

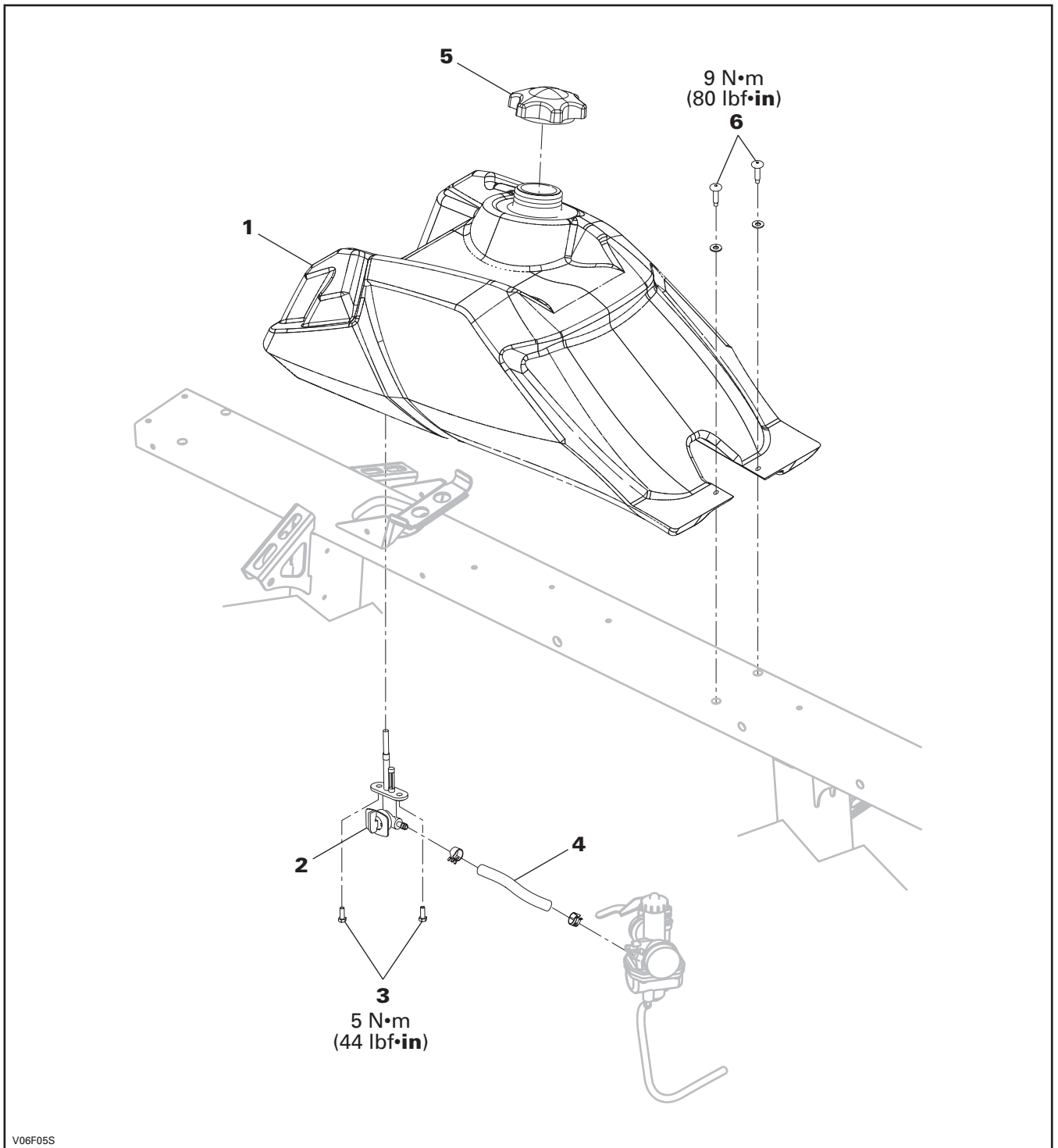
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FUEL CIRCUIT



Section 04 FUEL SYSTEM

Subsection 02 (FUEL CIRCUIT)

GENERAL

Disconnect battery before working on fuel system.

WARNING

Always disconnect battery exactly in the specified order, BLACK (-) cable first. It is recommended to disconnect electrical connections prior to disconnecting fuel lines.

WARNING

When draining a fuel tank or whenever a fuel line is disconnected, obstruct line with a hose pincher (P/N 295 000 076) or equivalent device. Fuel is flammable and explosive under certain conditions. Ensure work area is well ventilated. Do not smoke or allow open flames or sparks in the vicinity.

For installation, use the torque values and Loctite products from the exploded view. Clean threads before using Loctite when installing the screws.

FUEL LINE

WARNING

Whenever working on fuel system, always verify for water or dust infiltration in reservoir. Replace any damaged, leaking or deteriorated fuel lines.

When replacing fuel line, be sure to use hoses as available from Bombardier parts department. This will ensure continued proper and safe operation.

WARNING

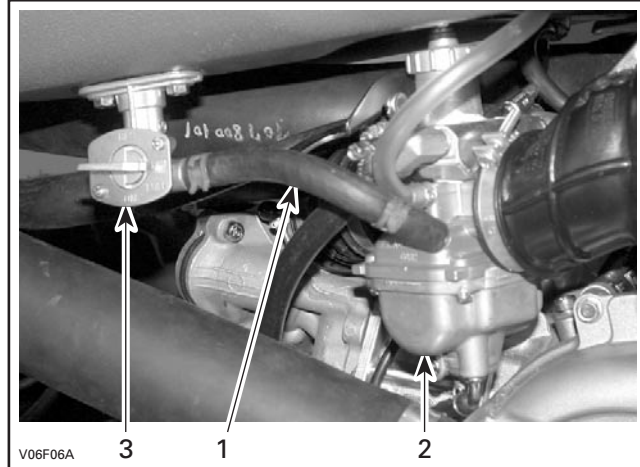
Use of improper fuel line could compromise fuel system integrity.

