SERVICE SHOP DOPE

No. 348 September 27, 1954

SERVICING THE 1954 AND EARLIER OHV MODEL ENGINE PINION SHAFT BEARING

10-0787

VT No. 10-0787

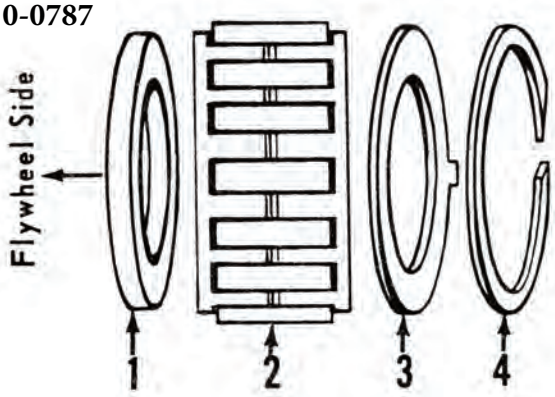

FIGURE 1

1 – 24695-40 Bearing Spacer (.122" thick)
2 – 24650-36 Bearing Complete – Consists of
(12) 9261 Bearing Roller (¼" x .600")
(2) 24646-36 Bearing Retainer
(Overall Width .370")
3 – 24690-40 Bearing Washer
4 – 24702-40 Spring Ring

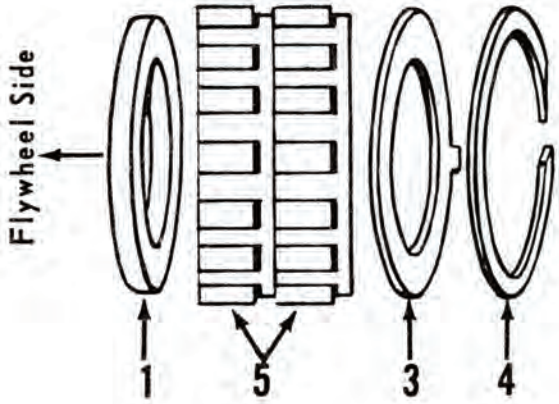

FIGURE 2

1 – 24695-40 Bearing Spacer (.122" thick)
5 – 24650-36 Bearing Complete – Consists of
(24) 9301 Bearing Roller (¼" x .270")
(2) 24646-36 Bearing Retainer
(Overall Width .370")
3 – 24690-40 Bearing Washer
4 – 24702-40 Spring Ring

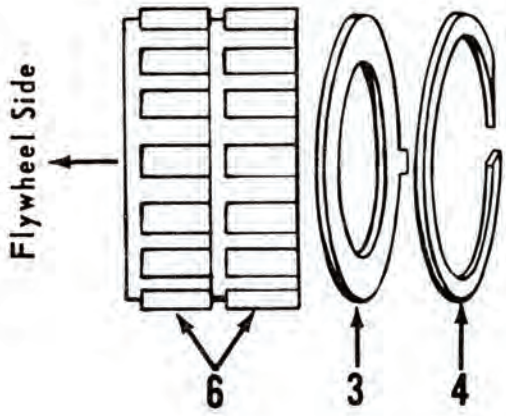

FIGURE 3

6 – 24650-54 Bearing Complete – Consists of
(24) 9321 Roller Bearing (¼" x .360")
(2) 24646-54 Bearing Retainer
(Overall Width .434")
3 – 24690-40 Bearing Washer
4 – 24702-40 Spring Ring

NOTE: Spacer 24695-40 shown in Figs. 1 and 2 cannot be used with this bearing.

PINION SHAFTS AND FITTINGS IN CORRECT ORDER OF ASSEMBLY

FIGURE 4

PINION SHAFT AND FITTINGS USED IN 1940 TO AND INCLUDING 1953 OHV ENGINES

1 – 24007-39 Gear Shaft
2 – 24697-40 Gear Shaft Bearing Seal Ring
3 – 26349-39 Oil Pump Drive Gear
4 – 24703-40 Gear Spacer
5 – 24699-37 Spacing Spring
6 – 24010-39 Pinion Gear
7 – 24020-51 Gear Shaft Plug (left thread)

NOTE: In original factory engine assembly, shaft with screw thread in end for pinion gear puller and installer tool, part number 96830-51 was used only since 1951; however, shafts under part number 24007-39, with or without threaded end and screw plug (7) are interchangeable. Only the shaft with the screw plug is furnished on parts order.

FIGURE 5

PINION SHAFT AND FITTINGS USED IN 1954 OHV ENGINES

1 – 23985-54 Gear Shaft Gear Keys
2 – 24006-54A Gear Shaft
3 – 26349-54 Oil Pump Drive Gear
4 – 24703-54 Gear Spacer
5 – 24699-37 Spacing Spring
6 – 24010-54 Pinion Gear
7 – 24023-54 Gear Shaft Nut (left thread)

NOTE: 1954 shaft and fittings cannot be installed in 1953 and earlier OHV engine, unless 1954 timing gear case cover is also installed (bearing end of shaft is smaller diameter).

FURTHER INFORMATION ON PINION SHAFT BEARINGS – READ CAREFULLY

Figure 1 on page 1 shows roller bearing and adjacent parts in correct order of assembly, as used in all OHV model engines from 1940 to late 1953. The bearing complete (2) part number 24650-36 is shown as it is being supplied on parts order.

NOTE: This bearing with adjacent parts shown *(less spacer 24695-40)* was used in earlier than 1940 OHV engines, and was also used in 74 and 80 cu. in. Side-Valve engines from 1937 through 1948. It is still the correct bearing to use in servicing engines referred to in this "Note".

Figure 2 on page 1 shows roller bearing and adjacent parts in correct order of assembly as used in late 1953 and early 1954 OHV model engines.

NOTE: This bearing, carrying the same part number (24650-36) as bearing shown in Fig. 1, was used for only a short period of time and was then discontinued and replaced with bearing shown in Fig. 3. Bearing shown in Fig. 1 is now furnished on parts order calling for part number 24650-36.

Figure 3 on page 1 shows roller bearing and adjacent parts in correct order of assembly as used in 1954 OHV model engines from engine number 54FL 5010 to the season's end. This bearing (24650-54) will not fit 74 and 80 cu. in. Side-Valve models or OHV models earlier than 1940.

NOTE: The 1955 OHV engine pinion shaft bearing was changed to gain greater bearing area. Shaft and bearing are new and differ from anything shown and described in this Shop Dope. See 1955 parts list.

RECOMMENDATION – Use only the bearing shown in Fig. 3 for all servicing of OHV engines from 1940 to and including 1954, as it has greater bearing area than earlier bearings used.