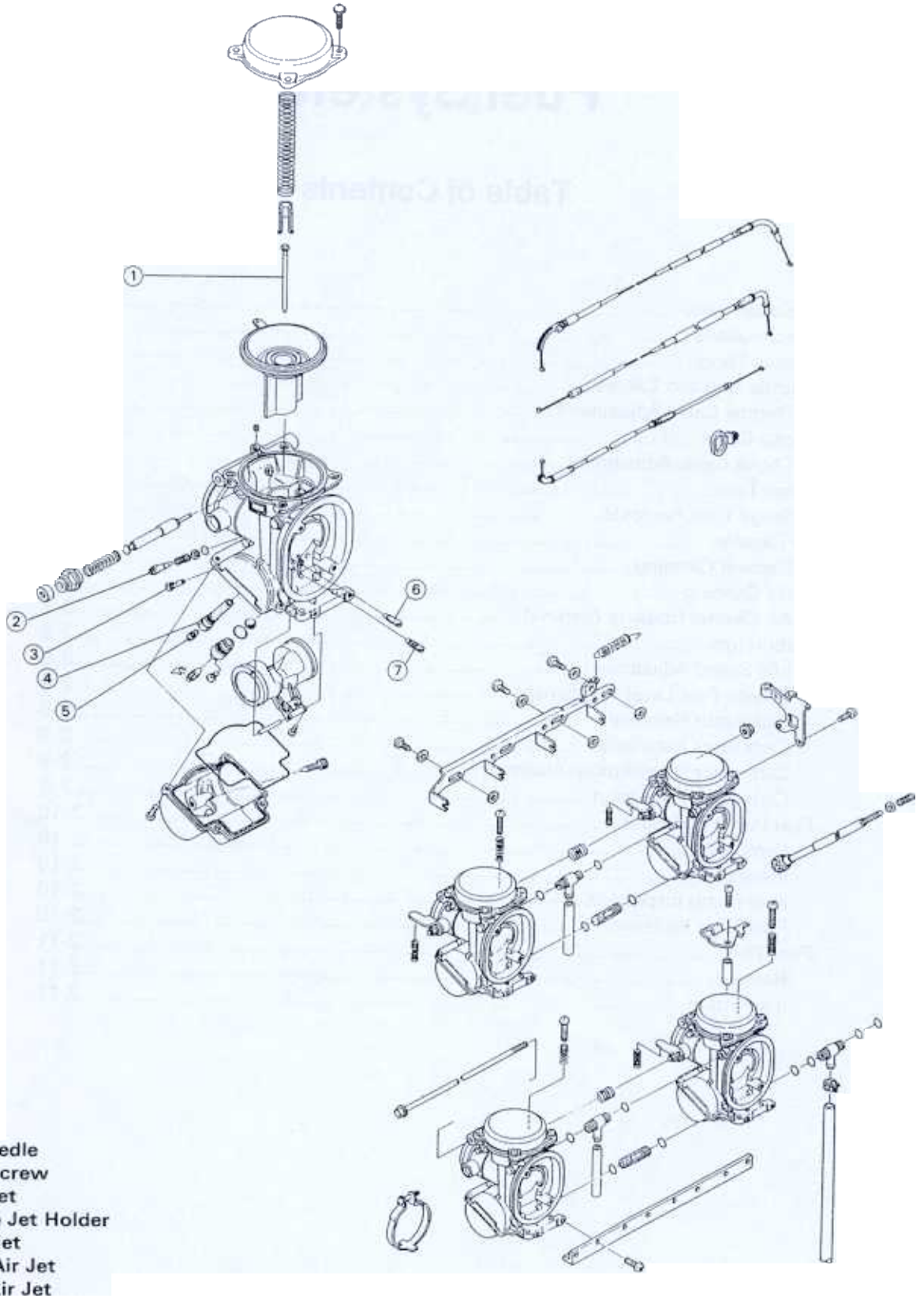
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Fuel System

