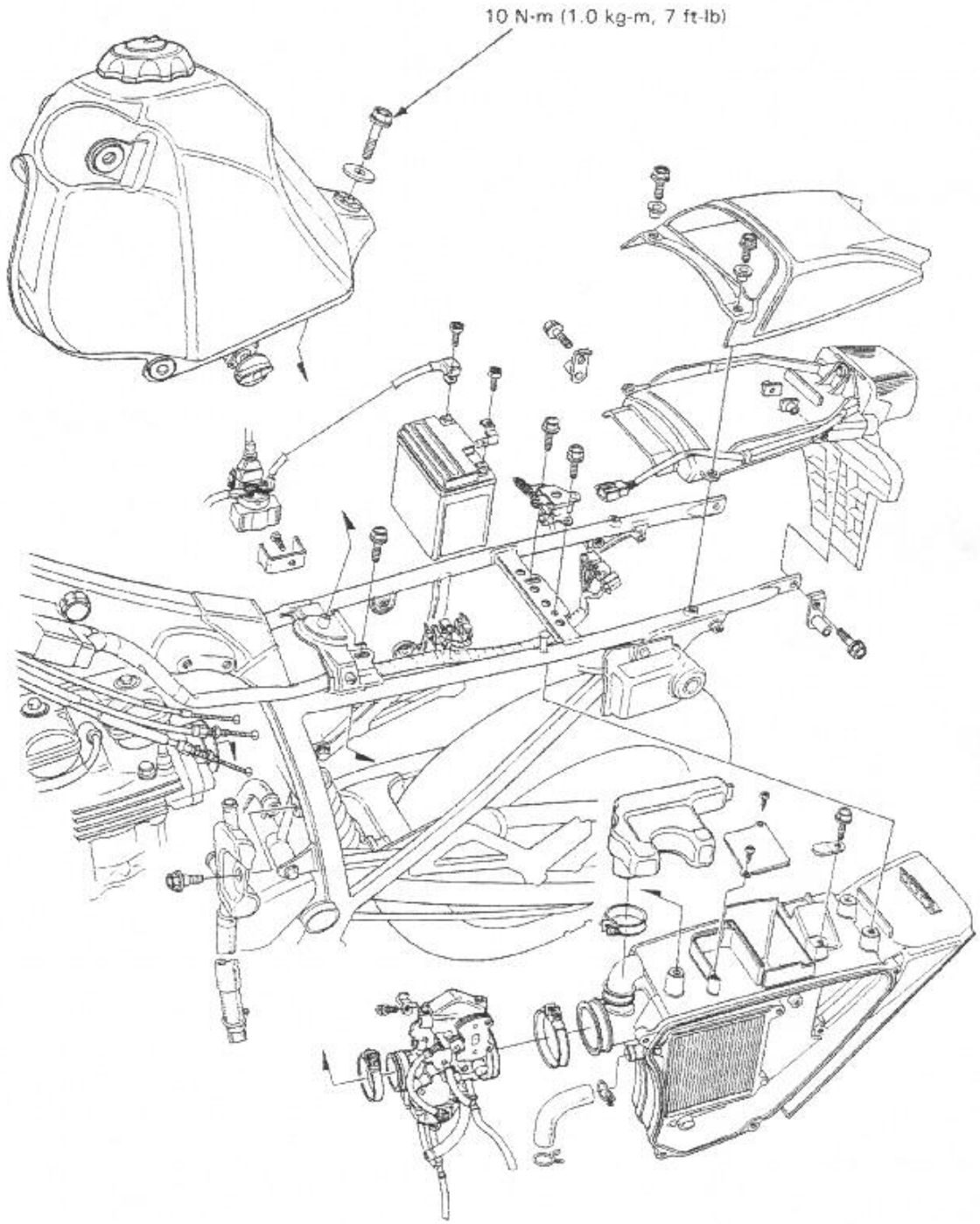
4

FUEL SYSTEM

CIRCUIT D'ALIMENTATION

KRAFTSTOFFSYSTEM


10 N·m (1.0 kg-m, 7 ft-lb)

SERVICE INFORMATION

⚠ WARNING

- *Gasoline is extremely flammable and is explosive under certain conditions work in a well ventilated area with the engine stopped. Work in a well ventilated area. Do not smoke or allow flames or sparks in the work area or where gasoline is stored.*
- *If the engine must be running to do some work, make sure the area is well-ventilated. Never run the engine in an enclosed area. The exhaust contains poisonous carbon monoxide gas that may cause loss of consciousness and lead to death.*

GENERAL

- When disassembling fuel system parts, note the locations of the O-rings. Replace them during reassembly.
- The carburetor float bowl has a drain plug that can be loosened to drain residual fuel.

CAUTION

- *Do not bend or twist control cables. Damaged control cables will not operate smoothly and may stick or bind.*

NOTE

- If the vehicle is to be stored for more that one month, drain the float bowl. Fuel left in the float blow may cause clogged jets resulting in hard starting or poor driveability.

SPECIFICATIONS

Type	Piston valve carburetor
Venturi dia.	32 mm (1.3 in)
Identification No.	PD6BA [P] GII type: PD6B8 F type: PD6BC
Float level	14 mm (0.55 in)
Main jet	#138 GII type: #145 F type: #142
Slow jet	#38
Idle speed	1,300 ± 100 min^{-1} (rpm)
Throttle grip free play	2–6 mm (1/16–1/4 in)
Pilot screw initial opening	1-1/2 GII type 2-5/8

TORQUE VALUE

Fuel tank mounting bolt	10 N·m (1.0 kg-m, 7 ft-lb)
Engine mounting 10 mm bolt	75 N·m (7.5 kg-m, 54 ft-lb)
Engine bracket 8 mm bolt	27 N·m (2.7 kg-m, 20 ft-lb)

TOOLS

Special

Pilot screw wrench	07908–4730001

Common

Float level gauge	07401–0010000

TROUBLESHOOTING

Engine cranks but won't start
- No fuel in tank
- No fuel to carburetor
- Engine flooded with fuel
- No spark at plug (ignition system malfunction)
- Clogged air cleaner
- Intake air leak
- Improper choke operation
- Improper throttle operation

