

# AIRWOLF FILTER CORP.

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## TO THE MECHANIC:

This P/N AFC-K008 remote mount oil filter kit incorporates our generic STC approved for all Continental powered aircraft up to 450 hp. The STC paperwork provided with this kit utilizes the new approved model list (AML) system recently instituted by the FAA. Although you may notice your particular aircraft is not specifically listed under this new classification, it is still approved.

Upon installing this filter kit, you will need to fill out and file a 337 form for this installation referencing the P/N AFC-K008 kit and the STC# SA00079NY. If your particular aircraft is not listed on the AML, you will also need a field approval by your local FSDO. for this installation. This is necessary because the FAA only updates this list on an semi-annual basis, and until your aircraft is listed, a field approval is required. If you are unsure whether or not you need a field approval, please call us directly.

With this paperwork, your local FSDO inspector has all the approved engineering data necessary to issue a field approval . This inspector is not an engineer and typically all he is doing is seeing if you installed it I/A/W the installation instructions and usually to make sure it doesn't leak. That's it.

If your local FSDO. inspector has any questions or concerns on this STC, he is to call the following office who will clarify the details. they are familiar with our filter kits and can address any concerns your FSDO inspector may have on your particular installation

FAA - Chicago Aircraft Certification Office (CHI-ACO) Engine and Propeller Division 2300 East Devon Street Des Plaines, IL 60018 (847) 294-7358 / (847) 294-7834 Fax FAA APPROVED

CHICAGO AIRCRAFT CERTIFICATION OFFICE CENTRAL REGION

If your aircraft required a field approval, we must have a copy in order to update the (AML) list on our STC. Please send us a copy in addition to the one you will file with your local FSDO. We will then forward our copy to the ACO for their office to update the (AML) list on our STC.

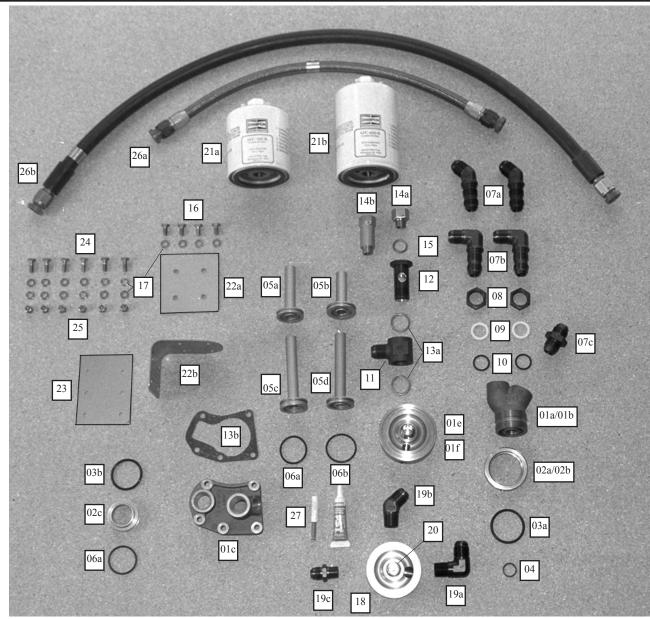
## DATA PERTINENT TO ALL INSTALLATIONS

Prior to installing the filter kit on the aircraft, weigh the filter kit, add the weight of the hoses, and subtract the oil screen or oil filter adapter removed from the engine, and determine the net weight being added to the aircraft for determining the weight and balance of the aircraft later. Once the filter kit is installed on the aircraft, if you choose to purchase the hoses from Airwolf, we will supply you with the Teflon Hoses specified in this STC. At the time of the order we will need the flare to flare length of the hoses, and the hose ends needed on each hose ie: Straight to Straight, Straight to 90°, Straight to 45°, 45° TO 45°, or 45° to 90° allowing for engine torque and vibration per AC43.13.

If our instructions do not specifically say your allowed to do something, assume that means you are not allowed to do it without our written approval

Thank you for your help.

Airwolf Filter Corp



## Oil Filter Kit AFC-K008

Applicability:	Continental powered Single and Multi Engine	First Release:	01/08/94
	Fixed Wing Aircraft less than 450hp.	Revision:	C
	having firewalls of .021 ASTM A527 galvanized steel or equivalent.	Date:	11/11/10

#### Parts List No. AFC-K008-PL <u>Index</u> Part Number Description Quantity CON-10 or Full Flow Engine Adapter [1-3/4"-16 Threads] 01a. (1) Full Flow Engine Adapter [1-13/16"-16 Threads] 01b. CON-11 or (1) 01c. CON-12 or Full Flow Engine Adapter "E" Series Engines (1) 01d. CON-16 Full Flow Engine Adapter C85-IO240 (1) 01e. **OFB-17** Full Flow Engine Adapter -10 Port (1) Oil Filter Base, -12 Port 01f. **OFB-15** (1) Sealing Ring [1-3/4"-16 Threads] 02a. RNG-10 or (1) Sealing Ring [1-13/16"-16 Threads] 02b. RNG-11 (1) 02c. RNG-17 Oil Divertor Ring, "E" Series (1) 03a. M83248/1-223 Sealing O-Ring (1) 03b. M83248/1-222 Oil Divertor O-Ring (1) 04. M83248/1-016 O-Ring, Nosepiece (1) 05a. EXT-10 or Oil Screen Adapter - A50, A65, A75, A80, C75, C85, C90, C125, O-200, IO240 (1) 05b. EXT-11 or Oil Screen Adapter - C145, O300, GO300, & IO-360A, C, D, G, H, J, K (1) Oil Screen Adapter - O-470A, B, E, G, J, K, L, M, P, R, S, U, 05c. EXT-12 or IO-470C, D, E, F, G, H, J, K, L, M, N, P, R, S, U, V IO-520A, D, E, F, J, K, L, / TSIO-520C, G, H, M, P, R, T

## Oil Filter Kit AFC-K008

Applicability: Continental powered Single and Multi Engine First Release: 01/08/94
Fixed Wing Aircraft less than 450hp. Revision: C
having firewalls of .021 ASTM A527 galvanized steel or equivalent. Date: 11/11/10

		Parts List No. AFC-K008-PL (continued)	
<u>Index</u>	Part Number	Description	Quantity
05d.	EXT-12 or	Oil Screen Adapter - IO550	(1)
05e.	EXT-14	Oil Screen Adapter - O470-11 & 15	(1)
06a.	M83248/1-126 or	O-Ring, Use w/EXT-10 or 12 Adapter, Oil Screen, or RNG-17 Oil Diverter Ring	(1)
06b.	M83248/1-128	O-Ring, Use w/EXT-11 or 14 Adapter, Oil Screen	(1)
07a.	AN837-10D-SP or	45° Bulkhead Fitting	(2)
07b.	AN833-10D-SP or	90° Bulkhead Fitting	(Opt)
07c.	AN815-10D-SP	Union	(Opt)
07d.	AN919-15D-SP	Union, Use with OFB-16 Adapter	(2)
08a.	AN6289-10D	Bulkhead Nut	(2)
09.	MS28773-10	Boss Gasket	(2)
10a.	M83248/1-908	-8 O-Ring, Use with OFB-16 Adapter	(2)
10b.	M83248/1-910	-10 O-Ring	(2)
11.	AN776-10D	90° Fitting	(1)
12a.	TPA-775	Temp Probe Adapter	(Opt)
12b.	TPA-776	Temp Probe Adapter & Gasket	(Opt)
13a.	MS35769-18	Temp Probe Adapter Gasket	(Opt)
13b.	352067	Engine Adapter Gasket, Use with CON-12 Adapter	(1)
13c.	652070	Engine Adapter Gasket, Use with CON-16 Adapter	(1)
14a.	OTA-527 or	5/8" Long Oil Temp Adapter	(Opt)
14b.	OTA-2250	2-1/4" Long Oil Temp Adapter	(Opt)
15	MS35769-11	Oil Temp Adapter Gasket	(Opt)
16.	AN4H-4A	Drilled Head Bolts	(4)
17a.	AN960-416	Flat Washers	(16)
17b.	AN960-524	Flat Washers, Use with CON-12 Adapter	(3)
18a.	OFB-11	Oil Filter Base, -10 Port	(1)
18b.	OFB-10	Oil Filter Base, -8 Port, Use with CON-16 Adapter	(1)
19a.	MS20822-10D or	90° Elbow	(1)
19b.	MS20823-10D or	45° Elbow	(1)
19c.	AN816-10D	Flared Tube Nipple	(Opt)
19d.	AN842-16D	90° Hose Elbow [Stearman Kit]	(1)
19e.	AN844-16D	45° Hose Elbow [Stearman Kit]	(Opt)
19f.	MS20822-8D or	90° Elbow, Use with CON-16 Adapter	(1)
19g.	MS20823-8D or	45° Elbow, Use with CON-16 Adapter	(1)
19h.	AN816-8D	Flared Tube Nipple, Use with CON-16 Adapter	(Opt)
20.	OFS-10	Oil Filter Stud	(1)
21a.	AFC-500 or	Std Oil Filter or Equivalent [Champion CH48108]	(1)
21b.	AFC-600	Long Oil Filter or Equivalent [Champion CH48109]	(1)
22a.	OFM-10	Horizonta Oil Filter Mount	(1)
22b.	OFM-11	Vertical Oil Filter Mount	(1)
23.	DBL-10	Doubler Plate	(1)
24.	AN4-5A	Bolts	(6)
25a.	MS20365-428A	Locknuts	(6)
25b.	MS20365-524A	Locknuts, Use with CON-16 Adapter	(3)
26a.	13000010-0xxz or	Teflon Hose Assy w/o Fire Sleeving.	(Opt)
26b.	F13000010-0xxz	Teflon Hose Assy with Fire Sleeving.	(Opt)
27.	MIL6000-1-25	25" Long MIL 6000 Hose [Stearman Kit]	(2)
28.	MIL6000-3/4-2	Dampener	(1)
29.	QS100M16H	1" Hose Clamp [Stearman Kit]	(4)
30.	QS100M52H	3-1/4" Hose Clamp Dampener	(1)
31.	56707	Loctite® 567 PST Teflon Thread Sealant	(1)
32.	AFC-K008-II	Installation Instructions	(1)
33.	AFC-K008-MI	Instructions for Continued Airworthiness	(1)
34.	AFC-K008-PL	Parts List	(1)

Applicability: Continental powered Single and Multi Engine
Fixed Wing Aircraft less than 450hp.
having firewalls of .021 ASTM A527 galvanized steel or equivalent.

First Release: Revision: 01/08/94 C

Date: 11/11/10

\*\*\*\*\* WARNING (A) \*\*\*\*\*

LOCAL STIFFENING OF THE FIREWALL MAY BE NECESSARY TO SUPPORT WEIGHT OF OIL FILTER AND PREVENT FIREWALL CRACKING.

\*\*\*\*\* WARNING (B) \*\*\*\*\*

USE LOCTITE® 567 PST TEFLON THREAD SEALANT BEFORE INSTALLATION OF FITTINGS. DO NOT ASSEMBLE FITTINGS INTO OIL FILTER BASE WITHOUT SEALANT OTHERWISE GALLING OF MATERIAL WILL RESULT.

