OWNER'S MANUAL



89
CB-1
CB400F

IMPORTANT NOTICE

- **OPERATOR AND PASSENGER**
  This motorcycle is designed to carry the operator and one passenger. Never exceed the maximum weight capacity as shown on the tire information label.

- **ON-ROAD USE**
  This motorcycle is not equipped with a spark arrester and is designed to be used only on the road. Operation in forest, brush or grass covered areas may be illegal. Obey local laws and regulations.

- **READ THIS OWNER'S MANUAL CAREFULLY**
  Pay special attention to statements preceded by the following words:

⚠DANGER

Indicates severe personal injury or death will result if instructions not followed.

⚠WARNING

Indicates a strong possibility of severe personal injury or death if instructions are not followed.

CAUTION:

Indicates a possibility of personal injury or equipment damage if instructions are not followed.

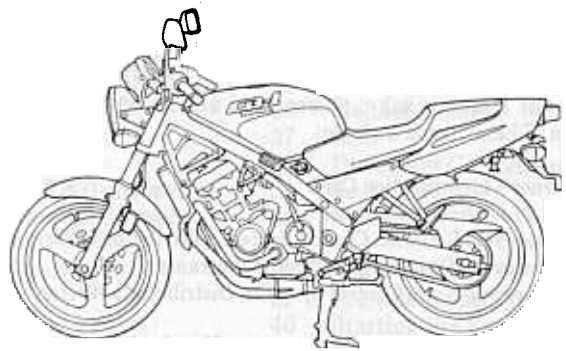
NOTE:

Gives helpful information.

This manual should be considered a permanent part of the motorcycle and should remain with the motorcycle when resold.

HONDA CB400F
CB—1
OWNER'S MANUAL

1989



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WELCOME

Your new motorcycle presents you with an invitation to adventure and a challenge to master the machine. Your safety depends not only on your own alertness and familiarity with the motorcycle, but also the motorcycle's mechanical condition. A pre-ride inspection before every outing and regular maintenance are essential.

To help meet the challenges safely and enjoy the adventure fully, become thoroughly familiar with this Owner's Manual BEFORE YOU RIDE THE MOTORCYCLE. Also for your own and your Honda's sake, please read all the written material which came with your new Honda. These items include:

*Honda Owner's Identification Card
*Set-up and Pre-delivery Checklist
*Honda Motorcycle Emission Control System, Distributor's Warranty
*Honda Motorcycle, Distributor's Limited Warranty
*Honda Motorcycle Noise Control Systems, Distributor's Warranty

When service is required, remember that your Honda dealer knows what it takes to keep your Honda going strong. If you have the required mechanical "know-how" and tools, your dealer can supply you with an official Honda Service Manual to help you perform many maintenance and repair tasks.

Pleasant riding, and thank you for choosing a Honda.

OPERATION

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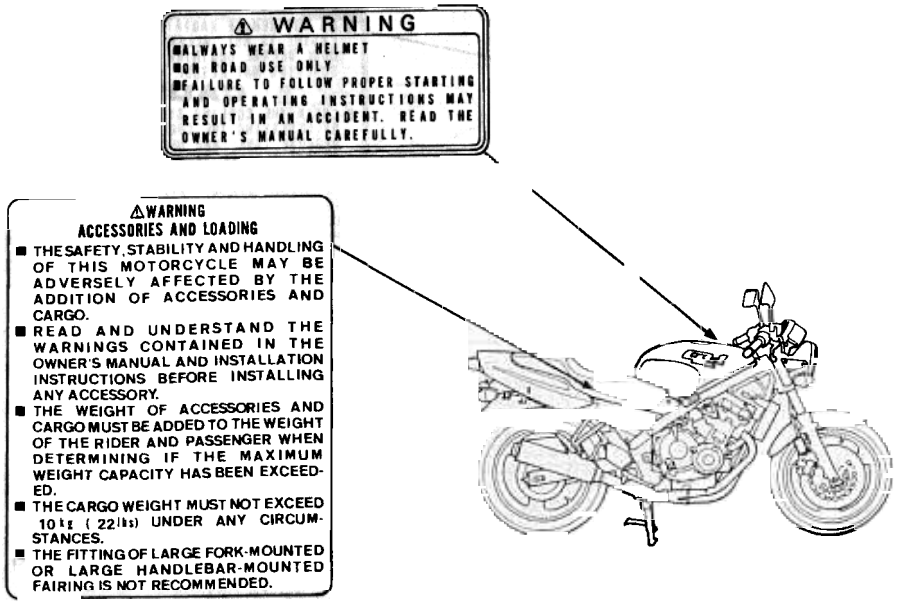
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MOTORCYCLE SAFETY

Read these WARNING LABELS before you ride.





⚠ WARNING

- DO NOT REMOVE RADIATOR CAP WHILE THE ENGINE IS HOT. ALLOW THE ENGINE TO COOL BEFORE DRAINING. SEVERE SCALDING MAY RESULT.

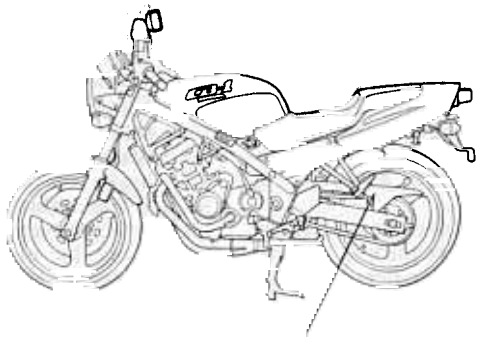
⚠ CAUTION

- CHECK THE COOLING SYSTEM FREQUENTLY BY OBSERVING THE COOLANT LEVEL IN THE RESERVE TANK. ADD NECESSARY COOLANT TO THE RESERVE TANK FILLER OPENING.
- ONLY USE A 50/50 SOLUTION OF ANTIFREEZE OR SUMMER COOLANT AND DISTILLED WATER TO AVOID POSSIBLE OVERHEATING THAT CAN LEAD TO ENGINE DAMAGE.

⚠DRIVE CHAIN CAUTION

- THIS CHAIN CONTAINS RUBBER SEALS. DO NOT STEAM CLEAN OR USE SOLVENTS. REDUCED CHAIN LIFE MAY OCCUR IF MAINTENANCE INSTRUCTIONS ARE NOT STRICTLY FOLLOWED.
- CHAIN SLACK SHOULD BE 15—25 mm (5/8—1 IN) WHEN ADJUSTED AND NEVER BE ALLOWED TO EXCEED 50 mm (2 IN).
- LUBRICATE WHENEVER CHAIN APPEARS DRY. INSPECT AND LUBRICATE EVERY 1,000 km (600 MILES). USE SAE 80 OR 90 GEAR OIL ONLY.
- REPLACE CHAIN WHEN RED ZONE ON LABEL REACHES INDEX MARK WITH CHAIN SLACK SET TO 15—25 mm (5/8—1 IN).
- REPLACEMENT CHAIN: DID 525V8 OR RK 525SM4
- READ OWNER'S MANUAL CAREFULLY.





TIRE INFORMATION			
COLD TIRE PRESSURES:			
(UP TO MAXIMUM WEIGHT CAPACITY)	FRONT 225 kpa	2.25 kg/cm²	33 psi
	REAR 250 kpa	2.50 kg/cm²	36 psi
(UP TO 90kg (200 lbs.) LOAD)	FRONT 225 kpa	2.25 kg/cm²	33 psi
	REAR 225 kpa	2.25 kg/cm²	33 psi
TIRE BRAND	BRIDGESTONE	DUNLOP	
TIRE SIZE FRONT	110/70- 17 54H G547	110/70- 17 54H K505F	
TIRE SIZE REAR	140/70- 17 66H G548	140/70- 17 66H K505	

THIS MOTORCYCLE IS EQUIPPED WITH TUBELESS TIRES.

MAXIMUM WEIGHT CAPACITY: 157 kg (347 lbs.)

MIN. RECOMMEND TIRE CENTER TREAD DEPTH
FRONT: 1.5mm(0.06in) REAR: 2.0mm(0.08in)

Read Owner'S Manual

⚠WARNING

***Motorcycle riding requires special efforts on your part to ensure your safety. Know these requirements before you ride:**

SAFE RIDING RULES

1. Always make a pre-ride inspection (page 39) before you start the engine. You may prevent an accident or equipment damage.
2. Many accidents involve inexperienced riders. Most states require a special motorcycle riding test or license. Make sure you are qualified before you ride. NEVER lend your motorcycle to an inexperienced rider.
3. Many automobile/motorcycle accidents happen because the automobile driver does not "see" the motorcyclist. Make yourself conspicuous to help avoid the accident that wasn't your fault:
   - Wear bright or reflective clothing.
   - Don't ride in another motorist's "blind spot."
4. Obey all federal, state and local laws and regulations.
   - Excessive speed is a factor in many accidents. Obey the speed limits, and NEVER travel faster than conditions warrant.
   - Signal before you make a turn or lane change. Your size and maneuverability can surprise other motorists.
5. Don't let other motorists surprise you. Use extra caution at intersections, parking lot entrances and exits, and driveways.
6. Keep both hands on the handlebars and both feet on the footpegs while riding. A passenger should hold on to the motorcycle or the operator with both hands and keep both feet on the passenger footpegs.

PROTECTIVE APPAREL

1. Most motorcycle accident fatalities are due to head injuries: ALWAYS wear a helmet. You should also wear a face shield or goggles as well as boots, gloves and protective clothing. A passenger needs the same protection.
2. The exhaust system becomes hot during operation, and it remains hot for a while after stopping the engine. Be careful not to touch the exhaust system while it is hot. Wear clothing that fully covers your legs.
3. Do not wear loose clothing which could catch on the control levers, footpegs, drive chain or wheels.

MODIFICATIONS

⚠WARNING

Modification of the motorcycle, or removal of original equipment, may render the vehicle unsafe or illegal. Obey all federal, state and local equipment regulations.

LOADING AND ACCESSORIES

⚠WARNING

***To prevent an accident, use extreme care when adding and riding with accessories and cargo. Addition of accessories and cargo can reduce a motorcycle's stability, performance and safe operating speed. Never ride an accessory-equipped motorcycle at speeds above 80 mph. And remember that this 80 mph limit may be reduced by installation of non-Honda accessories, improper loading, worn tires and overall motorcycle condition, poor road or weather conditions. These general guidelines may help you decide whether or how to equip your motorcycle, and how to load it safely.**

Loading

The combined weight of the rider, passenger, cargo and additional accessories must not exceed the maximum weight capacity: 347 lbs (157 kg)
Cargo weight alone should not exceed:
22 lbs (10 kg)

1. Keep cargo and accessory weight low and close to the center of the motorcycle. Load weight equally on both sides to minimize imbalance. As weight is located farther from the motorcycle's center of gravity, handling is proportionally affected.
2. Adjust tire pressure (page 3) and rear suspension (page 16) to suit load weight and riding conditions.
3. Vehicle handling and stability can be adversely affected by loose cargo. Recheck cargo security and accessory mounts frequently.
4. Do not attach large or heavy items to the handlebars, front forks, or fender. Unstable handling or slow steering response may result.

