

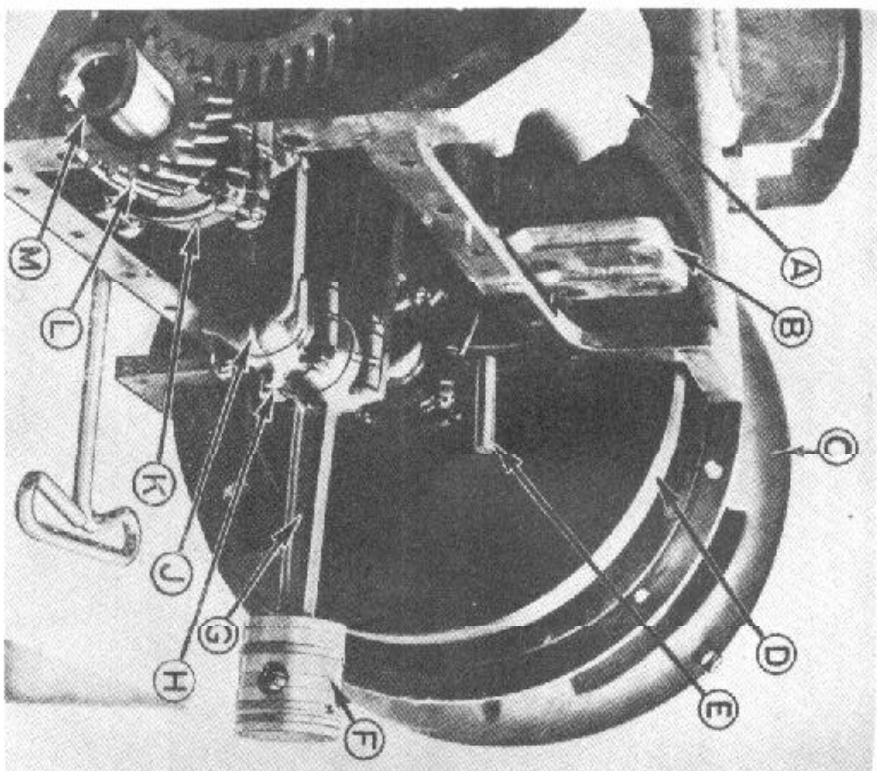
TL-90729

- A. Piston pin retainer.
- B. Piston pin.
- C. Connecting rod.
- D. Connecting rod bearings.
- E. Oil dip.
- F. Bearing shims.
- G. Oil hole.
- H. Piston
- J. Piston rings.

Figure 29. Fitting piston pin.

*b. Fitting New Connecting Rod Bearings.* New rod bearings must be fitted properly to the crankshaft. To do so, wipe the shaft and bearing clean and then apply a little Persian red or blue, mixed in oil, to the shaft. Place the bearing half on the shaft, and slide it back and forth around the pin. Remove the bearing and note the impression on it. Cut down the high spots on the bearing with a bearing scrape, and repeat the rubbing test. At least 80 percent of the bearing should touch the shaft. After fitting the bearings, adjust the bearing clearance of each connecting rod on the crankshaft individually. Connect each rod to the shaft, putting in sufficient shims to secure proper clearance. If the rods are attached so that they are left out of the cylinders when bearing clearance is adjusted (fig. 30) the clearance can be tested by raising the rod to a horizontal position after the bolts have been tightened. If the rod gradually drops, due to its own weight, the fit is approximately correct. The bearings should not bind, and should be able to be moved laterally slightly. Be sure to replace all cotter pins on bearing studs after tightening nuts.

*c. Oil Dip of Connecting Rod.* When the cranks are in the bottom center position, the top of the oil dips on the connecting rods should be



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- A. Governor housing.
- B. Magneto bracket.
- C. Governor frame.
- D. Flywheel.
- E. Oil pump tappet.
- F. Piston.
- G. Connecting rod.
- H. Oil dip.
- I. Crankshaft.
- K. Main bearing.
- L. Crankshaft gear.
- M. Starting jaw.

Figure 30. Fitting connecting rod bearings.