

CARB

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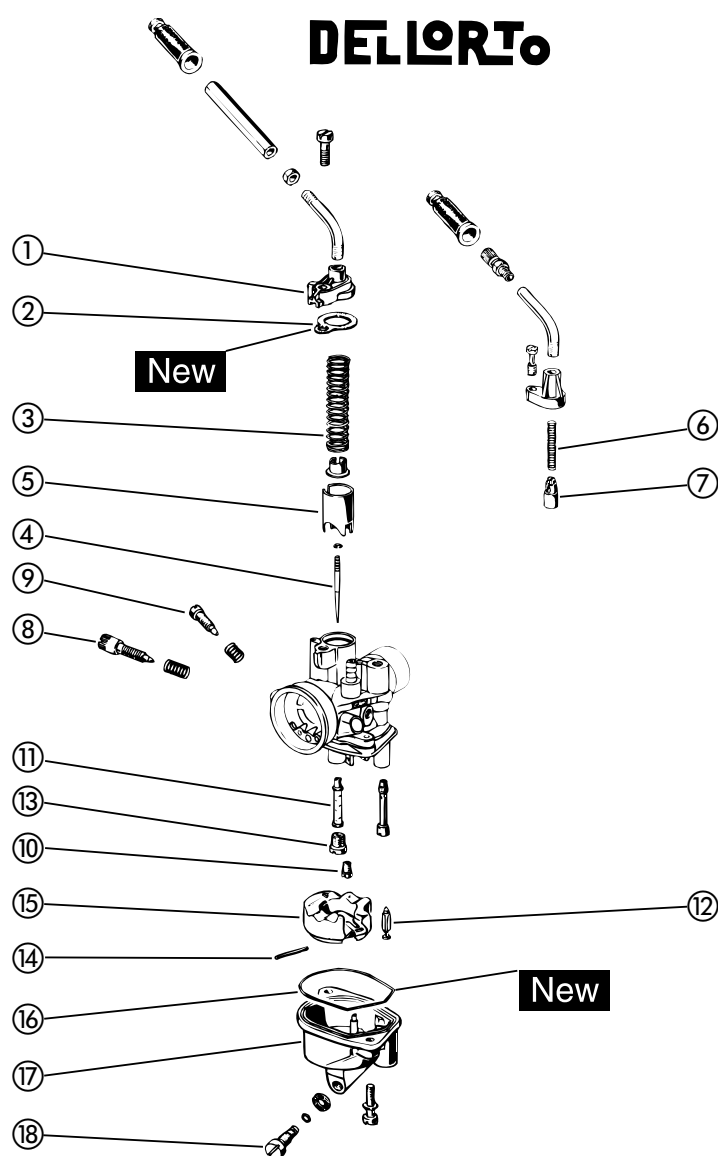
CHAPTER 6. CARBURETION

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DELL'ORTO CARBURETOR

- | | |
|--------------------------|------------------------|
| ① Carburetor top | ⑩ Pilot jet |
| ② Gasket | ⑪ Needle jet |
| ③ Throttle valve spring | ⑫ Needle valve |
| ④ Needle set | ⑬ Main jet |
| ⑤ Throttle valve | ⑭ Float pin |
| ⑥ Starter plunger spring | ⑮ Float |
| ⑦ Starter plunger | ⑯ Float chamber gasket |
| ⑧ Air screw | ⑰ Float chamber |
| ⑨ Throttle stop screw | ⑱ Drain screw |



**REMOVAL****1. Remove :**

- Side covers and footrest board

Refer to the section "SIDE COVERS AND FOOTREST BOARD" in Chapter 3.

