

NOTE

It may be necessary to replace only one of preformed packing (14 or 16) if drain tube (15) was not removed and if packing was not leaking.

e. Allow sealant used in preceding step a. to cure for 24 hours at **70 to 80** degrees F.

6-108. Installation - Input Drive Quill (P/N 205-040-263).

a. Uncover opening for input drive quill on aft side of transmission case. Check that mating surfaces of case and quill are clean.

b. Inspect opening for quill in transmission case for the following conditions:

(1) Any pitting or surface deterioration in the area of seals, gaskets, packings, and mating surfaces of close tolerance machine surfaces, is not acceptable if it will affect the proper function and performance of the mating component or assembly.

(2) Any minor scratches on the preformed packing contact surface should be reworked to blend with the surrounding surface to prevent leakage using crocus cloth (C68) or fine stone (C263 or C264).

c. Remove cover from unused mount, opening side of transmission.

d. Remove No. 6 oil jet (paragraph 6-62).

e. Fabricate work aid (figure 6-25) as follows:

(1) Cut a rubber plug (C230) slightly larger than the diameter of the roller bearing inner race on the inboard end of the pinion (12, figure 6-26).

(2) Insert a 3/16 cotter pin of 0.9375 inch length through center of rubber plug and through a 0.9375 inch washer having a 1/4 inch hole. Bend ends of cotter pin back against washer and plug.

(3) Attach a piece of 0.125 inch nylon cord (C84) or wire (C156), approximately 2 feet long, to the eye of the cotter pin.

f. Position the rubber plug (figure 6-25) in the bearing that mates with end of pinion gear (12, figure 6-26), from inside of the transmission, in such a manner that the rollers are held against the bearing outer race. Cord to extend outside uncovered quill opening at left side of transmission (step c).

NOTE

No. 6 oil jet must be removed to prevent it from being damaged when plug is removed. Rubber plug installation procedure must be followed to prevent damage to bearing in transmission when installing quill.

g. Lubricate new preformed packings (14 and 16) with oil (C166, C166A, or C168) and place preformed packings (14 and 16) on ends of drain tube (15).

(1) Install one end of drain tube (15) in transmission case opening.

(2) Place preformed packings (13) in each of the two outside grooves on sleeve assembly (11), leaving the middle groove open for oil flow.

(3) Recoat preformed packings (13), OD of sleeve assembly (11) and ID in transmission case opening with oil (C166, C166A, or C168).

NOTE

Using a heat lamp, heat transmission case opening at quill until case is hot to touch or 250 degrees F (121 degrees C).

h. Insert quill into transmission case opening and remove rubber plug through unused quill opening on left side of case. Exercise care to engage gear teeth and to align nose of pinion gear (12) into roller bearings as quill is installed. Ensure that drain tube (15) is properly installed.

CAUTION

Do not tap on outer race of freewheeling clutch assembly (4) while installing quill.

NOTE

Note verification of the backlash (see paragraph j. on page 6-80) must begin immediately after removing the rubber plug (C230) to ensure that the quill pinion gear (15) and the bevel gear are engaging (meshing) and continue verifying that backlash exists until the ring (8) mates with the transmission case.

i. Secure quill to transmission case with bracket on lower studs, washers, and nuts. Torque nuts **160 TO 190** inch-pounds.

NOTE

Refer to paragraph 6-36f., for installation of special input quill mounting studs. These studs are required for use of pusher set (T59.1).