

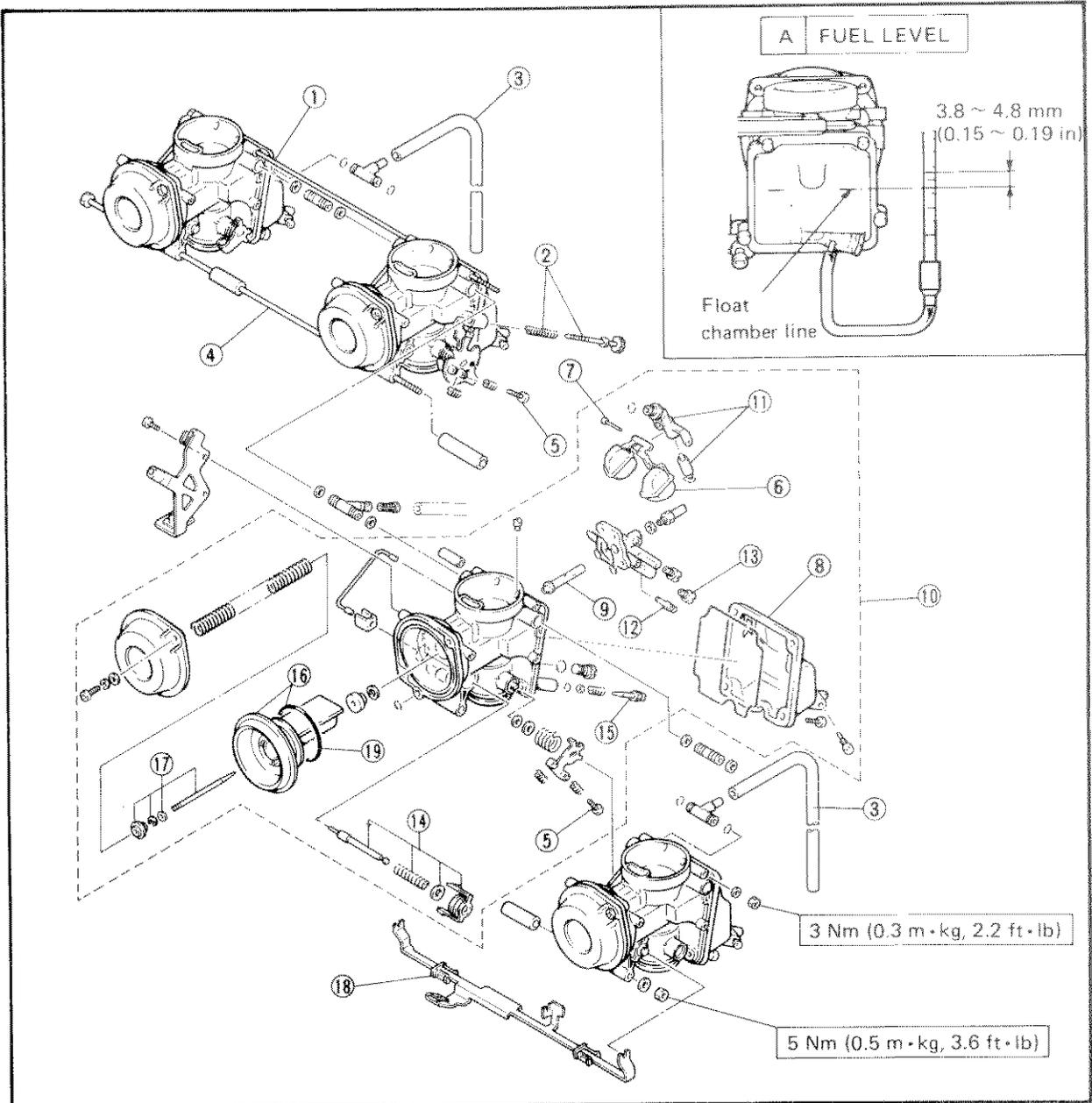


CARBURETOR

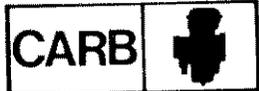
CARBURETOR

- ① Upper bracket
- ② Throttle stop screw
- ③ Fuel overflow hose
- ④ Lower bracket
- ⑤ Synchronizing screw
- ⑥ Float
- ⑦ Float pin
- ⑧ Float chamber
- ⑨ Main nozzle
- ⑩ Fuel drain screw
- ⑪ Valve seat assembly
- ⑫ Pilot jet
- ⑬ Main jet
- ⑭ Starter plunger assembly
- ⑮ Pilot screw
- ⑯ Piston valve assembly
- ⑰ Jet needle set
- ⑱ Starter lever
- ⑲ O-ring

| | SPECIFICATIONS | |
|---------------------|----------------------------------|---------------------|
| | FZR600W | FZR600WC |
| ID MARK | 3HH-00 | 3HW-00 |
| MAIN JET | #107.5 | #105 |
| MAIN AIR JET | #65 | ← |
| PILOT JET | #32.5 | ← |
| PILOT AIR JET | #132.5 | ← |
| JET NEEDLE POSITION | 5CFZ4-2 | 5CFZ7-1 |
| PILOT SCREW | Preset | ← |
| THROTTLE VALVE | #130 | * |
| ENGINE IDLE SPEED | 1,150 ~ 1,250 r/min | 1,250 ~ 1,350 r/min |
| FUEL LEVEL | 3.8 ~ 4.8 mm (0.15 ~ 0.19 in) | * |



