

**DATE: 10 APRIL 1972** 

PAGE 1 OF 6

MANDATORY MANDATORY MANDATORY MANDATORY

# MODIFICATION – MECHANICAL RELEASE SYSTEM, CARGO HOOK KIT INSTALLATION, PN 369H90065

### 1. PLANNING INFORMATION

### A. MODELS AFFECTED:

All Models 369HS and 369HE Helicopters With Cargo Kit, PN 369H90065, 369H90065–501 or 369H90065–511 Installed

### **B. PREFACE:**

The information given in this Service Information Notice lists a procedure for modifying existing cargo hook installations having a grip type mechanical emergency release installed on the pilot's collective stick, to a new PN 369H90065-513 configuration incorporating a pull type T-handle emergency release mechanism attached to the left-hand door frame structure. The modification is designed to provide an easily accessible, emergency release mechanism for the above affected helicopters. The electrical release system is still the primary method of detaching the cargo hook load.

### C. TIME OF COMPLIANCE:

Shall be accomplished within the next 100 hours of helicopter operation following receipt of parts

### D. WEIGHT AND BALANCE:

Weight and balance not affected

### E. REFERENCE:

500 Series - Basic Handbook of Maintenance Instructions, Revised 1 December 1971

500 Series - HMI Appendix A, Revised 1 December 1971

500 Series - HMI Configuration Supplement S/E, Revised I December 1971



**DATE: 10 APRIL 1972** 

PAGE 2 OF 6 MANDATORY MANDATORY MANDATORY MANDATORY

### F. PARTS LIST:

NOTE: When ordering, specify Kit Part No. M50034 which consists of the following items. Kits will be furnished at no charge if ordered within three months of the date of this Notice.

REPLACEMENT PARTS/SUPPLIES				
Nomenclature	Part No.	Qty.	Source	
Handle	369H92154	1	HTC –AD	
Retainer Half	369H92155	2	HTC –AD	
Channel Assembly	369H92156	1	HTC –AD	
Bracket	369H92157	1	HTC –AD	
Cable	369H92171	1	HTC –AD	
Grommet	NAS557-4A	1	Commercial	
Clamp	MS25281-3	1	Commercial	
Pulley	AN219-1	1	Commercial	
Plug	SS48151	1	Dot Supply Los Angeles, Ca.	
Washer	HS306-226	1	HTC –AD	
Screw	NAS623-3-24	2	Commercial	
Screw	NAS623-4-9	1	Commercial	
Screw	NAS602-8	1	Commercial	
Nut	MS21042-4	1	Commercial	
Nut	MS21042-08	1	Commercial	
Washer	AN960PD416L	1	Commercial	
Washer	AN960PD8L	1	Commercial	
Lockwire	MS20995C32-6	1	Commercial	
Rivet	NAS1738B4-1	4	Commercial	
Setscrew	NAS1081-3A4	2	Commercial	
Washer	AN936A4	4	Commercial	
Screw	AN515-4R3	4	Commercial	



**DATE: 10 APRIL 1972** 

PAGE 3 OF 6

MANDATORY MANDATORY MANDATORY MANDATORY

### G. TOOLS AND EQUIPMENT:

TOOLS AND EQUIPMENT Nut			
Nomenclature	Source		
Drill motor, portable	Commercial		
Rivet gun	Commercial		
Drill bit, No. 2 (0.221 in. dia.)	Commercial		
Drill bit, No. 1/8 (0.125 in. dia.)	Commercial		
Drill bit, No. 26 (0.1470 in. dia.)	Commercial		
Drill bit, No. 19/64 (0.2968 in. dia.)	Commercial		
Knife, Exacto or equivalent	Commercial		

### H. MATERIALS:

MATERIALS		
Nomenclature	Source	
Primer, zinc chromate	W.P. Fuller and Company Los Angeles, Calif.	

### PART I - REMOVAL- EXISTING COLLECTIVE GRIP RELEASE MECHANISM

a. Check that all electrical switches are in OFF position.

**NOTE:** Pay particular attention to BATT-OFF-EXT PWR switch; ensure that switch is in OFF position.

- b. Remove pilot's seat; remove pilot compartment floor left-hand access door.
- c. Disconnect and remove battery.
- d. Remove emergency release lever and cable. (Refer to Group 9 of HMI Appx A.)

**NOTE:** To facilitate modification, replace existing two lever pivot screws one at a time with NAS1081-3A4 set-screws. Ensure that set screws are seated in holes in collective tube without deforming the tube. Also, remove existing 369H90017-37 balance screw from collective switch housing (see Figure 1).

e. Reinstall switch button plate to collective switch housing, using four AN515-4R3 screws and AN936A4 shim washers if required.

### PART II - INSTALLATION - NEW T-HANDLE RELEASE MECHANISM

- a. Remove 369H6571-21 crew compartment left-hand forward door frame trim panel. (Refer to Section 4 of 500S/E HMI Configuration Supplement.)
- b. Position 369H92157 bracket as shown on forward section of door frame structure above 369H2401-17 doubler. Mark and drill four 0.125 inch diameter holes in door frame structure to match bracket. (See Figure 2, Detail B.) Trim bracket corner, as required, on installation.

