

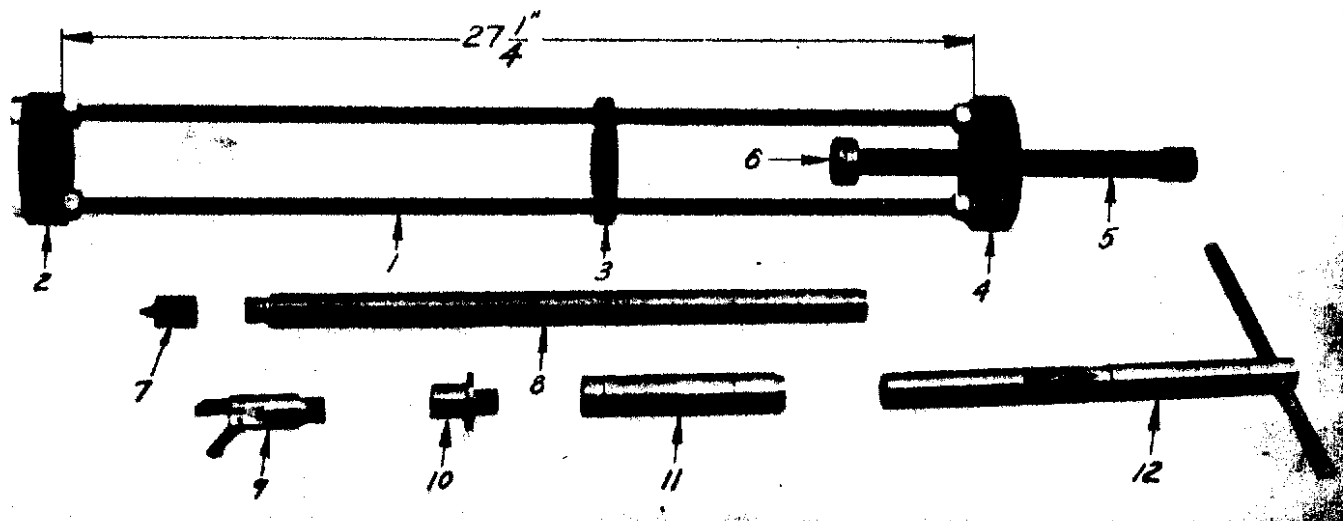
# SERVICE

## SHOP DOPE

No. 352

December 1, 1954

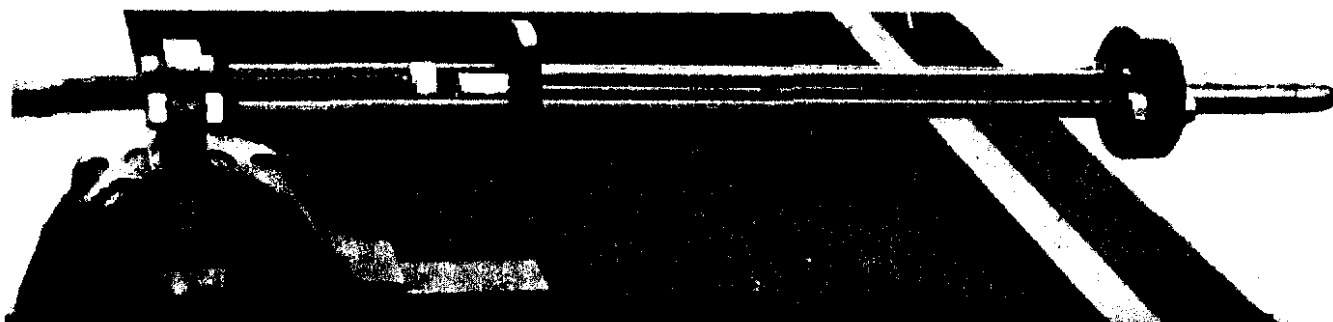
### SINGLE MODEL TELE-GLIDE FORK BUSHING TOOL SET



ILLUS. 1

### TOOL SET PART NO. 97030-54

Item No.	Description
1	Press Assembly
2	Press Base
3	Fork Tube Locating Plate
4	Screw Plate
5	Screw
6	Thrust Bearing
7	Press Tube Tip
8	Combination Pilot and Press Tube
9	Claw Assembly
10	Oil Seal Installing Tip
11	Extension
12	Fork Tube Bushing Reamer Assembly



ILLUS. 2

### (INSTRUCTIONS FOR USING TELE-GLIDE FORK BUSHING TOOL)

Refer to ILLUS. 1 for item numbers, except where indicated otherwise.

**TO REMOVE LOWER FORK TUBE BUSHING:** First remove oil seal in lower end (flanged end) of fork tube. The oil seal can be removed from its seat with a screwdriver.

Secure the screw plate in a vise as shown in ILLUS. 2.

