

SHOP DOPE BULLETIN NO. 388

4-1-57

FILE: 2-2G-10

FRONT FORK SLIDER BUSHING REPLACEMENT - MODELS K, KH, AND XL

The illustration below shows tools necessary for removing, installing and reaming the front fork slider bushings on Models K, KH, and XL (Sportster) Motorcycles

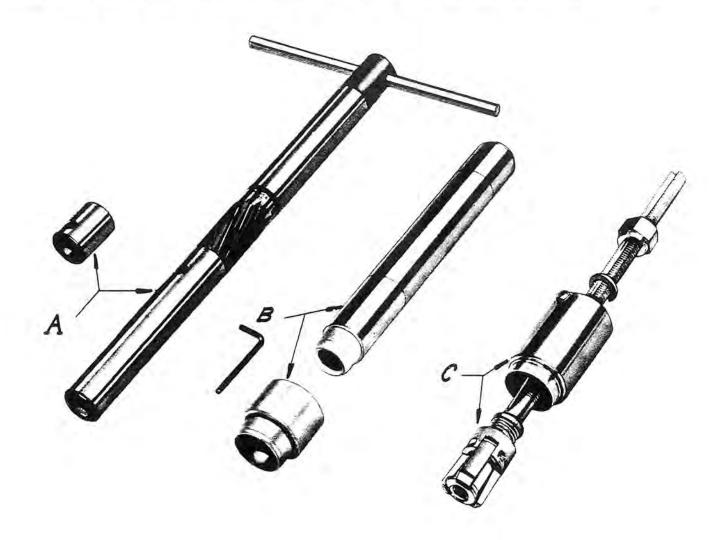


Figure 1. Tool Set Complete, Part No. 96254-54

Item	Description						
A	Fork	Slider	Bushing	Reamer	and	Pilots	
В	Fork	Slider	Bushing	Driver	and	Guide	
C	Fork	Slider	Bushing	Puller	and	Puller	Car

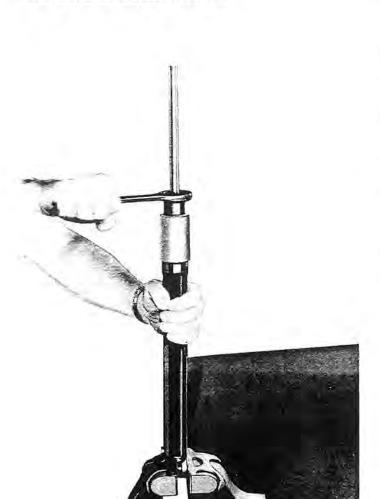


Figure 2.

REMOVING FORK SLIDER BUSHINGS:

First remove fork slider oil seal. In the K Model fork (without forkboot) the fork slider oil seal consists of three pieces; rubber seal, felt washer and felt washer retainer. The felt washer and its retainer can be removed from its seat with a screwdriver using the top edge of the fork slider as a fulcrum. The rubber seal can be removed in the same manner.

In the KH and Sportster forks having rubber fork boots, the space provided for the felt washer and its retainer is taken up with the fork boot retainer. To remove the fork boot retainer, use a flat brass drift, tapping first on one side of the retainer and then the other side until it is free of the fork slider.

Insert the fork slider bushing puller and cap (C) Figure 1, into the fork slider a sufficient distance to allow the claws to extend below lower end of the upper fork

slider bushing. Place puller cap into oil seal counterbore; apply oil to screw threads and steel thrust washer; turn nut down against puller cap to remove all slack from puller assembly. Use a Big Twin engine sprocket lock nut wrench and continue to turn nut against puller cap until bushing is removed.

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To remove lower fork slider bushing, follow same procedure used in removing upper fork bushing.

Figure 2 shows set up for removing upper and lower bushings.

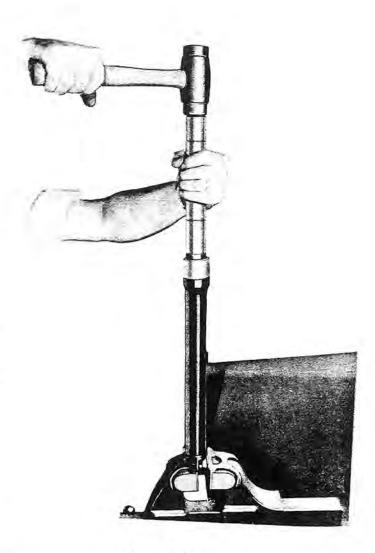


Figure 3.