- Air filter case assembly

2. Drain:

- Coolant

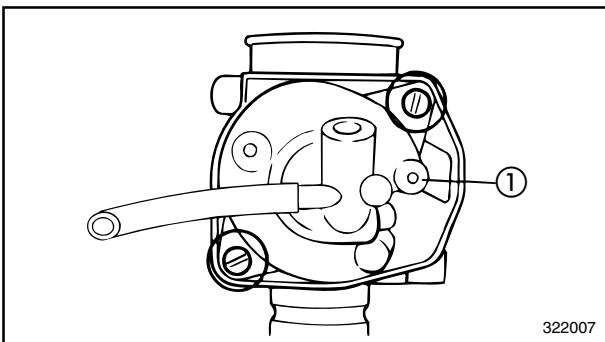
Refer to chapter 3 "COOLANT REPLACEMENT"

3. Disconnect :

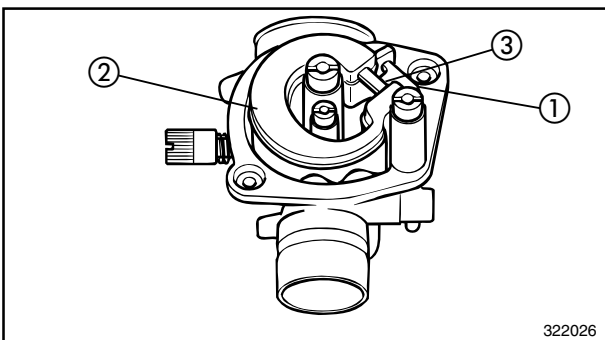
- Fuel hose
- Oil hose
- Coolant hoses

4. Remove :

- Carburetor top
- Throttle valve
- Starter plunger top
- Starter plunger
- Carburetor

**DISASSEMBLY****1. Remove :**

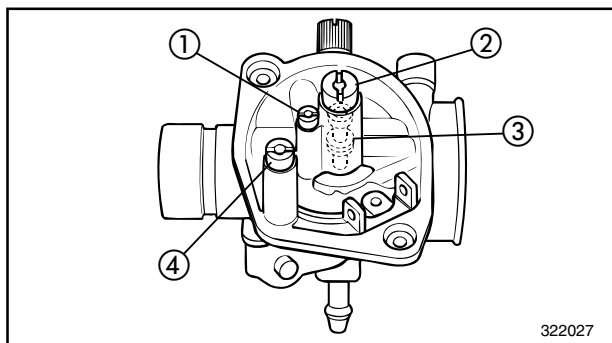
- Float chamber ①

**2. Remove :**

- Float pin ①
- Float ②
- Needle valve ③

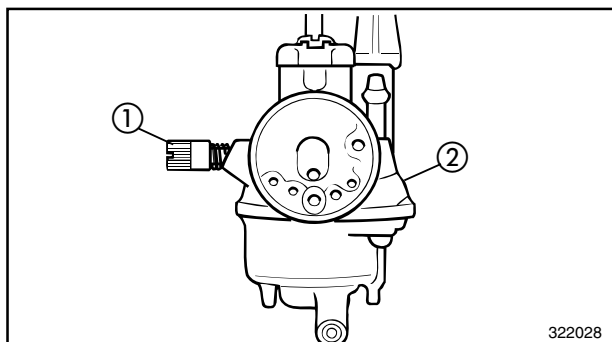
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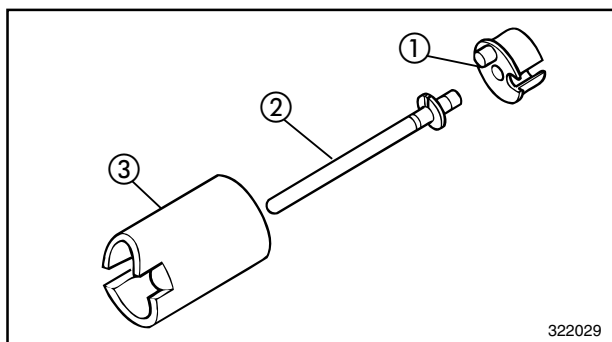
3. Remove :

