

TECHNICAL BULLETIN

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* Supersedes Technical Bulletin TB900-033, dated 05 February 2010. Revised to reflect an alternate part number for item (6) Rivet and item (7) Collar. Aircraft that are in compliance with TB900-033 meet the intent of this revision.

MODIFICATION/REPAIR OF ROOF RIB BRACKET

1. PLANNING INFORMATION

A. Aircraft Affected:

All MD900 helicopters, serial numbers 900-00008 thru 900-00138. Serial numbers 900-00139 and subsequent will have the intent of this bulletin done prior to delivery.

B. Assembly/Components Affected By This Notice:

Rib, Roof Beam Aft - LH (900F2306456-103)
Rib, Roof Beam Aft - RH (900F2306456-104)

C. Reason:

Cracks have been reported in the installed bracket, on the left and right hand sides of the Aft Roof Rib Beams.

D. Description:

Procedures in this Bulletin give owners and operators information for the installation of a doubler that will reinforce the roof rib bracket, and provide a cracked bracket repair.

E. Time of Compliance:

Optional, owner/operator selection.

F. Classification:

This modification is a minor repair.

G. FAA Approval:

The technical design aspects of this Bulletin are FAA Approved.

H. Manpower:

Eight (8.0) man-hours

I. Disposition of Parts Removed:

N/A

J. Interchangeability:

None

K. Disposition of Parts Removed:

N/A

L. Warranty Policy:

N/A

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M. Tooling:

N/A

N. Weight and Balance:

N/A

O. Electrical Load Data:

N/A

P. Compliance Record:

Record compliance to this Technical Bulletin in the Compliance Record section of the Rotorcraft Log Book.

Q. Other Publications Affected:

CSP-SPM Standard Practice Manual
 CSP-900RMM-2 Rotorcraft Maintenance Manual
 CSP-900IPL-4 Illustrated Parts List

R. Points of Contact:

For further assistance, contact the Field Service Department at MDHI, Mesa, Arizona. Telephone 1-800-388-3378 or 480-346-6387. DATAFAX: 480-346-6813.

S. Material/Part Availability:

Contact MDHI Field Service Department.

REPLACEMENT PARTS/SUPPLIES				
Item No.	Nomenclature	Part No.	Qty.	Source
1	Angle, Left Hand (LH)	900F7911639-103	1	MDHI
2	Angle, Right Hand (RH)	900F7911639-104	1	MDHI
3	Bolt	NAS1801-08-6	2	Commercial
4	Nut	MS21042L08	2	Commercial
5	Washer	NAS1149FN832P or AN960-8	4	Commercial
6	Rivet	MHS5815-0503AC	4	MDHI
6	Rivet	MHS5714-5-03 (Alternate)	4	MDHI
7	Collar	MHS5816-05	4	MDHI
7	Collar	MHS5583-5 (Alternate)	4	MDHI
8	Primer	MIL-PRF-23377	AR	Commercial
9	Sealant	EA9330.3	AR	Commercial

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2. ACCOMPLISHMENT INSTRUCTIONS

A. Prepare Aircraft

(Ref. Figure 1 and Figure 2)

NOTE: Angle installation instructions are the same for left and right hand sides.

- (1). Remove cargo compartment linings and panels to access the roof beam installation structure. (Ref. CSP-900RMM-2)
- (2). Remove additional equipment as necessary for more access. (Ref. CSP-900RMM-2.)

B. Install Angle

NOTE: If crack is present-stop drill, deburr and conversion coat all exposed aluminum.

- (1). Remove the upper two fasteners used to attach the engine mount fitting (900F2306557) to the roof structure. (Ref. Figure 2)
- (2). Lay up the angle (1 or 2) into position.
- (3). Use the pilot hole in the angle as a guide to drill a **0.169 to 0.175 inch (4.29 to 4.45 mm)** diameter hole thru the angle (1 or 2) and roof rib fitting (900F2306456).
 - (a). Install a temporary fastener to hold the angle in place.
- (4). Use the holes in the engine mount fitting (900F2306557) as a guide to drill full size holes (the same diameter as the existing holes) through the angle.
- (5). Remove the angle (1 or 2) and clean and deburr all holes.

Alodine (C241)



Chemical Film (C316)



- (6). Apply a conversion coat on all exposed aluminum. (Ref. CSP-SPM 91-00-00 Table 201, MIL-DTL-81706, Class 1A, or MIL-DTL-5541, Class 1A, and CSP-SPM 20-20-00.)

Adhesive, Epoxy (C402)



Adhesive, Epoxy (C411)



- (7). Apply faying surface sealant (9), to the faying surfaces of the angle.

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■ **NOTE:** Rivet MHS5714-5-03 (6) is to be used with Collar MHS5583-5 (7).

