

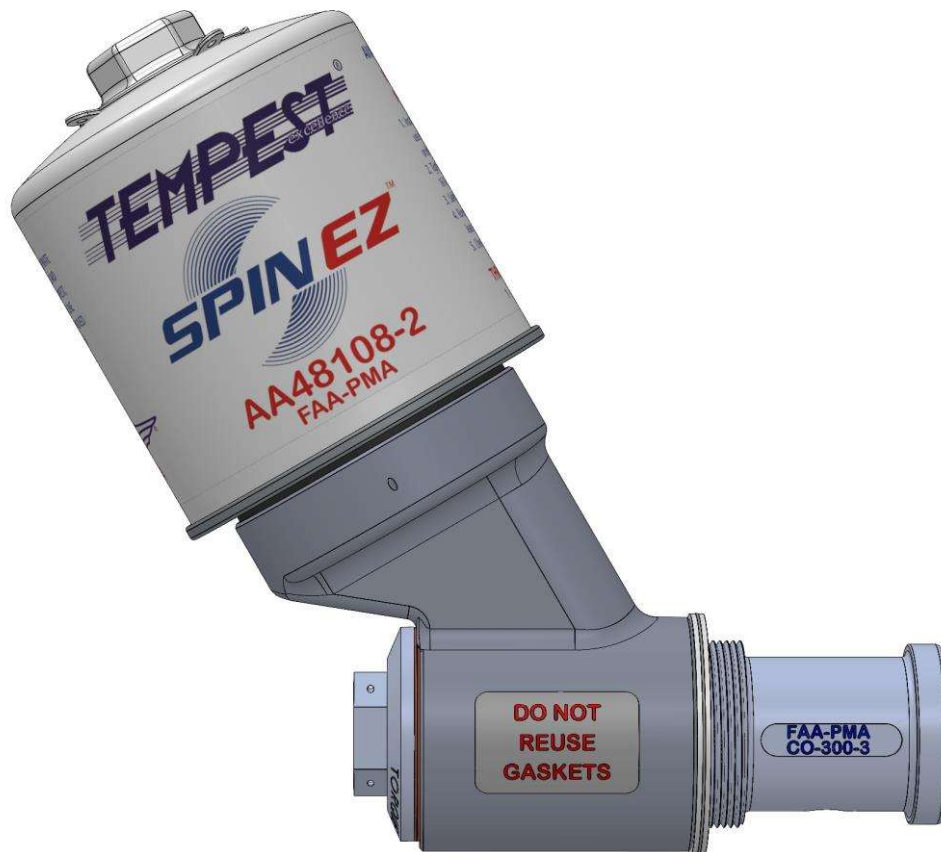
MODEL CO-300 OIL FILTER ADAPTER

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

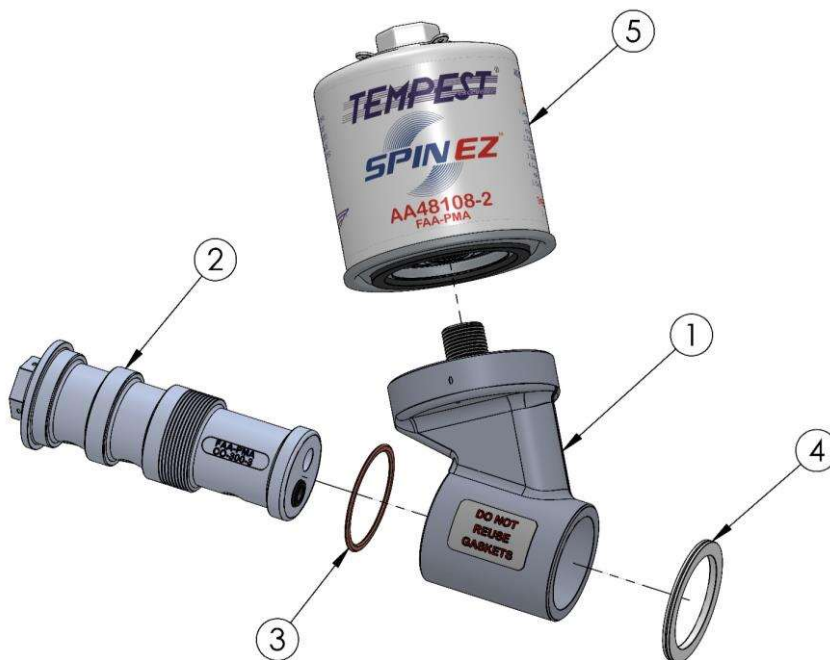
Revision	Revision Date	Description of Revision
---	04/06/2017	Initial Release
1	02/21/2020	Copper Gaskets
2	06/01/2022	ST07 Lower Gasket