6

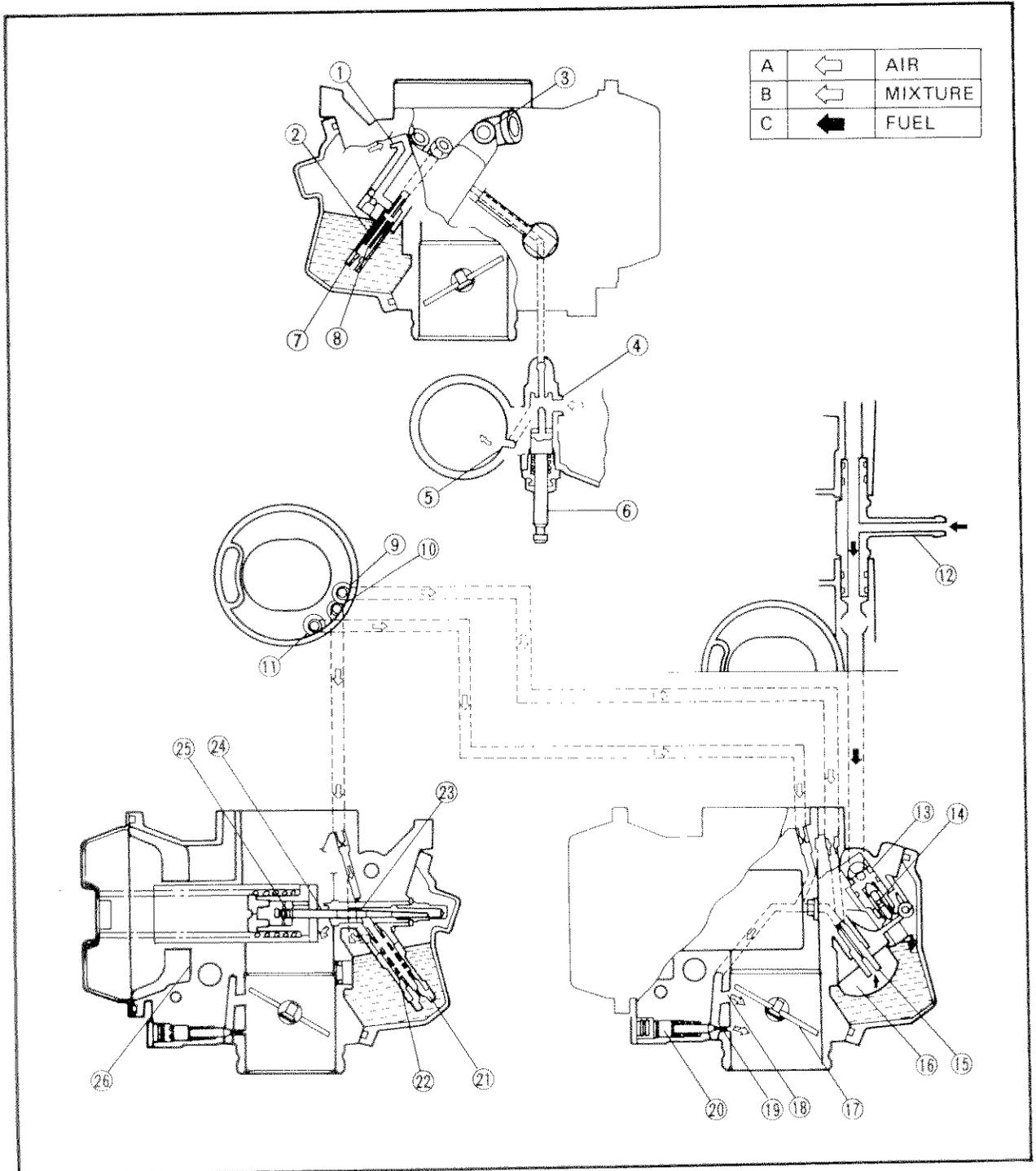


SECTION VIEW

- ① Starter air bleed
- ② Starter air bleed pipe
- ③ Air vent
- ④ Air inlet
- ⑤ Mixture outlet
- ⑥ Starter plunger
- ⑦ Starter jet No. 1
- ⑧ Starter jet No. 2
- ⑨ Pilot air jet 2
- ⑩ Main air jet
- ⑪ Pilot air jet 1
- ⑫ Fuel inlet
- ⑬ Float needle valve
- ⑭ Valve seat
- ⑮ Pilot jet
- ⑯ Float
- ⑰ Throttle valve
- ⑱ Bypass hole
- ⑲ Pilot outlet
- ⑳ Pilot screw
- ㉑ Main jet
- ㉒ Main bleed pipe
- ㉓ Needle jet
- ㉔ Jet needle
- ㉕ Spring clip
- ㉖ Piston valve

⚠ CAUTION:

The pilot air screw settings are adjusted for maximum performance at the factory. Any attempt to change these settings will decrease engine performance.

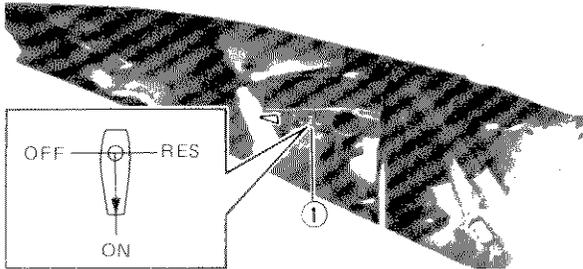




REMOVAL

1. Remove:
 - Seat
 - Top cover
 - Side cowlings
 Refer to "COWLINGS/COVERS REMOVAL AND INSTALLATION" section in the CHAPTER 3.

2. Turn the fuel cock ① to "OFF".



3. Disconnect:
 - Fuel hoses ①

⚠ WARNING:

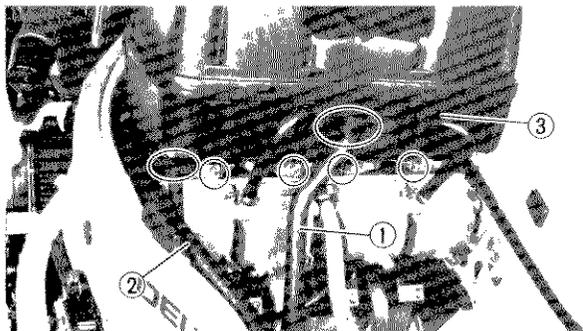
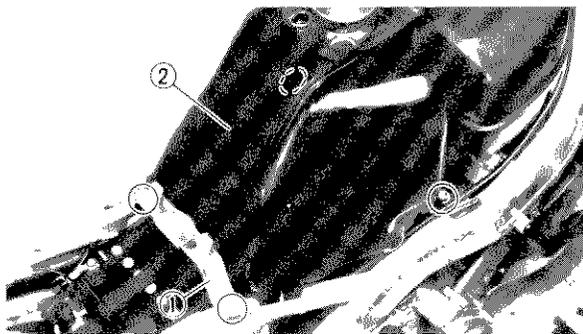
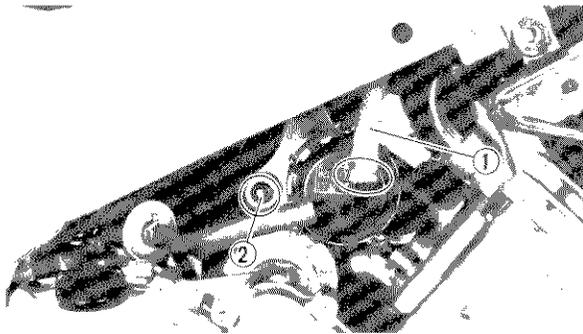
Gasoline is highly flammable.
Avoid spilling fuel on the hot engine.

