

RF31

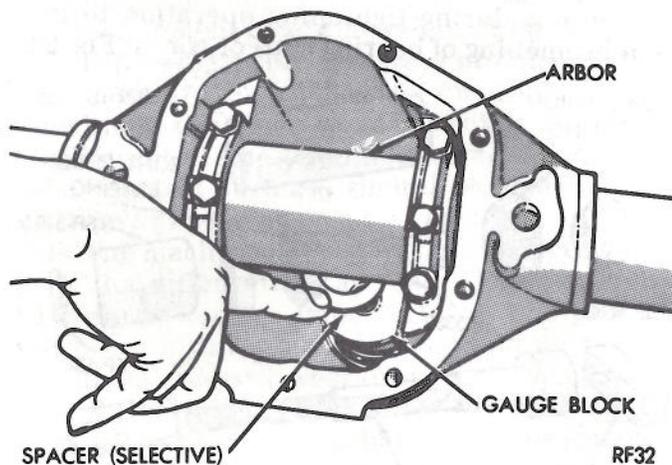
Fig. 23—Seating Bearing Cups in Axle Housing

The position of the drive pinion with respect to the drive gear (depth of mesh) is determined by the location of the bearing cup shoulders in the carrier and by the portion of the pinion in back of the rear bearing. A shim is located between the rear pinion bearing cone and the head of the pinion. The thickness of this shim will be determined next.

(13) Loosen tool nut SP-3193 on 7-1/4 inch and 8-1/4 inch axles. Lubricate front and rear pinion bearings with rear axle lubricant. Retighten nut to produce 15 to 25 in. lbs. (1 to 3 N·m) of rotating torque. Rotate pinion several complete revolutions to align bearing rollers.

(14) On 7-1/4 inch axles install gauge block SP-3250 on end of main body SP-5385, install cap screw SP-536 and tighten securely with SP-531 wrench.

On 8-1/4 inch axles install gauge block SP-5383 on end of main body SP-5385, install cap screw SP-536 and tighten securely with SP-531 wrench.



RF32

Fig. 24—Measuring Housing for Pinion Shim Thickness

(15) On 7-1/4 inch axles position crossbore arbor SP-3243 in axle housing differential bearing seats.

On 8-1/4 inch axles position crossbore arbor SP-6029 in axle housing differential bearing seats.

Center the arbor so that an approximate equal distance is maintained at both ends. Position bearing caps and attaching bolts on carrier pedestals and insert a piece of .002 inch shim stock between arbor and each cap. Tighten cap bolts to 10 ft. lbs. (14 N·m).

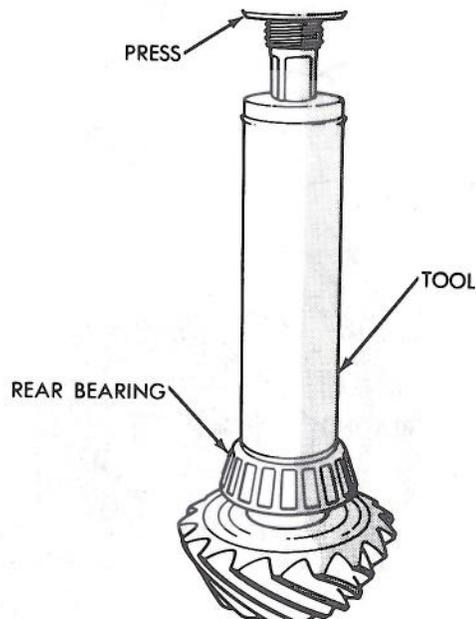
(16) Select rear pinion bearing mounting shim which will fit between crossbore arbor and gauge block (Fig. 24). This fit must be snug but not too tight (similar to the pull of a feeler gauge). Shims are available in .001 inch increments from .020 inch to .038 inch.

(17) Read the markings on the end of the pinion head (—0, —1, —2, +1, +2, etc.). When marking is —(minus), add that amount to the thickness of shims selected in step (16). When the marking is + (plus), subtract that amount. Treat other pinion markings in a similar manner.

(18) Remove the tool arbor and tool from axle housing.

(19) Position shim selected in step (16) on pinion followed by rear pinion bearing cone (make certain that pinion head contact surface, bearing cone and shim are clean and free from foreign particles). Using Tool C-3717 for 7-1/4 inch axles or Tool C-4040 for 8-1/4 inch axles, press bearing on pinion stem. An arbor press may be used in conjunction with tool (Fig. 25).

(20) Lubricate front and rear pinion bearing cones with rear axle lubricant.



RF33

Fig. 25—Installing Drive Pinion Rear Bearing Cone