Hard starting or stalling after starting
- Improper choke operation
- Ignition malfunction
- Faulty carburetor
- Fuel contaminated
- Intake air leak
- Incorrect idle speed
- Incorrect valve clearance (Section 3)

Rough idle
- Ignition system malfunction
- Incorrect idle speed
- Incorrect valve clearance (Section 3)
- Cylinder compression too low
- Faulty carburetor
- Fuel contaminated
- Dirty air cleaner

Misfiring during accceleration
- Ignition system malfunction

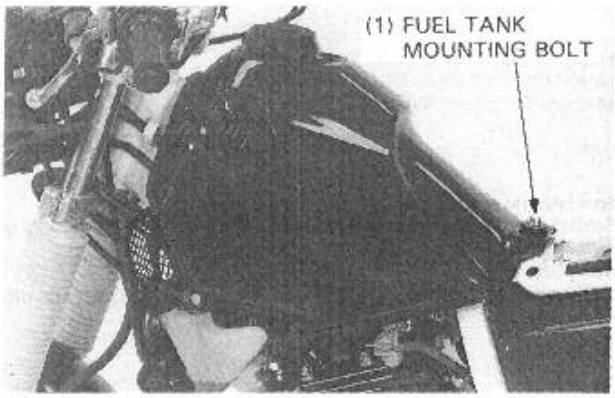
Backfiring
- Ignition system malfunction
- Faulty carburetor

Poor performance (driveability) and poor fuel economy
- Clogged fuel system
- Ignition system malfunction
- Dirty air cleaner

Lean mixture
- Clogged fuel jets
- Faulty float valve
- Low float level
- Clogged fuel tank breather
- Clogged fuel strainer
- Restricted fuel line
- Intake air leak

Rich mixture
- Carburetor choke stuck closed
- Faulty float valve
- Float level too high
- Dirty air cleaner

FUEL TANK



REMOVAL

⚠ WARNING

- ***Gasoline is extremely flammable and is explosive under certain conditions. Work in a well ventilated area with the engine stopped. Do not smoke or allow flames or sparks in the work area or where gasoline is stored.***

Remove the seat and side fairings (page 15-2).
Turn the fuel valve off, and disconnect the fuel tube.

Remove the mounting bolt and the fuel tank.
Check that the fuel flows out of the fuel valve freely.
If flow is restricted, clean the fuel strainer.

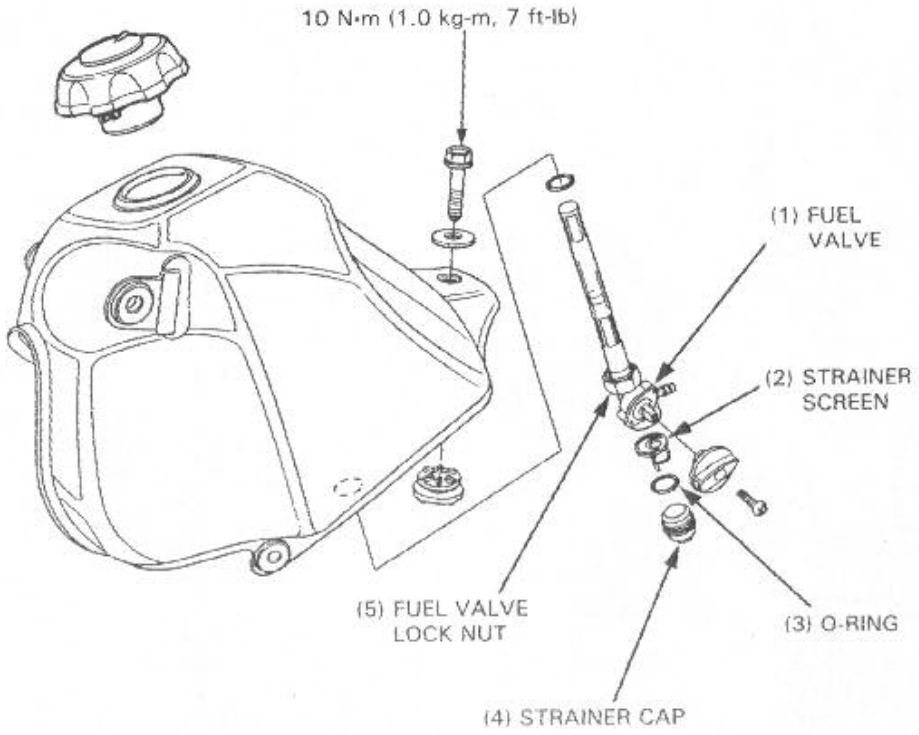
INSTALLATION

Install the fuel tank with the mounting bolt.
Connect the fuel line.

NOTE

- After assembling, make sure there are no fuel leaks. Do not overtighten the fuel valve lock nut.

Reinstall the fairings and the seat.