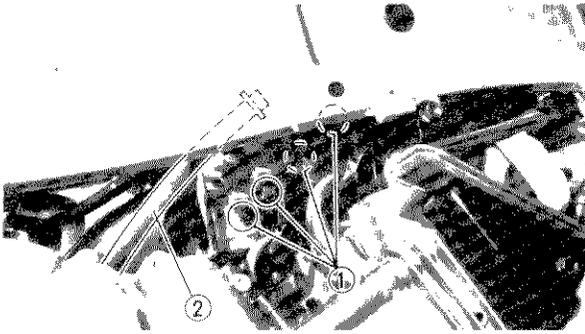
4. Remove:
 - Bolt (fuel pump) ②

5. Remove:
 - Fuel tank bracket ①
 - Fuel tank ②

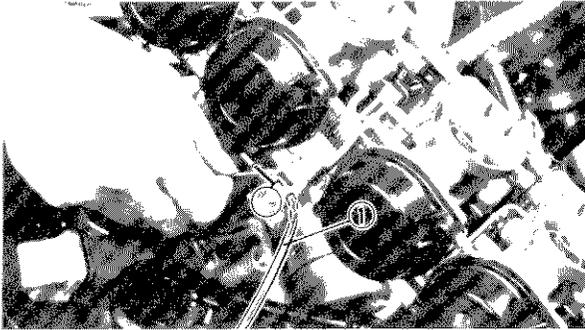
6. Disconnect:
 - Crankcase ventilation hose ①
 - Air vent hose ②

7. Remove:
 - Air filter case ③

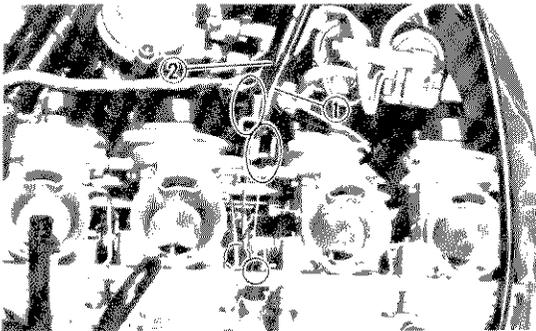




8. Loosen:
 - Bolts (carburetor joint) ①
9. Disconnect:
 - Fuel hose ②
10. Remove:
 - Carburetor assembly
(from carburetor joint)



11. Disconnect:
 - Starter cable ①



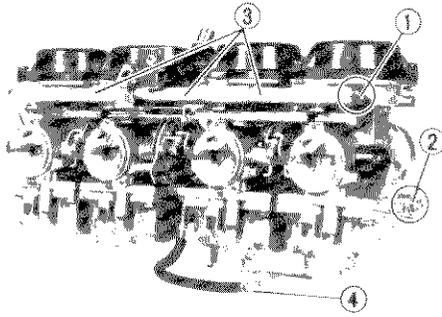
12. Disconnect:
 - Throttle cable 1 ①
 - Throttle cable 2 ②

DISASSEMBLY

NOTE:

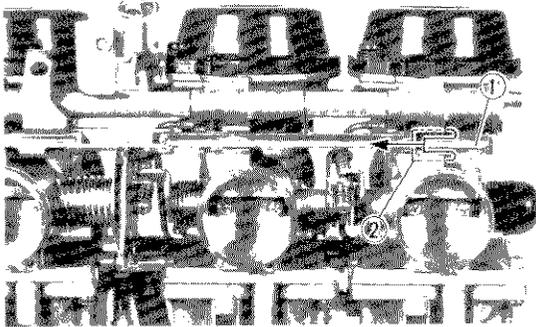
The following parts can be cleaned and inspected without carburetor separation.
(All inner parts except starter plunger can be cleaned and inspected without carburetor separation.)

- Throttle valve
- All jets
- Float
- Needle valve
- Main nozzle
- Jet needle



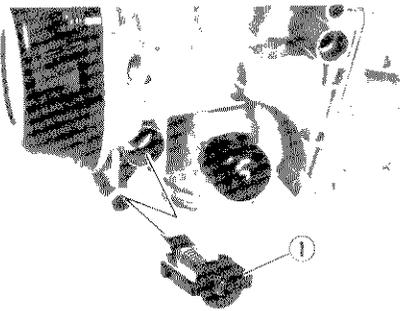
1. Remove:

- Connecting bolt (upper) ①
- Connecting bolt (lower) ②
- Collars ③
- Fuel hose joint
- Screw (throttle stop screw bracket) ④



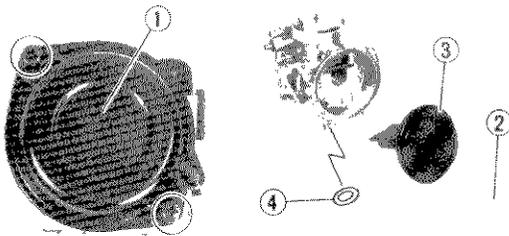
2. Remove:

- Starter lever ①
- Slide the stopper ② to remove the starter lever.