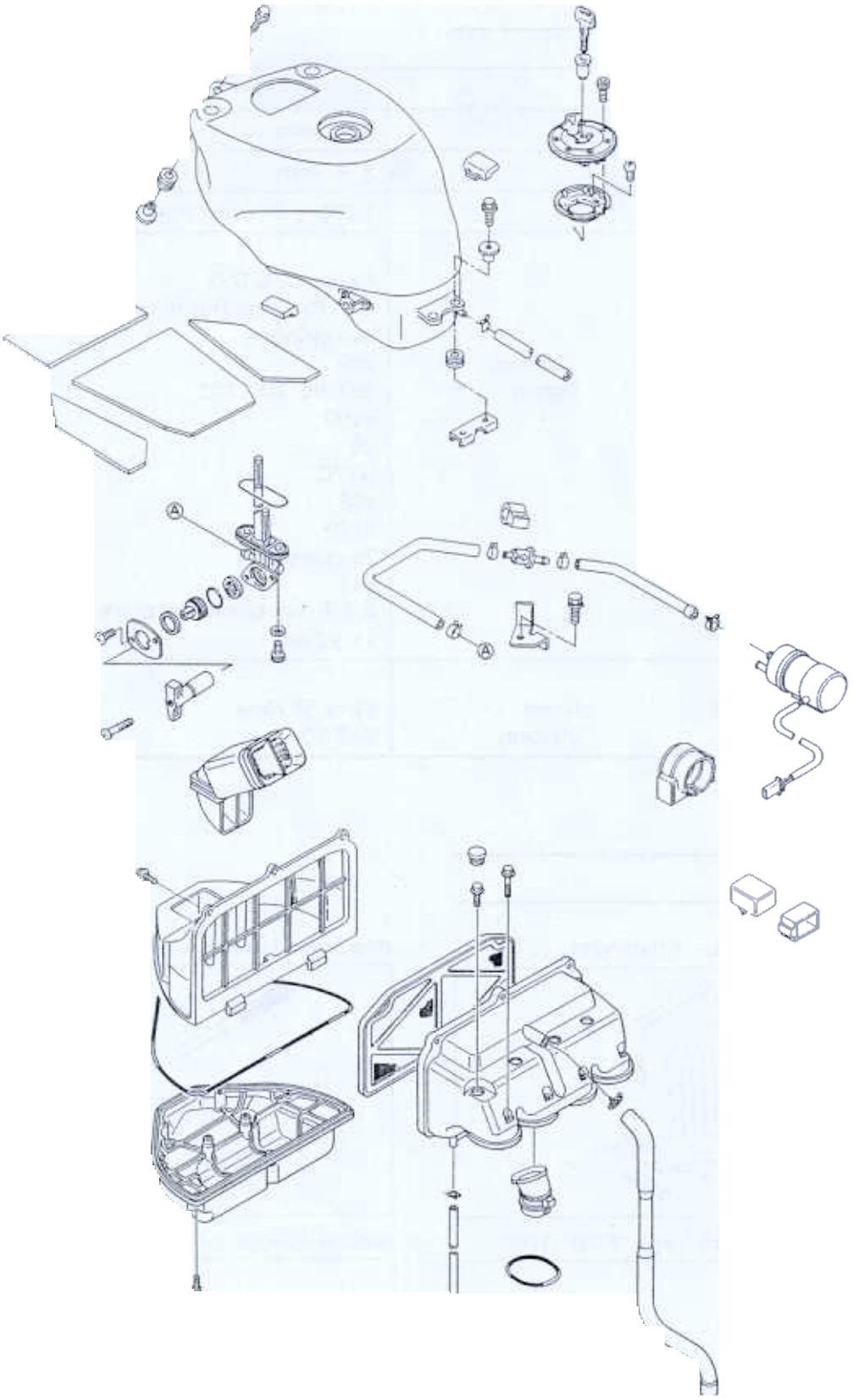
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Exploded View



1. Jet Needle
2. Pilot Screw
3. Pilot Jet
4. Needle Jet Holder
5. Main Jet
6. Main Air Jet
7. Pilot Air Jet



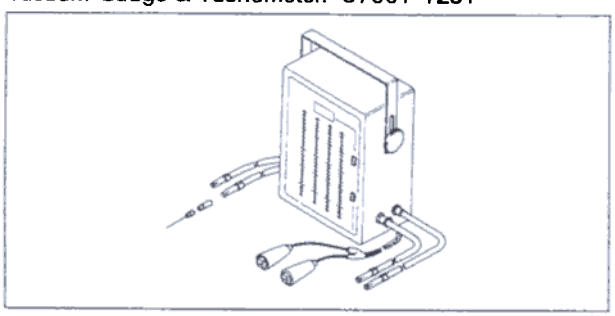
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Specifications

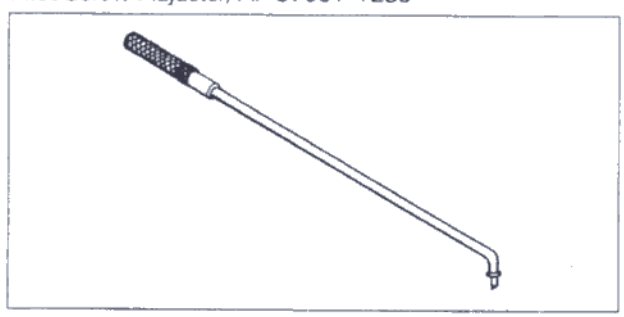
Item		Standard
Throttle Grip Free Play		2 ~ 3mm
Choke Cable Free Play		2 ~ 3mm
Idle Speed		1 200 ± 50 r/min (rpm)
Carburetor Specifications:		
Make/type		Keihin/CVK-D32
Synchronization vacuum		2.7 kPa (2 cm Hg) or less difference between two cylinders
Main jet	Standard	#98
	Option	#92, 95, 100, 102
Main air jet		#100
Needle jet		#6
Jet needle mark		N77C
Pilot jet (slow jet)		#35
Pilot air jet		#120
Pilot screw		2¼ (turns out)
Starter jet		#45
Service fuel level		8 ± 1 mm below the mark
Float height		11 ±2 mm
Air Cleaner:		
Air cleaner element oil:	Grade	SE or SF class
	Viscosity	SAE 30