FUEL TANK

Draining

Turn fuel valve **no. 2** to the position OFF.

Disconnect fuel line from carburetor.



1. Fuel line
2. Carburetor
3. Fuel valve on OFF position

Place fuel line **no. 4** in to an approved fuel container.

Turn fuel valve on RESERVE position to drain the fuel tank.

NOTE: To accelerate fuel tank draining and ensure complete draining, remove cap **no. 5**.

When the tank is empty, turn valve OFF.

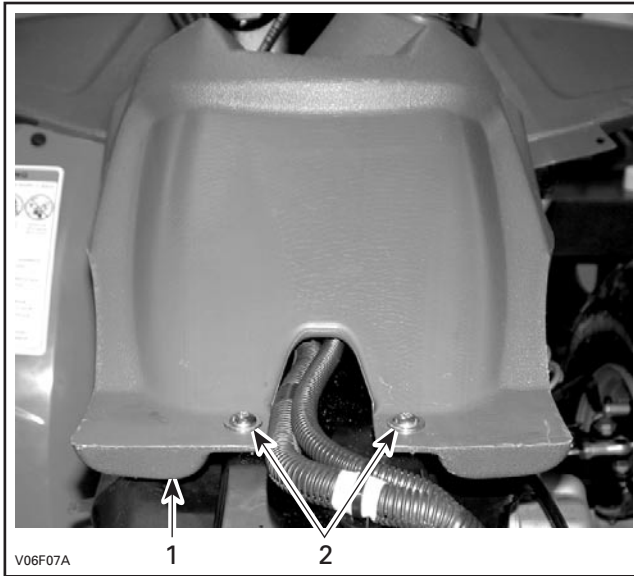
Removal

Drain fuel tank.

Remove following items from body. Refer to **BODY** for complete detailed procedure:

- seat
- console.

Unscrew the bolts **no. 6** retaining fuel tank to frame.



1. Fuel tank
2. Bolts

Inspection

Inspect fuel tank for any damage or cracks which may result in fuel leaks. If so, replace tank with new one.

Installation

Reverse removal procedure, however pay attention to the following.

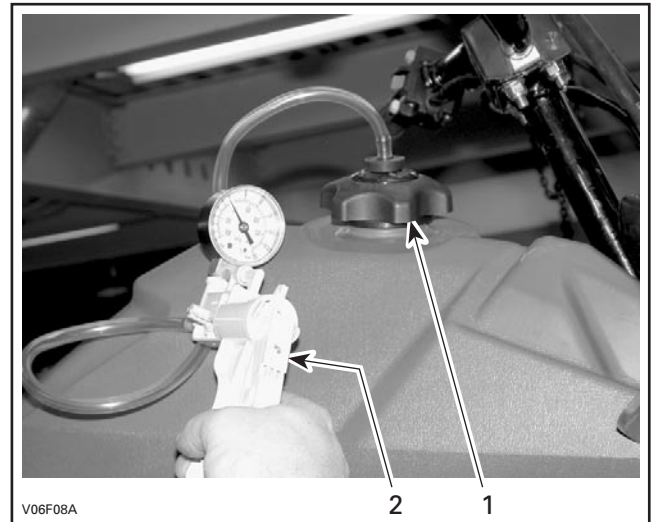
Perform fuel system pressurization as described in the following procedure.

Fuel System Pressurization

Fill up fuel tank **no. 1**.

Install on fuel tank, the special cap of leak testing kit (P/N 529 033 100).

Using air pump from engine leak test kit (P/N 861 749 100) inject air into fuel tank. See next photo.



1. Special cap on tank
2. Air pump

Pressurize fuel system to 21 kPa (3 PSI). That pressure must not drop during 3 minutes.

If pressure drops, locate fuel leak(s) and repair/replace leaking component(s).

To ease locating leak(s) at fuel tank vent fitting, fuel gauge or fuel cap spray soapy water on components; bubbles will indicate leak location(s).

FUEL VALVE

Removal

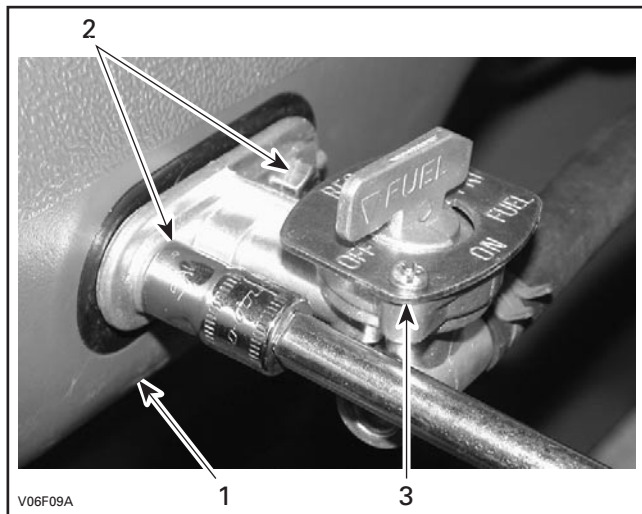
Remove LH side cover (refer to **BODY**).

Drain fuel tank, refer to **Fuel Tank Draining**.

Unscrew the bolts **no. 3** retaining fuel valve **no. 2** to fuel tank **no. 1**.