AIR CLEANER CASE

REMOVAL

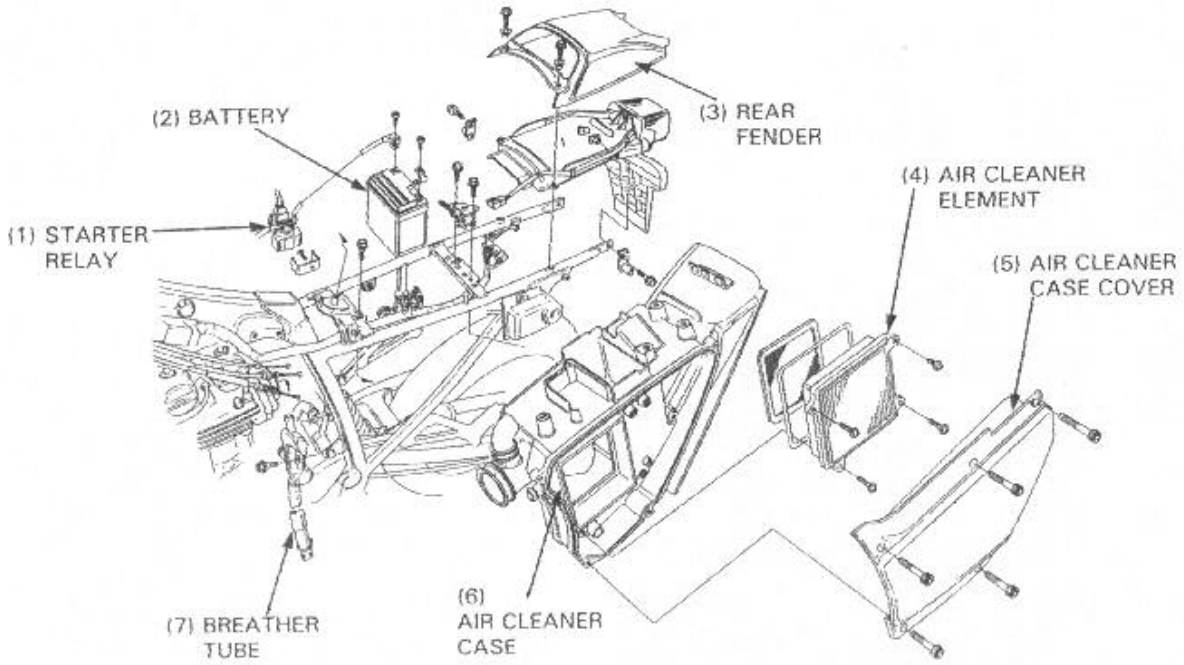
Remove the following;
- seat and fuel tank (page 4-3).
- air cleaner case cover.
- air cleaner case mounting bolts.

Disconnect the taillight connector, starter relay switch and breather tube from the air cleaner case.

Remove the following;
- carburetor (page 4-5).
- exhaust pipe/muffler (page 15-1).
- regulator/rectifier (page 16-6).
- battery (page 16-4).
- rear fender.
- air cleaner case.

INSTALLATION

Install the removed parts in the reverse order of removal.

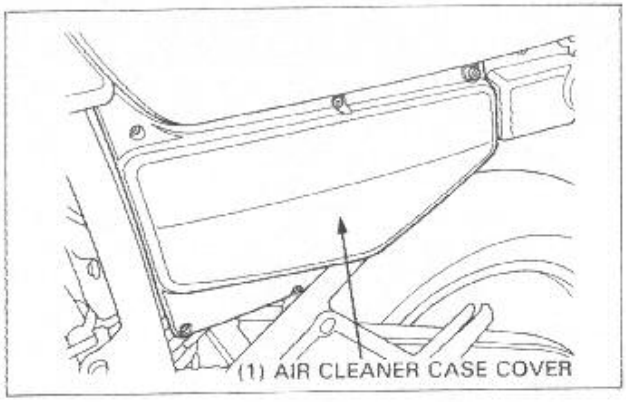


CARBURETOR REMOVAL

WARNING

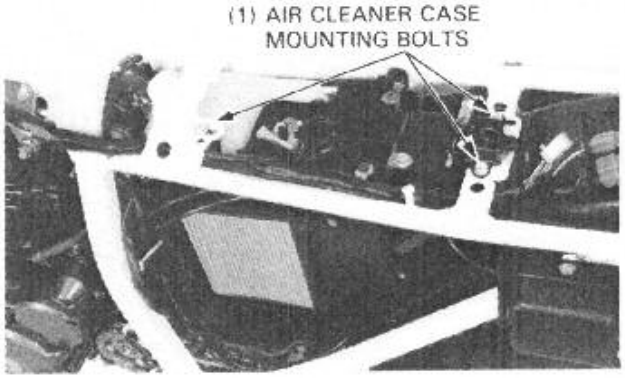
- *Gasoline is extremely flammable and is explosive under certain conditions. Work in a well ventilated area with the engine stopped. Do not smoke or allow flames or sparks in the work area or where gasoline is stored.*

Remove the following:
— seat and fuel tank (page 4-3).
— rear side cover and air cleaner case cover (page 15-2).

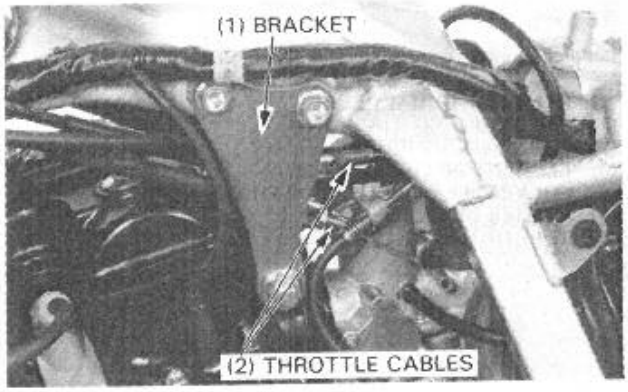


Loosen the carburetor drain screw and drain the fuel into a container.

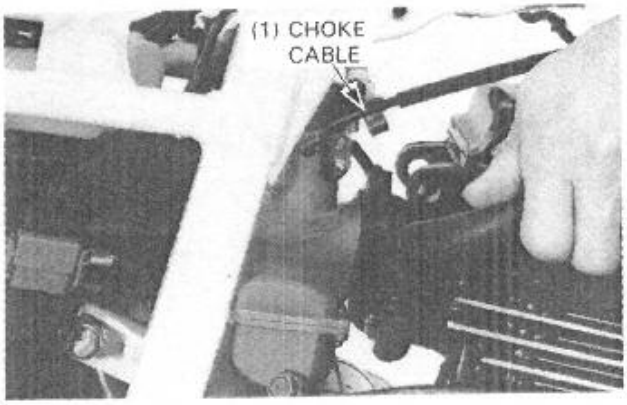
Remove the air cleaner case mounting bolts.



Remove the upper engine bracket and disconnect the throttle cables.

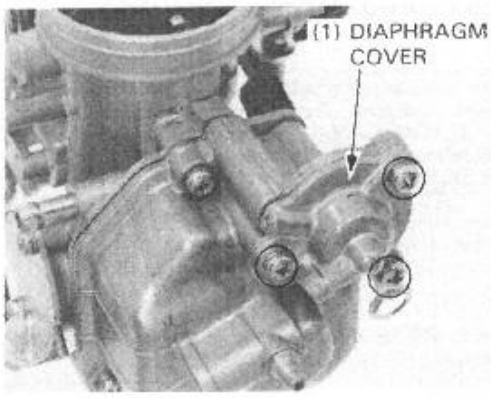


Disconnect the choke cable and loosen the carburetor insulator band screws, then remove the carburetor from the left side.



