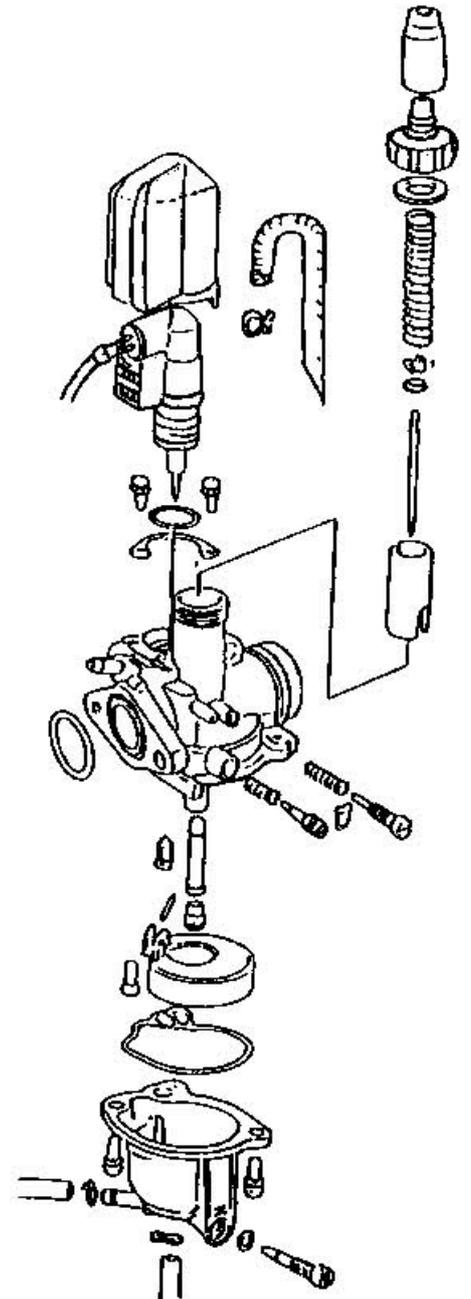
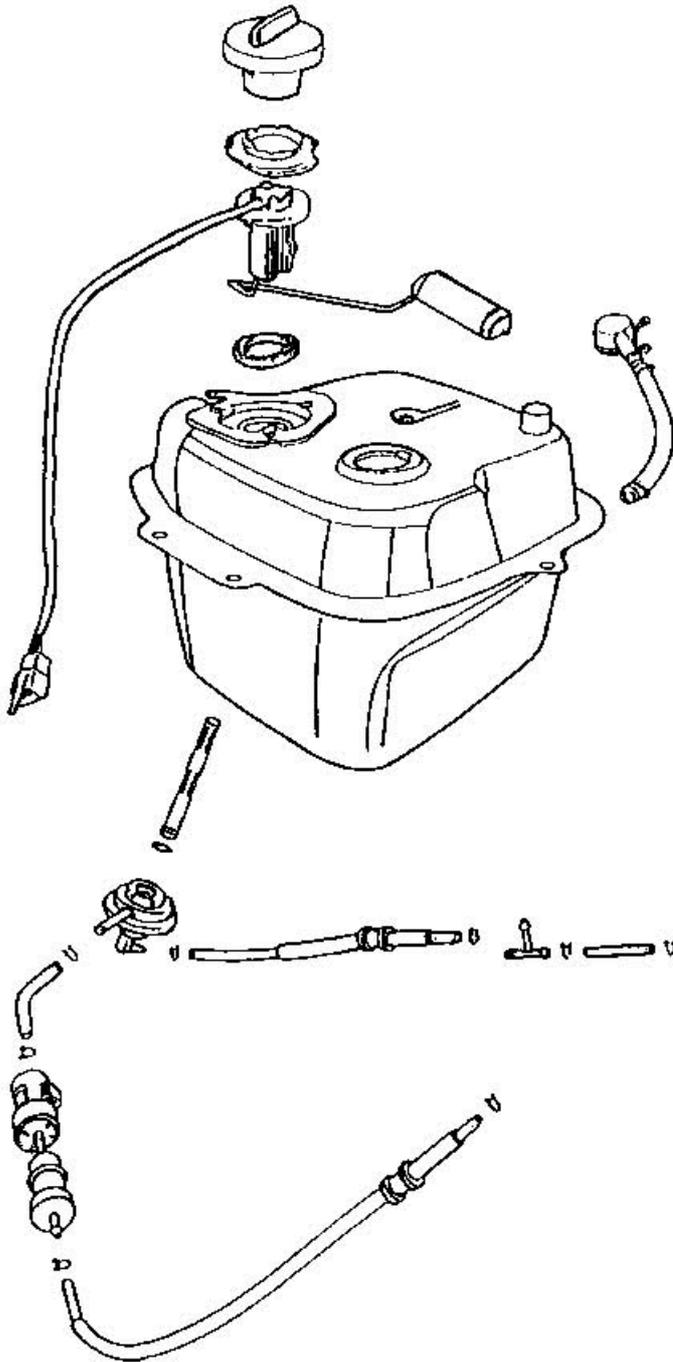