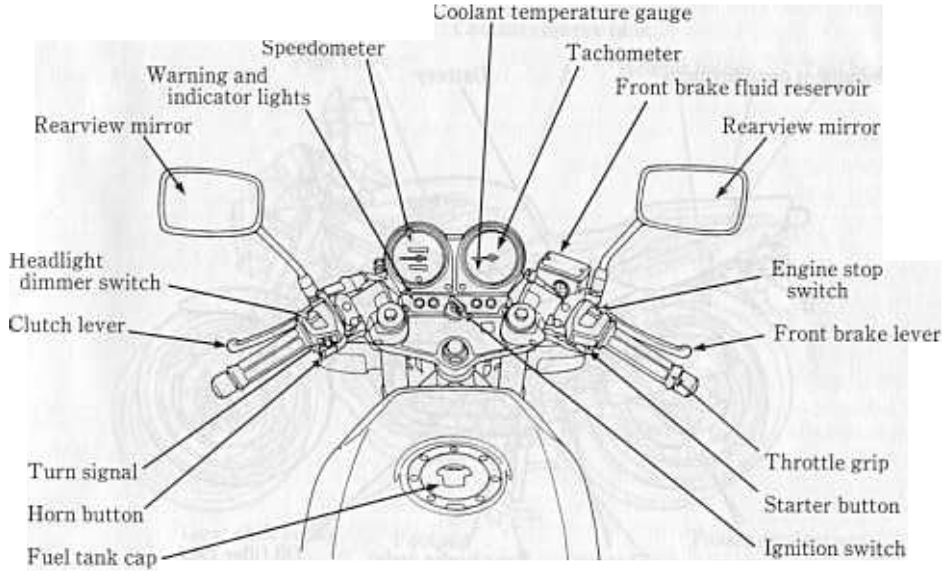
Accessories

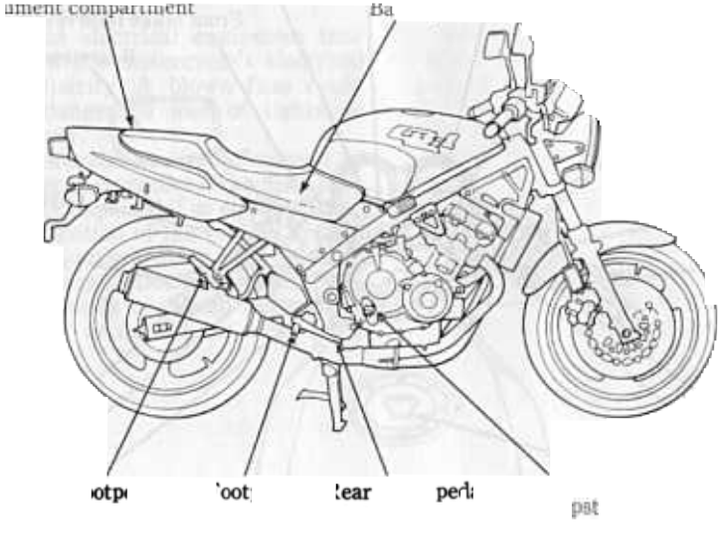
Genuine Honda accessories have been specifically designed for and tested on this motorcycle. Because the factory cannot test all other accessories, you are personally responsible for proper selection, installation, and use of non-Honda accessories. Always follow the guidelines under Loading, and these:

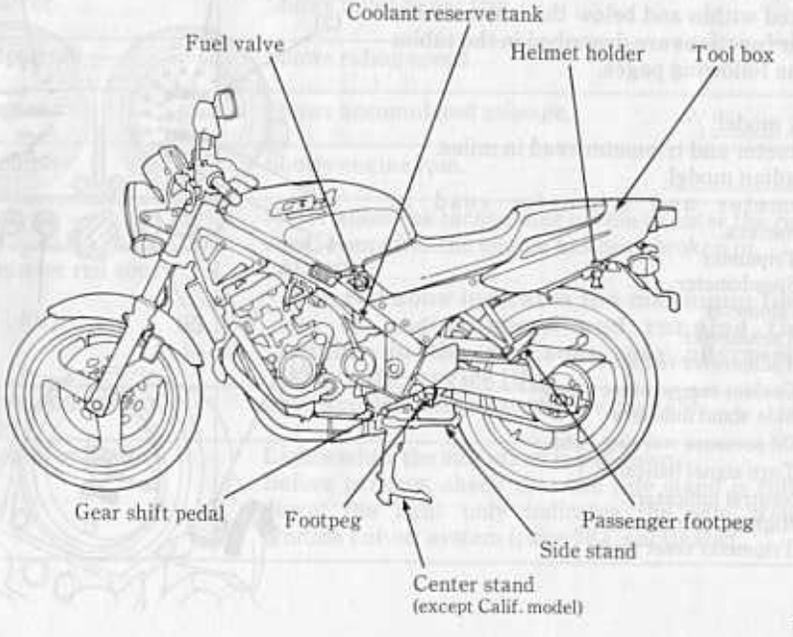
1. Carefully inspect the accessory to make sure it does not obscure any lights, reduce ground clearance and banking angle, or limit suspension travel, steering travel or control operation.
2. Large fork-mounted fairings or windshields, or poorly designed or improperly mounted fairings can produce aerodynamic forces that cause unstable handling. Do not install fairings that decrease cooling air flow to the engine.

3. Accessories which alter your riding position by moving hands or feet away from controls may increase reaction time in an emergency.
4. Do not add electrical equipment that will exceed the motorcycle's electrical system capacity. A blown fuse could cause a dangerous loss of lights or engine power.
5. This motorcycle was not designed to pull a sidecar or trailer. Handling may be seriously impaired if so equipped.
6. Any modification of the cooling system may cause overheating and serious engine damage. Do not modify the radiator shrouds or install accessories which block or deflect air away from the radiator.

PARTS LOCATION




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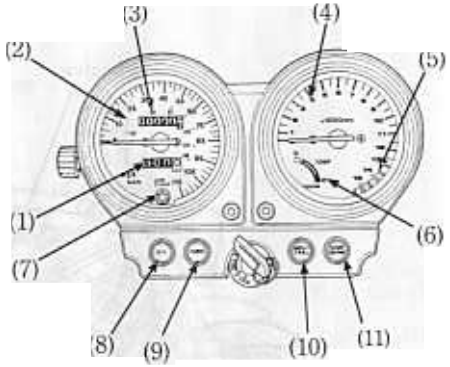

Coolant reserve tank
Fuel valve
Helmet holder
Tool box
Gear shift pedal
Footpeg
Passenger footpeg
Side stand
Center stand
(except Calif. model)

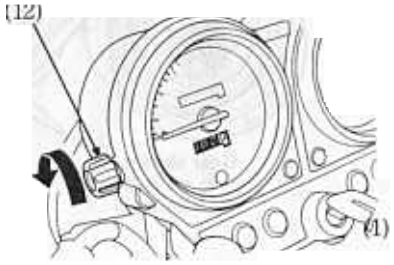
INSTRUMENTS AND INDICATORS

The indicators and warning lights are located within and below the instruments. Their functions are described in the tables on the following pages.

USA model:
Odometer and tripmeter read in miles.
Canadian model:
Odometer and tripmeter read in kilometers.

(1) Tripmeter
(2) Speedometer
(3) Odometer
(4) Tachometer
(5) Tachometer red zone
(6) Coolant temperature gauge
(7) Side stand indicator
(8) Oil pressure warning light
(9) Turn signal indicator
(10) Neutral indicator
(11) High beam indicator
(12) Tripmeter reset knob





(Ref.No.) Description	Function
(1) Tripmeter	Shows mileage per trip
(2) Speedometer	Shows riding speed.
(3) Odometer	Shows accumulated mileage.
(4) Tachometer	Shows engine rpm.
(5)Tachometer red zone	Never allow the tachometer needle to enter the red zone, even after the engine has been broken in. **CAUTION:** * **The red zone indicates the maximum limits of engine speed and running the engine in the red zone may adversely affect its service life.**
(6) Coolant temperature gauge	Shows coolant temperature (See page 15).
(7) Side stand indicator	Lights when the side stand is put down. Before parking, check that the side stand is fully down; the light only indicates the side stand ignition cut-off system (page 76) is activated.

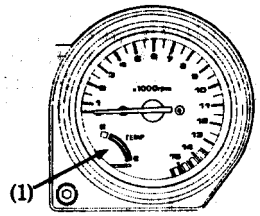
(Ref.No.) Description	Function
(8) Oil pressure warning light	Lights when the engine oil pressure is below the normal operating range. Should light when ignition switch is ON and engine is not running. Should go out when the engine starts, except for occasional flickering at or near idling speed when engine is warm. **CAUTION:** **• Running the engine with insufficient oil pressure may cause serious engine damage.**
(9) Turn signal indicator	Flashes when either turn signal is operated.
(10)Neutral indicator(green)	Lights when the transmission is in neutral.
(11)High beam indicator (blue)	Lights when the headlight is on high beam.
(12)Tripmeter reset knob	Resets tripmeter to zero(0). Turn knob in direction shown.

Coolant Temperature Gauge

When the needle begins to move above the C (Cold) mark, the engine is warm enough for the motorcycle to be ridden. The normal operating temperature range is within the wider section of the outlined band. If the needle reaches the H (Hot) mark, stop the engine and check the reserve tank coolant level. Read pages 23 - 24 and do not ride the motorcycle until the problem has been corrected.

CAUTION:

• Exceeding maximum running temperature may cause serious engine damage.



(1) Coolant temperature gauge

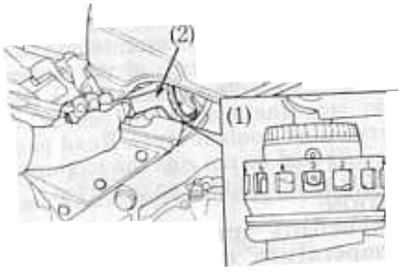
MAJOR COMPONENTS (Information you need to operate this motorcycle)

⚠WARNING

* **If the Pre-ride Inspection (page 39) is not performed, severe personal injury or vehicle damage may result.**

SUSPENSION

The spring preload adjuster (1) has 7 spring preload positions for different load or riding conditions.
Remove the seat (page 37). Use the hook spanner (2) to adjust the rear shock.
Positions 1 to 3 are for a light load and smooth road conditions.
Positions 4 to 7 increase spring preload for a stiffer rear suspension and can be used when the motorcycle is more heavily loaded.



(1) Preload adjuster (2) Hook spanner

⚠WARNING

* **The rear shock absorber assembly includes a damper unit that contains high pressure nitrogen gas. Do not attempt to disassemble, disconnect or service the damper unit; an explosion causing serious injury may result.**
* **Puncture or exposure to flame may also result in an explosion, causing serious injury.**
* **Service or disposal should only be done by your authorized Honda dealer or a qualified mechanic, equipped with the proper tools, safety equipment and the official Honda Service Manual.**

BRAKES

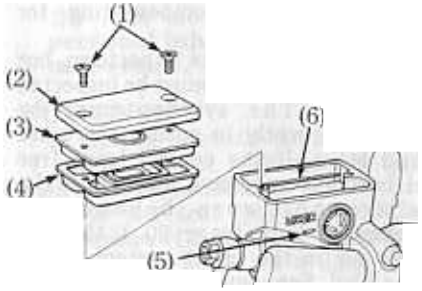
Both front and rear brakes are hydraulic disc types.
As the brake pads wear, brake fluid level drops, automatically compensating for wear.
There are no adjustments to perform, but fluid level and pad wear must be inspected periodically. The system must be inspected frequently to ensure there are no fluid leaks. If the control lever free travel becomes excessive and the brake pads are not worn beyond the recommended limit (page 20), there is probably air in the brake system and it must be bled. See your authorized Honda dealer for this service.

Front Brake Fluid Level:

⚠WARNING

* **Brake fluid may cause irritation. Avoid contact with skin or eyes. In case of contact, flush thoroughly with water and call a doctor if your eyes were exposed.**

Check that the fluid level is above the lower level mark (5) with the motorcycle in an upright position.



(1) Screws
(2) Reservoir cover
(3) Diaphragm plate
(4) Diaphragm
(5) LOWER level mark
(6) UPPER level mark

Brake fluid must be added to the reservoir whenever the fluid level begins to reach the lower level mark (5). Remove the screws (1), reservoir cover (2), diaphragm plate (3) and diaphragm. Fill the reservoir with DOT 4 BRAKE FLUID from a sealed container up to the upper level mark (6). Reinstall the removed parts in the reverse order of removal . Tighten the screws (1) securely.

CAUTION:

* **Handle brake fluid with care because it can damage plastic and painted surfaces.**
* **When adding brake fluid, be sure the reservoir is horizontal before the cap is removed or brake fluid may spill out.**
* **Use only DOT 4 brake fluid from a sealed container.**
* **Never allow contaminants such as dirt or water to enter the brake fluid reservoir.**

Rear Brake Fluid Level:

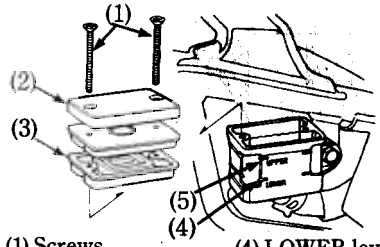
⚠WARNING

* **Brake fluid may cause irritation. Avoid contact with skin or eyes. In case of contact, flush thoroughly with water and call a doctor if your eyes were exposed.**

Check that the fluid level is above the lower level mark (4) with the motorcycle in an upright position.
Brake fluid must be added to the reservoir whenever the fluid level begins to reach the lower level mark (4). Remove the seat and seat cowl. Remove the reservoir cover (2) by removing the screws (1), and remove the diaphragm (3). Fill the reservoir with DOT 4 BRAKE FLUID from a sealed container up to the upper level mark (5). Reinstall the removed parts in the reverse order of removal. Tighten the screws (1) securely.