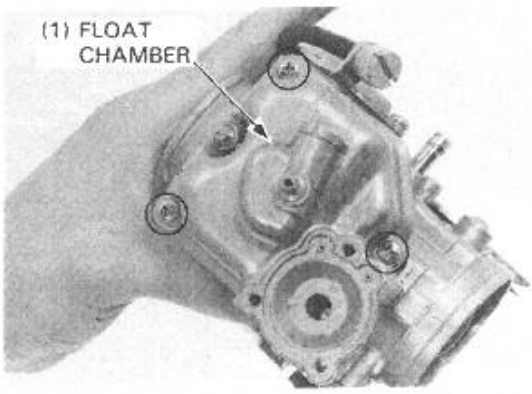
CARBURETOR DISASSEMBLY

Remove the three screws and the accelerator diaphragm cover.
Remove the diaphragm spring and diaphragm.

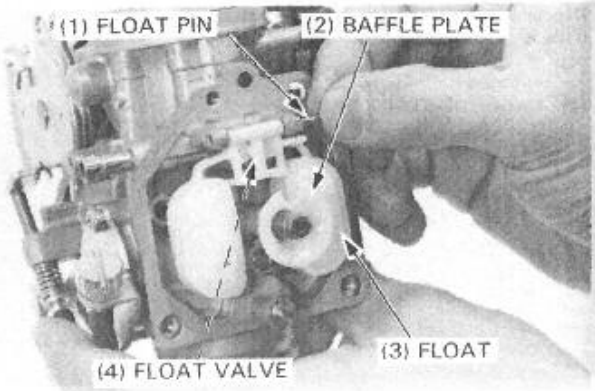


Check the diaphragm for a tear deterioration.
Check the rod for wear and trueness.

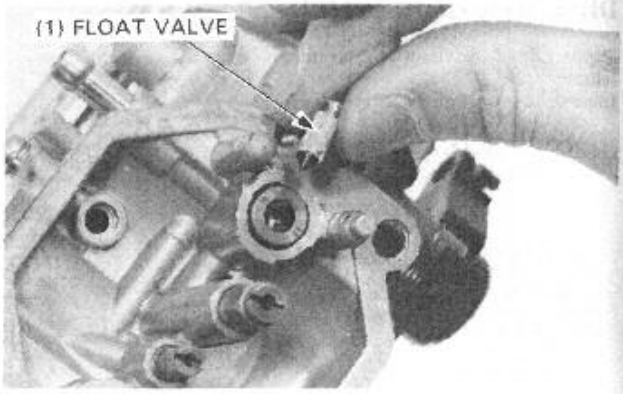
Remove the three screws and the float chamber.



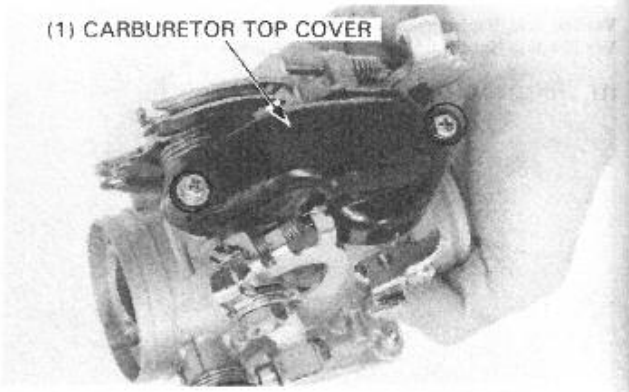
Remove the float pin, float, baffle plate and float valve.



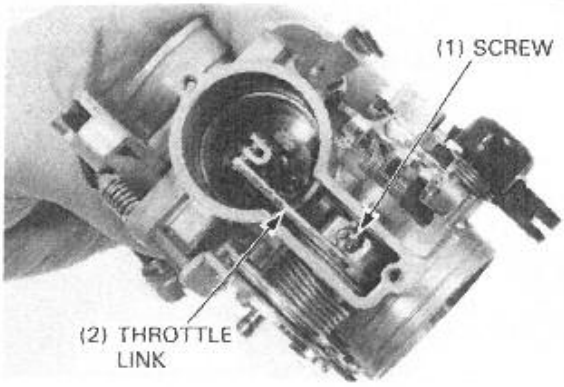
Inspect the float valve seat for grooves and nicks.
Check the operation of the float valve.



Remove the two screws and the carburetor top cover.



Remove the throttle link attaching screw and the throttle valve.

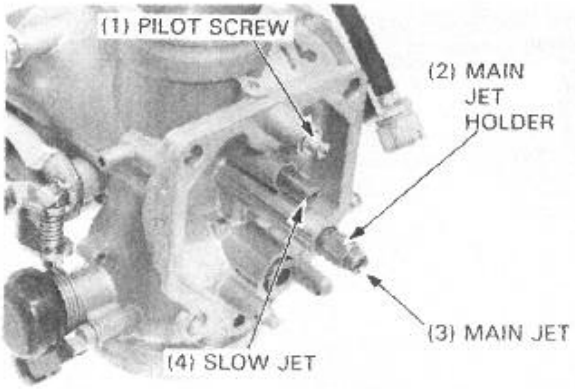


Remove the pilot screw, main jet holder and slow jet.

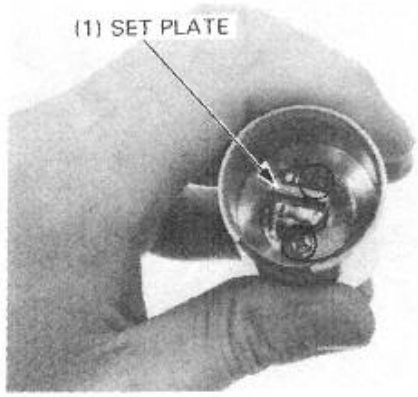
NOTE

- Do not try to remove the float valve seat from the carburetor body.
- Before removing the pilot screw, record the number of turns until it seats lightly.
  Use this as a reference for reinstallation. Remove the jet needle by pressing it out from the throttle valve side carefully.