11. CARBURETOR

CARBURETOR

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11. CARBURETOR



11. CARBURETOR

SERVICE INFORMATION

GENERAL INSTRUCTIONS

- ï When working with gasoline, keep away from sparks and flames..
- ï Note the locations of O-rings when disassembling and replace them with new ones during assembly.
- ï All cables, fuel lines and wires must be routed and secured at correct locations.
- ï Bleed air from the oil lines whenever they are disconnected.

SPECIFICATIONS	BA10AB.AC.
Venturi dia.	14mm
Identification number	PB058[A]
Float level	8.6mm
Main jet	#85
Slow jet	#35
Air screw opening	1° ± Ω
Idle speed	2000±100rpm
Throttle grip free play	2_ 6mm

SPECIAL TOOL

Float level gauge

TROUBLESHOOTING

Engine does not start

- No fuel in tank
- Too much fuel getting to cylinder
- Clogged fuel filter
- Clogged air cleaner

Lean mixture

- Clogged fuel jets
- Clogged fuel cap vent
- Clogged fuel filter
- Bent, kinked or restricted fuel line

- Faulty float valve
- Float level too low
- Clogged air cleaner

Engine idles roughly, stalls or runs poorly

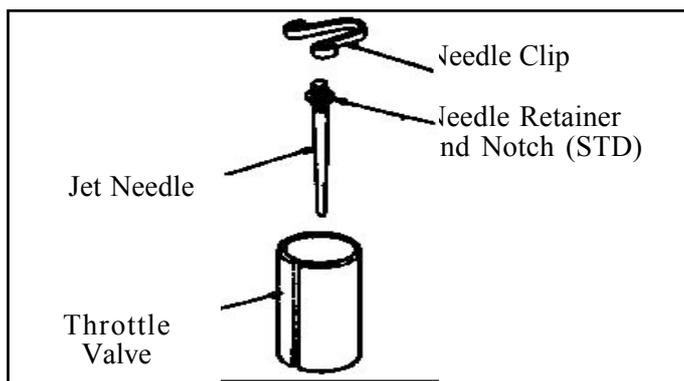
- Incorrect idle speed
- Ignition malfunction
- Compression too low
- Incorrectly adjusted air screw
- Incorrect float level
- Clogged air cleaner
- Intake air leaks
- Fuel contaminated
- Faulty reed valve
- Clogged fuel jets

Rich mixture

- Faulty float valve
- Float level too high
- Clogged air jets

11. CARBURETOR

Remove the jet needle by removing the needle clip.
Check the jet needle and throttle valve for wear or damage.



THROTTLE VALVE INSTALLATION

Install the jet needle on the throttle valve and secure with the needle clip.

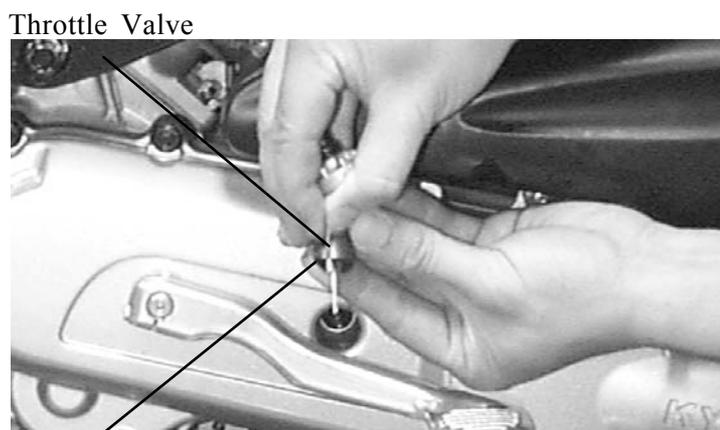
Install the rubber seal on the throttle cable and then install the carburetor cap and throttle valve spring.