CAUTION:

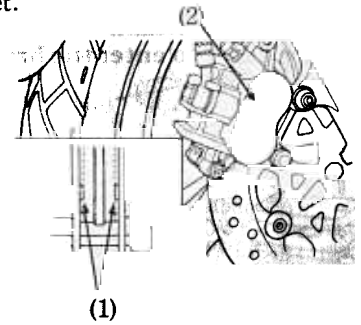
* **Handle brake fluid with care because it can damage plastic and painted surfaces.**
* **When adding brake fluid, be sure the reservoir is horizontal before the cap is removed or brake fluid may spill out.**
* **Use only DOT 4 brake fluid from a sealed container.**
* **Never allow contaminants such as dirt or water to enter the brake fluid reservoir.**



(1) Screws
(2) Reservoir cover
(3) Diaphragm
(4) LOWER level mark
(5) UPPER level mark

Brake Pad Wear

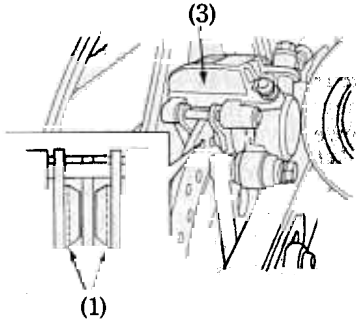
Brake pad wear will depend upon the severity of usage, type of riding, and condition of the roads. The pads will wear faster on dirty and wet roads. Inspect the pads visually during all regular service intervals to determine the pad wear. If either pad wears to the bottom of the groove (1), both pads must be replaced as a set.



(1) Groove (2) Front brake caliper

Other checks:

Make sure there are no fluid leaks. Check for deterioration or cracks in the hoses and fittings.



(3) Rear brake caliper

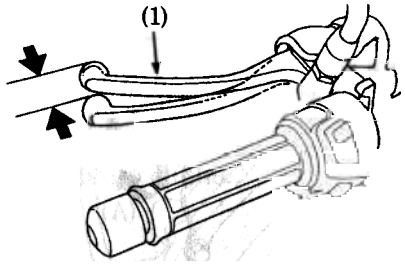
CLUTCH

Clutch adjustment may be required if the motorcycle stalls when shifting into gear or tends to creep; or if the clutch slips, causing acceleration to lag behind engine speed.

Minor adjustments can be made with the clutch cable adjuster (4) at the lever.

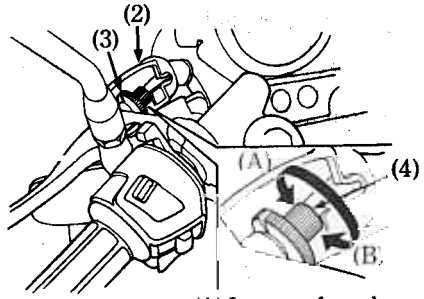
Normal clutch lever free play is:

10—20mm (3/8—3/4 in)



(1) Clutch lever

1. Pull back the rubber dust cover (2). Loosen the lock nut (3) and turn the adjuster (4). Tighten the lock nut (3) and check the adjustment.
2. If the adjuster is threaded out near its limit or if the correct free play cannot be obtained, loosen the lock nut (3) and turn in the cable adjuster (4) completely. Tighten the lock nut (3) and pull on the dust cover.



(2) Dust cover
(3) Lock nut
(4) Clutch cable adjuster
(A) Increase free play
(B) Decrease free play

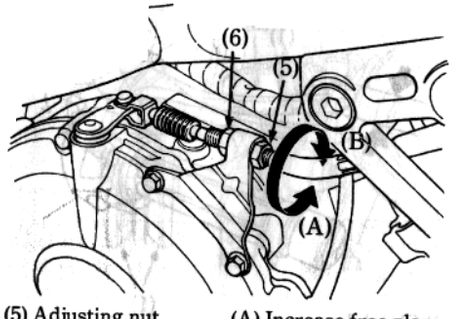
3. At the lower end of the cable, loosen the lock nut (6). Turn the adjusting nut (5) to obtain the specified free play. Tighten the lock nut (6) and check the adjustment.
4. Start the engine, pull in the clutch lever and shift into gear. Make sure the engine does not stall and the motorcycle does not creep. Gradually release the clutch lever and open the throttle. The motorcycle should start smoothly and accelerate gradually.

NOTE:

* If proper adjustment cannot be obtained or the clutch does not work correctly, see your authorized Honda dealer.

Other Checks:

Check the clutch cable for kinks or signs of wear that could cause sticking or failure. Lubricate the clutch cable with a commercially available cable lubricant to prevent premature wear and corrosion.



(5) Adjusting nut
(6) Lock nut
(A) Increase free play
(B) Decrease free play

COOLANT

Coolant Recommendation

The owner must properly maintain the coolant to prevent freezing, overheating and corrosion. Use only high quality ethylene glycol antifreeze containing corrosion protection inhibitors specifically recommended for use in aluminum engines. (SEE ANTIFREEZE CONTAINER LABEL).

CAUTION:

* **Use only low-mineral drinking water or distilled water as a part of the antifreeze solution. Water that is high in mineral content or salt may be harmful to the aluminum engine.**

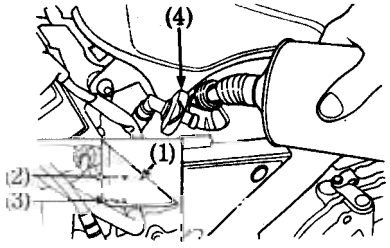
The factory provides a 50/50 solution of antifreeze and water in this motorcycle. This coolant solution is recommended for most operating temperatures and provides good corrosion protection. A higher concentration of antifreeze decreases the cooling system performance and is recommended only when additional protection against freezing is needed. A concentration of less than 40/60 (40% antifreeze) will not provide proper corrosion protection. During freezing temperatures, check the cooling system frequently and add higher concentrations of antifreeze (up to a maximum of 60% antifreeze) if required.

Inspection
The reserve tank is behind the left side cover.
Check the coolant level in the reserve tank (1) while the engine is at the normal operating temperature with the motorcycle in an upright position. If the coolant level is below the LOWER level mark (3), remove the seat (page 37) and reserve tank cap (4) and add coolant mixture until it reaches the UPPER level mark (2). Do not remove the radiator cap.

⚠WARNING

- **Do not remove the radiator cap when the engine is hot. The coolant is under pressure and could scald you.**
- **Keep hands and clothing away from the cooling fan, as it starts automatically.**

If the reserve tank is empty, or if coolant loss is excessive, check for leaks and see your authorized Honda dealer for repair.



(1) Reserve tank (3) LOWER level mark
(2) UPPER level mark (4) Reserve tank cap

FUEL

Manual Fuel Valve
The manual fuel valve (1) is under the left side of the fuel tank. Set it to ON for normal operation or RES when you start to run out of the main fuel supply. The OFF setting is only for long term storage or servicing of fuel system components.

Automatic Fuel ON-OFF
With the fuel valve set to ON (or RES) fuel flows to the carburetors only when the engine is being started or is running. A diaphragm shuts off fuel flow when the engine is turned off.

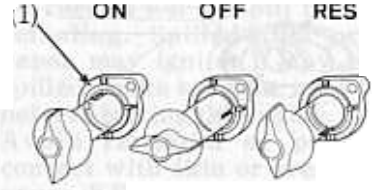
Reserve Fuel
When the main fuel supply is gone, turn the fuel valve to RES. Refill the tank as soon as possible after switching to RES, then switch the valve back to ON.
The reserve fuel supply is:
3.5 ℓ (0.92 US gal, **0.77** Imp gal)

⚠WARNING

- **To avoid running out of fuel that may result in a sudden stop, learn how to operate the fuel valve when riding the motorcycle.**

NOTE:

- Do not operate the motorcycle with the fuel valve in the RES position after refueling. You may run out of fuel with no reserve.



(1) Fuel valve

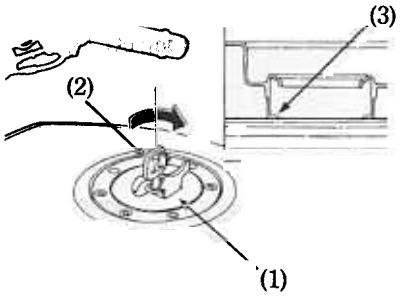
Fuel Tank

The fuel tank capacity, including reserve, is:

11.5 ℓ (3.04 US gal, 2.53 Imp gal)

To open the fuel tank cap (1), insert the ignition key (2) and turn it clockwise. The cap will pop up and can be lifted off.

To close the fuel tank cap, align the latch in the cap with the slot in the filler neck. Push the cap into the filler neck until it snaps closed and locks. Remove the key.



(1) Fuel tank cap (2) Ignition key
(3) Filler neck

Your engine is designed to use any gasoline that has a pump octane number (R+M)/2 of 86 or higher, or that has a research octane number of 91 or higher. Gasoline pumps at service stations normally display the pump octane number.

We recommend that you use unleaded fuel because it produces fewer engine and spark plug deposits and extends the life of exhaust system components.

Never use stale or contaminated gasoline or an oil/gasoline mixture. Avoid getting dirt, dust or water in the fuel tank. Use of a lower octane gasoline can cause persistent "pinging" or heavy "spark knock" (a metallic rapping noise) which, if severe, can lead to engine damage.

CAUTION:

* **If "spark knock" or "pinging" occurs at a steady engine speed under normal load, change brands of gasoline. If spark knock or pinging persists, consult your authorized Honda dealer. Failure to do so is considered misuse, and damage caused by misuse is not covered by Honda's Limited Warranty.**

Occasionally you may experience light spark knock while operating under heavy loads. This is no cause for concern, it simply means your engine is operating efficiently.

⚠WARNING

* **Gasoline is extremely flammable and is explosive under certain conditions.**
  Refuel in a well-ventilated area with the engine stopped. Do not smoke or allow flames or sparks in the area where the engine is refueled or where gasoline is stored.
* **Do not overfill the tank (there should be no fuel in the filler neck (3)). After refueling, make sure the fuel cap is closed securely.**
* **Be careful not to spill fuel when refueling. Spilled fuel or fuel vapor may ignite. If any fuel is spilled, make sure the area is dry before starting the engine.**
* **Avoid repeated or prolonged contact with skin or breathing of vapor. KEEP OUT OF REACH OF CHILDREN.**

Gasolines Containing Alcohol

If you decide to use a gasoline containing alcohol ("gasohol"), be sure its octane rating is at least as high as that recommended by Honda. There are two types of "gasohol" : one containing ethanol, and the other containing methanol. Do not use gasohol that contains more than 10% ethanol. Do not use gasoline containing methanol (methyl or wood alcohol) that does not also contain cosolvents and corrosion inhibitors for methanol. Never use gasoline containing more than 5% methanol, even if it has cosolvents and corrosion inhibitors.

NOTE:

* Fuel system damage or engine performance problems resulting from the use of fuels that contain alcohol is not covered under the warranty. Honda cannot endorse the use of fuels containing methanol since evidence of their suitability is as yet incomplete.
* Before buying fuel from an unfamiliar station, try to find out if the fuel contains alcohol. If it does, confirm the type and percentage of alcohol used. If you notice any undesirable operating symptoms while using a gasoline that contains alcohol, or one that you think contains alcohol, switch to a gasoline that you know does not contain alcohol.

ENGINE OIL

Engine Oil Level Check

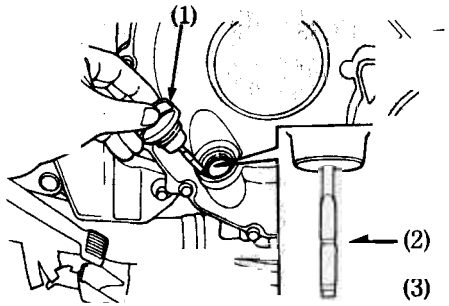
Check the engine oil level each day before riding the motorcycle.

