

# SERVICE LETTER s

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**EFFECTIVE DATE:** This Service Letter is effective March 13, 2014.

- SUBJECT: Winterization Kit Installation
- MODELS AFFECTED: CC18-0001 AND ON

**COMPLIANCE TIME:** No required compliance time.

**PURPOSE:** This Service Letter provides instructions to install covers restricting airflow to the engine in order to increase engine oil temperatures when operating in colder climates.

PARTS LIST:

| PART NUMBER | DESCRIPTION                          | QTY |
|-------------|--------------------------------------|-----|
| TC5023-001  | COWL INLET PLATE ASSEMBLY, LH        | 1   |
| TC5023-002  | COWL INLET PLATE ASSEMBLY, RH        | 1   |
| TC5021-001  | WINTERIZATION KIT, PLATE, OIL COOLER | 1   |
| 101889-01   | FLANGE, SCAT TUBE                    | 1   |
| TC9361-001  | PLACARD, WINTERIZATION KIT           | 1   |
| MS21059L06  | NUTPLATE                             | 12  |
| MS20426A3-4 | RIVET, COUNTERSUNK                   | 24  |
| AN363-632   | LOCK NUT                             | 4   |
| AN526C632R6 | TRUSS HEAD SCREW                     | 12  |
| AN526C632R7 | TRUSS HEAD SCREW                     | 4   |
| AN737TW74   | HOSE CLAMP                           | 2   |
| AN960-6L    | WASHER                               | 4   |
| RM0006-001  | 2" SCAT DUCTING                      | 8"  |
| RM1072-001  | ANTI-CHAFE TAPE                      | 42" |

Please verify all of the parts listed are included with this Service Letter.

#### **INSTRUCTIONS:**

This kit may be installed when temperatures are below 40°F. It must be removed when the aircraft is operated above 40°F.

FIRST TIME INSTALLATION:

- 1. Remove the top engine cowl, and remove the four bolts and hardware attaching the oil cooler to the engine baffles in accordance with Aircraft Maintenance Manual (TC10000AMM).
- **2.** Remove attachment bolts and support oil cooler. Do not disconnect oil lines.
- **3.** Install oil cooler plate (TC5021-001) in front of baffle, aligned with the four bolt holes (see Figure 1) and oriented with the flat edge down. This should leave the opening at the top. Reinstall the oil cooler and securely fasten with previous hardware in accordance with

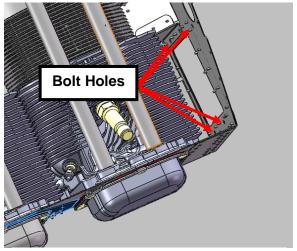


FIGURE 1 - Oil Cooler Attach Points



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AC43.13-1B.

- **4.** Verify that 1.00"±.13 of the oil cooler is still exposed. Trim plate as needed to achieve this.
- 5. Set SCAT Tube Flange on top of forward left baffle and align with cabin heat air inlet. ¼" holes in the flange are to lie over the existing rivets. (Figure 3)
- **6.** Using the (4) Ø.098 predrilled pilot holes in the SCAT Tube Flange, matchdrill (4) Ø.140 holes through the SCAT Tube Flange, Baffle and underlying Flange.
- **7.** Install SCAT Tube Flange with AN526C632R7 screws on top, and AN960-6L washers and AN363-632 lock nuts on underside of baffle, in accordance with AC43.13-1B.
- 8. Clamp end of SCAT Tube to Flange with AN737TW74 Hose Clamp. (Figure 3)
- **9.** Align the cowl plates (TC5023-001 left, -002 right) to the cowl inlets so the flanges are located at the top of the cowl inlets.
- 10. Using the predrilled holes in the cowl plates, mark and predrill the holes in the cowl inlets for the nutplates and rivets (Figure 4).
- **11.** Install six (6) nutplates (MS21059L06) per side with the provided rivets (MS20426A3-4) in accordance with AC43.13-1B.
- **12.** Install anti-chafe tape onto the exterior of the cowling to prevent plate from rubbing.
- **13.** Install the cowl plates with the provided screws (AN526C632R6) in accordance with AC43.13-1B, ensuring the flat side of the cowl plates faces forward and the flange is at the top.
- **14.** Install loose end of SCAT on Flange of left Cowl Plate (TC5023-001) with AN737TW74 Hose Clamp.
- **15.** Reinstall top engine cowl per the Aircraft Maintenance Manual (TC10000AMM).
- **16.** Verify that there is a  $2.75^{\circ} \pm .13$  gap from the top of the plates to the top of the cowl inlets.
- **17.** Install placard on instrument panel to be in view of the pilot. See Figure 5 below for placement example.
- Make a logbook entry stating that provisions for winterization kit and winterization kit were installed per Service Letter SL0003.

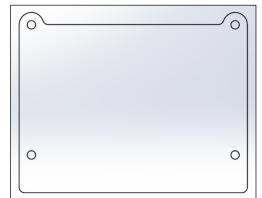


FIGURE 2 - TC5021-001 Oil Cooler Plate

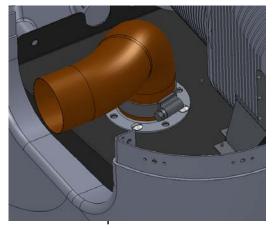


FIGURE 3 – SCAT Tube Flange Installation

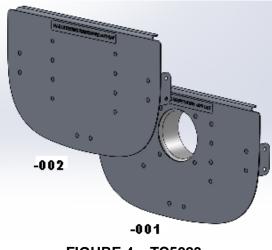


FIGURE 4 – TC5023 Cowl Plate



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### CAUTION

Winterization kit to be removed when ambient temperature exceeds 40°F.

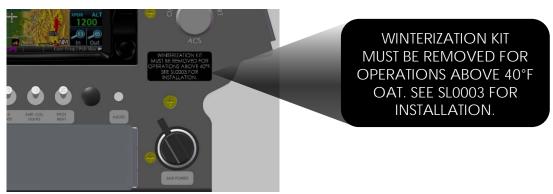


FIGURE 5 – TC9361-001, Winterization Kit Placard



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REMOVAL AND SUBSEQUENT INSTALLATION:

The oil cooler plate, both cowl plates, and SCAT tube flange must be removed for operations above 40°F OAT. Refer to TC10000AMM chapter 71-10 section 1.2. Make note in log book stating that winterization kit was removed. For subsequent installation also refer to TC10000AMM chapter 71-10 section 1.2. Make note in log book that winterization kit was installed.