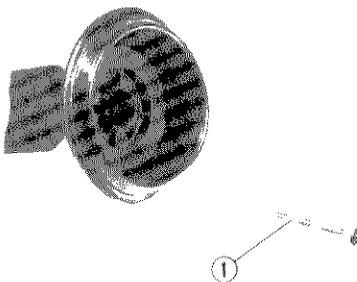
3. Remove:

- Starter plunger ①



4. Remove:

- Vacuum chamber cover ①
- Spring ②
- Throttle valve ③
- O-ring ④

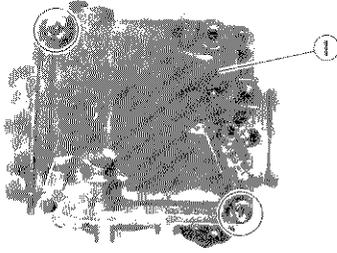


5. Remove:

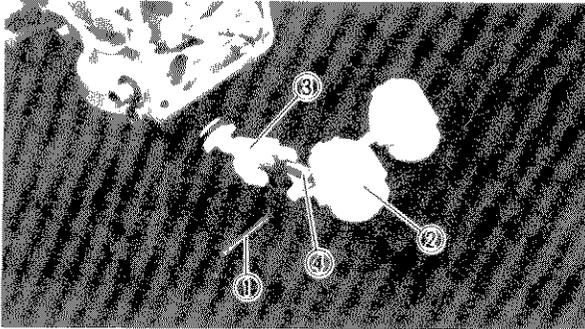
- Jet needle ①



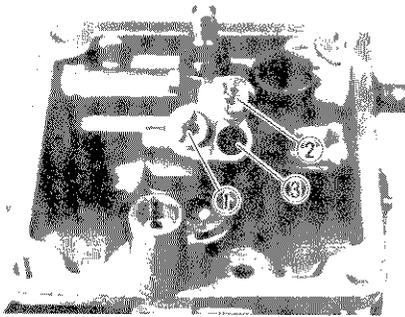
6. Remove:
- Float chamber ①



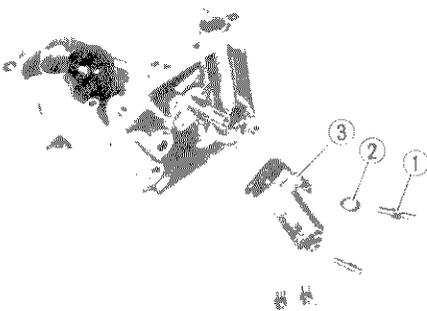
7. Remove:
- Float pin ①
 - Float ②
 - Valve seat ③
 - Needle valve ④



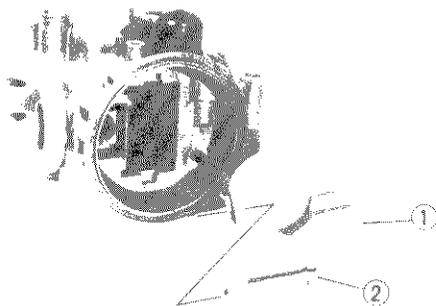
8. Remove:
- Main jet ①
 - Starter jet ②
 - Pilot jet ③

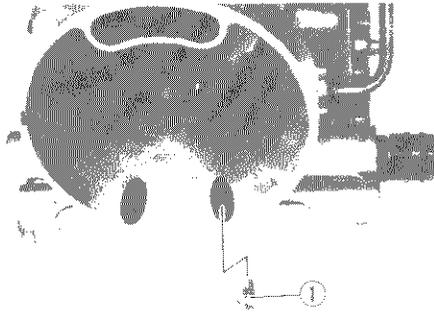


9. Remove:
- Bolt ①
 - Washer ②
 - Holder ③

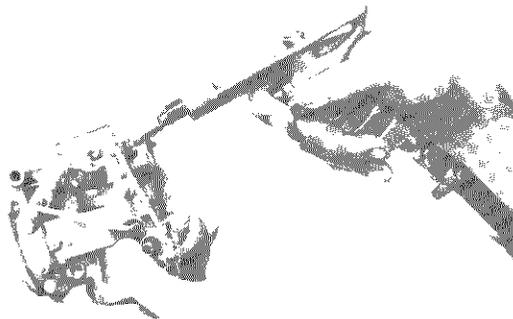


10. Remove:
- Throttle valve support ①
 - Main nozzle ②





11. Remove
 - Pilot air jet ①

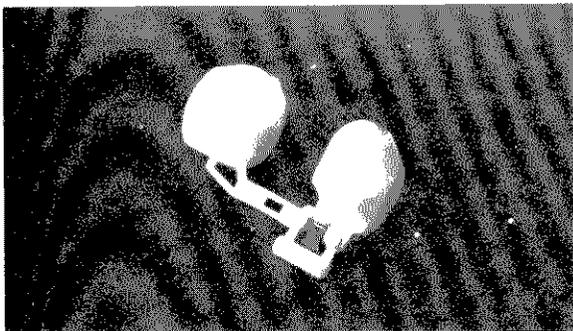


INSPECTION

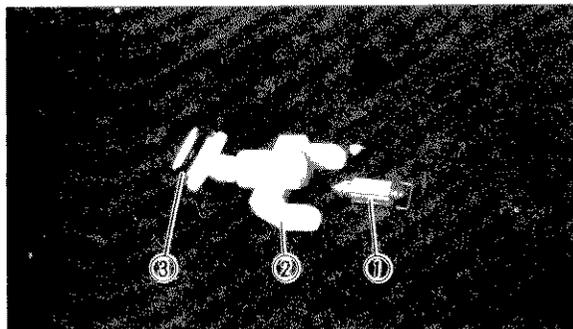
1. Inspect:
 - Carburetor body
 - Float chamber
 - Fuel passage
 Contamination → Clean as indicated.

Cleaning steps:

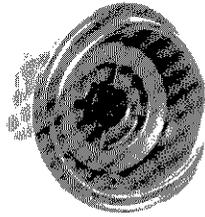
- Wash carburetor in petroleum based solvent. (Do not use any caustic carburetor cleaning solution.)
- Blow out all passages and jets with a compressed air.