Special Tools

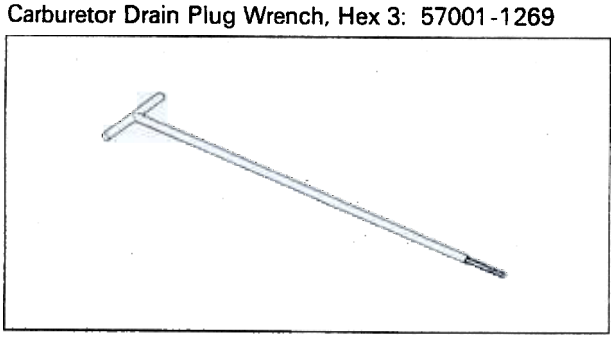
Vacuum Gauge & Tachometer: 57001-1291



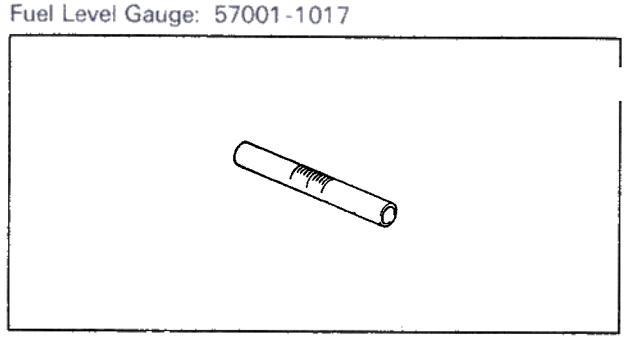
Pilot Screw Adjuster, A: 57001-1239



Carburetor Drain Plug Wrench, Hex 3: 57001-1269



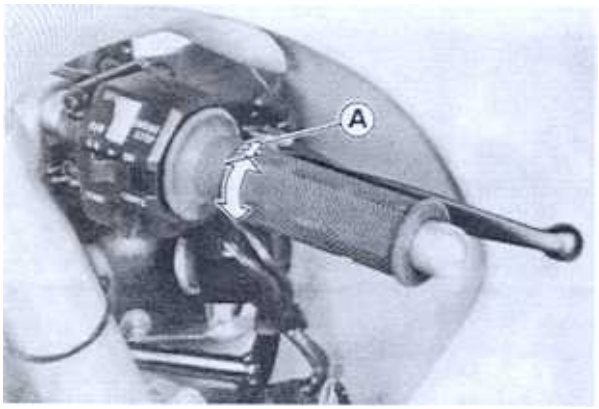
Fuel Level Gauge: 57001-1017



Throttle Grip and Cables

Throttle Cable Adjustment

●Check throttle grip free play.

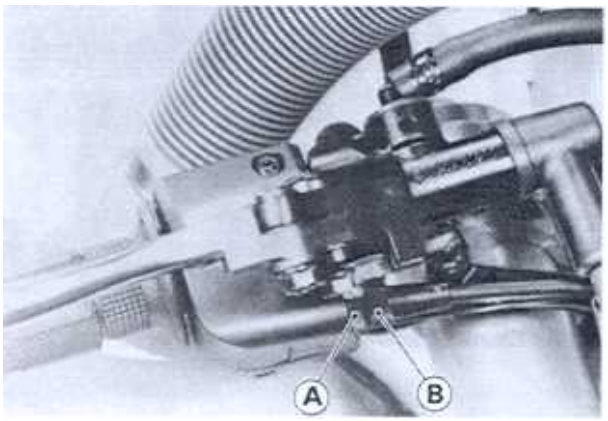


A. Throttle Grip Free Play

Throttle Grip Free Play

Standard: 2 ~ 3 mm

★If the free play is incorrect, loosen the locknut and turn the adjuster of the accelerator cable until the proper amount of throttle grip play is obtained.



