MAIN ROTOR BLADE ABRASION TAPE

SUMMARY:
HTC has observed Water Intrusion into the Bond-Line of the Inboard Areas of the Abrasion Strip on fielded Main Rotor Blades. This Water Intrusion can cause a Failure of the Abrasion Strip Bond. A Failure of the Abrasion Strip Bond and subsequent Departure of the Abrasion Strip could result in significant Main Rotor Vibration and Loss of Control of the Aircraft. An additional issue is onset of Erosion and Corrosion on the Leading Edges of Main Rotor Blades just inboard of the Abrasion Strips which could necessitate Early Retirement of these blades.

Procedures in this service notice provide owners and operators with information pertaining to Installation and Use of Abrasion Tape to protect the Abrasion Strip Bond.

PURPOSE:
The purpose of this notice is to provide a procedure for Installation and Maintenance of Abrasion Tape on Main Rotor Blades.

Failure of the Abrasion Strip Bond due to Water Intrusion and subsequent Departure of the Abrasion Strip could result in significant Main Rotor Vibration and Loss of Control of the Aircraft. Additionally, a failure to comply with this bulletin may result in onset of Erosion and Corrosion on the Leading Edges of Main Rotor Blades just inboard of the Abrasion Strips and could necessitate Early Retirement of these blades.

PART NUMBERS AND SERIAL NUMBERS AFFECTED:
500P2100-101, -103, and -105 (STC Number SR09047RC) All Serial Numbers.
These blades are also known as MD Helicopters, Inc. Part Number 369D21120-501, -503, and -505 and all references in MD Helicopters, Inc. CSP-HMI-2 that pertain to Part Number 369D21120-501, -503, and -505 pertain to HTC Part Number 500P2100-101, -103, and -105 as well.

500P2100-301, -303, and -305 (STC Number SR09184RC) All Serial Numbers.
These blades are also known as MD Helicopters, Inc. Part Number 369D21123-501, -503, and -505 and all references in MD Helicopters, Inc. CSP-HMI-2 that pertain to Part Number 369D21123-501, -503, and -505 pertain to HTC Part Number 500P2100-301, -303, and -305 as well.

500P2300-501, -503, and -505 (STC Number SR01050LA) All Serial Numbers.
These blades are also known as MD Helicopters, Inc. Part Number 369D21121-501, -503, and -505 and all references in MD Helicopters, Inc. CSP-HMI-2 that pertain to Part Number 369D21121-501, -503, and -505 pertain to HTC Part Number 500P2300-501, -503, and -505 as well.

HELI OPTER MODELS AFFECTED:
MD Helicopters, Inc. Models 369A, H, HE, HM, HS, D, E, FF, 500N, and 600N.
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TIME OF COMPLIANCE:
This bulletin shall be accomplished as often as is required based on observations made during each pre-flight.

FAA APPROVAL:
N/A.

MANPOWER:
Approximately 1.5 man-hours will be required to accomplish this notice.

WARRANTY POLICY:
N/A

DISPOSITION OF PARTS REMOVED:
N/A

REFERENCES:
1) MD Helicopters, Inc. Handbook of Maintenance Instructions (CSP-H-2), Revision 17, dated May 15, 2001 or later
2) MD Helicopters, Inc. Appendix B (CSP-H-4), Revision 1, dated May 14, 2001 or later
3) MD Helicopters, Inc. Handbook of Maintenance Instructions (CSP-HMI-2), Revision 29, dated May 11, 2001 or later
4) MD Helicopters, Inc. Rotorcraft Log Book (CSP-RLB), Revision 2, dated February 17, 2000 or later
5) Maintenance Manual HTCM-001, Main Rotor Blades (Installation and Maintenance), Revision H, dated February 12, 2009 or later.
6) Mandatory Service Bulletin 2100-4R2, Main Rotor Blade Inspection and Protection, Revision 2, dated December 23, 2005 or later.

REQUIRED MATERIALS:
1) Naphtha or Rubbing Alcohol
2) Kim Wipes or equivalent clean lint-free wipes.
4) 10x Magnifying Glass
4) Abrasion Tape, 2.0 inch width 3M Part Number 8671HS Transparent or equivalent Polyethylene or Polyurethane tapes
MAIN ROTOR BLADE ABRASION TAPE

INSPECTION INSTRUCTIONS:
1) Clean area thoroughly with Solvent. Naphtha or Rubbing Alcohol is recommended. MPK, MEK, or Acetone should not be used as they will remove the pigment from the black paint.

3) Coin Tap area for Abrasion Strip dis-bond. If dis-bonding is discovered, contact HTC Factory for further disposition.

2) Inspect areas with 10x Glass for Active Corrosion. The presence of corrosion calls for Alodine Solution application.

3) Visually inspect areas for Sealant. If areas do not have Sealant in place, apply sealant in accordance with HTC Mandatory Service Bulleting 2100-4R2.

4) Cut a 6.0 inch long section of Abrasion Tape from roll. Trim all corners round to a 0.12 inch radius. Apply Tape in accordance with tape manufacturer instruction such that the 2.0 inch tape width is centered on the Leading Edge and extends from 4.0 inches inboard of Abrasion Strip (on Hard Anodize Area) and overlaps Abrasion Strip by 2.0 inches. Ensure that air is not entrapped and work all bubbles out to an edge. Do not cut tape while in contact with the Blade. See Figure 1 above.

Figure 1 – Inboard Area of Abrasion Strip (Top Side Shown)
MAIN ROTOR BLADE ABRASION TAPE

RECORDING AND COMPLIANCE:
Record compliance with this Service Notice in the Technical Directives and Bulletins section of the rotor blade Serviceable Component Record.

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