\*\*\*\*\* WARNING (C) \*\*\*\*\*

NO ROUTING OF FLAMMABLE FLUID LINES ABOVE EXHAUST SYSTEM, UNLESS SHROUDED.

INSTALLER IS RESPONSIBLE FOR INTER-RELATIONSHIP BETWEEN THIS AND OTHER ENGINE CHANGES (INCLUDING ACCESSORIES)

\*\*\*\*\* WARNING (D) \*\*\*\*\*

On some Continental engines, you may find the 1-3/4"-16 UNF-3B threads in the oil pump/accessory case where the oil screen was located, to be damaged or not complete causing our CON-10 adapter to bind during installation. DO NOT FORCE our engine adapter into these damaged threads as galling WILL occur. A specially ground 1-3/4"-16 UNF-3B tap is available from Airwolf that usually will cleanup these threads.

## Installation Instructions No. AFC-K008-II-A

Installation of the remote oil filter kit on the following engines using P/N A3568 Oil Screen Assy: A50, A65, A75, A80, C75, C85, C90, C125, O-200, IO240

First Release: 01/08/94 Revision: C Date: 11/11/10

- Note A: Some hoses or wires may have to be rerouted so the oil filter assembly will fit into position. Reference and material per AC 43.13-1B & 2A.
- 01. Remove the Continental screen assembly P/N A3568.
- 02. Clean Screen housing and gasket surface. Assemble Engine Adapter (01a) as follows:
  - (A) Lubricate threads of Engine Adapter (01a) and Sealing Ring (02a) with suitable lubricant.
  - (B) Thread Sealing Ring (02a) onto Engine Adapter (01a) past smooth area, onto second set of threads.
  - (C) Install lightly oiled O-Ring, (03), and position in the smooth area between the upper and lower threads.
  - (D) Run Sealing Ring (02a) down against O-ring. [Assure O-ring is still centered in non threaded area.]
  - (E) Insert lightly oiled O-ring, (04) into groove inside of center opening of Engine Adapter (01a)
- 03. Install lightly oiled O-ring (06a) onto Oil Screen Adapter (05a) and insert into screen chamber of engine.

  When seated correctly, tube will extend above face of engine accessory case approximately 1/4". As adapter is inserted, resistance will be met. Continue pressure indicating compression of O-Ring (06a)- until adapter is seated in lower screen seat.
- O4. Thread engine adapter (01a) into engine oil screen opening being sure that oil screen adapter (05b) is started in center of the opening. Screw in engine adapter (01a) until light resistance indicates that O-ring (03) is seated on the accessory case. Orient the engine adapter (01a) as necessary, being careful not to screw the engine adapter (01a) in or out more than 1/2 turn from present position. This assures that the O-Ring is still centered in the non threaded area. Do not tighten sealing ring yet.
- Onto each bulkhead fitting (07a) or (07b), install in order 1 ea. bulkhead nut (08), boss gasket (09), and O-Ring (10). If using a union (07c), install O-Ring (10) only. When assembled correctly, the O-Ring (10) is positioned in the center of the non-threaded area, between the upper set of threads and the lower set of threads on the bulkhead fitting. Install each completed assembly into the engine adapter (01a) and located towards intended direction of hoses.
- CAUTION: O-ring only seals in the center of the non-threaded area between the upper set threads and lower set of threads on the bulkhead fitting. Failure to position the O-Ring in this area, may cause a small oil leak.
- 06. On A50 & A65 engines, remove the oil drain plug and relocate the oil temperature capillary tube and oil temp adapter using oil temp gasket (15) provided and safety wire.
- 07. On A75, A80, C75, C85, C90, & O200 engines, remove one of the Continental P/N 532432 plugs located in the front of the engine which caps off access to the oil gallery. Remove the brass oil temp adapter nut from the existing oil screen and relocate the oil temperature bulb to this location. Torque to specs and secure.
- NOTE D: Capillary tube may be kept at present location provided sufficient space exists between the engine and firewall. To utilize the existing location, 1 ea. 90° Fitting (11), Temp Probe Adapter (12), Oil Temp Adapter Gasket(14), and 2 ea. Temp Probe Adapter Gasket (13a) must be used per installation drawings.
- 08. Remove the oil drain plug and relocate the oil temperature capillary tube and oil temp adapter using oil temp gasket (15) provided and safety wire.

\*\*\*\*\* SEE WARNING (A) ABOVE \*\*\*\*\*

- 09. Using the horizontal oil filter mount (22a) or vertical oil filter mount (22b) as a drilling template, locate and drill mounting holes using a letter "F" drill.
- 10a. Secure vertical oil filter mount (22b) to Fwd side of firewall and doubler plate (23) to Aft side of firewall using bolts (24), washers (17), and locknuts (25). OR
- 10b. Secure oil filter base (18) to Fwd side of firewall and horizontal oil filter mount plate (22a) to rear side using bolts (16), washers (17) and secure with .032 MS20995-C safety wire.

\*\*\*\*\* SEE WARNING (B) ABOVE \*\*\*\*\*

- 11. Install any combination of fitting (19a), (19b), or (19c) into oil filter base (18). Mount to vertical oil filter mount (22b.) using bolts (16), washers (17), and secure with .032 MS20995-C safety wire.
- 12. Determine hose lengths and order appropriate hoses. Ex: P/N for a 24-7/8" long firesleeved hose with straight swivel fittings at each end of the hose is F13000010-0247.

- 13. Install 2 ea. hose assy's (26a) or (26b) connecting the "A" port on the filter adapter to the "A" port on the oil filter base and the "B" port on the filter adapter to the "B" port on the oil filter base per installation drawings and tighten hose fittings to 270-350 in/ lbs.
- 14. After hoses have taken natural set, and hose fittings tightened, tighten sealing ring (02a) with 2" Pin Spanner wrench. Do not overtighten. Secure with safety wire. Note: Approximately 1/4-1/2 turn is all that is needed to compress the Viton O-ring properly and no leakage will occur.
- 15. Install oil filter (21a), torque per instructions on oil filter and secure with safety wire.
- Run engine and check for leaks.
- 17. Determine weight and balance, initiate 337 form, and update the equipment list.

## **Installation Instructions No. AFC-K008-II-B**

Installation of the remote oil filter kit on the following engines using P/N 530003 Oil Screen Assy: C145, O300, GO300, & IO-360A, C, D, G, H, J, K

First Release: 01/08/94 Revision: C Date: 11/11/10

Note A: Some hoses or wires may have to be rerouted so the oil filter assembly will fit into position. Reference and material per AC 43.13-1B & 2A.

- 01. Remove the Continental screen assembly P/N 530003
- 02. Clean Screen housing and gasket surface. Assemble Engine Adapter (01a) as follows:
  - (A) Lubricate threads of Engine Adapter (01a) and Sealing Ring (02a) with suitable lubricant.
  - (B) Thread Sealing Ring (02a) onto Engine Adapter (01a) past smooth area, onto second set of threads.
  - (C) Install lightly oiled O-ring, (03). and position in the center of the smooth area between the upper and lower threads.
  - (D) Run Sealing Ring (02a) down against O-ring (03). [Assure O-ring is still centered in non threaded area.]
  - (E) Insert lightly oiled O-ring, (04) into groove inside of center opening of Engine Adapter (01a)
- 03. Install lightly oiled O-ring (06b) onto Oil Screen Adapter (05b) and insert into screen chamber of engine.

  When seated correctly, tube will extend above face of engine accessory case approximately 1/4". As adapter is inserted, resistance will be met. Continue pressure indicating compression of O-ring (06a)- until adapter is seated in lower screen seat.
- 04. Thread engine adapter (01a) into engine oil screen opening being sure that oil screen adapter (05b) is started in center of the opening. Screw in engine adapter (01a) until light resistance indicates that O-ring (03) is seated on the accessory case. Orient the engine adapter (01a) as necessary, being careful not to screw the engine adapter (01a) in or out more than 1/2 turn from present position. This assures that the O-Ring is still centered in the non threaded area. Do not tighten sealing ring yet.
- 05. Onto each bulkhead fitting (07a) or (07b), install in order 1 ea. bulkhead nut (08), boss gasket (09), and O-ring (10). If using a union (07c), install O-ring (10) only. When assembled correctly, the O-ring (10) is positioned in the center of the non-threaded area, between the upper set of threads and the lower set of threads on the bulkhead fitting. Install each completed assembly into the engine adapter (01a) and located towards intended direction of hoses.
- CAUTION: O-ring only seals in the center of the non-threaded area between the upper set threads and lower set of threads on the bulkhead fitting. Failure to position the O-ring in this area, may cause a small oil leak.
- 06. On C-145 & O-300 installations, remove oil scavenge screen (TCM P/N 5300050), drill & tap a 5/8" x 18 thread for future installation of oil temperature bulb, and reinstall in engine accy case. Transfer existing capillary temp probe adapter from oil pressure screen, to scavenge oil screen. Reroute oil temperature bulb into tachometer cable hole in firewall and install into adapter in scavenge oil screen and tighten.

CAUTION: Do not overtorque or break capillary tube otherwise oil temperature gage will have to be replaced.

NOTE D: Capillary tube may be kept at present location provided sufficient space exists between the engine and firewall. To utilize the existing location, 1 ea. optional 90° Fitting (11), Temp Probe Adapter (12), Oil Temp Adapter Gasket(14), and 2 ea. Temp Probe Adapter Gasket (13a) must be used per installation drawings.

## \*\*\*\* SEE WARNING (A) ABOVE \*\*\*\*

- 07. Using the horizontal oil filter mount (22a) or vertical oil filter mount (22b) as a drilling template, locate and drill mounting holes using a letter "F" drill.
- 08a. Secure vertical oil filter mount (22b) to Fwd side of firewall and doubler plate (23) to Aft side of firewall using bolts (24), washers (17), and locknuts (25). OR
- 08b. Secure oil filter base (18) to Fwd side of firewall and horizontal oil filter mount plate (22a) to rear side using bolts (16), washers (17) and secure with .032 MS20995-C safety wire.

\*\*\*\*\* SEE WARNING (B) ABOVE \*\*\*\*\*

- 09. Install any combination of fitting (19a), (19b), or (19c) into oil filter base (18). Mount to vertical oil filter mount (22b.) using bolts (16), washers (17), and secure with .032 MS20995-C safety wire.
- 10. Determine hose lengths and order appropriate hoses. Ex: P/N for a 24-7/8" long firesleeved hose with straight swivel fittings at each end of the hose is F13000010-0247.

- 11. Install 2 ea. hose assy's (26a) or (26b) connecting the "A" port on the filter adapter to the "A" port on the oil filter base and the "B" port on the filter adapter to the "B" port on the oil filter base per installation drawings and tighten hose fittings to 270-350 in/ lbs.
- 12. After hoses have taken natural set, and hose fittings tightened, tighten sealing ring (02a) with 2" Pin Spanner wrench. Do not overtighten. Secure with safety wire. Note: Approximately 1/4-1/2 turn is all that is needed to compress the O-ring properly and no leakage will occur.
- 13. Install oil filter (21a), torque per instructions on oil filter and secure with safety wire.
- 14. Run engine and check for leaks.
- 15. Determine weight and balance, initiate 337 form, and update the equipment list.

