



# SERVICE BULLETIN

DATE: 7 MARCH 1980

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\* Supersedes Service Information Notice No. DN-25, Dated 15 July 1978

## REWORK OF FUSELAGE STRUCTURE; FORWARD SECTION

### 1. Models Affected:

500D Model 369D Helicopter Serial No. 0003D through 0339D; 0341D through 0385D; 0387D through 0401D; 0403D through 0406D; 0408D through 0417D; 0419D through 0429D; 0431D through 0434D; 0436D through 0442D; 0444D through 0491D; 0493D through 0503D; 0505D through 0507D; 0509D; 0510D; 0512D through 0519D; 0521D through 0552D; 0554D through 0568D; 0572D through 0590D; 0594D through 0596D; 0599D through 0620D; 0622D through 0625D; 0627D through 0633D; 0635D; 0636D; 0638D through 0645D; 0647D; 0649D

### A. Preface:

The information given in this Service Information Notice lists a procedure for installing support assemblies to the fuselage frame structure, to provide reinforcement at the forward attach points for the engine inlet fairing assemblies. Field reports indicate that cracking and/or damage has occurred in the area of the forwardmost attach nutplate assembly, for both left-hand and right-hand sides of the fairing assemblies. Instructions are also provided for field fabrication and installation of doublers and repair angles, if cracking or damage to the upper fuselage skin or frame structure is noted.

The fuselage support assemblies may be obtained without charge from your authorized HH Service Center or Distributor.

### B. Time of Compliance:

Shall be accomplished at next 100 hour periodic inspection after receipt of parts.

### C. FAA Approval:

FAA APPROVED

### D. Weight and Balance:

Weight and balance not affected

### E. Reference Publications:

500D Model 369D Basic HMI-Volume 1, Issued 15 September 1976; Revision No. 3, 15 March 1979

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| REPLACEMENT PARTS/SUPPLIES |                |      |            |
|----------------------------|----------------|------|------------|
| Nomenclature               | Part No.       | Qty. | Source     |
| Support                    | 80-369D22400-3 | 1    | HH         |
| Support                    | 80-369D22400-4 | 1    | HH         |
| Nutplate                   | NAS697A3       | 2    | Commercial |
| Rivet                      | MS20470AD3     | A/R  | Commercial |

| MATERIAL  |                 |
|---|-----------------|
| Nomenclature  | Source          |
| Doubler - 0.030 in. (as required) 2024-T3 Al Aly Sh | Field Fabricate |
| Angle - 0.020 in. (as required) 2024-T3 Al Aly Sh   | Field Fabricate |
| Primer, Zinc chromate                               | Commercial      |

| TOOLS AND EQUIPMENT              |            |
|----------------------------------|------------|
| Nomenclature                     | Source     |
| Gun, rivet                       | Commercial |
| Drill motor, portable            | Commercial |
| Drill bit - 0.198/0.204 in. dia. | Commercial |
| Drill bit - 0.096 in. dia.       | Commercial |

## 2. REWORK PROCEDURE

- (1). Remove engine inlet forward fairing assemblies from helicopter. (Ref Basic HMI-Vol 1.)
- (2). Remove interior trim panels, and wire harnesses as applicable, to gain access to work area at forward attach nutplate assembly for LH and RH engine inlet forward fairings. (Refer to Basic HMI/-Vol 1.)
- (3). Remove existing forward nutplate (for both LH and RH fairing assemblies) from fuselage frame structure.
- (4). Inspect upper fuselage skin for cracks or damage at area of forward nutplate attachment holes. Also inspect repair doublers if previously installed on upper fuselage skin.

**NOTE:** If cracking or damage to fuselage skin or repair doublers is noted, perform the following:

1. Stop drill all cracks or remove damaged skin area or damaged repair doublers prior to rework. Perform all work in accordance with FAA AC 43.13-1A Aircraft Inspection and Repair.

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2. Field fabricate and install doublers on outer fuselage skin, as shown in Figure 1, View A. Drill 0.196/0.204 inch diameter hole in each doubler to match existing hole in fuselage skin for fairing attach screw. Use existing rivet pattern as shown; install rivets with zinc chromate primer.

3. Prime and paint doubler to match finish color of helicopter. Ref Basic HMI-Vol I.

(5). Inspect fuselage frame structure (channel) for cracks or damage at forward nutplate attach areas.

**NOTE:** If no cracking or damage to fuselage frame is noted, install 80-369D22400-3 and -4 support assemblies at FORWARD side of frame structure, using rivets as shown in Figure 1, View C. Drill holes in support assemblies for nutplates and for conduit clearances as required. Install nutplate rivets through support, frame, upper skin and doubler, if installed.

