

CARB

5



CHAPTER 5 CARBURETOR

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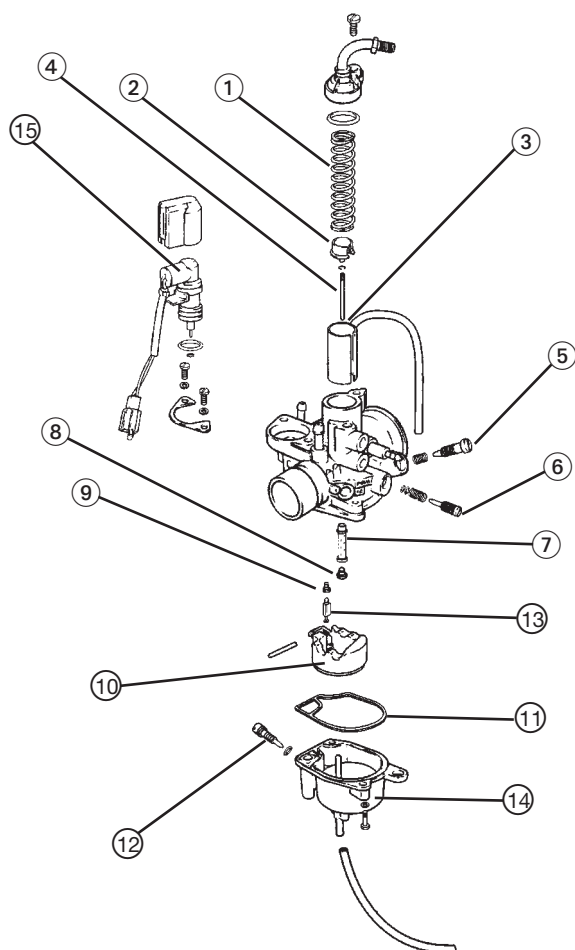
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CARBURETOR

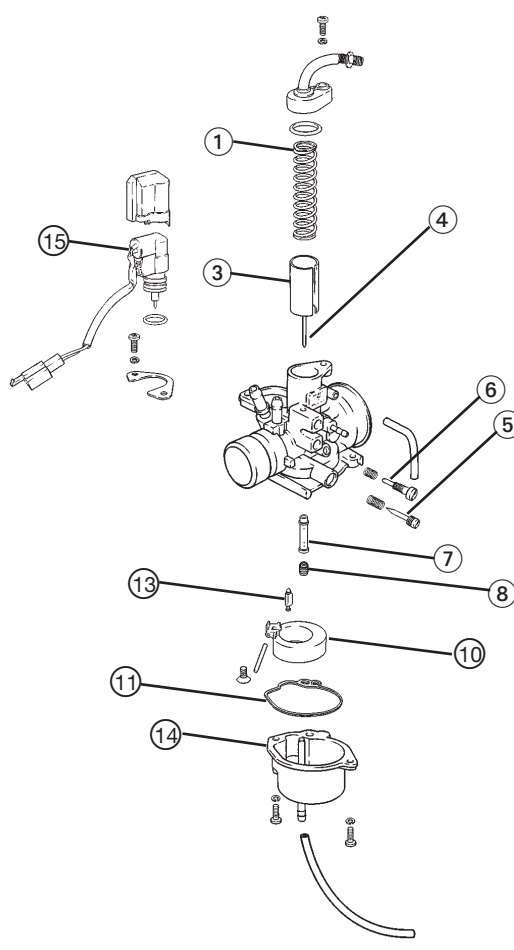
CARBURETOR

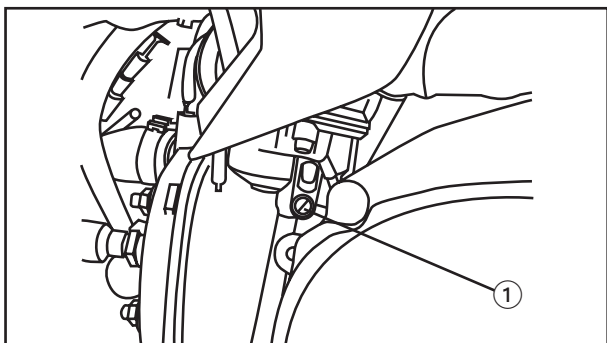
- | | |
|-------------------------|------------------|
| ① Throttle valve spring | ⑨ Pilot jet |
| ② Spring catch | ⑩ Float |
| ③ Throttle valve | ⑪ Float gasket |
| ④ Jet needle | ⑫ Drain screw |
| ⑤ Pilot air screw | ⑬ Needle valve |
| ⑥ Throttle stop screw | ⑭ Float chamber |
| ⑦ Needle jet | ⑮ Autochoke unit |
| ⑧ Main jet | |