The level must be maintained between the upper (2) and lower (3) level marks on the dipstick (1).

1. Start the engine and let it idle for a few minutes. Make sure the red oil pressure warning light goes off. If the light remains on, stop the engine immediately.
2. Stop the engine and hold the motorcycle in an upright position on firm, level ground.
3. After a few minutes, remove the oil filler cap/dipstick, wipe it clean, and reinsert the dipstick without screwing it in. The oil level should be between the upper and lower marks on the dipstick.
4. If required, add the specified oil up to the upper level mark. Do not overfill.
5. Reinstall the oil filler cap/dipstick. Check for oil leaks.

CAUTION:

* **Running the engine with insufficient oil pressure may cause serious engine damage.**



(1) Oil filler cap/dipstick
(2) Upper level mark
(3) Lower level mark

TUBELESS TIRES

This motorcycle is equipped with tubeless tires, valves, and wheel rims. Use only tires marked "TUBELESS" and tubeless valves on rims marked "TUBELESS TIRE APPLICABLE."

Proper air pressure will provide maximum stability, riding comfort and tire life.

Check tire pressure frequently and adjust if necessary. (page 3).

NOTE:

* Tire pressure should be checked before you ride, while the tires are "cold."
* Tubeless tires have some degree of self-sealing ability if they are punctured, and leakage is often very slow. Inspect very closely for punctures, especially if the tire is not fully inflated.

Check the tires for cuts, embedded nails, or other sharp objects. Check the rims for dents or deformation. If there is any damage, see your authorized Honda dealer for repair, replacement, and balancing.

⚠WARNING

* **Improper tire inflation will cause abnormal tread wear and create a safety hazard. Underinflation may result in the tire slipping on, or coming off of the rim causing tire deflation that may result in a loss of vehicle control.**
* **Operation with excessively worn tires is hazardous and will adversely affect traction and handling.**

Replace tires before tread depth at the center of the tire reaches the limit as shown on the tire information label (page 3).

Tire Repair/Replacement:

See your authorized Honda Dealer

⚠WARNING

* **The use of tires other than those listed here may adversely affect handling. (page 3).**
* **Do not install tube-type tires on tubeless rims. The beads may not seat and the tires could slip on the rims, causing tire deflation that may result in a loss of vehicle control.**
* **Do not install a tube inside a tubeless tire. Excessive heat build-up may cause the tube to burst resulting in rapid tire deflation that may result in a loss of vehicle control.**
* **Replace the tire if the sidewall is punctured or damaged. Sidewall flexing may cause repair failure and tire deflation that may result in a loss of vehicle control.**
* **Proper wheel balance is necessary for safe, stable handling of the motorcycle. Do not remove or change any wheel balance weights. When wheel balancing is required, see your authorized Honda dealer. Wheel balancing is required after tire repair or replacement.**
* **To avoid possible repair failure and tire deflation that may result in a loss of vehicle control, do not exceed 50 mph for the first 24 hours, or 80 mph at any time, after tire repair.**

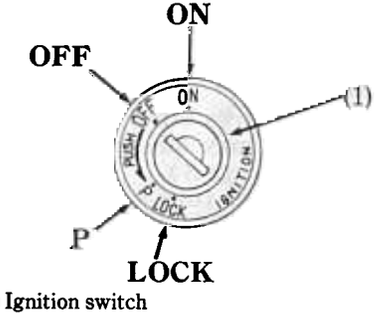
CAUTION:

* **Do not try to remove tubeless tires without special tools and rim protectors. You may damage the rim sealing surface or disfigure the rim.**

ESSENTIAL INDIVIDUAL COMPONENTS

IGNITION SWITCH

The ignition switch (1) is located below the indicator panel.



(1) Ignition switch

Key Position	Function	Key Removal
LOCK (steering lock)	Steering is locked. Engine and lights cannot be operated.	Key can be removed
P (parking)	For parking the motorcycle near traffic. The taillight is on, but all other lights are off. The engine cannot be started.	Key can be removed
OFF	Engine and lights cannot be operated.	Key can be removed
ON	Headlight, taillight and instrument lights are on and other lights can be operated. Engine can be started.	Key cannot be removed

RIGHT HANDLEBAR CONTROLS

Engine Stop Switch

The engine stop switch (1) is next to the throttle grip. When the switch is in the RUN position, the engine will operate. When the switch is in the OFF position, the engine will not operate. This switch is intended primarily as a safety or emergency switch and should normally remain in the RUN position.

NOTE:

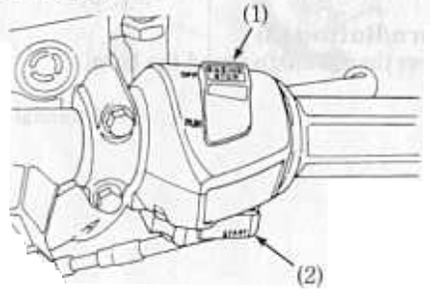
* If your motorcycle is stopped with the ignition switch ON and the engine stop switch OFF, the headlight and taillight will still be on, resulting in battery discharge.

Starter Button

The starter button (2) is below the engine stop switch (1).

When the starter button is pressed the starter motor will crank the engine; the headlight will automatically go out, but the taillight will stay on.

See pages 41 – 42 for "Starting Procedure."



(1) Engine stop switch
(2) Starter button

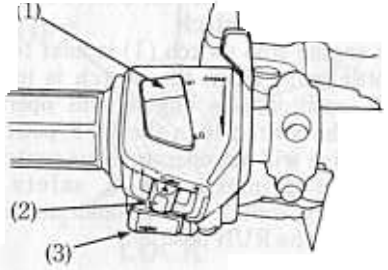
LEFT HANDLEBAR CONTROLS

The three controls next to the left handlebar grip are:

Headlight Dimmer Switch (1)
Select HI for high beam, LO for low beam.

Turn Signal Switch (2)
Move to L to signal a left turn, R to signal a right turn. Press to turn signal off.

Horn Button (3)
Press the button to sound the horn.



(1) Headlight dimmer switch
(2) Turn signal switch
(3) Horn button

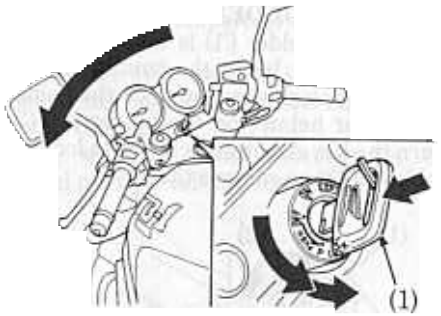
FEATURES
(Not required for operation)

STEERING LOCK

To lock the steering, turn the handlebars all the way to the left or right, turn the key (1) to LOCK while pushing in. Remove the key.

⚠WARNING

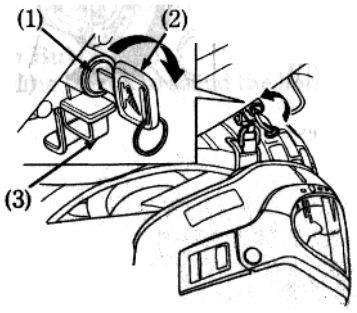
*** Do not turn the key to LOCK while riding the motorcycle, loss of vehicle control will result.**



(1) Ignition key

HELMET HOLDER

The helmet holder (1) is on the left side below the seat. Insert the ignition key (2) and turn it clockwise to unlock the holder. Hang your helmet on the holder pin (3). Turn the key counterclockwise to lock the holder and then remove the key.



(1) Helmet holder
(2) Ignition key
(3) Holder pin

⚠WARNING

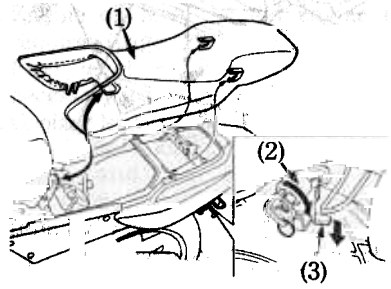
* **The helmet holder is designed for helmet security while parked. Do not ride with a helmet attached to the holder; the helmet may interfere with safe operation and result in loss of control.**

SEAT

To remove the seat (1), Insert the ignition key into the helmet holder (2), turn it clockwise and pull the seat lock lever (3) downward. Pull the seat back and up. To install the seat, insert the prong into the recess under the frame cross member and then push down on the rear of the seat.

CAUTION:

* **Be sure to securely lock the seat after reinstalling it.**



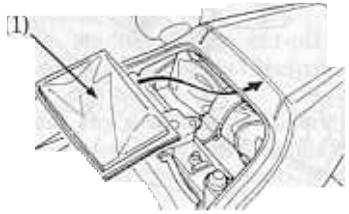
(1) Seat
(2) Helmet holder
(3) Seat lock lever

DOCUMENT COMPARTMENT

The document compartment (1) is under the seat.

This owner's manual and other documents should be stored in the compartment.

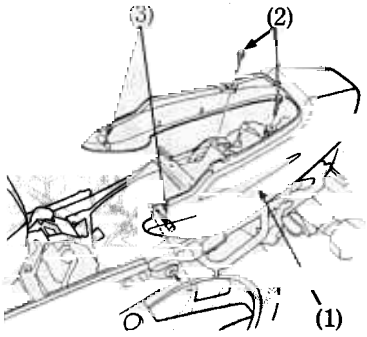
When washing your motorcycle, be careful not to flood this area with water.



(1) Document compartment

SEAT COWL

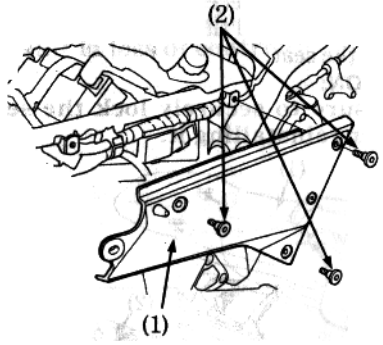
The seat cowl (1) must be removed to add the rear brake fluid. To remove the seat cowl, remove the seat (page 37) and mounting bolts (2), pull out both side cowl tabs (3). Slide the cover upward.



(1) Seat cowl
(2) Mounting bolts
(3) Tabs

SIDE COVER

The side cover (1) must be removed for the fuse maintenance. To remove the side cover, remove the seat cowl and three mounting bolts (2).



(1) Side cover
(2) Mounting bolts

OPERATION

PRE-RIDE INSPECTION

⚠WARNING

*** If the Pre-ride Inspection is not performed, severe personal injury or vehicle damage may result.**

Inspect your motorcycle every day before you ride it. The items listed here will only take a few minutes to inspect, and in the long run they can save time, expense, and possibly your life.

1. Engine oil level — add engine oil if required (page 29). Check for leaks.
2. Fuel level — fill fuel tank when necessary (page 26). Check for leaks.
3. Coolant level — add coolant if required. Check for leaks (pages 23 — 24).
4. Front and rear brakes — check operation; make sure there is no brake fluid leakage. (pages 17 — 20)
5. Tires — check condition and pressure (page 3).
6. Drive chain—check condition and slack (page 66). Adjust and lubricate if necessary.
7. Throttle — check for smooth opening and closing in all steering positions.
8. Lights and horn — check that the headlight, tail/stoplight, turn signals, indicators and horn function properly.
9. Engine stop switch — check for proper function (page 33).
10. Side stand ignition cut-off system—check for proper function (page 76).

Correct any discrepancy before you ride. Contact your authorized Honda dealer for assistance if you cannot correct the problem.

STARTING THE ENGINE

This motorcycle is equipped with a side stand ignition cut-off system. The engine cannot be started if the side stand is down, unless the transmission is in neutral. If the side stand is up, the engine can be started in neutral or in gear with the clutch lever pulled in. After starting with the side stand down, the engine will shut off if the transmission is put in gear.

⚠WARNING

* **Never run the engine in a closed area. The exhaust contains poisonous carbon monoxide gas that can cause loss of consciousness and may lead to death.**

NOTE:

* Do not use the electric starter for more than 5 seconds at a time. Release the starter button for approximately 10 seconds before pressing it again.