- (8). Install the angle (1 or 2) with rivet (6), collar (7), bolt (3), washer (5), and nut (4). (Ref CSP-SPM 20-10-00)

Primer, Epoxy (C307)



- (a). Wet install the fasteners with primer (8). (Ref CSP-SPM 20-30-00)
- (9). Torque nut (4) **12 to 15 inch-pounds (1.3 to 1.6 Nm)**. (Ref CSP-SPM 20-10-00)
- (10). If necessary, remove unwanted conversion coat and sealant. (Ref. CSP-SPM 20-20-00)

C. Job Close-Up

- (1). Install items removed to get access.
- (2). Clean the modification area using best shop practices. (Ref. CSP-SPM 20-20-00)

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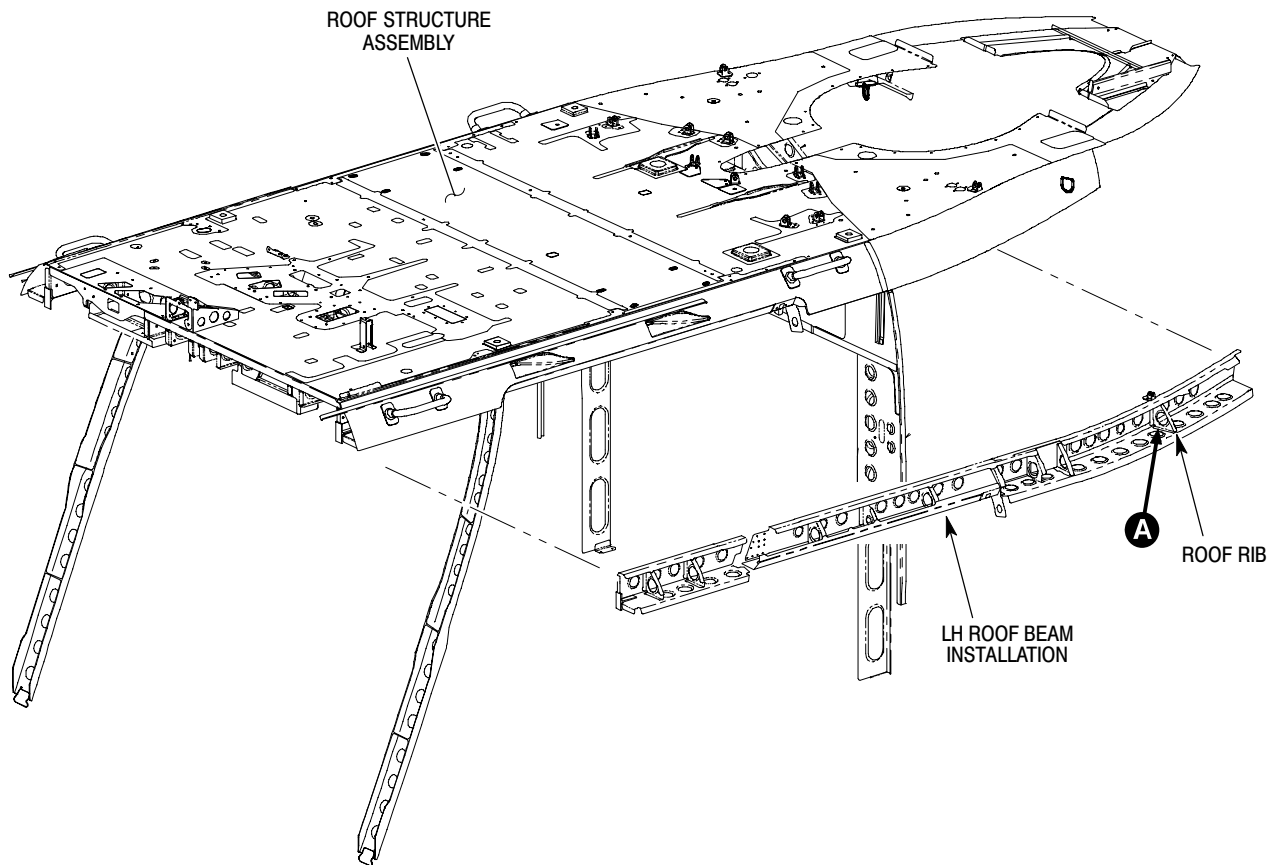
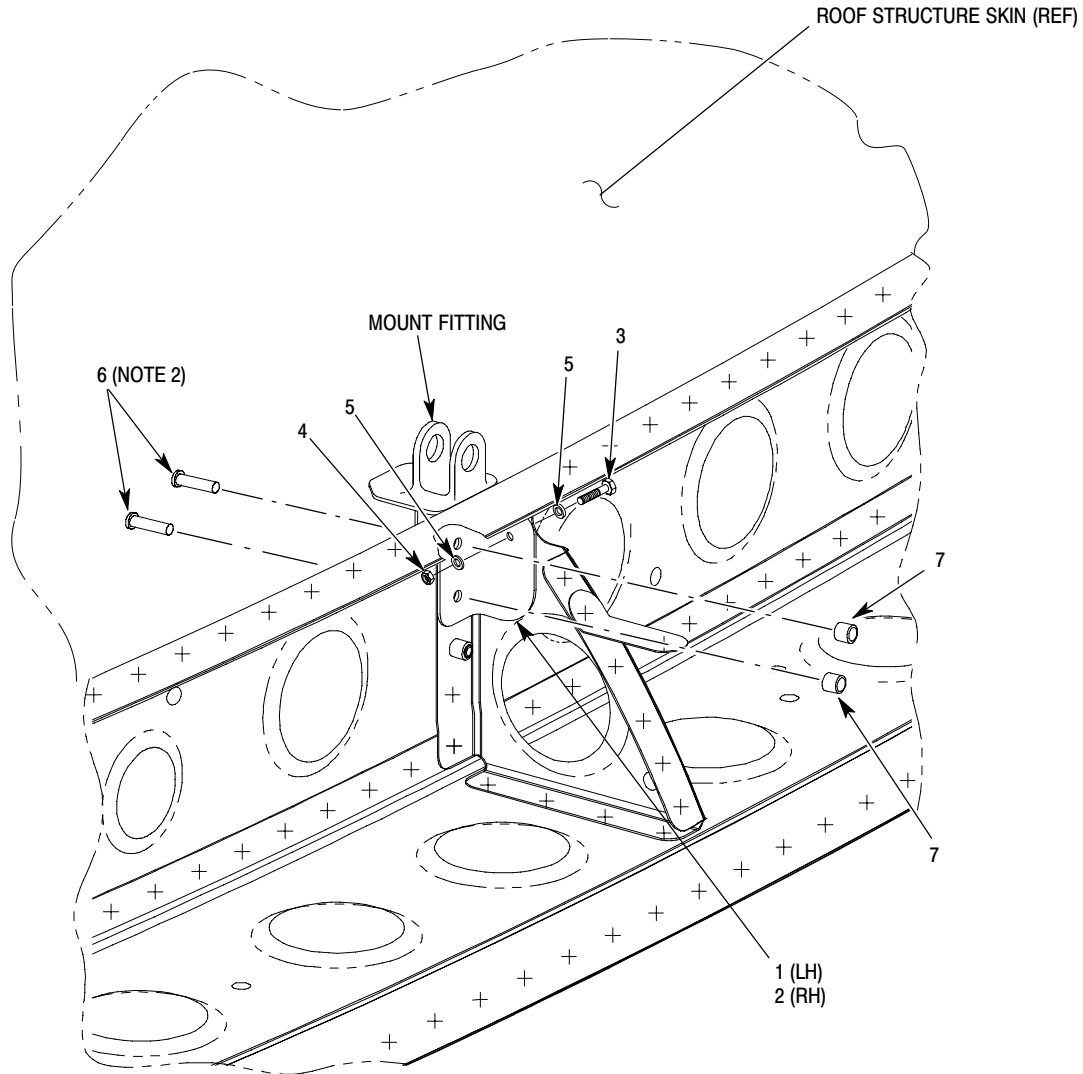