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**DATE: 10 APRIL 1972** 

**SERVICE BULLETIN** 

PAGE 4 OF 6

MANDATORY MANDATORY MANDATORY MANDATORY

- c. Install bracket to door frame structure with four NAS1738B4-1 rivets; install rivets with zinc chromate primer.
- d. Drill 0.296 inch diameter hole at dimension shown in 369H4201-27 door frame angle (at Station 44.65); install NAS557-4A grommet (see View A-A).
- e. Position door frame trim panel in place; drill two 0.220 inch diameter holes in trim panel to match nutplates on 369H92157 bracket (see View C-C). Remove sound insulation from back of trim panel to accommodate bracket.
- f. Cut 0.80 by 0.20 inch slot in trim panel at dimension shown.
- g. Install pulley to channel, using screw, washer and nut.
- h. Insert terminal of 369H92171 cable in slot of channel; route ball end of cable through channel and pulley groove and out aft hole in channel. Secure ball end of cable in handle, using two retainer halves, washer and plug. Lock-wire cable terminal to channel, using holes as slot.
- i. Route cable from channel down into slot made in trim panel; then down through grommet installed in door frame angle.
- j. Install channel to trim panel and bracket, using two screws; with forward trim panel in position, check for easy lie and fit of cable.

**NOTE:** As required, remove channel from trim panel and enlarge slot in trim panel to ensure easy lie of cable. Also, remove sound insulation from back of trim panel at area shown for fit of cable. (See Figure 1.)

- k. Reinstall left-hand forward door frame trim panel.
- l. Drill 0.140/0.146 inch diameter hole in 369A2515-3 electronics compartment frame at dimension shown at Station 50.50; coat hole edge with zinc chromate primer. (See Figure 2, View A-A.)
- m. Secure cable with clamp on frame at Station 50.50, Using screw, washer and nut.

**NOTE:** If installed, remove pulser unit and plate from underside of fuselage.

- n. Install cable terminal to forward end of hook fairing and secure with washers and locknuts. Install washer, return spring and spring retainer on cable end.
- o. Compress spring and connect cable ball-end to existing aft cable quick-disconnect device. Check that cable is free of kinks or excessive slack and that there is free movement of cable core. Reinstall pulser unit and plate on underside of fuselage if unit was removed per step m.
- p. Reinstall and reconnect battery; perform operational check of cargo hook release system per  $HMI\ Appx\ A$ .
- q. Record compliance with this Service Information Notice in Compliance Record of helicopter Log Book.



**DATE: 10 APRIL 1972** 

PAGE 5 OF 6

MANDATORY MANDATORY MANDATORY MANDATORY

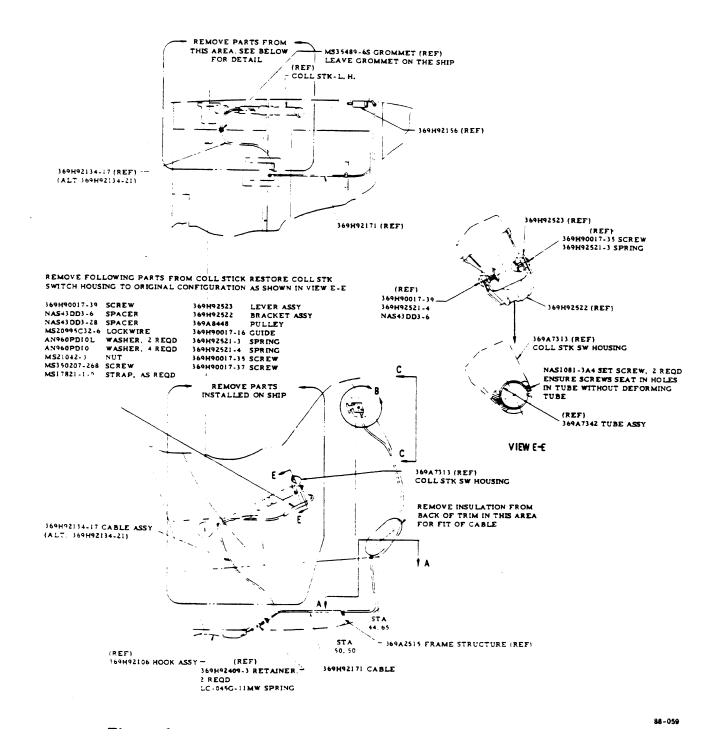


Figure 1. Removal - Existing Collective Grip Release Mechanism

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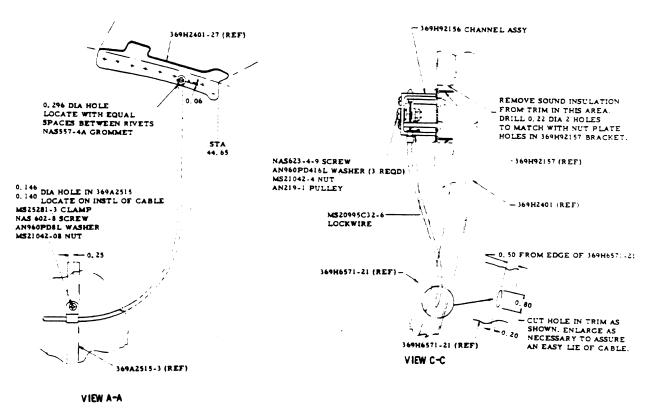
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**DATE: 10 APRIL 1972** 

# **SERVICE BULLETIN**

PAGE 6 OF 6

### MANDATORY MANDATORY MANDATORY MANDATORY



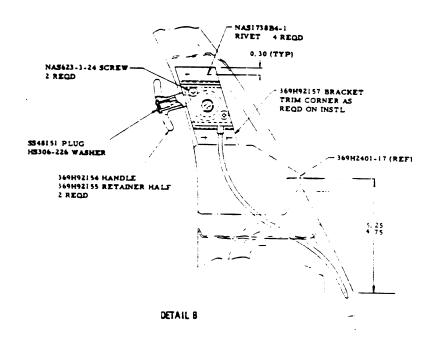


Figure 2. Installation - T-Handle Release Mechanism