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

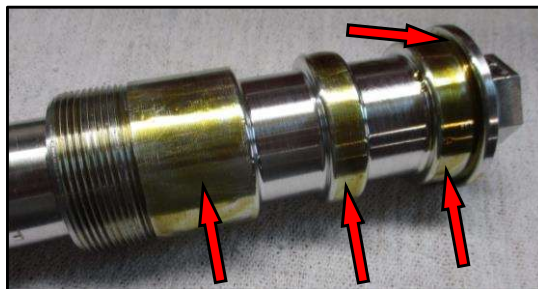


Figure 2



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.

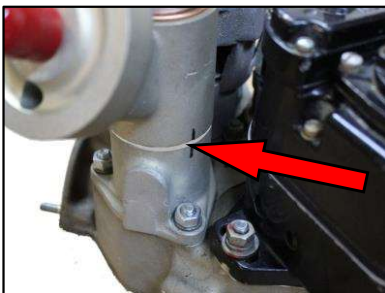


Figure 7

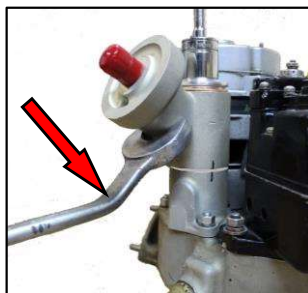


Figure 8

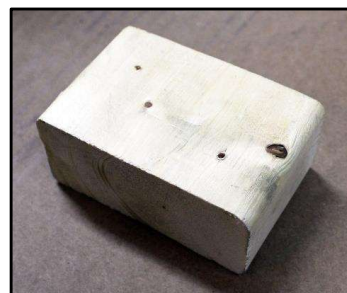


Figure 9



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

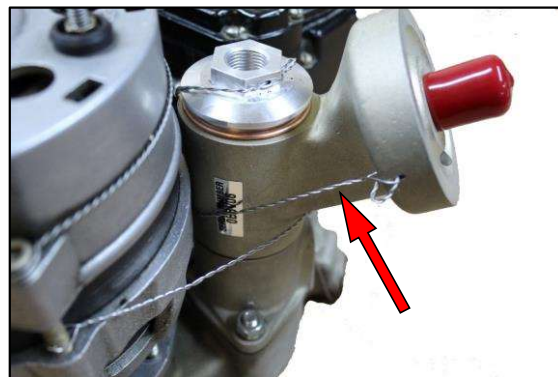
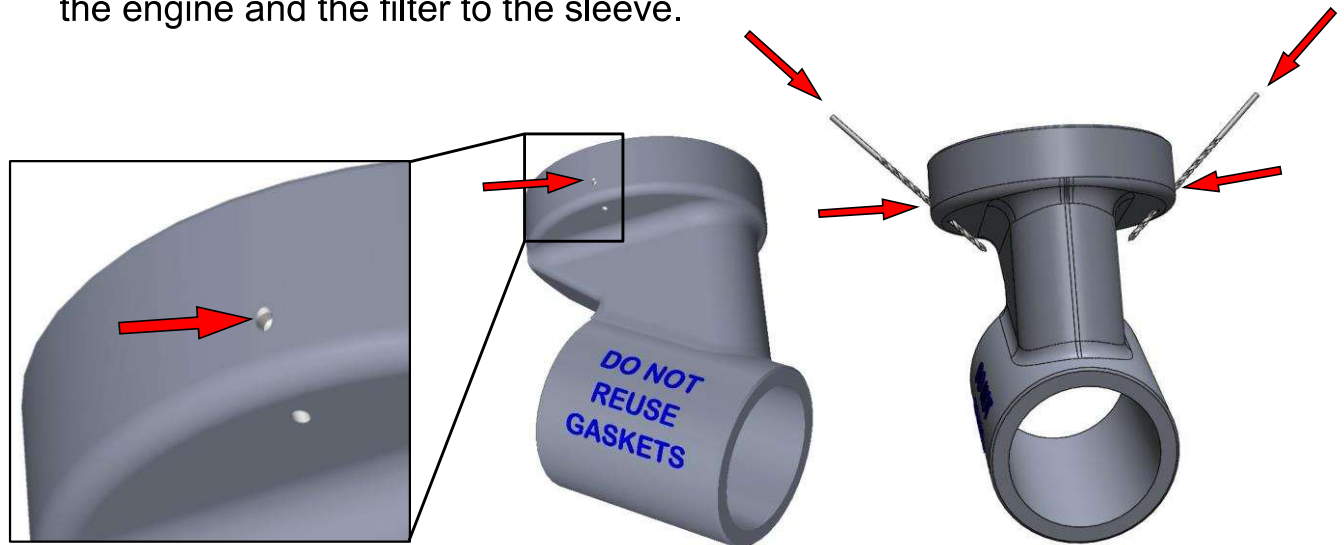


Figure 12

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.

Stratus Tool Technologies, LLC
OIL FILTER ADAPTER

P/N'S

C6LC-L, C6LC-S, C6SC
C6LC-11/15, CO-300, TAF

**INSTRUCTIONS
FOR
CONTINUED AIRWORTHINESS**



C6LC-L



C6LC-S



C6SC



C6LC-11/15



CO-300



TAF-Long



RECORD OF REVISIONS

Revision	Revision Date	Description of Revision
-	04/06/2017	Initial release
A	08/02/2017	Added text, Drawings, and Table
B	03/05/2020	All pages. Incorporated Copper Gaskets
C	05/25/2022	All pages. Lower Copper Gasket replaced with ST07 Lower Gasket

List of Effective Pages

Revision	Revision Date	Description of revision
-	04/06/2017	Initial release
A	08/02/2017	ALL PAGES, Added text, Drawings, and table
B	03/05/2020	Revised Pages 2 through 6 to incorporate Copper Gaskets.
C	05/25/2022	Revised Pages 2 through 6 to incorporate ST07 Lower Gaskets.



Instructions for Continued Airworthiness

1. DESCRIPTION

This modification removes the oil screen and replaces it with an oil filter adapter.

2. CONTROL, OPERATION INFORMATION / SPECIAL PROCEDURES

Refer to Table 1 on page 6 for applicable installation instructions.

3. SERVICING INFORMATION

The applicable installation instructions contain the information necessary to perform maintenance. Stratus Service Bulletins also contains information relative to properly inspecting and installing F&M and Stratus oil filter adapters.

4. MAINTENANCE INSTRUCTIONS

At each oil change and each 100 hour or annual inspection:

- a) Reference page 5 for identification of “C” style and “TAF” style adapters: Inspect the oil filter adapter for oil seepage. If oil seepage is detected, replace both gaskets with new gaskets. If a fiber gasket is encountered, DO NOT reuse it. Do NOT install a fiber FM07 gasket in any F&M or Stratus oil filter adapter. Reinstall the adapter in accordance with the applicable Stratus Tool Technologies LLC Installation Instructions.
- b) Use of a torque wrench is mandatory when installing or reinstalling an oil filter adapter. Safety-wire the spool and the sleeve as shown in the applicable installation instructions to appropriate locations on the engine accessory case. Run the engine and check for oil leaks.
- c) Check the safety-wire for proper installation and security. Do not safety-wire the transfer spool to the sleeve of the adapter or to the airframe. The transfer spool and sleeve must be safety-wired to appropriate safety-wire locations on the engine accessory case.
- d) Verify that the sleeve will not rotate around the oil transfer spool when 10 to 20 pounds of force is applied to an oil filter mounted on the adapter in a manner that would tend to rotate the sleeve around the spool. If the sleeve rotates around the spool, remove the safety-wire, disassemble the adapter, and replace both gaskets with new gaskets. Tighten the adapter in accordance with the applicable Stratus Tool Technologies, LLC Installation Instructions. Safety-wire the transfer spool and sleeve to appropriate safety-wire locations on the engine accessory case. Safety-wire the oil filter to a safety-wire hole on the adapter. Install and tighten the oil filter in accordance with the oil filter manufacturer's instructions. Run the engine and check for oil leaks.



- e) For TAF style adapters: Ensure that the mounting hardware is securely tightened to the torque value specified in the applicable CMI overhaul manual for the engine model onto which the filter adapter is being installed. Run the engine and ensure that there are no oil leaks.
- f) Use of a torque wrench is mandatory when installing, tightening, or reinstalling an oil filter adapter on the engine.

5. REMOVAL AND REPLACEMENT INFORMATION

Refer to Table 1 on page 6 for applicable installation instructions.

6. DIAGRAMS

Refer to CMI's overhaul, service and maintenance instructions for applicable engine diagrams.

7. LIST OF SPECIAL TOOLS

Refer to Table 1 on page 6 for applicable installation instructions.

8. ADDITIONAL INFORMATION FOR COMMUTER CATEGORY AIRCRAFT

Not Applicable.

9. RECOMMENDED OVERHAUL PERIODS

The recommended time between overhaul (TBO) for the Stratus Tool Technologies LLC. oil filter adapters are the same as identified in CMI data for the affected engine models. At engine overhaul, the adapter should be inspected for any cracks or other damage that would render it unsuitable for further service. If any such damage is found, retire the adapter from service or replace unserviceable parts with new or serviceable parts.

10. REVISIONS

Revisions to this document will be logged in the Log of Revisions sheet and a copy of the revised document should be distributed as required.

11. Airworthiness Limitations

NOTE: The Airworthiness Limitations section is FAA approved and specifies maintenance required under Parts 43.16 and 91.403 of the Federal Aviation Regulations unless an alternative program has been FAA approved. There are no mandatory replacement times for any component parts of the oil filter adapter(s).