carburetor dell'orto



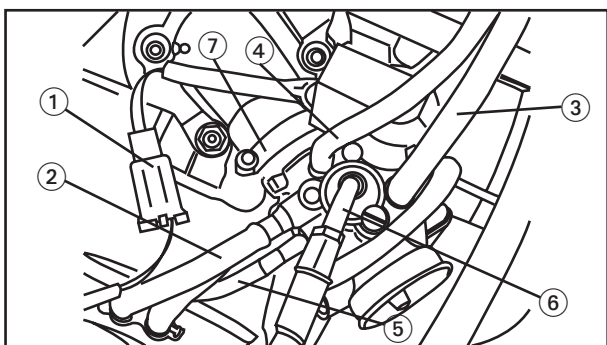
carburetor gurtner





REMOVING THE CARBURETOR

1. Remove:
 - air filter box
 - helmet box
 Refer to "REAR BODYWORK, MUD-GUARD" in chapter 3
2. Drain:
 - fuel (from drain screw ①)

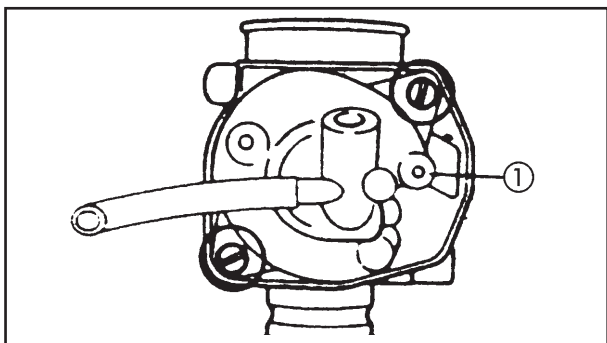


3. Disconnect:
 - autochoke lead coupler ①
 - fuel hose ③
 - vacuum hose ④
 - oil delivery hose ⑤
 - throttle cable (with throttle valve) ⑥
 - clamp (fixing clip) ⑦

