

**Mandatory
Service Bulletin**

**MAIN ROTOR BLADE
ENHANCED 100-HOUR INSPECTION REQUIREMENTS**

SUMMARY:

MD Helicopters, Inc. has modified their Maintenance Manual and issued Mandatory Service Bulletins (SB369D-222R1, SB369E-121R1, SB369F-108R1, SB500N-059R1, and SB600N-071R1) to improve inspection of the root fitting on main rotor blades.

PURPOSE:

The purpose of this bulletin is to require an enhancement to the 100 Hour Periodic Inspection of the Root Fitting on Main Rotor Blades.

Failure to comply with this bulletin can result in helicopter operation with a possible defect in the main rotor blade.

REVISION:

N/A.

PART NUMBERS AND SERIAL NUMBERS AFFECTED:

All Variants of Main Rotor Blade installed on an MD Helicopters, Inc. Model 369A, H, HE, HM, HS, D, E, FF, 500N, and 600N. This includes the following Part Numbers:

500P2100 ALL VARIANTS (STC Numbers SR09074RC, SR09184RC, and SR09172RC)

500P2300 ALL VARIANTS (STC Number SR01050LA)

369D21120 ALL VARIANTS

369D21121 ALL VARIANTS

369D21123 ALL VARIANTS

369A1100 ALL VARIANTS

369D21100 ALL VARIANTS

369D21102 ALL VARIANTS

HELICOPTER MODEL AFFECTED:

MD Helicopters, Inc. Models 369A, H, HE, HM, HS, D, E, FF, 500N, and 600N.

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REFERENCES:

- 1) MD Helicopters, Inc. Handbook of Maintenance Instructions (CSP-HMI-2), Revision 29, dated May 11, 2001 or later
- 2) MD Helicopters, Inc. Handbook of Maintenance Instructions (CSP-H-2), Revision 17, dated May 15, 2001 or later
- 3) MD Helicopters, Inc. Appendix B (CSP-H-4), Revision 1, dated May 14, 2001 or later
- 4) Maintenance Manual HTCM-001, Main Rotor Blades (Installation and Maintenance), Revision H, dated February 12, 2009 or later.
- 5) MD Service Bulletins: SB369D-222R1, SB369E-121R1, SB369F-108R1, SB500N-059R1, and SB600N-071R1

FAA APPROVAL:

The design engineering aspects of this Bulletin have been shown to comply with the applicable Federal Aviation Regulations (FARs) and are FAA Approved.

TIME OF COMPLIANCE:

The instructions in this bulletin must be completed at the next scheduled 100 Hour Inspection and then every 100 Hour Inspection thereafter.

MANPOWER:

Approximately 0.5 man-hours will be required to accomplish this bulletin.

WARRANTY POLICY:

As applicable per Helicopter Technology Company (HTC) written Limited Warranty for New Product located on the company Website at www.helicoptertech.com.

DISPOSITION OF PARTS REMOVED:

Notify at the below Contact for further instructions.

ACCOMPLISHMENT INSTRUCTIONS:

- 1). Inspection of the Blade Root Fittings
 - a. Remove the rotor blade to be examined from the helicopter. (Ref. CSP-HMI-2. 62-10-00, Main Rotor Blade Replacement).
 - b. Examine the interface and area around the upper and lower root fittings, doublers, and bonding for cracks or delamination.
 - i. If there are no visible cracks or delamination, continue the inspection (go to Step 2 a.).
 - ii. If there are cracks or delamination of the bonding at the periphery of the blade root fittings and doublers do these steps:

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CAUTION: Do not remove the bolt, nut, or washers from the blade. It is possible the hardware stackup for the blade can be incorrectly assembled.

- (1) Loosen the outboard bolt.
- (2) Try to insert a Mylar shim between the bottom of the root fitting and the doubler.

NOTE: The Mylar shim is 0.004 inch (0.10 mm) thick and 0.118 to 0.236 inch (3 to 6 mm) wide.

CAUTION: Do not remove the bolt, nut, or washers from the blade. It is possible the hardware stackup for the blade can be incorrectly assembled.

- (3) If the Mylar shim did not go between the bottom of the root fitting and the doubler, loosen the adjacent bolt.
- (4) Try to insert a Mylar shim between the bottom of the root fitting and the doubler.

NOTE: The Mylar shim is 0.004 inch (0.10 mm) thick and 0.118 to 0.236 inch (3 to 6 mm) wide.

CAUTION: Do not use chemicals to remove the sealant. Damage to the blade can occur.

- (5) If necessary, remove the sealant with 320 sandpaper from the periphery of the blade root fitting to get a better view of the bond line.
 - (6) Remove and replace a blade with a crack or delamination (ref. CSP-HMI-2, Section 62-10-00, Removal/Installation, Procedure 2. Mani Rotor Blade Replacement).
 - (7) If there is no crack or delamination, torque the bolts 50 to 60 inch-pounds (5.65 to 6.78 Nm) plus 10 inch-pound (1.13Nm) of run-on torque.
 - (8) If necessary, apply sealant to the periphery of the blade root fitting (ref. the manufacturer instructions).
- iii. Contact HTC if you are not sure of the condition.
 - iv. Install the rotor blade in the same position as removed. (Ref. CSP-HMI-2, (Ref. CSP-HMI-2, 62-10-00, Main Rotor Blade Replacement)
- 2). Compliance Record
- a. Record compliance to the Service Bulletin in the Compliance Record Log (ref. CSP-RLB-L8) of the Rotocraft Log Book CSP-RLB.

POINTS OF CONTACT:

For further information and rotor blade disposition, contact Helicopter Technology Company (HTC), LLC at (310) 523-2750, or FAX (310) 523-2745. www.helicoptertech.com

THIS SERVICE BULLETIN IS FAA APPROVED