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R66 SERVICE BULLETIN SB-39

DATE: 30 June 2021

TO: R66 Owners, Operators, and Maintenance Personnel

SUBJECT: Hydraulic Controls Pre-Takeoff Check

EFFECTIVITY: Helicopters equipped with D212-5 hydraulic servo S/Ns 19666 & prior and/or D212-6 servo S/Ns 19048 & prior, unless servos have been factory repaired or overhauled April 2014 or later. Each R66 has two D212-5 servos and one D212-6 servo. (R66 helicopter S/Ns 0564 & subsequent were factory-fitted with unaffected servos.)

TIME OF COMPLIANCE: Within next 10 flight hours or by 31 July 2021, whichever occurs first.

BACKGROUND: RHC has received a report of hydraulic controls becoming stiff in flight. One of the three hydraulic servos was found to have excessive internal wear resulting in the servo moving too slowly in one direction. All servos manufactured, repaired, or overhauled since April 2014 do not have an internal wear issue and are not affected by this SB; refer to helicopter's maintenance record for servo history. For helicopters with affected servos, an additional pre-takeoff check is required to verify that all three servos are able to move rapidly in both directions.

NOTE: Information in this Service Bulletin is equivalent to and supersedes the Safety Alert dated 8 Jan 2021.

COMPLIANCE PROCEDURE:

If helicopter is equipped with one or more affected D212-5 or -6 servos, insert enclosed Special Hydraulic Controls Pre-Takeoff Check (page 2 of this bulletin) before the title page of the Pilot's Operating Handbook.

NOTE: Special Hydraulic Controls Pre-Takeoff Check sheet may be removed from Pilot's Operating Handbook following factory repair, overhaul, or replacement of all affected servos.

APPROXIMATE COST:

Parts: None required (Special Hydraulic Controls Pre-Takeoff Check sheet included as part of Bulletin).

Labor: 0.2 man-hour.

THE DESIGN ENGINEERING ASPECTS OF THIS BULLETIN HAVE BEEN SHOWN TO COMPLY WITH APPLICABLE FEDERAL AVIATION REGULATIONS AND ARE FAA APPROVED.

R66 SB-39

SPECIAL HYDRAULIC CONTROLS PRE-TAKEOFF CHECK

To be inserted before the title page of the R66 Pilot's Operating Handbook for all helicopters with affected hydraulic servos per R66 SB-39.

Also distribute to all pilots flying these helicopters.

Date: 30 June 2021

RHC has received a report of hydraulic controls becoming stiff in flight. One of the hydraulic servos was found to have excessive internal wear resulting in the servo moving too slowly in one direction. The following pre-takeoff check confirms that all three servos are able to move rapidly in both directions.

In addition to the Normal Procedures hydraulic system check described on page 4-8 of the Pilot's Operating Handbook, perform the following:

With helicopter at governed flight RPM and collective full down, position cyclic approximately 1 inch aft of neutral. Move cyclic rapidly forward approximately 2 inches, then rapidly aft approximately 2 inches. There should be no feel of resistance (no feeling similar to hydraulics off).

NOTE

This check does not need to be a continuous fore-aft motion. A pause between the fore and aft motion is acceptable. Feeling resistance indicates a servo is moving too slowly. A short video demonstrating the check is available on the Robinson website www.robinsonheli.com.

If resistance is felt, do not fly. Have maintenance personnel contact RHC technical support.

This page may be removed from the Pilot's Operating Handbook following repair or replacement of affected servos.

Cut or fold along this line

(This page to be printed on pink paper.)