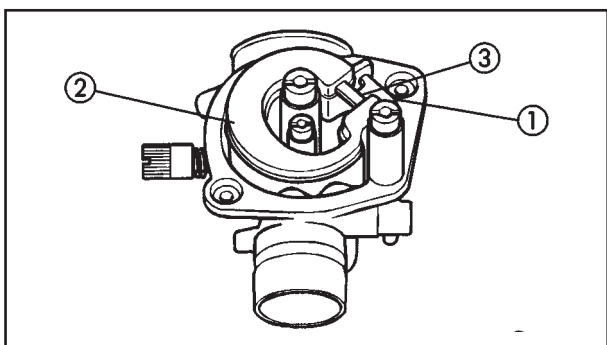
4. Remove:
 - carburetor

DISASSEMBLING THE CARBURETOR

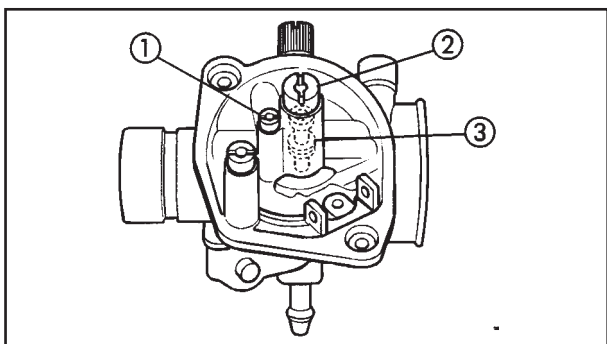
1. Remove:
 - float chamber ①

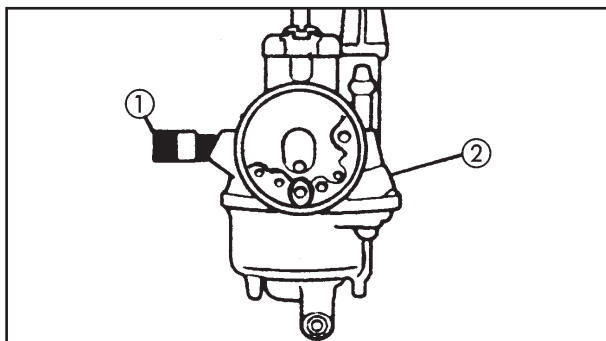


2. Remove:
 - float pin ①
 - float ②
 - needle valve ③

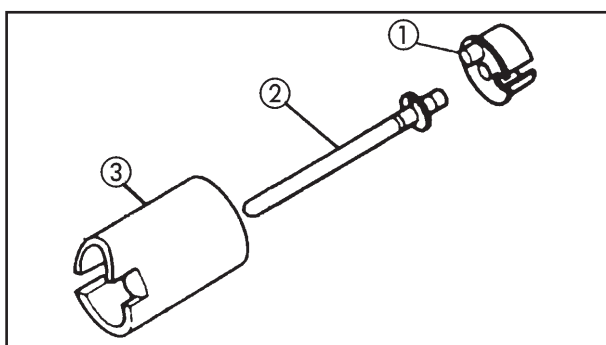


3. Remove:
 - pilot jet ①
 - main jet ②
 - needle jet ③

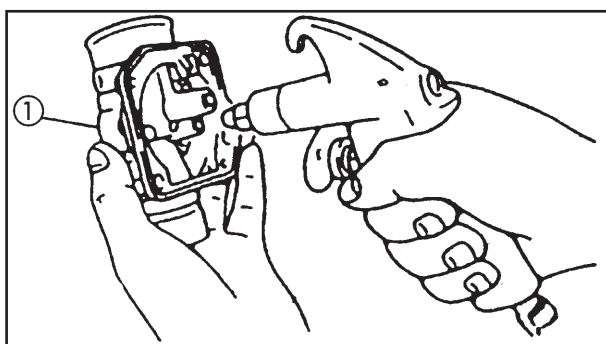




4. Remove:
 - throttle stop screw ① (with spring, washer and o-ring)
 - pilot air screw ② (with spring)



5. Remove:
 - spring seat ①
 - jet needle ②
 - throttle valve ③
 - throttle valve spring



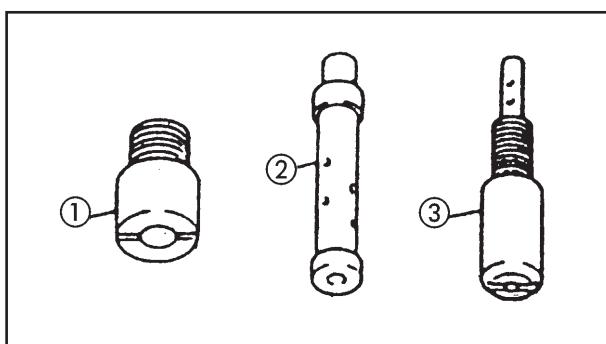
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CHECKING THE CARBURETOR

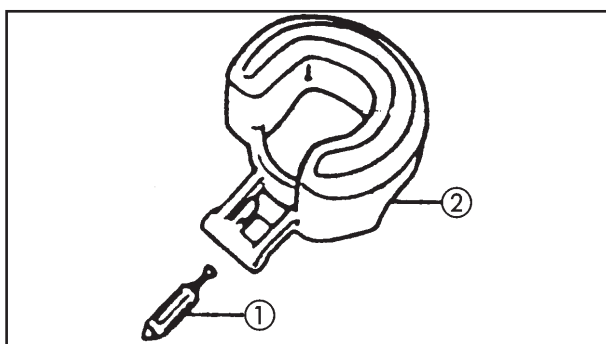
1. Check:
 - carburetor body ①
 Dirty → Clean

NOTE:

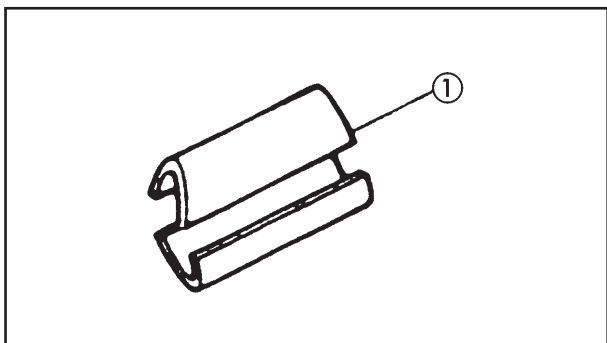
For cleaning, use a petrol based solvent. Clean the pipes and jets with compressed air



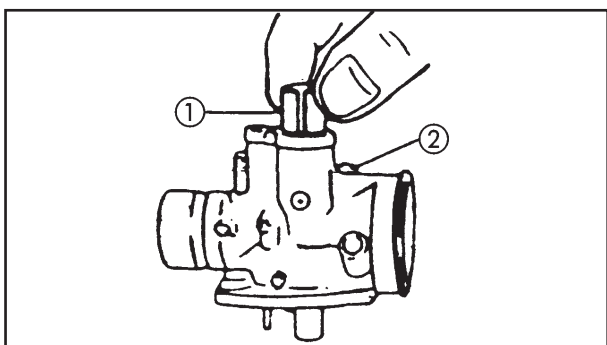
2. Check:
 - main jet ①
 - needle jet ②
 - pilot jet ③
 Dirty → Clean



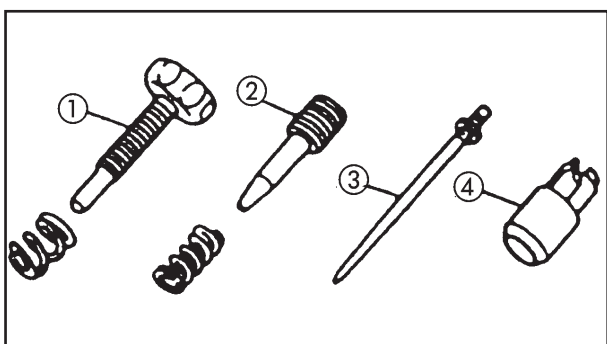
3. Check:
 - needle valve ①
 - Wear/Dirty → Clean
 - float ②
 - Damage → Change
 - gasket Damage → Change



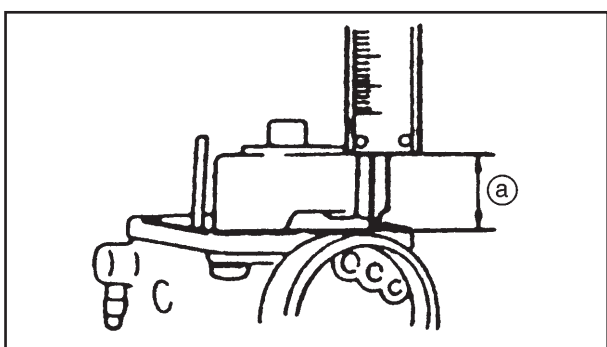
4. Check:
- throttle valve (1)
Wear/Damage → Change



5. Check:
- throttle valve displacement
Irregular movement/Catches → Change
Insert the throttle valve (1) in the body (2) and check its displacement.



6. Check:
- throttle stop screw (1)
 - pilot air screw (2)
 - jet needle (3)
 - starter plunger (4)
Wear/Damage → Change



7. Measure:
- Float height (a)
Outside specifications → Check valve, float and valve seat



Float height (a)
15.0 mm ~ 17.0 mm

Steps for measuring the height of the float:

- Assemble the valve, float and axle on the carburetor body
- Turn the carburetor upside down
- Using a vernier caliper, measure the distance between the plane of the bowl gasket (without the gasket) and the upper part of the float.



NOTE:

The arm of the float should be supported on the valve without compressing it.

- If the height of the float is not within the specified limits, inspect the valve and its seat.
- Substitute both parts if any part of them is worn.
- If both are in good condition, replace the float.
- Check the height of the float again.

NOTE:

The height of the float is adjusted in the factory. Do not try to modify it under any circumstances.

