	B-4	09200-08057	F-4		D-7
	B-5	09206-08001	B-2	09265-25019	I-4
09168-10002	B-6		B-3	09265-30009	I-4
09168-10007	B-6	09206-13004	B-5	09280-03002	I-3
09168-10031	B-5	09209-05011	D-11	09280-04004	B-5
09168-14002	B-6	09241-12006	B-11	09280-10005	C-5
	B-8	09241-37002	B-6	09280-12012	B-8
09168-16002	B-6	09247-14001	B-8	09280-14003	I-2
	B-8	09248-10007	B-6		I-3
09168-22002	B-6	09248-14010	B-6	09280-17003	B-7
09169-05018	E-10	09248-16010	B-6	09280-18009	B-8
09169-06026	J-2		B-8		D-3
	J-3	09248-18002	B-5	09280-26005	B-8
09169-06028	G-9	09248-22002	B-6	09280-35006	D-11
09169-08012	C-2	09250-06011	G-7	09280-42003	B-3
09180-06002	J-2	09259-20008	B-7	09280-44005	D-3
09180-06011	C-8	09259-20012	B-7	09280-64003	C-9
09180-06044	E-9	09261-05003	D-10	09280-71004	B-4
09180-06072	F-6	09261-05006	B-8	09283-10004	C-10
	F-7	09262-10014	C-10	09283-14006	D-10
09180-06114	H-12	09262-12001	C-10	09283-36008	D-9
09180-06202	D-10	09262-15008	C-10	09285-06015	D-5
	H-12	09262-20042	J-5		D-7
09180-06225	G-2		J-6	09285-20006	D-8
	G-3	09262-20114	J-5	09285-28001	J-5
09180-06244	E-7		J-6		J-6
09180-06263	C-8	09262-25006	D-10	09285-35001	J-5
09180-06265	G-5	09262-25105	D-8		J-6
09180-06271	F-8	09262-25110	E-4	09289-04002	B-12
09180-06283	J-3	09262-25114	J-5	09300-22005	D-3
09180-07004	D-2		J-6	09300-28002	D-8

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09301-28001	D-8	09390-52006	D-8	09440-04010	D-11
09319-08025	F-4	09390-62012	D-8	09440-05003	F-5
09320-03004	H-12	09390-70001	D-9	09443-06012	E-13
09320-07014	E-10	09400-16302	J-9	09443-13029	F-3
09320-08018	G-2	09401-00411	D-4	09443-15044	F-3
	G-3	09401-11407	C-8	09443-22017	F-3
	G-5		F-9	09444-20002	D-10
09320-08048	E-9	09401-12404	C-8	09444-20003	D-10
09320-08061	G-2	09401-13409	C-6	09448-18022	F-4
	G-3	09401-13410	C-9	09448-19020	F-4
	G-5	09401-13413	J-9	09462-00008	G-9
09320-09009	C-8	09401-16401	C-6		H-15
09320-09016	H-12	09401-26404	C-10	09471-12045	E-11
09320-10038	F-6		D-3		E-12
	F-7	09402-30502	D-3	09471-12060	E-10
	F-8	09402-32511	D-3	09471-12081	E-12
09320-12049	C-7	09402-33502	C-10	09471-12082	E-8
09320-12053	D-2		D-3	09471-12100	E-8
09320-12064	C-7	09402-38511	C-10	09471-12108	E-8
09320-14017	F-6		D-3	09481-30101	E-7
	F-7	09402-50511	J-4	09482-00456	B-3
	F-8	09402-52208	B-3	09482-00457	B-3
09320-20008	H-15	09402-58208	C-6	09482-00458	B-3
09321-06026	E-12	09404-06206	E-13	09482-00459	B-3
09321-10011	H-15	09404-06402	C-9	09482-00460	B-3
09351-14152-600	C-8		D-11	09482-00461	B-3
	F-9	09404-06404	E-7	09491-22014	C-3
09352-70103-600	F-6	09404-06426	D-11	09491-22025	C-3
	F-7	09404-06429	C-9	09491-50006	C-3
	F-8		D-11	09492-12008	C-3
09354-70133-600	C-8		E-13	09493-18001	C-3
09355-70125-600	C-8	09404-06431	E-7	09493-24010	B-5
	F-9	09404-06433	C-6	09493-24013	C-3
09360-10018	I-7		D-11	09493-28012	B-6
09360-10039	I-7	09404-08405	J-4	09493-80008	B-6
	I-9	09404-08419	J-4	09493-80010	C-3
	J-9	09407-11401	E-13	09494-00810	C-2
09360-10040	I-9	09407-11402	E-13	09800-21008	G-9
09360-10041	I-7	09407-14403	C-4	09822-00005	G-9
	J-9		E-13		
09360-10043	I-7	09407-18403	D-4		
09380-28008	D-8		E-13		
09381-19001	B-10		H-15		
09381-84002	D-5		J-4		
09390-52003	E-4	09440-04003	D-10		