HUGHES SERVICE INFORMATION NOTICE

FAA APPROVED

MANDATORY MANDATORY MANDATORY

SUBJECT: INSPECTION - LANDING GEAR DAMPER (POPPET TYPE) ASSEMBLY, PN 269A3150

MODELS AFFECTED: Model 269C Helicopter Serial No. 0001 thru 0113; 0116 thru 0118; and 0120 thru 0149

TIME OF COMPLIANCE: Shall be accomplished within next 100 hours of helicopter operation for installed damper; or prior to installation on helicopter for subject damper in spares inventory at date of this Notice.

Compliance not required for subject damper identified with torque stripe.

PREFACE: The information given in this Service Information Notice lists a procedure for a one-time inspection of the subject landing gear damper assemblies installed on the helicopter and in spares inventory. The purpose of the inspection is to ensure that no lubricant or grease exists on the inner threads of the damper upper cap, or on the upper threads of the damper piston rod. Instructions also include a requirement for torquing the damper upper cap to the piston rod to provide positive retention.

Reference

269 Series - Basic HMI, Issued 1 Feb 1972; Revision No. 1, 10 May 1972
269 Series - HMI Supplement C, Issued 1 Feb 1972; Revision No. 1, 10 May 1972

Customer Service Department

Hughes Helicopters, Inc. Culver City, California 90230

MATERIALS

Solvent - Naptha or equivalent
Paint - Acrylic lacquer, white
Lubricant - White petroleum jelly (Vaseline)

TOOLS AND EQUIPMENT

Wrench, torque - 0 to 1000 inch-pounds
Blocks, cylinder holding - Locally fabricated
*Adapter, cap wrench - 369A6300-80906 (modified) or locally fabricated
Wrench, piston - Locally fabricated

*Modified 369A6300-80906 cap wrench adapter usable for 269A3150 landing gear dampers only

INSPECTION PROCEDURE

WARNING

A charged damper is under high gas pressure and it must be treated cautiously, or bodily injury may occur. Read the inspection procedure thoroughly in its entirety before proceeding.

a. Remove installed landing gear damper assembly from helicopter (refer to Section 12 of Basic HMI); or remove spares damper from sealed transparent container.

b. Remove damper plastic cover by removing plastic tape or rubber sleeve and tie strap used to compress cover tangs, and carefully but firmly pull cover toward top end to disengage tangs from upper bearing cap groove.

c. Place damper in fabricated holding blocks (see figure 1), then place blocks in vise with damper in vertical position and upper bearing cap at top (see figure 2).

WARNING

Safety glasses should be worn when removing upper bearing cap in following step d. It is possible for pressurized gas to escape if piston plug seal has been damaged. After removing upper cap, do NOT disturb or remove plug installed in upper end of piston rod.

Replace damper if gas leakage is noted.

d. Engage piston wrench on flats of piston rod; place cap wrench adapter on upper cap lug and slowly unscrew and remove upper cap.

e. Using solvent, thoroughly clean threads of upper cap and threads of upper end of piston rod of all traces of lubricant or grease. All threads must be completely clean and dry.

NOTE

Also clean MS28775-118 O-ring installed below piston rod threads. Replace O-ring if worn or damaged; lubricate new O-ring with white petroleum jelly to facilitate installation, but be sure to clean and wipe all lubricant from O-ring and and from threads of upper end of piston rod before installing upper cap. Threads must be completely clean and dry.

f. Install upper cap on piston rod; torque cap to 500 to 600 inch-pounds plus drag torque, using cap wrench adapter and piston wrench. Align upper and lower caps by turning piston with wrench engaged at wrenching flats.

g. Paint or stencil a torque stripe on damper upper and lower caps as shown in figure 2.

h. Install plastic cover on damper; compress tangs in cap groove and secure cover with plastic tape or rubber sleeve and tie strap.

NOTE

When reworked damper is installed on helicopter, ensure that torque stripe is visible for inspection.

Steps i, j and k below are not applicable to spares damper. Package spares damper in sealed transparent container.

i. Install landing gear damper, per Basic HMI. As required, use wrench on upper bearing cap wrenching flats to help align and mate upper cap attach lug with crossbeam attach lugs on helicopter.