Attach claw assembly (Item 9) to extension (Item 11). Insert claw assembly into the lower end (flanged end) of the fork tube a sufficient distance to allow the claws to come above the upper end of the lower fork tube bushing (Item 3) ILLUS. 4. Attach press tube tip (Item 7) to combination pilot and press tube (Item 8). Insert this assembly, press tube tip end into the top of fork tube (straight end of tube) to the point where the press tube tip bottoms in the center of the claw assembly.

The tapered press tube tip will spread the claws out and hold them in position over the upper end of the lower fork tube bushing and provide a means of pressing the bushing out the lower end of the fork tube.

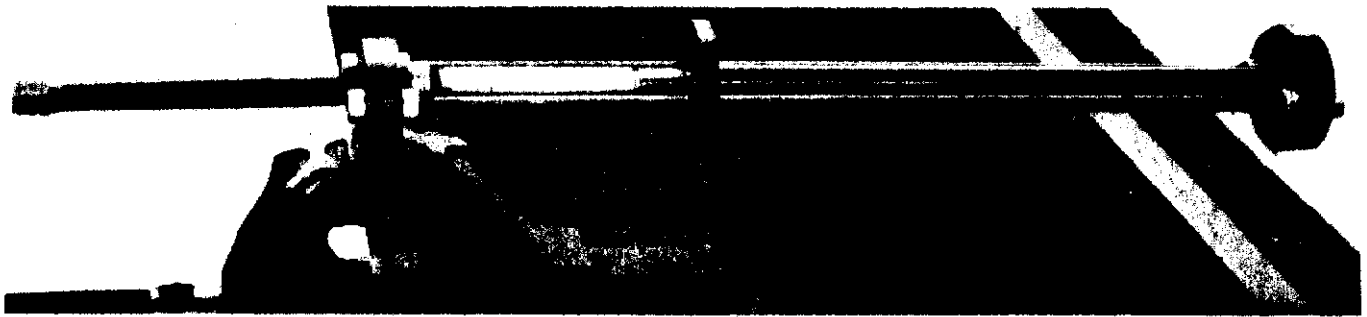
Hold the fork tube in the left hand and apply a slight downward pressure on combination pilot and press tube in order to hold the claws in position while inserting the assembly into the press. Insert the lower end (flanged end) of the fork tube into the center of the press base (Item 2). Slide fork tube locating plate (Item 3) over the upper end (straight end) of the fork tube as shown in ILLUS. 2. Illustration 2 shows the fork tube set up in the press to remove the lower fork tube bushing. Turn screw (Item 5) clockwise until

thrust bearing (Item 6) contacts the end of combination pilot and press tube (Item 8) and press the lower fork tube bushing out the end of fork tube.

**TO REMOVE UPPER FORK TUBE BUSHING:** Follow the same procedure described to remove the lower fork tube bushing.

**TO INSTALL UPPER FORK TUBE BUSHING:** Attach extension (Item 11) to combination pilot and press tube (Item 8). Slide upper bushing (Item 2) ILLUS. 4, over the end of combination pilot and press tube and bring bushing to rest against the end of extension (Item 11). Insert the end of combination pilot and press tube into the lower end (flanged end) of fork tube and bring the upper fork bushing to rest against the bottom end of the fork tube. Turn screw (Item 5) counter clockwise until back side of thrust bearing (Item 6) rests lightly against screw plate (Item 4).

Insert the upper end of extension (Item 11) through the center of fork tube locating plate (Item 3) and bring the end of extension to rest against thrust bearing (Item 6). Bring upper end (straight end) of fork tube down and insert in center of press base (Item 2). Slide fork tube locating plate (Item 3) over lower end (flanged end) of fork tube. This supports the fork tube exactly center between press base (Item 2) and fork tube locating plate (Item 3). The upper fork tube bushing can now be pressed into the fork tube by turning screw (Item 5) clockwise. ILLUS. 3 shows the fork tube set up in the press to install upper or lower fork tube bushings.

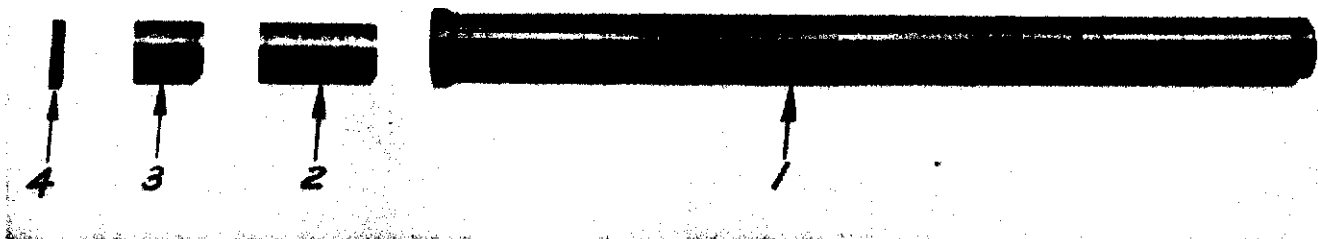


ILLUS. 3

The extension (Item 11) has two grooves cut around its outside diameter. The lower groove, the groove closest to the threaded end of extension, is the depth gauge used when pressing in the lower bushing (Item 3) ILLUS. 4. The upper groove is the depth gauge used when pressing in the upper bushing (Item 2) ILLUS. 4. The depth of either bushing is correct when the grooves on extension (Item 11) align with the upper

surface of the fork tube locating plate (Item 3). This is the side of the locating plate that faces the thrust bearing (Item 6).