A. Locknut B. Adjuster

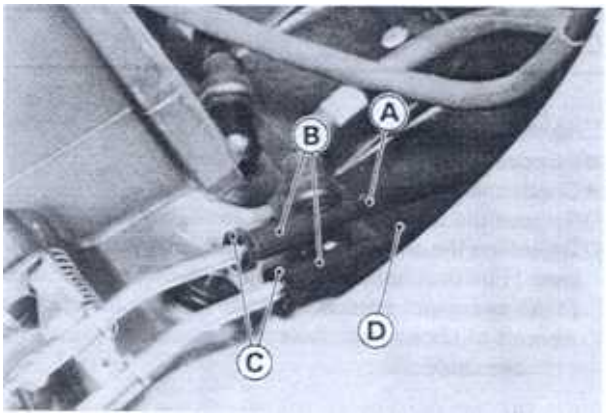
●Tighten the locknut against the adjuster securely.

★If the play can not be adjusted by using the adjuster at the throttle grip, use the adjusters at the carburetors.

●Remove the fuel tank (see Fuel Tank Removal).

●Remove the surge tank (see Surge Tank Removal).

●Screw in the adjuster fully at the throttle grip and tighten the locknut.



A. Accelerator Cable C. Locknut
B. Adjuster D. Decelerator Cable

●Loosen all the adjuster and slide both throttle cables at the carburetor to obtain the specified free play.

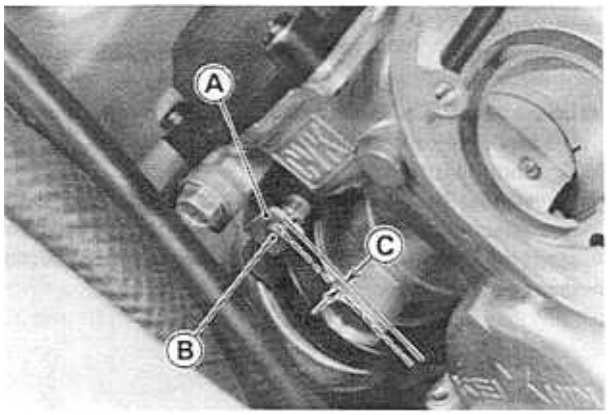
●Tighten the locknuts.

●Check that the throttle linkage lever stops against the idle adjusting screw with the throttle grip released and stops against the carburetor stopper with the throttle grip opened.

Choke Cable

Choke Cable Adjustment

● Remove surge tank (see this chapter).
● Check choke cable free play.
○ Remove the fuel tank (see Fuel Tank Removal).
○ Determine the amount of choke cable play at the choke lever. Pull the choke lever until the starter plunger lever at the carburetor contacts with the starter plunger; the amount of choke lever lower end travel is the amount of choke cable play.

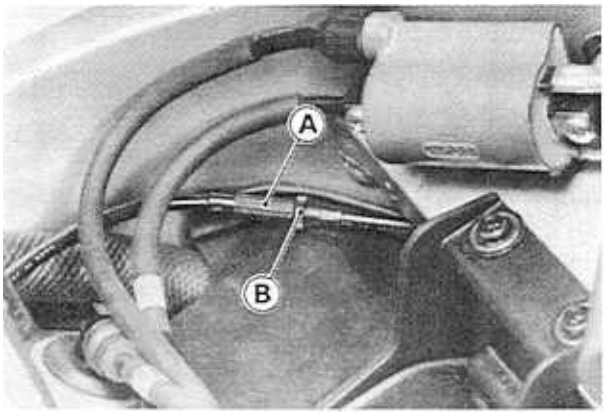


A. Starter Plunger Lever C. Play
B. Starter Plunger

Choke Cable Play

Standard: 2 ~ 3 mm

★If the play is incorrect, loosen the locknut and turn the adjuster at the middle of the cable until the proper amount of choke cable play is obtained.



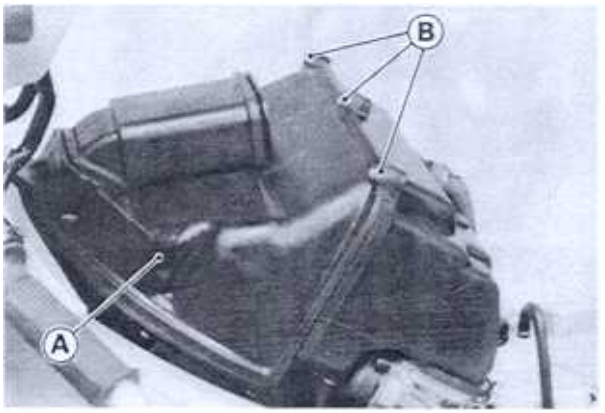
A. Adjuster B. Locknut

● Tighten the locknut against the adjuster securely.