If cracking or damage to fuselage frame is noted, perform the following:

1. Stop drill all cracks or remove damaged area prior to installation of repair angles and support assemblies. Perform all work in accordance with FAA AC 43.13-1A Aircraft Inspection and Repair,

2. Field fabricate and install repair angles at AFT side of fuselage frame structure (channel); and install 80-369D22400-3 and -4 support assemblies at FORWARD side of frame structure, using rivets as shown in Figure. 1, View B, Drill 0.096 inch diameter rivet holes in angles to match support assemblies.

3. Drill holes in support assemblies and repair angles for nut plates and for conduit clearances as required. Install nutplate rivets through support, frame, angle, upper skin and doubler if installed.

(6). Reinstall removed components.

(7). Check installation of 80-369D22400-3 and -4 assemblies, and repair angles and doublers if installed, for discrepancies.

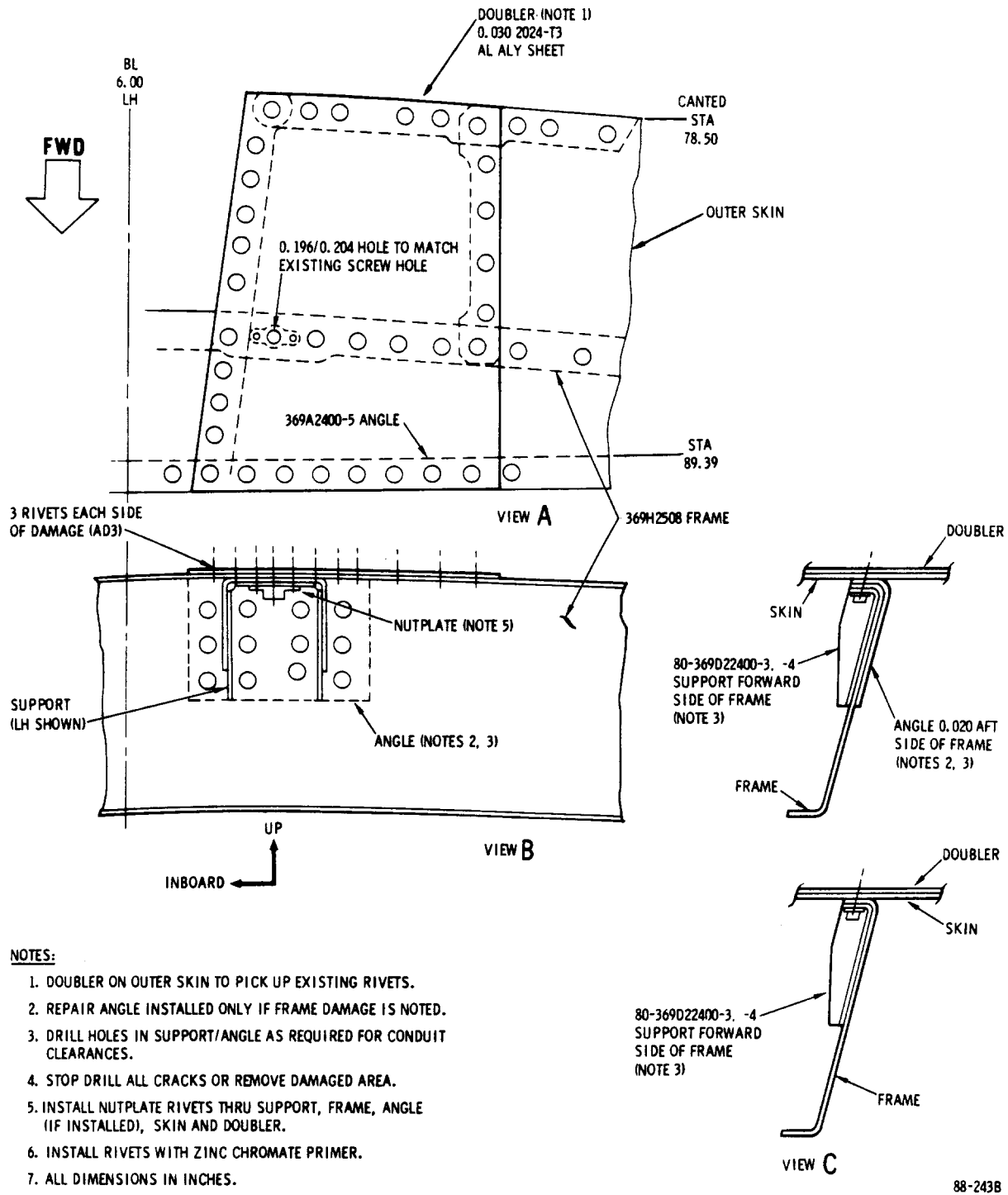
(8). Record compliance with this Service Information Notice in Compliance Record of helicopter Log Book.

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**Figure 1. Rework of Fuselage Structure - Forward Section**

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