### MODEL C6LC-S OIL FILTER ADAPTER

Model C6LC-S oil filter adapters are approved for use on the following Continental engines:

**O-470 Series** 

**IO-470 Series (Sand Cast Crankcase)** 

**IO-520 Series (Sand Cast Crankcase)** 

**IO-550 Series (Sand Cast Crankcase)** 

**TSIO-520 Series (Sand Cast Crankcase)** 





### **RECORD OF REVISIONS**

Revision	Revision Date	Description of Revision	
	04/06/2017	Initial Release	
1	02/21/2020	Copper Gaskets	
2	06/01/2022	ST07 Lower Gasket	

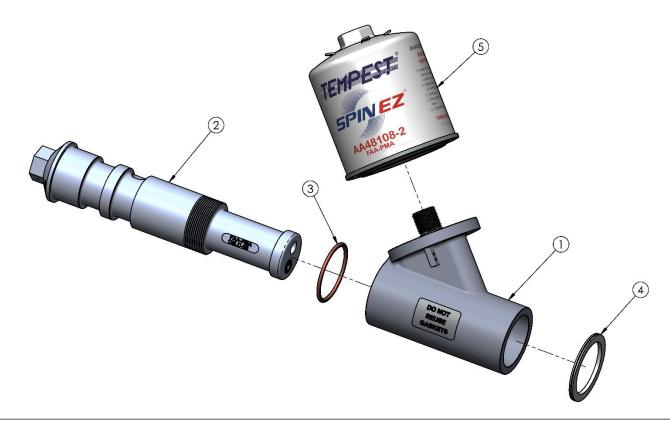


# MODEL C6LC-S INSTALLATION INSTRUCTIONS

1. Verify that the following parts are included in your oil filter adapter kit:

<b>ITEM</b>	<b>DESCRIPTION</b>	<b>PART NUMBER</b>	<b>QUANTITY</b>
1	Sleeve	C6LC-2S	1
2	Spool	C6LC-3S	1
3	Copper Gasket	AN900-28	1
4	Lower Gasket	ST07	1
5	TEMPEST® Oil Filter	AA48108-2*	1
6	STC	SE09356SC	1

<sup>\*</sup>Standard with kit. See page 8 for other acceptable filters.



Note: It is acceptable to use a Copper Crush Gasket in place of Lower Gasket ST07.



- 2. Remove the starter from the engine. Remove any other items that will obstruct access to the work area. (Remove and replace parts in accordance with the engine/airframe manufacturers' instructions.
- 3. Remove the oil screen. Thoroughly clean the threads of the oil pump housing, see Figure 1. (You may need to dip or siphon excess oil from the oil pump housing to facilitate cleaning the oil pump housing threads). Lubricate the threads with clean engine oil.
- 4. Lubricate the large diameters and under the flange of the spool with clean engine oil as shown in Figure 2.
- 5. Lubricate the inside diameter and top surface of the sleeve with clean engine oil as shown in Figure 3.
- 6. Lubricate the copper gasket with engine oil and install it onto the spool with the split side of the gasket turned away from the spool's flange, see Figure 4.
- 7. Slide the spool through the sleeve's bore and place the lower gasket on the spool, see Figure 5.



Figure 1 Figure 2



Figure 2 Figure 3





Figure 4

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- 8. Thread the spool into the oil pump housing by hand two to three turns, see Figure 6.
- 9. Using a socket as shown in Figure 7, tighten the spool just snug. Temporarily install an oil filter onto the filter mount flange. Position the filter so that at least 3/8-inch of clearance exists between the oil filter and other items in the engine compartment. (At this stage, the spool should be tightened only enough to keep the filter in the proper location with respect to clearance between it and surrounding items.)