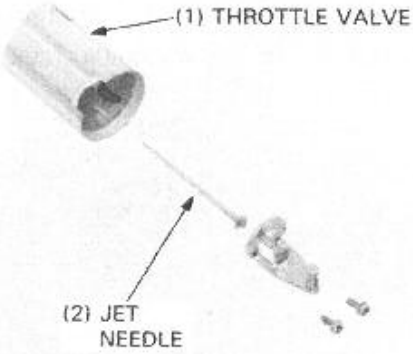
Clean the jets with compressed air.
Inspect the jets for wear or damage and replace if necessary.



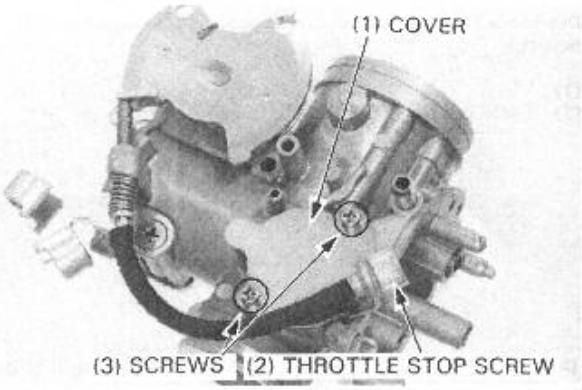
Remove the two screws and the set plate.



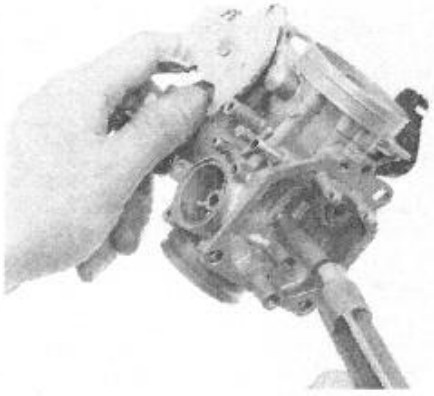
Inspect the throttle valve for wear or scratches.
Inspect the jet needle for damge.



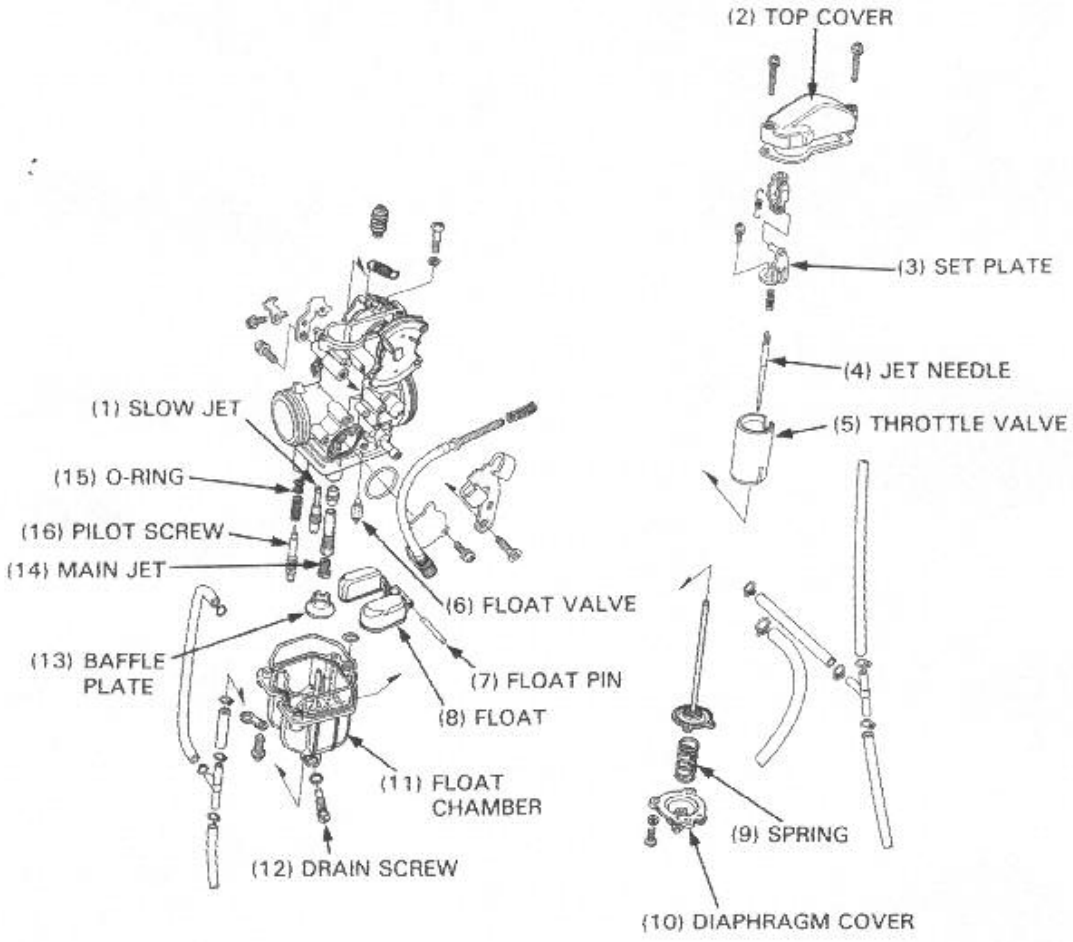
Remove the throttle stop screw and cable from the carburetor by removing the cover screws.



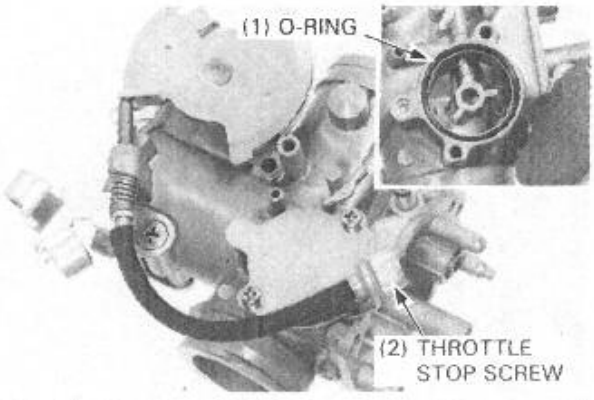
Blow open all carburetor body openings with compressed air.