**TO INSTALL LOWER FORK TUBE BUSHING:** To install the lower fork tube bushing (Item 3) ILLUS. 4, follow the same procedure used to install the upper fork tube bushing.



ILLUS. 4

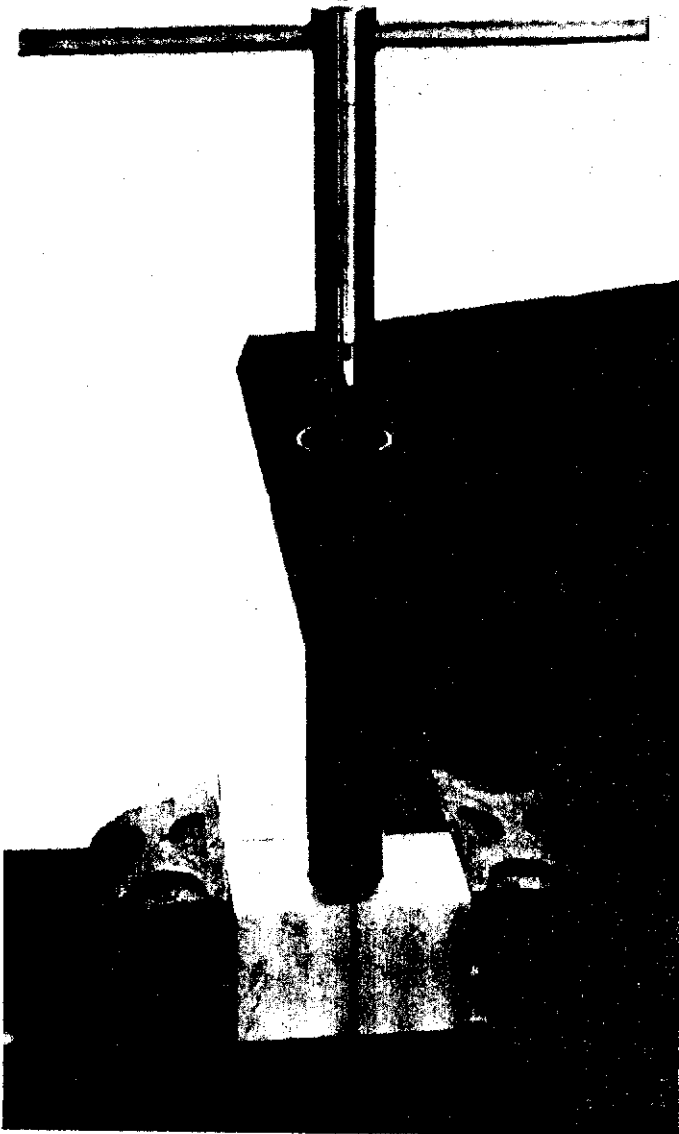
- Item 1
- Item 2
- Item 3
- Item 4

- Fork Tube
- Upper Fork Tube Bushing
- Lower Fork Tube Bushing
- Fork Seal

**TO REAM FORK TUBE BUSHINGS TO FINISH SIZE:** Clamp fork tube in vise between fork tube straightening blocks as shown in ILLUS. 5. There is a groove cut around the outside diameter of the reamer at its upper end. This groove is used as a gauge to indicate that the reamer has passed through both bushings. Both bushings have been reamed throughout their length when this groove aligns with the bottom surface (flanged-end) of the fork tube. After the reaming

job is completed, continue turning the reamer in a clockwise direction with a slight upward pressure to remove reamer from the fork tube.

**TO INSTALL FORK TUBE OIL SEAL:** Attach oil seal installing tip (Item 10) to extension (Item 11). Install oil seal (Item 4) ILLUS. 4, on oil seal installing tip with the lip of the oil seal facing down. Clamp the fork tube in a vise between fork tube straightening



ILLUS. 5

blocks as shown in ILLUS. 6. Insert end of oil seal installing tip into the lower fork tube bushing and drive the oil seal to bottom in its seat by striking end of extension (Item 11) with a soft hammer using very light hammer blows. This operation is shown in ILLUS. 6.



ILLUS. 6

The fork bushing tool press is shipped disassembled. Proper assembly of press is shown in ILLUS. 1. The counterbored sides of press base (Item 2) and fork tube locating plate (Item 3) must face one another. Adjust inner surfaces of screw plate (Item 4) and press base (Item 2) on tie rods to measure  $27\frac{1}{4}$ " , as shown in ILLUS. 1.

**HARLEY-DAVIDSON MOTOR CO.**

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