Surge Tank

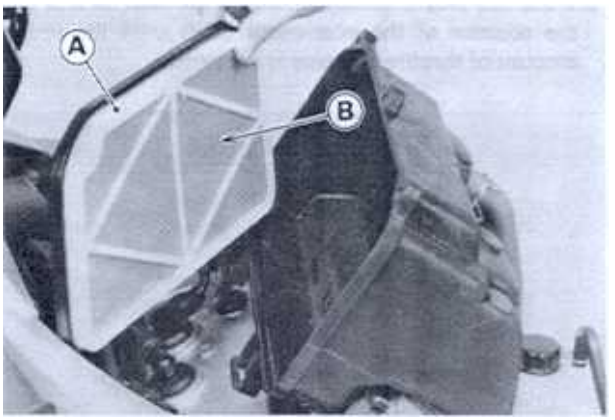
Surge Tank Removal

● Remove the fuel tank (this chapter).
● Remove the surge tank.



A. Surge Tank B. Mounting Bolt

● Install the air cleaner element so that the mesh side faces the carburetor.



A. Air Cleaner Element B. Mesh Side

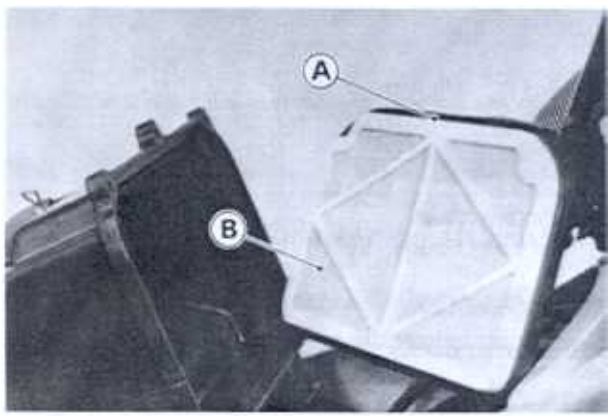
Air Cleaner

Element Cleaning

⚠WARNING

Clean the element in a well-ventilated area, and take care that there is no spark or flame anywhere near the working area; this includes any appliance with a pilot light. Because of the danger of highly flammable liquids, do not use gasoline or low-flash point solvents to clean the element. A fire or explosion could result.

- Remove the surge tank (see this chapter)
- Take out the air cleaner element.



A. Air Cleaner Element B. Element Mesh

⚠WARNING

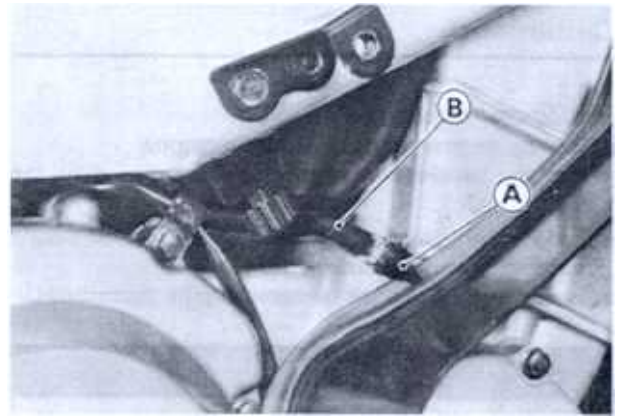
If dirt or dust is allowed to pass through into the carburetors, the throttle may become stuck, possibly causing accident.

- Wash the element in a bath of high-flash point solvent and then dry it with compressed air or by shaking it.
- After cleaning, saturate a clean, lint-free towel with SE or SF class SAE30 oil and apply the oil to the element by tapping the foam side of the element with the towel.
- Install the element so that the mesh side faces the carburetor.

Oil Draining

A drain hose is connected to the bottom of the air cleaner housing, to drain oil accumulated at the bottom of the housing.

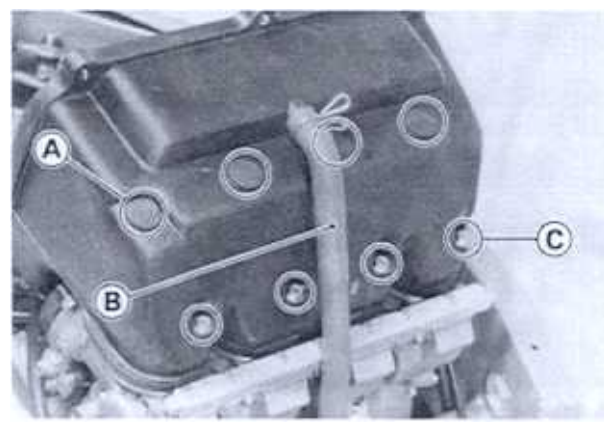
- Drain oil by taking off the plug at the lower end of the drain hose.



A. Plug B. Drain Hose

Air Cleaner Housing Removal

- Remove the following.
  - Fuel Tank (see Fuel Tank Removal)
  - Serge Tank
  - Air Cleaner Element (see Element Cleaning)
  - Crankcase Breather Hose
- Remove the air cleaner housing.



A. Plugs and Bolts C. Bolts
B. Crankcase Breather Hose

Carburetors

Idle Speed Adjustment

- Start the engine and warm it up thoroughly.
- Turn the handlebar from side to side while idling the engine.
- ★If idle speed varies, the throttle cables may be poorly routed or they may be damaged.
- Correct any problem before operating the motorcycle.