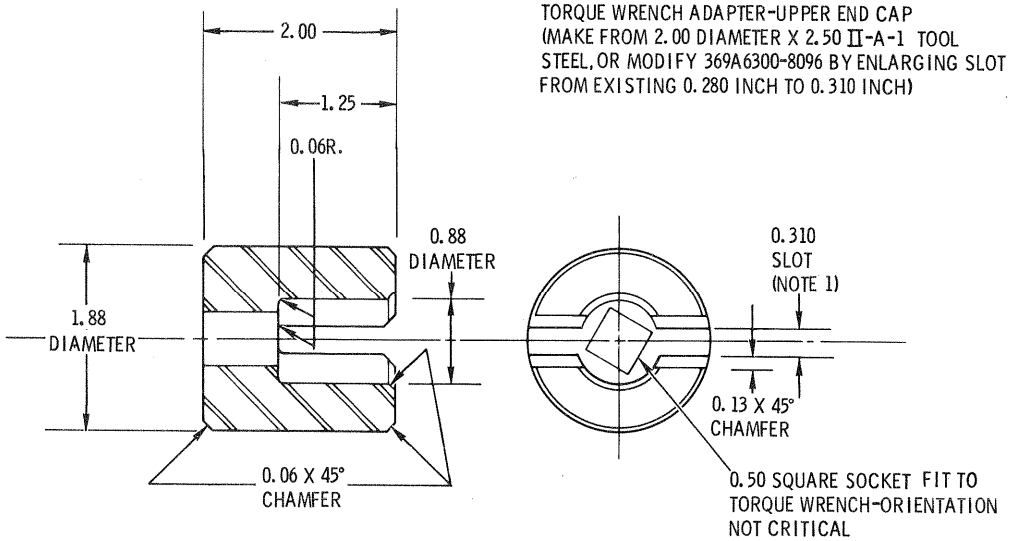
j. Repeat steps a through i for remaining dampers on helicopter.

k. Check landing gear dampers for proper extension and operation per HMI.

1. Record compliance with this Service Information Notice in Compliance Record of helicopter Log Book.

WEIGHT AND BALANCE DATA

Weight and balance not affected.



NOTE:

1. MODIFIED 369A6300-80906 CAP WRENCH ADAPTER (WITH 0.310 INCH WIDE SLOT) USED TO TORQUE UPPER END CAPS OF 269A3150 LANDING GEAR DAMPERS ONLY, DO NOT USE MODIFIED TOOL FOR LANDING GEAR DAMPERS INSTALLED ON 369H SERIES HELICOPTERS.

