Special Instruction

Debris in Oil System Causing Repeat Failures of the (HEUI) Pump for Certain C7 and C9 Engines. {1126, 1251, 1318, 1378}

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SMCS - 1126; 1251; 1318; 1378

Asphalt Paver

AP-1000D (S/N: EAD1-UP)

AP-1055D (S/N: FAC1-UP; A6P1-UP)

AP-755 (S/N: B3T1-UP)

BG-2455D (S/N: BNW1-UP; BXW1-UP)

BG-260D (S/N: BPW1-UP)

Challenger

MT735 (S/N: AKN1-UP)

MT745 (S/N: ALA1-UP)

MT755 (S/N: ALM1-UP)

MT765 (S/N: AMS1-UP)

MTC735 (S/N: 8121-UP)

MTC755 (S/N: 8141-UP)

MTC765 (S/N: 8151-UP)

Cold Planer

PM-102 (S/N: Z2X1-UP)

Combine

LEXION 470 R (S/N: 7651-UP)

LEXION 475 R (S/N: 7671-UP)

Gen Set-Military

C9 (S/N: SRB1-UP)

Generator Set

C9 (S/N: X3R1-UP)

C9 GEN SET (S/N: C9E1-UP)

C9 MARINE GEN (S/N: SJB1-UP)

C9 MARINE GS (S/N: C9A1-UP)

Industrial Engine

C-9 (S/N: 4ZF1-UP; CLJ1-UP)

C7 (S/N: JRA1-UP; JTF1-UP; RMF1-UP; PRY1-UP)

C9 (S/N: JSC1-UP)

C9 INDUSTRIAL (S/N: MBD1-UP; JLW1-UP)

Integrated Toolcarrier

IT62H (S/N: M5G1-UP)

Landfill Compactor

816F Series 2 (S/N: BZR1-UP)

Marine Engine

C7 MARINE (S/N: M7A1-UP; C7B1-UP; C7D1-UP; M7G1-UP; C7X1-UP; C7Z1-UP)

C9 (S/N: C9Y1-UP)

C9 MARINE (S/N: C9B1-UP; CSN1-UP; X9X1-UP; Z9X1-UP; X9Y1-UP)

TK732 (S/N: C9Z1-UP)

Mobile Hydraulic Power Unit

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323D MHPU (S/N: GRN1-UP; DCY1-UP)
    324D MHPU (S/N: KJR1-UP)
    325D MHPU (S/N: SRC1-UP; C3N1-UP; H3N1-UP; X3N1-UP)
    328D MHPU (S/N: JTC1-UP)
    329D MHPU (S/N: J9D1-UP)
    330C MHPU (S/N: MSD1-UP; MSL1-UP)
    330D MHPU (S/N: D3D1-UP; H3D1-UP; M3D1-UP; GMN1-UP)
    336D MHPU (S/N: J6D1-UP; M3N1-UP; L5X1-UP)
Motor Grader
    120K (S/N: SZN1-UP; JAP1-UP)
    120M Series 2 (S/N: M9H1-UP)
    12H (S/N: 1251-UP; CBK1-UP; AMZ1-UP)
    12K (S/N: JJA1-UP; SZP1-UP)
    140K (S/N: JPA1-UP; SZL1-UP)
    140M (S/N: B9D1-UP; B9G1-UP; D9G1-UP; B9M1-UP)
    140M Series 2 (S/N: M9D1-UP; M9J1-UP)
    160K (S/N: JBP1-UP)
    160M (S/N: B9E1-UP; B9L1-UP; B9T1-UP; D9T1-UP)
    160M Series 2 (S/N: M9E1-UP; M9K1-UP)
Petroleum Engine
    C7 PETROLEUM (S/N: K2A1-UP; C7P1-UP)
    C9 PETROLEUM (S/N: P9L1-UP; KLW1-UP)
Petroleum Powertrain Package
    TH31-C9I (S/N: PAZ1-UP)
Petroleum Transmission
    TH31-E61 (S/N: SKY1-UP)
Soil Compactor
    815F Series 2 (S/N: BYN1-UP)
Track Feller Buncher
    TK711 (S/N: 1011-UP)
    TK721 (S/N: 1021-UP)
    TK722 (S/N: 1031-UP)
    TK732 (S/N: 1041-UP)
    TK741 (S/N: 2021-UP)
    TK751 (S/N: 3011-UP)
    TK752 (S/N: 3021-UP)
Track Loader
    973C (S/N: BCP1-UP; LDX1-UP)
Track-Type Tractor
    D6R Series II (S/N: BNC1-UP; AFD1-UP; CAD1-UP; ADE1-UP; BLE1-UP; DAE1-UP; ACJ1-
    UP; BMJ1-UP; BRJ1-UP; BMK1-UP; BNL1-UP; AEM1-UP; AFM1-UP; AGM1-UP; BPM1-UP;
    AEP1-UP; BPP1-UP; BPS1-UP; BLT1-UP; FDT1-UP; AAX1-UP; BMY1-UP; BPZ1-UP; BRZ1-
    UP)
    D6R Series III (S/N: GJB1-UP; WCB1-UP; HDC1-UP; RFC1-UP; TBC1-UP; HCD1-UP; HKE1-
    UP; WRG1-UP; MTJ1-UP; DMK1-UP; JEK1-UP; EXL1-UP; JDL1-UP; DLM1-UP; LFM1-UP;
    LGP1-UP; DPS1-UP; GMT1-UP; MRT1-UP; EXW1-UP)
    D6T (S/N: JHB1-UP; SMC1-UP; LBD1-UP; LAE1-UP; LKJ1-UP; SNK1-UP; KJL1-UP; SKL1-
    UP; GCT1-UP; LAY1-UP; PEZ1-UP)
Truck Engine
    C7 (S/N: KAL1-UP; SAP1-UP; C7T1-UP; JRT1-UP; WAX1-UP)
    C7 TRUCK ENGINE (S/N: LBM1-UP)
    C7 TRUCK/BUS (S/N: YPG1-UP)
    C9 (S/N: MTB1-UP; LFE1-UP; 9DG1-UP; CKP1-UP; LFR1-UP)
    C9 ON-HIGHWAY (S/N: ETK1-UP)
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Vibratory Compactor

