

R44

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SERVICE BULLETIN SB-23

DATE: 30 May 97

TO: All R44 Owners, Operators, and Service Centers

SUBJECT: Replacement of C018-1 Clutch Assembly

ROTORCRAFT AFFECTED: R44 Helicopters S/N 0001 through 0322 excluding S/N 0182, 0224, 0228, 0253, 0301, 0306, 0307, 0311, 0312, 0314, and 0319.

TIME OF COMPLIANCE: Within next 100 flight hours or by 30 Sep 97, whichever occurs first.

BACKGROUND: RHC has received reports of unusual noise coming from the upper sheave during shutdown. Upon inspection, the sprag clutch assemblies in these helicopters showed excessive wear. The C018-2 clutch assembly has a redesigned sprag clutch and drive shaft with greatly increased torque-carrying capacity.

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COMPLIANCE PROCEDURE:

Note: Use R44 Maintenance Manual (MM) Change 4 (dated June 1, 1997) or later.

1. Inspect data plate on clutch shaft or sheave. If data plate indicates a C166-4 clutch shaft or C188-3 sprag clutch assembly, a C018-2 clutch assembly is already installed and no further action is necessary. Go to step 10.
2. Reference helicopter serial number and order either C018-2 or C018-2A clutch assembly. (C018-2A clutch assembly is a C018-2 without C184-2 bearing assembly; bearing assembly must be pressed off old clutch shaft and reused.)
3. Remove C018-1 clutch assembly per R44 MM section 7.210.
4. Remove C907 and C195 yokes per R44 MM sections 7.260 and 7.270.
5. If installing a C018-2A clutch assembly, remove C184-2 bearing assembly from C018-1 clutch assembly per R44 MM Section 7.211. (Use MT528-1 revision E or later tool set.) Install bearing assembly on new clutch assembly per R44 MM Section 7.212.
6. Install C907 and C195 yokes on C018-2 clutch assembly per R44 MM sections 7.260 and 7.270.
7. Install C018-2 clutch assembly per R44 MM section 7.220.
8. Rotate upper sheave to obtain minimum clearance between sheave bolts and actuator gear housing per figure on page 2. Engage clutch switch to fully tension V-belts. Check for 0.06 inch minimum clearance between bolts and housing. Housing may be filed to provide clearance if required.
9. Damage C018-1 clutch assembly to render it unusable.
10. Record compliance with R44 SB-23 in aircraft maintenance record (logbook).

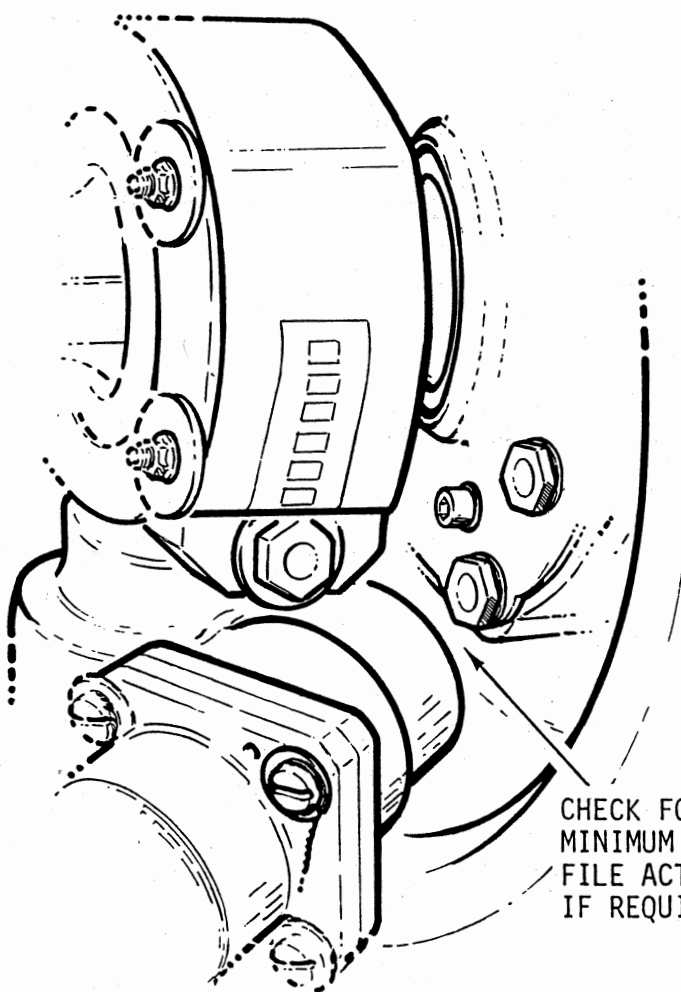
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**Approximate Cost:**

Labor: 5 manhours to install C018-2  
6 manhours to install C018-2A

Parts\*: If ordered prior to 31 Aug 97, \$3000 for C018-2A (Does not include C184-2 Bearing Assembly) or \$3400 for C018-2.

\*Normal Service Center discounts do not apply (Refer to letter dated 28 May 97.)



CHECK FOR 0.06 INCH  
MINIMUM CLEARANCE.  
FILE ACTUATOR HOUSING  
IF REQUIRED.