Rubber Seal Carburetor Cap



Throttle Valve Spring

Connect the throttle cable to the throttle valve.



Throttle Cable

11. CARBURETOR

Install the throttle valve by aligning the groove in the throttle valve with the throttle stop screw.

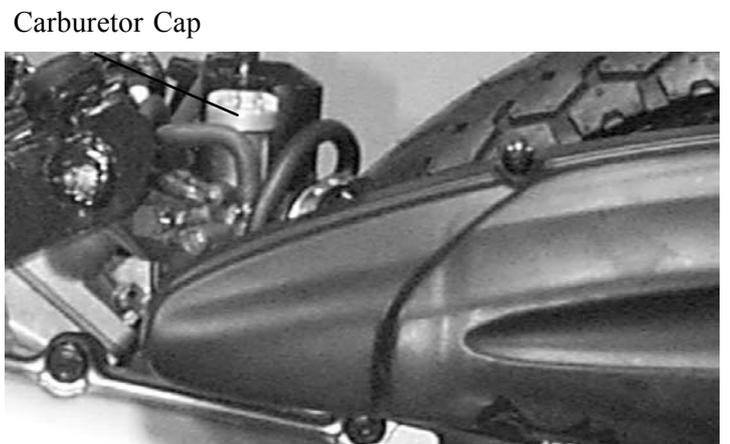


Throttle Stop Screw

Tighten the carburetor cap.
After installation, perform the following adjustments and inspections.

- Throttle cable free play (⇒3-12)
- Idle speed adjustment (⇒3-11)

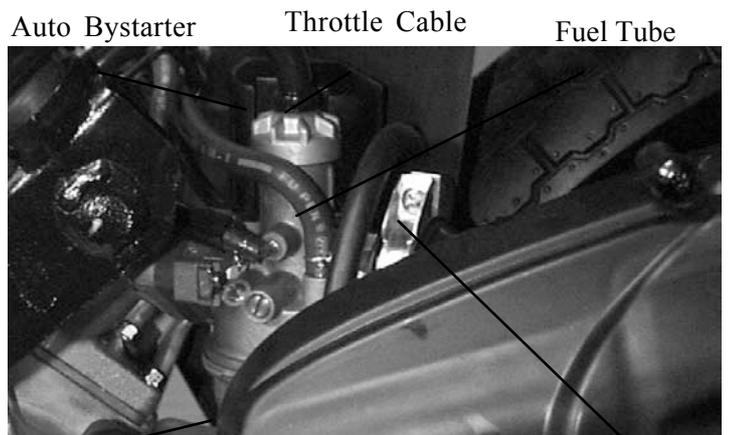
Install the met-in box.



Carburetor Cap

CARBURETOR REMOVAL

Remove the met-in box. (⇒12-4)
Remove the air cleaner by removing the air cleaner band screw and attaching bolts.
Disconnect the fuel tube.
Loosen the drain bolt to drain fuel from the carburetor.
Disconnect the auto bystarter wire connector.
Remove the two carburetor lock nuts.



Auto Bystarter

Throttle Cable

Fuel Tube

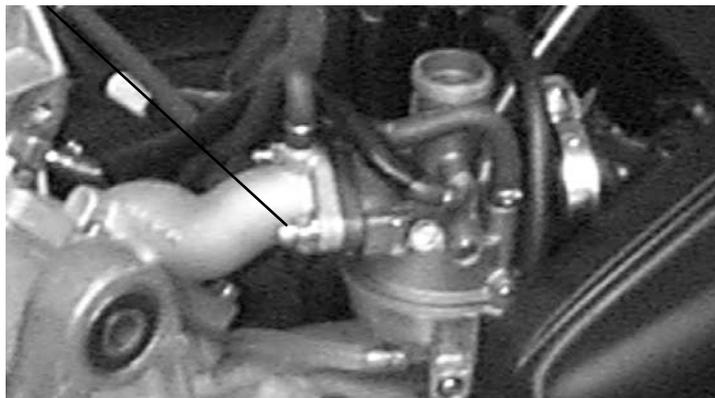
Drain Bolt

Band

11. CARBURETOR

Remove the carburetor.

