SUBJECT: ONE-TIME INSPECTION OF BOLT HOLES AT TAIL ROTOR TRANSMISSION ATTACHMENT AREA

MODELS AFFECTED: All Model 269C helicopters equipped with 269A2320-11 Tailboom Assembly with Serial Number of S001 through S171.

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

REFERENCE: 269 Series - Basic HMI, Reissued 15 March 1982.

PREFACE: A reported incident of tail rotor drive shaft disengagement has revealed the possibility of an error in the location of five tailboom bolt holes at boom station 283.06. An error in the location of these holes could result in a misalignment between the tail rotor drive shaft and the driven spline. This misalignment could cause the drive shaft to travel rearward during operation and allow the driven spline to wear against the drive shaft internal bumper. This condition could eventually cause the driven spline to wear through the internal bumper, allowing the drive shaft to move further aft and slip off the driven spline.

This Service Information Notice provides instructions for a one-time inspection of the five .249/.254 bolt holes at boom station 283.06. The requirements of this inspection must be met in order to have an acceptable tailboom. Nonconforming tailbooms are repaired by installing a doubler (Basic HMI, Section 11). It should be noted that disassembly is not required as part of the inspection process.

PROCEDURE

a. Using a vernier caliper (or equivalent), verify that the dimension from aft end of tailboom to centerline of each .249/.254 bolt hole is 0.437 ±0.010 inches. (See Figure 1.)

b. If any dimension is not within the required limits, proceed as follows:
   (1) Remove tail rotor drive shaft in accordance with Basic HMI, paragraph 10-89.
   (2) Repair tail boom in accordance with Basic HMI, paragraph 11-7, Step f.
   (3) Inspect tail rotor drive shaft aft spline for wear or damage.
   (4) Replace shaft if wear can be felt as a step when a sharp scribe type instrument is moved across face of spline teeth. (Contact your SAC Customer Service Center for disposition.)

(5) Inspect aft bumper plug in tail rotor drive shaft for wear or damage . (Refer to Figure 2.)
(6) If wear or damaged area exceeds 0.580 inch diameter, replace drive shaft. (Contact your SAC Customer Service Center for disposition.)
(7) Inspect tail rotor transmission driven spline and coupling nut in accordance with HMI Appendix C, Part III, Table 3-1; repair or replace as required.
(8) Reinstall tail rotor drive shaft in accordance with Basic HMI, paragraph 10-93.

NOTE

When greasing the tail rotor drive shaft, avoid hydraulic preloading of interior cups by alternately lubricating couplings at both ends. Only inject grease into fitting with ballcheck visible. Ensure that the aft coupling is properly lubricated before greasing the forward coupling.

c. Check for proper lubrication of tail rotor drive shaft. (Lubricate, as required, in accordance with Basic HMI, Section 2.)
d. Record compliance with this Service Information Notice in Compliance Section of Helicopter Log Book.

WEIGHT AND BALANCE DATA

Weight and balance not affected.

The procedures and information provided by this Service Information Notice has been shown to comply with applicable Federal Aviation Regulations and is FAA approved.

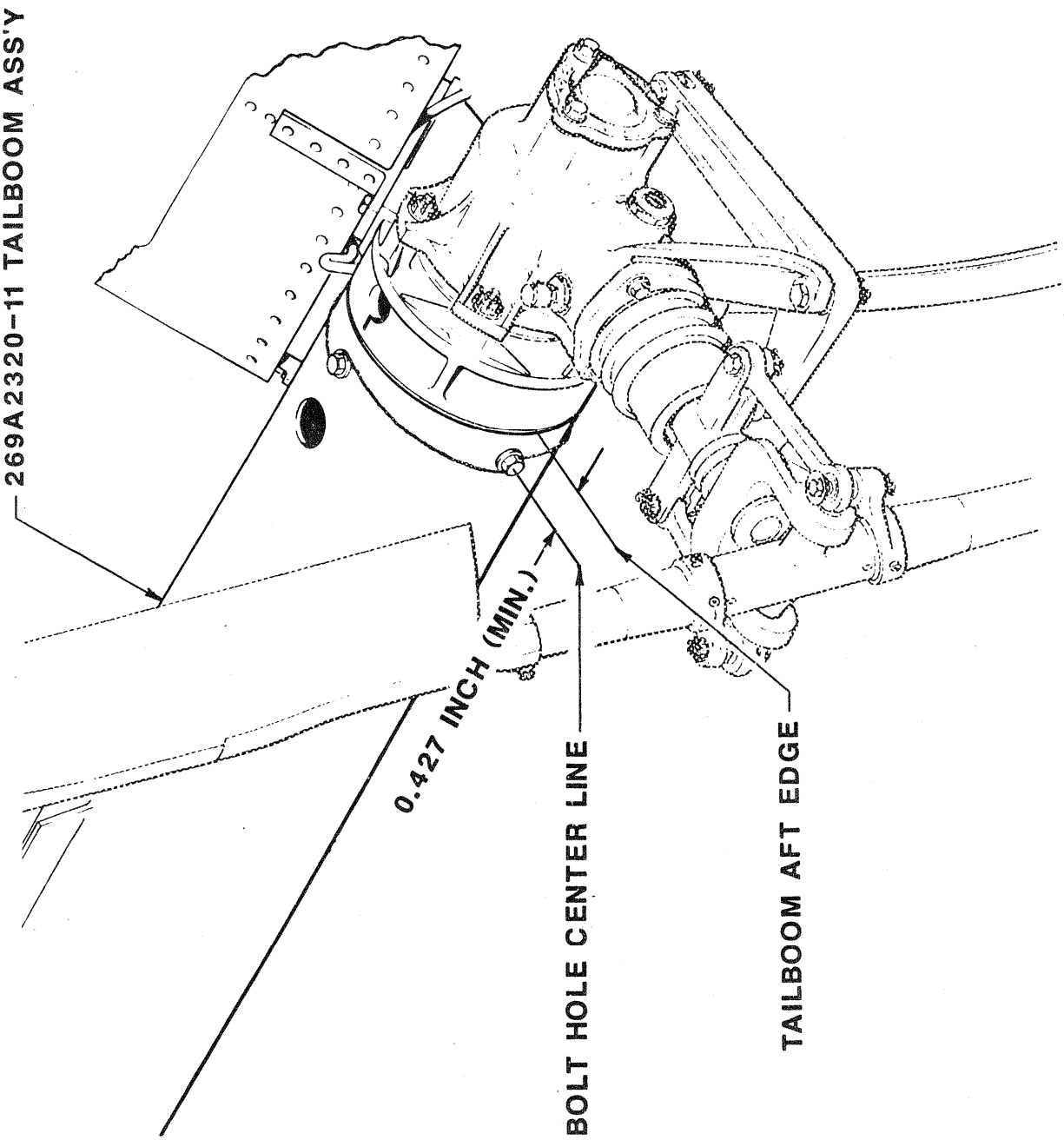
269A2320-11 TAILBOOM ASS'Y
0.427 INCH (MIN.)
BOLT HOLE CENTER LINE
TAILBOOM AFT EDGE

