

**INSTALLATION OF KIT P/N 382029-23**

Parts Included (Figure 1)	Tools Required:
Bottom Plate Seal	3/16" Hex key
Fluid Bottom Plate Assembly	
Bottom Plate Screws (6)	
1/2" NPT Plugs (not shown)	
1/2"-20 WIF Plug (not shown)	

**Generic Installation instructions**

**Disassembly**

**Step 1:** Open the vent cap and then open the drain valve. Drain the Fuel Pro completely. Close the drain valve. Dispose of the fuel in an environmentally safe manner.

**Step 2:** Remove the drain valve, any preheaters and WIF, and set aside. Using a hex key, remove and discard the six bolts from the bottom plate. Remove and discard the bottom plate seal.

**Assembly**

**Step 1:** Install the square cut bottom plate seal on the fluid heated bottom plate. Install the fluid-heated bottom plate on the Fuel Pro. Tighten the bolts to 10 ft-lbs. in a "criss-cross" pattern. Using Teflon thread sealant, re-install the drain valve, preheaters and WIF into the replacement bottom plate. Install plugs into the unused ports in the bottom plate.

**Step 2:** Connect a hose (5/8" silicon heater hose) from the high pressure side of the engine coolant system to the Fuel Pro bottom plate (parallel circuit). Either bottom plate heater port will work as an inlet. Route another hose from the bottom plate to a low pressure port in the coolant system (Figure 2).

**Note:** "Y" or "T" connectors can be used in the cab heater hoses if no engine ports are available.

**Step 3:** Prime the unit by filling the clear cover with clean diesel fuel until it reaches the top of the filter.

**Step 4:** Install the vent cap.

**Step 5:** Start the engine and run for one minute. **Slowly** open the vent cap and allow the fuel to drop to about one inch above the collar.

**Step 6:** Close the vent cap. It is normal for the fuel level to vary after the initial start-up and during engine operation. Filter performance is not affected.

