

R44

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SERVICE BULLETIN SB-19

DATE: 16 April 1997

TO: All R44 Owners, Operators, and Service Centers

SUBJECT: Lateral Cyclic Trim Assembly Spring Shaft Wear

ROTORCRAFT AFFECTED: R44 Helicopters S/N 0002 through 0321, except 0301, 0306, 0307, 0311, 0312, 0314 and 0319.

TIME OF COMPLIANCE: Within next 50 flight hours or by 31 May 1997, whichever occurs first. Ships with less than 100 flight hours should not comply until first 100 hour inspection.

BACKGROUND: RHC has received reports of excessive C585-1 shaft wear. Excessive wear can be caused by a high-friction spherical bearing in C581-1 revision H or prior arms. The KI-109 kit includes a C581-1 arm with a low-friction bearing.

COMPLIANCE PROCEDURE:

1. Turn cyclic trim system on, push and hold cyclic stick against right stop, and then switch cyclic trim off. (This will cause system to apply maximum right trim.)
2. Remove avionics from mounting trays. Detach intercom system from C641 avionics face and remove avionics face.
3. Remove radio rack (it is not necessary to disconnect airframe wiring from radio trays to remove radio rack).
4. Move cyclic stick to left stop to compress trim spring.
5. Refer to figure 1. Determine minimum diameter of exposed portion of C585-1 shaft by measuring at several places.
6. Diameter of new shaft is 0.248 inch. If shaft diameter decreased more than 0.001 inch per 100 hours time-in-service OR if shaft diameter is less than 0.238 inch, order KI-109 kit and replace C585-1 shaft and C581-1 arm using instructions supplied with kit. Note: if minimum shaft diameter is less than 0.218 inches, shaft must be replaced prior to further flight.

(OVER)

7. If shaft minimum diameter is within allowable limits, clean and lubricate shaft with A257-1 grease (ref R44 Maintenance Manual Section 1.440) as required.
8. Install radio rack, avionics face, and avionics.

Approximate Cost:

Labor: 0.5 manhours for inspection of C585-1 shaft.
2.5 manhours for installation of KI-109 kit.

Parts: \$90 for KI-109 kit if ordered prior to 31 May 1997. (No charge for aircraft under warranty.) Order must include helicopter serial number.

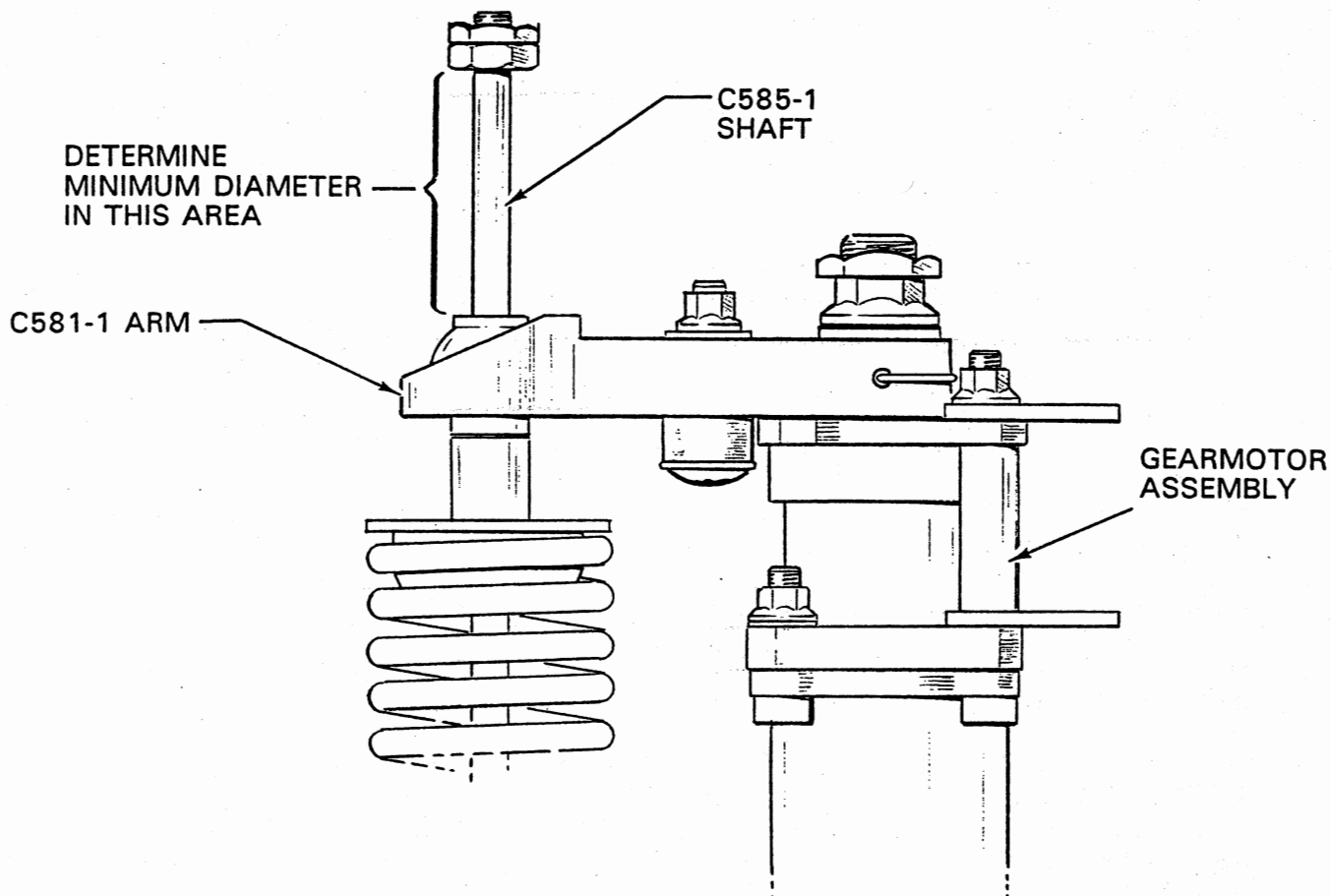


FIGURE 1

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