

R66 SERVICE BULLETIN SB-05B
(supersedes R66 SB-05, R66 SB-05A, and R66 SL-03A)

DATE: 03 December 2012 **REV B:** 21 December 2012

TO: R66 owners, operators, and maintenance personnel

SUBJECT: Clutch Retaining Bolt

ROTORCRAFT AFFECTED: R66 helicopters S/N 0003 thru 0271.

TIME OF COMPLIANCE: Within next 100 flight hours or by 31 March 2013, whichever occurs first.

BACKGROUND: RHC has received additional reports of a broken bolt which retains the clutch assembly and eliminates play between the engine PTO (power take-off) shaft and clutch splines. This bulletin requires installing a new bolt and cap configuration and discarding the PTO cover. Some helicopters may also require replacement of the thread insert in the clutch housing.

COMPLIANCE PROCEDURE:

1. Remove engine cowling per R66 Maintenance Manual (MM) § 53-21.
2. Refer to Figure 1. If installed, remove and discard engine-supplied PTO cover and associated nuts, spacers, and gasket.
3. Remove clutch retaining bolt, washer, G732-1 or G732-2 cap, and tube (if installed) and determine bolt length. A strap wrench or plastic-jaw pliers may be used to hold clutch assembly housing when removing bolt (avoid damaging identification plate). Discard bolt, washer, G732-1 cap, and tube; retain G732-2 cap.
4. If an NAS6604-57 bolt was removed, verify end of MS21209F4-10L thread insert is 0.1 inch below end of clutch housing; contact [RHC Technical Support](#) if thread insert position is incorrect.
5. Install C130-62 spacer and G732-2 cap on NAS6604-67 bolt and install bolt. Standard torque bolt to 132 in.-lb per MM § 20-32 and torque stripe.
6. Install engine cowling per MM § 53-21.

(OVER)

7. If engine-supplied PTO cover and associated nuts, spacers, and gasket were removed, revise Weight & Balance Record in helicopter's Pilot's Operating Handbook Section 6 to incorporate the following data:

Item	Weight	Longitudinal Arm	Longitudinal Moment	Lateral Moment
PTO cover removal	-0.25 lb	137.0 in.	-34.25 in.-lb	Ø

8. Make appropriate maintenance record entries.

Approximate Cost:

Parts: No charge for NAS6604-67 bolt, C130-62 spacer, and G732-2 cap, as required, if ordered while aircraft is under warranty. Reference helicopter serial number.

Parts may be obtained from any R66 Dealer or Service Center, or ordered directly from assigned [RHC Customer Service Representative](#) via email, fax, or phone.

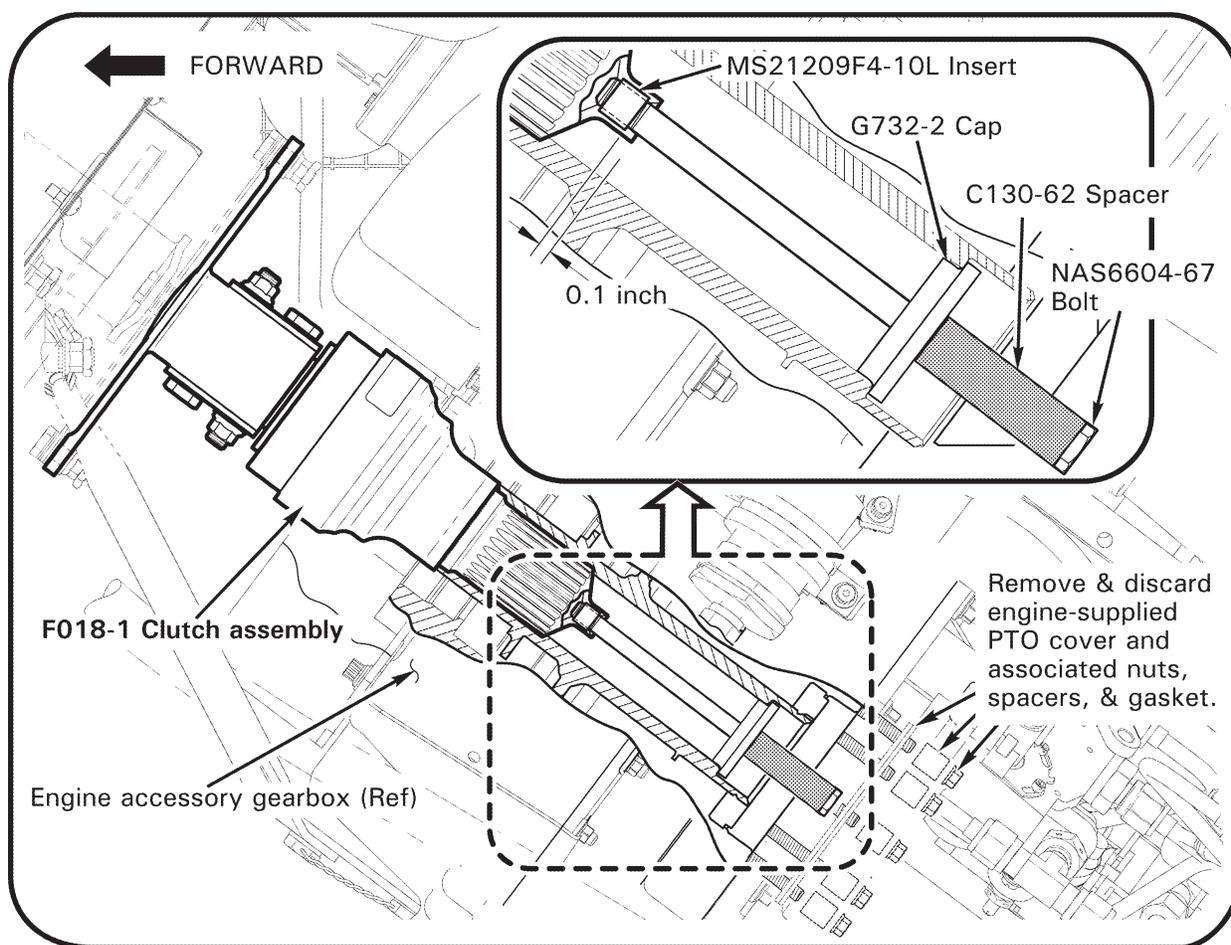


FIGURE 1

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