

Technical Notes

Drilling the Distributor Shaft for Lubrication

By Lynn Sondenaa

This article will give you the necessary information needed to drill the upper distributor shaft A-12178 so that oil can reach the upper bushing A-12132. If you have a metal lathe and a milling machine these tools could be used, but most people only have a drill press so this information will cover the drill press. The tools needed are eye protection, center punch, ball peen hammer, 3/32, 1/8, 3/16 inch twist drill bits, 6 inch rule, two used distributor shaft bushings, and a vee-block. (Fig. 1)

The first step is to drill a 3/16 inch diameter hole a depth of $\frac{3}{4}$ inches in the shaft. Slide the two used distributor bushings onto the shaft. These will protect the ground surfaces of the shaft. Clamp the shaft vertical onto the vee-block with the top of the shaft facing upwards. Drill the 3/16 inch hole. (Fig. 2)

Next lay the shaft horizontal and mark the hole 1 1/8 inch from the top. Center punch this mark in the center of the shaft which would be $\frac{1}{4}$ inch. Place the two bushings on the shaft to protect the ground surface. Drill a 3/32 inch diameter hole a depth of 5/16 inches. (Fig. 3) Unclamp, remove the bushings and clean the chips out of the holes. Compressed air works well using 15 to 20 psi.

If you have an old distributor shaft, screw the cam screw into the shaft tight and clamp it into the vee-block. Drill a 1/8 inch diameter hole in the center of the head of the screw all the way through the screw. Remove, clean and now you have a distributor shaft that has passage so oil can reach the upper bushing. This process will take 15 to 30 minutes to complete.

Here is a point to ponder. Why did Ford not do this process originally? Was it to save money on production or was it due to the fact that the shaft turns counter clockwise forcing the oil upwards?



Fig 1



Fig 2

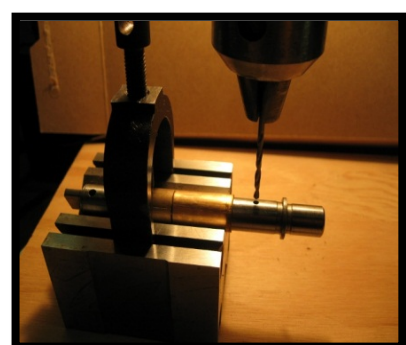


Fig 3