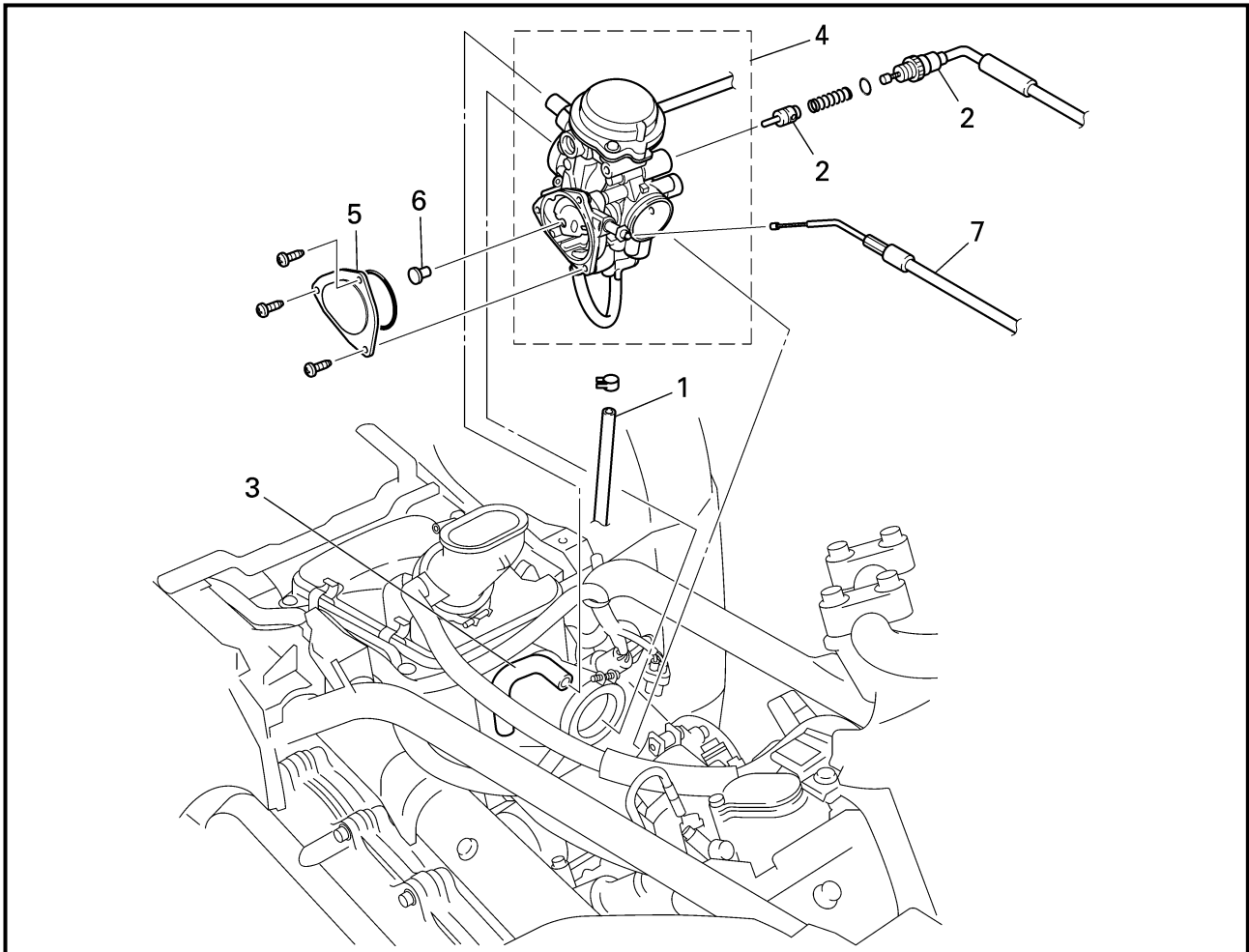

CHAPTER 6. CARBURETION

CARBURETOR	6-1
CARBURETOR INSPECTION	6-4
CARBURETOR ASSEMBLY	6-6
FUEL LEVEL ADJUSTMENT	6-7

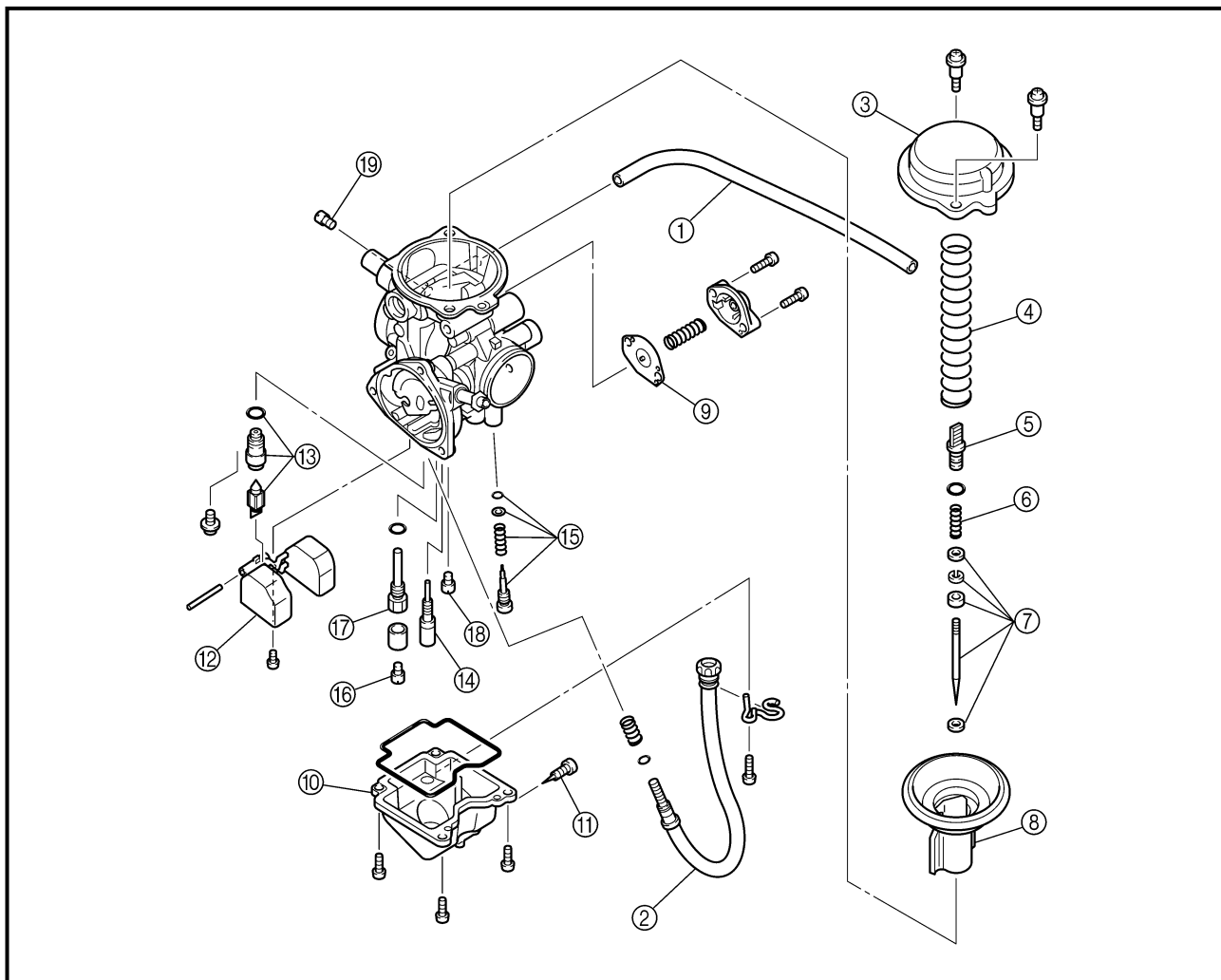


CARBURETION

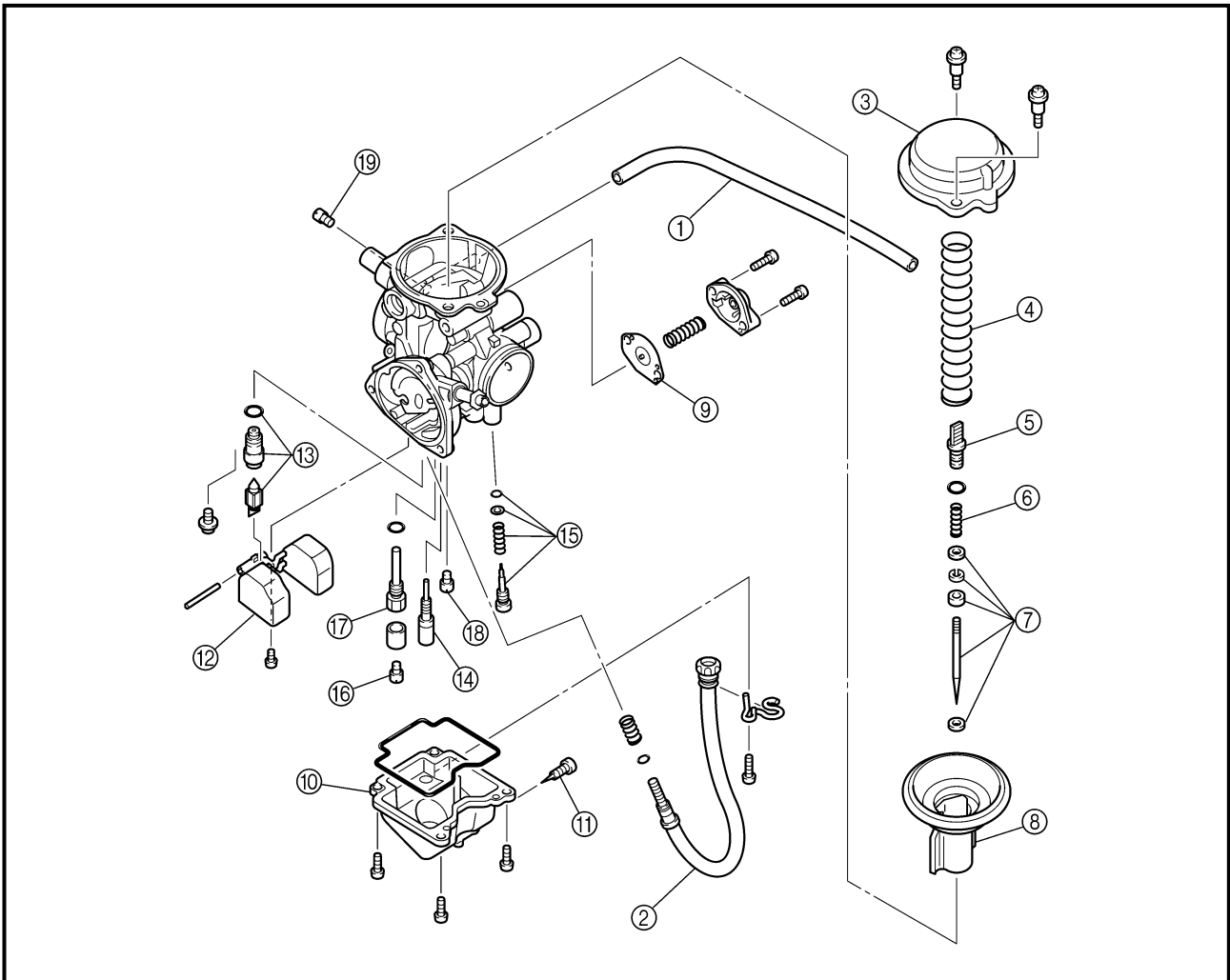
CARBURETOR