Preparation

Before starting, insert the key, turn the ignition switch ON and confirm the following:

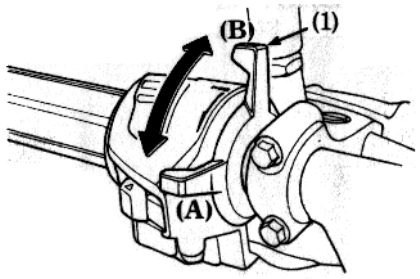
- The transmission is in NEUTRAL (neutral indicator light ON).
- The engine stop switch is at RUN.
- The red engine oil pressure warning light is ON.

Starting procedure

To restart a warm engine, follow the procedure for "High Air Temperature."

Normal Air Temperature
10—35°C (50—95°F)

1. Pull the choke lever (1) back all the way to Fully ON(A).
2. Start the engine, leaving the throttle closed.



(1) Choke lever
(A) Fully ON
(B) Fully OFF

NOTE:

* Do not open the throttle when starting the engine with the choke ON. This will lean the mixture, resulting in hard starting.

CAUTION:

* **The red oil pressure warning light should go off a few seconds after the engine starts. If the light stays on, stop the engine immediately and check engine oil level. Operating the engine with insufficient oil pressure can cause serious engine damage.**

3. Immediately after the engine starts, operate the choke lever (1) to keep fast idle at: 1,500—2,500 rpm.
4. About a half minute after the engine starts, push the choke lever (1) forward all the way to Fully OFF (B).
5. If idling is unstable, open the throttle slightly.

High Air Temperature
35°C (95°F) or above

1. Do not use the choke.
2. Open the throttle slightly.
3. Start the engine.

Low Air Temperature
10°C (50°F) or below

1. Follow steps 1 – 2 under "Normal Air Temperature."
2. Warm up the engine by opening and closing the throttle slightly.
3. Continue warming up the engine until it runs smoothly and responds to the throttle when the choke lever is at Fully OFF (B).

CAUTION:

* **Snapping the throttle or fast idling for more than about 5 minutes at normal air temperature may cause exhaust pipe discoloration.**
* **Extended use of the choke may impair piston and cylinder wall lubrication.**

Flooded Engine

If the engine fails to start after repeated attempts, it may be flooded with excess fuel. To clear a flooded engine, turn the engine stop switch OFF and push the choke lever forward to Fully OFF (B). Open the throttle fully and crank the engine several times. Wait 10 seconds, then turn the engine stop switch ON and follow the "High Air Temperature" Starting Procedure (page 42).

BREAK-IN

During initial break-in, newly machined surfaces will be in contact with each other and these surfaces will wear in quickly. Break-in maintenance at 600 miles (1000 km) is designed to compensate for this initial minor wear. Timely performance of the break-in maintenance will ensure optimum service life and performance from the engine.

The general rules as follows:

1. Never lug the engine with full throttle at low engine speeds. This rule is applicable not only during break-in but at all times.
2. Maximum continuous engine speed during the first 1,000 km (600 miles) must not exceed 5,000 rpm.
3. Increase the maximum continuous engine speed by 2,000 rpm between odometer readings of 1,000 km (600 miles) and 1,600 km (1,000 miles). Drive briskly, vary speeds frequently and use full throttle for short bursts only. Do not exceed 7,000 rpm.

4. Upon reaching an odometer reading of 1,600 km (1,000 miles), you can subject the motorcycle to full throttle operation. However, do not exceed 13,500 rpm at any time (tachometer RED ZONE limit).

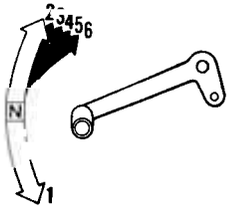
CAUTION:

* **The red zone indicates the maximum limits of engine speed and running the engine in the red zone may adversely affect its service life.**

RIDING

⚠WARNING

Review Motorcycle Safety (pages 1 – 6) before you ride.



Shifting pattern

Proper shifting will provide better fuel economy. When changing gears under normal conditions, use these recommended shift points:

Shifting Up:

From 1st to 2nd:	9 mph (15 km/h)
From 2nd to 3rd:	16 mph (25 km/h)
From 3rd to 4th:	22 mph (35 km/h)
From 4th to 5th:	28 mph (45 km/h)
From 5th to 6th:	34 mph (55 km/h)

Shifting Down:

From 6th to 5th:	25 mph (40 km/h)
From 5th to 4th:	19 mph (30 km/h)
From 4th to 3rd:	12 mph (20 km/h)

Disengage the clutch when speed drops below 9 mph (15km/h), when engine roughness is evident, or when engine stalling is imminent; shift down to 1st gear for acceleration.

⚠WARNING

* **Do not downshift when traveling at a speed that would force the engine to overrev in the next lower gear; the rear wheel may lose traction, resulting in a possible loss of vehicle control.**

CAUTION:

* **Do not shift gears without disengaging the clutch and closing the throttle. The engine and drive train could be damaged by overspeed and shock.**
* **Do not tow the motorcycle or coast for long distances while the engine is off. The transmission will not be properly lubricated and damage may result.**
* **Do not race the engine in neutral or with the clutch disengaged. Serious engine damage may result if the engine is run, without a load, above: 13,500rpm**

CAUTION:

* **Do not ride over a curb or rub the wheel against an obstacle, as wheel damage may result.**

NOTE:

* The battery will not charge while the engine speed is near idle speed. Avoid idling for prolonged periods, or continuous operation below: 1,800rpm
* Be careful when revving the engine or accelerating in 1st or 2nd gear as the engine will easily enter the tachometer red zone.

High Altitude Riding

When operating this motorcycle at high altitude the air-fuel mixture becomes overly rich. Above 6,500 feet (2,000 m) driveability and performance may be reduced and fuel consumption increased. See your authorized Honda dealer for high altitude adjustments.

BRAKING

1. For normal braking, gradually apply both front and rear brakes while downshifting to suit your road speed.
2. For maximum deceleration, close the throttle and apply the front and rear brakes firmly. Disengage the clutch before the motorcycle stops.

⚠WARNING

* **Independent use of only the front or rear brake reduces stopping performance. Extreme braking may cause either wheel to lock, reducing control of the motorcycle.**
* **When possible, reduce speed or brake before entering a turn; closing the throttle or braking in mid-turn may cause wheel slip. Wheel slip will reduce control of the motorcycle.**
* **When riding in wet or rainy conditions, or on loose surfaces, the ability to maneuver and stop will be reduced. All of your actions should be smooth under these conditions. Sudden acceleration, braking or turning may cause loss of control. For your safety, exercise extreme caution when braking, accelerating or turning.**
* **When descending a long, steep grade, use engine compression braking by downshifting, with intermittent use of both brakes. Continuous brake application can overheat the brakes and reduce their effectiveness.**
* **Riding with your foot resting on the brake pedal or your hand on the brake lever may actuate the brakelight, giving a false indication to other drivers. It may also overheat the brake, reducing effectiveness.**

PARKING

1. After stopping the motorcycle, shift the transmission into neutral, turn the handlebar fully to the left, turn the ignition switch OFF and remove the key.
2. Use the side stand to support the motorcycle while parked.

CAUTION:

* **Park the motorcycle on firm, level ground to prevent it from falling over.**
* **If you must park on a slight incline, aim the front of the motorcycle uphill to reduce the possibility of rolling off the side stand or overturning.**

3. Lock the steering to help prevent theft (page 35).

NOTE:

* When stopping for a short time near traffic at night, the ignition switch may be turned to P and the key removed. This will turn on the taillight to make the motorcycle more visible to traffic. The battery will discharge if the ignition switch is left at P for too long a time.

ANTI-THEFT TIPS

1. Always lock the steering and never leave the key in the ignition switch. This sounds simple but people do forget.
2. Be sure the registration information for your motorcycle is accurate and current.
3. Park your motorcycle in a locked garage whenever possible.
4. Use an additional anti-theft device of good quality.
5. Put your name, address and phone number in this Owner's Manual and keep it on your motorcycle at all times. Many times stolen motorcycles are identified by information in the Owner's Manuals that are still with them.

NAME: _____

ADDRESS: _____

_____

_____

PHONE NO: _____

MAINTENANCE

- The U.S. Environmental Protection Agency and California Air Resources Board (CARB) require that your motorcycle comply with applicable exhaust emissions standards during its useful life, when operated and maintained according to the instructions provided, and that motorcycles built after January 1, 1983 comply with applicable noise emission standards for one year or 6,000 km (3,730 miles) after the time of sale to the ultimate purchaser, when operated and maintained according to the instructions provided. Compliance with the terms of the Distributor's Warranties for Honda Motorcycle Emission Control Systems is necessary in order to keep the emissions system warranty in effect. (USA ONLY)

- When service is required, remember that your authorized Honda dealer knows your motorcycle best and is fully equipped to maintain and repair it. The scheduled maintenance may also be performed by a qualified service facility that normally does this kind of work; or you may perform most of the work yourself if you are mechanically qualified and have the proper tools and service data.

- These instructions are based on the assumption that the motorcycle will be used exclusively for its designed purpose. Sustained high speed operation, or operation in unusually wet or dusty conditions, will require more frequent service than specified in the MAINTENANCE SCHEDULE. Consult your authorized Honda dealer for recommendations applicable to your individual needs and use.

MAINTENANCE SCHEDULE

The following items require some mechanical knowledge. Certain items (particularly those marked * and * * may require more technical information and tools. Consult your authorized Honda Dealer.

Perform the Pre-ride Inspection (page 39) at each scheduled maintenance period.
I: INSPECT AND CLEAN, ADJUST, LUBRICATE OR REPLACE IF NECESSARY
C: CLEAN R: REPLACE A: ADJUST L: LUBRICATE

	ITEM \ FREQUENCY	WHICHEVER COMES FIRST → / NOTE	x1,000mi / x1,000km	ODOMETER READING [NOTE(1)] 0.6 / 1	4 / 6.4	8 / 12.8	12 / 19.2	16 / 25.6	20 / 32.0	24 / 38.4	Refer to
EMISSION RELATED ITEMS	*FUEL LINE					I		I		I	
	*THROTTLE OPERATION					I		I		I	
	*CARBURETOR CHOKE					I		I		I	
	AIR CLEANER	NOTE (2)					R			R	
	SPARK PLUG				R	R	R	R	R	R	Page 63
	*VALVE CLEARANCE			I				I			
	ENGINE OIL			R		R		R		R	Pages 59—62
	ENGINE OIL FILTER			R		R		R		R	Pages 60—61
	*CARBURETOR SYNCHRONIZATION					I		I		I	
	*CARBURETOR IDLE SPEED			I	I	I	I	I	I	I	Page 65
	RADIATOR COOLANT	NOTE (3)				I		I		R	Pages 23—24
	*COOLING SYSTEM					I		I		I	
	*SECONDARY AIR SUPPLY SYSTEM	NOTE (4)				I		I		I	
	*EVAPORATIVE EMISSION CONTROL SYSTEM	NOTE (4)					I			I	

	ITEM \ FREQUENCY	WHICHEVER COMES FIRST → / NOTE	x1,000mi / x1,000km	ODOMETER READING [NOTE(1)] 0.6 / 1	4 / 6.4	8 / 12.8	12 / 19.2	16 / 25.6	20 / 32.0	24 / 38.4	Refer to
NON-EMISSION RELATED ITEMS	DRIVE CHAIN			I, L EVERY 600mi (1000km)							Page 66
	BRAKE FLUID	NOTE (3)			I	I	R	I	I	R	Pages 17—19
	BRAKE PAD WEAR				I	I	I	I	I	I	Page 20
	BRAKE SYSTEM			I		I		I		I	Pages 17—20
	*BRAKE LIGHT SWITCH					I		I		I	
	*HEADLIGHT AIM					I		I		I	
	CLUTCH SYSTEM			I	I	I	I	I	I	I	Pages 21—22
	SIDE STAND					I		I		I	Page 76
	*SUSPENSION					I		I		I	
	*NUTS, BOLTS, FASTENERS			I		I		I		I	
	**WHEELS/TIRES					I		I		I	
	**STEERING HEAD BEARINGS			I		I		I		I	

* SHOULD BE SERVICED BY AN AUTHORIZED HONDA DEALER UNLESS THE OWNER HAS PROPER TOOLS AND SERVICE DATA AND IS MECHANICALLY QUALIFIED. REFER TO THE OFFICIAL HONDA SERVICE MANUAL.