⚠WARNING

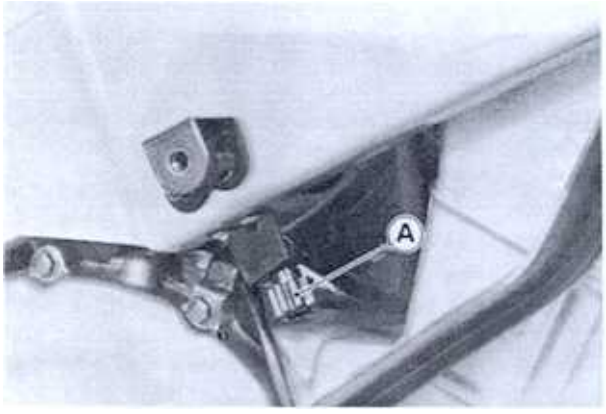
Operation with an improperly adjusted, incorrectly routed, or damaged cable could result in an unsafe riding condition.

- Check idle speed.

Idle Speed

Standard: 1200 ±50 r/min (rpm)

- Turn the idle adjusting screw until idle speed is correct.



A. Idle Adjusting Screw

Service Fuel Level Adjustment

⚠WARNING

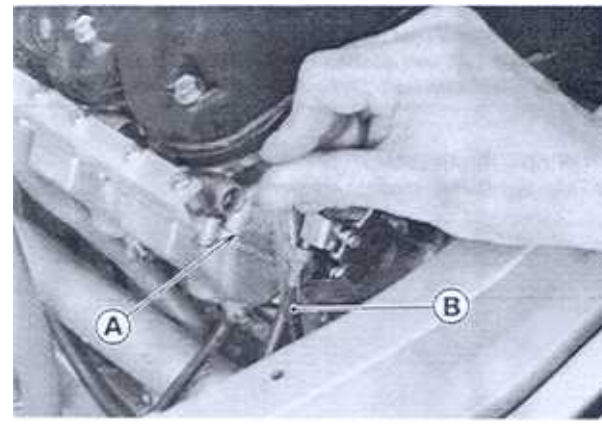
Gasoline is extremely flammable and can be explosive under certain conditions. Turn the ignition switch OFF. Do not smoke. Make sure the area is well ventilated and free from any source of flame or sparks; this includes any appliance with a pilot light.

- Remove the fuel tank and air cleaner housing (see this chapter).
- Connect a fuel tank to the carburetors with a suitable hose.
- Prepare a fuel hose (6 mm in diameter and 300 mm in length).
- Connect the fuel level gauge (special tool) to the carburetor float bowl with the fuel hose.
- Situate the motorcycle so that it is perpendicular to the ground.
- Check the fuel level as shown.

○Turn out the carburetor drain plug a few turns. Wait until the fuel level in the gauge settles.

NOTE

○*Keeping the gauge vertical, align the top line with the mark on the carburetor body right side. Then turn out the drain plug to feed fuel to the gauge.*

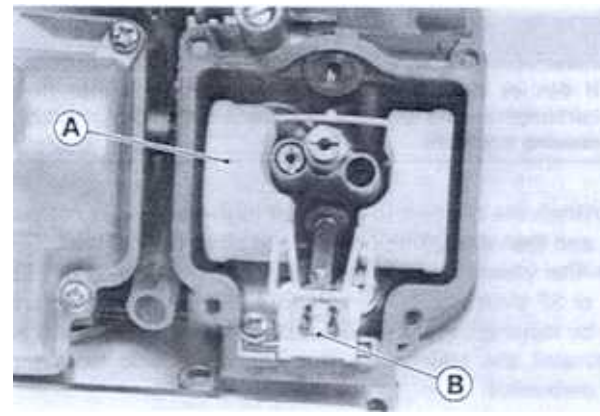


A. Fuel Level Mark
B. Fuel Level Gauge: 57001-1017

Service Fuel Level

8 ±1 mm below the mark on the carburetor body

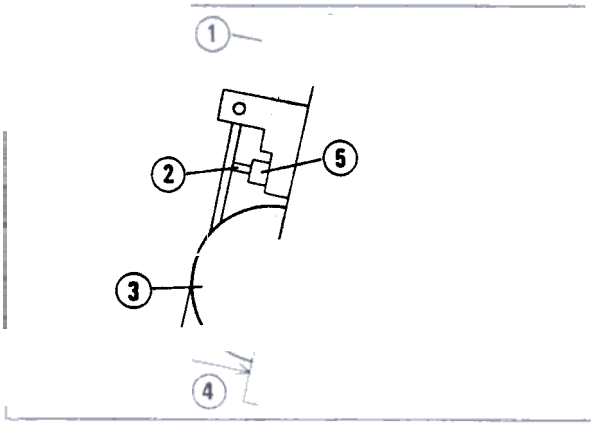
- To adjust the fuel level, remove the float bowl, and bend the tang on the float arm to change the float height.