2. Inspect:
 - Floats
 Damage → Replace.

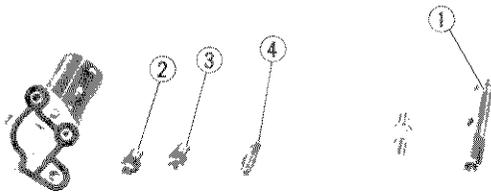


3. Inspect:
 - Float needle valve ①
 - Valve seat ②
 - O-ring ③
 Damage/Wear/Contamination → Replace as a set.



4. Inspect:

- Throttle valve
Scratches → Replace.
- Rubber diaphragm
Tears → Replace.



5. Inspect:

- Main nozzle ①
- Main jet ②
- Starter jet ③
- Pilot jet ④
- Pilot air jet
Bends/Wear/Damage → Replace.
Contamination → Blow out jets with a compressed air.

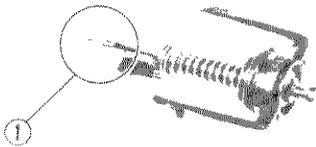


6. Check:

- Free movement
Insert the throttle valve into the carburetor body, and check for free movement.
Stick → Replace.

7. Inspect:

- Starter plunger ①
Wear/Damage → Replace.



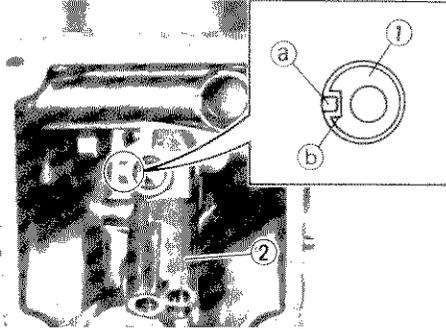


ASSEMBLY

To assemble the carburetor, reverse the disassembly procedures. Note the following points.

CAUTION:

- Before reassembling, wash all parts in clean petroleum based solvent.
- Always use a new gasket.

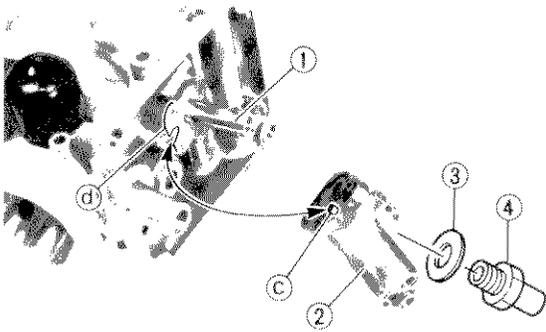


1. Install:

- Throttle valve support
- Main nozzle ①
- Holder ②
- Washer ③
- Bolt ④

NOTE:

- Align the projection (a) on holder with the slot (b) on main nozzle.
- Align the projections (c) on the holder bottom with the slot (d) on the carburetor body.

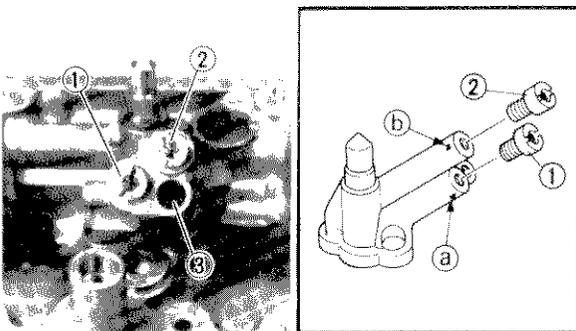


2. Install:

- Main jet ①
- Starter jet ②
- Pilot jet ③

NOTE:

The jet with a bigger eye is main jet ①, it should be installed on (a) position.
The jet with a smaller eye is starter jet ②, it should be installed on (b) position.

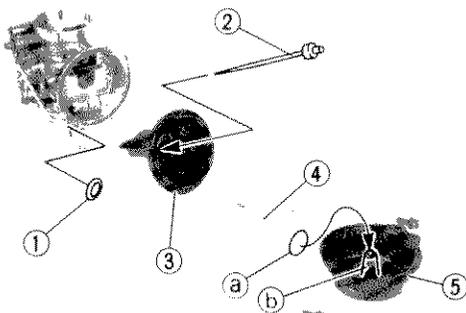


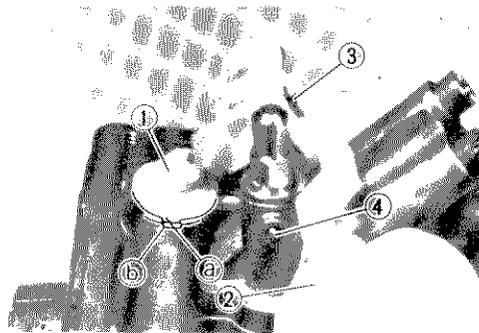
3. Install:

- O-ring ①
- Jet needle ②
- Throttle valve ③
- Spring ④
- Vacuum chamber cover ⑤

NOTE:

Insert the spring end (a) onto the projection (b) on the vacuum chamber cover.



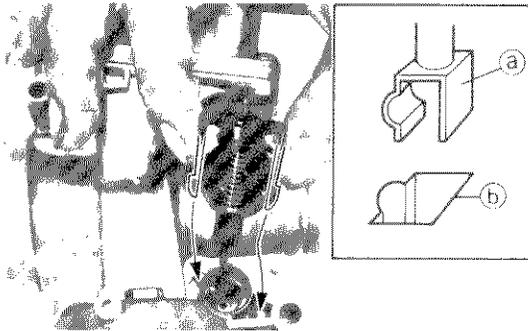


4. Install:

- Valve seat ①
- Float ②
- Float pin ③

NOTE:

Align the projection ① on valve seat with the slot ② on carburetor body.

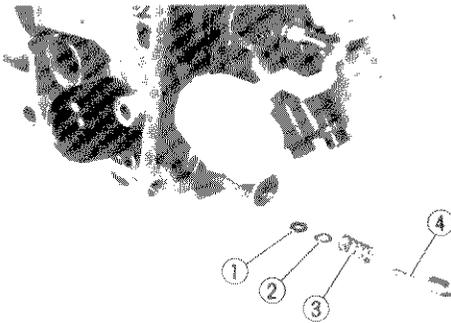


5. Install:

- Starter plunger ①

NOTE:

Install with the float surface ① of the starter plunger on that ② of the carburetor body.