CARBURETOR ASSEMBLY



Install the spring onto the cable and screw the cable in the carburetor.
Install a new O-ring and cover, then tighten the screws securely.

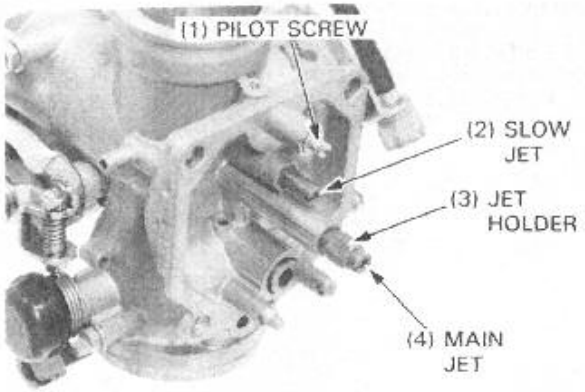


Install the main jet, jet holder and slow jet.

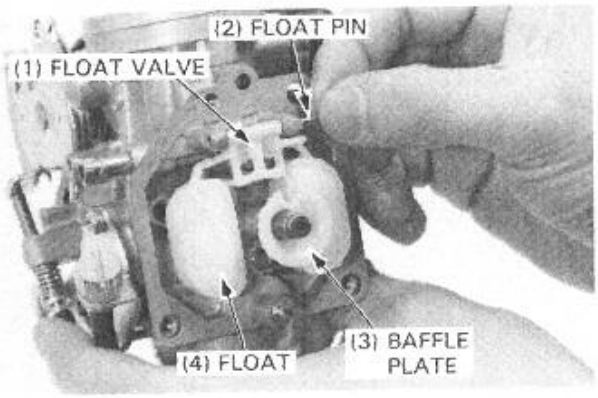
CAUTION

- *Handle all jets with care. They can easily be scored or scratched.*

Install the pilot screw and return it to its original position as noted during removal.
Perform a pilot screw adjustment if a new pilot screw is installed (page 4-14).



Install the float valve, float, float pin and baffle plate.

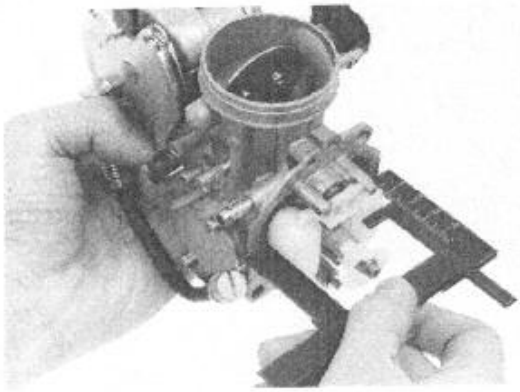


With the float valve seated and the float arm just touching the valve, measure the float level with the float level gauge as shown.

SPECIFICATION: 14 mm (0.55 in)

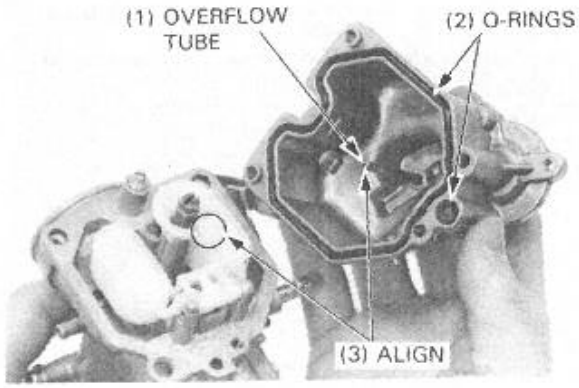
TOOL:
Float level gauge **07401—0010000**

The float cannot be adjusted.
Replace the float assembly if the level is out of specification.

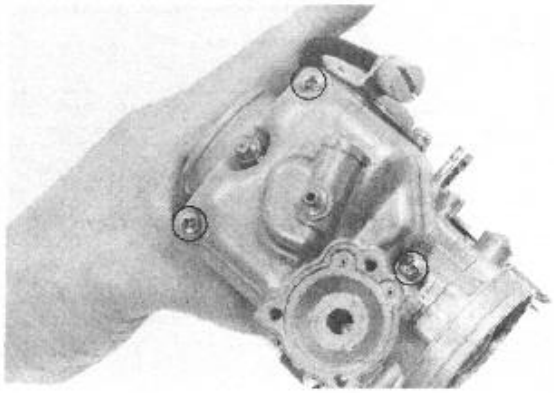


Install the O-rings.

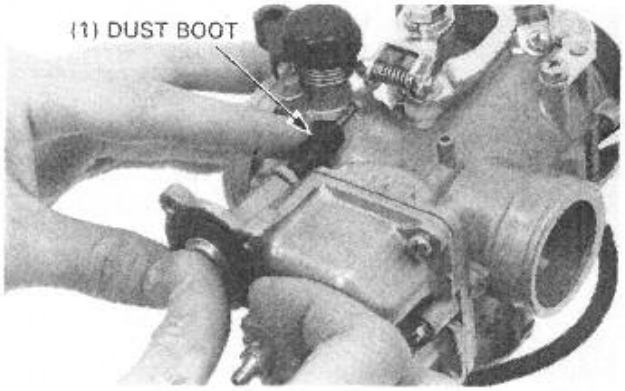
Install the float chamber, aligning the overflow tube on the chamber with the hole in the baffle as shown.



