

FAA Airworthiness Directive

90-12-03 MCDONNELL DOUGLAS HELICOPTER COMPANY (MDHC): Amendment 39-6618.
Docket No. 90-ASW-21.

Applicability: Model 369D, E, F, and FF helicopter, certificated in any category.

Compliance is required as indicated, unless already accomplished.

To prevent tail rotor malfunction, which could result in loss of control and possible loss of the helicopter, accomplish the following:

(a) Within the next 10 hours' time in service after the effective date of this AD, check the tail rotor swashplate bearing assembly to determine the color (green, yellow, or black) of the bearing seal, P/N 369D21832. The check required by this paragraph may be performed by a pilot. The bearing seal can be observed by looking into the outboard end of the T/R swashplate bearing assembly. If necessary, clean the face of the bearing seal so that the color can be determined.

NOTE: Part I of MDHC Service Information Notice DN-167, EN-58, and FN-46 pertains to this one-time check.

(b) If the bearings have green or yellow seals, record the seal color in the logbook together with the record of compliance with this AD, and no further action is required.

(c) For bearings with black seals which have a serial number in the range of 059150-0001 through 059150-0692, or 059150-0734 through 059150-0742, or which have unidentified serial numbers, conduct the following inspections within the next 10 hours' time in service, and thereafter at intervals not to exceed 10 hours' time in service from the last inspection until the bearing is replaced:

(1) Disconnect the outboard end of the bellcrank.

(2) Disconnect the dust boot from the inboard end of the pitch assembly. This will allow rotation of the tail rotor swashplate housing.

(3) While applying a down load on top of the housing by hand, slowly rotate the pitch control housing to verify smoothness of operation. The bearing must rotate smoothly and without roughness to be acceptable. A slight feeling of grit in the grease, with smooth areas in between, is considered acceptable for an additional 10 hours' time in service. If the gritty feeling is continuous, replace the bearings.

(4) If the roughness is beyond that allowed in paragraph (c)(3) or if the gritty feeling is continuous, replace the tail rotor swashplate bearing with an airworthy bearing before further flight.

(5) Install and lockwire the dust boot on the inboard end of the pitch control housing.

(6) Service the tail rotor swashplate pivot bearing assembly with an acceptable grease as specified in the Handbook of Maintenance Instructions.

(7) Reconnect the bellcrank to the outboard end of the pitch control assembly as specified in the Handbook of Maintenance Instructions.

(8) If an acceptable black seal bearing (i.e., a bearing having a serial number exclusive of the specified unacceptable ranges) is installed or has been installed as a replacement, apply a white paint dot on the outside face of the housing and record this action in the helicopter log book.

(9) Record compliance in the helicopter log book, together with the serial number of the newly installed bearing.

NOTE: Part II of MDHC Service Information Notice DN-167, En-58, and FN-46 pertains to this inspection procedure.

(d) Replace any bearings with black seals which have any serial number in the range of 059150-0001 through 059150-0692 or 059150-0734 through 059150-0742, or which have unidentified serial numbers as follows:

(1) For bearings which have 290 or more hours' time in service on the effective date of this AD, replace the bearing with an airworthy part within the next 10 hours' time in service.

(2) For bearings which have less than 290 hours' time in service on the effective date of this AD, replace the bearing with an airworthy part before the accumulation of 300 hours' time in service.

(e) Prior to the installation of new or replacement bearing sets, P/N 369D21832; pitch control assemblies, P/N 369D21800 or 369D21820 series; or tail rotor assemblies, P/N 369D21600 or 369D21610 series, determine the color of the swashplate bearing seal and record in the logbook. If a bearing set has a black seal, install only parts that are verified to have serial numbers other than those listed in paragraph (c).

(f) In accordance with FAR Sections 21.197 and 21.199, the helicopter may be flown to a base where compliance with this AD may be accomplished.

(g) An alternate method of compliance or adjustment of the compliance time which provides an equivalent level of safety may be used if approved by the Manager, Los Angeles Aircraft Certification Office, FAA, 3229 E. Spring Street, Long Beach, California.

This amendment (39-6618, AD 90-12-03) becomes effective on June 22, 1990.