## Installation Instructions No. AFC-K008-II-C

Installation of the remote oil filter kit on the following engines using P/N 538727 or 534862 Oil Screen Assy: [1-3/4" - 16 Thread]
O-470A, B, E, G, J, K, L, M, P, R, S, U,
IO-470C, D, E, F, G, H, J, K, L, M, N, P, R, S, U, V
IO-520A, D, E, F, J, K, L,
TSIO-520C, G, H, M, P, R, T and
GTSIO-520C, D, F, H, K, L, M, N
IO550

First Release: 01/08/94
Revision: C
Date: 11/11/10

# Note A: Some hoses or wires may have to be rerouted so the oil filter assembly will fit into position. Reference and material per AC 43.13-1B & 2A.

- 01. Remove the Continental screen assembly P/N 538727 or 534862.
- 02. Clean Screen housing and gasket surface. Assemble Engine Adapter (01a) as follows:
  - (A) Lubricate threads of Engine Adapter (01a) and Sealing Ring (02a) with suitable lubricant.
  - (B) Thread Sealing Ring (02a) onto Engine Adapter (01a) past smooth area, onto second set of threads.
  - (C) Install lightly oiled O-ring, (03), and position in the center of the smooth area between the upper and lower threads.
  - (D) Run Sealing Ring (02a) down against O-ring (03). [Assure O-ring is still centered in non threaded area.]
  - (E) Insert lightly oiled O-ring, (04) into groove inside of center opening of Engine Adapter (01a)
- 03. Insert Oil Screen Adapter (05c) without O-ring installed into screen chamber of engine. When seated, tube will extend above face of engine casting approximately 1/4". Trim as necessary to achieve the 1/4" height. Remove Oil Screen Adapter (05c) from engine
- 04. Lightly oil O-ring (06a), install onto Oil Screen Adapter (05c), and reinstall into oil screen chamber of oil pump. As adapter is inserted, resistance will be met. Continue pressure indicating compression of O-ring (06a) until adapter is firmly seated in lower screen seat.
- Thread engine adapter (01a) into engine oil screen opening being sure that oil screen adapter (05b) is started in center of the opening. Screw in engine adapter (01a) until light resistance indicates that O-ring (03) is seated on the accessory case. Orient the engine adapter (01a) as necessary, being careful not to screw the engine adapter (01a) in or out more than 1/2 turn from present position. This assures that the O-Ring is still centered in the non threaded area. Do not tighten sealing ring yet.
- 06. Onto each bulkhead fitting (07a) or (07b), install in order 1 ea. bulkhead nut (08), boss gasket (09), and O-ring (10). If using a union (07c), install O-ring (10) only. When assembled correctly, the O-ring (10) is positioned in the center of the non-threaded area, between the upper set of threads and the lower set of threads on the bulkhead fitting. Install each completed assembly into the engine adapter (01a) and located towards intended direction of hoses.

CAUTION: O-ring only seals in the center of the non-threaded area between the upper set threads and lower set of threads on the bulkhead fitting. Failure to position the O-ring in this area, may cause a small oil leak.

## \*\*\*\*\* SEE WARNING (A) ABOVE \*\*\*\*\*

- 07. Using the horizontal oil filter mount (22a) or oil vertical filter oil filter mount (22b) as a drilling template, locate and drill mounting holes using a letter "F" drill.
- 8a. Secure vertical filter oil filter mount (22b) to Fwd side of firewall and doubler plate (23) to Aft side of firewall using bolts (24), washers (17), and locknuts (25).

OR

8b. Secure oil filter base (18) to Fwd side of firewall and horizontal oil filter mount (22a) to rear side using bolts (16), washers (17) and secure with .032 MS20995-C safety wire.

## \*\*\*\*\* SEE WARNING (B) ABOVE \*\*\*\*\*

- 9. Install any combination of fitting (19a), (19b), or (19c) into oil filter base (18). Mount to vertical oil filter mount plate (22b.) using bolts (16), washers (17), and secure with .032 MS20995-C safety wire.
- 10. Determine hose lengths and order appropriate hoses (26a) or (26b). Last 2 xx's in part number is the length of the hose in inches and the z is the length in eighths of an inch. The letter "F" at the beginning of the P/N denotes firesleeving. Ex: P/N for a 24-7/8" long firesleeved hose with straight swivel fittings at each end of the hose is F13000010-0247.

- Install 2 ea. hose assy's (26a) or (26b) connecting the "A" port on the filter adapter to the "A" port on the oil filter base and the "B" port on the filter adapter to the "B" port on the oil filter base per installation drawings and tighten hose fittings to 270-350 in/lbs.
- 12. After hoses have taken natural set, and hose fittings tightened, tighten sealing ring (02a) with 2" Pin Spanner wrench. Do not overtighten. Secure with safety wire. Note: Approximately 1/4 1/2 turn is all that is needed to compress the O-ring properly and no leakage will occur.
- 13. Install oil filter (21b), torque per instructions on oil filter and secure with safety wire.
- 14. Run engine and check for leaks.
- 15. Determine weight and balance, initiate 337 form, and update the equipment list.

## **Installation Instructions No. AFC-K008-II-D**

Installation of the remote oil filter kit on the following engines using P/N 536902 or A35996 Oil Screen Assy: [1-13/16" - 16 Thread] O-470-11, & 15 as used in the Cessna 305 series aircraft

First Release: 01/08/94 Revision: C Date: 11/11/10

Note A: Some hoses or wires may have to be rerouted so the oil filter assembly will fit into position. Reference and material per AC 43.13-1B & 2A.

- 01. Remove the Continental screen assembly.
- 02. Clean Screen housing and gasket surface. Assemble Engine Adapter (01b) as follows:
  - (A) Lubricate threads of Engine Adapter (01a) and Sealing Ring (02a) with suitable lubricant.
  - (B) Thread Sealing Ring (02b) onto Engine Adapter (01a) past smooth area, onto second set of threads.
  - (C) Install lightly oiled O-ring, (03). and position in the smooth area between the upper and lower threads.
  - (D) Run Sealing Ring (02b) down against O-ring (03). [Assure O-ring is still centered in non threaded area.]
  - (E) Insert lightly oiled O-ring, (04) into groove inside of center opening of Engine Adapter (01b)
- 03. Insert Oil Screen Adapter (05d) without O-ring installed into screen chamber of engine. When seated, tube will extend above face of engine casting approximately 1/4". <u>Trim as necessary to achieve the 1/4" height.</u> Remove Oil Screen Adapter (05d) from engine
- 04. Lightly oil O-ring (06b), install onto Oil Screen Adapter (05d), and reinstall into oil screen chamber of oil pump. As adapter is inserted, resistance will be met. Continue pressure indicating compression of O-ring (06b) until adapter is firmly seated in lower screen seat.
- O5. Thread engine adapter (01b) into engine oil screen opening being sure that oil screen adapter (05d) is started in center of the opening. Screw in engine adapter (01b) until light resistance indicates that O-ring (03) is seated on the accessory case. Orient the engine adapter (01a) as necessary, being careful not to screw the engine adapter (01b) in or out more than 1/2 turn from present position. This assures that the O-Ring is still centered in the non threaded area. Do not tighten sealing ring yet.
- 06. Onto each bulkhead fitting (07a) or (07b), install in order 1 ea. bulkhead nut (08), boss gasket (09), and O-ring (10). If using a union (07c), install O-ring (10) only. When assembled correctly, the O-ring (10) is positioned in the center of the non-threaded area, between the upper set of threads and the lower set of threads on the bulkhead fitting. Install each completed assembly into the engine adapter (01a) and located towards intended direction of hoses.

CAUTION: O-ring only seals in the center of the non-threaded area between the upper set threads and lower set of threads on the bulkhead fitting. Failure to position the O-ring in this area, may cause a small oil leak.

07. Install in order Temp probe adapter (12), gasket (13), 90° fitting (11), and gasket (13) and install into engine adapter (01b). Note: Oil temp adapters (14a) or (14b) may be interchanged depending on length of your oil temperature bulb.

\*\*\*\* SEE WARNING (A) ABOVE \*\*\*\*

- 08. Using the horizontal oil filter mount (22a) or vertical oil filter mount (22b) as a drilling template, locate and drill mounting holes using a letter "F" drill.
- 09a. Secure vertical oil filter mount (22b) to Fwd side of firewall and doubler plate (23) to Aft side of firewall using bolts (24), washers (17), and locknuts (25).

<u>OR</u>

09b. Secure oil filter base (18) to Fwd side of firewall and horizontal oil filter mount (22a) to rear side using bolts (16), washers (17) and secure with .032 MS20995-C safety wire.

\*\*\*\* SEE WARNING (B) ABOVE \*\*\*\*

- 10. Install any combination of fitting (19a), (19b), or (19c) into oil filter base (18). Mount to oil filter mount plate-vertical (22b) using bolts (16), washers (17), and secure with .032 MS20995-C safety wire.
- 11. Determine hose lengths and order appropriate hoses. Ex: P/N for a 24-7/8" long firesleeved hose with straight swivel fittings at each end of the hose is F13000010-0247.

- 12. Install 2 ea. hose assy's (26a) or (26b) connecting the "A" port on the filter adapter to the "A" port on the oil filter base and the "B" port on the filter adapter to the "B" port on the oil filter base per installation drawings and tighten hose fittings to 270-350 in/ lbs.
- 13. After hoses have taken natural set, and hose fittings tightened, tighten sealing ring (02a) with 2" Pin Spanner wrench. Do not overtighten. Secure with safety wire. Note: Approximately 1/4-1/2 turn is all that is needed to compress the O-ring properly and no leakage will occur.
- 14. Install oil filter (21b), torque per instructions on oil filter and secure with safety wire.
- 15. Run engine and check for leaks.
- 16. Determine weight and balance, initiate 337 form, and update the equipment list.

#### Installation Instructions No. AFC-K008-II-E

Installation of the remote oil filter kit on the following engines using P/N A25131 or A35996 Oil Screen Assy: E165, E185, E205 & E225

First Release: 01/08/94 Revision: C

Date: 11/11/10

- Note A: Some hoses or wires may have to be rerouted so the oil filter assembly will fit into position. Reference and material per AC 43.13-1B & 2A.
- 01. Gain access to the engine compartment.
- 02. Remove from rear of accessory case (lea.) P/N A25131 or A35996 oil screen assembly, P/N 40660 housing, and P/N A25132 check valve assy. Note: the A25132 check valve is only found on dry sump engines in older Bonanza's
- 03. Clean gasket surface on rear of accessory case.
- 04. Per installation drawing AFC-D-0030-A, Install lightly oiled O-ring (03b) onto Oil Divertor Ring (02c) and insert into bottom of oil gallery in rear of accessory case. Make sure nub is facing out. Note: Dry sump engines in the Bonanza's do not use this divertor ring. Reinstall A25132 check valve using new O-ring (03b) provided.
- 05. Install lightly oiled O-ring (06a) onto top of Oil Divertor Ring (02c) or A25132 check valve assy.
- 06. Using new oil adapter gasket (13b), install engine adapter (01c) onto rear of accessory case and torque to specs.