Nut



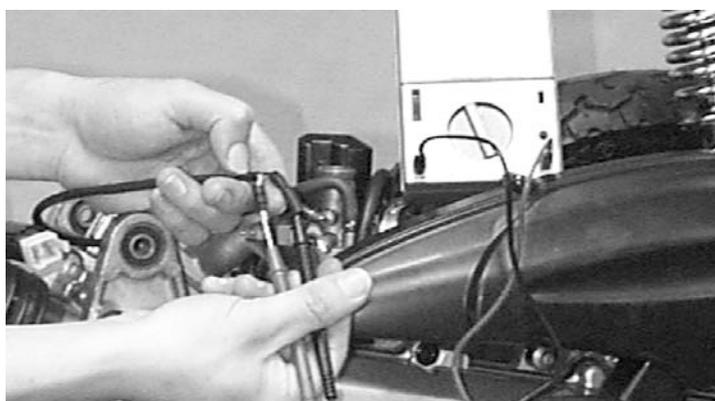
AUTO BYSTARTER

AUTO BYSTARTER INSPECTION

Measure the resistance between the auto bystarter wire terminals.

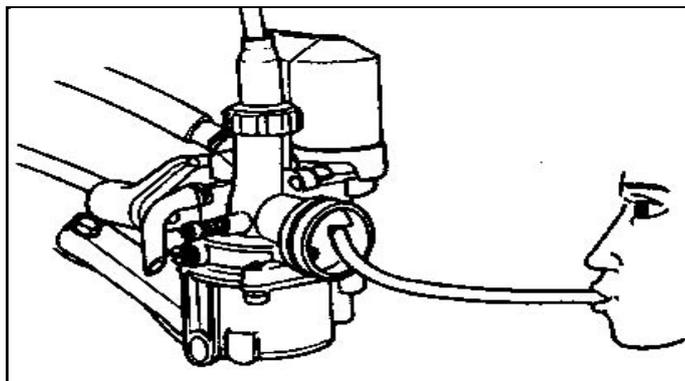
Resistance: 5Ω (10 minutes minimum after stopping the engine)

If the resistance exceeds 5Ω , replace the auto bystarter with a new one.



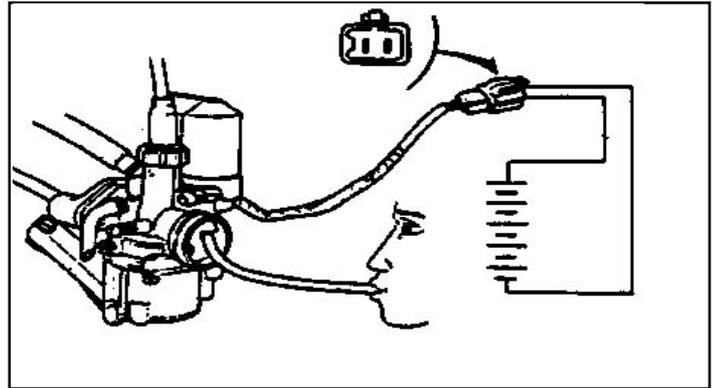
After the engine stops for 30 minutes, connect a hose to the fuel enriching circuit and blow the hose with mouth.

If air cannot be blown into the hose (clogged), the auto bystarter is faulty. Replace it with a new one.



11. CARBURETOR

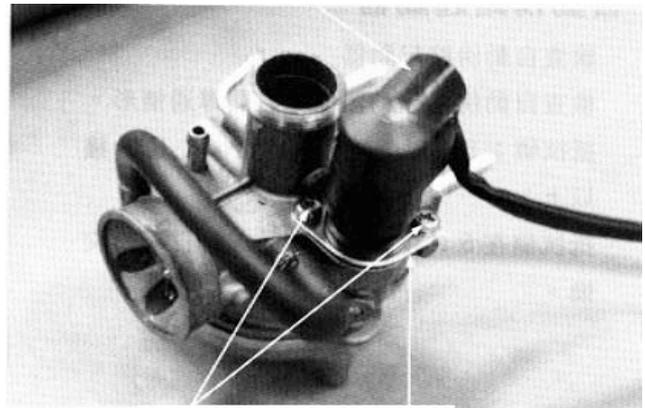
Connect the auto bystarter yellow wire to the battery positive (+) terminal and green/black wire to the battery negative (-) terminal and wait 5 minutes.
Connect a hose to the fuel enriching circuit and blow the hose with mouth.
If air can be blown into the hose, the auto bystarter is faulty and replace it with a new one.