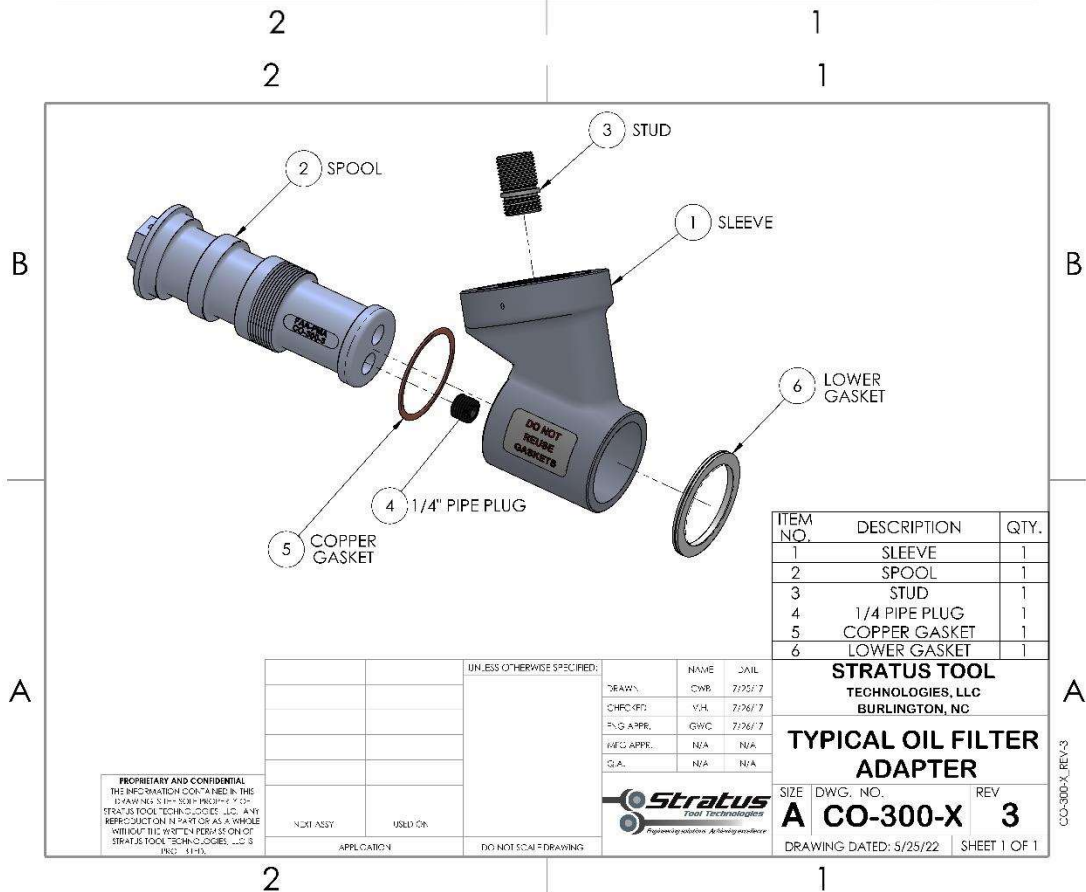
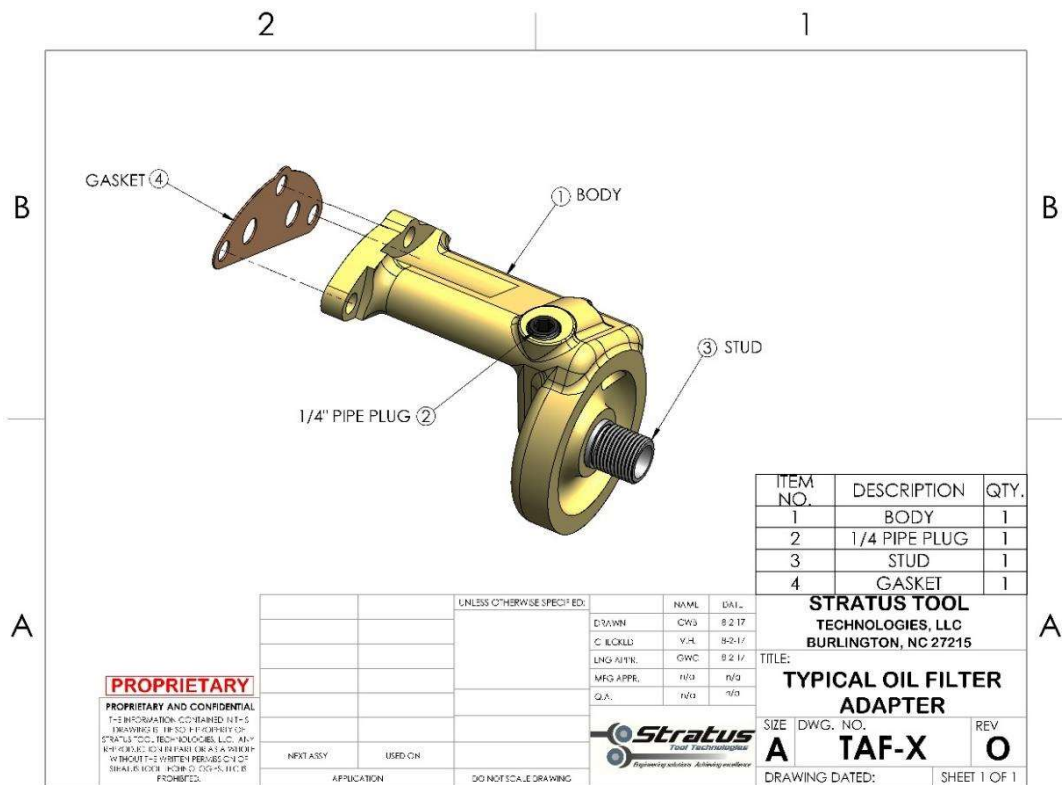