\*\*\*\*\* WARNING \*\*\*\*\* Do not over torque as binding of oil pump gears can occur.

- NOTE B: As adapter is inserted, resistance will be met. Continue pressure indicating compression of O-ring (06b)- until adapter (01c) is seated against gasket.
- 07. Onto each union (07c) install O-ring (10), insert into engine adapter(01c), and tighten.
- 08. Install new gasket (15) under the head of the 5/8" long (14a) or 2-1/4" long (14b) Temp probe adapter if used, into adapter-engine (01a). Note: Oil temp adapters (14a) or (14b) may be interchanged depending on length of your oil temperature bulb.
- 09. Install oil temperature bulb into oil temp adapter.
- NOTE C: If oil temp probe is not kept at present location on the particular aircraft, cap off hole with Continental P/N 532432 Oil drain plug and gasket (15).

## \*\*\*\* SEE WARNING (A) ABOVE \*\*\*\*

- 10. Using the horizontal oil filter mount (22a) or vertical oil filter mount (22b) as a drilling template, locate and drill mounting holes using a letter "F" drill.
- 11a. Secure vertical oil filter mount plate (22b) to Fwd side of firewall and doubler plate (23) to Aft side of firewall using bolts (24), washers (17), and locknuts (25).

OF

11b. Secure oil filter base (18a) to Fwd side of firewall and horizontal oil filter mount (22a) to rear side using bolts (16), washers (17) and secure with .032 MS20995-C safety wire.

## \*\*\*\*\* SEE WARNING (B) ABOVE \*\*\*\*\*

- 12. Install any combination of fitting (19a), (19b), or (19c) into oil filter base (18a). Mount to vertical oil filter mount(22b) using bolts (16), washers (17), and secure with .032 MS20995-C safety wire.
- 13. Determine hose lengths and order appropriate hoses (26a) or (26b). Last 2 xx's in part number is the length of the hose in inches and the z is the length in eighths of an inch. Ex: P/N for a 24-7/8" long firesleeved hose with straight swivel fittings at each end of the hose is F13000010-0247.

- 14. Install 2 ea. hose assy's (26a) or (26b) connecting the "A" port on the filter adapter to the "A" port on the oil filter base and the "B" port on the filter adapter to the "B" port on the oil filter base per installation drawings and tighten hose fittings to 270-350 in/ lbs.
- 15. Install oil filter (21a) or (21b), torque per instructions on oil filter and secure with safety wire.
- 16. Run engine and check for leaks.
- 17. Determine weight and balance, initiate 337 form, and update the equipment list.

## Installation Instructions No. AFC-K008-II-F

Installation of the remote oil filter kit on the following engines using
P/N 641574, 641575, 641639, 646253, 649217, 653489, or 653490 Oil Filter Adapters

TSIO-360, A, B, C, D, E, F, GB, H, JB, KB, LB, MB - LTSIO-360, E, KB
O/IO470 All
IO-520B, C, M
Revision:
C
Date: 11/11/10
IO-550B, C and

Note A: Some hoses or wires may have to be rerouted so the oil filter assembly will fit into position. Reference and material per AC 43.13-1B & 2A.

TSIO550

- 01. Remove existing spin on oil filter from rear of engine.
- 02. Clean oil filter base and gasket surface.
- 03. Verify oil filter stud in existing Continental oil filter base extends .375" above face of adapter. Using new oil filter adapter without O-ring installed as a reference, screw completely down onto existing stud and determine that new oil filter adapter bottoms out on existing Continental oil filter base. If not, trim oil filter stud to obtain this dimension.

  Remove new oil filter adapter.
- 04. Apply liberal amount of Dow Corning DC-4 silicon grease to Viton O-ring and place in machined groove in Adapter-Engine (01d) and reinstall onto the existing Continental oil filter adapter on rear of engine.
- 05. Screw adapter onto existing oil filter stud and position as required. Install fitting (07c), and O-ring (10) into Engine Adapter, torque to specifications and secure with .032 MS20995-C safety wire.

## \*\*\*\*\* SEE WARNING (A) ABOVE \*\*\*\*\*

- 06. Using the horizontal oil filter mount (22a) or vertical oil filter mount (22b) as a drilling template, locate and drill mounting holes using a letter "F" drill.
- 07a. Secure vertical oil filter mount (22b) to Fwd side of firewall and doubler plate (23) to Aft side of firewall using bolts (24), washers (17), and locknuts (25).

OR

07b. Secure oil filter base (18) to Fwd side of firewall and horizontal oil filter mount (22a) to rear side using bolts (16), washers (17) and secure with .032 MS20995-C safety wire.

## \*\*\*\*\* SEE WARNING (B) ABOVE \*\*\*\*\*

- 08. Install any combination of fitting (19a), (19b), or (19c) into oil filter base (18). Mount to vertical oil filter mount (22b.) using bolts (16), washers (17), and secure with .032 MS20995-C safety wire.
- 09. Determine hose lengths and order appropriate hoses. Ex: P/N for a 24-7/8" long firesleeved hose with straight swivel fittings at each end of the hose is F13000010-0247.

- 10. Install 2 ea. hose assy's (26a) or (26b) connecting the "A" port on the filter adapter to the "A" port on the oil filter base and the "B" port on the filter adapter to the "B" port on the oil filter base per installation drawings and tighten hose fittings to 270-350 in/ lbs.
- 11. Install oil filter (21b), torque per instructions on oil filter and secure with safety wire.
- 12. Run engine and check for leaks.
- 13. Determine weight and balance, initiate 337 form, and update the equipment list.

## Installation Instructions No. AFC-K008-II-G

Installation of the remote oil filter kit on Boeing Model 75 series aircraft with Continental W-670 radial engines.

First Release: 01/08/94 Revision: C

Date: 11/11/10

- Note A: Some hoses or wires may have to be rerouted so the oil filter assembly will fit into position. Reference and material per AC 43.13-1B & 2A.
- 01. Remove left engine cowl (top and door) and bottom engine cowl.
- 02. Drain oil (optional).
- 03. Remove engine oil return line P/N A75N1-3004 (note this may be a length of 1" MIL 6000 hose). This line runs from the engine to the oil tank.
- 04. Turn the AN842-16D on top of the oil tank to where it points to the engine primer mounted in the step.
- 05. Remove the screw that goes through the end of the firewall stiffener P/N 75-2912. This is located on the left side of the firewall on the aft side. Loosen the screw that goes through the firewall stiffener and the tab welded on the fuselage. This screw is 4-5/16" inboard of the removed screw. (see attached drawing). Drill the hole of the removed screw to 1/4" (.250).
- 06. Measure 3-9/16" out from a vertical line drawn from the C/L of the left engine mount studs. Using reinforcing plate P/N DBL-10 as a template drill the other 5 holes 1/4" (.250). The previously drilled hole is the middle outboard hole.
- 07. Slip reinforcement plate (DBL-10) between the firewall and stiffeners. The long side goes up.
- 08. Bolt oil filter base support angle P/N OFM-11 to firewall and reinforcement plate using (6ea) provided AN 4-5A bolts.

## \*\*\*\* SEE WARNING (B) ABOVE \*\*\*\*

- 09. Install provided AN842-816D fittings in the oil filter base. The fitting in B hole points horizontal with the filter base. The other points over the first fitting.
- Bolt oil filter base (OFB-15) to oil Filter Mount Plate, Vertical (22b) using provided AN4H-4A bolts. Oil inlet hole "B" is positioned to the front of the aircraft. Secure bolts with safety wire.
- 11. Install one 25" piece of 1" MIL 6000H hose using provided QS100M16H hose clamps. The "B" hole is the oil inlet and goes to the oil pump. The "A" port is the oil outlet and it goes to the oil tank. Tighten clamps.
- 12. Install oil filter as per manufacturers specifications and safety wire.
- Using the 2" piece of 3/4" Mil 6000 hose provided, secure to bottom of oil filter with (1) QS100M52H 3-3/4" clamp obtained locally, and locate between bottom of oil filter and existing firewall. This will strengthen the oil filter mount and dampen the vibrations of the engine.
- 14. Safety wire drain and refill oil tank with 4.4 gals. oil. (If step #2 is omitted this step is not necessary).
- 15. Run engine and check for leaks.
- 16. Determine weight and balance, initiate 337 form, and update the equipment list.

## \*\*\*\*\* WARNING (C) \*\*\*\*\*

NEVER, EVER INSTALL AN OIL FILTER ON THE ENGINE OIL PUMP INLET. THE OIL LINES CAN COLLAPSE, THEREBY STARVING THE ENGINE OF OIL.

## THE OIL ROUTING AND OIL FLOW IS ALWAYS;

ENGINE SCAVENGE PUMP OUTLET --> AIRWOLF OIL FILTER ---> OIL COOLER [if applicable] ---> OIL TANK.

## **Installation Instructions No. AFC-K008-II-K**

Installation of the remote oil filter kit on the following engines having oil cooler accessory pad C75, C85, C90, C125, O-200, IO240

First Release: 01/08/94 Revision: C Date: 11/11/10

- Note A: Some hoses or wires may have to be rerouted so the oil filter assembly will fit into position. Reference and material per AC 43.13-1B & 2A.
- 01. Gain access to the engine compartment.
- 02. Remove the Oil Cooler Bypass Plate from the LH rear side of the engine case.
- 03. Clean gasket surface on the engine case.
- 04. Install new P/N 652070 gasket.
- Install CON-16 Adapter, and secure with MS20365-542A locknuts & AN960-516 washers provided.
- 06. Install M83248/1-908 O-rings onto AN815-8D-SP fittings. Apply light film of oil onto O-Ring and insert into CON-16 Adapter. Once oring is seated, tighten fitting 1/2-3/4 turn.

NOTE: Do not overtighten fitting. Blue hex of fitting should not come in contact with CON-16 adapter.

## \*\*\*\*\* SEE WARNING (A) ABOVE \*\*\*\*\*

- 07. Using the horizontal oil filter mount (22a) or vertical oil filter mount (22b) as a drilling template, locate and drill mounting holes using a letter "F" drill.
- 08a. Secure vertical oil filter mount plate (22b) to Fwd side of firewall and doubler plate (23) to Aft side of firewall using bolts (24), washers (17), and locknuts (25).

<u>OR</u>

08b. Secure oil filter base (18a) to Fwd side of firewall and horizontal oil filter mount (22a) to rear side using bolts (16), washers (17) and secure with .032 MS20995-C safety wire.