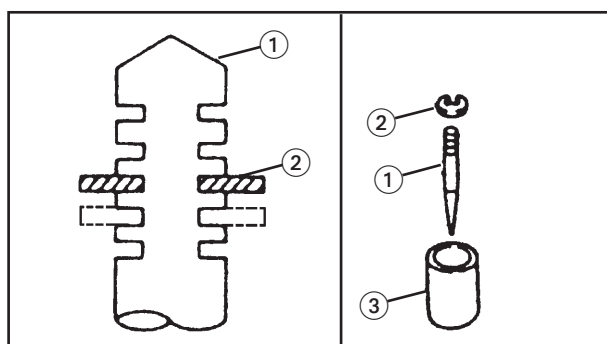
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ASSEMBLING THE CARBURETOR

The assembly of the carburetor is carried out following the reverse procedure to "DISASSEMBLY". Bear in mind the following points:

CAUTION:

- Before assembling the carburetor, wash all of the parts in a petroleum-based solvent.
- Always use new gaskets.



1. Install:

- jet needle ①
- clip ②
- throttle valve ③
- spring seat
- spring



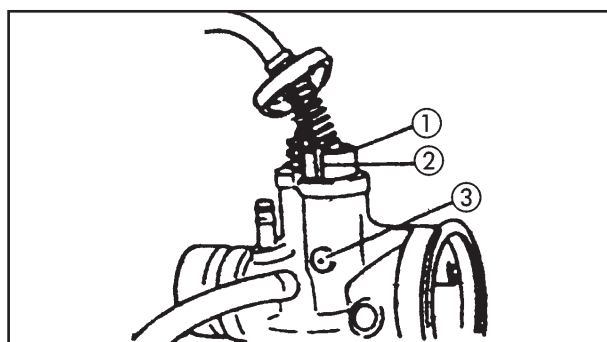
Jet needle clip position:
 3/5 (Dell'orto)
 2/3 (Gurtner)
 1/3 (Mofa Version)

2. Install:

- throttle valve ①

NOTE:

Align the groove ② with the carburetor projection ③.





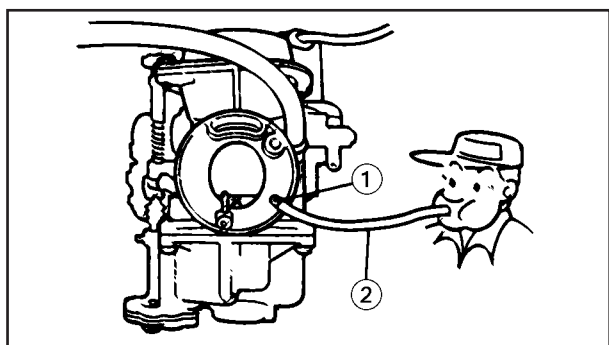
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CHECKING THE AUTOCHOKE UNIT

NOTE:

When checking the autochoke unit, the ambient temperature must be lower than 45°C (113°F).

1. Remove:
 - carburetor
2. Check:
 - autochoke unit



- a. Connect a 3.3 mm hose ① to the starter air passage ② and blow into the hose.

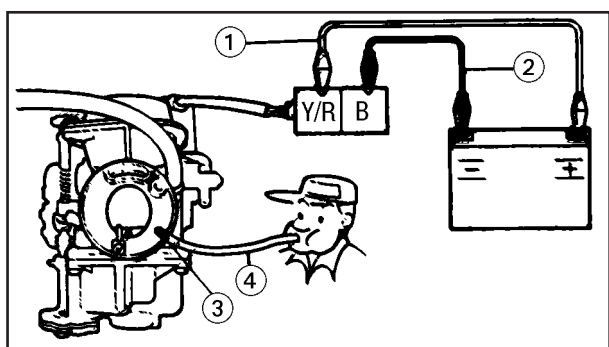
NOTE:

When the starter plunger is open, air should come out of the other side of the starter air passage.

Starter plunger opens	Perform step (3)
Starter plunger closes	Replace the auto-choke unit.

- autochoke unit

- Connect the autochoke unit leads to a 12.0 V battery for five minutes.