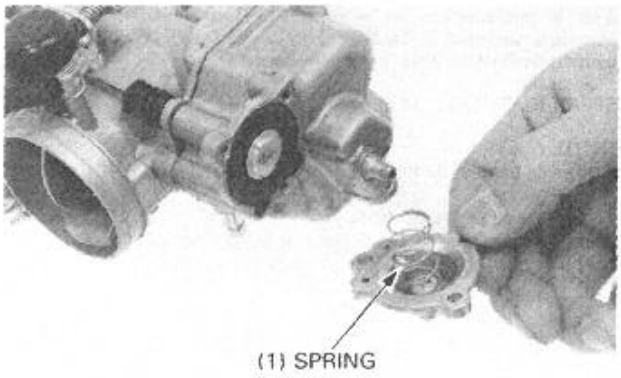
Tighten the float chamber screws.



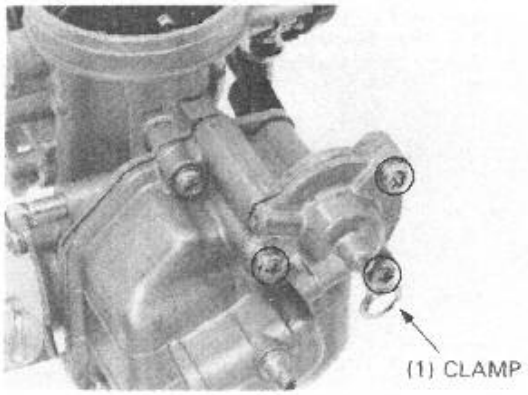
Install the accelerator diaphragm and dust boot.



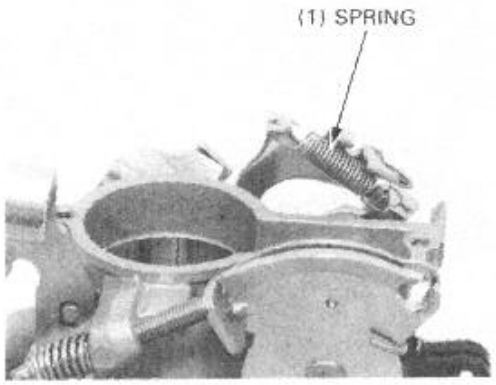
Install the spring and cover.



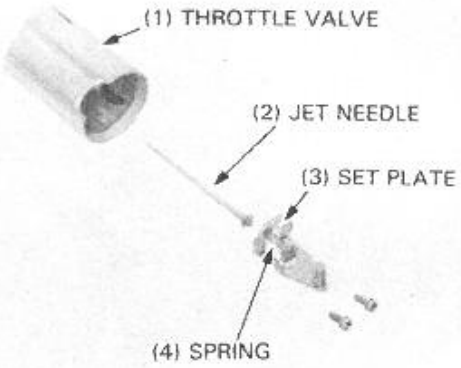
Tighten the screws and clamp as shown.



Install the spring as shown.

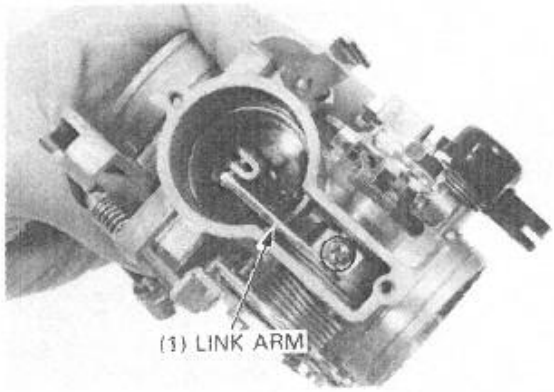


Install the jet needle into the throttle valve.
Install the spring on the set plate, and install the set plate in the throttle valve.



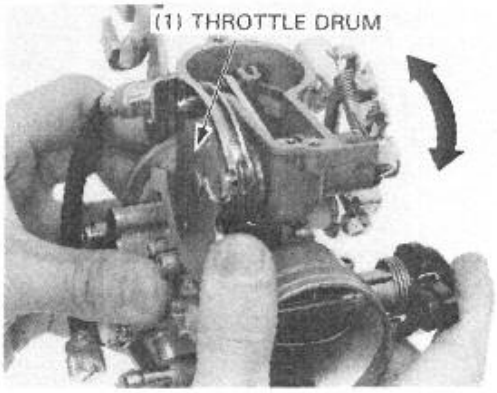
Install and tighten the screws.

Install the link arm to the throttle valve and tighten the screw.

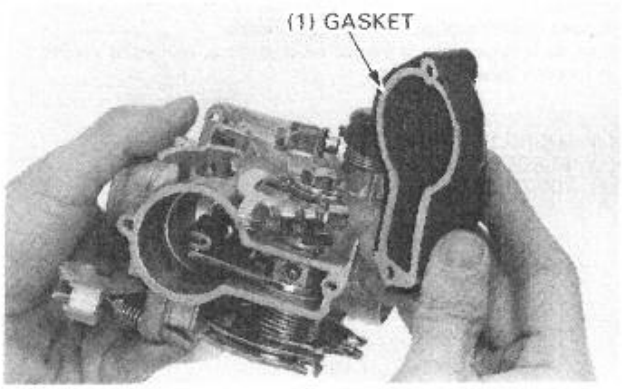


Inspect the linkage operation:

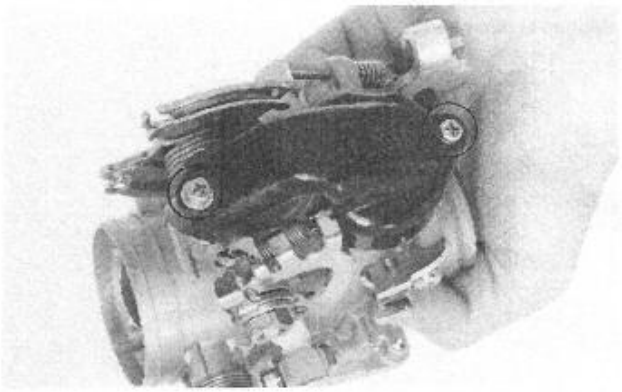
- Open the throttle slightly by pressing on the throttle drum. Then release the throttle.
- Make sure that there is no drag.