- Pilot jet ①
- Main jet ②
- Main nozzle ③
- Starter jet ④



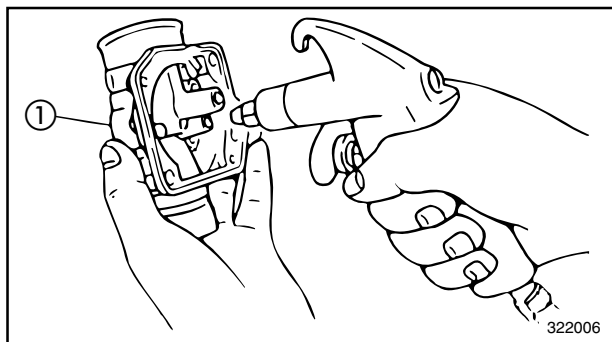
4. Remove :

- Throttle stop screw ①
- Spring (throttle stop screw)
- Air screw ②
- Spring (air screw)



5. Remove :

- Needle clip ①
- Jet needle ②
- Throttle valve ③



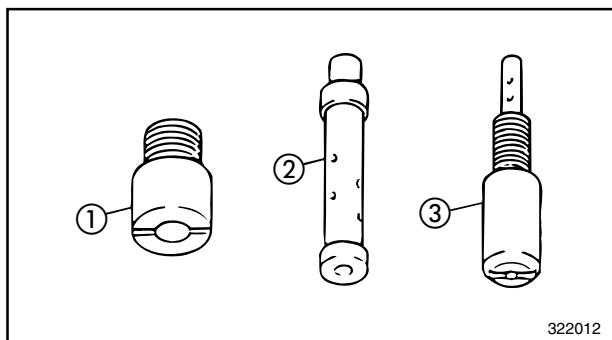
INSPECTION

1. Check :

- Carburetor body ①
- Dirt → Clean.

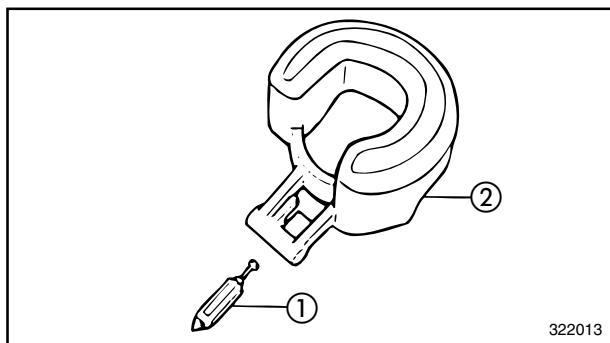
NOTE: _____

Use a petroleum based solvent for cleaning.
Blow out all passages and jets with compressed air.



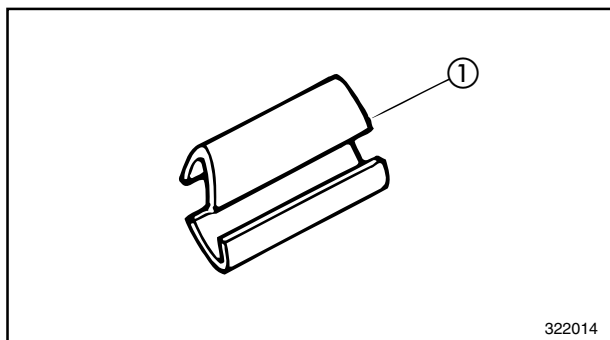
2. Inspect :

- Main jet ①
 - Main nozzle ②
 - Pilot jet ③
 - Starter jet
- Contamination → Clean.