Figure 1. Upper Fuselage

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A LH SHOWN
RH OPPOSITE

NOTE 1. VIEW SHOWN LOOKING INBOARD.
NOTE 2. RIVETS MAY BE INSTALLED IN EITHER DIRECTION FOR EASE OF INSTALLATION.

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Figure 2. Roof Rib Bracket



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Bulletin Completed Record Technical Bulletin TB900-033R1, MODIFICATION OF ROOF RIB BRACKET

MD Helicopters, Inc.
Field Service Department
4555 E. McDowell Road
Mesa, AZ 85215-9734

800-388-3378 phone (U.S. and Canada)
480-346-6387 phone (International)
480-346-6813 Fax

FAX this form to MDHI (480) 346-6813 or Email to ServiceEngineering@mdhelicopters.com

Dear Sir:

This is to tell you that this Technical Bulletin has been completed as follows:

Owner /Operator: _____	Helicopter Serial No: _____
Address: _____	Helicopter Total Time: _____
_____	Date: _____
_____	Location: _____
Phone: _____	
E-mail: _____	

This bulletin is complete: _____
 (Signature)

(Print Name)

(Title)

Comments: _____



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Parts Request Form: Please fill in the following information and FAX this form to MDHI (480) 346-6813 or Email to ServiceEngineering@mdhelicopters.com .

Helicopter Ser. No.:	_____
Helicopter Total Time:	_____
Date:	_____

Parts Required:	
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
Part Ser. No. (if required):	
_____	_____

Ship to:	Company: _____
	Address: _____

	City: _____
	State/Province: _____
	Zip/Postal Code: _____
	Country: _____