



TSB062112

## TECHNICAL SERVICE BULLETIN

**Models: All Diesel Powered Installers**

**SUBJECT: Purging Air from the Fuel System**

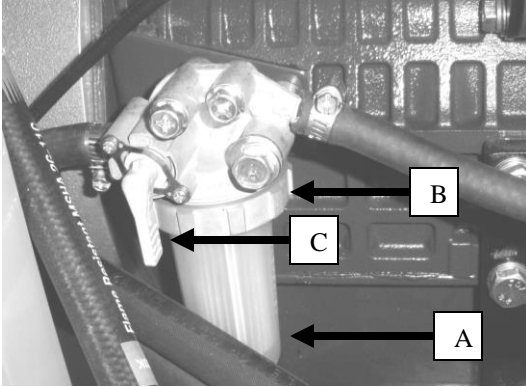
Air contained within the fuel system must be purged after any of the following has occurred:

- The fuel filter has been replaced
- The unit has run out of fuel
- Any fuel lines or hoses have been removed or the fuel system is opened for any reason
- Prior to starting the engine after an extended storage period

### **WARNING**

**Never smoke when servicing the fuel system. Never service the fuel system near sparks or open flames. If the engine has been running recently, it will be hot. Allow the engine to cool prior to working on the fuel system.**

If replacing the fuel filter, always fill the filter bowl (A, **Figure 1**) with clean fuel prior to installing the bowl. Also make sure the O-ring is properly seated on the bowl and that the bowl retaining ring is tightened securely.

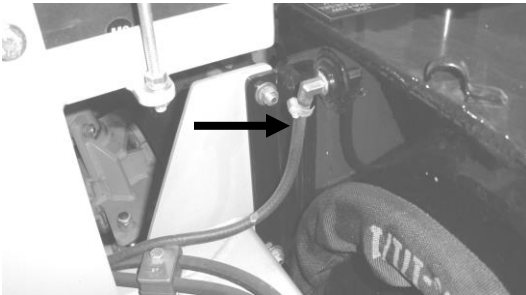


**Figure 1—Fuel filter assembly.**

- A. Bowl**
- B. Retaining ring**
- C. Fuel valve**

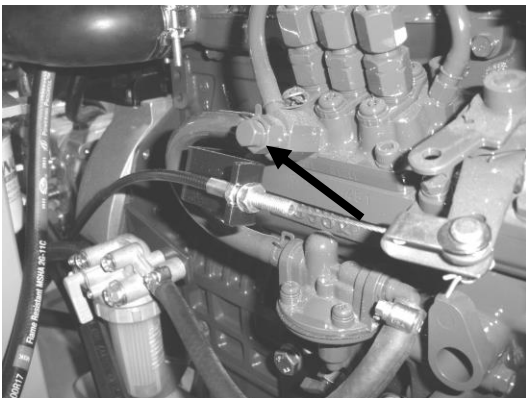
To purge the fuel system of air, proceed as follows:

1. Make sure the fuel tank contains an adequate amount of clean fuel.
2. Rotate the fuel valve (C, **Figure 1**) to the on position.
3. Clamp the fuel return hose (**Figure 2**) closed using needle-nose pliers or a similar equivalent. The hose can be disconnected from the tank fitting and plugged if necessary. If the return hose is disconnected, also plug the tank fitting.



**Figure 2—Fuel return hose.**

4. Loosen the bleed screw on the fuel injection pump approximately one turn. See **Figure 3**.



**Figure 3—Injection pump bleed screw.**

5. Remove the cap from the fuel tank. Using compressed air and a shop towel (**Figure 4**), lightly pressurize the fuel tank.

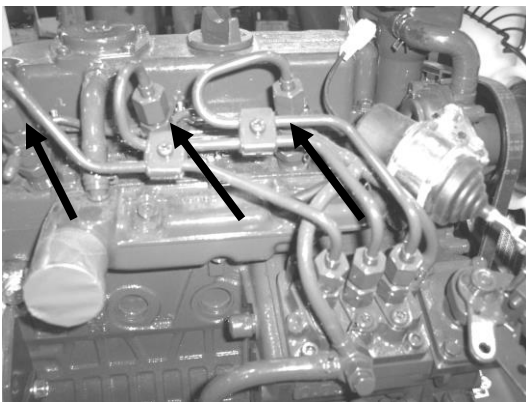


**Figure 4—Apply light pressure to the fuel tank as shown.**

6. Continue until the fuel filter bowl is completely full and air free fuel flows from the bleed valve on the injection pump. Securely tighten the bleed valve. Remove the clamp or unplug and reconnect the fuel return hose to the fuel tank. Clean all fuel from the pump, engine and surrounding area using a shop towel.

7. Start the engine and run at idle speed. If the engine runs roughly and smokes from the exhaust, there may be additional air present in the lines between the injectors and injector pump.

8. If necessary, loosen the fitting at each fuel injector (**Figure 5**) slightly. Loosen one injector fitting at a time.



**Figure 5—View showing fuel injectors.**

9. Tighten the injector fitting after air free fuel flows from the fitting. Repeat at the remaining two injectors. Clean all residual fuel from the engine and injector area. At this point, the air in the fuel system should be purged and the machine can be returned to service.