Figure 6

Figure 7

- 10. Make a match-mark on the sleeve and oil pump housing, see Figure 8. Remove the filter, taking care not to move the adapter sleeve. Check the match-mark. If the match-marks are not aligned, move the sleeve so that they are aligned. If necessary, tighten the spool slightly, just enough to hold the sleeve in place with the match-marks aligned.
- 11. Fabricate a suitable wooden block as shown in Figure 9. The block will be used to prevent the sleeve from rotating as the spool is tightened. Because installations differ, the block may not look exactly like the exemplar block shown in Figure 9 & 10. However, it should fit snugly between the edge of the filter mount flange and an adjacent structurally sound part of the engine or airframe that is able to resist the turning forces encountered without being damaged when the spool is tightened.



12. Place the wooden block between the filter mount flange and a suitable point of resistance on the engine or airframe such that the sleeve will not rotate around the spool when the spool is tightened, see Figure 10.







Figure 8

Figure 9

Figure 10

### Use of a torque wrench is mandatory per the ICA.

Using a torque wrench, tighten the spool to 65-foot pounds of torque.

- 13. Check the match-marks. If they are displaced more than 1/32 inch, remove the spool and reinstall it in accordance with paragraphs 4 thru 10 using two new gaskets.
- 14. When the spool is tightened to 65 foot-pounds of torque and the matchmarks are aligned within limits, remove the wooden wedge.

Safety-wire the:

- a. spool to the engine (Figure 11) and;
- b. the sleeve to the engine (Figure 12).

Note: Wrap the safety-wire around the spool and sleeve in such a manner that they cannot turn counterclockwise.

15. Install the oil filter in accordance with the filter manufacturer's instructions. Check that at least 3/8-inch of clearance exist between the oil filter & other parts in the engine compartment. Safety-wire the filter to one of the holes in the safety wire tab below the filter mount pad, see Figure 13.





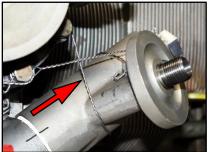




Figure 11

Figure 12

Figure 13

16. Apply Tamper Seal across the joint of the sleeve and oil pump housing as shown in Figure 14.



Figure 14

- 17. Reinstall the starter and any other items that were removed per the aircraft and/or engine manufacturers' maintenance instructions.
- 18. Check the engine oil level and replenish it if required. Start the engine and check for leaks around the oil filter and oil filter adapter. Run the engine for at least five minutes after normal engine oil operating temperature is achieved. Stop the engine and inspect the adapter installation for leaks. (The filter holds about a quart of oil. Thus, the engine oil level may be lower after the filter fills.) Check and adjust the engine oil level as necessary.
- 19. Make a detailed log-book entry referencing these installation instructions to memorialize the adapter installation and any other work accomplished contemporaneously with the oil filter adapter installation process.



## In addition to the description of work you provide in Section 8 on Form 337, you must include the following statement:

"A minimum of 3/8-inch clearance must be maintained between the oil filter and adjacent components. Make sure that adequate clearance exists on all sides of the filter to allow for the engine's movement in its mounts so that that no interference occurs with controls, cables, wires, or other items. If the oil filter adapter is loosened or removed from the engine for any reason, it must be reinstalled using new gaskets, tightened in accordance with these installation instructions, and properly safety-wired".

Spin-on oil filters approved for use on the applicable engines and air frames are approved for use with the Stratus oil filter adapters.

Oil Filter Adapter C6LC-S is typically used on the following aircraft:

Beechcraft Bonanza Beach Baron (Model 55) Beechcraft Debonair Bellanca Viking Cessna 180, 182, 185, 188

For additional information, please call 800-822-3200 or visit

### www.tempestplus.com

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#### REFERENCE STC SE09356SC

#### **Limited Warranty**

STRATUS warrants that this oil filter adapter is free from defects in material or workmanship for a period of 90 days from the date of the original purchase by the consumer when it is installed in compliance with the manufacturer's installation instructions and it is used for its intended purpose. In case of defects in material or workmanship, STRATUS's obligation is to repair or replace the product at STRATUS's sole discretion. STRATUS assumes no responsibility for incidental or consequential damages or damage due to improper installation, misuse of this product, or from failure to follow the engine manufacturer's recommendations regarding the care and operation of the engine.

