



**HUGHES
SERVICE INFORMATION
NOTICE**

NOTICE NO. N-35
DATE July 26, 1967
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SUBJECT: INSPECTION-P/N 269A5513 BUMPER PLUG, LOWER
COUPLING DRIVE SHAFT

MODELS AFFECTED: All 269 Series Helicopters

TIME OF COMPLIANCE: Mandatory on a one-time basis within next 25 hours of
aircraft operation unless already accomplished.

PURPOSE: The information given in this Service Information
Notice lists a procedure to assure (1) proper installation
of the bumper plug at the forward end of the lower
coupling drive shaft, and (2) optimum engagement of
splines on the lower coupling drive shaft and drive
adapter.

Reference

269A/A-1 Handbook of Maintenance Instructions
TH55A HMI Addendum
269B Handbook of Maintenance Instructions

Tools & Equipment

Gage-depth	Commercial
Wrench-torque	100 ft. lbs. cap. (min)Commercial
Wrench-torque	1000 in. lbs. cap. (min)Commercial

Materials

Grease	Texaco Marfak H. D. EP1 or equiv.
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- a. Cut and remove safety wire between nut and lockwasher at aft end of lower coupling drive shaft; remove nut, lockwasher, gasket and bumper plug. (See Figure 1)
- b. From the aft end, push lower coupling drive shaft forward until solid metal contact is felt.
- c. Using depth gage, measure distance from aft end of lower coupling drive shaft to end of threaded shaft. (See Detail A, Figure 1)
- d. If dimension is $7/8$ inch or less, replace removed parts.

NOTE

Check for sufficient grease (two table spoons Texaco Marfak H.D. EP1 or equiv.) in grease coupling cavity.
Torque nut to 40-70 ft. lbs. and safetywire nut.

- e. If dimension exceeds $7/8$ inch. remove upper cover assembly of belt drive transmission by removing bolts and washers.
- f. Remove strut assembly by removing screws, washers and nuts.
- g. Remove cotter pin and clevis pin from clutch spring assembly; remove spring assembly through cutout of shell assembly.
- h. Remove screws and washers holding shell assembly; spring forward lower side of shell gently upward to clear bracket and move shell aft.
- i. Remove clamp and slide boot aft until clear of engine adapter; disconnect lower coupling drive shaft.
- j. Cut safety wire and remove bolts and washers securing engine adapter.
- k. Install 5513 bumper plug in aft end of engine crankshaft; reinstall adapter; torque bolts to 480-690 in. lbs. and safety wire bolts.
- l. Position lower coupling drive shaft in operating position. Check that eccentric fin on shaft aligns perfectly with inside of pulley diameter. If adjustment is required, tighten or loosen aft engine to transmission mounts lower right so as to align shaft in lower pulley assembly. (See reference)
- m. Pack gear coupling cavities fore and aft with two tablespoons of Texaco Marfak H.D. EP1 or equivalent.
- n. With shaft aligned, push lower coupling drive shaft forward into spline on drive adapter. Connect boot and clamp on adapter.

NOTE

Lower coupling drive shaft alignment should be rechecked with belt drive clutch assembly engaged.

- o. Install gasket, bumper plug, lockwasher and nut at aft end of lower coupling drive shaft; torque nuts to 40-70 ft. lbs. and safety wire nut.
- p. Install belt drive cover and strut assembly.
- q. Install clutch control spring assembly.
- r. With engine stopped, engage clutch lever to full down locked position. In this position, centerline of clutch spring guide should be aligned with black paint band on housing strap. If adjustment is required, cut safetywire loose from cable turnbuckle. Shorten cable to lower spring guide or lengthen cable to raise spring guide. Safetywire turn buckle.
- s. Recheck lower coupling drive shaft alignment with clutch engaged.
- t. Perform operational check of belt drive transmission assembly.

Weight & Balance Data

Weight and balance data not affected.

