Pinion Shaft

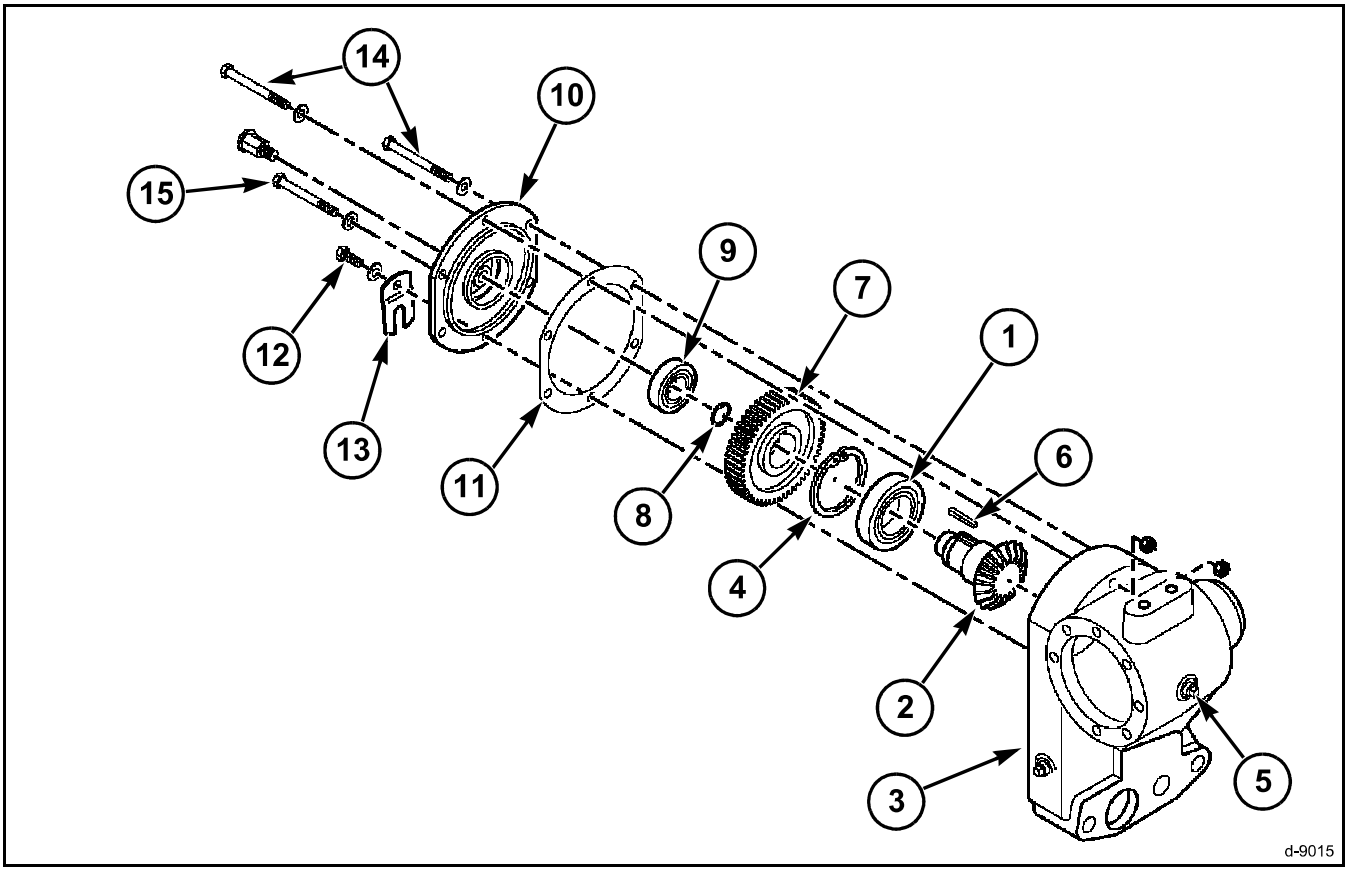

FIG. 144

FIG. 144: Apply Permatex® Aviation Form-A-Gasket® No. 3 to the inner race of the inner bearing (1). Do not permit the Form-A-Gasket to contact the bearing seal.

Support the bearing and press the pinion shaft (2) into the inner bearing. The bearing must be seated against the inner race of the bearing.

Apply Permatex® Aviation Form-A-Gasket® No. 3 to the outer race of the inner bearing. Do not permit the Form-A-Gasket to contact the bearing seal.

Use a soft face hammer to install the pinion shaft and the inner bearing into the gearbox (3). Drive the assembly until the bearing race is past the snap ring groove in the housing.

Install the snap ring (4).

Insert a brass punch through the hole for the pipe plug (5). Tap the brass punch to seat the pinion shaft and bearing against the snap ring. The outer race of the bearing must be tight against the snap ring.

Install the key (6) and gear (7) into the pinion shaft. Install the snap ring (8).

Install the outer bearing (9) onto the pinion shaft. The inner race of the outer bearing must be against the snap ring.

Install the pinion cover (10) and gasket (11).

Apply RTV sealant to the three 3/8-16 x 1 cap screws (12).

Install the three 3/8-16 x 1 cap screws and washers into the bottom three holes. Put the retaining clip (13) into position. Tighten the cap screws finger tight.

Install the two 3/8-16 x 3-1/2 cap screws (14), washers, and top lock nut.