* * IN THE INTEREST OF SAFETY, WE RECOMMEND THESE ITEMS BE SERVICED ONLY BY AN AUTHORIZED HONDA DEALER.

NOTES: (1) At higher odometer readings, repeat at the frequency interval established here.
(2) Service more frequently when riding in unusually wet or dusty areas.
(3) Replace every 2 years, or at indicated odometer interval, whichever comes first. Replacement requires mechanical skill.
(4) California type only.

MAINTENANCE RECORD

Miles	Performed By	Odometer	Date
600			
4,000			
8,000			
12,000			
16,000			
20,000			
24,000			

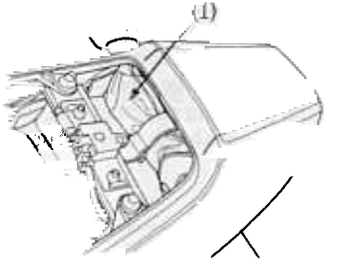
- Make sure whoever performs the maintenance completes this record. All scheduled maintenance, including the 600 mile (1,000 km) break-in maintenance, is considered a normal owner operating cost and will be charged for by your dealer.
- Detailed receipts verifying the performance of required maintenance should be retained. These receipts should be transferred with the motorcycle to the new owner if the motorcycle is sold.

TOOL KIT

The tool kit (1) is in the tool box under the seat

Some roadside repairs, minor adjustments and parts replacement can be performed with the tools contained in the kit.

- 8 x 12 mm open end wrench
- 10 x 12 mm open end wrench
- 14 x 17 mm open end wrench
- Pliers
- 5 mm hex wrench
- 6 mm hex wrench
- No.2 screwdriver
- Screwdriver grip
- 17 mm box wrench
- 24 mm box end wrench
- Hook spanner
- Handle for the end wrench
- Spark plug wrench
- Tool bag

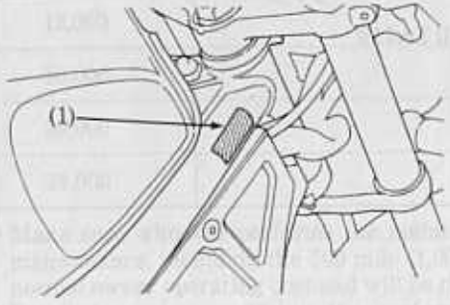


(1) Tool kit

SERIAL NUMBERS

The frame and engine serial numbers are required when registering your motorcycle. They may also be required by your dealer when ordering replacement parts. Record the numbers here for your reference.

VIN _____

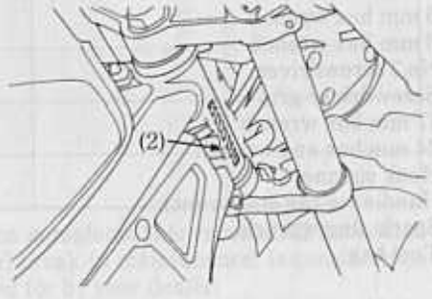


(1) VIN

The VIN, Vehicle Identification Number, (1) is on the Safety Certification Label affixed to the right side frame.

The frame number (2) is stamped on the right side of the steering head.

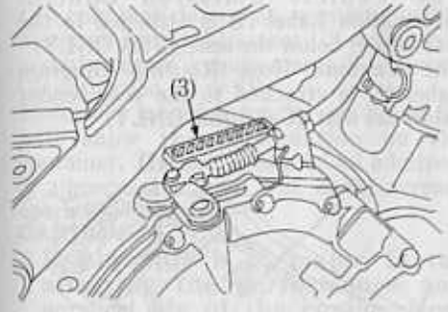
FRAME NO. _____



(2) Frame number

The engine number (3) is stamped on the right side of the crankcase.

ENGINE NO. _____



(3) Engine number

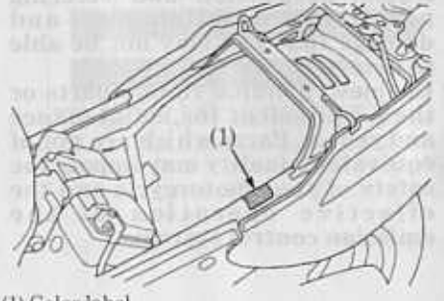
COLOR LABEL

The color label (1) is attached to the left frame rail under the seat.

It is helpful when ordering replacement parts. Record the color and code here for your reference.

COLOR _____

CODE _____



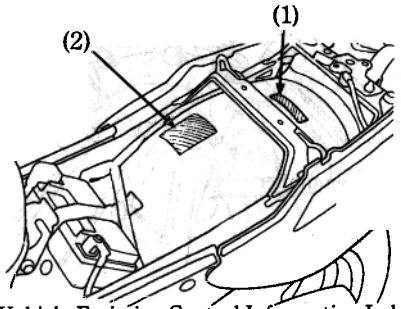
(1) Color label

MAINTENANCE PRECAUTIONS

⚠WARNING

- **If your motorcycle falls over or is involved in a collision, inspect control levers, cables, brake hoses, calipers, accessories, and other vital parts for damage. Do not ride the motorcycle if damage impairs safe operation. Have your authorized Honda dealer inspect the major components, including frame, suspension and steering parts, for misalignment and damage that you may not be able to detect.**
- **Use new, genuine Honda parts or their equivalent for maintenance and repair. Parts which are not of equivalent quality may impair the safety of your motorcycle and the effective operation of the emission control systems.**
- **Stop the engine and support the motorcycle securely on a firm, level surface before performing any maintenance.**

The Vehicle Emission Control Information Label (1) is attached to the rear fender below the seat. (USA ONLY)
The Vacuum Hose Routing Diagram Label (2) is attached to the rear fender below the seat. (California ONLY)



(1) Vehicle Emission Control Information Label
(2) Vacuum Hose Routing Diagram Label

ENGINE OIL

(Refer to the maintenance precautions on page 58).

Engine Oil Recommendation:
USE HONDA 4-STROKE OIL OR AN EQUIVALENT
Use only high detergent premium quality motor oil certified to meet US automobile manufacturers' requirements for Service Classification SE or SF.
Motor oils intended for Service SE or SF will show this designation on the container. The use of special oil additives is unnecessary and will only increase operating expenses.

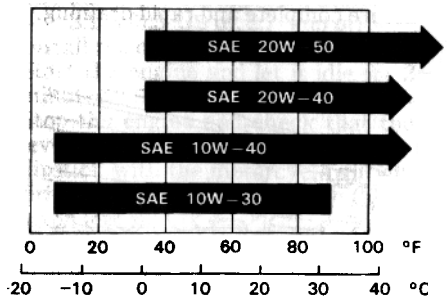
CAUTION:

- **Engine oil is a major factor affecting the performance and service life of the engine. Non-detergent, vegetable or castor-based racing oils are not recommended.**

Recommended Oil Viscosity

SAE 10W-40

Other viscosities shown in the chart below may be used when the average temperature in your riding area is within the indicated range.

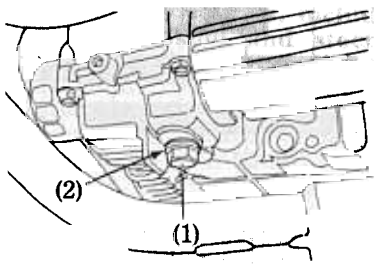


Engine Oil and Filter

Engine oil quality is the chief factor affecting engine service life. Change the engine oil as specified in the maintenance schedule. (page 52)

NOTE:

* Change the engine oil with the engine warm and the motorcycle on its stand to assure complete and rapid draining.

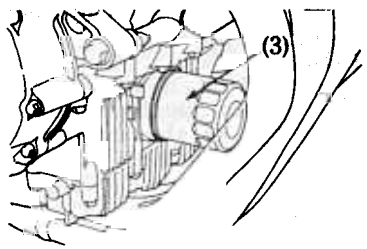


(1) Oil drain plug (2) Sealing washer

CAUTION:

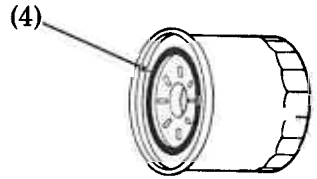
* **To prevent oil leaks and filter damage, never support the engine on the oil filter.**

1. To drain the oil, remove the oil filler cap, crankcase drain plug (1) and sealing washer (2).
2. Remove the oil filter (3) with a filter wrench and let the remaining oil drain out. Discard the oil filter.
3. Check that the new oil filter O−ring is in good condition.



(3) Oil filter

4. Apply a thin coat of engine oil to the new oil filter rubber seal (4).
5. Install the new oil filter and tighten it to:
   10 N·m (1.0 kg-m, 7 lb-ft)



(4) Oil filter rubber seal

6. Check that the sealing washer on the drain plug is in good condition and install the plug.
   Oil Drain Plug Torque:
   35 N·m (3.5 kg-m, 25 lb-ft)
7. Fill the crankcase with the recommended grade oil; approximately:
   3.1 ℓ (3.3 US qt, 2.7 Imp qt)
8. Install the oil filler cap.
9. Start the engine and let it idle for 2−3 minutes.
10. Stop the engine and check that the oil level is at the upper level mark on the dipstick with the motorcycle upright on firm, level ground. Make sure there are no oil leaks.

NOTE:

* When running in very dusty conditions, oil changes should be performed more frequently than specified in the maintenance schedule.

NOTE:

* Please dispose of used engine oil in a manner that is compatible with the environment. We suggest you take it in a sealed container to your local service station for reclamation. Do not throw it in the trash or pour it on the ground.

CAUTION:

* **Used engine oil may cause skin cancer if repeatedly left in contact with the skin for prolonged periods. Although this is unlikely unless you handle used oil on a daily basis, it is still advisable to thoroughly wash your hands with soap and water as soon as possible after handling used oil.**

SPARK PLUGS

(Refer to the maintenance precautions on page 58).

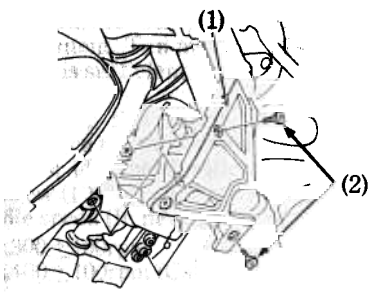
Recommended plugs:

Standard:

CR8EH−9 (NGK)
U24FER−9 (ND)

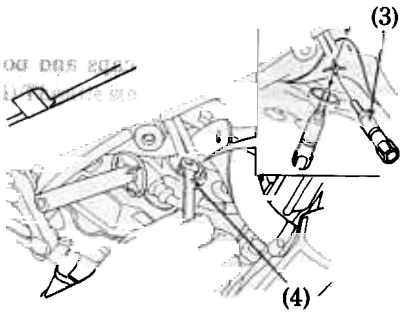
For extended high speed riding:

CR9EH−9 (NGK)
U27FER−9 (ND)



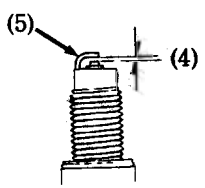
(1) Front side plate (2) Bolts

1. Remove the right and left front side plates (1) by removing the bolts (2).
2. Disconnect the spark plug caps.
3. Clean any dirt from around the spark plug bases.
4. Remove the spark plugs using the spark plug wrench (3) and open end wrench furnished in the tool kit.
   Discard the spark plugs.



(3) Spark plug wrench (4) Open end wrench

5. Check the new spark plug gap (4) using a wire-type feeler gauge. If adjustment is necessary, bend the side electrode (5) carefully.
   The gap should be:
   0.8- 0.9 mm (0.03- 0.04 in)
6. With the plug washer attached, thread the new spark plug in by hand to prevent cross-threading.
7. Tighten the spark plug 1/2 turn with a spark plug wrench to compress the washer.
8. Reinstall the spark plug caps and both front side plates.



(4) Spark plug gap (5) Side electrode

CAUTION:

- **The spark plug must be securely tightened. An improperly tightened plug can become very hot and possibly damage the engine.**
- **Never use a spark plug with an improper heat range. Severe engine damage could result.**

IDLE SPEED

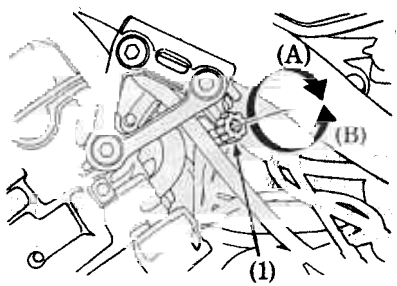
(Refer to the maintenance precautions on page 58).

