TECHNICAL BULLETIN

SHOCK–MOUNTED VERTICAL–TO–HORIZONTAL STABILIZER STRUT ASSEMBLY

1. PLANNING INFORMATION

A. MODELS AFFECTED:

369HE Helicopter Serial No. 0101E thru 0215E
369HS Helicopter Serial No. 0101S thru 0368S
369HM Helicopter Serial No. 0001 thru 0004;
0005M thru 0213M;
0215M thru 0219M

B. PREFACE:

The information given in this Service Information Notice lists a procedure for installing a new vertical–to–horizontal stabilizer strut assembly (P/N 369A2001–601) which incorporates a damper assembly in the lower end of the strut. The damper is designed to decrease vibration effects on the horizontal stabilizer resulting from tail rotor out–of–balance condition.

Instructions are also provided for reworking the existing fixed strut assembly (P/N 369A2001) to accommodate the damper assembly. Replacement or rework of the fixed strut to the damped strut configuration is at the owners option.

C. TIME OF COMPLIANCE:

At owners and operators discretion.

D. REFERENCE:

500 Series – Basic Handbook of Maintenance Instructions, Revised I June 1971

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E. PARTS LIST:

REPLACEMENT PARTS/SUPPLIES			
Nomenclature	**Part No.**	**Qty.**	**Source**
*Strut Assembly	369A2001–601	1	HTC –AD
**Damper Assembly	369A2128	1	HTC –AD
** Rivet or Rivet, Huck	NAS1398–4–2 MLSP–B4–2	12 12	Commercial
Bolt	MS21250–04004	*** 2	Commercial
Washer	MS20002C4	*** 2	Commercial

* For replacement of existing fixed strut assembly.

** For rework of existing fixed strut assembly.

*** One (1) required for rework of fixed strut assembly.

F. TOOLS AND EQUIPMENT:

TOOLS AND EQUIPMENT Nut	
Nomenclature	**Source**
Gun, rivet	Commercial
Saw, metal cutting	Commercial
Drill, portable	Commercial
Drill bit – No. 30 (0.1285 in. dia.)	Commercial
Drill bit – No. 42 (0.0935 in. dia.)	Commercial
Wrench, torque – 0 to 250 inch–pounds	Commercial
C–clamps	Commercial
File – fine, double cut	Commercial

G. MATERIALS:

MATERIALS	
Nomenclature	**Source**
Primer, zinc chromate	Commercial

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PART I – REMOVAL OF EXISTING FIXED STRUT ASSEMBLY

a. Remove access plate at each end of strut.

b. Remove mounting bolt and washer at each end of strut.

c. Loosen upper vertical stabilizer bolts and nuts far enough to allow strut to clear stabilizer attach fittings.

d. Remove the fixed strut.

NOTE:

1. Perform PART II for replacement of existing fixed strut with new P/N 369A2001–601 damped strut assembly.

2. Perform PART III for rework of existing fixed strut to incorporate the new P/N 369A2128 damper assembly only.

PART II – INSTALLATION OF NEW P/N 369A2001–601 DAMPED STRUT ASSEMBLY

a. Tighten upper vertical stabilizer bolts. Torque forward attachment bolt to 50 to 70 inch–pounds. Torque remaining two nuts to 170 to 200 inch–pounds.

b. Install upper end of strut assembly (end opposite damper assembly) at the vertical stabilizer attach fitting, using MS20002C4 countersunk washer and MS21250–04004 bolt.

c. At lower end of strut assembly, adjust threaded fitting at damper assembly attach point to the horizontal stabilizer fitting so that the bolt will slide into hole in stabilizer fitting.

d. Turn fitting inward one full turn to shorten strut length and establish damper preload.

e. Install MS20002C4 countersunk washer and MS21250–04004 bolt.

f. Tighten check nut. Bend one tab washer tab to safety the fitting and another to safety the check nut.

g. Torque strut bolts to 50 to 70 inch–pounds.

h. Check installation of damped strut assembly for discrepancies.

i. Record compliance with PART I and PART II of this Service Information Notice in Compliance Record of helicopter Log Book.

PART III– REWORK OF FIXED STRUT TO INCORPORATE DAMPER ASSEMBLY

a. Using metal cutting saw or equivalent, cut off –3 strut skin 2.83 ± 0.06 inches from centerline of attachment hole at horizontal stabilizer end of strut; file any burrs and check interior of strut for preservation and condition; coat trimmed edge with zinc chromate primer. (See Figure 1.)

b. Insert new 369A2128 damper housing into strut, flush with lower end as shown: secure housing with C–clamps or equivalent.

c. Drill twelve (12) holes in –3 skin and damper housing; maintain 0.25 inch edge distance as shown; use No. 42 pilot and No. 30 drill bits.

d. Install damper assembly with twelve (12) NAS1398–4–2 rivets or equivalent; trim pins and remove any burrs and coat with zinc chromate primer.