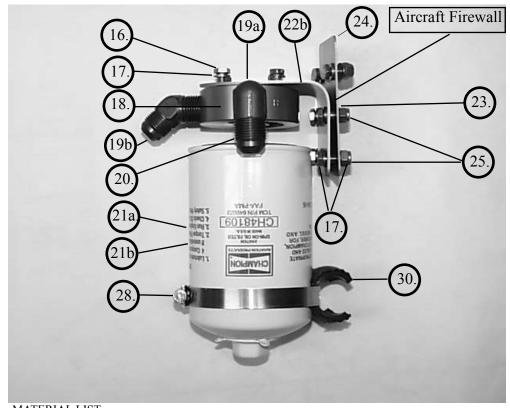
## \*\*\*\* SEE WARNING (B) ABOVE \*\*\*\*

- 09. Install any combination of fittings (19f), (19g), or (19h) into oil filter base (18b). Mount to vertical oil filter mount(22b) using bolts (16), washers (17), and secure with .032 MS20995-C safety wire.
- Determine hose lengths and order appropriate hoses (26a) or (26b). Last 2 xx's in part number is the length of the hose in inches and the z is the length in eighths of an inch. Ex: P/N for a 24-7/8" long firesleeved hose with straight swivel fittings at each end of the hose is F13000010-0247. Most likely you will need hoses that have straight swivel fittings at one end and 90 ° fittings a the opposite end.
- TIP: Aircraft hoses are measured tip to tip or flare to flare. The easiest way to properly measure a hose is take and old chunk of garden hose and touch one end of the hose to the fitting on the the engine adapter and one end of the hose to the fitting on the oil filter mount on the the firewall, and trim the hose to length until you have the routing the way you like it and enough extra for engine torque and vibration to be I/A/W AC 43.13-1B & 2A.. Measure this length of the sample garden hose and whatever it measures, this is the length you want to give to Airwolf or any hose shop in the world to have custom made TSO'd aircraft hoses built for your specific installation.

- 11. Install 2 ea. hose assy's (26a) or (26b) connecting the "A" port on the CON-16 adapter to the "A" port on the OFB-10 oil filter base and the "B" port on the CON-16 filter adapter to the "B" port on the OFB-10 oil filter base per installation drawings and tighten hose fittings to 270-350 in/lbs.
- 12. Install oil filter (21a) or (21b), torque per instructions on oil filter and secure with safety wire.
- 13. Run engine and check for leaks.
- 14. Determine weight and balance, initiate 337 form, and update the equipment list.

# ASSEMBLY DRAWING# AFC-D-0027

## **VERTICAL INSTALLATION**



MATERIA	AL LIST		
<u>Index</u>	Part Number	<u>Description</u>	Qty
16.	AN4H-4A	Drilled Head Bolts	(4)
17.	AN960-416	Flat Washers	(16)
18.	OFB-11	Oil Filter Base	(1)
19a.	MS20822-10D	90° Fitting	(1)
19b.	MS20823-10D	45° Fitting	(1)
19c.	AN816-10D	Union	(Opt)
20.	OFS-10	Oil Filter Stud	(1)
21a. or	AFC-500	Std Oil Filter [Champion CH48108]	(1)
21b.	AFC-600	Long Oil Filter [Champion CH48109]	(1)
22b.	OFM-11	Vertical Oil Filter Mount	(1)
23.	DBL-10	Doubler Plate	(1)
24.	AN4-5A	Bolt	(6)
25.	MS20365-428A	Locknut	(6)
28.	MIL6000-3/4-2	Vibration Dampener	(1)
30.	QS100M52H	Dampner Clamp	(1)

# HORIZONTAL INSTALLATION



MITTER	IAL LIST		
<u>Index</u>	Part Number	Description	Qty
16.	AH4H-4A	Drilled Head Bolts	(4)
17.	AN960-416	Flat Washers	(16)
18.	OFB-11	Oil Filter Base	(1)
19a.	MS20822-10D	90° Fitting	(1)

(1) 45° Fitting (1) 19b. MS20823-10D 19c. Union AN816-10D (Opt) 20. OFS-10 Oil Filter Stud (1) AFC-500 Std Oil Filter [Champion CH48108] 21a. or (1) 21b. Long Oil Filter [Champion CH48109] AFC-600 (1) Horizontal Oil Filter Mount 22a. OFM-10 (1)

# Airwolf Filter Corp.

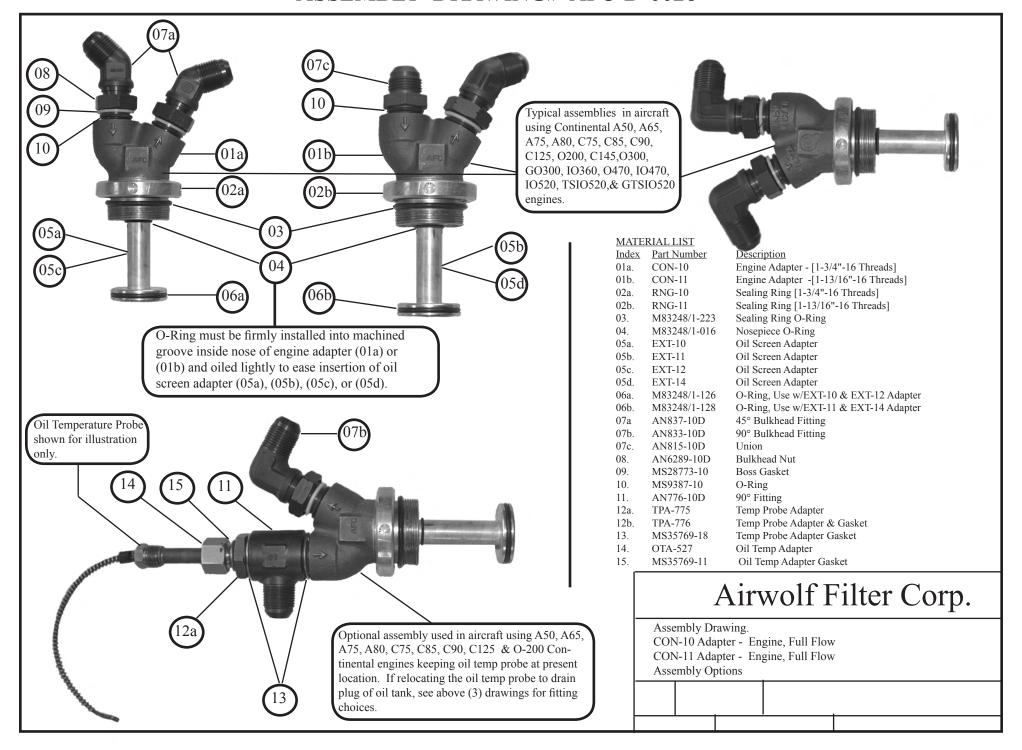
Assembly Drawing.

OFM-10 Oil Filter Mount Plate - Horizontal,

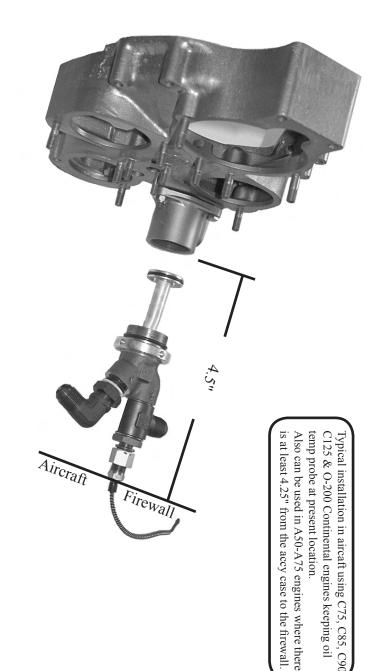
OFM-11 Oil Filter Mount Plate - Vertical,

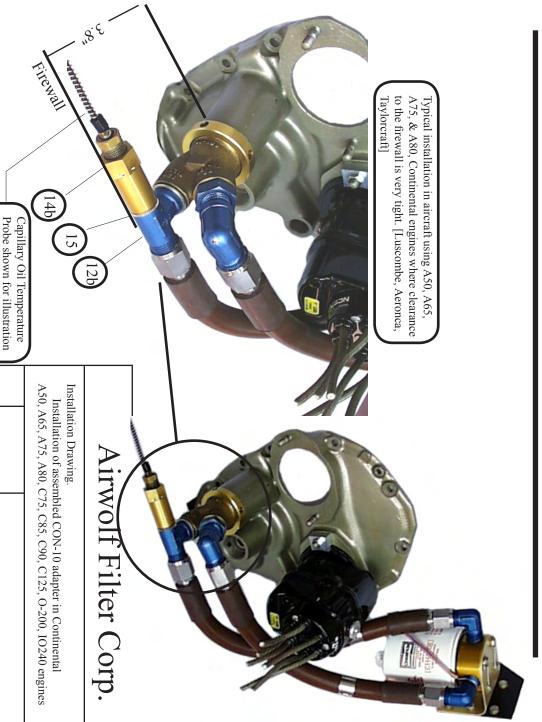
DBL-10 Doubler Plate & OFB-11  $\,$  Oil Filter Base

## ASSEMBLY DRAWING# AFC-D-0028



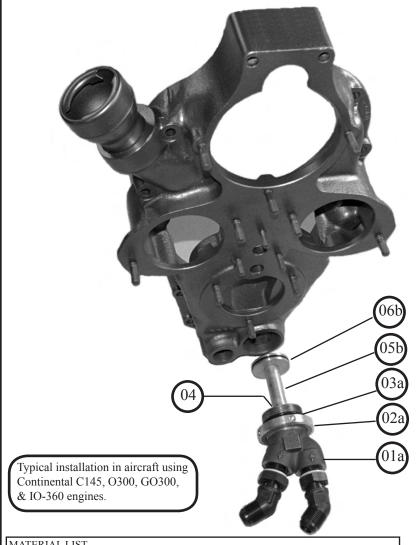
# INSTALLATION DRAWING# AFC-D-0029





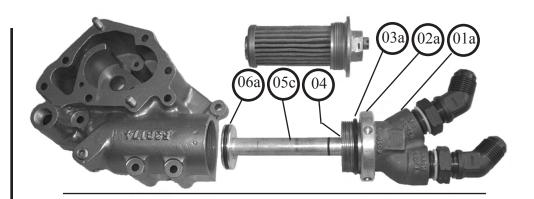
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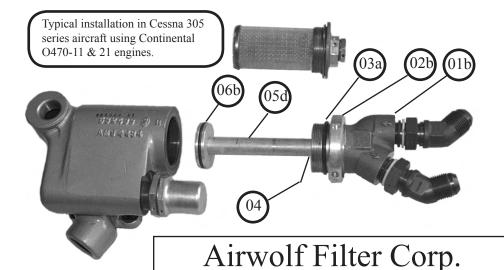
## INSTALLATION DRAWING# AFC-D-0030



