# ENGINE OILING SYSTEM (Fig. 47)

#### OIL PAN

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#### Removal

- (1) Disconnect battery ground cable and remove oil dip stick.
  - (2) Raise vehicle on hoist and drain engine oil.
  - (3) Remove oil pan screws and remove oil pan.

It may be necessary to rotate the crankshaft to clear the front of the oil pan.

#### Installation

- (1) Inspect alignment of oil strainer. The bottom of the strainer must be on a horizontal plane with machined surface of cylinder block. The bottom of the strainer must touch the bottom of oil pan.
- (2) Clean oil pan gasket surface. Inspect pan rail for distortion and flatten if necessary.
- (3) Using a new pan gasket, install oil pan and tighten screws to 200 in. lb. (23 N·m).
  - (4) Lower vehicle and install oil dipstick.

- (5) Connect battery ground cable.
- (6) Fill crankcase with oil to proper level.

#### OIL PUMP

### Removal

- (1) Remove oil filter element.
- (2) Remove oil pump attaching bolts and remove pump and filter assembly from bottom side of engine.

## Disassembly

- (1) Remove filter base and oil seal ring.
- (2) Remove pump rotor and shaft and lift out outer pump rotor.
- (3) Remove the oil pressure relief valve plug and lift out the spring and relief valve plunger (Fig. 48).

Inspection and Repair

(1) Clean all parts thoroughly. The mating face of filter base (oil pump cover) should be smooth. Replace filter base if it is scratched or grooved.

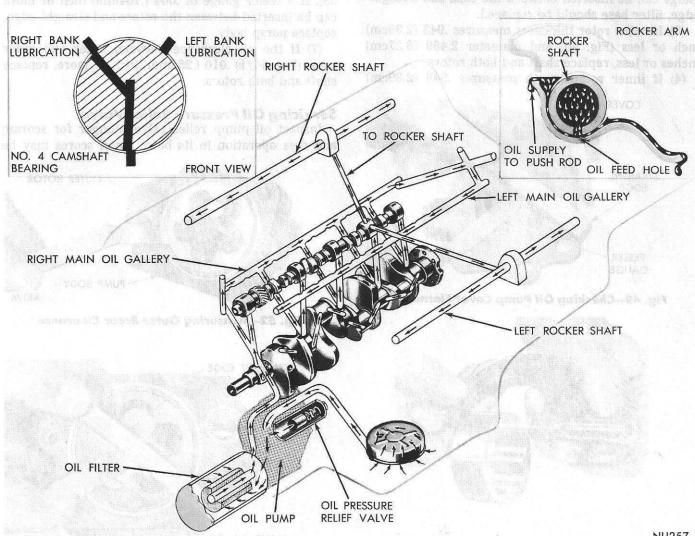


Fig. 47—Engine Oiling System (440 Engine)

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