

R66 SERVICE BULLETIN SB-04

DATE: 29 May 2012

TO: R66 owners, operators, and maintenance personnel

SUBJECT: Oil Cooling Fan Inlet Clearance

ROTORCRAFT AFFECTED: R66 helicopters S/N 0004 thru 0061, 0063 thru 0074, 0076 thru 0080, 0082 thru 0096, 0098, 0100, 0102 thru 0107, 0110, 0111, 0113, 0115, 0117, and 0121.

TIME OF COMPLIANCE: By 31 July 2012.

BACKGROUND: RHC received an engine cooling fanwheel that separated from the fan shaft during flight. The fanwheel's ring plates were worn due to rubbing against the scroll inlets. This bulletin requires trimming inlets as necessary to ensure a sufficient fanwheel-to-inlet gap.

COMPLIANCE PROCEDURE:

1. Remove tailcone cowling per R66 Maintenance Manual (MM) § 53-23.
2. Refer to Figure 1. Verify 0.10 inch minimum gap between G174-1 fanwheel assembly and forward and aft F305-5 inlets. Check gap all the way around; rotate fanwheel and check gap again (several positions). If gap is within limits at forward and aft inlets, proceed to step 7.
3. Remove hardware securing inlet(s) to F236-1 scroll assembly. If inlets are slotted, carefully twist inlets over F196-1 fan shaft to remove them. If inlets are not slotted, cut slot in inlets using tin snips per Figure 1 (it is not necessary to disconnect drive train). Straighten part as required. Chamfer slot corners near radius as shown.
4. Refer to MM § 20-70. Trim inlets as necessary to meet minimum fanwheel-to-inlet gap. Smooth inlet edges, deburr new slot edges, and coat bare metal with primer. Touch-up primed area using dark gray polyurethane enamel in accordance with paint manufacturer's recommendations.
5. Carefully twist inlets over fan shaft (slot orientation after installation is not critical). Install hardware securing inlets to scroll. Verify security.
6. Measure fanwheel-to-inlet gap per step 2. Repeat procedure as required for minimum 0.10 inch gap at forward and aft inlets.
7. Install tailcone cowling per MM § 53-23.
8. Make appropriate maintenance record entries.

(OVER)

Approximate Cost:

Parts: None. Consumables include approved primer and dark gray polyurethane enamel (refer to MM § 20-70).

Labor: 2 man-hours, if trimming inlets is necessary.

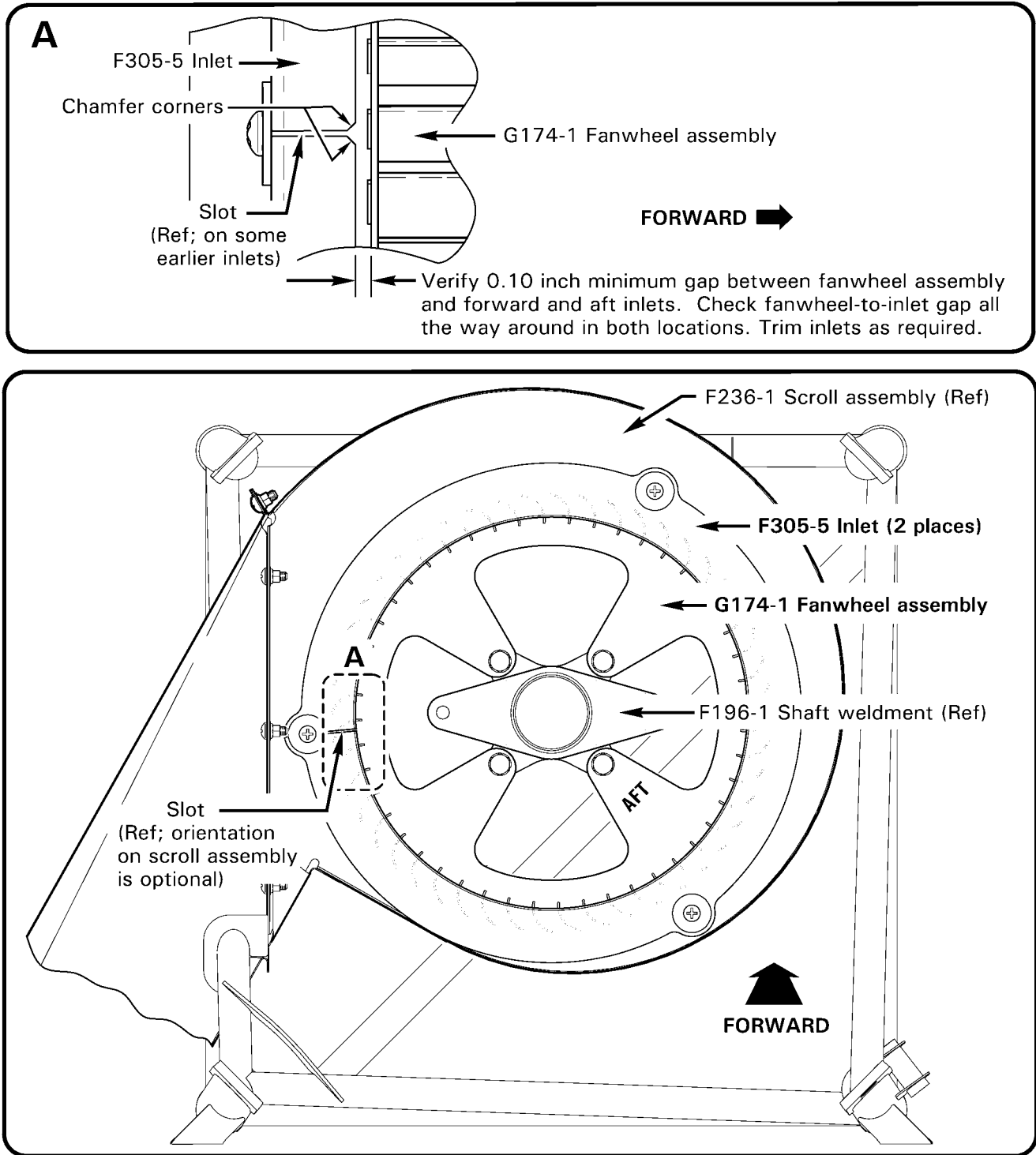


FIGURE 1

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