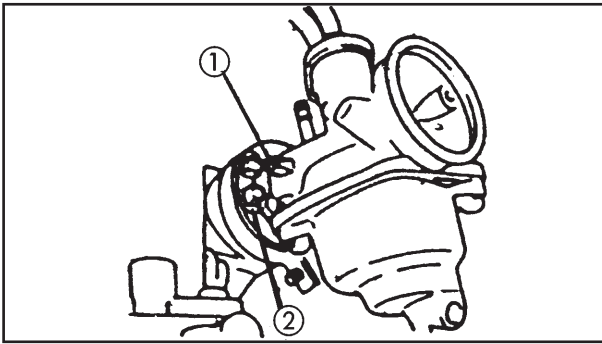


Positive batter lead ① → yellow/red

Negative battery lead ② → black

- b. Connect a 3.3 mm hose ③ to the starter air passage ④ and blow into the hose.

Starter plunger opens	Replace the autochoke unit.
Starter plunger closes	Autochoke is OK.



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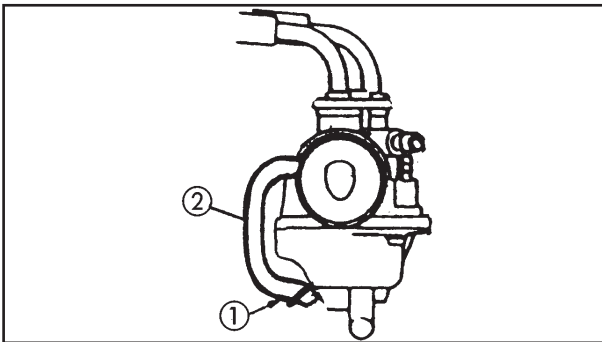
INSTALLING THE CARBURETOR

1. Adjust:
 - engine idling speed



Engine idling speed
1.800 rpm

Refer to “ADJUSTING HE ENGINE IDLING SPEED” in chapter 3.

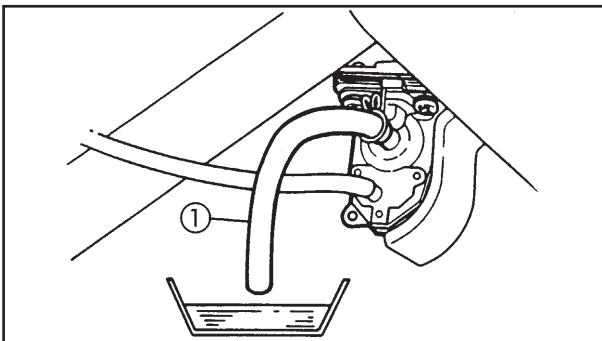


2. Adjust:
 - throttle cable free play



Throttle cable free play (at the flange of the throttle grip)
2 ~ 5 mm

Refer to “ADJUSTING HE ENGINE IDLING SPEED” in chapter 3.

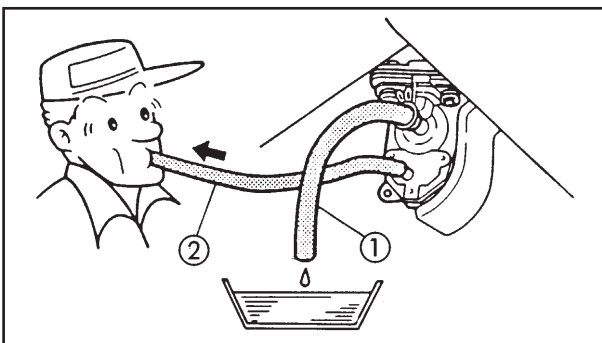


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FUEL COCK

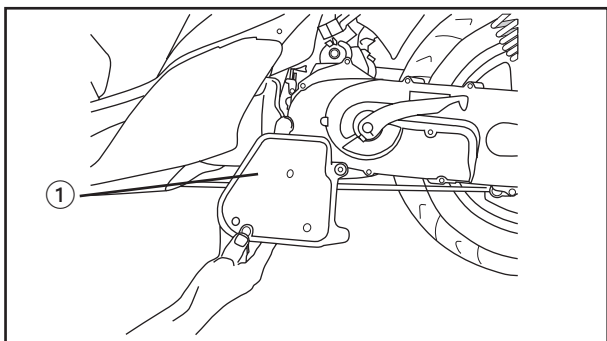
CHECKING THE FUEL COCK

1. Stop the engine.
2. Remove:
 - helmet box
 Refer to chapter 3, “REAR BODYWORK, MUDGUARD” section.
3. Inspect:
 - fuel cock