CS74 (S/N: CZJ1-UP)

Wheel Dozer

814F Series 2 (S/N: BXG1-UP)

Wheel Loader

950H (S/N: N1A1-UP; JAD1-UP; M1G1-UP; J5J1-UP; K5K1-UP) 962H (S/N: N4A1-UP; M3G1-UP; J6J1-UP; K6K1-UP; L5S1-UP)

980H Series 2 (S/N: MKP1-UP)

Wheel Scraper

627G (S/N: CEZ1-UP; DBZ1-UP)

637G (S/N: DEY1-UP)

Wheel Skidder

525C (S/N: 5251-UP) 535C (S/N: 5351-UP) 545C (S/N: 5451-UP)

Introduction

Do not perform any procedure in this Special Instruction until you have read the information and you understand the information.

Possible Paths for Debris

If repeat, low-hour (HEUI) pump failures occur, the following are possible paths of debris entering the system in operation. These paths are recommended areas for troubleshooting/inspection.

Gasket (Oil Filter Base)

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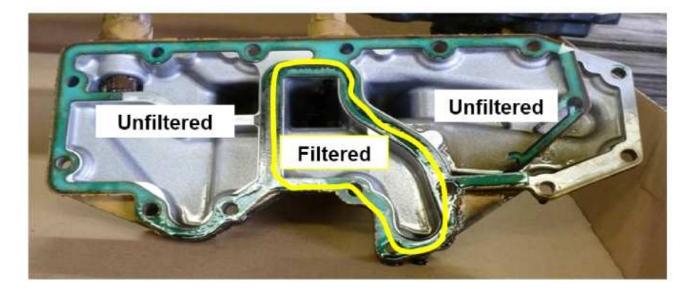


Illustration 1 Oil filter base g06035484

Gasket may break away or receive damage, causing unfiltered oil to bypass filter. Check the gasket integrity and replace the gasket if damage is noted.

Oil Cooler Flange

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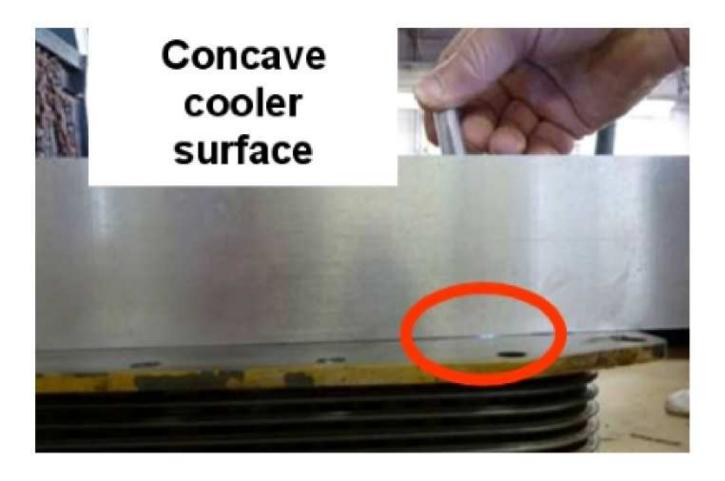
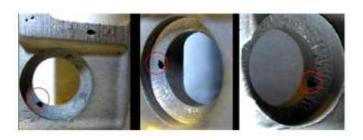


Illustration 2 g06035736
Concave cooler surface

Check oil cooler for flatness utilizing a straight edge or feeler gauge to inspect. Check locations where the gasket mates against the oil cooler flange, specifically between unfiltered and filtered oil cavities.

Oil Filter Base (Check Valve Bypass)

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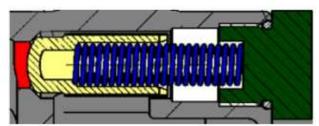


Illustration 3
Casting Porosity

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Check bypass valve seat for porosity. The check valve is horizontal and directly above oil filter, facing forward.

If porosity is present, replace the following:

- Filter base
- Spring
- Valve
- Oil cooler gasket

Spring (Valve Bypass)

Inspect spring in oil filter check valve, ensure that spring is the most current design.

Bypass Valve

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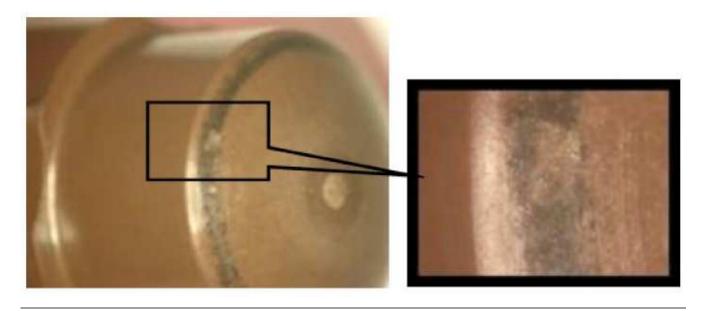


Illustration 4 g06035874
Bypass valve

Inspect filter bypass valve, check to see that there are no leak paths.

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