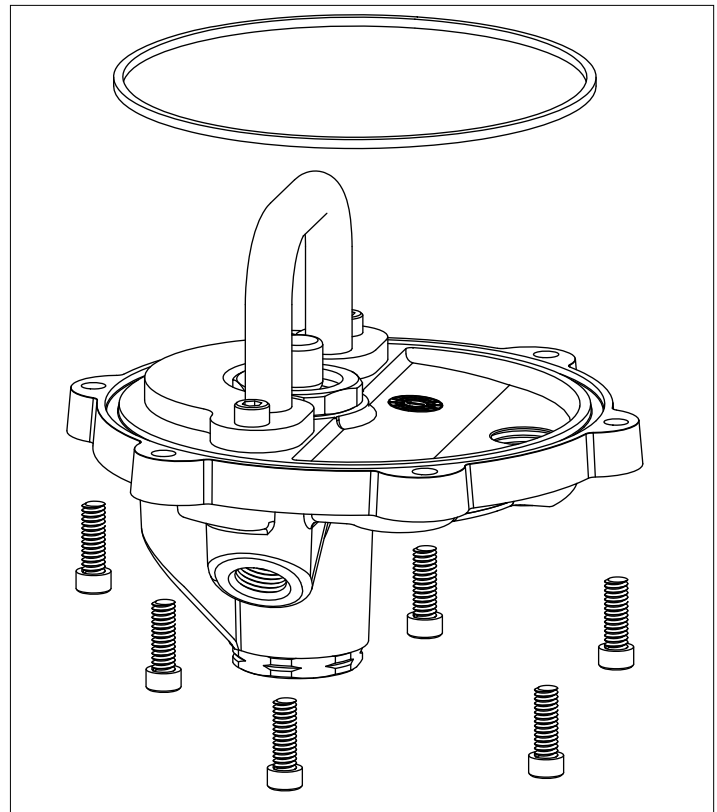


Figure 1: Kit Contents

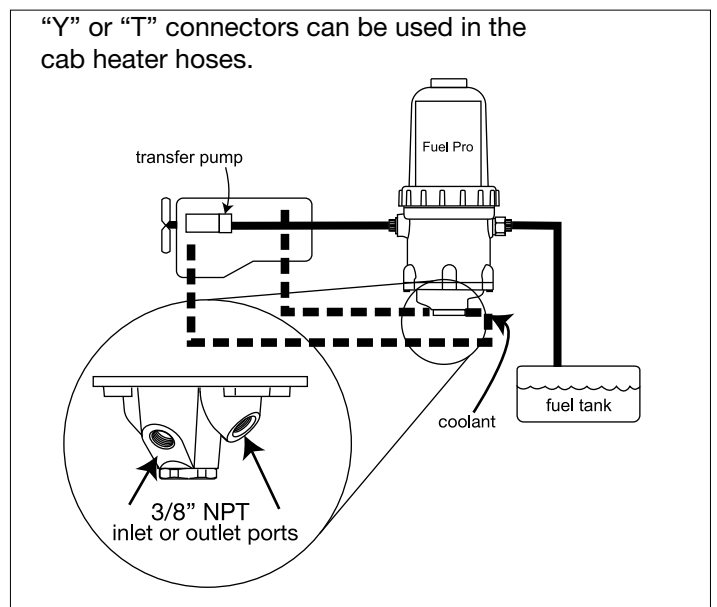


Figure 2: Coolant Heating Routing

**SPECIFIC ENGINE CONNECTIONS FOR COOLANT HEAT**

**Connection on Cummins ISX**

**Step 1:** On a Cummins ISX, a coolant pressure plug (Figure 3) is located behind the turbo on the right hand side of the engine. A coolant return plug is located at the water pump (Figure 4). Remove the metric allen head O-ring plug and install Parker P/N 169HB-10-M127 fitting (Figure 5).



Figure 3: Location of coolant pressure plug



Figure 4: Location of coolant return plug



Figure 5: Parker fitting P/N 169HB-10-M127

**Step 2:** Wrap with 1" Convuluted Tubing and route two pieces of 5/8" ID heater hose from the Fuel Pro 382 (Figure 6) to the coolant fittings at the engine, securing as needed.

**Note:** The Fuel Pro 382 heater ports are non-directional. Either port can be used for "in" or "out".

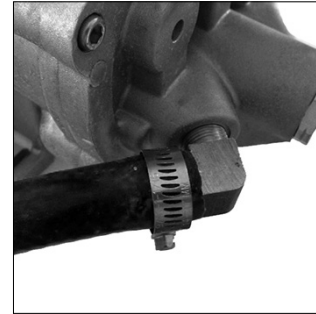


Figure 6: 5/8" heater hose on Fuel Pro 382

**Step 3:** Remove the heater hose clamp pliers and start the engine. Check for leaks. Top off the surge tank as needed.

**Connections on Navistar MaxxForce or Paccar MX13**

On a Navistar MaxxForce or a Paccar MX13 engine, there are no accessible engine coolant ports and the cab heater circuit must be utilized (Figure 7 - Peterbilt application shown).



Figure 7: Cab heater circuit

**Step 1:** Using heater hose pliers, clamp off both sides of the intended tee location. Cut the 3/4" ID hose. Install a 3/4" x 3/4" x 5/8" tee (Figure 8) into the cab heater return hose.



Figure 8: 3/4" x 3/4" x 5/8" tee, P/N 103430DAV

**Step 2:** Using heater hose pliers, clamp off both sides of the intended tee location. Cut the 5/8" ID hose. Install a 5/8" x 5/8" x 5/8" tee (Figure 9) into the cab heater pressure hose.

⚠ **Caution:** Do not splice into the heater hose going to the emission aftertreatment unit.



Figure 9: 5/8" x 5/8" x 5/8" tee, P/N 103429DAV

**Step 3:** Wrap with 1" Convuluted Tubing and route two pieces of 5/8" ID heater hose from the Fuel Pro 382 (Figure 10) to the tees at the cab heater circuit, securing as needed.

**Note:** The Fuel Pro 382 heater ports are non-directional. Either port can be used for "in" or "out".

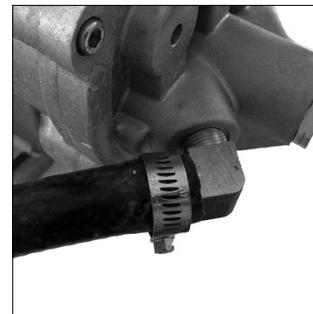


Figure 10: 5/8" heater hose on Fuel Pro 382

**Step 4:** Remove the heater hose clamp pliers and start the engine. Check for leaks. Top off the surge tank as needed.