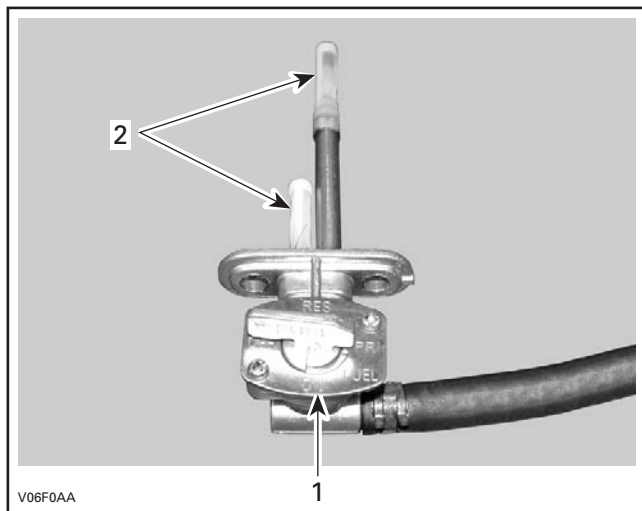
Section 04 FUEL SYSTEM

Subsection 02 (FUEL CIRCUIT)



1. Fuel tank
2. Bolts
3. Fuel valve on OFF position

Remove fuel valve.



1. Fuel valve
2. Strainers

Inspection

Check fuel valve strainers. If one strainer is damaged, change fuel valve.

Check gasket between fuel valve and fuel tank for damage. If so, change fuel valve.

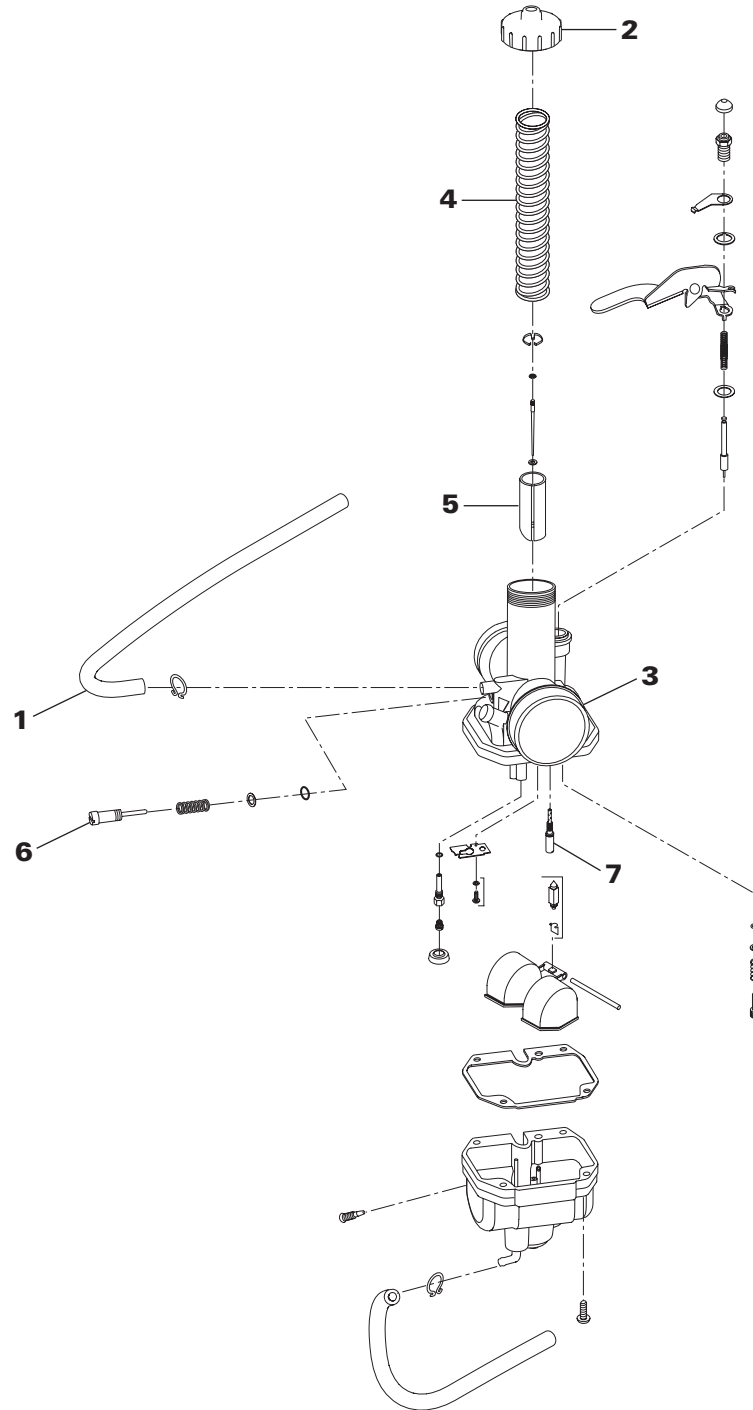
Installation

For installation, reverse the removal procedure.

Clean fuel valve strainers.

Perform fuel system pressurization as described in the **Fuel System Pressurization** section.

CARBURETOR



V06F0BS

Section 04 FUEL SYSTEM

Subsection 03 (CARBURETOR)

GENERAL

Disconnect battery before working on fuel system.

WARNING

Always disconnect battery exactly in the specified order, **BLACK (-)** cable first. It is recommended to disconnect electrical connections prior to disconnecting fuel lines.

CARBURETOR

CAUTION: Although some jets can be replaced by other jets from other carburetors, such modifications shouldn't be performed. They can greatly affect engine calibration and can cause severe damage to engine. Use only recommended jetting specific for this carburetor.

Removal

Turn fuel valve OFF.