MATERIAL LIST Index Part Number Description CON-10 Engine Adapter - [1-3/4"-16 Threads] 01a. CON-11 Engine Adapter - [1-13/16"-16 Threads] RNG-10 Sealing Ring [1-3/4"-16 Threads] Sealing Ring [1-13/.16"-16 Threads] RNG-11 M83248/1-223 Sealing O-Ring 03a. M83248/1-016 O-Ring, Nosepiece Oil Screen Adapter - C145/O-300/GO-300/IO-360 05b. EXT-11 052. EXT-12 Oil Screen Adapter - O470/IO470/IO520 Oil Screen Adapter - O470-7/11/13 05b. EXT-14 M83248/1-126 O-Ring, Use w/EXT-12 M83248/1-128 O-Ring, Use w/EXT-11 & EXT-14 Adapter

Typical installation in aircraft using Continental O470, IO470, IO520, TSIO520 & GTSIO520 engines

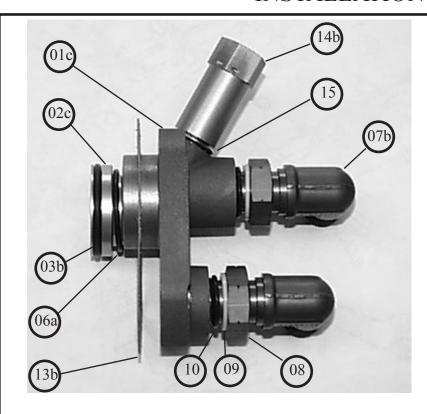




Installation of assembled CON-10 adapter in C145, O300, GO300, IO360, O470, IO470, IO520, TSIO520 & GTSIO520 Continental engines, and

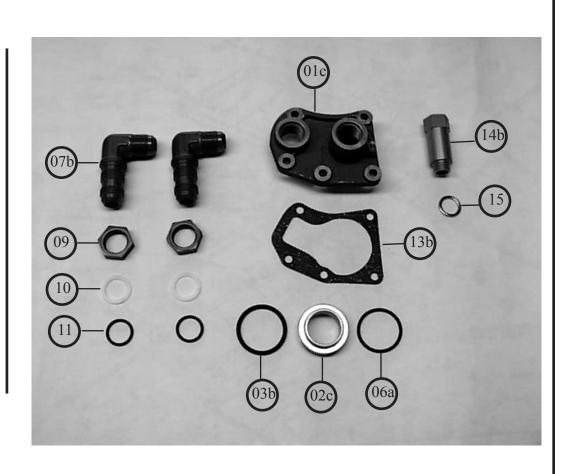
Installation of CON-11 adapter in O470--11 & 15 Continental engines,

## INSTALLATION DRAWING# AFC-D-0030-A



Typical installation as used in Continental E165/E185,E205 & E225 engines.

MATERIAL LIST Index Part Number Description 01c. CON-12 Engine Adapter - "E" Series 02c. RNG-17 Oil Diverter Ring, "E" Series O-Ring, Oil Diverter Ring 03b. M83248/1-222 O-Ring, Oil Diverter Ring 06a. M83248/1-126 90° Bulkhead Fitting 07b. AN833-10D AN6289-10D Bulkhead Nut 09. MS28773-10 Boss Gasket 10. MS9387-10 O-Ring 13b. 352067 Engine Adapter Gasket 14b. OTA-2250 Oil Temp Adapter 15. MS35769-11 Oil Temp Adapter Gasket



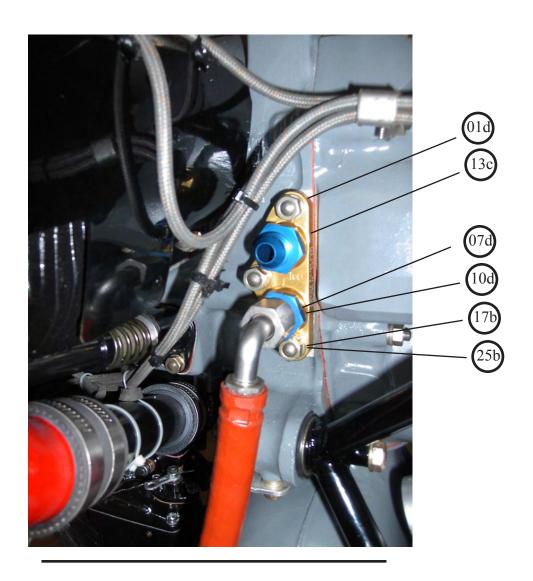
Revisions

# Airwolf Filter Corp.

Installation of CON-12 adapter in E165, E185, E205, & E225 Continental engines,

Revisions

# INSTALLATION DRAWING# AFC-D-0030-B



## MATERIAL LIST

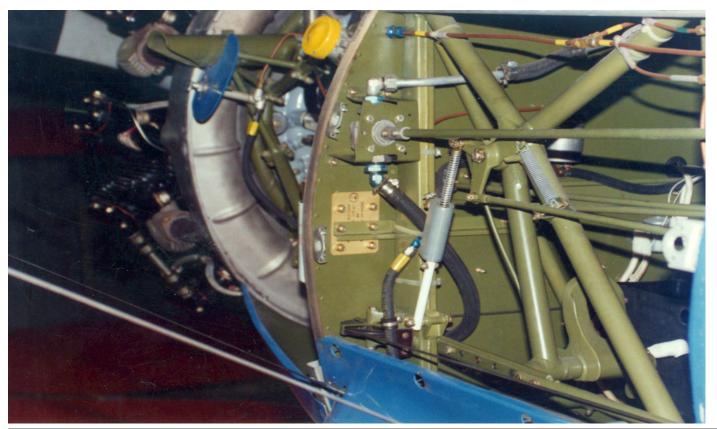
Index Part Number Description Engine Adapter 01d. CON-16 AN919-15D-SP 07d. Fittng 10d. M83248/1-910 O-Ring 13c 652070 Gasket 17b. AN960-513 Washer 25b. MS20365-524A Nut

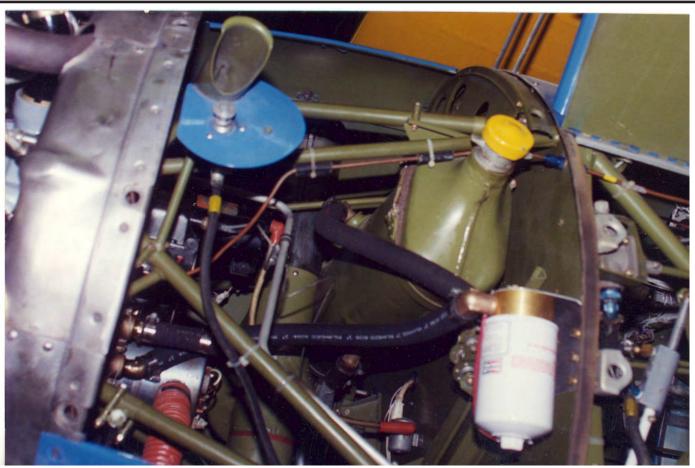
# Airwolf Filter Corp.

Installation of CON-16 adapter in C85 - IO240 Continental engines,

01/08/07 Dwg# AFC-D-0030-B

# INSTALLATION DRAWING# AFC-D-0030-C Boeing Stearman







# **Reference Data**

for

**AFC-K008** 

for

STC SA00079NY Oil Filter Kit

**AFC-K008** 

**Dated: 5-6-2024** 

**Airwolf Filter, Corp 12801 Hwy. 75 N. OKMULGEE, OK 74447**(918) 561-8696 Ph

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## READ THIS BEFORE INSTALLING OIL FILTER KITS, DATA PERTINENT TO ALL INSTALLATIONS

## TO THE MECHANIC:

This P/N AFC-K008 remote mount oil filter kit incorporates our STC approved for all Continental powered aircraft up to 450 hp. The STC paperwork provided with this kit utilizes the approved model list (AML) system instituted by the FAA.

Upon installing this filter kit, you will need to fill out and file a 337 form for this installation referencing the P/N AFC- K008 kit and the STC# SA00079NY. If your aircraft is not listed on the AML, you will also need a field approval by your local FSDO for this installation. This is necessary until your aircraft is listed, a field approval is required. If you are unsure whether you need a field approval, please call us directly.

If you have any questions or concerns on this STC, please call Airwolf Filter Corp, which we will clarify the details. Personnel are very familiar with our filter kits and can address any concerns you may have on your installation.

Airwolf Filter Corp 12801 Hwy 75 N. Okmulgee, OK 74447 Phone: (918) 561-8696

After completion of the installation of this kit, place a copy of the instructions along with the ICA in the Aircraft records for maintenance and replacement parts identification.

## DATA PERTINENT TO ALL INSTALLATIONS

Prior to installing the filter kit on the aircraft, weigh the filter kit, add the weight of the hoses, and subtract the oil screen or oil filter adapter removed from the engine, and determine the net weight being added to the aircraft for determining the weight and balance of the aircraft later. Once the filter kit is installed on the aircraft, if you choose to purchase the hoses from Airwolf, we will supply you with the Hoses specified in this STC. At the time of the order, we will need the flare – to flare length of the hoses, and hose ends needed on each hose i.e.: Straight to Straight, Straight to  $90^{\circ}$ , Straight to  $45^{\circ}$ , etc. allowing for engine torque and vibration per AC43.13.

If our instructions do not specifically say you can do something, that means you are not allowed to do it without our written approval.

- 1. Review all installation data and written material before beginning
- 2. Please inspect contents of kit and inventory components before beginning.
- **3. <u>Do not</u>** over tighten the fittings on Adapters or housings. This can distort or crack housings, causing oil to leak.
- **4.** It is <u>EXTREMELY</u> important that oil lines be routed properly in accordance with AC 43.13-1A & 2A Acceptable Methods and Practices. (see Tip below)
- **5.** See Warnings and Notes contained in the instructions concerning routing of lines and the use of sealant on NPT fittings.

## DO NOT USE TEFLON TAPE ON FITTINGS.

- **6.** The use of sealant on AN/Flared type fittings is not required, it is only required on NPT fittings.
- 7. When mounting Adapters use the supplied doublers for reinforcing mounting locations.
- **8. BE PATIENT!!!** Take your time and you will see the results of your effort.

## TIP

## How to get correct length of hose

Hose length is measured from flare to flare. Do not use a string or a tape measure but take a section of old garden hose. Touch one end of the garden hose to the tip of one fitting and touch the other end of the hose to the other fitting, that is the correct length of hose needed. The garden hose is trying to bend to its natural set, which is normally the extra length needed for engine torque and vibration per AC43.13, Also, if you kink a garden hose, you are obviously going to kink an aircraft hose. Doing it this way allows you to snake a hose across the back of an engine and around obstacles and this will replicate exactly how the aircraft hose will fit.

Thank you for taking the time to read this.

## **WARNINGS & NOTES**

## \*\*\*\*\*WARNING (A) \*\*\*\*\*

USE LOCTITE® BRAND 567 TEFLON THREAD SEALANT BEFORE INSTALLATION OF FITTINGS. DO NOT ASSEMBLE FITTINGS INTO OIL FILTER BASE WITHOUT SEALANT OTHERWISE GALLING OF MATERIAL WILL RESULT.