AUTO BYSTARTER REMOVAL

Remove the auto bystarter cover.
Remove the two auto bystarter set plate screws to remove the auto bystarter.

Auto Bystarter

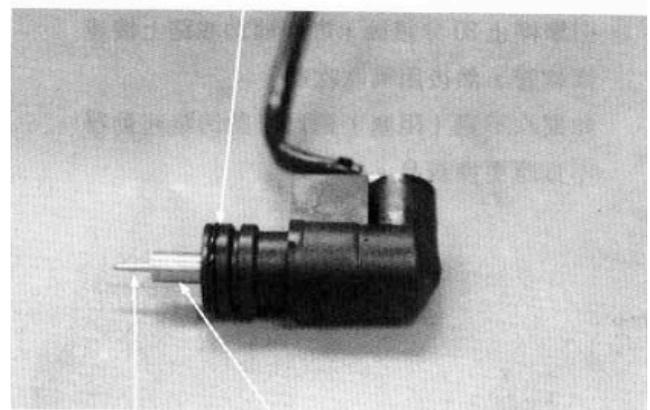


Screws

Set Plate

O-ring

Check the auto bystarter valve and needle for wear or damage.
Check the O-ring for wear or damage.



Bystarter
Needle

Bystarter Valve

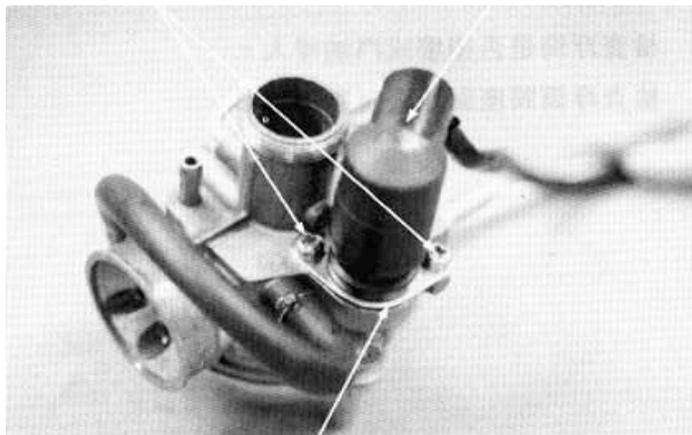
11. CARBURETOR

AUTO BYSTARTER INSTALLATION

Install the auto bystarter into the carburetor body until it bottoms..
Install the set plate and then tighten the two screws.

Screws

Auto Bystarter

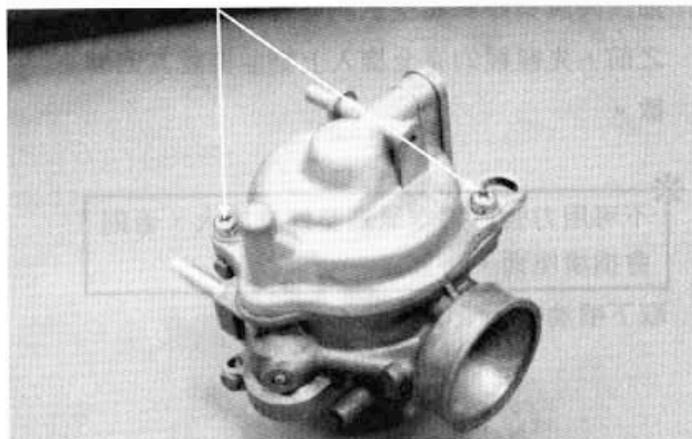


Set Plate

FLOAT CHAMBER

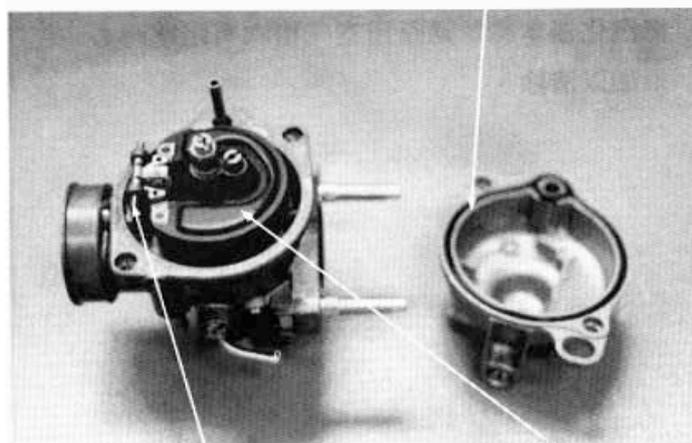
Remove the two float chamber screws and the float chamber.

