MODEL C6SC OIL FILTER ADAPTER

Model C6SC oil filter adapters are approved for the following Continental engines:

GO-300 Series IO-360 Series TSIO-360 Series





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	

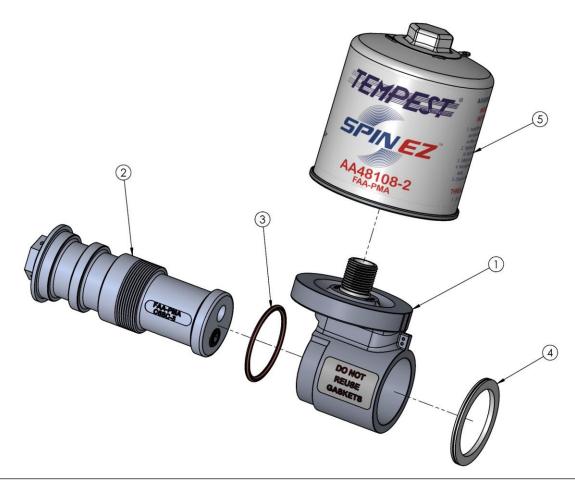


MODEL C6SC INSTALLATION INSTRUCTIONS

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

<u>ITEM</u>	DESCRIPTION	PART NUMBER	QUANTITY
1	Sleeve	C6SC-2	1
2	Spool	C6SC-3	1
3	Copper Gasket	AN900-28	1
4	Lower Gasket	ST07	1
5	TEMPEST® Oil Filter	AA48108-2*	1
6	STC	SE8409SW	1

^{*}Standard with kit. See page 9 for other acceptable filters.



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



Note: Illustrations (Figures) incorporated into this document are for the purpose of clarifying the written text instructions and are not intended to depict any specific aircraft or engine installation.

2. If applicable, remove the oil temperature probe and oil screen in accordance with the engine and/or airframe manufacturers' instructions. Clean the threads inside the oil screen housing. Apply clean engine oil to the oil screen housing threads, see Figure 1.

Note: It may be necessary to remove the alternator or generator in order to install the oil filter adapter on some aircraft such as the Cessna 336, 337, and 0-2 (Skymasters). If so, remove and reinstall the alternator, generator and any other parts removed to facilitate the installation of the oil filter adapter in accordance with the engine and/or airframe manufacturers' maintenance instructions.

- 3. Lubricate the large diameters and under the flange of the spool with clean engine oil as shown in Figure 2.
- 4. Lubricate the inside diameter and top surface of the sleeve with clean engine oil as shown in Figure 3.
- 5. 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.
- 6. Slide the spool through the sleeve's bore and place the lower gasket on the spool, see Figure 5.
- 7. Thread the spool into the oil screen housing two to three turns by hand, see Figure 6.



Figure 1

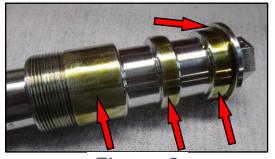


Figure 2



Figure 3







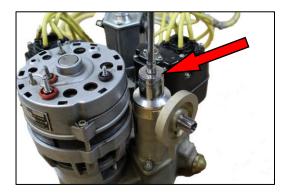


Figure 4

Figure 5

Figure 6

- 8. In general (see paragraph 9 for exceptions), using a socket as shown in Figure 7, tighten the spool snugly. 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 other adjacent items in the engine compartment.
- 9. For Cessna 336, 337 and 0-2 (Skymasters), the filter must be mounted horizontally. Orient the adapter sleeve so that the oil filter is positioned horizontally. Tighten the spool sufficiently to keep the sleeve and filter in their correct position.
- 10. Make a match-mark on the sleeve and oil screen housing, see Figure 8. Remove the filter, taking care not to move the adapter sleeve. Check the match-mark. If the marks are not aligned, move the sleeve so that the marks are aligned. If necessary, tighten the spool slightly, just enough to hold the sleeve in place with the match-marks aligned.