FIGURE 1

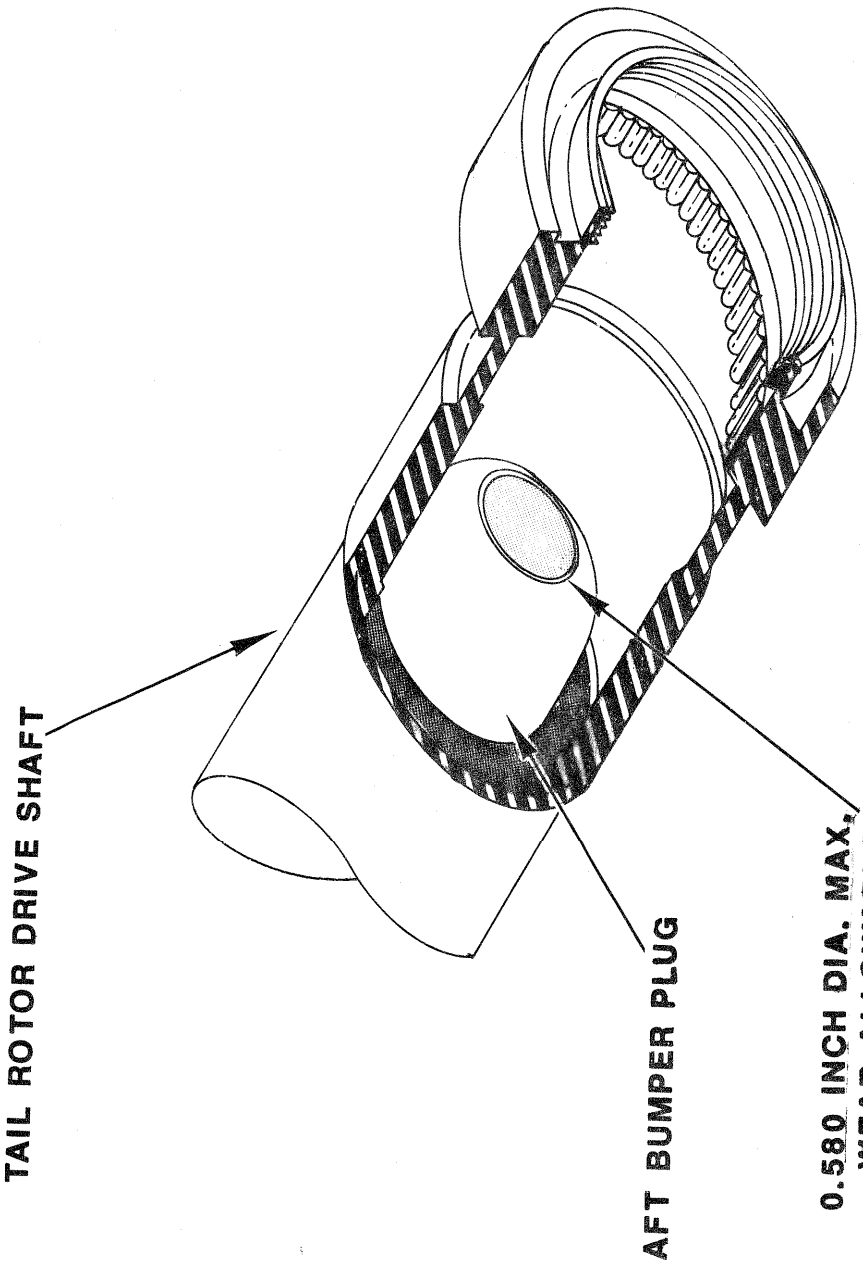

FIGURE 2. TAIL ROTOR DRIVE SHAFT AFT BUMPER PLUG