Table 1

FAA Supplemental Type Certificate Stratus Tool Technologies, LLC Oil Filter Adapters					
STC Number	Stratus P/N	STC Approved Engine Model List (AML)	Ref Engine Operation Manual	Ref Engine Overhaul Manual	Stratus Installation Document Number
SE7559SW	TAF-Long	CMI C-75, C-85, C-90 Series	CMI X30012	CMI X30010	ST007
		O-200 Series	CMI X30012	CMI X30010	ST007
SE8409SW	CO-300	CMI C-125, C-145 Series	CMI X30015	CMI X30013	ST006
		CMI-300 Series	CMI X30015	CMI X30013	ST006
	C6SC				
		CMI GO-300 Series	CMI X30021	CMI X30019	ST004
		CMI IO-360 Series	CMI X30617	CMI X30594	ST004
		CMI TSIO-360 Series	CMI X30583	CMI X30596	ST004
SE09356SC	C6LC-L C6LC-S	CMI O-470 Series	CMI X30097	CMI X30586	ST002 (-L) ST003 (-S)
		CMI IO-470 Series	CMI X30024	CMI X30588	ST002 (-L) ST003 (-S)
		CMI IO-520 Series	CMI X30041	CMI X30039	ST002 (-L) ST003 (-S)
		CMI IO-550 Series	CMI X30605	CMI X30607	ST002 (-L) ST003 (-S)
		CMI TSIO-520 Series			ST002 (-L) ST003 (-S)
SE10348SC	C6LC-11/15	CMI O-470-11	*TM 1-2R-0470-2	*TM 1-2R-0470-3	ST005
		CMI O-470-15	*TM 1-2R-0470-26	*TM 1-2R-0470-23	ST005
Notes: 1) * denotes military technical manual 2) CMI denotes engine TCDS holder Continental Motors Inc., formerly Teledyne Continental Motors					
-END-					

