

Number 149 December 25, 1944

## CONNECTING ROD SIDE-CLEARANCE OR "END-PLAY"

The recommended connecting rod side-clearances between the outside edge of the forked connecting rod bushing and flywheel thrust washers are --

> .015" to .020" - 74 cu. in. motors .010" to .015" - 30.50 and 45 cu. in. motors

The recommended connecting rod side-clearance between the bushings of the two rods is --

.005" to .015" - All Twins

These clearances are measured with a "feeler" gauge.

Different size thrust washers are available for 45" and 74" in order that you may arrive at the recommended clearances:

| #50311<br>44386 | Crankshaft | thrust | washe | r (new)  |        | -(45"<br>-(45"     |     | 74")<br>74") |
|-----------------|------------|--------|-------|----------|--------|--------------------|-----|--------------|
| 27B268          | 11         | 11     | - 11  | (Std.)   |        | 1 10               |     | 74")         |
| 50310           | 11         | 11     | 11    | (New)    | .07211 | -(45 <sup>th</sup> | -   | 74")         |
| 16A13           | 11         | 11     | 11    | (Std.)   | .062"  | -(30.5             | 50) |              |
| 44345           | 11         | ft .   | 11 (( | Optional |        |                    |     |              |

## FLYWHEEL ASSEMBLY SIDE-CLEARANCE OR "END-PLAY"

The recommended flywheel assembly side-clearance between the pinion and drive shaft thrust washers and pinion and drive drive shaft housings is --

.015" to .020" - All Twins (30.50" - 45" - 74")

The following thrust washers are available in order to arrive at the recommended clearances --

27B174 Pinion & Drive Shaft
thrust washer

37625 Pinion & Drive Shaft
thrust washer
16A13 Pinion Shaft thrust washer
44345 " " " " (Optional) .057"(30.50")
27B174 Drive Shaft thrust washer
37625 " " " (Optional) .057"(30.50")
(Optional) .062"(30.50")
(Optional) .050"(30.50")

Any excessive side-clearance can be taken up by removing the pinion housing and putting in pinion housing washer shims behind the pinion housing washer until you have arrived at the recommended clearance.

22B476 Pinion Housing washer shim - .005".

It is important that you "set up" the connecting rods and flywheels with the correct side-clearances because when there isn't enough clearance, the retainers bear against the thrust washers and the result is -- burnt thrust washers and damage to the retainer and roller bearings. When there is too much side-clearance, the washer will not stay on the thrust washer pins and the result will be the same as mentioned above.