

CONNECTING ROD BEARING LUBRICATION

Proper lubrication of the connecting rod bearings depends upon accurate adjustment of connecting rod dippers, depth of oil pan troughs and aiming nozzles in the oil pan.

The oil pans on the later model engines are the same; however, there are differences in the dipper height due to the difference in the length of the engine stroke. When checking oil pan troughs and dipper height on the various engines, use the gauges as listed to the right.



INST# 110

Tool Number	Engine Displacement	Models
J-969-2A	216.5 cubic inch	1937-1947
J-1646-A	235.5 cubic inch	1941-1946
J-1541	235.5 cubic inch	1947

These gauges have "Go" and "No Go" limits for the dipper height incorporated in them.

Checking Dipper Height

1. With oil pan removed, turn crankshaft until connecting rod is at bottom dead center.
2. With the oil pan gasket removed, place the two side pins of the gauge on the pan rail adjacent to the connecting rod dipper being checked.
3. Slide the gauge over the dipper being checked (fig. 20). If the dipper is properly adjusted, the low (or "Go") step of the gauge will pass over the dipper, but the high (or "No Go") step will not pass over it.



Fig. 20—Checking Connecting Rod Dipper Height

4. If the low (or "Go") step of the gauge will not pass over the dipper it may be lowered by a light tap with a hammer.
5. If the high (or "No Go") step passes over the dipper, a new dipper should be installed.

Each connecting rod dipper should be checked in this manner.

Checking Oil Pan Troughs

1. With the oil pan gasket removed, place the gauge on the side rails with the center pin extending into the oil pan.
2. Slide the gauge so that the pin passes over the edge of the trough at its center (fig. 21).
3. Check clearance between end of pin on gauge and edge of oil trough. This should not exceed .015" if the trough is in proper adjustment.
4. If the gauge does not pass over the trough, it may be corrected by carefully grinding the edge of the trough.
5. If there is more than .015" clearance between end of gauge and edge of oil trough, check for loose spot welds where trough is welded to the oil pan. A loose trough should either be rewelded or the oil pan replaced.

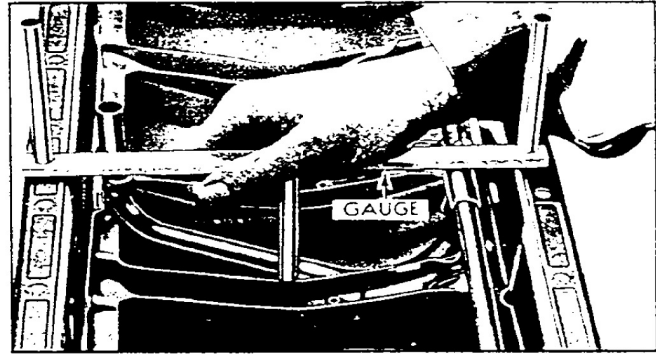


Fig. 21—Checking Oil Trough Depth

Checking Oil Pan Nozzles

1. Install oil pan target gauge J969-1 on the oil pan with the target plate on the side of the pan opposite the oil nozzles; locate the dowels of the gauge in the screw holes in the oil pan rail.
2. Insert water nozzle J793-3 in the main oil pipe.
3. Tip the oil pan about 45 degrees to prevent the water from covering the ends of the nozzles.
4. Open the water nozzle just enough to straighten the water streams at the ends of the nozzles. If the oil nozzles are properly adjusted, the water stream will pass through the centers of the target holes. Correct and incorrect aiming of the nozzles is shown in Figure 22.

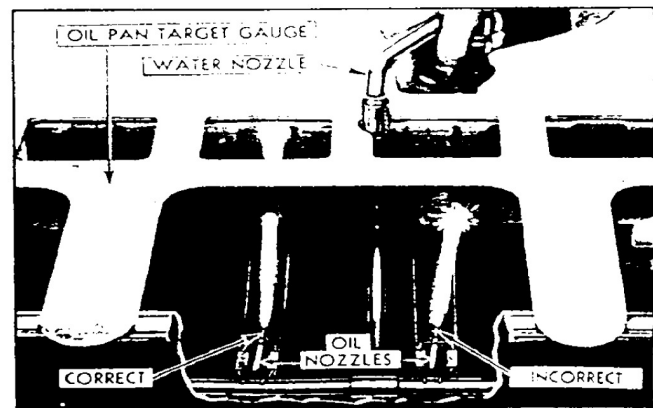


Fig. 22—Checking Aim of Oil Nozzles

5. The aiming of the oil nozzles may be adjusted by using the oil nozzle wrench J793-5 as shown in Figure 23. Continue adjusting and checking the oil nozzles until each water stream passes through the center of its target hole.