

c. Before installing main driveshaft, carefully wipe clean the area surrounding the driveshaft, especially the particle separator, fifth mount beam, synchronized elevator tube, and collective tube.

d. Position driveshaft assembly between engine adapter (41) and transmission input drive coupling.

e. Install clamp set (9) as follows:

(1) Wipe clamp set clean of all traces of lubricant.

(2) Check serial numbers on clamp set. Both halves of clamp set must have the same serial number.

(3) Position clamp set halves around main driveshaft outer coupling (18) and mating adapter on transmission input quill, check to make sure serial numbers on both clamp halves are on the same side.

(4) Install two bolts (1) with heads facing in direction of shaft rotation, and with special washers (2) under bolt head, counter sink of washers toward bolt heads.

(5) Torque nuts (7) evenly to **100 to 130** inch-pounds. Keep gaps at ends of clamp halves even within **0.030** inch of each other. Tap clamp set with a soft faced hammer to ensure proper seating. Recheck torque. Install cotter pins (8).

f. Install clamp set (42) in the same manner outlined in the preceding step and position clamp slots ninety degrees to clamp set (9).

g. Wipe any excess lubricant from main driveshaft.

h. After first ground runup, or first flight, following installation of main driveshaft inspect areas around main driveshaft and in line with couplings for evidence of lubricant slinging. If leakage of lubricant is evident, proceed as follows:

(1) Remove main driveshaft and install new packings (11, 19, 26 and 37, figure 6-9).

(2) Inspect boots for wear and damage.

(3) Reinstall main driveshaft and repeat inspection for lubricant leakage.

6-24. Alignment - Main Driveshaft.

Premaintenance requirements for main driveshaft alignment

Conditions	Requirements
Model	All
Part No. or Serial No.	All
Special Tools	(T47), (T51), (T53)
Test Equipment	None
Support Equipment	Dial Indicator
Minimum Personnel Required	One
Consumable Materials	None
Special Environmental Conditions	A covered area not susceptible to blowing dust or sand.

a. Check alignment of the main driveshaft installation between the transmission input drive quill coupling and the engine output shaft adapter if any one of the following conditions exist:

(1) Main driveshaft inspection reveals excessive wear of coupling spline or indications of excessive heating during operation.

(2) Major repairs or replacement of structural components has been made to either center fuselage or pylon support structure.

(3) Driveshaft misalignment is suspected for any reason.

(4) Shims under engine mount deck fitting have been changed.

(5) Anytime engine is installed or reinstalled.

b. Remove the main driveshaft assembly, but leave the engine adapter (41, figure 6-9) installed in the end of the engine output shaft (paragraph 6-17).

c. Position transmission to best position, corresponding to operation as follows: