

R44

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SERVICE BULLETIN SB-14

**DATE:** 26 April 1996 Supersedes R44 SB-2, SB-3, & SB-9

**TO:** R44 Owners, Operators, and Service Centers

**SUBJECT:** Replacement of C007-3 or C007-4 Shaft Assembly and D174-1 Fanwheel

**ROTORCRAFT AFFECTED:** R44 Helicopters S/N 0006 thru 0246 except S/N 0014, 0069, 0090, 0182, 0186, 0215, 0228, 0237, and 0239.

**TIME OF COMPLIANCE:** Within next 100 hours time in service or by 30 Sept 1996, whichever occurs first.

**BACKGROUND:** Cracks and excessive fretting have been found in some fan hubs and fan shafts of the original design. Failure of this shaft could result in loss of engine cooling and subsequent loss of power to the rotor. A new larger-diameter fan shaft, hub, and bearing are now available which eliminate this potential problem.

**COMPLIANCE PROCEDURE:**

- 1) Order KI-98 Fanwheel and Shaft Assembly Conversion kit. Additionally, Service Centers must order one MT592-1 puller assembly since old puller is incompatible with new fanwheel. Service Centers must also have a 3/4-inch drive (minimum), 2-inch socket and a 550 ft-lb capable torque wrench if MT173-1 torque wrench extension is not used.
- 2) Remove fanwheel and scroll per R44 Maintenance Manual (MM) Section 6.210.
- 3) Remove C007 shaft assembly per R44 MM Section 7.291.
- 4) Install C007-5 shaft assembly per R44 MM Section 7.292.

Note

Each KI-98 kit includes a fanwheel and fan shaft assembly which have been lapped together at RHC. If fanwheel and shaft assemblies are mixed, lapping per R44 MM Section 6.220(b) is required (new hub is not shot peened).

- 5) Install fanwheel and scroll per R44 MM Section 6.220. Ensure MS20002-24 washer is against fanwheel hub and use maximum number of NAS1149F2432P washers that will still allow installation of roll pin. Torque C182-1 nut to 450-550 ft-lb using A257-9 anti-seize on nut face and threads. Install B350-3 roll pin and safety wire.

Caution

Ensure MT173-1 torque wrench extension tool is Rev G or subsequent if used to torque C182-1 nut.

(OVER)

- 6) Balance fanwheel per R44 MM Section 6.240.
- 7) Record compliance with R44 SB-14 in aircraft maintenance records (log book).

**Approximate Cost:**

Labor: 4.0 manhours

Parts: KI-98 Kit \$4,400 list  
Special Price with 60% discount if ordered with  
aircraft serial number by 31 July 1996: \$1,760

No charge for KI-98 kit for aircraft still under  
warranty (S/N 0160 thru 0246 and S/N 0145 & 0156)