



SERVICE BULLETIN

DATE: 24 DECEMBER 1976
PAGE 1 OF 4

/// MANDATORY ////////////////////////////////////// MANDATORY ////////////////////////////////////// MANDATORY ///

INSPECTION - TALL ROTOR DRIVE SHAFT DAMPER, PN 369A5506

1. PLANNING INFORMATION:

A. Models Affected:

Model 369HS Helicopter Serial No. 0661S, 0662S, 0668S, 0675S, 0678S, 0680S, 0681S, 0686S, 0690S, 0693S, 0695S, 0696S, 0702S thru 0764S, 0767S thru 0773S, 0775S thru 0794S, 0796S thru 0810S, 0812S thru 0814S, 0817S thru 0819S, 0824S, 0826S, 0845S.

Model 369HM Helicopter Serial No. 0260M thru 0271M, 0274M, 0275M, 0278M thru 0292M.

B. Time of Compliance:

Part I - Shall be accomplished within the next 100 hour of helicopter operation.

Part II - Shall be accomplished, if applicable, at each 10 hours of helicopter operation until compliance with Part III or Part IV of this Notice is accomplished.

C. Preface:

Field reports indicate that limited number of the subject damper block did not receive a sufficient amount of heat stabilization to assure normal .service life,

Part I of this Service Notice lists a procedure to determine if the dampers installed on the above affected helicopters or in spares inventory fall within the lot.

Part II of this Notice defines &n interim inspection to be performed until compliance with Part III or Part IV of this Notice is accomplished, is applicable only to reinstalled dampers identified as having insufficient heat stabilization.

Part III and Part IV define alternative remedial procedures to be utilized if the damper is identified as one having insufficient heat stabilization.

D. Reference Publications:

500 Series - Basic HMI Issued 1 October 1972; Revision No. 6 1 November 1976

2. PART I - IDENTIFICATION

- (1). Remove tail rotor, tail rotor transmission, tail rotor drive shaft and tail rotor drive shaft damper assembly, per Basic HMI
- (2). Visually inspect drive shaft damper as follows:
 - (a). Damper block identified with stamp "HT-S", or a heat lot number on opposite side from "HT" stamp, is acceptable for continued service (see Figure 1).
 - (b). Damper block not having letter "S" in identification stamp, or not having heat lot number on opposite side from "HT" stamp, must be reworked or replaced.

NOTE: If reinstalled, a damper block not identified with letter "S" or heat lot number must be inspected periodically (Part II) until rework (Part III) or replacement (Part IV) is accomplished.

/// MANDATORY ////////////////////////////////////// MANDATORY ////////////////////////////////////// MANDATORY ///

DATE: 24 DECEMBER 1976

PAGE 2 OF 4

SERVICE BULLETIN

MANDATORY  **MANDATORY**  **MANDATORY** 

- (3). Visually inspect tail rotor drive shaft damper for general condition; check drive shaft damper friction, per Basic HMI.
- (4). Examine removed components for damage or other discrepancies.
- (5). Install components in reverse order of removal, per Basic HMI.
- (6). Record compliance with Part I of this Notice in Compliance Record of helicopter Log Book.

3. PART II -- INSPECTION

- (1). At each 10 hours of helicopter operation:
 - (a). Displace damper so that it touches drive shaft.
 - (b). Using wire gage, measure damper to shaft clearance 180° from the contact point. Minimum acceptable clearance is 0.010 inch.
 - (c). Repeat measurement at 90° intervals from initial check point.
- (2). Record compliance with Part II of this Notice in Compliance Record of helicopter Log Book.

4. PART III - REWORK

- (1). Disassemble tail rotor drive shaft damper assembly.
- (2). Measure inside diameter of damper block bore.

NOTE: 1. If ID of bore is greater than 2.960 inches, return part to service; perform steps 14 thru 16 below.

2. If ID of bore is less than 2.960 inches, record ID dimension and perform step 3 below.

- (3). Using any oven with thermostat control, preheat oven to 350°F; place damper block on flat metal sheet and bake block for two hours at 350 deg. F. Turn oven off and allow block to cool to approximate room temperature.
- (4). Measure inside diameter of damper block bore.

NOTE: 1. If ID of bore is 2.905 inches or greater, return part to service; perform steps 6 thru 8 below.

2. If ID of bore is less than 2.905 inches, perform rework per step 5 below.

- (5). Machine bore out-of-tolerance damper block to 2.905/.2.910 inches diameter. Use slow feed; finish block bore to a surface finish of 32.

NOTE: If difficulty is encountered in obtaining a surface finish texture of 32, polish bore with abrasive paper.

- (6). Fill stamped letters on damper with red paint to identify reworked part.
- (7). Reassemble and install parts and assemblies, per Basic HMI.
- (8). Perform operational check of tail rotor system.
- (9). Record compliance with Part III of this Service Information Notice in Compliance Record of Helicopter Log Book.

MANDATORY  **MANDATORY**  **MANDATORY** 



SERVICE BULLETIN

DATE: 24 DECEMBER 1976
PAGE 3 OF 4

/// MANDATORY ////////////////////////////////////// MANDATORY ////////////////////////////////////// MANDATORY ///

5. REPLACEMENT:

- (1). Remove existing damper assembly; install replacement 369A5506 damper assembly, per Basic HMI.

NOTE: Return nonserviceable damper assembly to Hughes Helicopters Customer Service Department. A replacement 369A5506 damper assembly will be provided without cost.

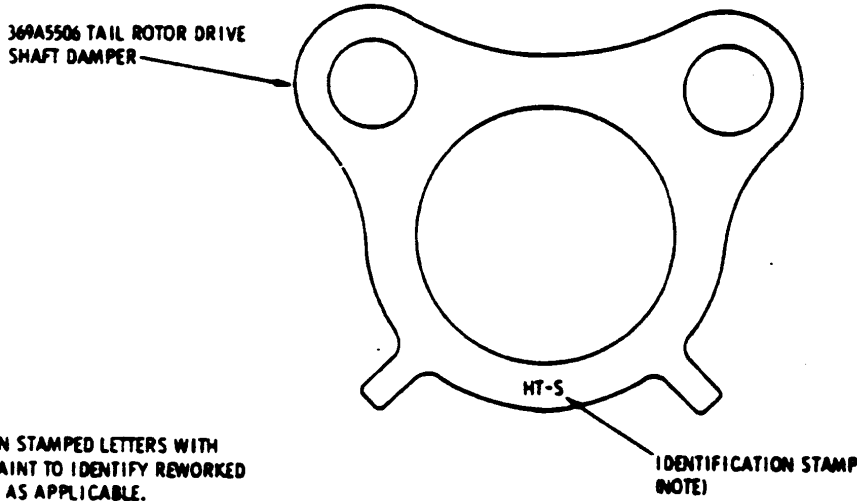
- (2). Record compliance with Part IV of this Service Information Notice in Compliance Record of helicopter Log Book.

/// MANDATORY ////////////////////////////////////// MANDATORY ////////////////////////////////////// MANDATORY ///

DATE: 24 DECEMBER 1976
PAGE 4 OF 4

SERVICE BULLETIN

/// MANDATORY ////////////////////////////////////// MANDATORY ////////////////////////////////////// MANDATORY ///



NOTE:
FILL IN STAMPED LETTERS WITH
RED PAINT TO IDENTIFY REWORKED
PART, AS APPLICABLE.

00-203

Figure 1. Inspection - Tail Rotor Drive Shaft Damper, PN 369A5506

/// MANDATORY ////////////////////////////////////// MANDATORY ////////////////////////////////////// MANDATORY ///