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R22 SERVICE BULLETIN SB-116
(supersedes R22 SL-82B)

R44 SERVICE BULLETIN SB-103
(supersedes R44 SL-68B)

R66 SERVICE BULLETIN SB-36
(supersedes R66 SL-26B)

DATE: 02 December 2019

TO: R22-series, R44-series, & R66 Owners, Operators, & Maintenance Personnel

SUBJECT: Main Rotor Blade Tip Plate Permanent Removal & Sealant Application

EFFECTIVITY:

- A016-6 Revision AT, AU, & AV main rotor blade assemblies (R22)
- C016-7 Revision AH & AI main rotor blade assemblies (R44)
- F016-2 Revision H & I main rotor blade assemblies (R66)

Main rotor blade part number and Revision letter are on data plate on inboard lower skin.

TIME OF COMPLIANCE: At next 100-hour inspection or annual inspection, or by 01 March 2020, whichever occurs first.

BACKGROUND: This bulletin requires permanent removal of C155 tip plates from specified main rotor blades and application of polysulfide sealant for improved corrosion resistance.

COMPLIANCE PROCEDURE:

For each affected main rotor blade:

1. Refer to Figure 1. Position main rotor blade to allow tip access and apply rotor brake. Support blade in level (spanwise) position with cushioned stand.
2. Remove tip cover from blade. If tip plate has previously been removed, proceed to step 4.
3. Initiate separation of tip plate from spar using mallet and a razor blade; hold razor parallel to plate. Peel off plate by pulling with pliers. If tip plate is removed from only one of an installed pair of blades, weigh removed tip plate and add equal amount balance weight to tip.

(OVER)

