

relieves all strains which might lead to failure. Proper bearing dimensions have been carefully worked out based on long and severe service experience so that a minimum of trouble will develop. These crankshafts are both statically as well as dynamically balanced within 1/2 inch ounce which largely minimizes vibration.

The crankcase is sealed at both ends of the crankshaft from dust -- at the front end by a spring-backed, leather seal back of a felt washer and, at the rear, by a specially designed Neoprene Seal.

**BEARINGS** - The 3 large replaceable precision type main bearings, steel backed semi-micro, tin-base babbitt lined, are doweled and securely held in place by rugged caps with 1/2" diameter heat-treated alloy steel cap screws all positively locked.

For checking bearing clearance, use 1/2 inch feeler gauge, .0025" thick, approximately the length of the bearing.

Place the feeler gauge between the bearing and crankshaft, parallel with the shaft, and tighten the cap screws on the bearing cap.

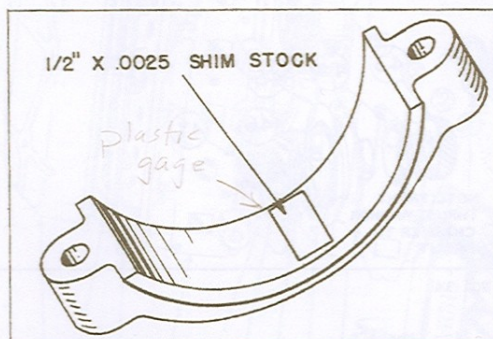


PLATE NO. 15 - FEELER GAUGE IN BEARING

A very light drag should be noticed when turning the shaft.

Bearing Size:	LENGTH	DIAMETER
FRONT	1-17/32	2-7/8
CENTER	2-3/8	2-7/8
REAR	2-1/16	2-7/8

Desired clearance .002 to .003".  
End clearance .006 to .010".

**CAMSHAFT** is a one-piece highly alloyed iron casting especially heat-treated with integral distributor shaft gear and runs on 3 large well lubricated bearings cast in the block, using no separate bushings.

Bearing Size:	LENGTH	DIAMETER	BEARING CLEARANCE
FRONT	1-7/16	2	.0035 to .004
CENTER	1-1/16	1-3/4	.0035 to .004
REAR	1-1/8	1-11/16	.0035 to .004

End clearance is from .006 to .010"

**CONNECTING RODS** are drop-forgings of heavy duty, "I" section design having an ample margin of safety under full load with carefully engineered caps. The hole for the piston pin is diamond bored to insure proper fit and carefully gauged for alignment.

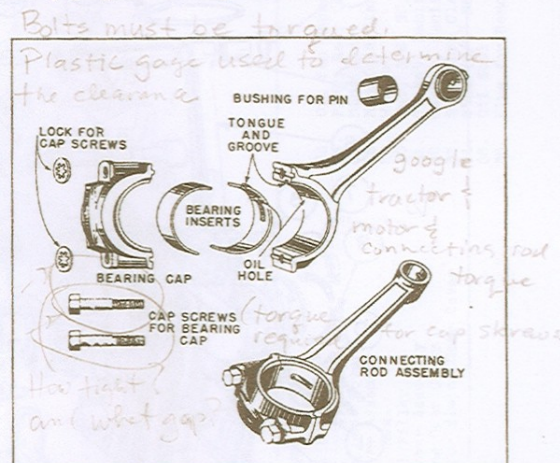


PLATE NO. 16 - CONNECTING ROD ASSEMBLY

**CONNECTING ROD BEARINGS** are of the replaceable precision ready-to-run type "steel-backed Semi-Micro, tin-base babbitt lined", doweled and securely held in place by rugged caps with 1/2" diameter heat-treated alloy steel bolts.

Bearing Size:	LENGTH	DIAMETER
	1-11/16"	2-1/2

CLEARANCE .002 to .0035"

SIDE CLEARANCE .006 to .010".

**PISTON PIN BUSHING** in the top end of the connecting rod is of "Phosphor Bronze" and are held to proper dimensions within very close limits. The finished hole size is 1.2504 to 1.2502 inches.

The piston pin diameter is 1.2500 to 1.2498 inches.

The desired pin fit in bushing .0004".

The desired pin fit in piston, light push fit.