

Disassembly and Assembly C-15, C-16 and C-18 On-highway Engines

Media Number -REN2306-04

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i01806588

Engine Oil Pump - Disassemble

SMCS - 1304-015

Disassembly Procedure (Type 1)

Table 1

Required Tools			
Tool	Part Number	Part Description	Qty
A	1P-2321	Combination Puller	1
B	1P-0510	Driver Group	1

Start By:

- A. Remove the engine oil pump. Refer to Disassembly and Assembly, "Engine Oil Pump - Remove".

NOTICE

Keep all parts clean from contaminants.

Contaminants may cause rapid wear and shortened component life.

NOTICE

Care must be taken to ensure that fluids are contained during performance of inspection, maintenance, testing, adjusting and repair of the product. Be prepared to collect the fluid with suitable containers before opening any compartment or disassembling any component containing fluids.

Refer to Special Publication, NENG2500, "Caterpillar Tools and Shop Products Guide" for tools and supplies suitable to collect and contain fluids on Caterpillar products.

Dispose of all fluids according to local regulations and mandates.

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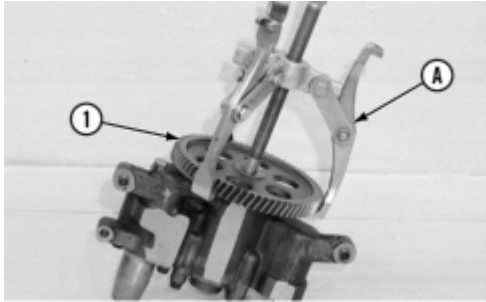


Illustration 1

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1. Remove the bolt that holds drive gear (1) to the shaft .
2. Use Tooling (A) to remove drive gear (1) from the shaft. Remove the key from the shaft.

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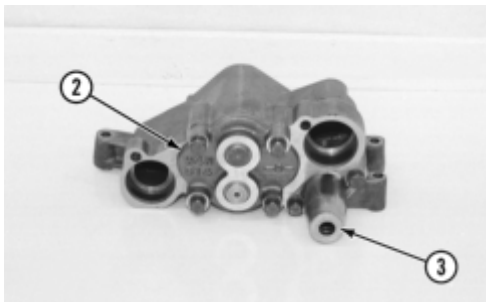


Illustration 2

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3. Remove the bolts that hold retainer (3) to the pump body.
4. Remove retainer (3), the spring, and the bypass valve.
5. Remove cover (2) from the pump body.

Note: Inspect the bores in the cover. The aluminum cover does not have bearings. If the bores in the cover are damaged, replace the cover with a new part.

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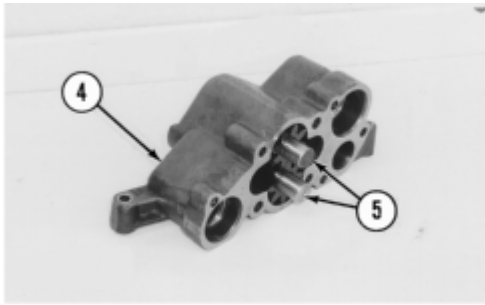


Illustration 3

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6. Remove gears (5) from pump body (4) .
7. Use Tooling (B) to remove the bearings from pump body (4) .

Disassembly Procedure (Type 2)

Table 2

Required Tools			
Tool	Part Number	Part Description	Qty
A	1P-2322	Puller Assembly	1
B	1P-0510	Driver Group	1

NOTICE

Keep all parts clean from contaminants.

Contaminants may cause rapid wear and shortened component life.

NOTICE

Care must be taken to ensure that fluids are contained during performance of inspection, maintenance, testing, adjusting and repair of the product. Be prepared to collect the fluid with suitable containers before opening any compartment or disassembling any component containing fluids.

Refer to Special Publication, NENG2500, "Caterpillar Tools and Shop Products Guide" for tools and supplies suitable to collect and contain fluids on Caterpillar products.

Dispose of all fluids according to local regulations and mandates.

1. Remove the oil pump. Refer to Disassembly and Assembly, "Engine Oil Pump - Remove".

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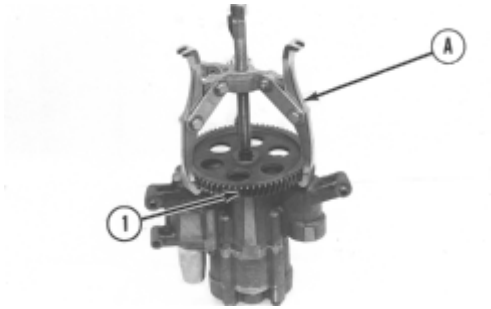


Illustration 4
Typical example

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2. Remove the bolt that holds drive gear (1) on the shaft.
3. Use Tooling (A) to remove the shaft. Remove the key from the shaft. Put alignment marks on the pump in order to assemble the gear and the shaft properly.

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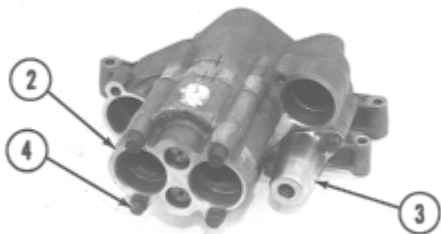


Illustration 5
Typical example

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4. Remove retainer (3) from the bypass valve. Remove the spring and the bypass valve.
5. Remove bolts (4) from the pump body. Remove pump body (2) .
6. Use Tooling (B) to remove the bearing from pump body (2) .

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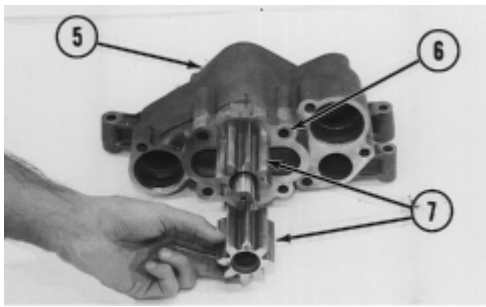


Illustration 6

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7. Remove gear (7). Put identifying marks on the gears in order to be installed properly.
8. Remove spacer (6) from main oil pump body (5). Use Tooling (B) to remove the bearing from spacer (6) .

Note: Check condition of the spacer and the bearings. If the spacer or the bearings are damaged use new parts for replacement.

9. Remove the gears from main oil pump body (5) .

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Illustration 7

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10. Use Tooling (B) to remove the bearings from the main oil pump body.