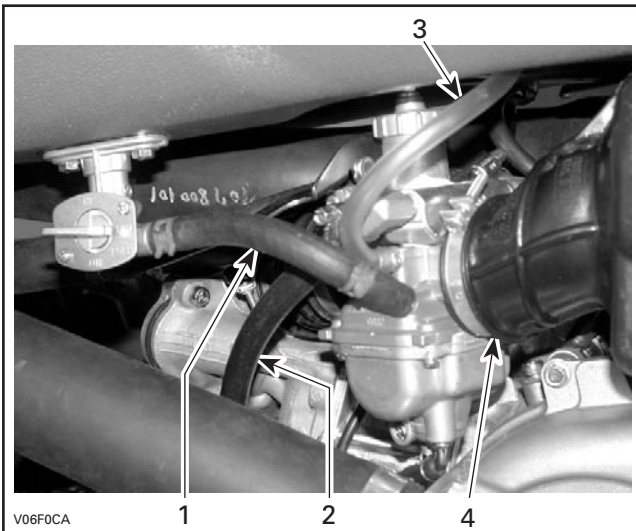
Disconnect fuel line from carburetor.

Unclamp the carburetor intake adaptor from carburetor. Refer **AIR INTAKE SILENCER**.

Disconnect two block heater hoses.

Disconnect vent hose **no. 1**.

Unscrew carburetor cap **no. 2** from the carburetor **no. 3**.



1. Fuel line
2. Block heater hose
3. Vent hose
4. Air intake adaptor

Remove throttle cable. See **THROTTLE CABLE** further in this section.

Pull out carburetor.

Cleaning and Inspection

The entire carburetor should be cleaned with a general solvent and dried with compressed air before disassembly.

CAUTION: Heavy duty carburetor cleaner may be harmful to the float material and to the rubber parts, O-rings, etc. Therefore, it is recommended to remove those parts prior to cleaning.

Carburetor body and jets should be cleaned in a carburetor cleaner following manufacturer's instructions.

WARNING

Solvent with a low flash point such as gasoline, naphtha, benzol, etc., should not be used as they are flammable and explosive.

Float Level Adjustment

Correct fuel level in float chamber is vital toward maximum engine efficiency. To check for correct float level proceed as follows:

- Remove float bowl and gasket from carburetor.
- Make sure that float arm is symmetric, not distorted.

With carburetor chamber up side down:

- Measure height between bowl seat and the top edge of float arm. Use float level gauge (P/N 529 035 520).
- Keep float level gauge perfectly vertical and in line with main jet hole.

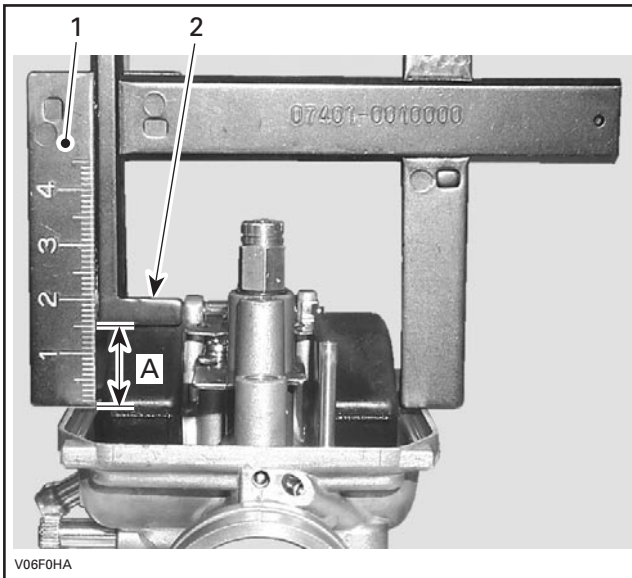
Ensure that both float level gauge tips are properly positioned on carburetor body and that "L" arm is leaning on float while compressing valve spring.

Refer to following photos for proper float level gauge positioning.

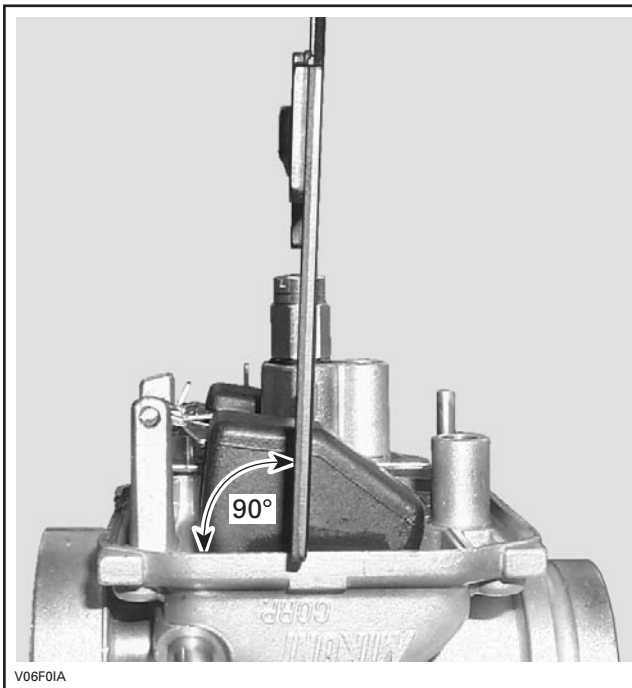
NOTE: Refer to **TECHNICAL DATA** for proper level.

Section 04 FUEL SYSTEM

Subsection 03 (CARBURETOR)



- 1. Gauge tips
- 2. "L" arm
- A. Height



GAUGE ALIGNED WITH MAIN JET

To adjust height, bend the contact tab of float arm until the specified height is reached.

CAUTION: When adjusting contact tab, do not pry on. This would apply pressure on needle and damage valve seat/needle.