Install the 3/8-16 x 3-3/4 cap screw (15), washer, and top lock nut.

NOTE: The longer 3/8-16 cap screws will be removed again to install the curtain assembly to the gearbox.

Tighten the bottom three cap screws to 48 to 54 Nm (35 to 40 lbf ft).

Insert a brass punch through the hole for the pipe plug. Tap the brass punch to make sure the pinion shaft is completely seated.

Input Shaft

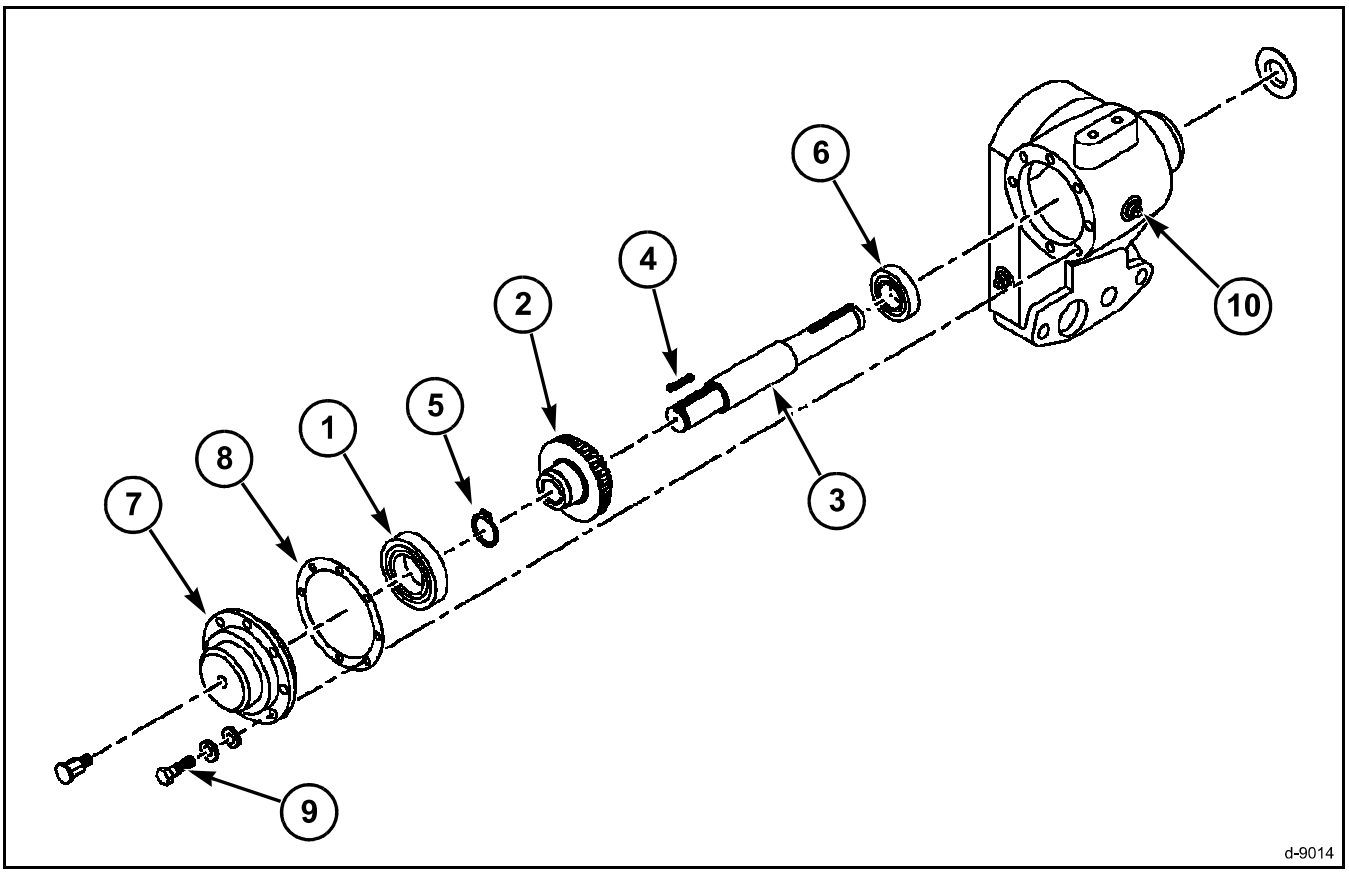

FIG. 145

FIG. 145: Press the bearing (1) onto the bevel gear (2) until fully seated. Press only on the inner race of the bearing.

Install the bevel gear onto the input shaft (3). The gear must be against the shoulder on the shaft. Install the key (4) for the bevel gear. Install the snap ring (5).

Install the bearing (6) onto the opposite end of the input shaft. Press against the inner race only. The inner race must be against the shoulder on the shaft.

Install the input shaft assembly into the end cap (7). Make sure the bearing is completely seated in the end cap by hitting the input shaft with a soft face hammer.

Install the input shaft and end cap into the housing. Use the original shim pack (8) or one that is thicker. Install the 3/8-16 x 1-1/4 locking cap screws (9) and washers. There are two washers on each cap screw. Tighten the cap screws to 48 to 54 Nm (35 to 40 lbf ft).

Hold the pinion shaft with a tool through the pipe plug hole (10) to keep the pinion shaft from moving. See Pinion Gear Retainer on page 62 in this section.