A. Float B. Tang

- Measure the float height tilting the carburetor so that the tang on the float just touches the needle rod in the float valve.

○Increasing the float height lowers the fuel level and decreasing the float height raises the fuel level.



1. Bottom Edge of Carburetor Body
2. Needle Rod
3. Float
4. Float Height
5. Float Valve

Float Height

Standard: **11 ±2 mm**

NOTE

○*Do not push the needle rod in during the float height measurement.*

Carburetor Removal

⚠WARNING

Gasoline is extremely flammable and can be explosive under certain conditions. Turn the ignition switch OFF. Do not smoke. Make sure the area is well ventilated and free from any source of flame or sparks; this includes any appliance with a pilot light.

- Remove the following.
  - Fuel Tank (see Fuel Tank Removal)
  - Surge Tank (see Surge Tank Removal)
  - Air Cleaner Housing (see Air Cleaner Housing Removal)
  - Idle Adjuster
  - Fuel Hoses
- Loosen the carburetor clamps and remove the carburetors.

Carburetor Installation

- Install the holder clamps as shown being careful of the screw position and the screw head direction (see Engine Top End chapter).

⚠WARNING

Be sure to install the holder clamp screws in the direction shown. Or, the screws could come in contact with the throttle linkage resulting in an unsafe riding condition.

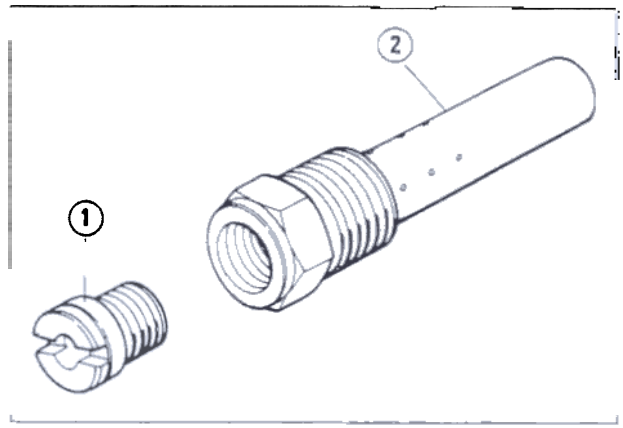
Carburetor Disassembly/Assembly

⚠WARNING

Gasoline is extremely flammable and can be explosive under certain conditions. Turn the ignition switch OFF. Do not smoke. Make sure the area is well ventilated and free from any source of flame or sparks; this includes any appliance with a pilot light.

CAUTION

During carburetor disassembly, be careful not to damage the diaphragm. Never use a sharp edge to remove the diaphragm.
Do not force the needle jet holder (air bleed pipe) and main jet or overtighten them. They could be damaged requiring replacement.



1. Main Jet 2. Needle Jet Holder

★If the needle jet is damaged, replace the carburetor.

Carburetor Inspection

⚠WARNING

Gasoline is extremely flammable and can be explosive under certain conditions. Turn the ignition switch OFF. Do not smoke. Make sure the area is well ventilated and free from any source of flame or sparks; this includes any appliance with a pilot light.

- Slide the starter plunger lever right to left to check that the starter plungers move smoothly and return with spring tension.

★If the starter plungers do not work properly, replace the carburetors.

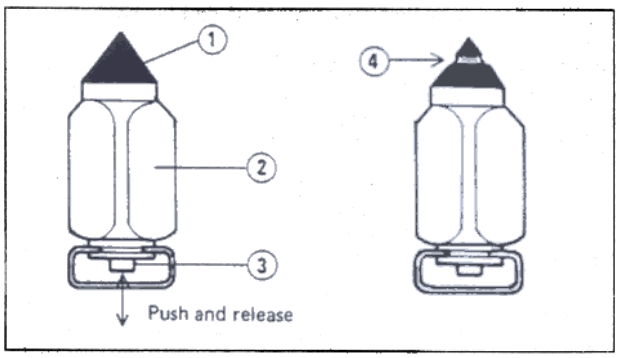
- Turn the throttle cable lever to check that the throttle butterfly valves move smoothly and return by spring tension.

★If the throttle valves do not move smoothly. Replace the carburetors.

- Check that the O-rings on the float bowl and pilot screws and the diaphragm on the vacuum piston are in good condition.

★If any of the O-rings or diaphragms are not in good condition, replace them.

