

SERVICE BULLETIN

HN-220 DN-163 EN-53 FN-41

DATE: 27 OCTOBER 1989

PAGE 1 OF 3

MANDATORY MANDATORY MANDATORY MANDATORY

SUBJECT: ONE-TIME INSPECTION OF 369A5358 LOCKWASHER IN THE

OVERRUNNING CLUTCH ASSEMBLY AND INSPECTION OF ENGINE

OUTPUT DRIVE SPLINES.

MODELS AFFECTED: All MD Helicopters, Inc. (MDHI) 369A (OH-6A), 369H series, 369D, 369E, serial No. 0001E thru 0368E and 369F/FF, serial No. 0001F thru 0067FF, series helicopters.

TIME OF COMPLIANCE: The requirements of this Service Information Notice shall be accomplished within the next 300 hours of helicopter operation or the next time the overrunning clutch sub—assembly is removed from the helicopter, whichever occurs first.

PREFACE: Several 369A5358 overrunning clutch lockwashers have been found cracked in service. As cracking may occur during the crimping operation at installation, MDHI is requiring operators to perform the following inspection to ensure the subject lockwasher is not cracked.

Additionally, excessive wear has been detected on the Allison engine output drive splines on some helicopters. Therefore, anytime the overrunning clutch sub—assembly is removed from the helicopter, the splines on the overrunning clutch and the output spline in the engine should be inspected for wear. Wear in the engine output splines can be detected by feeling for a "step" inside the splines. Operators are required to contact Allison for a disposition if any "step" in the area is felt/observed.

REFERENCE PUBLICATIONS:

369H Basic HMI (CSP-H-2) Revised 15 January 1989 369H COM (CSP-H-5) Revised 15 July 1989 369D/E HMI Vol. I (CSP-D-2) Revised 01 August 1989 369F/FF HMI Vol. I (CSP-F-2) Revised 01 June 1989 369D/E/FF COM (CSP-DEF-5) Revised 29 September 1989

PROCEDURE

a. Remove overrunning clutch subassembly per HMI to gain access to 369A5358 lockwasher.

NOTE

DO NOT remove lockwasher unless cracks are observed when performing the following step.

HN-220 DN-163 EN-53 FN-41



DATE: 27 OCTOBER 1989

PAGE 2 OF 3

SERVICE BULLETIN

MANDATORY MANDATORY MANDATORY MANDATORY

b. Using a suitable light and a 10X magnifying glass, inspect lockwasher crimped area as shown in Figure 1 for any indications of cracking. Replace cracked lockwashers per the applicable COM.

NOTE

Pay particular attention to the crimped portions of the lock-washer.

- c. Check the splines of the overrunning clutch for wear per the COM.
- d. Check the engine output drive splines using a sharp point scribe, lightly feel for a "step" in the spline length (see Figure 1) where the clutch input drive splines mesh with the engine output drive splines.

NOTE

If a "step" is observed or felt using a sharp point scribe, contact Allison Gas Turbine Division of General Motors Corporation for disposition at (317) 230–2720.

e. If a "step" is not felt/observed install overrunning clutch sub-assembly per applicable HMI.

NOTE

- Verify overrunning clutch assembly has been properly serviced.
- Verify clutch input and output drive splines have been properly lubricated before installation.
- f. Record compliance to this Service Information Notice in the Compliance Record section of the helicopter Log Book.



SERVICE BULLETIN

HN-220 DN-163 EN-53 FN-41

DATE: 27 OCTOBER 1989

PAGE 3 OF 3

MANDATORY MANDATORY MANDATORY MANDATORY

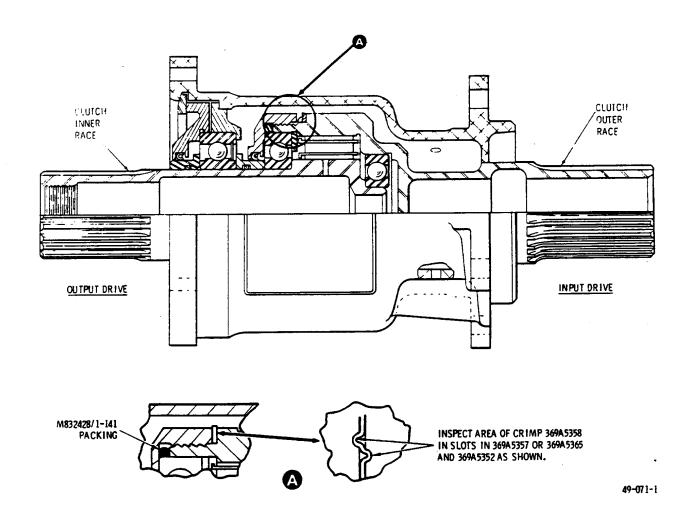


Figure 1. Inspection of Overrunning Clutch Assembly and Engine Output Drive Splines.