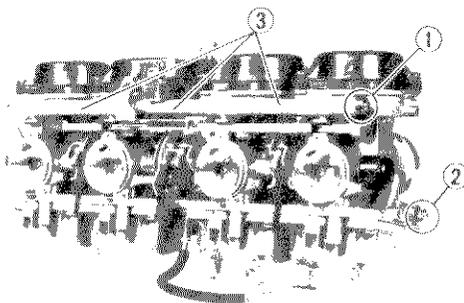


6. Install:

- Connecting bolt (upper) ①
 - Connecting bolt (lower) ②
 - Collars ③
 - Fuel hose joint
- To carburetors (#1 ~ #4)

NOTE:

• Do not tighten the connecting bolts yet.
 • Insert the throttle arm ① (each carburetor) between the spring ② and projection ③.

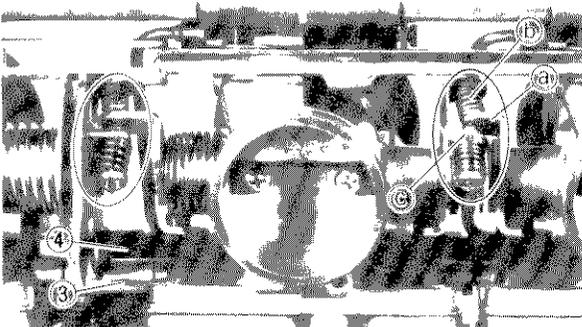


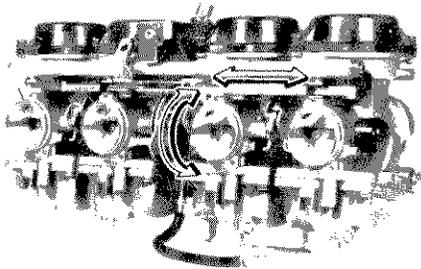
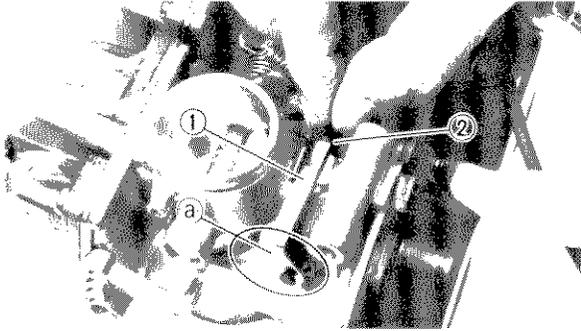
7. Install:

- Starter lever ①

NOTE:

• Hook the starter lever arm ① onto each starter plunger.
 • Insert the stopper ② into the slot on carburetor body.





8. Tighten:

- Connecting bolts

Place the carburetor assembly on a surface plate with the manifold side down, then tighten the connecting bolts while pushing down the respective carburetors with an even force.

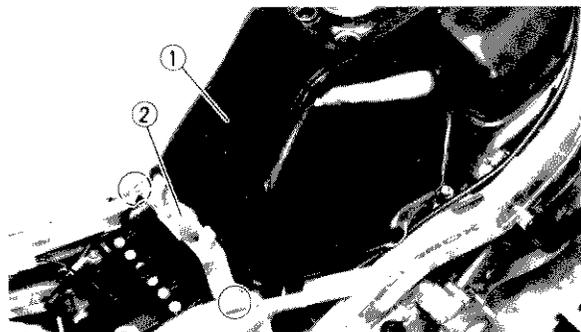


Connecting bolt (upper):
3 Nm (0.3 m·kg, 2.2 ft·lb)

Connecting bolt (lower):
5 Nm (0.5 m·kg, 3.6 ft·lb)

NOTE:

After tightening check the throttle lever and starter lever for smooth action.



INSTALLATION

Reverse the "REMOVAL" procedure. Note the following points.

1. Install:

- Fuel tank ①



Bolts (fuel tank):
14 Nm (1.4 m·kg, 10.2 ft·lb)

2. Install:

- Fuel tank bracket ②



Bolts (fuel tank bracket):
10 Nm (1.0 m·kg, 7.2 ft·lb)



3. Adjust:

- Idle speed

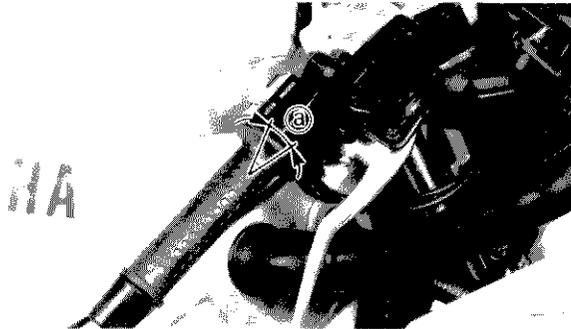


Idle Speed:

1,150 ~ 1,250 r/min

1,250 ~ 1,350 r/min (FZR600WC)

Refer to "IDLE SPEED ADJUSTMENT" section in the CHAPTER 3.



4. Adjust:

- Throttle cable free play ^a



Throttle cable free play:

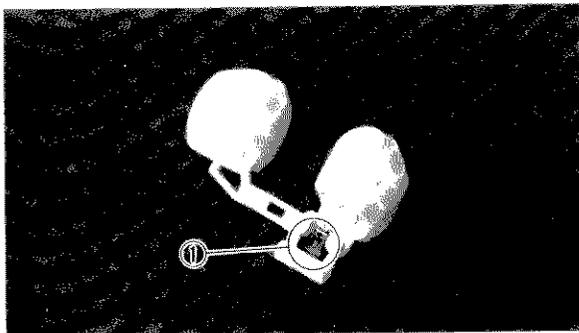
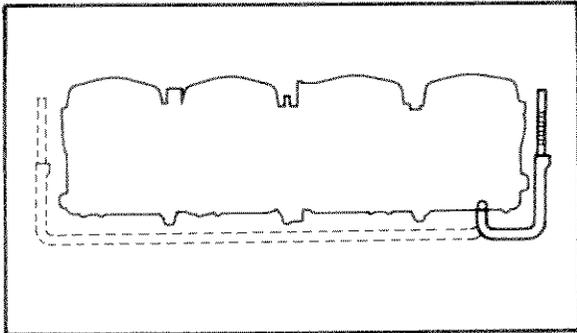
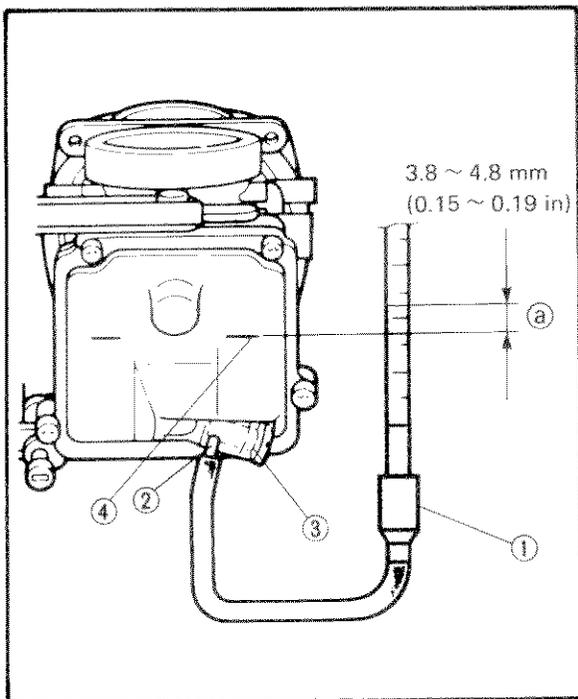
3 ~ 7 mm (0.12 ~ 0.28 in)

Refer to "THROTTLE CABLE ADJUSTMENT" section.

5. Adjust:

- Carburetor synchronization

Refer to "CARBURETOR SYNCHRONIZATION" in the CHAPTER 3.



ADJUSTMENT

Fuel Level Adjustment

1. Measure:

- Fuel level (a)

Out of specification → Adjust.



Fuel level (a) :

3.8 ~ 4.8 mm (0.15 ~ 0.19 in)

Below the float chamber line.

Fuel level measurement and adjustment steps:

- Place the motorcycle on a level surface.
- Use a garage jack under the engine to ensure that the carburetor is positioned vertically.
- Connect the Fuel Level Gauge (1) to the drain pipe (2) .



Fuel level gauge:

YM-01312

90890-01312

- Loosen the drain screw (3) and warm up the engine for several minutes.
- Hold the gauge vertically next to the float chamber line (4) .
- Measure the fuel level a with the gauge.

NOTE:

Fuel level readings of both side of carburetor line should be equal.

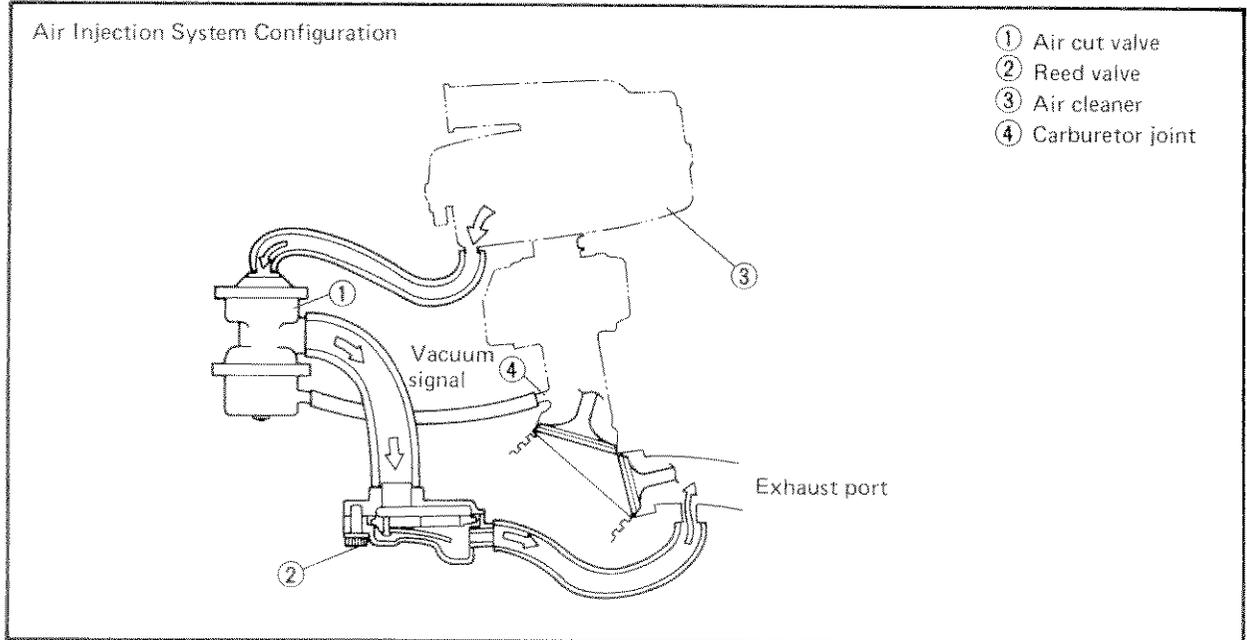
- If the fuel level is incorrect, adjust the fuel level.
- Remove the float chamber, float, valve seat and the needle valve.
- Inspect the valve seat and needle valve.
- If either is worn, replace them both.
- If both are fine, adjust float level by bending the float tang (1) slightly.
- Install the carburetor.
- Recheck the fuel level.