CARBURETOR FLOAT LEVEL ADJUSTMENT

Float level	15 mm \pm 1mm (.591 in \pm .039 in)
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Installation

To install carburetor on engine, inverse removal procedure, as described:

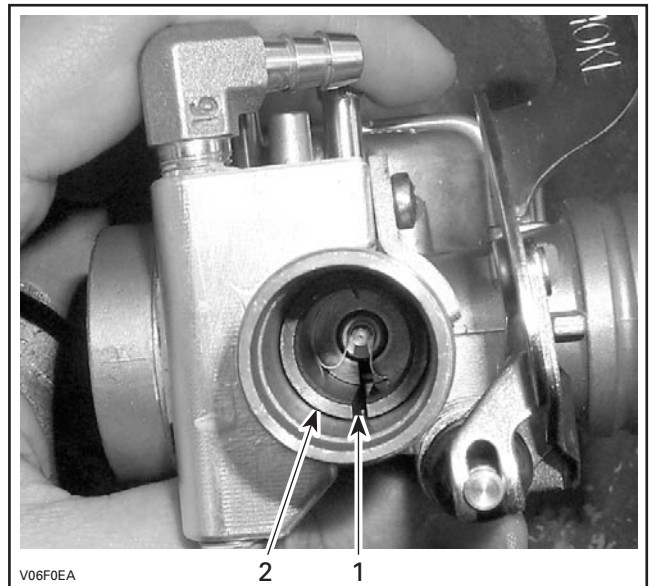
Adjust the throttle cable, then install the carburetor cap. Refer to CARBURETOR ADJUSTMENTS below in this section.

Carefully replace carburetor cap no. 2 in its original position.

Make sure valve piston no. 5 groove passes the inside protrusion in carburetor no. 3 before closing the carburetor cap no. 2.

⚠ WARNING

Throttle valve piston groove must be aligned with carburetor inside protrusion to allow throttle valve piston to reach idle bottom position. Otherwise throttle valve piston should be half open leading to potential dangerous situation.



- 1. Protrusion
- 2. Valve piston

Reinstall carburetor on engine.

When reinstalling carburetor on engine, pay attention to the following:

Section 04 FUEL SYSTEM

Subsection 03 (CARBURETOR)

CAUTION: The rubber flanges must be checked for cracks and/or damage. At assembly, the rubber flanges must be perfectly matched with the air box, carburetor and engine or severe engine damage will occur. Do not use screwdriver or other tool to install the rubber flanges.

Install rubber flange on air box side so that its recess aligns with air box notch.

CARBURETOR ADJUSTMENTS

Pilot Screw Preliminary Adjustment

NOTE: The pilot screw no. 6 is factory pre-set. Adjustment is not necessary unless the carburetor is overhauled or replaced.

Completely close the pilot screw (until a slight seating resistance is felt) then back off as specified.

Refer to **TECHNICAL DATA** for specifications.

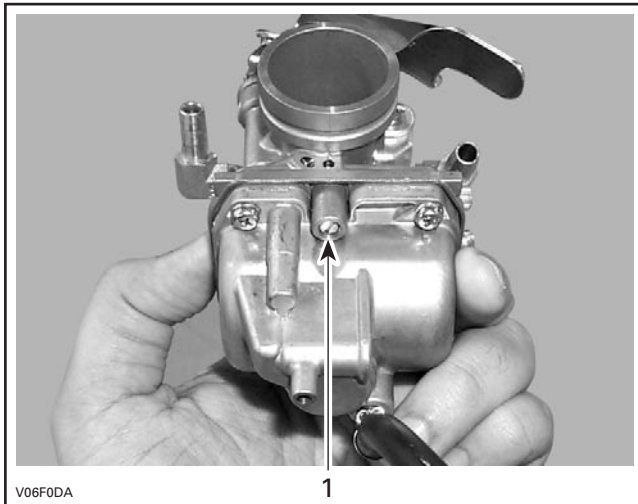
Pilot Screw Adjustment

NOTE: Warm up the engine to operating temperature.

Turn the pilot screw clockwise until it sits lightly then unscrew of 3/4 turn.

CAUTION: Take care when screwing the pilot screw, the feeling is very slight.

Adjust the idle speed, see below for procedure.



1. Pilot screw

Idle Speed Adjustment

Start engine and allow it to warm then adjust idle speed to specifications by turning **idle speed screw** clockwise to increase engine speed or counterclockwise to decrease it.



1. Idle speed screw

NOTE: Use the deluxe automotive meter, such as ESI 585 for the best measure.

CAUTION: Do not attempt to set the idle speed by using the pilot screw.

Refer to **TECHNICAL DATA** for idle speed specifications.

THROTTLE CABLE

Removal

Carburetor Side

⚠ WARNING

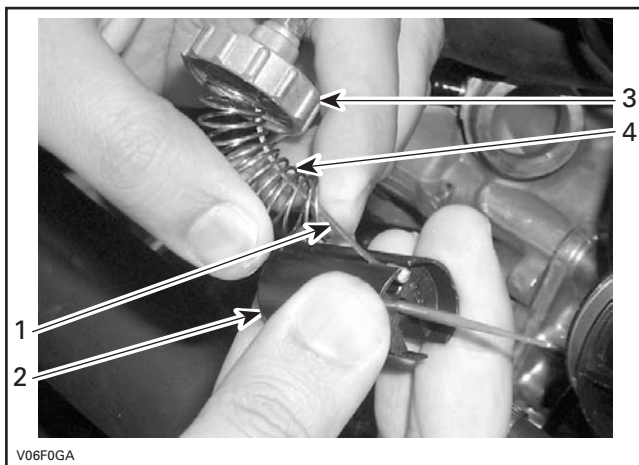
Ensure the key is turned OFF, prior to performing the throttle cable removal.

NOTE: To ease reinstallation, take note cable routing.

Unscrew carburetor cap no. 2 from the carburetor no. 3.

Push back the carburetor spring no. 4 to get hold of the throttle cable.

Push forward throttle cable out of the valve piston no. 5.