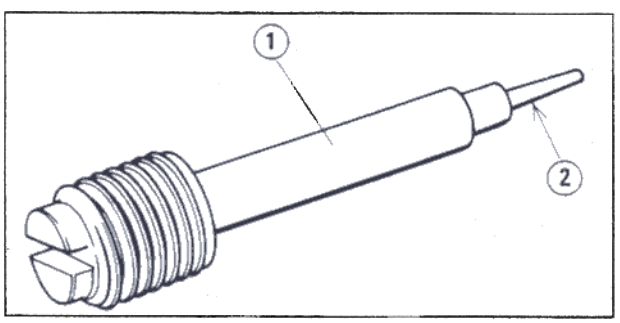
- Check the plastic tip of the float valve needle. It should be smooth without any grooves, scratches, or tears.



1. Plastic Tip
2. Valve Needle
3. Rod
4. Valve Needle Wear

★If the plastic tip is damaged, replace the needle.

- Check the tapered portion of the pilot screw for wear or damage.



1. Pilot Screw
2. Tapered Portion

★If the pilot screw is worn or damaged on the tapered portion, it will prevent the engine from idling smoothly. Replace it.

Fuel Pump and Filter

⚠WARNING

Gasoline is extremely flammable and can be explosive under certain conditions. Turn the ignition switch OFF. Do not smoke. Make sure the area is well ventilated and free from any source of flame or sparks; this includes any appliance with a pilot light.;br Be prepared for fuel spillage.

Removal

- Remove the following.
  Right Side Cover (see Frame chapter)
  Fuel Hoses
- Disconnect the pump lead connector.
- Remove the fuel pump and filter.

Installation

- Connect the fuel hoses.

○Install the fuel filter so that the arrow on it shows the fuel flow from the fuel tank to the fuel pump.

○Be sure to route the hoses so that they will not be kinked or stretched.

Fuel Pump Inspection

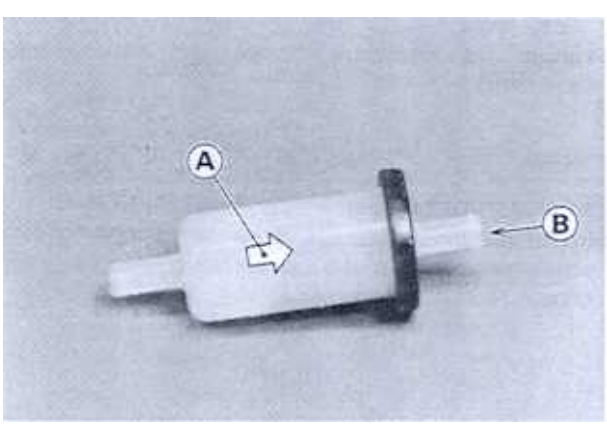
Refer to the Electrical System chapter.

Fuel Filter Inspection

- Visually inspect the fuel filter according to the Periodic Maintenance Chart (see General Information chapter).

★If the filter is clear with no signs of dirt or other contamination, it is OK and need not be replaced.

★If the filter is dark or looks dirty, replace it. Also, check the rest of the fuel system for contamination.



A. Arrow Mark
B. Blow

Fuel Tank

Removal

● Turn the fuel tap to the OFF position to stop the fuel flow.

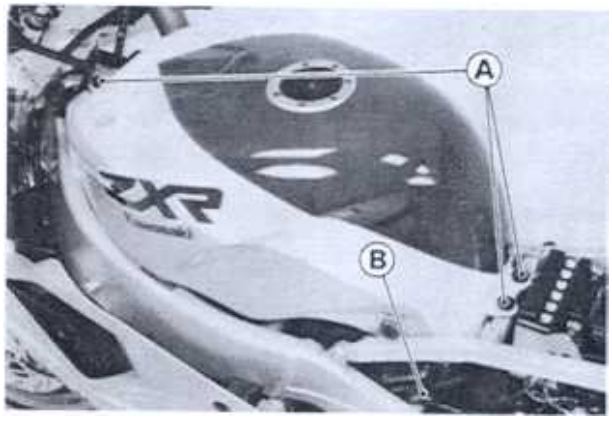
⚠WARNING

Gasoline is extremely flammable and can be explosive under certain conditions. Turn the ignition switch OFF. Do not smoke. Make sure the area is well ventilated and free from any source of flame or sparks; this includes any appliance with a pilot light.

CAUTION

If gasoline, solvent, water, or any other liquid enters the canister, the canister's vapor absorbing capacity is greatly reduced. If the canister does become contaminated, replace it with a new one.

● Remove the following.
Front Seat (see Frame chapter)
Side Cover Assembly
Fuel Tank Mounting Bolts
Fuel Tap with Fuel Hoses left installed and Fuel Hose to the carburetor removed
Air Duct Clamp



A. Mounting Bolts B. Fuel Tap

NOTE

○ *To take the air ducts out, remove the duct pawls from the inside of the fuel tank.*

● Remove the fuel tank.

Installation

● Install the fuel tank hoses.