AIR INJECTION (For California)

AIR INJECTION (AIR INDUCTION SYSTEM)

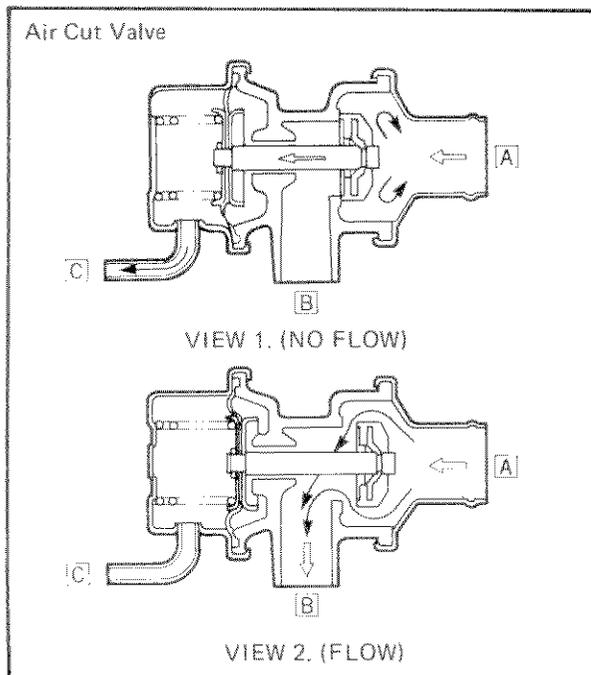
It is re-burning of un-burned exhaust gas by mixing fresh air (secondary air) at the exhaust port to reduce hydrocarbon.

When the pressure around the exhaust port becomes genative, the reed valve is opened and the secondary air flows into the exhaust port. Required temperature for re-burning of un-burned exhaust gas is approximately 600° to 700° C.



AIR CUT VALVE

Air cut valve is operated by intake gas pressure through the diaphragm. Normally, this valve is opened in order to allow fresh air to flow into the exhaust port. When the throttle is closed rapidly, negative pressure is generated and this valve is closed in order to prevent after-burning.



VIEW 1. (NO FLOW)

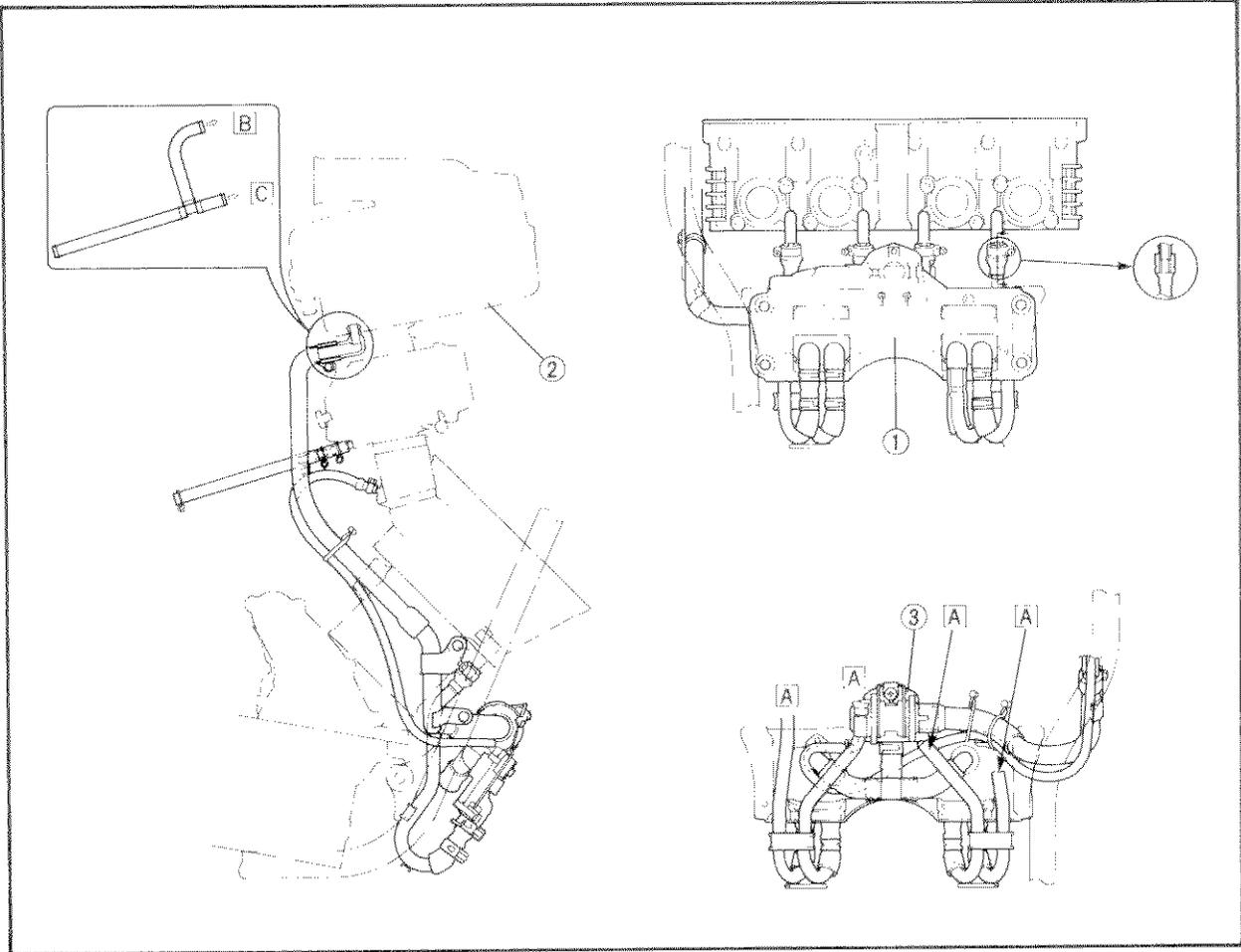
Valve will be closed at the time of deceleration by closing throttle.

VIEW 2. (FLOW)

Valve is opened during normal operation.

- [A] From air cleaner
- [B] To reed valve
- [C] To carburetor joint

- | | |
|-----------------|---------------------|
| ① Reed valve | Ⓐ To cylinders |
| ② Air cleaner | Ⓑ To No. 3 cylinder |
| ③ Air cut valve | Ⓒ To No. 4 cylinder |



AIR INDUCTION SYSTEM INSPECTION

1. Inspect:
 - Hose connection
Poor connection → Correct.
 - Hoses
 - Reed valves
 - Air cut valve
 - Air filter
Cracks/Damage → Replace.
Clogs → Clean.