INSTALLING FORK SLIDER BUSHINGS:

Before installing new fork slider bushings thoroughly clean slider bore and lubricate with engine oil. Fork bushing driver and guide (B) Figure 1, is used to install fork slider bushings. Insert the bushing

guide into the fork slider oil seal counterbore and insert the new lower fork slider bushing into the guide as shown in Figure 3. The fork bushing driver has two grooves cut around its outside diameter which are used as depth gauges when driving in the bushings. The groove nearest the top of the driver is the depth gauge for the lower bushing, and the lower groove is the depth gauge for the upper bushing. The lower bushing is driven into the fork slider to the point where the upper groove on the bushing driver aligns with the top edge of the bushing guide. NOTE: If the lower bushing is driven into the fork slider farther than specified, it will contact the bottom of the counterbore at lower end of fork bushing and bushing may be collapsed to the extent that it cannot be finished reamed. When installing upper fork slider bushing follow the same procedure used to install lower fork slider bushing. The upper fork slider bushing is driven into the fork slider the correct depth when the lower groove on the bushing driver is aligned with the top edge of the bushing guide.

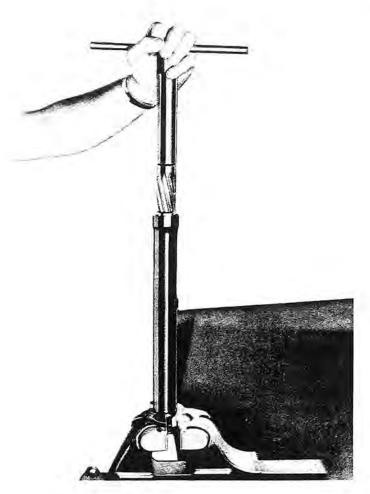


Figure 4

REAMING FORK SLIDER BUSHINGS:

Figure 4 shows reamer with long pilot attached as required for reaming upper bushings to finish size. The long pilot is of correct size to fit into the unfinished lower bushing and guide the reamer through the upper bushing. CAUTION: Do not drop cutting edges of the reamer into bushing. Slowly start cut, turning reamer clockwise. When removing reamer after bushing is reamed, continue turning clockwise and apply a slight upward pressure to remove reamer from the finished bushing. Install the short reamer pilot. shown under (A) Figure 1., on reamer to ream the lower bushing. The Allen wrench provided with the tool set is used to tighten or loosen reamer pilots on the reamer body.

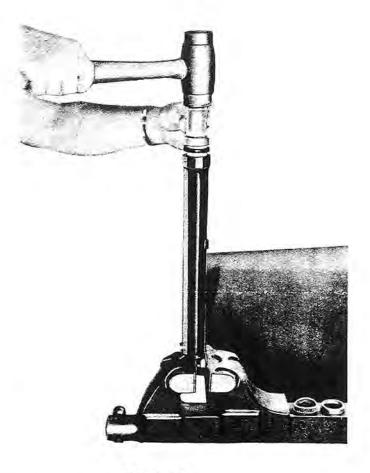


Figure 5.

INSTALLING FORK SLIDER OIL SEAL: (USED ON MOTORCYCLES NOT HAVING RUBBER FORK BOOT)

After fork slider bushings have been reamed, thoroughly wash out the fork slider to remove chips, and drive in a new oil seal as shown in Figure 5.

Seal must be installed with wiping lip downward.

The oil seal driver, Part No. 96310-55, as shown in Figure 5, is not part of tool set 96254-54 shown on page 1 of this bulletin, and must be ordered separately.

To install the oil seal, place on oil seal driver, seal lip facing down, and insert the pilot end of the oil seal driver into the upper fork slider bushing as shown in Figure 5. With a soft hammer, drive the oil seal to bottom using light blows of the hammer.

Install felt washer retainer on oil seal driver with its open end facing the pilot end of the driver. Insert felt washer into retainer. Insert the pilot end of oil seal driver into the upper fork slider bushing and with light blows of soft hammer, drive the felt washer and retainer to bottom against the rubber oil seal. The felt washer and retainer are not used in the Model KH and Sportster forks.

NOTE: The rubber oil seal only was used in the Model KH fork until the early part of the 1955 season. At this time, use of the rubber oil seal was discontinued because it was found to be unnecessary in connection with the use of the rubber fork boot.

INSTALLING LOWER FORK BOOT RETAINER: (Part No. 46008-54)

Start fork boot retainer by hand into the counterbore in upper end of fork slider. Insert the pilot end of oil seal driver through fork boot retainer and into the upper fork slider bushing. With a soft hammer, use very light hammer blows to drive fork boot retainer to bottom against the end of fork slider.

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