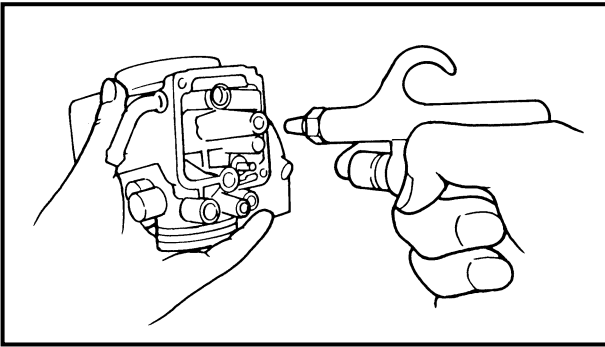
Order	Job name/Part name	Q'ty	Remarks
	Carburetor removal		Remove the parts in the order below. Refer to "SEAT, CARRIERS, FENDERS AND FUEL TANK" in CHAPTER 3.
	Seat/fuel tank side panels/fuel tank/rubber cover		
1	Drain hose	1	
2	Starter cable/starter plunger	1/1	
3	Air vent hose	1	
4	Carburetor assembly	1	
5	Throttle valve cover	1	
6	Throttle cable end	1	
7	Throttle cable	2	NOTE: _____ After removing the carburetor assembly, remove the throttle cable. _____
			For installation, reverse the removal procedure.