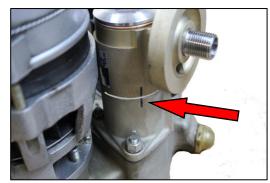
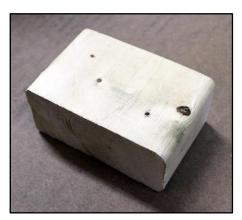


Figure 8



11. To prevent the sleeve from rotating when the spool is tightened, fabricate a suitable wooden block to insert between the filter adapter and a suitable point of resistance on the engine or airframe. Because installations differ, the block may not look exactly like the block shown in Figures 9 and 10. However, it should fit snugly between the sleeve 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.

As an alternative to using a block to prevent sleeve rotation, place ¾ inch I.D. washers on the threaded stud along with a ¾-16 nut. Use enough washers so that the nut completely covers the stud's threads when tightened as shown in Figure 11. Tighten the nut securely. Insert a close-fitting suitable steel rod such as an Allen wrench into the nut and stud. Use the rod to resist the sleeve from turning when it is final tightened. Warning: Do not use this method unless a nut and washers are installed as described and tightened securely on the stud. Without the washers and nut installed and tightened, the stud may be damaged.



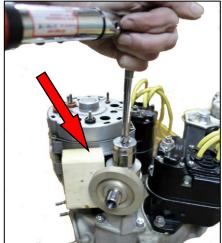




Figure 9

Figure 10

Figure 11

12. <u>Use of a torque wrench is mandatory per the ICA.</u> While preventing the sleeve from turning, use a torque wrench to tighten the spool to 65-foot pounds of torque.



- 13. Check the match-marks. If the marks are displaced more than 1/32 inch, remove the adapter, and reinstall it using two new copper gaskets in accordance with paragraphs 3 thru 10.
- 14. When the spool is tightened to 65 foot-pounds of torque and the match marks are aligned within limits, apply Tamper Seal across the joint between the sleeve and the oil screen housing. Then:
 - a. Safety-wire the spool to a suitable location on the engine. Wrap the safety-wire around the spool/sleeve in such a manner that the spool cannot turn counterclockwise (loosening), see Figure 12, and;
 - b. Safety-wire the sleeve to a suitable location on the engine. Wrap the safety-wire around the sleeve below the filter mount flange and secure the wire to the engine in such a manner that the sleeve cannot rotate counterclockwise (loosening), see Figure 13.

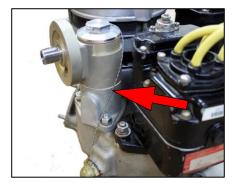


Figure 12



Figure 13

15. Install the oil filter in accordance with the filter manufacturer's instructions. Check that at least 3/8-inch of clearance exists between the oil filter and other parts in the engine compartment. Safety-wire the filter to a hole in the safety wire tab below the filter mount pad on the adapter, see Figure 14.



16. Apply Tamper Seal across the joint of the sleeve and oil pump housing as shown in Figure 15.



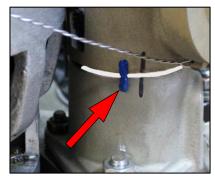


Figure 14

Figure 15

- 17. If applicable, reinstall the oil temperature probe and any other engine and/or airframe parts removed to facilitate the installation of the oil filter adapter in accordance with the engine and/or airframe 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 and operating temperature is achieved. Stop the engine. (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 oil filter 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 re-installed using new gaskets, tightened in accordance with these installation instructions, and properly safety-wired".



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

Oil Filter Adapter C6SC is typically used on the following aircraft:

Cessna 172 Hawk XP, 175, 336 & 337 Maule Mooney M20-K

Piper Seneca II
Piper Turbo Arrow III & IV

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

www.tempestplus.com

Stratus Tools Technologies, LLC 2208 Air Park Drive Burlington, NC 27215

REFERENCE STC SE8409SW

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.