Screws



Remove the screw and O-ring.
Remove the float pin, float and float valve.

O-ring



Float Pin

Float

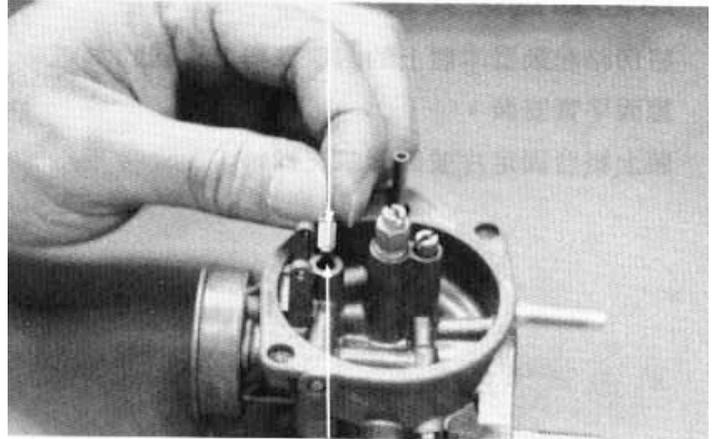
11. CARBURETOR

FLOAT/FLOAT VALVE INSPECTION

Inspect the float for damage or fuel inside the float.

Check the float valve seat for wear or damage.

Float Valve



Float Seat

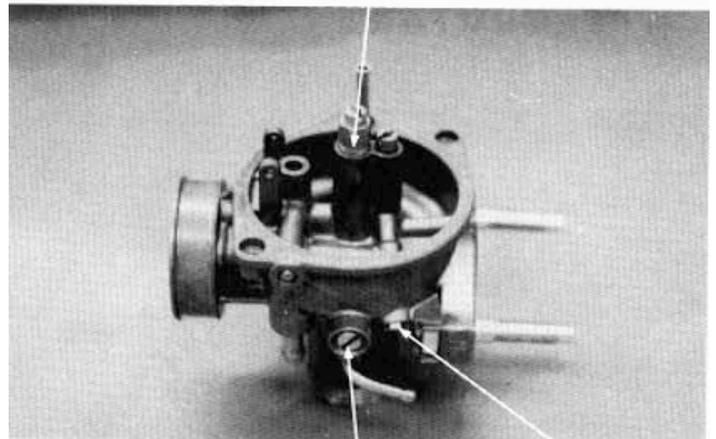
JETS/SCREWS REMOVAL

Before removing the throttle stop screw or air screw, record the number of rotations until it seats lightly. Then, remove them.

* Do not force the air screw against its seat to prevent damage.

Remove the main jet and needle jet holder.

Main Jet

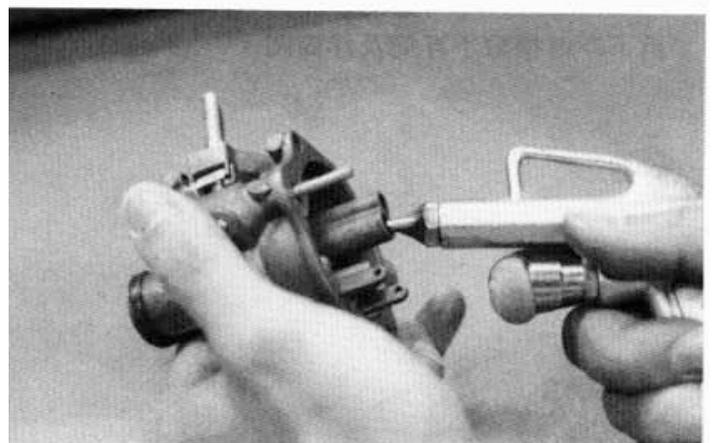


Throttle Stop Screw

Air Screw

CARBURETOR PASSAGES CLEANING

Blow compressed air through all passages of the carburetor body with an air gun.