Order	Job name/Part name	Q'ty	Remarks
	Carburetor disassembly		Disassemble the parts in the order below.
①	Air vent hose	1	
②	Throttle stop screw	1	
③	Vacuum chamber cover	1	
④	Spring	1	
⑤	Jet needle holder	1	
⑥	Spring	1	
⑦	Jet needle set	1	
⑧	Piston valve	1	
⑨	Coasting enricher	1	
⑩	Float chamber	1	
⑪	Drain screw	1	
⑫	Float	1	Refer to "CARBURETOR ASSEMBLY".
⑬	Needle valve set	1	



Order	Job name/Part name	Q'ty	Remarks
⑭	Pilot jet	1	Refer to "CARBURETOR ASSEMBLY".
⑮	Pilot screw set	1	
⑯	Main jet	1	Refer to "CARBURETOR DISASSEMBLY/ASSEMBLY".
⑰	Needle jet	1	
⑱	Starter jet	1	
⑲	Pilot air jet	1	For assembly, reverse the disassembly procedure.



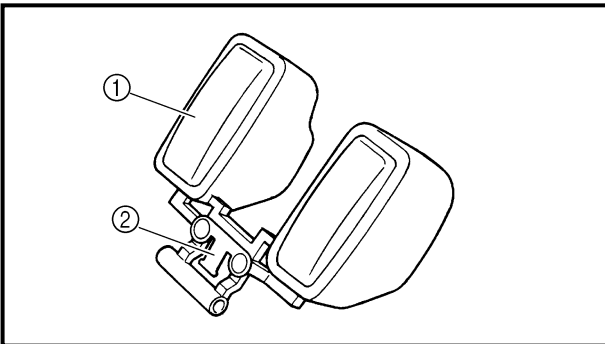
CARBURETOR INSPECTION

1. Inspect:

- Carburetor body
Cracks/damage → Replace.
- Fuel passage
Contamination → Clean as indicated.
- Fuel chamber body
Contamination → Clean.

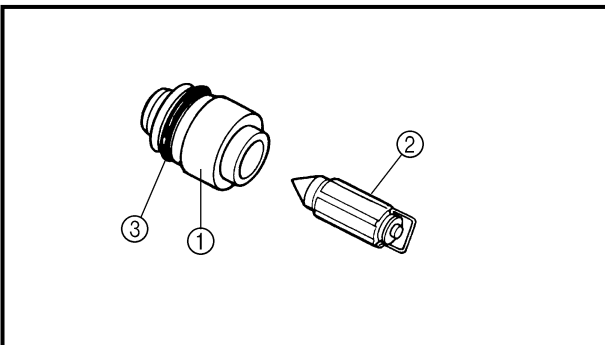
Cleaning steps:

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



2. Inspect:

- Float ①
- Float tang ②
Damage → Replace.

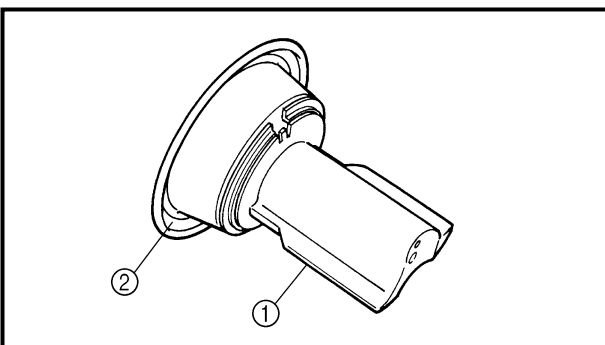


3. Inspect:

- Valve seat ①
- Needle valve ②
- O-ring ③
Contamination/wear/damage → Replace as a set.

