NOTICE NO. N-73.1*
DATE March 24, 1970
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HUGHES SERVICE INFORMATION NOTICE

*Supersedes Service Information Notice No. N-73, dated October 17, 1969

SUBJECT: INSPECTION - IDLER PULLEY ASSEMBLY, AXIAL PLAY

MODELS AFFECTED: All 269 Series Helicopters

TIME OF COMPLIANCE: Shall be accomplished within the next 100 hours of helicopter operation, or within 60 days after date of this Notice, whichever is sooner.

PREFACE: The information given in this Service Information Notice lists an inspection procedure to determine that sufficient axial play exists on the installed idler pulley assembly.

Reference

269A/A-1/TH-55A Handbook of Maintenance Instruction, Revised 15 March 1969

269B Handbook of Maintenance Instruction, Revised 1 January 1970

269C Handbook of Maintenance Instruction, Issued 1 September 1969

(▌) Denotes portion of text added or superseded

FORM NO. 9578A HTC AD REV 11-67

TOOLS AND EQUIPMENT

Dial indicator set or Height gage		Commercial
Spacer (steel or aluminum tube) or equivalent	0.625 in. X 0.880 in. O.D. X 0.473/0.474 in. I.D.	Field fabricate

INSPECTION PROCEDURE

a. Remove belt drive transmission upper cover.

NOTE

Retain and identify all attaching hardware and parts removed, to ensure proper reinstallation.

b. Remove cotter pin, nut, washers bolt and spacers securing clutch engagement spring assembly to idler pulley arms; remove lower cover.

c. Remove cotter pin, nut and washer securing forward end of idler pulley shaft to pulley arm.

d. Remove nut, washers and bolt securing aft arm to lower pivot shaft.

e. Rotate idler pulley assembly on pivot shaft toward engaged position far enough for pulley to clear "H" frame; insert wooden block between forward pulley arm and stop on "H" frame.

f. Disengage belts from idler pulley grooves; withdraw aft idler pulley arm complete with pulley and pulley shaft from belt drive transmission assembly.

NOTE

Noting and recording location, number and size of shimming washers simplifies and facilitates subsequent reassembly. In addition, measurement and recording

thickness of washers assists in reassembly of the idler pulley assembly to required dimensional tolerances. It is advisable to keep each separate group of washers together, since washers must be replaced at same location from which removed.

g. Remove cotter pin, nut and washer securing aft arm to idler pulley shaft; remove arm from shaft.

h. Replace original forward and aft shimming washers on the two ends of the idler pulley shaft, in the same position and same locations from which they were removed against inner races of the two bearings.

NOTE

Stack-ups of washers may be used in lieu of fabricated spacers. Ensure that height of washer stack-up is sufficient to prevent nut from bottoming when torque is applied.

i. Field fabricate and install spacers, or equivalent, at each end of the idler pulley shaft (spacers simulate pulley arms); secure spacers with existing washers and nuts. Torque nuts to 300 to 350 inch-pounds.

j. Position idler pulley (with shaft and bearings installed) on wooden blocks, as shown in Figure 1.

k. Holding idler pulley firmly on blocks, push down and pull up on shaft several times to determine if axial play exists between inner and outer bearing races.

l. Using dial indicator or height gage, determine that a minimum of 0.002 inch axial play exists. (Take measurements from end of shaft to outer race of bearing. See Figure 1).

CAUTION

If axial play is less than 0.002 inch, remove and replace idler pulley bearings, per exact procedures outlined in Handbook of Maintenance Instructions.

When installing idler pulley bearings, use the following precautionary procedures:

(1) Determine that bore of pulley and shoulders of pulley shaft are free of dirt, contamination, old coating of Loctite, zinc chromate, etc.

(2) Verify that bearing is not cocked when initially installing each bearing.

(3) Use installation sleeve (1-3/8 inch OD x 1/2 inch ID x 2 inch long aluminum, steel or phenolic tube) to ensure full contact with both inner and outer bearing races, when bearing is being pressed into pulley bore or onto the pulley shaft.

(4) Apply steady pressure when seating bearings; if binding occurs, check for cause.

