



DN-43

TECHNICAL BULLETIN

DATE: 15 FEBRUARY 1979
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SUBJECT: FIELD REPAIR - TRIM TAB, MAIN ROTOR BLADE, PN 369D21100 SERIES

MODELS AFFECTED: All 500D Model 369D Series Helicopters equipped with subject Main Rotor Blades

TIME OF COMPLIANCE: At owners and operators discretion

PREFACE: The information given in this Service Information Notice lists a procedure for field repair of the trim tab on the trailing edge of the main rotor blade; and for removal of the trim tab or portions of the trim tab, if required.

It is to be noted that instructions in the Basic HMI specify that the blade must be rejected, if specified damage limitations for the tab area are exceeded. In the interest of safety and economy, the procedures given in this Notice provide a broader cleanup of the damaged trim tab area, which distributes stresses over a larger area to preclude cracking and permit continued use of the blade.

No minimum length of trim tab is required. In addition, the entire trim tab, or portion of the trim tab, may be removed if required. Main rotor blades with and without trim tabs are 100% interchangeable, individually and in ship sets.

The information given in this Service Notice is to be considered as part of the HMI and will be incorporated in the next scheduled revision to the below referenced Basic HMI – Vol I.

REFERENCE PUBLICATIONS:

Model 500D – Basic HMI – Vol I, Revised 15 September 1976;
Revision No. 2, 27 November 1978

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TOOLS AND EQUIPMENT

Shears, Metal Cutting

Saw, Metal Cutting - Power, Portable

Grinder or File

MATERIALS

Exterior Surface Touchup Treatment	Iridite	Eichardson Co. Allied-Kelite Div Des Plaines, Ill
Paint, Flat Black		Advance Coating Co So. El
Primer, Yellow	MIL-P-23377B	Commercial
Solvent - Aliphatic Naphtha	TT-N-95	Commercial
Solvent - Dry Cleaning	P-D-680	Commercial
Tape	#850	3M Company St Paul, Minn

- a. Inspect trim tab area of main rotor blade and repair tab area, as per Basic HMI - Vo1 I.

NOTE

If damage to trim tab area exceeds limitations specified in Basic HMI - Vol I, perform the following:

- b. As applicable, remove main rotor blade, per Basic HMI - Vol I.

CAUTION

Provide protective surface and/or covering to prevent scratching, nicking or other damage to blade during rework. Position blade on work bench or equivalent.

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- c. Wipe away dirt on and around trim tab area with clean cloth dampened with dry cleaning solvent.
- d. Mask edges of blade area around trim tab area with tape; do NOT cut tape after it has been applied to blade
- e. Remove damaged area of trim tab by making V-type cut with 45° sides joined by a 0.25-inch radius at the bottom of the V, as shown in Figure I. Blend into trailing edge of the blade with a 0.25-inch radius as shown. Maximum V-cut depth is 0.35-inch; do not cut past trim tab area into main portion of blade.
- f. If damage occurs within 1 inch of either or both ends of trim tab, remove tab end(s) and restore contour as shown.
- g. If excessive damage requires full or partial removal of trim tab from blade, perform the following (no minimum length of trim tab is required):
 - 1. Position blade on workbench so that a firm straight edge is provided for cutting or filing off trim tab.



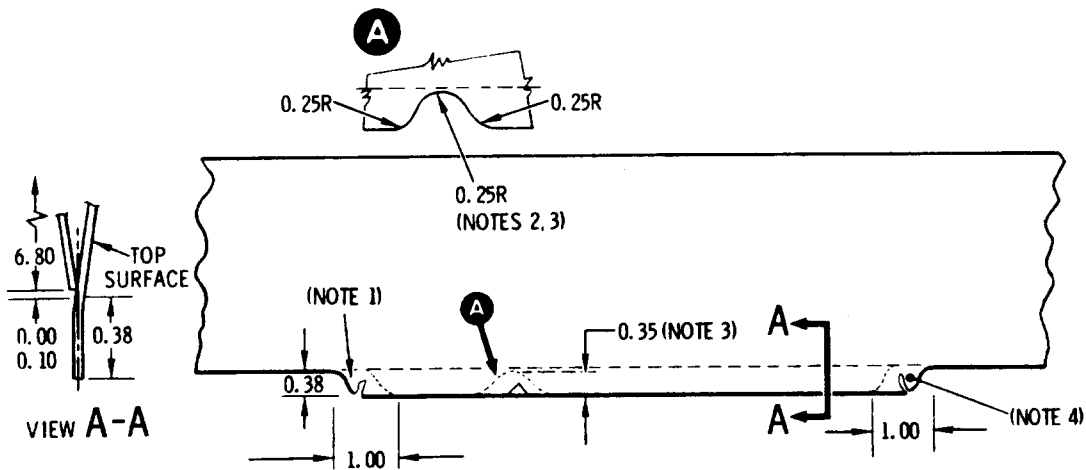
Cutting, grinding or filing to remove trim tab, and deburring of reworked blade trailing edge, are to be performed in a SPANWISE direction only. Do NOT use shears or clippers to remove trim tab.

- 2. Use metal cutting saw or equivalent to remove the 0.38-inch wide trim tab per dimensions shown in Figure 1, View A-A. Deburr edges in a SPANWISE direction only.
- h. Peel and remove tape from blade and inspect area around repair; clean repaired area with cloth dampened in solvent (aliphatic naphtha).
- i. Apply chemical film treatment (Iridite) to reworked area of blade trailing edge or trim tab; apply a thin film of primer and paint lightly.
- j. As applicable, reinstall main rotor blades, per Basic HMI - Vol I.

WEIGHT AND BALANCE: Weight and balance not affected.

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NOTES:

1. REMOVE DAMAGED END(S) IF THEY OCCUR WITHIN 1 INCH OF TAB ENDS.
2. 0.25 RADIUS CLEANUP. FINISH PER BASIC HMI.
3. MAXIMUM DEPTH OF REPAIR 0.35.
4. NO MINIMUM LENGTH OF TAB REQUIRED. IF DAMAGE OCCURS AT BOTH ENDS, IT IS PERMISSIBLE TO REMOVE AT BOTH ENDS.
5. ENTIRE TAB MAY BE REMOVED IF REQUIRED.

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Figure 1. Repair and Removal of Trim Tab, Main Rotor Blade



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REFERENCE SHEET

SERVICE INFORMATION NOTICES AND LETTERS

Action Reference:

When performing maintenance or inspection

of main rotor blades, refer to Service Information Notice No. DN-43.

HMI Reference:

Insert this sheet in 369D Series Basic-HMI -Volume I, Section 7. Page 7-17.

This reference sheet shall be kept as a .Dart of the manual until the data is incorporated in the next revision of the Basic-HMI-Volume I. (See Service Information Summary, Basic HMI-Volume I, Page i.)