

**No. MP1331**

## TASK DESCRIPTION

## CLEAN/REPLACE PRIMARY FUEL FILTERS

### BUILDER'S OR VENDOR'S MAINTENANCE INSTRUCTIONS

MP40PH-3C Head End Power MAINTENANCE MANUAL, CATERPILLAR MAINTENANCE MANUAL C27

**SPECIAL TOOLS REQUIRED:**

## RELATED MAINTENANCE PROCEDURES MODIFICATIONS, POINTERS, ETC.

**SAFETY PRECAUTIONS:**

CONTRACTOR TO ASSUME RESPONSIBILITY FOR SAFETY RULES AND COMPLIANCE.

**PREPARATION:**

## PROCEDURE



## Warning

Fuel leaked or spilled onto hot surfaces or electrical components can cause a fire. Clean up fuel spills immediately.



## Caution

Do not allow dirt to enter the fuel system. Thoroughly clean the area around the fuel system component that will be disconnected. Fit a suitable cover over any disconnected fuel system components.

Use a suitable container to catch any fuel that may spill.

Do not loosen fuel lines or fittings at the fuel manifold or ECM. The engine components may be damaged.

Do not fill the primary fuel filter with fuel before installing. The fuel would not be filtered and could be contaminated. Contaminated fuel will cause accelerated wear to the fuel system parts.

The water separator is under suction during normal engine operation. Ensure that the vent plug is tightened securely to help prevent air from entering the fuel system.

1. Stop the HEP engine and shut off fuel supply valve.

DATE OF FIRST ISSUE

September 2007

AUTHORIZED BY:

REVISION

1

August 2009

TITLE:

Manager, Rail Equipment

# Maintenance Procedure

## No. MP1331

Page 2 of 2

2. Open the drain valve in order to drain any fuel from the filter case into a suitable container. Close the drain valve.
3. Remove the fuel bowl and wash the fuel filter bowl with clean diesel fuel.
4. Remove the fuel filter.
5. Clean the gasket dealing surface of the fuel filter base. Ensure that all of the old gasket is removed.
6. Apply clean diesel fuel to the new fuel filter gasket.
7. Install the new fuel filter. Spin the fuel filter onto the fuel filter base until the gasket contacts the base. Use the rotation index marks on the filters as a guide for proper tightening. Tighten the filter for an additional  $\frac{3}{4}$  turn by hand. Do not over tighten the filter.
8. Install the clean fuel filter bowl on the new fuel filter.
9. Open the fuel tank supply valve.
10. Start the engine and check for leaks. Run the engine for one minute. Stop the engine and check for leaks again.

Leaks are difficult to detect while the engine is running. The primary filter/water separator is under suction. A leak will allow air to enter the fuel. The air in the fuel can cause low power due to aeration of the fuel. If air enters the fuel, check the components for over tightening or under tightening.



Primary Fuel Filter

DATE OF FIRST ISSUE	September 2007	AUTHORIZED BY:  TITLE: Manager, Rail Equipment
REVISION 1	August 2009	