



FAA
Aviation Safety

SPECIAL AIRWORTHINESS INFORMATION BULLETIN

SAIB: 2024-05

Date: 10/29/2024

SUBJ: Engine/Transmission Coupling, Gearmotor Assembly

This is information only. Recommendations aren't mandatory.

Introduction

This Special Airworthiness Information Bulletin (SAIB) alerts all owners, operators, maintenance technicians, and inspectors of an airworthiness concern on **Robinson Helicopter Company (RHC) Model R44 and R44 II** helicopters due to potential loosening of the gearmotor assembly (gearmotor), part number (P/N) D276-1 or D276-3, on belt-tension actuators. This concern also applies to C051-1 and C051-2, Revision AC and prior, belt-tension actuator assemblies sold as spares that include gearmotor P/N D276-1 or D276-3.

At this time, the airworthiness concern is not an unsafe condition that would warrant airworthiness directive (AD) action under Title 14 of the Code of Federal Regulations (14 CFR) part 39.

Background

The FAA has received reports of loose P/N D276-1 and D276-3 gearmotors on RHC Model R44-series helicopters from both domestic and international operators. Investigation has determined the cause to be related to poor dimensional control of certain internal countersunk head screws and the potential absence of thread locking adhesive in a population of gearmotors that left the manufacturer.

RHC updated the R44-series maintenance manual in September 2023 to add a gearmotor assembly torque stripe verification to the 100-hour / annual inspection procedures. Additionally, RHC released R44 Service Bulletin SB-115, dated October 27, 2023 (RHC SB-115); this service bulletin specifies a one-time verification of gearmotor security and application of a torque stripe for future visual inspections.

Recommendations

The FAA recommends the following the actions:

- (1) Inspect the gearmotor assembly for looseness, replace if necessary, and apply the torque stripe for future visual inspections, in accordance with the SB.
- (2) At every 100-hour/Annual Inspection, follow the Gear Motor Assembly Torque Stripe inspection procedure within RHC R44 MM, dated September 2023.

For Further Information Contact

Eric Moreland, Aerospace Engineer, FAA, 3960 Paramount Boulevard, Lakewood, CA 90712; phone: (562) 627-5364; email: eric.r.moreland@faa.gov.

For Related Service Information Contact

Robinson Helicopter Company, Technical Support Department, 2901 Airport Drive, Torrance, CA 90505; phone: (310) 539-0508; website: robinsonheli.com.