

SERVICE BULLETIN #46

DATE: 18 October 1985

TO: R22 Owners and Operators

SUBJECT: Sprag Clutch Replacement

ROTORCRAFT AFFECTED: Any aircraft affected by SB-42A which has not had the new A188-2 Sprag Clutch installed, or, any other R22 helicopter which growls or vibrates excessively during sprag clutch reengagement.

TIME OF COMPLIANCE: Prior to December 15, 1985

NOTE: This service bulletin supercedes SB-42 and SB-42A

BACKGROUND: SB-42A required the owners of the affected rotorcraft to perform certain maneuvers and checks with their aircraft to determine if it was equipped with one of the suspect clutches. Aircraft which already had the new A188-2 sprag clutch installed were excluded. It is now apparent that all of the owners did not perform these checks adequately. Therefore, any R22 helicopters affected by SB-42A which have not had their sprag clutches replaced must do so at this time.

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COMPLIANCE PROCEDURE:

1. RHC records indicate that at least the following R22 helicopters affected by SB-42A may need to have had their sprag clutches replaced with the new A188-2 sprag clutch. Check the aircraft and aircraft log-book to determine if the proper sprag clutch is installed. Clutch assemblies with the A188-2 sprag installed have an identification plate bearing that number on the sheave web.

Aircraft S/N:

0002	0109	0241	0365	0381	0395
0003	0160	0269	0367	0383	0397
0016	0167	0275	0368	0384	0402
0028	0169	0292	0369	0385	0408
0035	0172	0355	0371	0387	0409
0053	0200	0359	0372	0388	0410
0075	0222	0360	0374	0390	0419
0088	0234	0362	0379	0393	0424

CAUTION

Owners sometimes exchange clutch assemblies between aircraft. Be sure you can trace the history of your clutch to ensure that it did not come from one of the above aircraft. If there is any doubt, perform the checks given in SB-42A very critically.

2. If your sprag clutch needs to be replaced with the new A188-2 sprag clutch, remove the yokes from both ends of the A166 clutch shaft and ship the A018-1 clutch assembly to RHC for overhaul and sprag replacement. Pack the clutch very carefully to avoid damage in shipping. Be sure to include the aircraft S/N and the hours in service.

COST: To ease the financial burden on R22 owners of affected aircraft, RHC will apply a special discount for clutches overhauled in compliance with this service bulletin. The overhaul price will be discounted from the normal list price of \$2,934.00 to \$950.00. No other discounts will apply. This price includes sprag replacement.

Special Overhaul Price: \$950.00

Approximate Removal and Reinstallation Labor: 2 Manhours