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e. Tighten upper vertical stabilizer bolts. Torque forward attachment bolt to 50 to 70 inch-pounds. Torque remaining two nuts to 170 to 200 inch-pounds.

f. Install upper end of strut assembly (end opposite damper assembly) at the vertical stabilizer attach fitting using existing attachment bolt and washer.

g. At lower end of strut assembly, adjust threaded fitting at damper assembly attach point to the horizontal stabilizer fitting so that the bolt will slide into hole in stabilizer fitting.

h. Turn fitting inward one full turn to shorten strut length and establish damper preload.

i. Install MS20002C4 countersunk washer and MS21250-04004 bolt.

j. Tighten check nut; bend one tab washer tab to safety the fitting and another to safety the check nut.

k. Torque strut bolts to 50 to 70 inch-pounds.

l. Check installation of damped strut assembly for discrepancies.

m. Install access plate to vertical stabilizer end of strut assembly.

n. Record compliance with PART I and PART III of this Service Information Notice in Compliance Record of helicopter Log Book.

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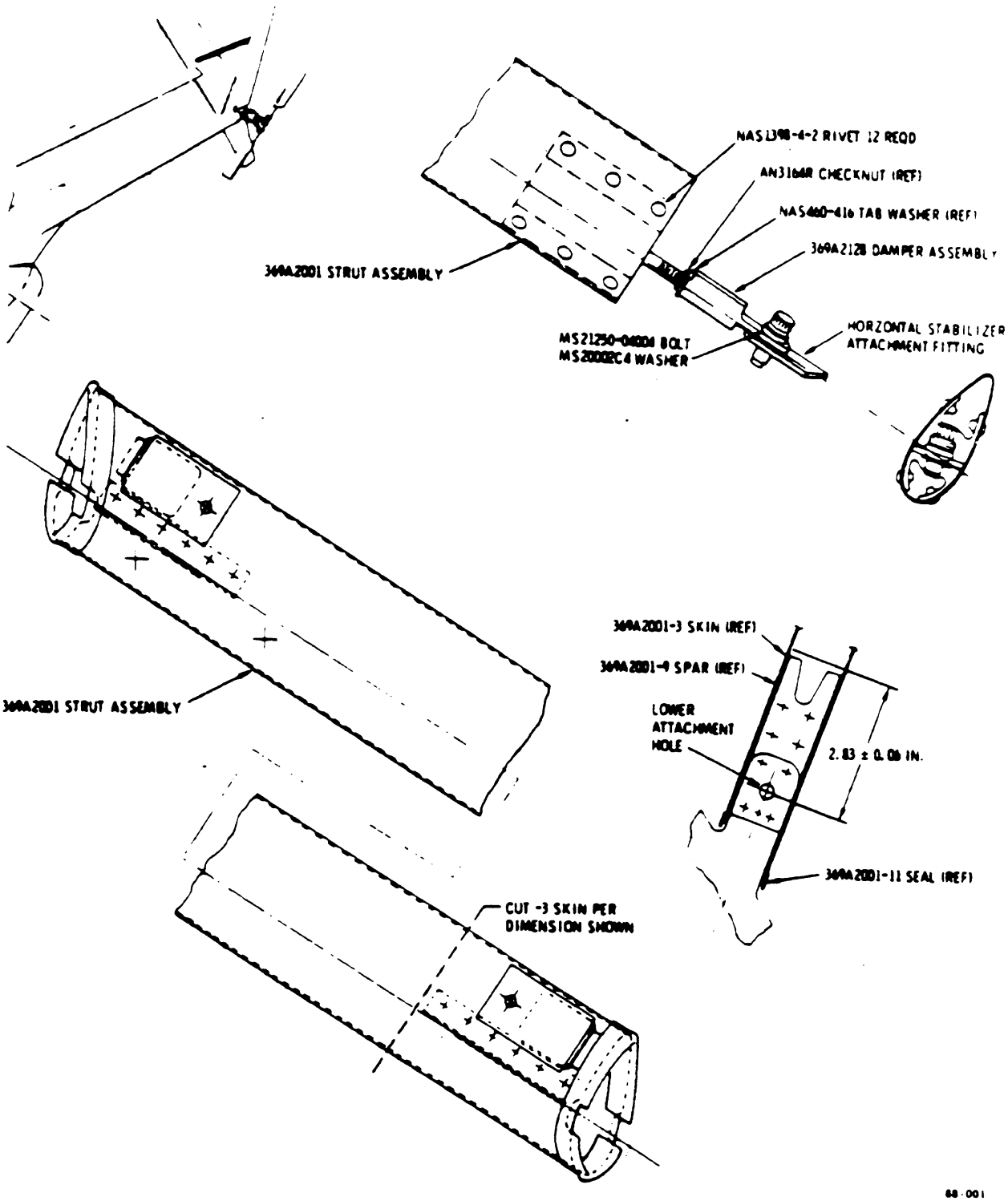

Figure 1. Rework of Fixed Strut to Incorporate Damper Assembly