
AIRWORTHINESS DIRECTIVE

For the reasons set out in the background section, the CASA delegate whose signature appears below issues the following Airworthiness Directive (AD) under subregulation 39.1 (1) of CAR 1998. The AD requires that the action set out in the requirement section (being action that the delegate considers necessary to correct the unsafe condition) be taken in relation to the aircraft or aeronautical product mentioned in the applicability section: (a) in the circumstances mentioned in the requirement section; and (b) in accordance with the instructions set out in the requirement section; and (c) at the time mentioned in the compliance section.

McDonnell Douglas (Hughes) and Kawasaki 369 Series Helicopters**AD/HU 369/109****Tail Rotor Gearbox Attachment****10/2002**

Applicability: MD Helicopters Inc. Model 369D, 369E, 369F, and 369FF helicopters, modified in accordance with Aerometals Supplemental Type Certificate (STC) SH5055NM or SH4801NM.

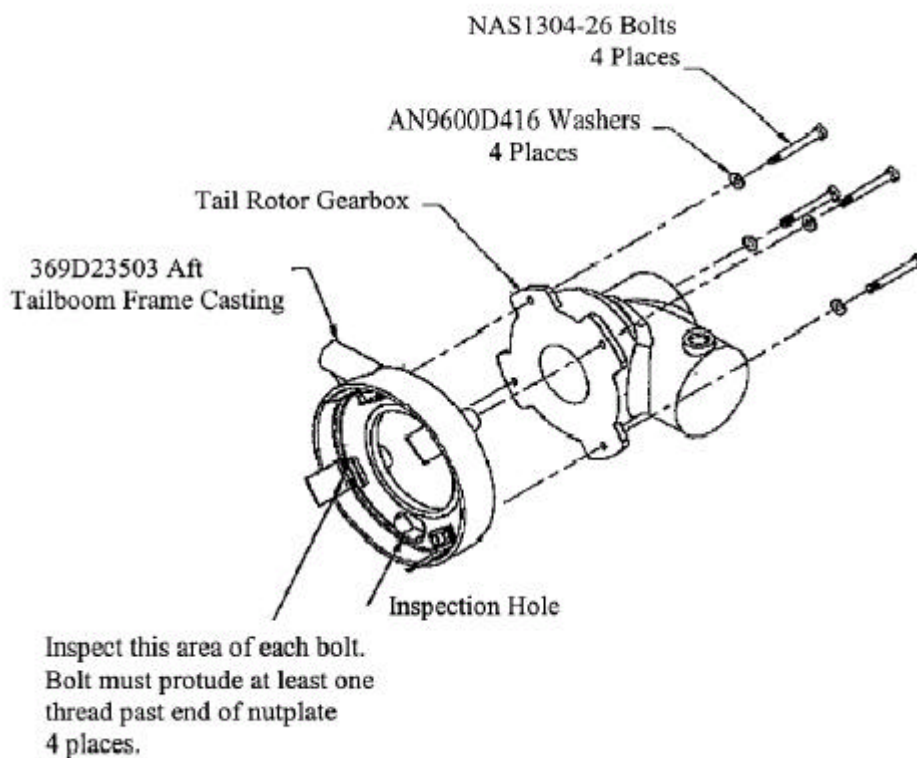
- Requirement:**
- 1. Initial Inspection and bolt replacement:**
 - a. Carry out an inspection of the tail rotor gearbox attachment bolts to determine the part number.
 - b. If the part number cannot be determined or if the bolt is not P/N NAS1304-26, replace the bolt with bolt, P/N NAS1304-26.
 - c. Torque the bolt to 100-110 in-lbs and apply slippage mark.
 - d. Remove the tailboom control rod and determine the number of threads protruding from each nutplate on the internal surface of the aft tailboom frame casing, P/N 369D23503, as shown in Figure 1 of this Directive. At least one thread must protrude. If more than four threads protrude, add an additional washer, P/N AN960D416, under the bolt head.
 - e. Torque the bolt to 100-110 in-lbs and re apply slippage mark.
 - 2. Repetitive Inspection:**
 - a. Re check the attachment bolts for correct torque and re-torque if necessary.
 - b. Re apply slippage mark if re-torque is required.

Note: FAA AD 2002-13-05 Amdt 39-12793 refers.

McDonnell Douglas (Hughes) and Kawasaki 369 Series Helicopters

AD/HU 369/109 (continued)

Figure 1 – Inspection Location



Compliance: **1. Initial Inspection and bolt replacement:**

Within 25 flight hours from the effective date of this Directive.

2. Repetitive Inspection:

Between 2 and 10 hours flight hours after initial inspections have been carried out, thereafter between 2 and 10 flight hours until no further bolt movement occurs during torque check.

This Airworthiness Directive becomes effective on 3 October 2002.

McDonnell Douglas (Hughes) and Kawasaki 369 Series Helicopters

AD/HU 369/109 (continued)

Background: The bolts that attach the tail rotor gearbox have been found to be of inadequate grip length. This Directive introduces an inspection and possible replacement of the bolts to ensure the integrity of the gearbox for safe operation of the helicopter.



James Coyne
Delegate of the Civil Aviation Safety Authority

23 August 2002