



BLEEDING AIR FROM DIESEL FUEL LINES AND FILTERS

Farm Machinery Fact Sheet FM-01

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When you change a diesel fuel filter, run out of fuel or disturb the fuel system, air is trapped. When you try to start the engine this air acts as a lock, preventing the normal supply of fuel into the cylinder.

Here are the steps to take in bleeding air from a diesel fuel system:

1. Turn off fuel valve.
2. Clean outside of filter housing.
3. Install new filter element and new gaskets. A little oil on the gasket will aid a tight seal.
4. I'd suggest that you fill a spin-on filter with clean fuel before installation.
5. Open the bleed plug on the filter closest to the fuel tank.
6. Open fuel supply valve so that the fuel is available to the filter and pump.
7. Most all equipment has a hand priming pump lever to pump fuel through the system and replace trapped air. (Check operator's manual.) Pump several times until full flow, without air bubbles, escapes from the bleed plug holes.
8. You may need to bleed filters, fuel pump and lines to the injectors.
9. Close bleed plugs after all air is removed from the fuel tank, filters, settlement bulb, and fuel pump (only one at a time working through all bleed screws beginning closest to tank and ending at nozzles if necessary).
10. Try the engine; if it doesn't start or runs poorly, you may have to bleed the injection line.
11. Loosen injection lines at the injectors about one turn. The use of two wrenches will prevent the binding or twisting of the steel lines. Usually, it is enough to bleed just half of the lines at a time.
12. Crank the engine until all air is forced out and fuel is present.
13. Engine will start to pop on one or two cylinders.
14. Tighten the injector lock nut one at a time to tell by sound which cylinders are firing properly.
15. Run the engine until it runs smoothly. This will bleed the other injectors.

No attempt should be made to service the injection pump or nozzles. This requires special tools and know how. All new gaskets, O-rings, and seals will have to be replaced to prevent leaking.

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