1. Throttle cable
2. Valve piston
3. Carburetor cap
4. Carburetor spring

Pull cable out of carburetor.

Throttle Lever Side

Remove both screws on throttle housing.

Remove throttle cable.

Lubrication

The throttle cable must be lubricated with Bombardier cable lubricant (P/N 293 600 041) only.

⚠ WARNING

Using another lubricant could cause sticking or stiffness of throttle lever/cable.

To lubricate the throttle cable, remove cable from throttle lever and from carburetor.

Install cable lubber (P/N 529 035 738) on cable.

Insert the needle of lubricant can on cable lubber hole.

⚠ WARNING

Always wear eye protection and gloves when lubricating cables.

NOTE: Place a rag around cable lubber to prevent lubricant splash.

Put lubricant until it passes through the cable.

Place the cable in a vertical position during approximately 15 minutes or until no lubricant flow out of cable.

Reinstall and adjust cable, see below.

Installation

For installation, reverse the removal procedure.

Adjustment

⚠ WARNING

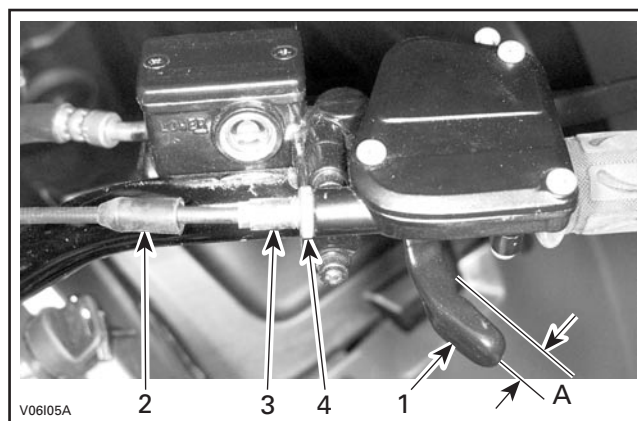
Ensure the key is turned OFF, prior to perform the throttle cable adjustment.

Slide rubber protector back to expose throttle cable adjuster.

Loosen lock nut then turn the adjuster to obtain correct throttle lever free play.

NOTE: Measure throttle free play at the tip of throttle lever.

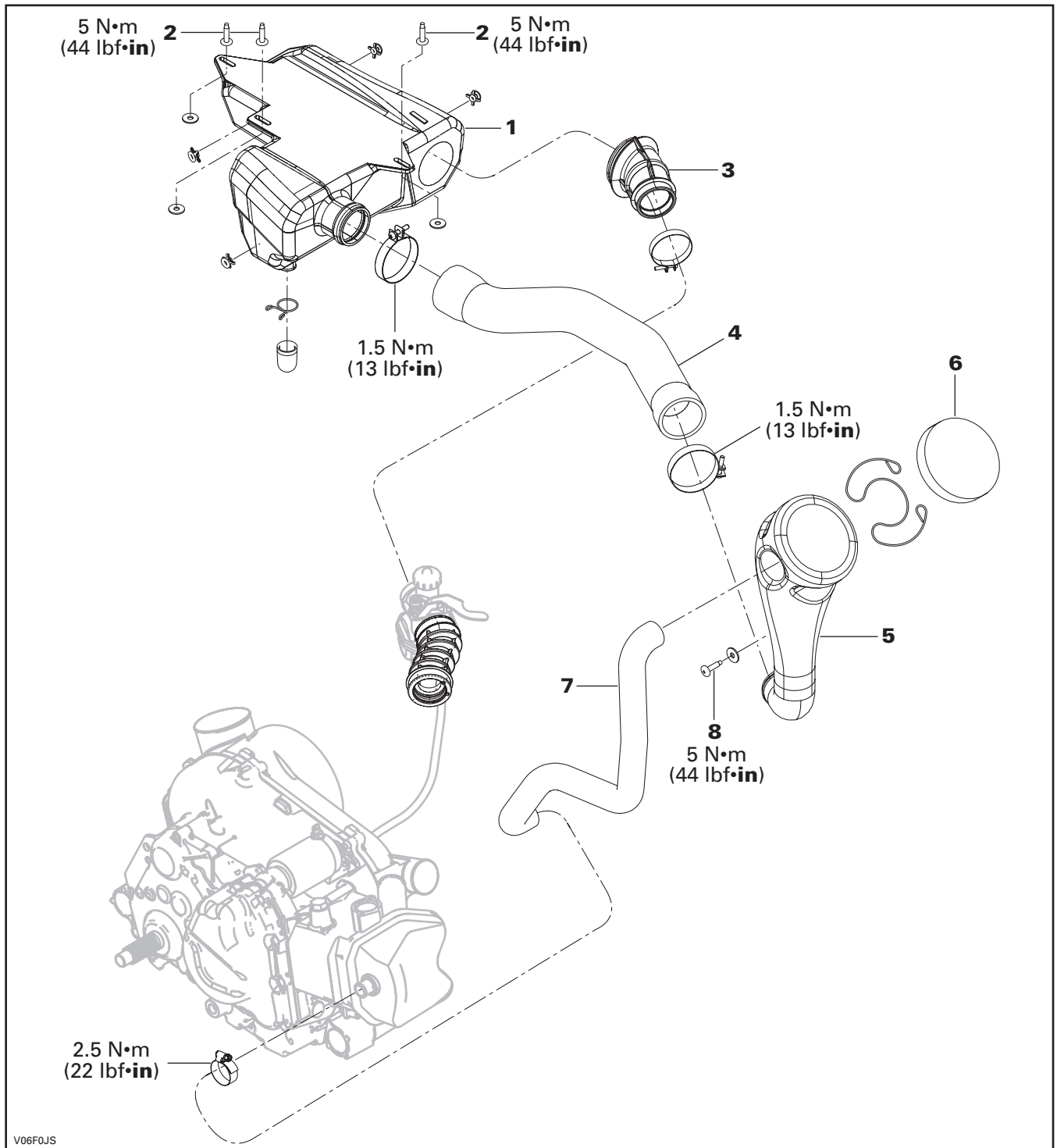
Tighten lock nut and reinstall protector.



