

5. Fuel System

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Service Information

General Safety

WARNING

Gasoline is extremely flammable. Avoid fire in the work place, also paying particular attention to sparks. Furthermore, the evaporated (gasified) gasoline is highly explosive. Work in a well-ventilated areas. Exhaust gas contains poisonous substance. Do not keep engine running for a long period of time in a closed, or poorly ventilated area.

CAUTION

Do not excessively bend or twist cable. Distorted or damaged cable may lead to mechanical malfunctions. Pay particular attention to the position of O-ring. Replace with new ones when disassembled.

If it is desired to store a vehicle for a period longer than 1 month, drain gasoline out of the carburetor float chamber. Gasoline left in the float chamber will be deteriorated causing the slow jet to be clogged with deposits, and idling may become unstable.

Specifications

Fuel tank capacity: 7.5 Reserve fuel capacity: 1.2

Carburetor

Item	Standard
Type/Throttle bore	CV type (vacuum) 24.2mm
Model mark	BDS 26 92 H1
Main jet No.	92.5
Pilot screw opening	3,1/4 returns
Pilot jet	17.5
Idling speed	1600 100(rpm)
Throttle grip free play	2-6mm

Tool

Float level gauge

Troubleshooting

Unable to start the engine

No fuel in the tank. Fuel cannot be supplied. Fuel excessively absorbed into the cylinder. Air cleaner clogged. No spark from plugs.

Unstable idling, unsatisfactory rotation

Unsatisfactory idling adjustment. Mixture too lean or rich Air cleaner clogged. Secondary air absorbed into the intake system. Fuel system clogged.

Mixture too lean

Carburetor jets clogged. Fuel tank cap air hole clogged. Fuel strainer screen clogged. Fuel tube kinked, pressed or clogged. Float valve malfunction. Oil level too low.

Mixture too rich

Float valve malfunction. Oil level too high. Air jets clogged.

Fuel Tank

Remove

WARNING

Gasoline is extremely flammable. Avoid fire during work, and pay particular attention to electric sparks. Furthermore, the evaporated (gasified) gasoline is highly explosive. Work in a well-ventilated areas.

Remove the following parts.

- Luggage box (4-5)
- Rear carrier (4-6)
- Body cover (4-6)
- Center cover (4-4)
- Rear cover (4-6)

- Tail combination-light (4-7)

Remove the fuel tube from the fuel pump.

Remove the fuel unit wire coupler.

Loosen the 2 top fuel tank bolts.

Loosen the 2 bottom fuel tank bracket bolts. Remove the fuel tank bracket.

Remove the fuel tank.

Installation

Install in the reverse order of removal.

NOTES

Check for gasoline leakage. "Gasoline" mark is on the fuel tank cap. Check this mark when filling gasoline.







Air Cleaner Removal

Remove the luggage box. (4-5) Loosen the 2 R/L bolts attached to the frame body. Loosen the band attached to the lower part(carburetor) of the intake coupling and remove the air cleaner. Install in the reverse order of removal.





Remove

- Remove the air cleaner. (5-4)
- Loosen the throttle cable lock nut, and remove
- the throttle cable from the carburetor.
- Remove the auto cock cord.
- Loosen the chamber connecting band and the carburetor insulator band.

Remove the carburetor.

Vacuum Chamber Removal

Remove the fuel tube and drain tube.





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Remove the 4 vacuum chamber screws.

Remove the compression spring, vacuum piston, and diaphragm.

Turn the jet needle holder with a screwdriver, and remove the jet needle holder, spring, and jet needle.



Vacuum piston

Diaphragm

Spring

Inspection

Check the vacuum piston for wear, cracks, scratches or other damage.

Check the jet needle edge for extensive wear, twist or damage.

Check if the diaphragm has become thin or cracked, and check the spring for wear or damage.

Float Chamber/Float/Jet Removal

Lossen the 4 float chamber screws.

Remove the float pins, float, and valve.

Check the float valves and seats for cracks or damage.

Check the float valve operation.

Remove the main jet, needle jet holder, and needle jet, and remove the slow jet.

NOTE

Prior to unfastening the pilot screws, count the number of turns until the screws are lightly tightened, so that the screws can be returned to the original condition after assembling. Do not tighten the pilot screws too hard as it may cause damage to the screw seat.









Assemble the needle jet, needle jet holder, main jet, and slow jets.

Assemble and turn the pilot screw to the number of turns memorized.

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Float Level

Install the float valves, and float pins. Check the float valve level.

Float level: 17.5mm

Assemble the float chamber.



Vacuum Chamber Assembly

Insert the jet needle and spring to the piston, and install the holder.

NOTE

Match the diaphragm with the body notch.

Install the compression spring and vacuum chamber.

Carburetor Installation

Assemble the air vent, fuel tubes, and drain tubes to the carburetor.







Check the insulator O-ring for wear or damage, and install the insulator.

Connect the Autoby starter cable to the terminal.

Assemble the carburetor insulator and connecting tube to the carburetor, and tighten the band screw. Connect the throttle cable to the carburetor. Rearrange the tube passing positions.(1-10) Adjust the throttle operation. Adjust the carburetor idling. Adjust the pilot screws.

Check on oil leakage.

Pilot Screw Adjustment

NOTE

Take due precautions during the assembly work to prevent damage to the pilot screw seat.

Gently tighten the pilot screw clockwise, and unscrew in reverse for 2 turns.

This is the optimal status of the pilot screw.

Start the engine, and warm up the engine to a normal operation level temperature.

Adjust idling speed with the throttle stop screw.

Idling speed: 1,600 rpm

Slowly turn the pilot screw until the engine stops running, and unscrew in reverse for 1 turn. Start the engine, and adjust the idling speed by turning the throttle screw, if necessary.

Fuel Pump Inspection

NOTE

Before checking dispensing volume, operate the engine in warm state to adjust idling rpm to specified range.

Start the engine and keep in the idling state.

Fuel pump is considered as satisfactory if dispensing volume of more than 28cc in 10 seconds is obtained after disconnecting fuel pump from caburetor and dispensing fuel over 5 seconds.

If specified dispensing volume cannot be obtained, check fuel tube, negative pressure tube fuel strainer.

If there is no abnormality, replace fuel pump with assy.









MEMO
