

McDonnell Douglas (Hughes) and Kawasaki 369 Series Helicopters

AD/HU 369/93 Main Transmission Gear Replacement 11/97

Applicability: All Model 369D, E, F, FF, 500N, AH-6 and MH-6 helicopters with main rotor transmission part number (P/N) 369D25100 installed.

Requirement:

1. Determine if the installed transmission output drive gear, P/N 369D25127-11, has a serial number (S/N) in the range S/N 005570-0646 thru S/N 005570-0765 or S/N 005570-0876 thru S/N 005570-0998. This may be achieved by inspection of records, contact with the manufacturer or by direct inspection through the open liquid level plug port (MDHS Service Information Notice DN-189/EN82/FN-69/NN-009 dated Jan 10, 1997 refers).

2. If the gear proves to be one of the affected S/N listed above, the gear is to be replaced with an airworthy gear with a S/N other than those listed at 1. above in accordance with the compliance summary below.

Note: FAA AD 97-15 -08 amendment 39-10081 refers.

Compliance:

1. Within the next 10 hours time in service after the effective date of this directive identify the gear serial number.
2. Gears identified in requirement 1 above are to be replaced as follows:
 - a. For helicopters equipped with a cargo hook assembly, with a separate, permanently maintained log of actual hours time in service (TIS) of external load operation, remove and replace the gear within the next 25 hours TIS for external load operations, or within 400 hours TIS for non-external load operations, whichever comes first.
 - b. For helicopters equipped with a cargo hook assembly with no separate, permanently maintained log of actual external load operation, remove and replace the gear within the next 25 hours TIS after the effective date of this directive. Owners/operators may elect to begin maintaining a separate permanent log of external load operations from the effective date of this directive and then comply with the requirements of 2(a) of this AD.
 - c. For helicopters without cargo hook assemblies, remove and replace the gear within the next 400 hours TIS after the effective date of this directive.
3. There are no follow on inspections or maintenance requirements once the gear has been replaced as required above.

Background: Several reports of spalled or fractured gear teeth of the output transmission drive of the affected aircraft have lead to the generation of this Directive to identify and replace certain gear serial numbers. The defect was traced to a quality control problem within the gear manufacturing process and the affected batches have been traced.