1. Throttle lever
2. Protector
3. Cable adjuster
4. Lock nut
- A. 3 to 8 mm (1/8 to 5/16 in)

Tighten lock nut and reinstall protector.

AIR INTAKE SILENCER



Section 04 FUEL SYSTEM

Subsection 04 (AIR INTAKE SILENCER)

GENERAL

Disconnect battery before working on fuel system.

WARNING

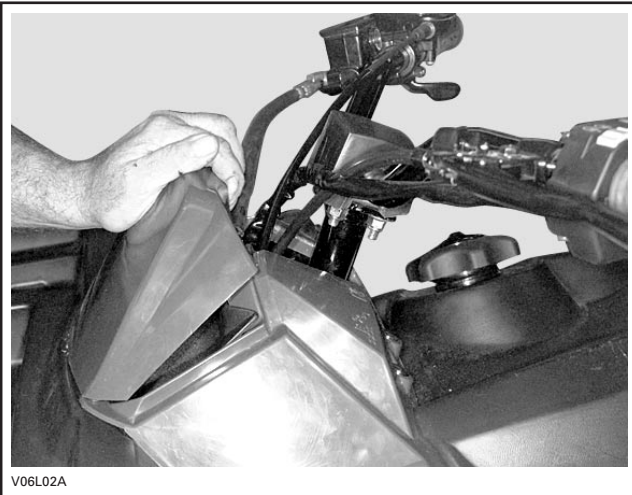
Always disconnect battery exactly in the specified order, **BLACK (-)** cable first. It is recommended to disconnect electrical connections prior to disconnecting fuel lines.

For installation, use the torque values and Loctite products from the exploded view. Clean threads before using Loctite when installing the screws.

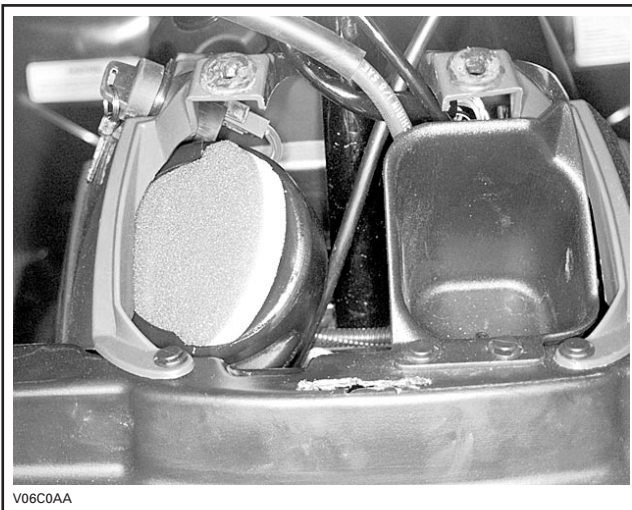
AIR FILTER AND CLEANING

Removal

Remove cluster cover.



Remove air filter.



Pour Bombardier air filter cleaner (P/N 293 600 059) into a bucket, dunk the filter multiple times until clean. Rinse with warm water.

While filter soaks, clean the air filter area.

Then, let the filter dry completely.

When the filter is dried, re-oil it with Bombardier air filter oil (P/N 293 600 058).

Installation

Properly reinstall removed parts in the reverse order of their removal.

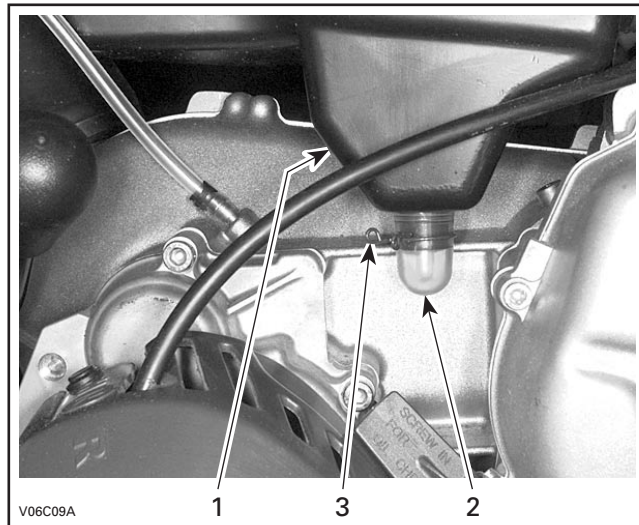
Reinstall the air filter with the grey part on top.

NOTE: Check if the air filter broach is properly located before installing air filter.

AIR BOX

Draining

Periodically inspect air box drain tube for water or deposits.



TYPICAL

1. Air box
2. Drain tube
3. Clamp

NOTE: If vehicle is used in dusty area, inspect more frequently than specified in **Maintenance Chart**.

If water/deposits are found, squeeze and remove the clamp. Pull drain tube out.

CAUTION: Do not start engine when water is found in the drain tube.

When water/deposits are found, the air filter must be inspected/dried/replaced depending on its condition.