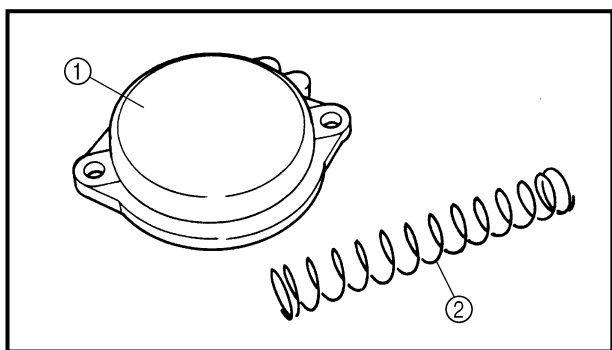
NOTE:

Always replace the needle valve and valve seat as a set.



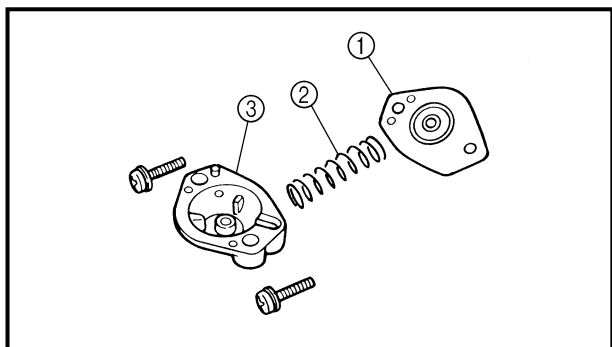
4. Inspect:

- Piston valve ①
Scratches/wear/damage → Replace.
- Rubber diaphragm ②
Tears → Replace.



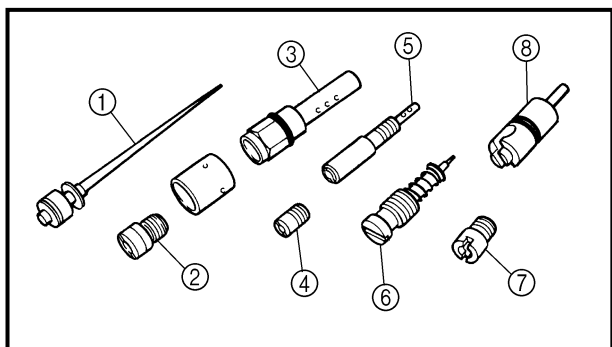
5. Inspect:

- Vacuum chamber cover ①
 - Spring ②
- Cracks/damage → Replace.



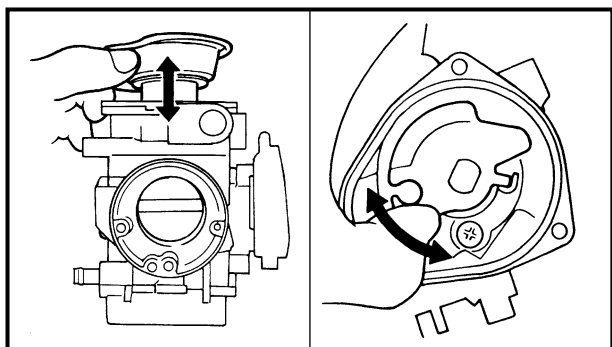
6. Inspect:

- Diaphragm (coasting enricher) ①
 - Spring ②
 - Cover ③
- Tears (diaphragm)/damage → Replace.



7. Inspect:

- Jet needle ①
 - Main jet ②
 - Needle jet ③
 - Pilot air jet ④
 - Pilot jet ⑤
 - Pilot screw ⑥
 - Starter jet ⑦
 - Starter plunger ⑧
- Bends/wear/damage → Replace.
- Blockage → Blow out the jets with compressed air.



8. Check:

- Free movement (piston valve)
- Sticks → Replace the piston valve guide and the piston valve.
- Insert the piston valve into the carburetor body, and check for free movement.

9. Check:

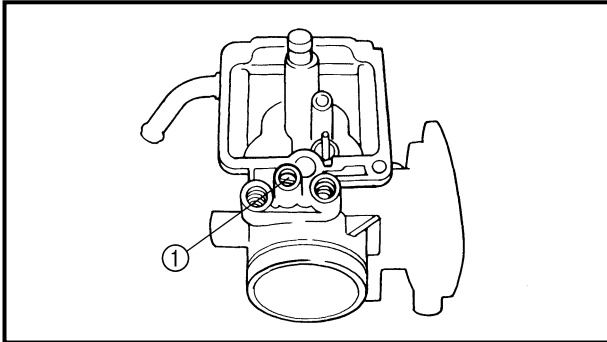
- Free movement (throttle valve)
- Sticks → Replace.



