

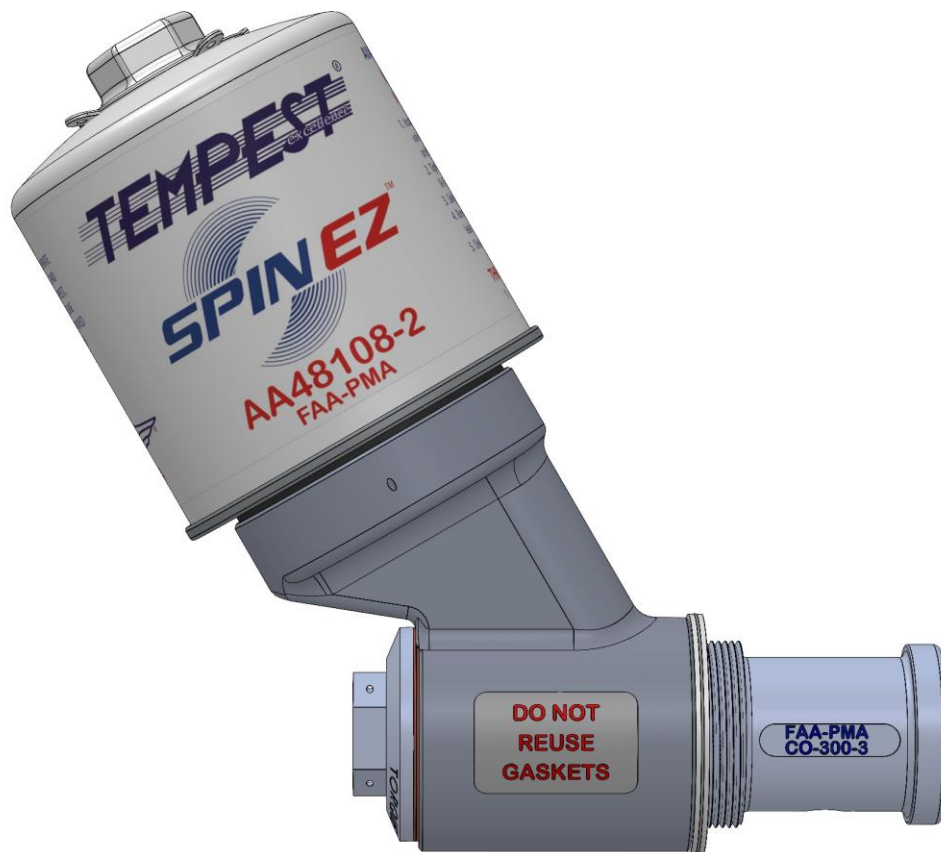
MODEL CO-300 OIL FILTER ADAPTER

Model CO-300 oil filter adapters are approved for use on the following
Continental engines:

C-125 Series

C-145 Series

O-300 Series



RECORD OF REVISIONS

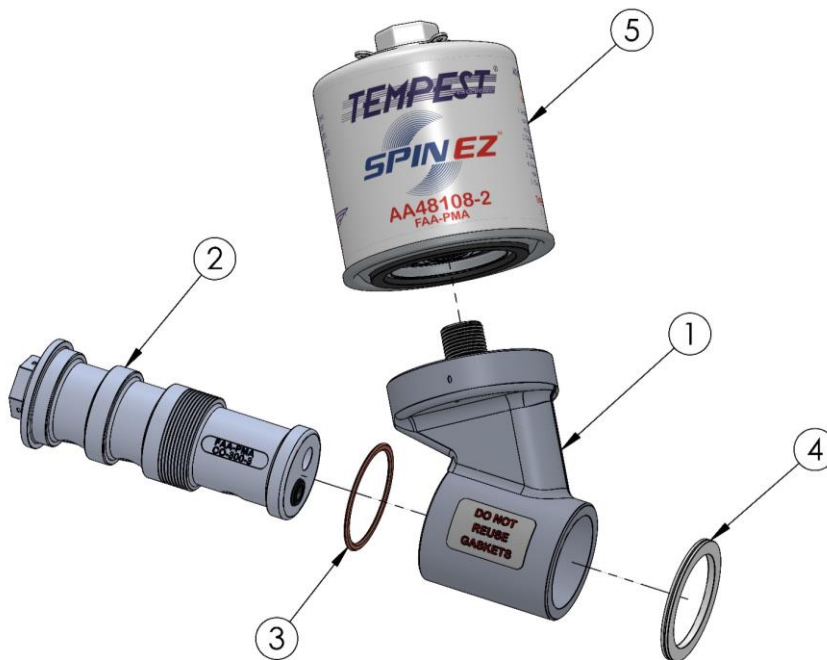
Revision	Revision Date	Description of Revision
---	04/06/2017	Initial Release
1	02/21/2020	Copper Gaskets
2	06/01/2022	ST07 Lower Gasket

MODEL CO-300 INSTALLATION INSTRUCTIONS

1. Verify the following parts are included with your oil filter adapter kit.

<u>ITEM</u>	<u>DESCRIPTION</u>	<u>PART NUMBER</u>	<u>QUANTITY</u>
1	Sleeve	CO-300-2	1
2	Spool	CO-300-3	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 8 for other acceptable filters.