Section 04 FUEL SYSTEM

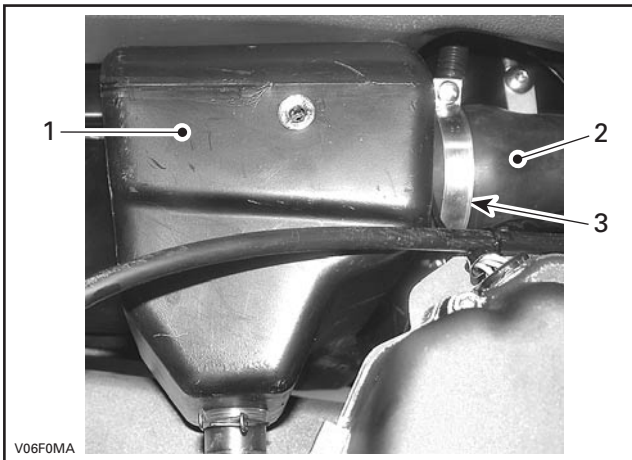
Subsection 04 (AIR INTAKE SILENCER)

Removal

CAUTION: Never remove or modify any component in the air box. The engine carburation is calibrated to operate specifically with these components. Otherwise, engine performance degradation or damage can occur.

Remove LH and RH side covers to get access to the air box **no. 1**. Refer to **BODY** for LH and RH side covers removal.

Unclamp vent hose **no. 4** on RH side.



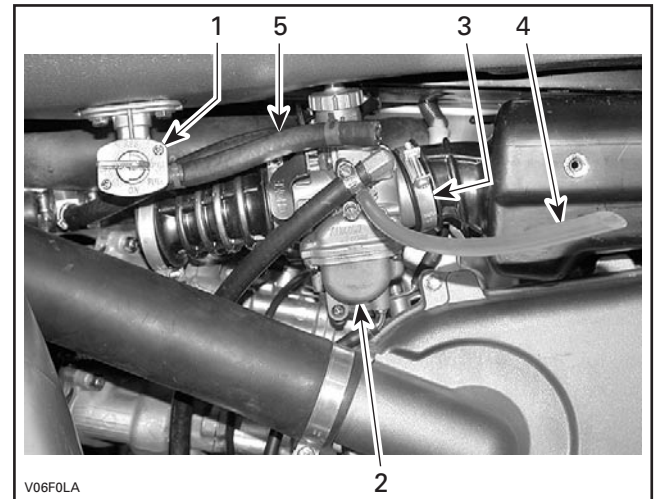
RIGHT SIDE SHOWN

1. Air box
2. Vent hose
3. Clamp

Turn off the fuel valve.

Unclamp the carburetor intake adaptor **no. 3** from carburetor and remove it from air box.

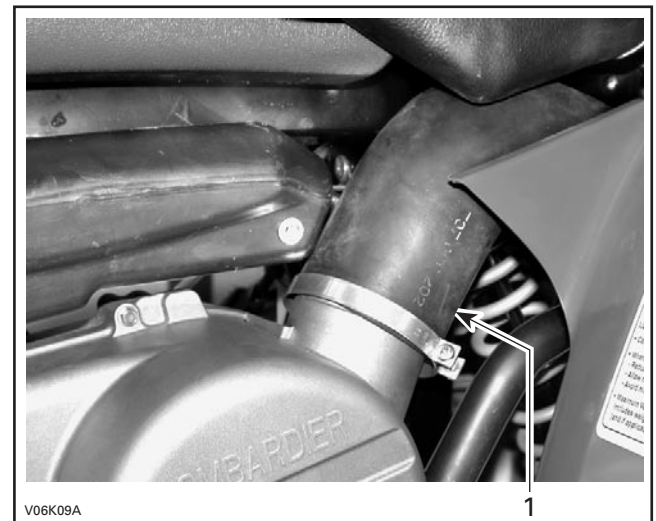
Disconnect carburetor vent hose and carburetor fuel line. Remove and place carburetor off to one side to get access of the torx screw retaining the air box to the frame.



LEFT SIDE SHOWN

1. Fuel valve on OFF position
2. Carburetor
3. Carburetor intake adaptor clamp
4. Carburetor vent hose
5. Carburetor fuel line

Unclamp the CVT air outlet hose.



LEFT SIDE SHOWN

1. CVT air outlet hose

Section 04 FUEL SYSTEM

Subsection 04 (AIR INTAKE SILENCER)

Remove the torx screws **no. 2**.

Remove air box **no. 1**.

NOTE: Air box **no. 1** can only be removed through right hand side.

Installation

Properly reinstall removed parts in the reverse order of their removal.

AIR FILTER HOUSING

Removal

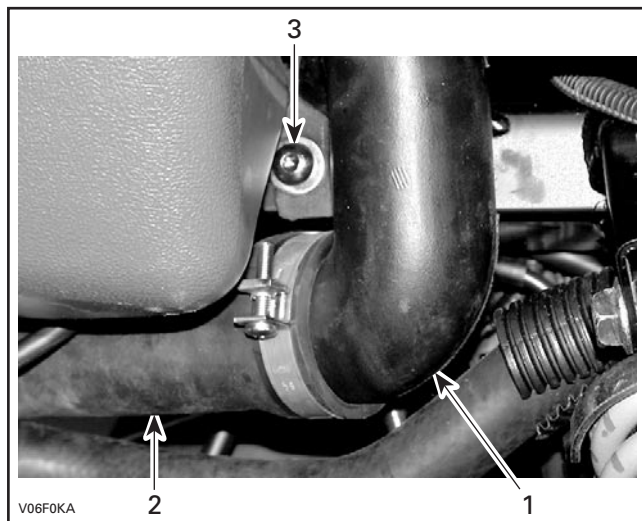
Air filter housing can be removed as follows:

Remove RH side cover and console cover. Refer to **BODY**.

Unclamp vent hose **no. 4** from air filter housing **no. 5**.

Pull out the breather vent hose **no. 7** from air filter housing **no. 5**.

Unscrew the screw **no. 8** and pull upwards air filter housing **no. 5**.



- 1. Air filter housing
- 2. Vent hose
- 3. Screw

Installation

Properly reinstall removed parts in the reverse order of their removal.