FAA APPROVED

SUBJECT: INSPECTION - ENGINE LOWER COUPLING DRIVE SHAFT (P/N269A5504-3) OR ENGINE LOWER COUPLING DRIVE SHAFT ASSEMBLY (P/N269A5504-5 OR 80-269A5504-5)

MODELS AFFECTED: See Page 2

TIME OF COMPLIANCE: Shall be accomplished within next 25 hours of helicopter operation.

PREFACE:

The information given in this Service Information Notice lists a procedure for inspection of the subject Lower Coupling Drive Shaft and Lower Couplin Drive Shaft Assemblies to assure the physical integrity of the shaft, includi freedom from cracks.

It is to be noted that the 269A5504-3 Shaft is a component part of the 269A5504-5 and 80-269A5504-5 Lower Coupling Drive Shaft Assemblies. Also, as a limited life item, the -3 shaft is identified with both a Part Number and a Serial number.

The lower coupling drive shaft assemblies referenced above consist of the following:

(▮) Denotes portion of text superseded.

Nomenclature	Part Number
Assembly, Lower Coupling Drive Shaft	269A5504-5
Shaft	269A5504-3
Ring, retainer	269A5558
Ring, alignment	269A5552
Assembly, Lower Coupling Drive Shaft	80-269A5504-5
Shaft	269A5504-3
Ring, retainer	269A5558
Ring, alignment	269A5552
Boot	269A5473
Retainer	269A5509
Ring	RS131C

Reference

269A/A-1/TH-55A Handbook of Maintenance Instruction, Revised 1 June 1968.
269B Handbook of Maintenance Instruction, Revised 1 July 1968.

MODELS AFFECTED: 1. 269A Helicopter Serial No's 0011 through 0893 (*)
269A-1 Helicopter Serial No's 0001 through 0041
269A-2 Helicopter Serial No's 0001 and 0002
269B Helicopter Serial No's 0001 through 0359
When equipped with Lower Coupling Drive Shaft (P/N 269A5504-3 or Lower Coupling Drive Shaft Assembly (P/N269A5504-5 or P/N 80-269A5504-5)

2. All spare 269A5504-3 Lower Coupling Drive Shafts and 269A5504-5 and 80-269A5504-5 Lower Coupling Drive Shaft Assemblies in stock in the field.

(*) This Notice does not apply to 269A Military TH-55A helicopters which have had magnetic particle inspection of the 269A5504-3 shaft performed on a rotating periodic inspection basis.

MATERIALS

Kit - dye penetrant inspection	Commercial
Cement - Grip or equipment	Commercial
Wire - lock 0.032 in. stainless steel	Commercial
Solvent-cleaning naptha alphatic	Standard Oil 200 or equivalent
Brush - bristle	Commercial
Paint	Commercial

PROCEDURE

a. Cut and remove lockwire securing lower pulley coupling retainer nut to lockwasher.

b. Remove retainer nut, lockwasher, aft bumper plug, gasket, and lower pulley bearing spacer.

c. Roll boot back far enough so that forward spline is completely uncovered; secure boot to shaft.

CAUTION

Damage to boot will result during removal of the shaft from the aircraft if the boot is not positioned per step c.

d. Remove lower coupling drive shaft from rotorcraft.

e. Cut lockwire securing alignment ring to shaft. (See Figure 1)

NOTE

Removal of "C" ring securing the boot to the shaft is not required.

f. Carefully peel rubber retainer ring from shaft; keep for re-installation.

g. Using brush and solvent thoroughly clean shaft, boot, retainer and alignment ring; wipe dry with lint free cloth.

NOTE

Slide boot, retainer and alignment ring away from original position during cleaning to insure all parts of the shaft are thoroughly cleaned.

h. Slide boot, retainer, and alignment ring to one end of shaft.

i. Following dye penetrant manufacturers instruction, inspect one half of shaft for cracks.

j. Upon completion of preceeding step reposition boot, retainer, and alignment ring at opposite end of shaft and repeat step i.

CAUTION

Insure that dye applications overlap one another so that complete shaft is inspected.

k. Retire shaft from service and replace with a new part if cracks are found during inspection.