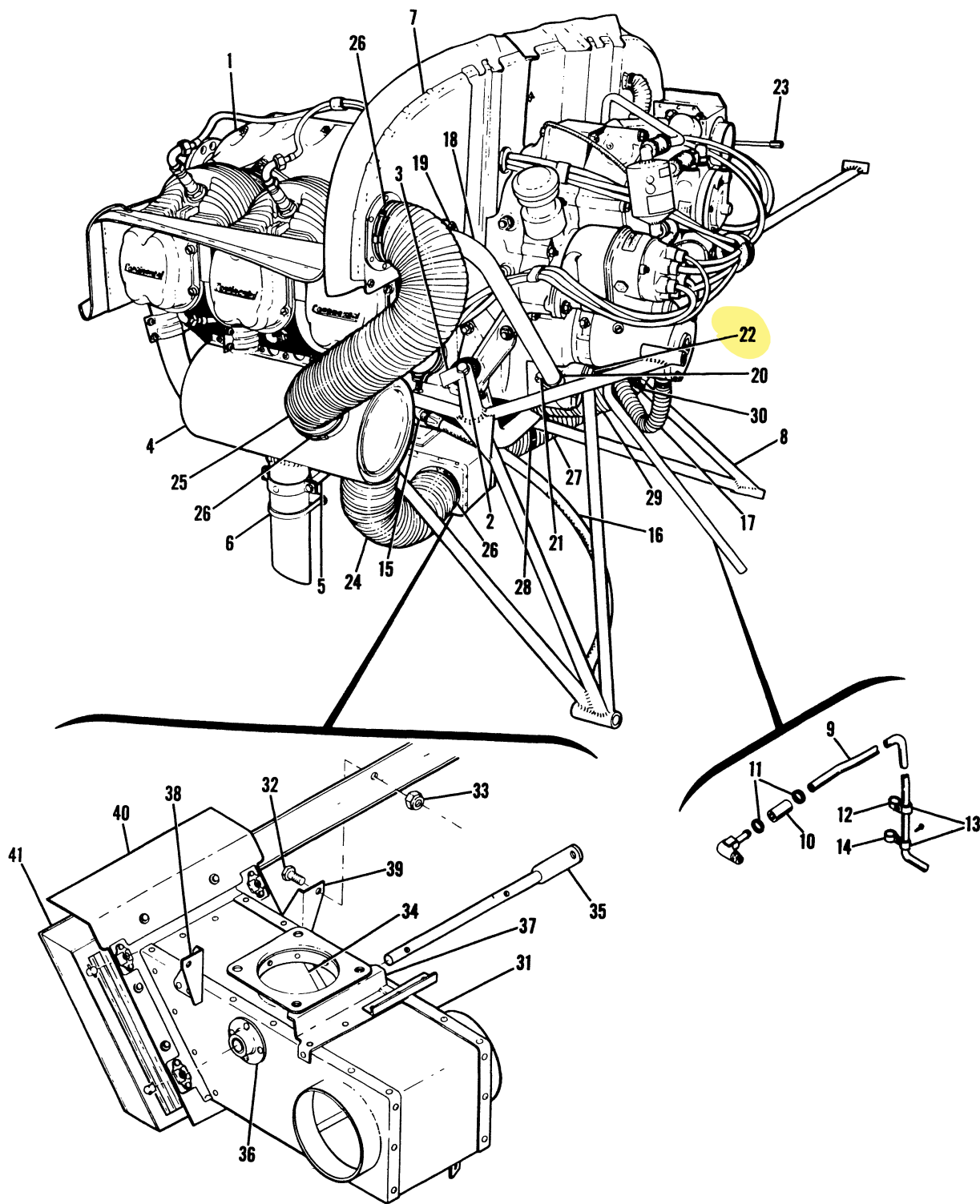
For additional information, please call 800-822-3200 or visit

www.tempestplus.com

Stratus Tools Technologies
2208 Air Park Drive
Burlington, NC 27215



Engine (Cont)



