McCULLOCH

SERVICE BULLETIN #1086

MODEL **MISCELLANEOUS** DATE 3/20/60

SUBJECT **NEW CLOSED-END BEARING AND PISTON PIN**

To increase piston pin service life, a new closed-end Needle Bearing, P/N 104378, and a new Piston Pin, P/N 57198, are being installed in production engines.

The closed-end Needle Bearing replaces needle bearing, P/N 101206, on the exhaust side of the piston. The 101206 needle bearing used on the flywheel side of the piston remains in effect.

The new, unplugged Piston Pin, P/N 57198, must be used in new Piston Assemblies which contain the closed-end bearing. The unplugged piston pin is not interchangeable with plugged piston pins, P/N's 50207A and 51213.

Installation of the new closed-end bearing and piston pin in production engines began with the following serial numbers:

MODEL	SERIAL NUMBER
1-50	23319
1-60	6554
1-70	21860
1-80	6645
MC-10	5545
MC-5	1012

SERVICE REPLACEMENT

When replacing piston pins, needle bearings, or complete piston assemblies, follow this procedure:

1. For engines with earlier serial numbers than those shown above, use part numbers listed in applicable Illustrated Parts List.

2. For engines with later serial numbers than those shown above, use the following part numbers:

COPYRIGHT 1960 McCULLOCH CORPORATION

LITHO IN U.S.A.

MODEL	PISTON ASSY	PISTON PIN	BEARINGS
1-50	55007A	57198	1 - 104378 1 - 101206
1-60	55007A	57198	1 - 104378 1 - 101206
1-70	55310A	57198	1 - 104378 1 - 101206
1-80	55310A	57198	1 - 104378 1 - 101206
MC-10	55310A	57198	1 - 104378 1 - 101206
MC-5	55007A	57198	1 - 104378 1 - 101206

SERVICE INSTALLATION

A. Installation of new Piston Pin, P/N 57198

When installing the new Piston Pin, P/N 57198, in piston assemblies containing the new closed-end Bearing, follow this method:

1. Insert piston pin through open-end bearing in piston and place one thrust washer on pin (figure 1).

2. Align connecting rod between the two bearings and press piston pin into connecting rod. Do n ot press piston pin completely through connecting rod and into closed-end bearing as the second thrust washer must be installed.

3. Use special inserter, P/N 103603, to hold second thrust washer between piston pin and closed-end bearing. Carefully press pin through second thrust washer and into closed-end bearing until the outer end of the pin is flush with the edge of the outer edge of the open-end bearing (A, figure 1). At this point, there will be sufficient clearance (.010 inch - .030 inch) between the other end of the piston pin and the shield of the closed-end bearing.

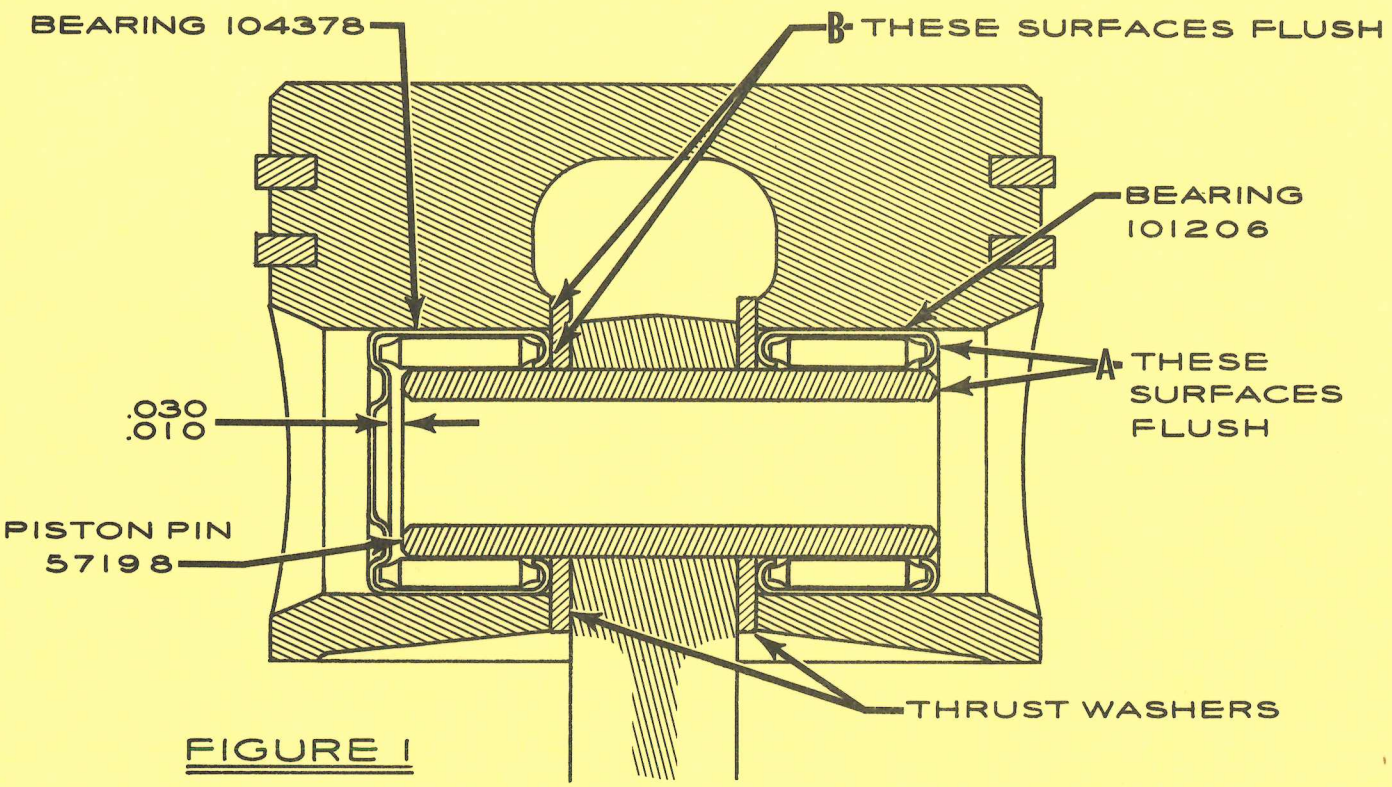


FIGURE 1

CAUTION: Do not press the pin below the surface of the open-end bearing because if the pin touches the shield of the closed end bearing and the engine is run, friction will destroy the bearing and may cause serious damage to the engine.

4. If the piston pin is pressed too far into the closed-end bearing, both piston pin and closed-end bearing will have to be pressed out of the piston. When this is done, the piston pin will distort or break the shield of the closed-end bearing making it necessary to replace the bearing with a new one.

B. Installation of new closed-end Bearing in Piston

When installing the new, closed-end Bearing, P/N 104378, in piston, press bearing into piston until the Bearing edge is flush with the interior edge of the piston (B, figure 1). The Bearing is now properly positioned for piston pin installation.