

Robinson Helicopter Company

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MANDATORY SERVICE BULLETIN #16

Date: 18 November 81

To: All owners and operators of Robinson R22 helicopters.

Subject: Improper clutch shaft plug installation.

Rotorcraft affected: R22 serial numbers 002 through 0226.

Time of compliance: Within the next 25 hours time in service.

Background: The forward seal of a clutch assembly was found loose from its housing due to insufficient airgap being available inside the clutch assembly. The airgap in the clutch assembly is to accomodate fluid expansion due to the normal heat buildup in the clutch assembly. This service difficulty has occurred due to the aft clutch shaft plug being installed too deep in the shaft. The following procedure is used to check for proper installation depth of the aft clutch shaft plug.

Plug Depth Inspection Procedure

- 1) Remove the forward A195-1 yoke attach bolt (closest to sheave) and blocks.
- 2) Insert the enclosed inspection tool through the bolt hole with the "vee" tip facing up. Hold the ends of the tool against the forward edge of the bolt hole and carefully rotate the tool ("vee" tip moving forward) until the "vee" tip contacts the plug.

If the plug is installed too deep, the tip will not contact the plug. The maximum depth from the forward edge of the bolt hole to the plug must not exceed .20 inch. (The inspection tool is set for the maximum depth)

N O T E

If the plug can not be detected by the inspection tool, the clutch assembly must be returned to Robinson Helicopter for reassembly.

- 3) If the inspection tool contacts the plug, the depth is acceptable.
- 4) Reinstall the blocks, bolt, washers and nut. Torque to 100 in-lbs plus nut drag and install a new palnut.

FAA APPROVED: Nov. 25, 1981