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

NOTE: If your adapter does not arrive from the factory predrilled with safety wire holes in the edge of the filter mount flange, drill safety wire holes in accordance with the instructions in paragraph 14 prior to installing the adapter.

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, oil screen, and any other airframe or engine parts necessary to gain access to the work area in accordance with the engine and/or airframe manufacturers' instructions. Clean the threads inside the oil screen housing and lubricate them with clean engine oil, see Figure 1.
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. Thread the spool into the oil screen housing two to three turns by hand.
7. Using a socket as shown in Figure 6, tighten the spool snugly. Temporarily install an oil filter onto the filter mount flange. Position the filter so that at least 1/2-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 its surrounding items.

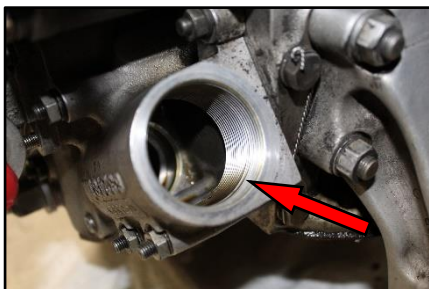


Figure 1

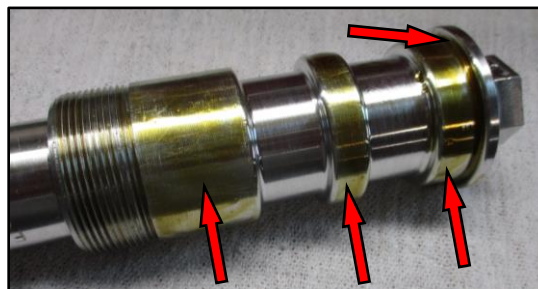


Figure 2



Figure 3



Figure 4

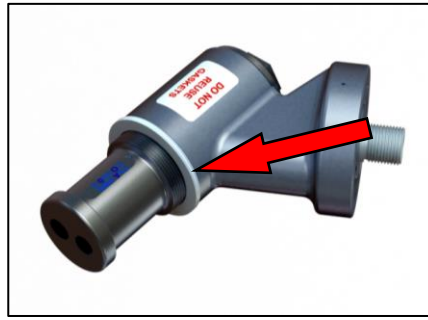


Figure 5



Figure 6

8. Make a match-mark on the sleeve and oil screen housing, see Figure 7. 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 marks aligned.

9. To prevent the sleeve from turning when the spool is tightened, fabricate a suitable wooden block to insert between the filter adapter and a point of resistance on the engine or airframe or, use a 1 ¼ inch open end wrench on the sleeve just below the filter mount flange as shown in Figure 8 to prevent the sleeve from rotating while tightening the filter adapter to its final torque. Because installations differ, the block you need may not look exactly like the exemplar block shown in Figures 9 & 10. However, if a block is used, it should fit snugly between the edge of the filter mount flange and an adjacent structurally sound part of the engine or airframe that can resist the forces encountered without being damaged when the spool is tightened. If a wrench is used, it may need to be bent to fit your installation.

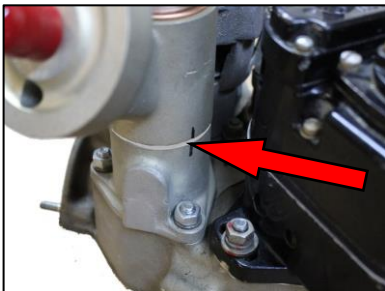


Figure 7

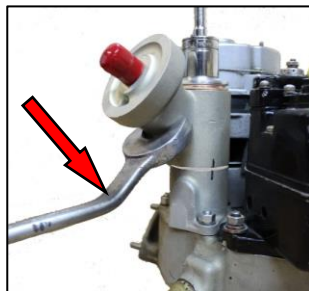


Figure 8

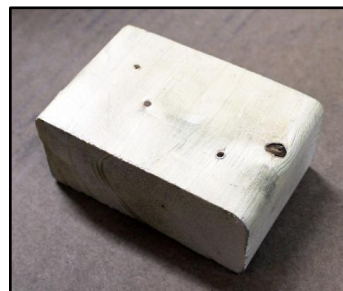


Figure 9

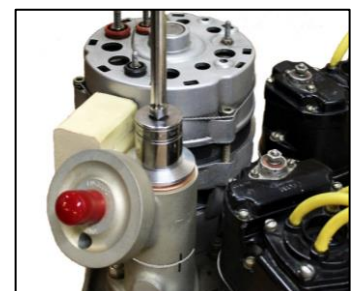


Figure 10

10. **Use of a torque wrench is mandatory per the ICA.** Regardless of the method chosen, prevent the sleeve from rotating and, using a torque wrench, tighten the spool to 65-foot pounds of torque.
11. Check the match-mark. If the marks are displaced more than 1/32 inch, remove the adapter and reinstall it using two new gaskets in accordance with paragraphs 3 thru 10.
12. 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 (loosen), see Figure 11, and;
 - b) safety-wire the sleeve to a suitable location on the engine. Wrap the safety-wire around the sleeve in such a manner that the sleeve cannot rotate counterclockwise (loosening), see Figure 12.



