TASK DESCRIPTION REPLACE ENGINE OIL AND OIL FILTER
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** Hot oil and hot components can cause personal injury. Do not allow hot oil or hot components to contact skin.

1. Operate the engine until it reaches normal operating temperature. DO NOT drain the oil when engine is cold. As the oil cools, suspended waste particles settle to the bottom of the oil pan. The waist particles are not removed with the draining of cold oil.

2. Stop the engine.

3. Remove the crankcase drain line plug, open drain valve, and allow oil to drain.

4. Remove the oil filter (spin-on type) using a filter or strap wrench. Make certain all of the old seal is removed from the filter base.

5. Use an oil filter cutter to cut the oil filter element open. Spread the pleats and inspect the element for metal debris.

   Use a magnet to differentiate between the ferrous metals and the non ferrous metals that are found in the oil element. Ferrous metals may indicate wear on the steel and cast iron parts of the engine.

Nonferrous metals may indicate wear on the aluminum parts, brass parts, or bronze parts of the engine. Parts that may be affected include the following items: main bearings, rod bearings, turbocharger bearings, and cylinder heads.

Due to normal wear and friction, it is not uncommon to find small amounts of debris in the oil filter element. An excessive amount of debris in the oil filter element may be indicative of a pending failure.

6. Wipe the sealing surface of the filter element mounting base. Make sure the old gasket is removed.

7. Apply a small amount of clean engine oil to the new filter element gasket. DO NOT fill the new filter with oil.

8. Install the new filter element until the gasket contacts the base. Tighten the filter ¾ of a turn more by hand. Do not over tighten. Use the rotation index marks on the filters as a guide for proper tighting.

9. Remove the oil filler cap to add the oil to the crank case. Fill the crankcase with proper fresh engine oil.

10. Before starting engine, ensure oil level is within the correct operating range of the full zone on the ENGINE STOPPED side of the dipstick.

Oil Filters

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