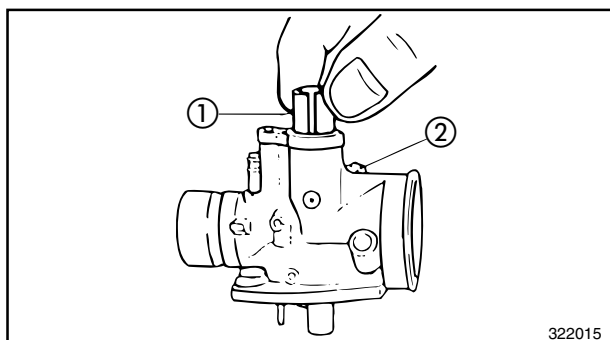
3. Check :

- Needle valve ①
Wear/Contamination → Replace.
- Float ②
Damage → Replace.
- Gasket
Damage → Replace.



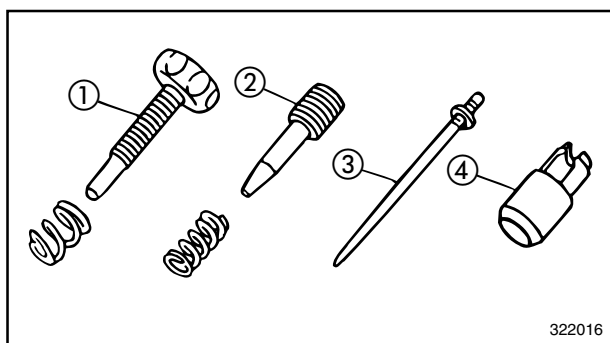
4. Check :

- Throttle valve ①
Wear/Damage → Replace.



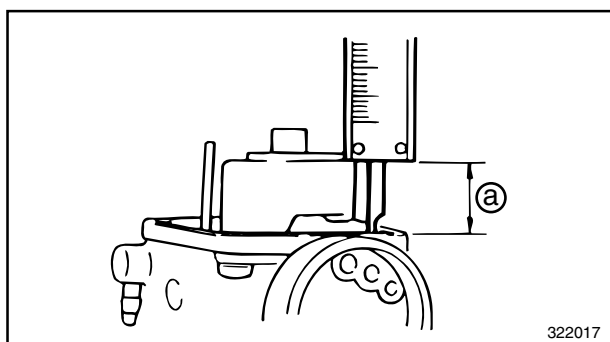
5. Check :

- Throttle valve free movement
Unsmooth/stickiness → Replace.
- Insert the throttle valve ① into the carburetor body ② and check for smooth movement.



6. Check :

- Throttle stop screw ①
- Air screw ②
- Needle ③
- Starter plunger ④
Wear/Damage → Replace.



7. Measure :

- Float height @
Out of specification → Inspect needle valve, float, and valve seat.



Float height @ :
15.0 ~ 17.0 mm (0.59 ~ 0.67 in)



Float height measurement steps :

- Install the needle valve, float and float pin into the carburetor body.
- Hold the carburetor upside down.
- Measure the height distance between the mating surface of the float chamber (gasket removed) and the top of the float, using a gauge.

NOTE:

The float arm should be resting on the needle valve. It should not compress the needle valve.

- If the float height is not within specification, inspect the needle valve, float and valve seat.
- If one of these parts is worn, replace the whole set.
- If both parts are in good condition, replace the float.
- Check the float height again.

NOTE:

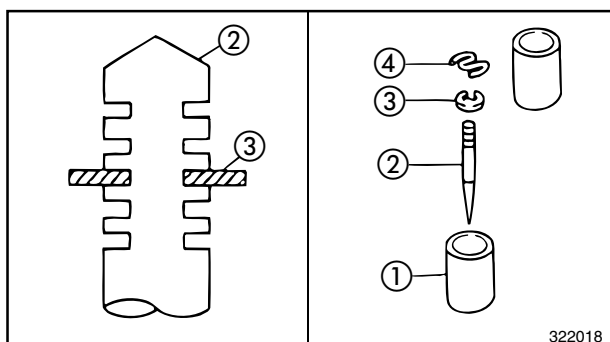
The float height is factory-adjusted. Never try to adjust it yourself.

ASSEMBLY

Reverse the "DISASSEMBLY" procedures. Note the following points.