172 SERIAL 17247747 THRU 17249544

Figure 59A. Engine Assembly

FIGURE AND INDEX NO.	PART NUMBER	DESCRIPTION	UNITS PER ASSY	USABLE ON CODE
		1 2 3 4 5 6 7		
59A-		ENGINE ASSEMBLY-CONTINENTAL	NP	A
- 1	0-300-C	ENGINE-----CM	1	B
	0-300-D	ENGINE-----CM	1	C
		ATTACHING PARTS		
- 2	AN7-27A	BOLT	4	
	MS20365-720C	NUT	4	
	AN960-716	WASHER	4	
- 3	0550100-7	BONDING STRAP-ENGINE MOUNT	4	
		-----*		
- 4	0550176-55	STACK ASSEMBLY-EXHAUST LH	1	
	0550176-56	STACK ASSEMBLY-EXHAUST RH	1	
- 5	0550186-1	BRACE-EXHAUST STACK	1	
		ATTACHING PARTS		
- 6	684-3-22-36-P	CLAMP ADEL	2	
	MS20365-428C	NUT	2	
	AN4-26A	BOLT	2	
		-----*		
- 7		BAFFLE INSTALLATION-ENGINE	1	
- 8	0551014-1	MOUNT ASSEMBLY-ENGINE	1	
- 9	0500106-307	LINE ASSEMBLY-BREATHER	1	
		ATTACHING PARTS		
- 10	S-51-10	HOSE 3 IN LG	1	
- 11	NAS397-16-1	CLAMP	2	
- 12	AN742D16	CLAMP	1	
- 13	NAS434D10	CLAMP	2	
	S-1021Z-8-12	SCREW CESSNA STANDARD	1	
- 14	AN742D10	CLAMP	1	
	S-1021Z-8-8	SCREW CESSNA STANDARD	1	
		-----*		
- 15	MS20822-6	ELBOW	1	
- 16	S-1167-6-0254	HOSE ASSEMBLY-CARBURETOR TO STRAINER	1	
- 17	S-1053E8T	HOSE 31.5 IN LG BULK ITEM REF S-1053E8T31.5	1	
		ATTACHING PARTS		
	NAS397-16-1	CLAMP	2	
		-----*		
- 18	0550123	TUBE ASSEMBLY-BLAST LH	1	
	0550224-1	TUBE ASSEMBLY-BLAST RH	1	
		ATTACHING PARTS		
- 19	AN515-8R6	SCREW	3	
	MS20365-832C	NUT	3	
- 20	NAS434-D16	CLAMP LH ONLY	1	
- 21	0550100-6	BRACKET LH ONLY	1	
	S-1021Z-10-8	SCREW CESSNA STANDARD LH ONLY	1	
		-----*		
- 22	0750139	ADAPTER-OIL TEMPERATURE GAGE	1	
- 23	0500106-306	LINE-OIL PRESSURE	1	
	AN823-2B	ELBOW	1	
- 24	S-1053K24T	HOSE 16.75 IN LG BULK ITEM REF S-1053K24T16.75	1	
- 25	S-1053E24T	HOSE-LH 22.25 IN LG BULK ITEM	1	
		REF S-1053E24T22.25		
	S-1053E24T	HOSE-RH 12.00 IN LG BULK ITEM	1	
		REF S-1053E24T12.00		
		ATTACHING PARTS		
- 26	NAS398-50	CLAMP	2	
		-----*		
- 27	S-1053K24T	HOSE 29.00 IN LG BULK ITEM	1	
		REF S-1053K24T29.00		
		ATTACHING PARTS		
	NAS398-50	CLAMP	2	
- 28	AN742D50	CLAMP	1	
	AN742D12	CLAMP	1	
	NAS446-4-3	NUT	1	
	S-1021Z-8-6	SCREW CESSNA STANDARD	1	
		-----*		

CONTINUED ON PAGE 204

S-PART NOS. APPEARING ON THIS PAGE ARE CESSNA STANDARDS.

FIGURE AND INDEX NO.	PART NUMBER	DESCRIPTION	UNITS PER ASSY	USABLE ON CODE
		1 2 3 4 5 6 7		
59A- 29	S-1053K24T	HOSE 32.00 IN LG BULK ITEM ----- REF S-1053K24T32.00 CESSNA STANDARD ATTACHING PARTS -----	1	
- 30	NAS398-50 AN742D50 AN742-10 NAS446-4-3 S-1021Z-8-8	CLAMP ----- CLAMP ----- CLAMP ----- NUT ----- SCREW CESSNA STANDARD ----- -----*	2 1 1 1 1	
- 31	0550180-1	AIR BOX ASSEMBLY----- ATTACHING PARTS -----	1	
- 32	AN3-3A	BOLT -----	2	
- 33	MS20365-1032C	NUT ----- -----*	2	
- 34	0550180-10	VALVE ASSEMBLY-----	1	
- 35	0550180-16	ARM ASSEMBLY -----	1	
- 36	0750113-1	HOUSING -----	2	
- 37	0550180-20	SUPPORT -----	1	
- 38	0550180-21	EAR-SUPPORT LH-----	1	
- 39	0550180-22	EAR-SUPPORT RH-----	1	
- 40	0550180-25	PLATE -----	1	
- 41	121615 121615-06	FILTER-AIR BOX AMA ----- GASKET-AIR BOX FILTER AMA -----	1 1	
		A---172 SERIAL 17247747 THRU 17249544 172 SKYHAWK SERIAL 17247747 THRU 17249544 B---172 SERIAL 17247747 THRU 17249544 C---172 SKYHAWK SERIAL 17247747 THRU 17249544		