11. CARBURETOR

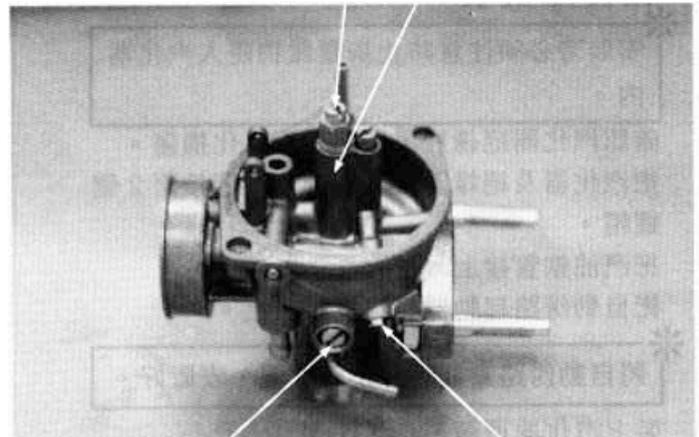
FLOAT CHAMBER ASSEMBLY

Install the main jet and needle jet holder.
Install the air screw and throttle stop screw according to the rotations recorded.

*

If the air screw must be replaced, be sure to perform the air screw adjustment again.

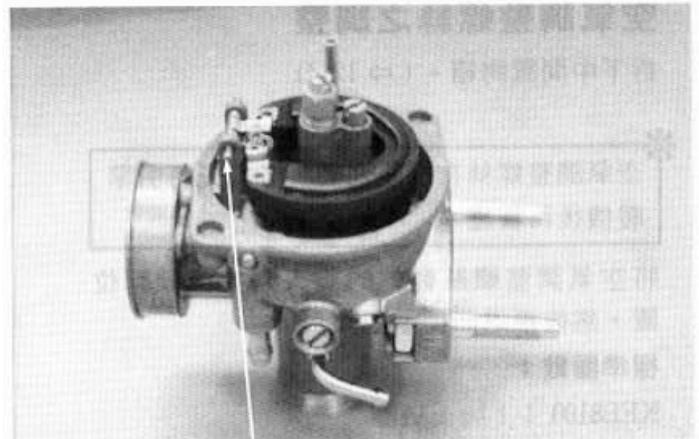
Main Jet Needle Jet holder



Throttle Stop Screw

Air Screw

Install the float valve, float and float pin.
Tighten the float screw securely.



Float Pin

FLOAT LEVEL INSPECTION

Slightly tilt the carburetor and measure the float level with the float valve just connecting the float arm.

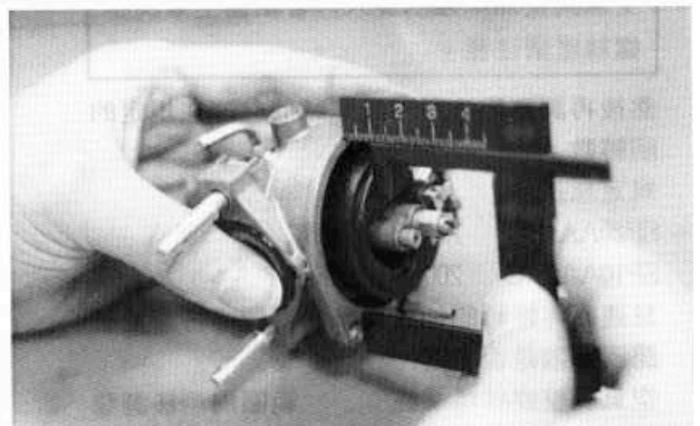
Float Level: 8.6mm

Replace the float if the level is out of the specified level range.

Install the O-ring.

Check the operation of the float and install the float chamber.

Tighten the screws.



11. CARBURETOR

CARBURETOR INSTALLATION

- * When installation, do not allow foreign particles to enter the carburetor.

Check the carburetor insulator and O-ring for wear or damage.
Install the carburetor and insulator onto the intake manifold and tighten the two lock nuts.
Connect the fuel tube and auto bystarter wire connector.

- * Route the auto bystarter wire correctly and properly.