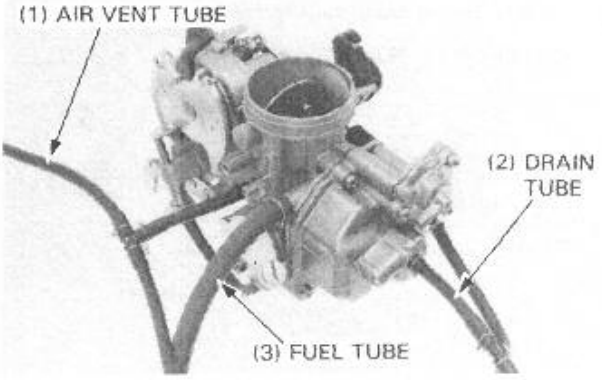
Install a new gasket on the top cover.



Tighten the screws.



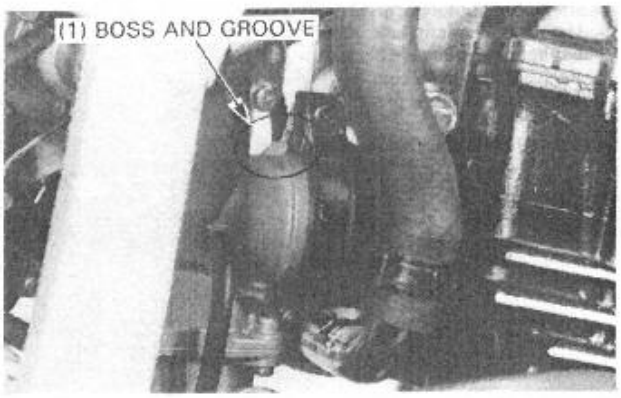
Install the carburetor tubes.



CARBURETOR INSTALLATION

Installation is essentially the reverse order of removal.

Install the carburetor by aligning its intake pipe boss with the insulator groove.

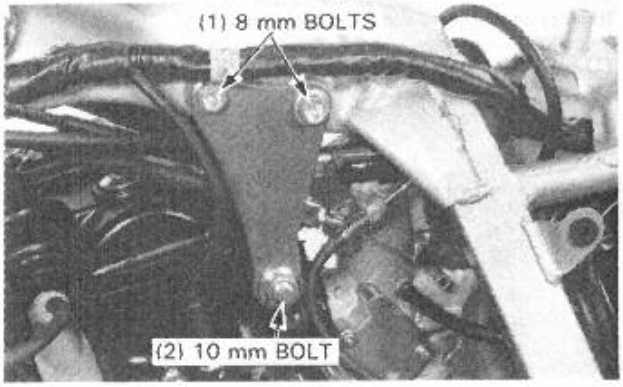


NOTE

- Route the throttle and choke cables properly (page 1-9 through 1-12).

Install the upper engine bracket and tighten the bolts:

TORQUE:
10 mm bolt: 75 N·m (7.5 kg-m, 54 ft-lb)
8 mm bolt: 27 N·m (2.5 kg-m, 20 ft-lb)



Perform the following inspections and adjustments.
- Throttle operation (page 3-4).
- Carburetor choke (page 3-5).
- Carburetor idle speed (page 3-9).

PILOT SCREW ADJUSTMENT

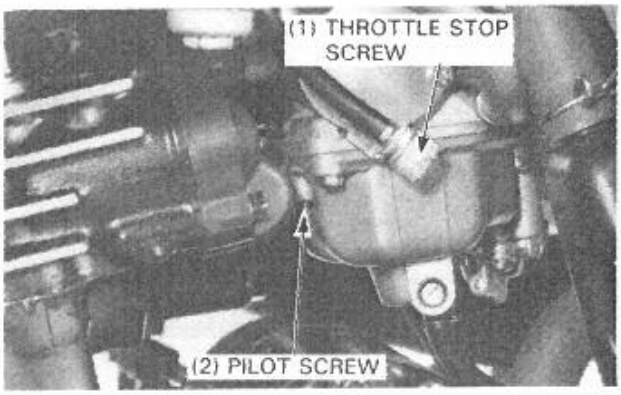
NOTE

- The pilot screw is factory pre-set. Adjustment is not necessary unless the carburetor is overhauled or a new pilot screw is installed.

CAUTION

- *Damage to the pilot screw seat will occur if the pilot screw is tightened against the seat.*

Turn the pilot screw clockwise until it seats lightly and back it out 1-1/2, GII type 2-5/8 turns.
This is an initial setting prior to the final pilot screw adjustment.

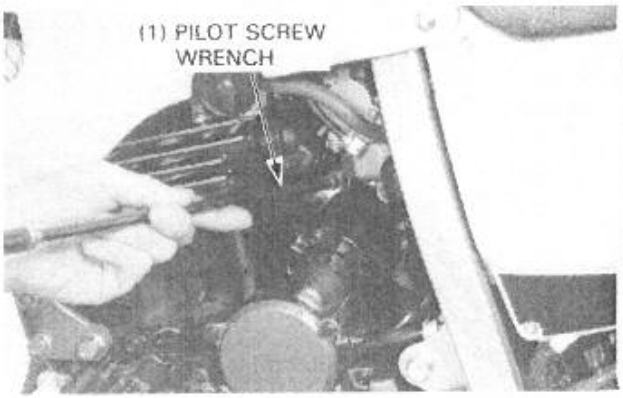


TOOL:
Pilot screw wrench **07908–4730001**

Warm the engine up to operating temperature.
Stop the engine and connect a tachometer.

Start the engine and adjust the idle speed with the throttle stop screw.

IDLE SPEED: 1,300 ± 100 min^{-1} (rpm)



Turn the pilot screw clockwise until you hear the engine miss or decrease in speed, then turn counterclockwise until the engine again misses or decreases in speed.
Center the pilot screw exactly between these two extreme positions.
If idle speed changes after adjusting the pilot screw, readjust the throttle stop screw.

ACCELERATOR PUMP

CAUTION

- *The accelerator pump-adjustment nut is factory pre-set.*

Start the engine and adjust the idle speed with the throttle stop screw.

IDLE SPEED: 1,300 ± 100 min^{-1} (rpm)

Stop the engine.

Adjust the throttle grip free play (page 3-4).

FREE PLAY: 2–6 mm (1/8–1/4 in)