(5) After installation, determine that bearings are properly seated.

m. Remove nuts, washers and spacers (or washer stack-ups) from idler pulley shaft; reassemble all removed components in reverse order of removal. (Refer to HMI)

n. Perform operational check of idler pulley assembly and belt drive transmission assembly.

o. Record compliance with this Notice in Compliance Record of helicopter Log Book.

WEIGHT & BALANCE DATA

Weight and balance not affected.

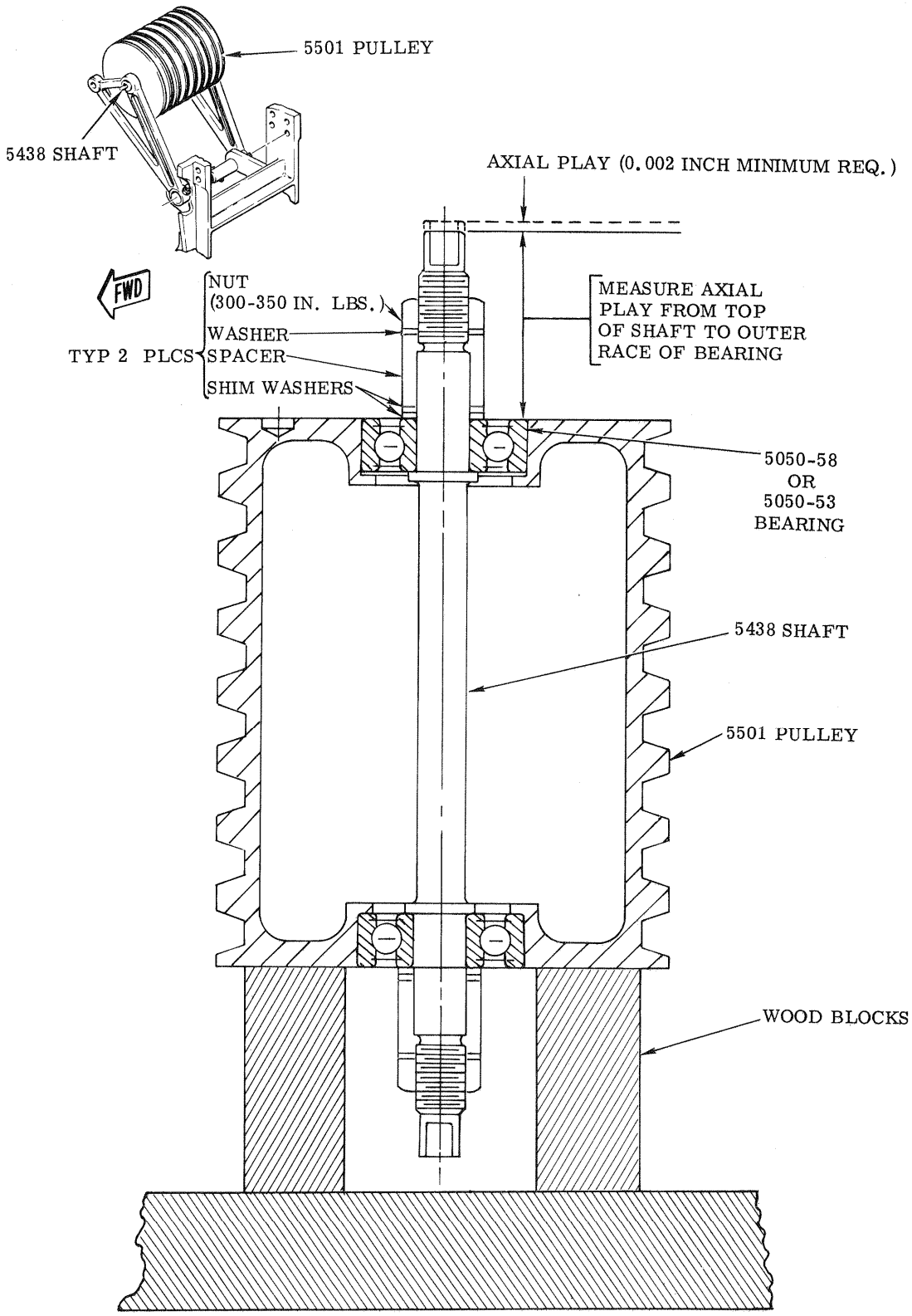

FIGURE 1. INSPECTION-IDLER PULLEY, AXIAL PLAY.