CARBURETOR ASSEMBLY

CAUTION:

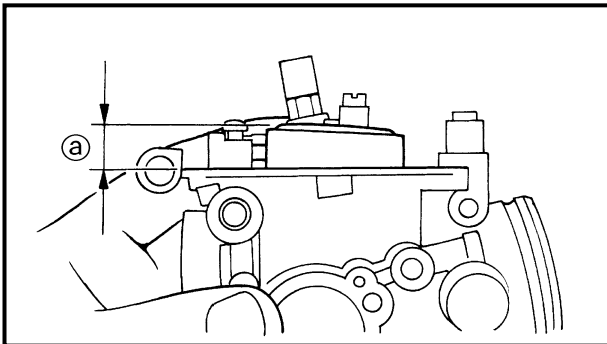
Before reassembling, wash all of the parts in a clean petroleum based solvent.



1. Install:

- Pilot screw ①

	Pilot screw: 2-1/2 turns out
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2. Measure:

- Float height ②
- Out of specification → Adjust.

	Float height (F.H.): 13 mm (0.51 in)
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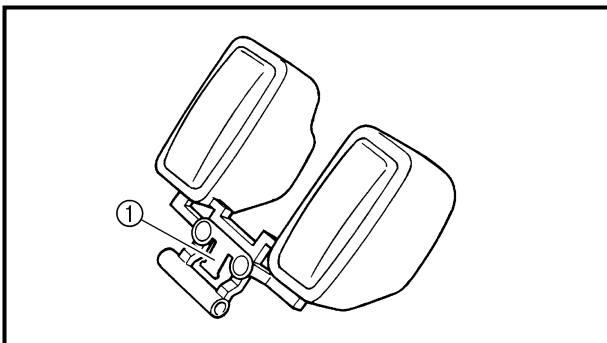
Measurement and adjustment steps:

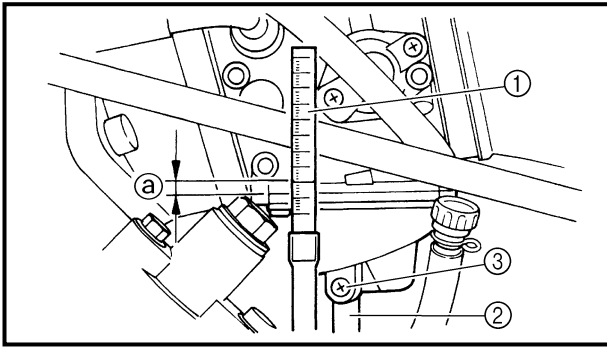
- Hold the carburetor in an upside down position.
- Measure the distance from the front mating surface of the float chamber (gasket removed) to the top of the float.

NOTE:

The float arm should be resting on the needle valve, but not compressing it.

- If the float height is not within the specification, inspect the valve seat and needle valve.
- If either is worn, replace them both.
- If both are fine, adjust the float height by bending the float tang ① on the float.
- Recheck the float height.





FUEL LEVEL ADJUSTMENT

1.Measure:

- Fuel level (a)

Out of specification → Adjust.



Fuel level:

2.0 ~ 3.0 mm (0.08 ~ 0.12 in)

Above the float chamber mating surface

Fuel level measurement and adjustment

steps:

- Place the machine on a level surface.
- Connect the fuel level gauge (1) to the drain pipe (2).



Fuel level gauge:

P/N. YM-01312-A, 90890-01312

- Loosen the drain screw (3).
- Hold the gauge vertically next to the float chamber line.
- Measure the fuel level (a) with the gauge.
- If the fuel level is incorrect, adjust the fuel level.
- Remove the carburetor.
- Inspect the valve seat and needle valve.
- If either is worn, replace them both.
- If both are fine, adjust the float level by bending the float tang (4) slightly.
- Install the carburetor.
- Recheck the fuel level.