CAUTION:

- Before reassembling the carburetor wash all its components in clean gasoline.
- Always use new gaskets.



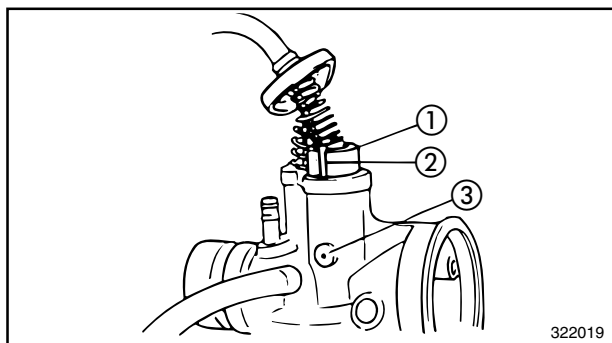
1. Install :

- Needle ②
- Clip ③
- Throttle valve ①
- Spring seat ④
- Spring



Jet needle clip position :
See specifications on Chapter 2

CARBURETOR

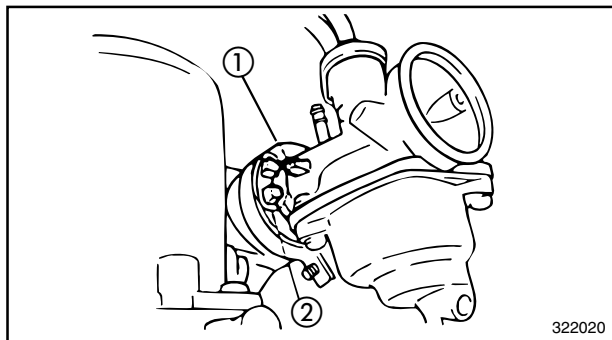
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2. Install :

- Throttle valve ①
- Starter plunger

NOTE:

Align the groove ② of the throttle valve with the projection ③ of the carburetor body.



3. Install :

- Carburetor

NOTE:

Align projection ① with projection ②.

INSTALLATION

To install the carburetor reverse the "REMOVAL" procedures. Note the following points.

1. Install :

- Carburetor cover

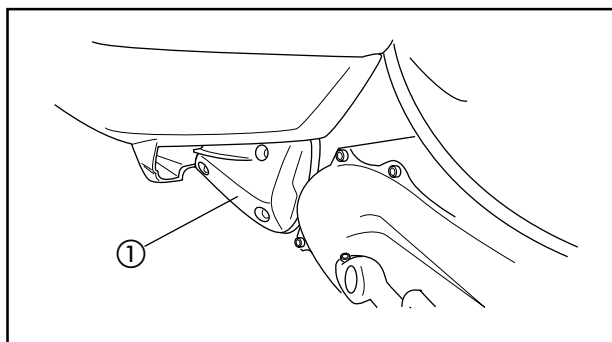
2. Connect:

- Coolant hose.

3. Adjust :

- Throttle cable free play

Refer to the section "THROTTLE CABLE FREE PLAY ADJUSTMENT" in Chapter 3.



4. Install :

- Air filter case ①

5.Fill:

- Coolant.

Refer to the chapter 3 "COOLANT REPLACEMENT"



FUEL COCK

INSPECTION

1. Stop the engine.

2. Remove :

- Side covers

Refer to the section "SIDE COVERS AND FOOTREST BOARD" in Chapter 3.

3. Check :

- Fuel cock

Fuel cock inspection steps :

- Disconnect the fuel hose.
- Place a receptacle under the fuel hose end.
- If fuel stops flowing within a few seconds, the fuel cock is in good condition. If not clean or replace the fuel cock.
- Disconnect the vacuum hose and breathe in through the hose to create a vacuum in the fuel cock.

If fuel flows out of the fuel hose when vacuum is applied and stops flowing when vacuum stops, the fuel cock is in good condition.