NOTE

In addition to the provisions of step k., notify Hughes Tool Company-Aircraft Division, Customer Service Department, if discrepancies are noted.

l. Clean shaft of dye penetrant material.

m. Mark aft end of shaft with 1/4 inch diameter white paint spot.

n. Position and install retainer ring using grip cement.

o. Position and secure alignment ring using lockwire.

p. Position boot against alignment ring, and retainer over retainer ring.

NOTE

Apply at least two loops of lockwire around alignment ring flange before twisting pigtail.

q. Install lower coupling drive shaft and other lower pulley components in reverse order of removal. (Refer to 269A/A-1/TH-55A HMI, Para. 4-118, steps p. thru v. ; 269B HMI, Para 4-111, steps x. thru ad.

r. Inspect installation for discrepancies.

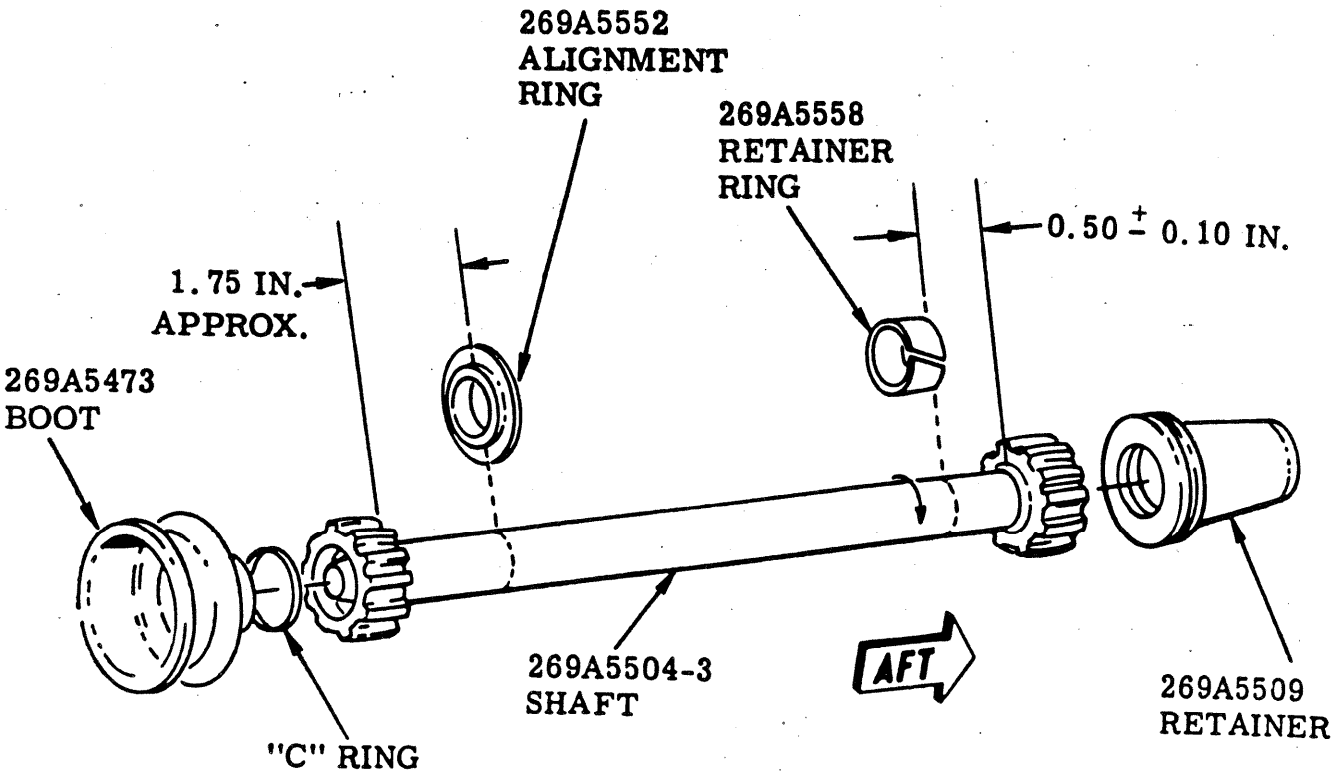

FIGURE 1. LOWER COUPLING DRIVE SHAFT ASSEMBLY.