The idle speed adjustment procedure given here should only be used when changes in altitude affect normal idle speed as set by your dealer. See your authorized Honda dealer for regularly scheduled carburetor adjustments, including individual carburetor adjustment and synchronization

NOTE:

- The engine must be at normal operating temperature for accurate idle speed adjustment. Ten minutes of stop-and-go riding is sufficient

1. Warm up the engine, shift to neutral and place the motorcycle on its stand
2. Adjust idle speed with the throttle stop screw (1).
   Idle speed (In neutral):
   1,300±100rpm
   1,400±100rpm (Calif. model)



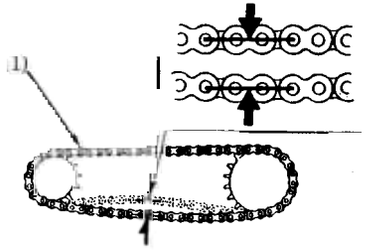
(1) Throttle stop screw (A) Increase (B) Decrease

DRIVE CHAIN

(Refer to the maintenance precautions on page 58).

The service life of the drive chain is dependent upon proper lubrication and adjustment. Poor maintenance can cause premature wear or damage to the drive chain and sprockets. Under severe usage, or when the motorcycle is ridden in dusty areas, more frequent maintenance will be necessary.

1. Turn the engine off, place the motorcycle on the side stand and shift the transmission into neutral.
2. Check slack in the lower drive chain run midway between the sprockets. Drive chain slack should be adjusted to allow the following vertical movement by hand:
   15- 25 mm (5/8 — 1 in)
3. Roll the motorcycle forward. Stop. Check drive chain slack as the wheel rotates. Repeat this procedure several times. Drive chain slack should remain constant. If the chain is slack only in certain sections, some links are kinked and binding. Binding and kinking can frequently be eliminated by lubrication.



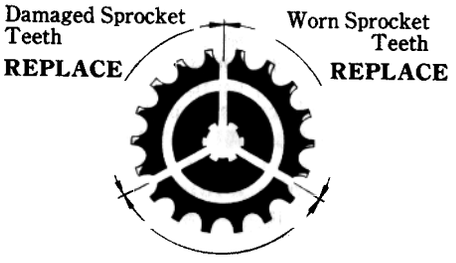
(1) Drive chain

4. Rotate the rear wheel slowly and inspect the drive chain and sprockets for any of the following conditions:

DRIVE CHAIN
- *Damaged Rollers
- *Loose Pins
- *Dry or Rusted Links
- *Kinked or Binding Links
- *Excessive Wear
- *Improper Adjustment
- *Missing O-rings

SPROCKETS
- *Excessively Worn Teeth
- *Broken or Damaged Teeth

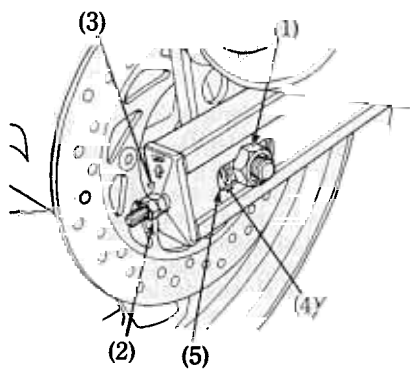
A drive chain with damaged rollers, loose pins, or missing O-rings must be replaced. A chain which appears dry, or shows signs of rust, requires supplementary lubrication. Kinked or binding links should be thoroughly lubricated and worked free. If links cannot be freed, the chain must be replaced.



Normal Sprocket Teeth
GOOD

This motorcycle has a staked master link drive chain which requires a special tool for cutting and staking. Do not use an ordinary master link with this chain. See your authorized Honda dealer.

Adjustment:
Drive chain slack should be checked and adjusted, if necessary, every 600 miles (1,000km). When operated at sustained high speeds or under conditions of frequent rapid acceleration, the chain may require more frequent adjustment.



(1) Axle nut
(2) Lock nut
(3) Adjusting nut
(4) Index mark
(5) Rear edge of adjusting slot

If the drive chain requires adjustment, the procedure is as follows:
1. Place the motorcycle on its side stand with the transmission in neutral and the ignition switch off.
2. Loosen the axle nut (1).
3. Loosen the lock nuts (2) on both right and left swingarm.
4. Turn both adjusting nuts an equal number of turns until the correct drive chain slack is obtained. Turn the adjusting nuts clockwise to tighten the chain, or counterclockwise to provide more slack. Adjust the chain slack at a point midway between the drive sprocket and the rear wheel sprocket. Rotate the rear wheel and recheck slack at other sections of the chain.
Chain slack should be:
15- 25 mm (5/8 — 1 in)

5. Check rear axle alignmemt by making sure the chain adjuster index marks (4) align with the rear edge (5) of the adjusting slots.
6. Both left and right marks should correspond. If the axle is misaligned, turn the left or right adjusting nut until the marks correspond on the rear edge of the adjusting slots and recheck chain slack.
7. Tighten the axle nut to specified torque.
Axle nut torque:
90 N·m (9.0 kg-m, 65 lb-ft)
8. Tighten the adjusting nuts lightly, then tigthten the lock nuts by holding the adjusting nuts with a spanner.

CAUTION:

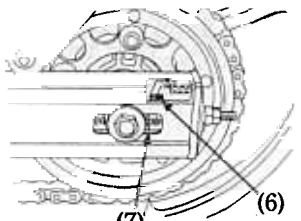
*** The drive chain on this motorcycle is equipped with small O-rings between the link plates. These O-rings retain grease inside the chain to improve its service life. However, special precautions must be taken when adjusting, lubricating, washing and replacing the chain.**

Wear inspection:
Check the chain wear label when adjusting the chain. If the red zone (6) on the label aligns with the arrow mark (7) on the chain adjuster plates after the chain has been adjusted to the proper slack, the chain is excessively worn and must be replaced. The proper slack is:

15—25mm (5/8—1 in)

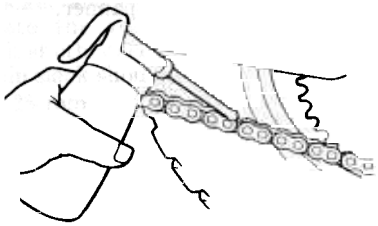
CAUTION:

* **Damage to the bottom part of the frame may be caused by excessive drive chain slack of more than: 50mm (2 in)**



(6) Red zone (7) Arrow mark

Lubrication and cleaning:
Lubricate every 600 miles (1,000 km) or sooner if chain appears dry.
The O-rings in this chain can be damaged by steam cleaning, high pressure washers, and certain solvents. Clean the chain with high flash-point solvent, such as kerosene. Wipe dry and lubricate only with SAE 80 or 90 gear oil. Commercial chain lubricants may contain solvents which could damage the rubber O-rings.
Chain Replacement: See (page 3).

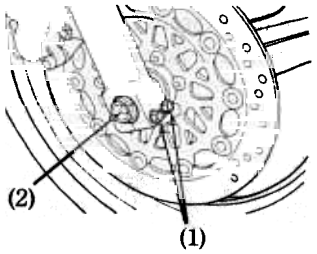


WHEEL REMOVAL

(Refer to the maintenance precautions on page 58).

NOTE

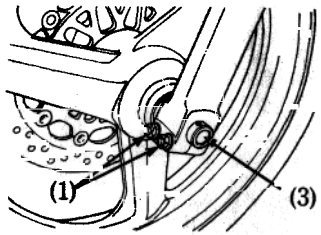
* The california model of this motorcycle is equipped with a side stand only. Therefore, if front or rear wheel removal is required it will be necessary to raise the center of the motorcycle with a jack or other firm support. If none is available, see your authorized Honda dealer for this service.



(1) Axle pinch bolts (2) Axle bolt

Front Wheel Removal

1. Raise the front wheel off the ground by placing a support block under the engine.
2. Loosen the right and left axle pinch bolts (1) and remove the axle bolt (2). Remove the front axle (3) and wheel.



(1) Axle pinch bolts (3) Axle

NOTE:

* Do not depress the brake lever when the wheel is off the motorcycle. The caliper piston will be forced out of the cylinder with subsequent loss of brake fluid. If this occurs, servicing of the brake system will be necessary. See your authorized Honda dealer for this service.

Installation Note:

To install the front wheel assembly, position the wheel between the fork legs.

Insert the front axle from the left side, through the left front fork leg and wheel hub.

Install and tighten the axle bolt to the specified torque.

Tighten the axle pinch bolts to the specified torque.

Axle bolt torque:

60 N·m (6.0 kg-m, 43 lb-ft)

Axle pinch bolts torque:

22 N·m (2.2 kg-m, 16 lb-ft)

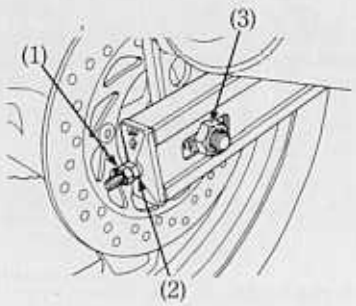
After installing the wheel, apply the brakes several times, and check for free wheel rotation when released.

⚠WARNING

*** If a torque wrench was not used for installation, see your authorized Honda dealer as soon as possible to verify proper assembly. Improper assembly may lead to loss of braking capacity.**

Rear Wheel Removal

1. Raise the rear wheel off the ground by placing a support block under the engine.
2. Loosen the drive chain adjusting nut lock nuts (1) and adjusting nuts (2).
3. Remove the rear axle nut (3).
4. Remove the drive chain (4) from the driven sprocket by pushing the rear wheel forward.

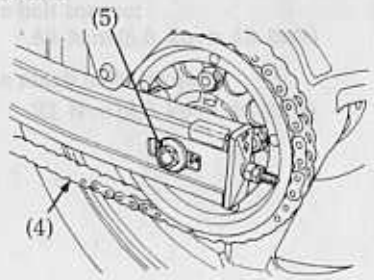


(1) Lock nuts (2) Adjusting nuts
(3) Axle nut

5. Remove the axle shaft (5), side collar and rear wheel from the swing arm.

NOTE:

- Do not depress the brake pedal while the wheel is off the motorcycle. The caliper pistons will be forced out of the cylinders with subsequent loss of brake fluid. If this occurs, servicing of the brake system will be necessary. See your authorized Honda dealer for this service.



(4) Drive chain (5) Axle shaft

Installation Notes

To install the rear wheel, reverse the removal procedure

Tighten the axle nut to specified torque

Axle nut torque:

90 N·m (9.0 kg-m, 65 lb-ft)

After installing the wheel, apply the brakes several times, and check for free wheel rotation when released.

⚠WARNING

If a torque wrench was not used for installation, see your authorized Honda dealer as soon as possible to verify proper assembly. Improper assembly may lead to loss of braking capacity.

SIDE STAND

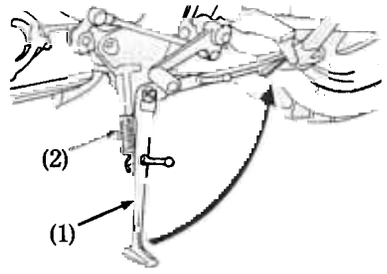
(Refer to the maintenance precautions on page 58).

Check the side stand system for proper function.

- Check the spring for damage or loss of tension and the side stand assembly for freedom of movement.
- Check the side stand ignition cut-off system:

1. Sit astride the motorcycle: put the side stand up and the transmission in neutral.
2. Start the engine and with the clutch lever pulled in, shift the transmission into gear.
3. Move the side stand fully down.
4. The engine should stop as you put the side stand down.

If the side stand system does not operate as described, see your authorized Honda dealer for service.



1) Side stand 2) Spring

BATTERY

(Refer to the maintenance precautions on page 58

It is not necessary to check the battery electrolyte level or add distilled water as the battery is a maintenance-free (sealed) type. If your battery seems weak and/or is leaking electrolyte (causing hard starting or other electrical troubles), contact your authorized Honda dealer.