Steps for inspecting fuel cock:

- Disconnect the fuel hose ①
- Place a receptacle under the end of the fuel hose.
- Disconnect the vacuum hose ② and suction to create a vacuum
- If the fuel comes out of the fuel hose as a result of applying a vacuum and stops when the vacuum is stopped, the cock is in good condition. If not, clean or replace the vacuum hose, the fuel hose and cock.

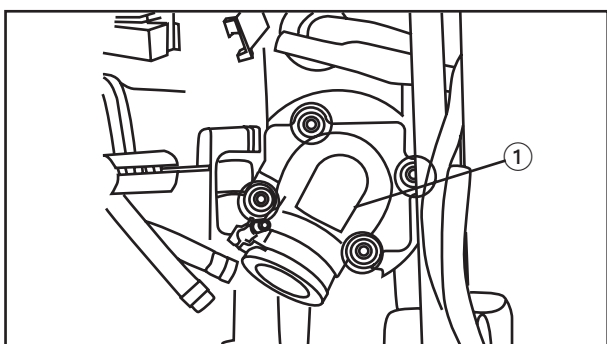


REED VALVE

REMOVING THE REED VALVE

1. Remove:
 - helmet box
Refer to “REAR BODYWORK, MUD-GUARD” in chapter 3.
 - air filter box assembly ①

2. Remove:
- carburetor
See section “REMOVING THE CARBURETOR”



3. Remove:
- carburetor joint ①
 - reed valve assembly

CHECKING THE REED VALVE

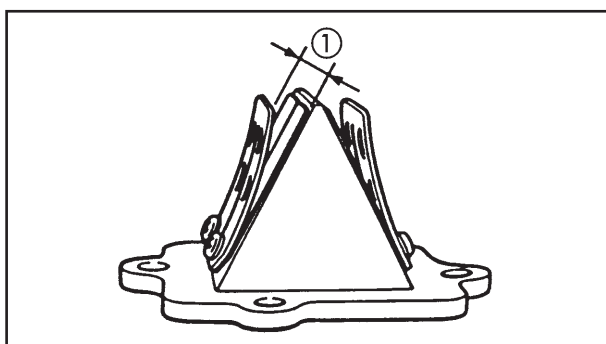
1. Inspect:
 - carburetor joint
Damage/Cracks → Change
 - reed valve
Fatigue/Cracks → Change

Inspection steps:

- Visually inspect the reed valve.
- If there is any doubt on how to seal, apply suction on the carburettor side.
- Leaks should be light or moderate.

REED VALVE

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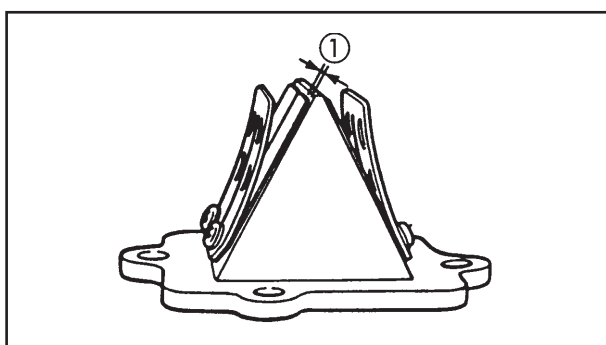


2. Measure:

- valve stopper height ①
Out of specification → Adjust the stopper/Replace the valve stopper.



Height of valve stopper ①
6.0 ~ 6.4 mm



3. Measure:

- clearance of reed valve ①
Out of specification → Replace the reed valve.



Clearance of reed valve ①
Less than 0.2 mm

INSTALLING THE REED VALVE

When the reed valve assembly is installed, reverse the removal procedure. Bear in mind the following points.

1. Install:

- gasket **New**

2. Tighten:

- tighten the bolts for reed valve



Reed valve
11 Nm (1.1 m • kg)

NOTE: _____

Tighten each bolt gradually to avoid it being deformed.