Install the carburetor cap. (⇒11-4)
Install the air cleaner onto the carburetor and tighten the band screw.
Install the met-in box. (⇒12-4)

AIR SCREW ADJUSTMENT

Remove the met-in box. (⇒12-4)

- * Warm up the engine before air screw adjustment.

Turn the air screw clockwise until it seats lightly and back it to the specification given.

Air Screw Opening:

BA10AB.AC.50: $1^\circ \pm \Omega$ turns

Start the engine and turn the air screw in or out slowly to obtain the highest engine speed.

- * Do not force the air screw against its seat to prevent damage.

Turn the throttle stop screw to obtain the specified idle speed.

Idle Speed:

BA10AB.AC.50 : 2000 ± 100 rpm

Slightly increase the engine speed and make sure that the engine does not miss or run erratic.

If the adjustment of the air screw within the range of $\pm \Omega$ turn makes no difference to the engine performance, check other related items.

O-rings



Insulator

Carburetor Cap Band Air Cleaner Case



Fuel Tube

Air Screw



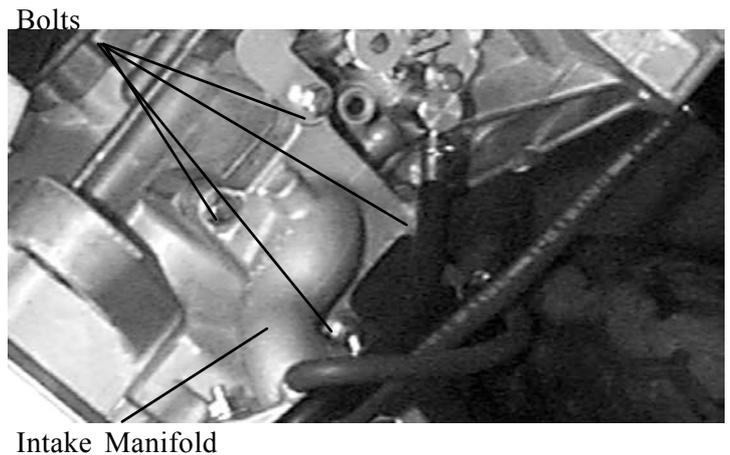
Throttle Stop Screw

11. CARBURETOR

REED VALVE

REMOVAL

Remove the rear carrier.
Remove the frame body cover.
Remove the four intake manifold bolts and gasket.
Remove the reed valve and gasket.

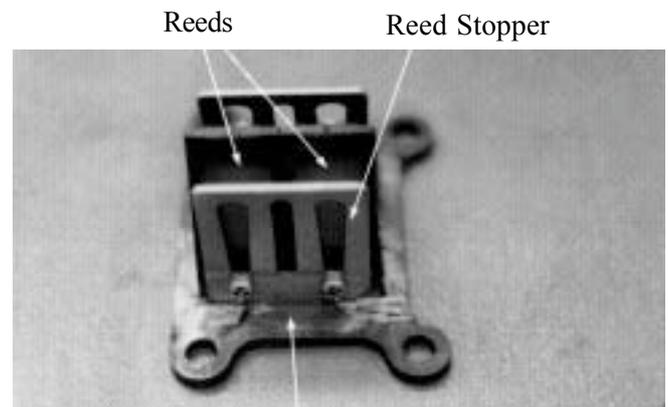


INSPECTION

Check the reed valve for damaged or weak reeds.
Check the reed valve seat for cracks, damage or clearance between the seat and reed.
Replace the valve if necessary.

*

Do not disassemble or bend the reed stopper. To do so can cause loss of engine power and engine damage. If any of the stopper, reed or valve seat is faulty, replace them as a unit.



Reed Valve Seat

INSTALLATION

Install the reed valve in the reverse order of removal.

*

- Install a new gasket with the gasket indentation aligned with the reed valve.
- After installation, check for intake air leaks.

11. CARBURETOR

FUEL TANK

REMOVAL

- Remove the met-in box. (⇒12-4)
- Remove the frame body cover. (⇒12-5)
- Remove the rear carrier. (⇒12-5)
- Disconnect the fuel tube and vacuum tube at the auto fuel valve.
- Disconnect the fuel unit wire connector.
- Remove the fuel tank mounting bolts and fuel tank.
- Inspect the fuel unit. (⇒16-2)
- Replace the fuel unit if necessary. (⇒16-2)

