

November 24, 2004

Fuel Valve Verification Procedure

This Tech Tip is to clarify the procedure used to verify the correct operation of fuel valves on carbureted vehicles built between 10/01/2004 and 11/20/2004 as referenced in the Dealer Communication letter dated 11/19/2004.

WARNING

Even with fuel tank completely drained, a small amount of gasoline may leak from the bore when the fuel valve is loosened or removed. Thoroughly wipe up any spilled fuel immediately and dispose of rags in a suitable manner. Gasoline is extremely flammable and highly explosive. Inadequate safety precautions could result in death or serious injury.

To verify fuel valves at PDI:

1. Position the vehicle on the side stand.
2. Fill fuel tank with 0.5 gallons of fuel.
3. Turn fuel knob to ON position.
4. Attempt to start vehicle.
(Keep in mind this vehicle has not been started and may require several revolutions of the engine to create vacuum and allow fuel into the float bowl.)
5. If vehicle does not start, turn to reserve and repeat step 4.
6. If vehicle starts in the RES position, turn fuel valve to the ON position, it should stall when all the fuel in the float bowl is used.
7. If bike stalls in the ON position, the fuel valve works properly and no further testing is required.
8. If the bike Starts in the ON position, and Stalls when turned to the RES position, the valve is incorrect and needs to be replaced.
9. Follow service manual procedures to replace fuel valve with a known good valve.
(Follow the procedure below to verify new fuel valves)

(The faulty component inside the fuel valve is a non serviceable part and can not be repaired. The fuel valve must be replaced)

Credit procedure for vehicles checked at PDI:

Note: Partial fill of the tank and checking function of the fuel valve is already part of our PDI – Procedures and is described in PDI instructions.

To inspect and replace a faulty Fuel Valve use labor code 2594 for 0.3 hr.

To inspect a fuel valve that tests good use labor code 2593 for 0.1 hr.

November 24, 2004

To verify fuel valves after PDI:

1. Position the vehicle on the side stand.
2. Remove the clamp from the fuel line at the point where it attaches to the fuel valve and attach a drain line from the fuel valve to a fuel safe container.
3. Remove the vacuum line from the fuel valve and attach a mity-vac.
4. Pump mity-vac 1 time.
5. Turn the fuel knob to the ON position and drain the fuel until no more fuel comes out.
6. Turn the fuel valve knob to RES, if pressure was lost in mity-vac then pump it once, if fuel does not come out the fuel valve it is misassembled and needs replacement.
Follow the service manual procedures to replace the fuel valve with a known good valve.
(Follow the procedure below to verify new fuel valves)

(The faulty component inside the fuel valve is a non serviceable part and can not be repaired. The fuel valve must be replaced)

Credit procedure for vehicles checked after PDI:

To inspect and replace a faulty Fuel Valve use labor code 2596 for 0.4 hr.

To inspect a fuel valve that tests good use labor code 2595 for 0.2 hr.

To verify new fuel valves:

1. Remove the fuel valve from the packaging.
2. Attach a mity-vac to the vacuum port of the fuel valve.
3. Pump the mity-vac 1 time.
4. Turn the fuel valve knob to the ON position.
5. Blow light compressed air through the larger diameter hole in the top of the fuel valve. (See illustration 1.)
6. If air comes out from the fuel valve outlet port the valve is good and can be installed.
7. If air does not come out from the fuel valve outlet port then the valve is misassembled.
Do not use the valve! File a DFS claim and return the parts.