Figure 11

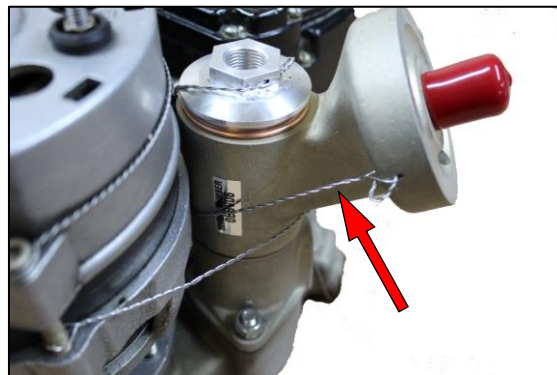
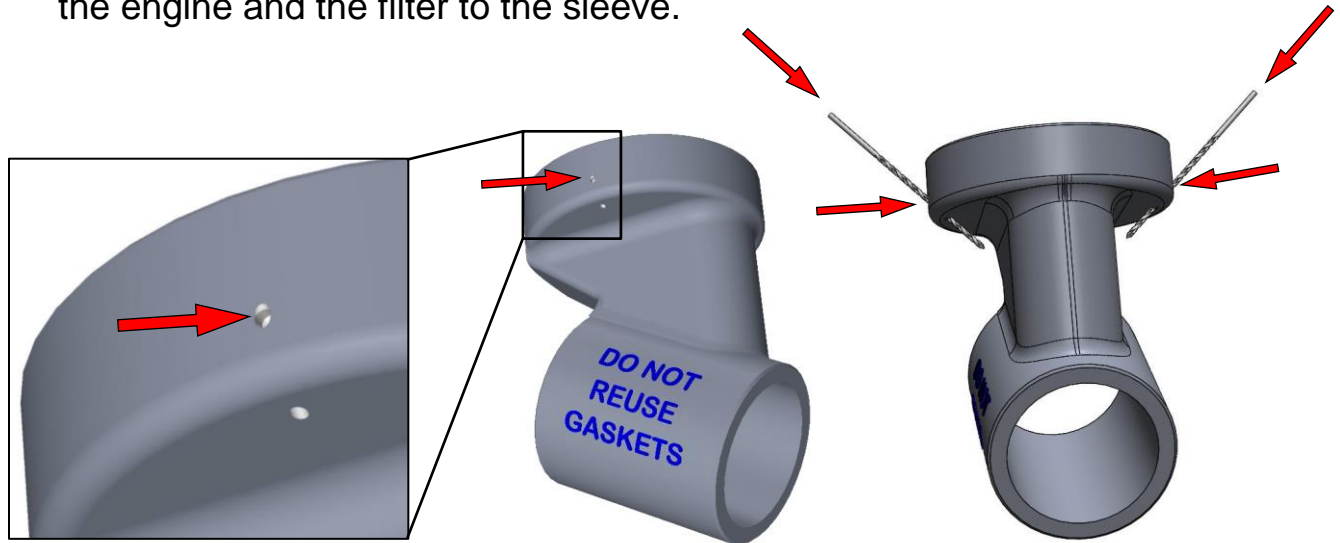


Figure 12

13. Install the oil filter in accordance with the filter manufacturer's instructions. Check that at least 1/2-inch of clearance exists between the oil filter and other parts in the engine compartment. Safety-wire the filter to a safety-wire hole in the edge of the sleeve's filter mount flange.

14. If your sleeve is not drilled for safety wire through the filter mount flange: Make a starting dimple using a center punch at the two locations shown in Figure 13. Using a 1/16 inch diameter drill bit, drill straight into the flange 1/16 inch deep. Then, holding the drill at an angle of 45 degrees to the flange, drill through the flange in both places in the locations. Use these holes for safety wiring the sleeve to the engine and the filter to the sleeve.



Enlarged Detail

Figure 13

15. If applicable, install the oil temperature probe and connect the wires per the aircraft and/or engine manufacturers' maintenance instructions. If blast air was provided to the oil screen, the blast air tube may need to be modified to provide blast air to the oil filter adapter. Extend, reposition, and/or modify the blast air tube as needed.
16. If any other airframe or engine parts were removed to facilitate the installation of the adapter, reinstall them in accordance with the airframe and/or engine manufacturers' maintenance instructions.
17. 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.

18. 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 1/2-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 airframe are approved for use with the Stratus oil filter adapters.

Oil Filter Adapter CO-300 is typically used on the following aircraft:

**Beechcraft Bonanza
Beechcraft Debonair
Cessna 170, 172**

**Globe Swift
Maule**

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.