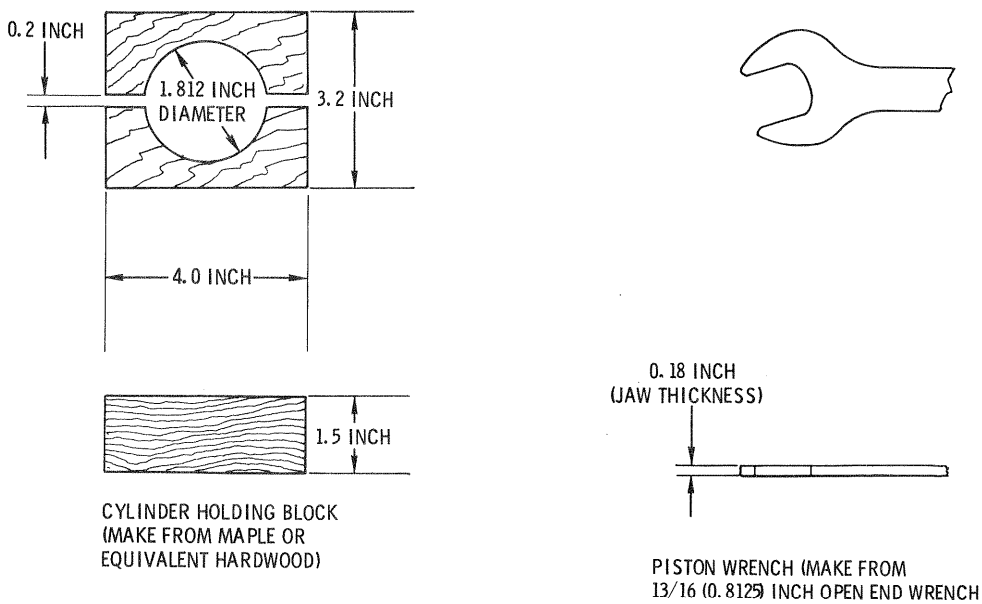


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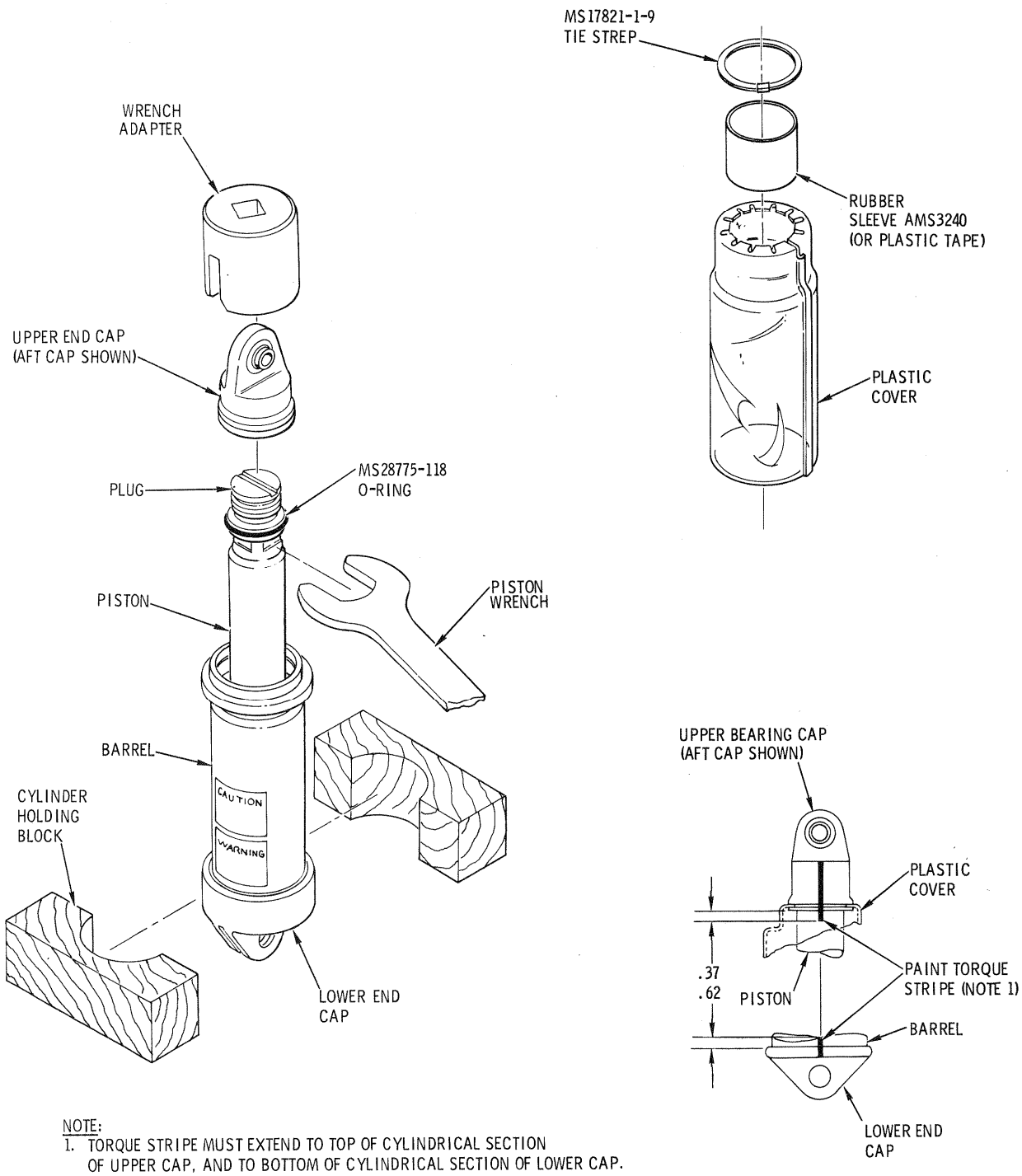
Figure 1. Special tools fabrication



NOTE:
1. TORQUE STRIPE MUST EXTEND TO TOP OF CYLINDRICAL SECTION OF UPPER CAP, AND TO BOTTOM OF CYLINDRICAL SECTION OF LOWER CAP. ENSURE THAT TORQUE STRIPE IS VISIBLE FOR INSPECTION, WHEN DAMPER IS INSTALLED ON HELICOPTER.

88-085

Figure 2. Inspection and rework of landing gear damper assembly