If not, clean or replace the vacuum hose, the fuel hose and the fuel cock.

FUEL FILTER CLEANING

The fuel filter is fitted inside the fuel tank. It is accessible when the fuel hose (between the fuel tank and the fuel cock) is disconnected.

Refer to the chapter 2 "CABLE ROUTING" for proper installation.

REED VALVE

REMOVAL

1. Remove :

- Side covers

Refer to the section "SIDE COVERS AND FOOTREST BOARD" in Chapter 3.

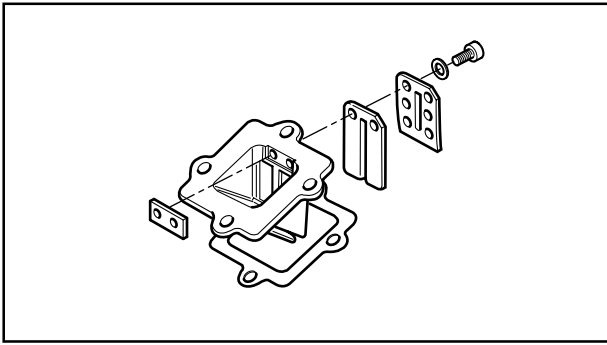
2. Remove :

- Carburetor

Refer to section "CARBURETOR REMOVAL".

REED VALVE

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3. Remove :

- Carburetor joint
- Reed valve assembly

INSPECTION

1. Check :

- Carburetor joint
Damage/Cracks → Replace.
- Reed valve
Wear/Cracks/Damage → Replace.

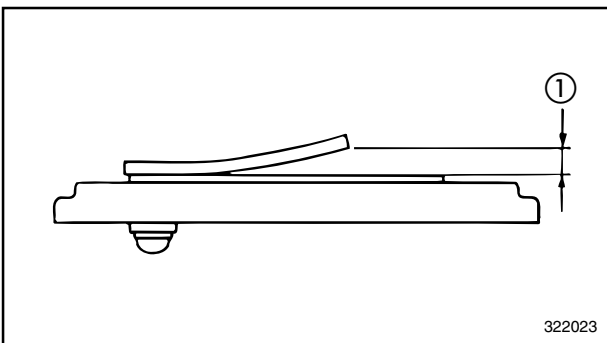
Reed valve inspection steps :

- Visually inspect the reed valve.

NOTE:

A reed valve in good condition should be completely or at least nearly flush with the valve seat.

- If in doubt, apply suction to the carburetor side of the assembly.
- Leakage should be minimal to moderate.

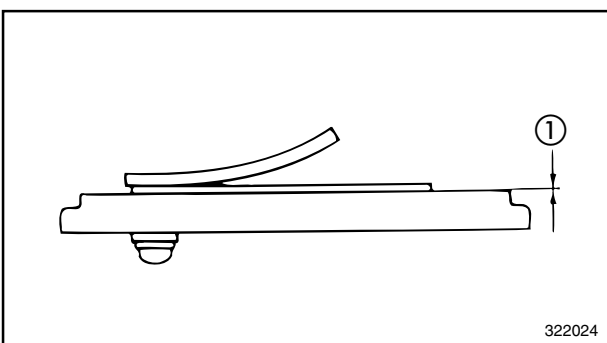


2. Measure :

- Valve stopper height ①
Out of specification → Replace valve stopper.



Valve stopper height :
6,0 ~ 6,4 mm (0.23 ~ 0.25 in)



3. Measure :

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



Reed valve clearance :
Less than 0.2 mm (0.008 in)

**INSTALLATION**

To install the reed valve reverse the “REMOVAL” procedure. Note the following points.

1. Install :

- Gasket (new)

2. Tighten :

- Reed valve assembly bolts



**Reed valve assembly bolts :
9 Nm (0.9 m.kg)**

NOTE:

Tighten the screws crosswise in several steps to prevent warpage of the reed valve assembly and the carburetor joint.