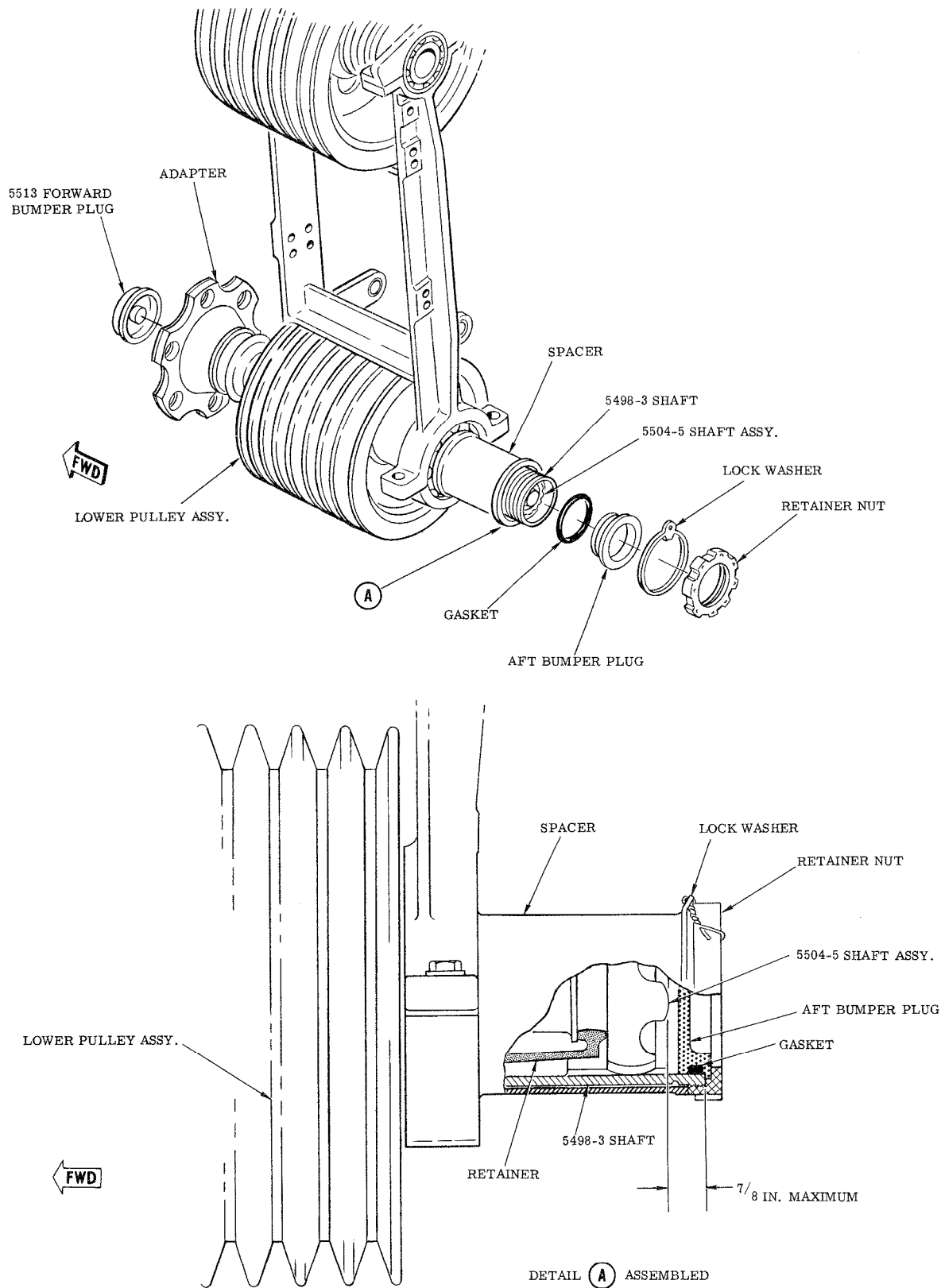


Figure 1. Inspection-Lower Coupling Drive Shaft, Forward Bumper Plug