# R44-series Tailcone Aft Bulkhead Insert Replacement Kit Instructions

For use on C023 Tailcone Assembly S/N 3562 & subsequent.

#### NOTE

Visit <u>www.robinsonheli.com</u> to verify kit instructions are current revision. Review instructions before installation; contact RHC Technical Support with questions. Verify kit contents match list; contact RHC Customer Service if parts are missing or damaged.

ITEM	PART NUMBER	KIT CONTENTS	QTY
1	KI-246-1Instr.	Kit Instructions	1
2	MT248-1	Repair Kit – C148 Bulkhead Thread. Includes: [1] MT248-2 Block [1] Installation Tool (McMaster-Carr P/N 93904A535, or equivalent) [3] Cap Screw (5/16-18x1 1/4-inch hex socket head) [1] Drill Bit (29/64-inch diameter) [1] Drill Bushing – 29/64-inch (P/N SF-48-12-29/64ID, or equivalent) [1] Drill Bushing – 33/64-inch (P/N SF-48-12-33/64ID, or equivalent) [1] Plug Tap – 1/2-13 UNC [1] MS27039C1-08 Screw	1
3	MS51831-103L	Insert	4
4	NAS1149F0532P	Washer	4
5	NAS1352-5-12P	Cap Screw	4

#### <u>Consumables</u>

Refer to R44 Maintenance Manual (MM) § 1.400 for approved materials list.

Cutting oil

#### Special Tools

- T-handle tap holder (or similar tool)
- Insert removal tool

#### Kit Instructions

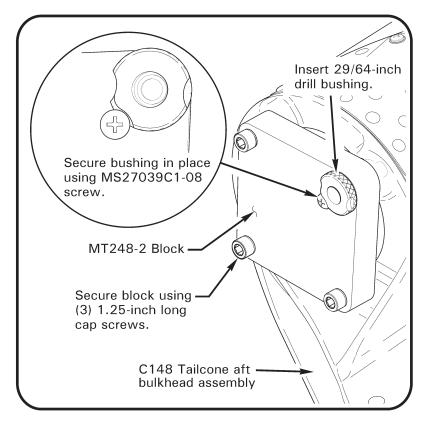
1. Remove tail rotor assembly per MM § 9.210 and tail rotor gearbox per MM § 7.410, if not previously removed.

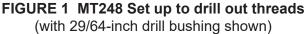
NOTE Kit contains four replacement inserts to be used as necessary. If multiple attach holes require repair, complete procedure on each hole separately.

2. Remove damaged insert, if necessary.

### Kit Instructions (continued)

- Refer to Figure 1. Position MT248-2 block on tailcone C148 aft bulkhead assembly with large diameter (bushing) hole over screw hole requiring repair. Secure block to aft bulkhead assembly using three 1¼-inch long cap screws. Insert 29/64-inch diameter drill bushing and secure to block using MS27039C1-08 screw. Drill out threads using 29/64-inch diameter drill bit.
- 4. Remove drill bushing and block. Create a 0.51-0.61-inch diameter, 82° to 100° countersink at newly drilled hole. Clean up debris.
- 5. Refer to Figure 2. Secure MT248-2 block to aft bulkhead as described in step 3. Install the 33/64-inch diameter drill bushing in block and secure with MS27039C1-08 screw. Tap new threads using 1/2-13 UNC plug tap and cutting oil. Clean up debris.
- Refer to Figure 3. Place MS51831-103L insert onto installation tool with locking keys in grooves of installation tool. Screw insert into newly-tapped hole until keys contact bulkhead Remove installation tool.





## Kit Instructions (continued)

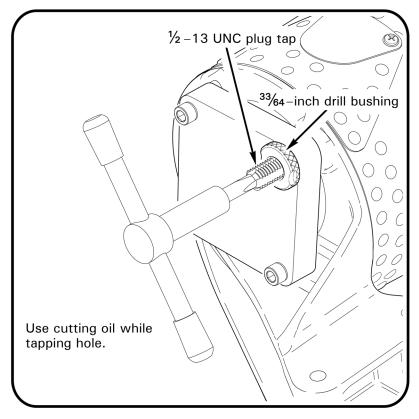


FIGURE 2 MT248 Set up to tap new threads (with 33/64 inch drill bushing shown)

- 7. Refer to Figures 4 & 5. Place opposite end of installation tool over locking keys. Drive keys with several hammer taps on end of installation tool until pin (in slot of installation tool) is forward, indicating locking keys are set. Remove tool and verify keys do not protrude above bulkhead aft surface. Clean up debris.
- 8. Repeat steps 2 thru 7 at remaining attach holes, as required.
- 9. Install C021 tail rotor gearbox per MM § 7.420 using (4) NAS1149F0532P washers & (4) NAS1352-5-12P bolts. Special torque per MM § 1.330.
- 10. Install tail rotor assembly per MM § 9.220.
- 11. Make appropriate maintenance record entries. Weight and Balance change is negligible.

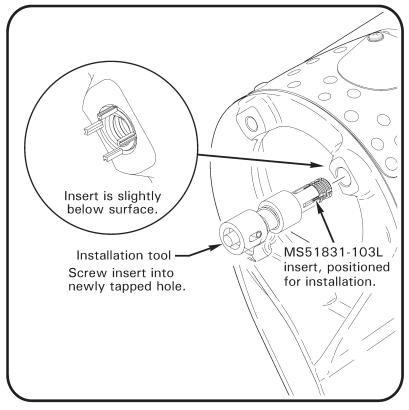


FIGURE 3 Insert installation

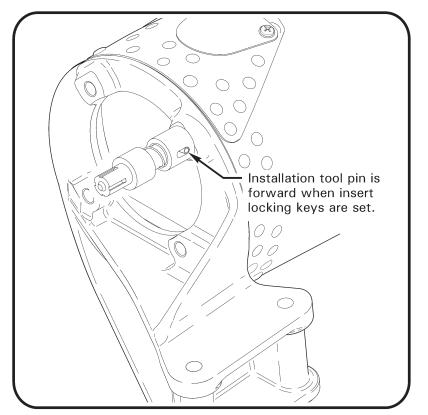


FIGURE 4 Insert locked in position