CAUTION

- **Removing the battery caps can damage the caps and result in leaks and eventual battery damage.**
- **When the motorcycle is to be stored for an extended period of time, remove the battery from the motorcycle and charge it fully. Then store it in a cool, dry place. If the battery is to be left in the motorcycle, disconnect the negative cable from the battery terminal.**

⚠WARNING

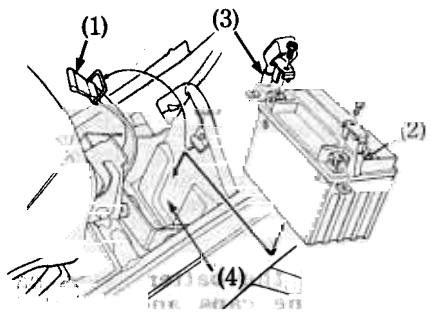
- **The battery gives off explosive gases; keep sparks, flames, and cigarettes away. Provide adequate ventilation when charging or using the battery in an enclosed space.**
- **The battery contains sulfuric acid (electrolyte). Contact with skin or eyes may cause severe burns. Wear protective clothing and a face shield.**
  - **—If electrolyte gets on your skin, flush with water.**
  - **—If electrolyte gets in your eyes, flush with water for at least 15 minutes and call a physician immediately.**
- **Electrolyte is poisonous.**
  - **—If swallowed, drink large quantities of water or milk and follow with milk of magnesia or vegetable oil and call a physician.**

⚠WARNING

* **KEEP OUT OF REACH OF CHILDREN.**

Battery Removal:

1. Remove the seat (page 37).
2. Remove the band (1).
3. Disconnect the negative (–) terminal lead (2) from the battery first, then disconnect the positive (+) terminal lead (3).
4. Pull out the battery from the battery box (4).



(1) Band
(2) Negative (–) terminal lead
(3) Positive (+) terminal lead
(4) Battery box

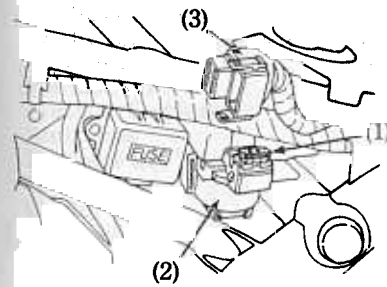
FUSE REPLACEMENT

(Refer to the maintenance precautions on page 56).

The main fuse (1), located on the starter magnetic switch (2) behind the right side cover, is 30 A

The spare main fuse is located on the fuse box.

The fuse box (4) is located behind the right side cover



(1) Main fuse
(3) Wire coupler
(2) Starter magnetic switch

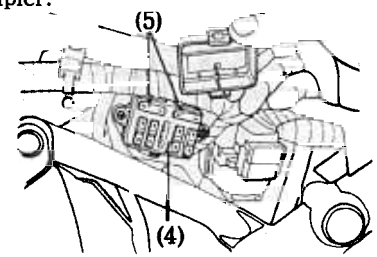
When frequent fuse failure occurs, it usually indicates a short circuit or an overload in the electrical system. See your authorized Honda dealer for repair.

CAUTION:

* **Turn the ignition switch OFF before checking or replacing the fuses to prevent accidental short-circuiting.**

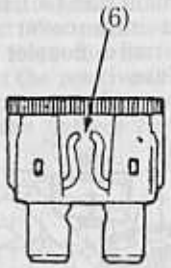
To replace the main fuse (1), remove the seat and right side cover (page 38), disconnect the wire coupler (3) and remove the old fuse.

Install a new fuse and reconnect the wire coupler.



(4) Fuse box
(5) Spare fuses

To replace fuses in the fuse box (4), remove the the fuse box cover.
The spare fuses (5) are located in the fuse box.
Pull the old fuse out of the clips. Push a new fuse into the clips and install the fuse box cover.



(6) Blow fuse

⚠WARNING

* **Never use a fuse with a different rating from that specified. Serious damage to the electrical system or a fire may result, causing a dangerous loss of lights or engine power.**

CLEANING

Clean your motorcycle regularly to protect the surface finishes and inspect for damage, wear and oil, coolant or hydraulic fluid leakage.

CAUTION

* **Avoid spraying high pressure water (typical in coin-operated car washes) at the following areas:**
  Wheel Hubs
  Ignition Switch
  Carburetors
  Brake Master Cylinder
  Instruments
  Handlebar
  Muffler Outlets
  Switches
  Under Fuel Tank
  Drive Chain
  Under Seat

1. After cleaning, rinse the motorcycle thoroughly with plenty of clean water. Strong detergent residue can corrode alloy parts.
2. Dry the motorcycle, start the engine and let it run for several minutes.
3. Test the brakes before riding the motorcycle. Several applications may be necessary to restore normal braking performance.
4. Lubricate the drive chain immediately after washing the motorcycle.

⚠WARNING

* **Braking efficiency may be temporarily impaired immediately after washing the motorcycle. Anticipate longer stopping distance to avoid a possible accident.**

CAUTION:

* **Do not use steel wool or a cleaner containing abrasives or compounds to clean the wheels, as they can cause damage.**

STORAGE GUIDE

Extended storage, such as for winter, requires that you take certain steps to reduce the effects of deterioration from non-use of the motorcycle. In addition, necessary repairs should be made BEFORE storing the motorcycle; otherwise, these repairs may be forgotten by the time the motorcycle is removed from storage.

STORAGE

1. Change the engine oil and filter.
2. Make sure the cooling system is filled with a 50/50 antifreeze solution.
3. Drain the fuel tank and carburetors. Spray the inside of the tank with an aerosol rust-inhibiting oil.
   Reinstall the fuel cap on the tank.

NOTE:

* If storage will last more than one month, carburetor draining is very important, to assure proper performance after storage.

⚠WARNING

* **Gasoline is flammable and is explosive under certain conditions. Do not smoke or allow flames or sparks near the equipment while draining fuel.**

4. Remove the spark plugs and pour a tablespoon (15—20 cc) of clean engine oil into each cylinder. Crank the engine several times to distribute the oil, then reinstall the spark plugs.

NOTE:

* When turning the engine over, the Engine Stop Switch should be OFF and each spark plug placed in its cable cap and grounded to prevent damage to the ignition system.

5. Remove the battery. Store in an area protected from freezing temperatures and direct sunlight.
6. Wash and dry the motorcycle. Wax all painted surfaces. Coat chrome with rust-inhibiting oil
7. Inflate the tires to their recommended pressures. Place the motorcycle on blocks to raise both tires off the ground.
8. Cover the motorcycle (don't use plastic or other coated materials) and store in an unheated area, free of dampness and with a minimum of daily temperature variation Do not store the motorcycle in direct sunlight

REMOVAL FROM STORAGE

1. Uncover and clean the motorcycle. Change the engine oil if more than 4 months have passed since the start of storage.
2. Charge the battery as required. Install the battery.
3. Drain any excess aerosol rust-inhibiting oil from the fuel tank. Fill the fuel tank with fresh gasoline.
4. Perform all Pre-ride Inspection checks (page 39).
   Test ride the motorcycle at low speeds in a safe riding area away from traffic.

SPECIFICATIONS

DIMENSIONS

Overall length	2,035 mm (80.1 in)
Overall width	705 mm (27.8 in)
Overall height	1,025 mm (40.4 in)
Wheelbase	1,370 mm (53.9 in)
Ground clearance	130 mm (5.1 in)

WEIGHT

Dry weight	170.0 kg (374.8 lbs)

CAPACITIES

Engine oil	3.1 ℓ (3.3 US qt, 2.7 Imp qt)	After disassembly
	2.9 ℓ (3.1 US qt, 2.6 Imp qt)	After draining
Fuel tank	11.5 ℓ (3.04 US gal, 2.53 Imp gal)	
Fuel reserve	3.5 ℓ (0.92 US gal, 0.77 Imp gal)	
Cooling system capacity	2.0 ℓ (0.53 US gal, 0.44 Imp gal)	
Passenger capacity load	Operator and one passenger	
Maximum weight capacity	157 kg (347 lbs)	

ENGINE

Bore and stroke		55.0 × 42.0mm (2.16 × 1.65in)
Compression ratio		11.5: 1
Displacement		399 cm³ (24.3 cu-in)
Spark plug		
Standard		CR8EH−9 (NGK) U24FER−9 (ND)
For extended high speed riding		CR9EH−9 (NGK) U27FER−9 (ND)
Spark plug gap		0.8- 0.9 mm (0.03- 0.04 in)
Idle speed		1,300±100rpm 1,400±100rpm (Calif. model)
Valve clearance(cold)	Intake	0.08 mm (0.003 in)
	Exhaust	0.08 mm (0.003 in)

CHASSIS AND SUSPENSION

Caster	25° 30'
Trail	99 mm (3.9 in)
Tire size, front	110/70—17 54H
Tire size, rear	140/70—17 66H

POWER TRANSMISSION

Primary reduction	2.182
Gear ratio, 1st	3.308
2nd	2.353
3rd	1.875
4th	1.591
5th	1.435
6th	1.333
Final reduction	2.733

ELECTRICAL

Battery	12V—8Ah
Generator	0.288kw/ 5,000rpm

LIGHTS

Headlight (HIGH/LOW)		12V—60/55W
Tail/stoplight		12V—3/32cp SAE No.1157
Turn signal light	Front	12V—32cp SAE No.1034
	Rear	12V—32cp SAE No.1073
Instrument lights		12V—1.7W X3
Neutral indicator light		12V—1.7W
Turn signal indicator light		12V—1.7W
High beam indicator light		12V—1.7W
Oil pressure warning light		12V—1.7W
Side stand indicator light		12V—1.7W

FUSE

	10A
	30A(Main fuse)

EMISSION CONTROL SYSTEM (USA ONLY)

Source of Emissions

The combustion process produces carbon monoxide and hydrocarbons. Control of hydrocarbons is very important because under certain conditions, they react to form photochemical smog when subjected to sunlight. Carbon monoxide does not react in the same way, but it is toxic.
Honda Motor Co., Ltd. utilizes lean carburetor settings and other systems to reduce carbon monoxide and hydrocarbons.

Exhaust Emission Control System

Except for California;
The exhaust emission control system is composed of lean carburetor settings, and no adjustment should be made except idle speed adjustment with the throttle stop screw. The exhaust emission control system is separate from the crankcase emission control system.
California only;
The exhaust emission system consists of a secondary air supply system which introduces filtered air into the exhaust gases in the exhaust port. No adjustments to this system should be made although periodic inspection of the components is recommended. The secondary air supply system helps improve emission performance.

Evaporative Emission Control System (California only)

This motorcycle complies with the California Air Resources Board (CARB) requirements for evaporative emission regulations. Fuel vapor from the fuel tank and carburetor is directed into the charcoal canister and air cleaner where it is adsorbed and stored while the engine is stopped.
When the engine is running and the purge control diaphragm valve is open, fuel vapor in the charcoal canister and air cleaner is drawn into the engine through the carburetor.

Crankcase Emission Control System

The engine is equipped with a closed crankcase system to prevent discharging crankcase emissions into the atmosphere.
Blow-by gas is returned to the combustion chamber through the air cleaner and the carburetor.

TAMPERING WITH THE NOISE CONTROL SYSTEM IS PROHIBITED: Federal law prohibits the following acts or the causing thereof: (1) The removal or rendering inoperative by any person, other than for purposes of maintenance, repair, or replacement, of any device or element of design incorporated into any new vehicle for the purpose of noise control prior to its sale or delivery to the ultimate purchaser or while it is in use; or (2) the use of the vehicle after such device or element of design has been removed or rendered inoperative by any person.

AMONG THOSE ACTS PRESUMED TO CONSTITUTE TAMPERING ARE THE ACTS LISTED BELOW:

1. Removal of, or puncturing the muffler, baffles, header pipes or any other component which conducts exhaust gases.
2. Removal of, or puncturing any part of the intake system.
3. Lack of proper maintenance.
4. Replacing any moving parts of the vehicle, or parts of the exhaust or intake system, with parts other than those specified by the manufacturer.

Problems that May Affect Motorcycle Emissions

If you are aware of any of the following symptoms, have the vehicle inspected and repaired by your authorized Honda Motorcycle Dealer:

1. Hard starting or stalling after starting
2. Rough idle
3. Misfiring or backfiring during acceleration
4. After-burning (backfiring)
5. Poor performance (driveability) and poor fuel economy

MEMO