## \*\*\*\*\* WARNING (B) \*\*\*\*\*

NO ROUTING OF FLAMMABLE FLUID LINES ABOVE EXHAUST SYSTEM, UNLESS FIRESLEEVED.
INSTALLER IS RESPONSIBLE FOR INTER-RELATIONSHIP BETWEEN THIS AND OTHER ENGINE
CHANGES (INCLUDING ACCESSORIES)

## \*\*\*\*\* WARNING (C) \*\*\*\*\*

THE USE OF PARTS AND COMPONENTS NOT INCLUDED IN THE KIT, IS NOT COVERED BY THE STC APPROVAL. ALWAYS REMEMBER THAT THE DIRTY OIL FROM THE ENGINE ENTERS THE OIL FILTER FROM THE OUTSIDE OF THE FILTER. THE CLEAN OIL EXITS THROUGH THE LARGE HOLE IN THE CENTER OF THE OIL FILTER AND RETURNS TO THE ENGINE.

## \*\*\*\*\* WARNING (D) \*\*\*\*\*

DO NOT, UNDER ANY CIRCUMSTANCES, CONNECT AN OIL COOLER THAT DOES NOT HAVE A THERMOSATIC CONTROL VALVE, IN SERIES WITH OUR REMOTE MOUNT OIL FILTER KIT. OUR FILTER KIT IS A "FULL FLOW" OIL FILTERING SYSTEM WHICH MEANS ALL OF THE OIL IS FILTERED ALL OF THE TIME. DURING STARTUP ON A COLD DAY, THE COLD THICK OIL WILL PARTIALLY BYPASS A CH48108 OR CH48109 OIL FILTER UNTIL THE VISCOSITY DROPS AND THE THIN OIL CAN FLOW THROUGH THE FILTER MEDIA THEREBY ALLOWING OIL TO CIRCULATE IN THE ENGINE. IF AN OIL COOLER HAS NO THERMOSTATIC BYPASS BUILT INTO THE UNIT, WHEN THE OIL FILTER GOES INTO PARTIAL BYPASS, THIS THICK SLUG OF OIL WILL BE STOPPED, OR SEVERELY RESTRICTED AT THE OIL COOLER. ONE OF THREE THINGS WILL HAPPEN:

- 1. THE OIL COOLER WILL SEPARATE IN HALF.
- 2. THE OIL FILTER GASKET WILL FAIL AND/OR THE OIL FILTER WILL EXPLODE.
- 3. THE OIL HOSE WILL FAIL

ANY OF THE THREE SCENARIOS ABOVE WILL CAUSE COMPLETE LOSS OF OIL IN A SHORT PERIOD OF TIME.

## **NOTE:**

## **COMMON TO ALL INSTALLATIONS**

SOME HOSES OR WIRES MAY HAVE TO BE REROUTED SO THE OIL FILTER ASSEMBLY WILL FIT INTO POSTION. REFERENCE AND MATERIAL PER AC 43.13-1B & 2A.

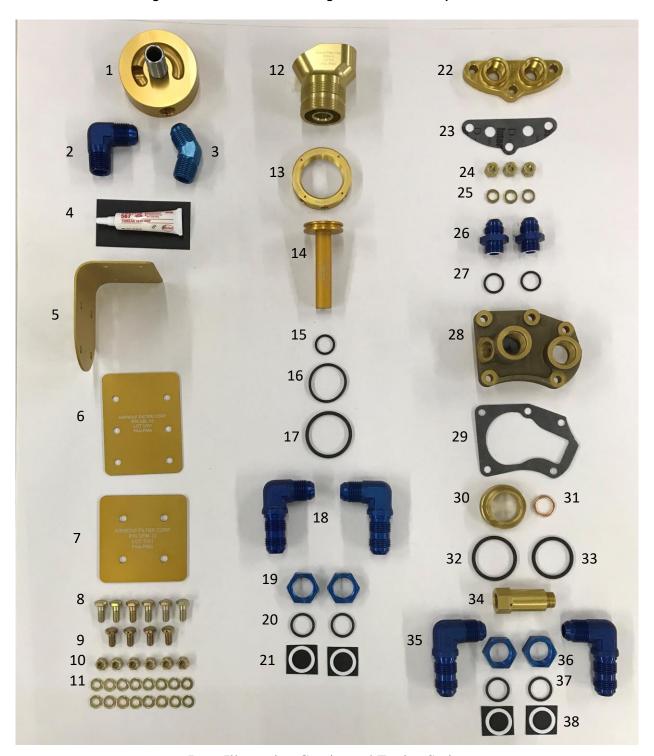
## Illustrated Parts List No. AFC-K008-PL

Applicability: Continental Engines using P/N A3568 Oil Screen Assy,

Fixed Wing Aircraft with A50, A65, A75, A80, C75, C85, C90, C125, O-200, & IO-240 Engines.

Date: 5-6-2024

Having firewalls of .021" ASTM A527 galvanized steel or equivalent.



Parts Illustration Continental Engine Series

Figure 1

## Illustrated Parts List No. AFC-K008-PL

Applicability: Continental Engines using P/N A3568 Oil Screen Assy,

Fixed Wing Aircraft with A50, A65, A75, A80, C75, C85, C90, C125, O-200, & IO-240 Engines.

Having firewalls of .021" ASTM A527 galvanized steel or equivalent.



Parts Illustration Continental Engine Series

Figure 2

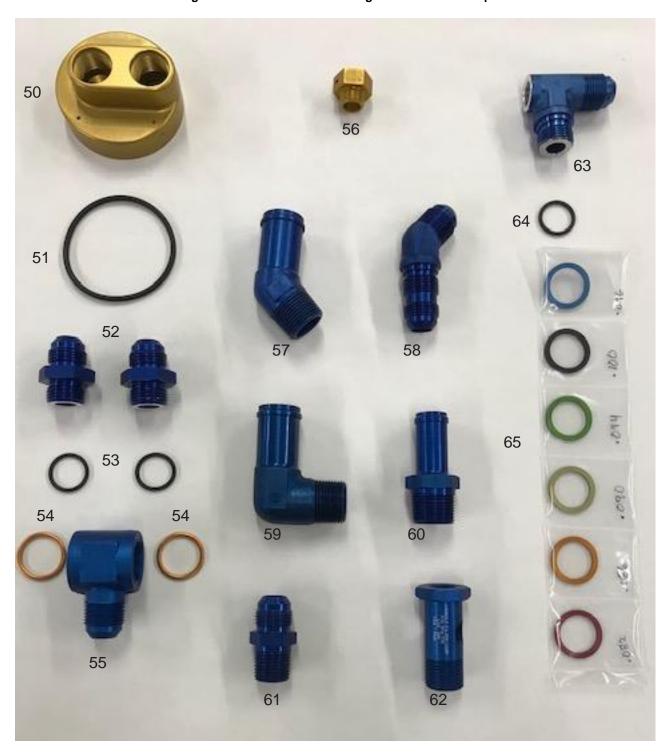
## Illustrated Parts List No. AFC-K008-PL

Applicability: Continental Engines using P/N A3568 Oil Screen Assy,

Fixed Wing Aircraft with A50, A65, A75, A80, C75, C85, C90, C125, O-200, & IO-240 Engines.

Date: 5-6-2024

Having firewalls of .021" ASTM A527 galvanized steel or equivalent.



Parts Illustration Continental Engine Series

Figure 3

# Parts List No. AFC-K008-PL (see Illustrations)

Figure	Index	Part Number	Description	Quantity
1	1	OFB-10	Oil Filter Base – 8 Ports, Use with Con-16 Adapter	1
1	1	OFB-11	Oil Filter Base – 10 Ports	1
1	1	OFB-15	Oil Filter Base – 12 Ports	1
1	2	MS20822-8D	Fitting Elbow 90°, Use with Con-16 Adapter	1
1	2	MS20822-10D	Fitting Elbow 90°	1
1	3	MS20823-8D	Fitting Elbow 45°, Use with Con-16 Adapter	1
1	3	MS20823-10D	Fitting Elbow 45°	1
1	4	567	Loctite Thread Sealant	1
1	5	OFM-11	Oil Filter Mount, Vertical	1
1	6	DBL-10	Doubler Plate	1
1	7	OFM-10	Oil Filter Mount, Horizontal	1
1	8	AN4-5A	Bolts	6
1	9	AN4H-4A	Bolts, Drilled Head	4
1	10	MS20365-428A	Locknuts	6
1	11	AN960-416	Washers, Flat	16
1	12	CON-10	Adapter, Engine Full Flow 1-3/4-16 UNF Thd	1
1	12	CON-11	Adapter, Engine Full Flow 1-13/16-16 UNF Thd	1
1	13	RNG-10	Sealing Ring, 1-3/4-16 UNF Thread.	1
1	13	RNG-11	Sealing Ring, 1-13/16-16 UNF Thread.	1
1	14	EXT-10	Adapter, Oil Screen,	1
-			A50,A65,A75,A80,C75,C85,C90,C125,O-200,IO240	
1	14	EXT-11	Adapter, Oil Screen,	1
			C145, O300, GO300, & IO-360A,C,D,G,H,J,K	
1	14	EXT-12	Adapter, Oil Screen,	1
			O-470A,B,E,G,J,K,L,M,P,R,S,U,	
			IO-470C,D,E,F,G,H,J,K,L,M,N,P,R,S,U,V,	
			IO-520A,D,E,F,J,K,L, / TSIO-520C,G,H,M,P,R,T,	
1	14	EXT-14	Adapter, Oil Screen, O470-11&15	1
1	15	M83248/1-016	O-Ring, Nose Piece	1
1	16	M83248/1-126	O-Ring, Use w/EXT-10 or -12 Adapter, Oil Screen or RNG-	1
			17 Oil Diverter Ring	
1	16	M83248/1-128	O-Ring, Use w/EXT-11 or -14 Adapter, Oil Screen	1
1	17	M83248/1-223	O-Ring, Sealing Ring	1
1	18	AN833-10D-SP	Fitting, Bulkhead 90°	2
1	19	AN6289-10D	Nut, Bulkhead	2
1	20	M83248/1-910	O-Ring, -10	2
1	21	MS28773-10	Gasket, Boss Teflon	2
1	22	CON-16	Adapter, Engine, C85-IO240	1
1	23	652070 or	Gasket, CON-16	1
		Equivalent		
1	24	MS20365-524A	Locknuts, Use with Con-16 Adapter	3
1	25	AN960-524	Washers, Flat, Use with Con-16 Adapter	3
1	26	AN815-8D-SP	Fitting, Union	2
1	26	AN815-10D-SP	Fitting, Union	2

# Parts List No. AFC-K008-PL (see Illustrations)

(continued)