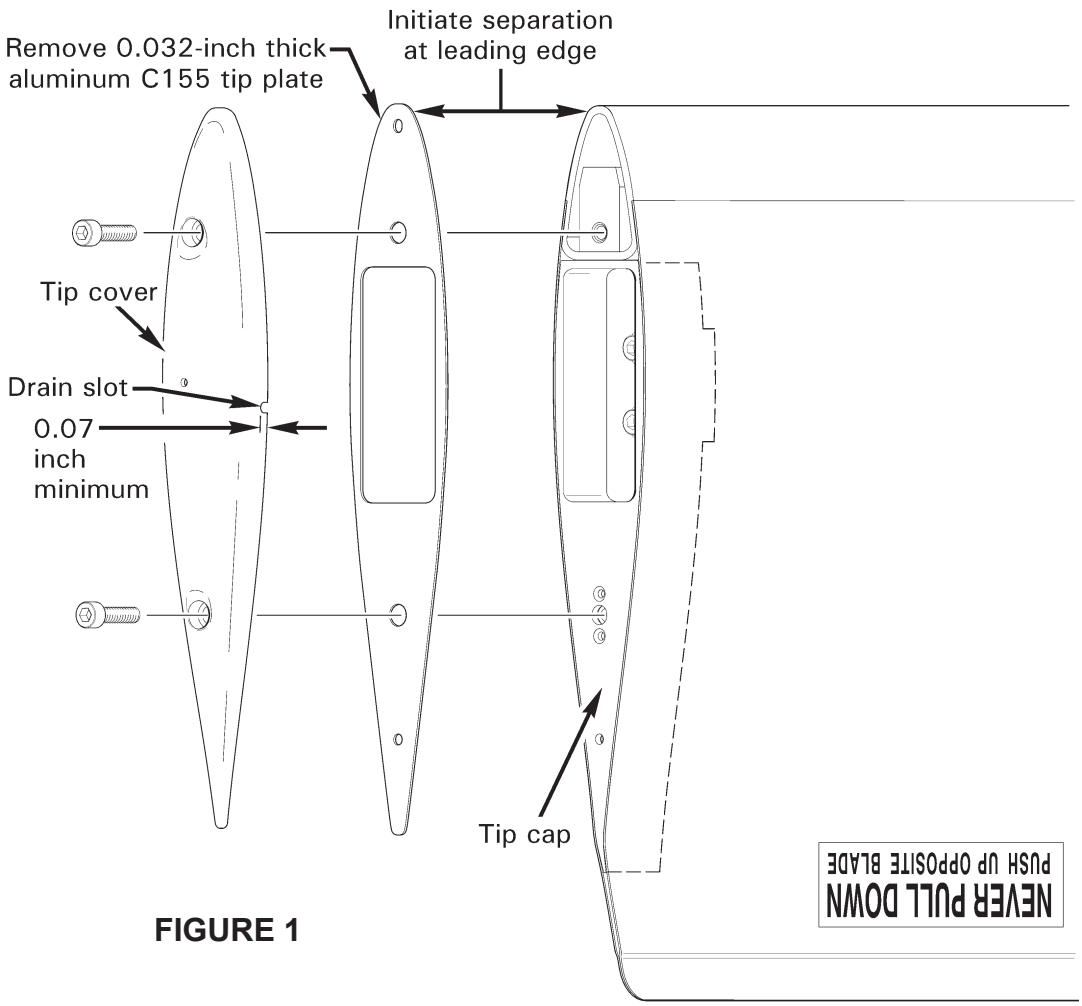

FIGURE 1

CAUTION

Do NOT use power tools or chemical paint strippers to remove blade paint.

4. Using a hard, flat block with 220-grit aluminum-oxide abrasive paper, hand-sand blade tip vertical surface in a chordwise direction to expose bare metal of tip cap and outboard edges of skins. Clean up debris.

5. Using 10X magnification, visually inspect blade tip for corrosion.

6. Remove any corrosion from tip cap and outboard edges of blade skins by hand-sanding vertical surface in a chordwise direction; use a hard, flat block with 220-grit aluminum-oxide abrasive paper. Remove only material necessary to eliminate corrosion.

7. Remove any corrosion from upper and lower surface of blade skins per current revision R22 SL-83 / R44 SL-70 / R66 SL-30.

WARNING

Review appropriate Safety Data Sheet (SDS) when working in proximity to hazardous materials. Specific recommendations for use of personal protective equipment are located in the SDS.

8. Clean bare metal area with lint-free cloth dampened with acetone.
9. Refer to Figure 2. Apply thin, even layer of B270-1 sealant (polysulfide, ref MM approved sealants) as shown. Allow to cure.

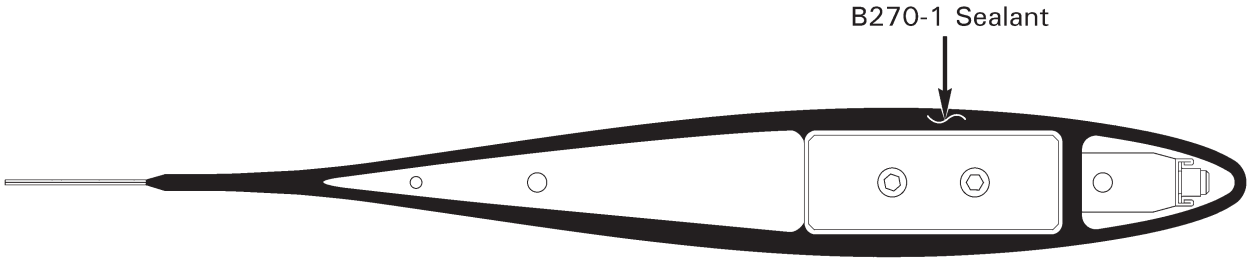

FIGURE 2

10. Refer to Figure 1. Visually inspect tip cover for corrosion. Remove any corrosion from tip cover clamping surface, and maintain surface flatness, by hand-sanding tip cover on 220-grit aluminum-oxide abrasive paper on a flat plate. Minimum allowable height of cover's drain slot after rework is 0.07 inch. Clean bare metal area with acetone, prime with two coats of epoxy primer (chromated epoxy preferred), and allow to cure.
11. On blade tip, prime bare metal with two coats of epoxy primer (chromated epoxy preferred), and allow to cure.
12. Install tip cover and special torque screws to 40 inch-pounds wet with A257-9 anti-seize.
13. Apply topcoat to blade tip and tip cover within 2–48 hours of primer application. For best performance, allow topcoat to cure 48 hours before flight.
14. Make appropriate maintenance record entries.

APPROXIMATE COST:

Parts: None.

Labor: 3.0 man-hours per installed pair of main rotor blades.