Figure	Index	Part Number	Description	Quantity
1	27	M83248/1-908	O-Ring, -8	2
1	28	CON-12	Adapter, Engine, Continental E Series	1
1	29	352067or	Gasket, CON-12	1
		Equivalent		
1	30	RNG-17	Ring, Oil Divertor "E" Series	1
1	31	MS35769-11	Gasket, Oil Temp Adapter	1
1	32	M83248/1-126	O-Ring, Oil Divertor Ring	1
1	33	M83248/1-222	O-Ring, Oil Divertor Ring	1
1	34	OTA-2250	Adapter, Oil Temp, Long 2-1/4"	1
1	35	AN833-8D-SP	Fitting, Bulkhead 90°	2
1	36	AN6289-8D	Nut, Bulkhead	2
1	37	M83248/1-910	O-Ring, -10	2
1	38	MS28773-8	Gasket, Boss Teflon	2
2	39	AFC-600	Oil Filter, or Equivalent [Champion CH48109]	1
2	40	AFC-500	Oil Filter, or Equivalent [Champion CH48108]	1
2	41	QS100M52H	Clamp, Hose 3-1/4" for Dampener	1
2	42	MIL6000-3/4-2	Hose, 1" x 2"	1
2	43	TBD-0XXX	Fire Sleeved Hose	opt
2	44	MIL6000-5/8	Hose, 5/8" x 24"	2
2	45	MIL6000-3/4	Hose, 3/4" x 24"	2
2	46	MIL6000-1	Hose, 1" x 25"	2
2	47	QS100M16H	Clamp, Hose 1"	4
2	48	QS100M12H	Clamp, Hose 3/4"	4
2	49	QS100M10H	Clamp, Hose 5/8"	4
3	50	OFB-17	Oil Filter Base	1
3	51	M83248/1-230	O-Ring,	1
3	52	AN919-15D-SP	Fitting, Union	2
3	53	M83248/1-910	O-Ring, -10	2
3	54	MS35769-18	Gasket, Temp Probe Adapter	2
3	55	AN776-10D	Fitting, 90°	1
3	56	OTA-527	Adapter, Oil Temp, Short 5/8"	1
3	57	AN844-8D	Fitting, 45°, NPT to Hose	2
3	57	AN844-10D	Fitting, 45°, NPT to Hose	2
3	57	AN844-16D	Fitting, 45°, NPT to Hose	2
3	58	AN837-10D-SP	Fitting, 45°	2
3	59	AN842-8D	Fitting, 90°, NPT to Hose	2
3	59	AN842-10D	Fitting, 90°, NPT to Hose	2
3	59	AN842-16D	Fitting, 90°, NPT to Hose	2
3	60	AN840-8D	Fitting, Straight, NPT to Hose	2
3	60	AN840-10D	Fitting, Straight, NPT to Hose	2
3	60	AN840-16D	Fitting, Straight, NPT to Hose	2
3	61	AN816-10D	Fitting, Nipple, NPT to Flare	2
3	62	TPA-775	Adapter, Temp Probe	1
3	63	TPA-776	Adapter, Temp Probe	1
3	64	M83248/1-910	O-Ring, -10	1
3	65	TPA-776	Gasket, Washer Set, Adapter, Temp Probe	1

## Installation Instructions AFC-K008-II-A

Applicability: Continental Engines using P/N A3568 Oil Screen Assy,

Fixed Wing Aircraft with A50, A65, A75, A80, C75, C85, C90, C125, O-200, & IO-240 Engines.

- 1. Remove the Continental screen assembly P/N A3568, Clean Screen housing and gasket surface.
- 2. Per Illustrated Parts List K008-PL, Assemble Engine Adapter (12) as follows:
  - (A) Lubricate threads of Engine Adapter (12) and Sealing Ring (13) with suitable lubricant.
  - (B) Thread Sealing Ring (13) onto Engine Adapter (12) past smooth area, onto second set of threads.
  - (C) Install lightly oiled O-Ring, (17), and position in the smooth area between the upper and lower threads.
  - (D) Run Sealing Ring (13) down against O-ring. [Assure O-ring is still centered in non-threaded area.]
  - (E) Insert lightly oiled O-ring, (15) into groove inside of center opening of Engine Adapter (12)
- 3. Per Illustrated Parts List K008-PL, install lightly oiled O-ring (16) onto Oil Screen Adapter EXT-10 (14) and insert into screen chamber of engine.
  - When seated correctly, tube will extend above face of engine accessory case approximately 1/4". As adapter is inserted, resistance will be met. Continue pressure indicating compression of O-Ring (16) until adapter is seated in lower screen seat. (see Assembly Drawing AFC-D-0029)
- 4. Per Illustrated Parts List K008-PL, thread engine adapter (12) into engine oil screen opening being sure that oil screen adapter (14) is started in center of the opening. Screw in engine adapter (12) until light resistance indicates that O-ring (16) is seated on the accessory case. Orient the engine adapter (12) as necessary, being careful not to screw the engine adapter (12) in or out more than 1/2 turn from present position. This assures that the O-Ring is still centered in the non-threaded area. Do not tighten sealing ring yet. (see Assembly Drawing AFC-D-0029)
- 5. Per Assembly Drawing AFC-D-0028, onto each bulkhead fitting (7), install in order 1 ea. bulkhead nut (8), boss gasket (9), and O-Ring (10). If using a union, install O-Ring (10) only. When assembled correctly, the O-Ring (10) is positioned in the center of the non-threaded area, between the upper set of threads and the lower set of threads on the bulkhead fitting. Install each completed assembly into the engine adapter (1) and located towards intended direction of hoses.
  - CAUTION: O-ring only seals in the center of the non-threaded area between the upper set of threads and lower set of threads on the bulkhead fitting. Failure to position the O-Ring in this area, may cause a small oil leak.
- 6. Per Illustrated Parts List K008-PL, on A50 & A65 engines, remove the oil drain plug and relocate the oil temperature capillary tube and oil temp adapter using oil temp gasket (31) provided and safety wire.
- 7. On A75, A80, C75, C85, C90, & O200 engines, remove one of the Continental P/N 532432 plugs located in the front of the engine which caps off access to the oil gallery. Remove the brass oil temp adapter nut from the existing oil screen and relocate the oil temperature bulb to this location. Torque to specs and secure.
- NOTE A: Per Illustrated Parts List K008-PL, capillary tube may be kept at present location provided enough space exists between the engine and firewall. To utilize the existing location, 1 ea. 90° Fitting (55), Temp Probe Adapter (62), Oil Temp Adapter Gasket (54), must be used. If there is not enough space to utilize the existing location, per installation drawing (AFC-D-0029). Use TPA-776 Fitting (3), Temp Probe Adapter (1), Oil Temp Adapter Gasket (2), Select the appropriate thickness of part number TPA-776 Washer/Spacer (4) that will allow you to tighten the TPA-776 adapter (3) at the correct orientation for oil line attachment.
- 8. Per Illustrated Parts List K008-PL, Remove the oil drain plug and relocate the oil temperature capillary tube and oil temp adapter using oil temp gasket (31) provided and safety wire.
- 9. Per Illustrated Parts List K008-PL, Using the horizontal oil filter mount (7) or vertical oil filter mount (5) as a drilling template, locate and drill mounting holes using a letter "F" drill.

## Installation Instructions AFC-K008-II-A

Applicability: Continental Engines using P/N A3568 Oil Screen Assy,

Fixed Wing Aircraft with A50, A65, A75, A80, C75, C85, C90, C125, O-200, & IO-240 Engines. (continued)

10a. Per Illustrated Parts List K008-PL, Secure vertical oil filter mount (5) to Fwd side of firewall and doubler plate (6) to Aft side of firewall using bolts (8), washers (11), and locknuts (10).) (see Assembly Drawing AFC-D-0024). OR

10b. Per Illustrated Parts List K008-PL, Secure oil filter base (1) to Fwd side of firewall and horizontal oil filter mount plate (7) to rear side using bolts (9), washers (11) and secure with .032 MS20995-C safety wire.) (see Assembly Drawing AFC-D-0025).

## \*\*\*\*\* SEE WARNING (A) \*\*\*\*\*

11. Per Illustrated Parts List K008-PL, Install any combination of fitting (2), (3), or (61) into oil filter base (1). Mount to vertical oil filter mount (5) using bolts (9), washers (11), and secure with .032 MS20995-C safety wire.

## \*\*\*\* SEE TIP "How to get correct length of hose" \*\*\*\*\*

12. Determine hose lengths and order appropriate hoses. Ex: P/N for a 24-7/8" long fire sleeved hose with straight swivel fittings at each end of the hose is F13000010-0247.

## \*\*\*\*\* SEE WARNING (B) \*\*\*\*\*

- 13. Per Assembly Drawing AFC-D-0029, Install 2 ea. hose assy's connecting the "A" port on the engine adapter to the "A" port on the oil filter base and the "B" port on the engine adapter to the "B" port on the oil filter base and tighten hose fittings to 270-350 in/lbs.
- 14. Per Assembly Drawing AFC-D-0028, After hoses have taken natural set, and hose fittings tightened, tighten sealing ring (2) with 2" Pin Spanner wrench. Do not overtighten. Secure with safety wire. Note: Approximately 1/4-1/2 turn is all that is needed to compress the Viton O-ring properly and no leakage will occur.
- 15. Install oil filter, torque per instructions on oil filter and secure with safety wire.
- 16. Run engine and check for leaks.
- 17. Determine weight and balance, initiate 337 form, and update the equipment list.

## Installation Instructions AFC -K008-II-B

Applicability: Continental Engines using P/N 530003 Oil Screen Assy,

Fixed Wing Aircraft with C145, O-300, GO-300, & IO-360A, C, D, G, H, J, K, Engines.

- 1. Remove the Continental screen assembly P/N 530003, Clean Screen housing and gasket surface.
- 2. Per Illustrated Parts List K008-PL, Assemble Engine Adapter (12) as follows:
  - (A) Lubricate threads of Engine Adapter (12) and Sealing Ring (13) with suitable lubricant.
  - (B) Thread Sealing Ring (13) onto Engine Adapter (12) past smooth area, onto second set of threads.
  - (C) Install lightly oiled O-ring, (17). and position in the center of the smooth area between the upper and lower threads.
  - (D) Run Sealing Ring (13) down against O-ring. [Assure O-ring is still centered in non-threaded area.]
  - (E) Insert lightly oiled O-ring, (15) into groove inside of center opening of Engine Adapter (12)
- 3. Install lightly oiled O-ring (16) onto Oil Screen Adapter EXT-11 (14) and insert into screen chamber of engine. When seated correctly, tube will extend above face of engine accessory case approximately 1/4". As adapter is inserted, resistance will be met. Continue pressure indicating compression of O-ring (16) until adapter is seated in lower screen seat.
- 4. Per Illustrated Parts List K008-PL, Thread engine adapter (12) into engine oil screen opening being sure that oil screen adapter (14) is started in center of the opening. Screw in engine adapter (12) until light resistance indicates that O-ring (16) is seated on the accessory case. Orient the engine adapter (12) as necessary, being careful not to screw the engine adapter (12) in or out more than 1/2 turn from present position. This assures that the O- Ring is still centered in the non-threaded area. Do not tighten sealing ring yet. (see Assembly Drawing AFC-D-0030)
- 5. Per Illustrated Parts List K008-PL, onto each bulkhead fitting (18) or (58), install in order 1 ea. bulkhead nut (19), boss gasket (21), and O-ring (20). If using a union (26), install O-ring (20) only. When assembled correctly, the O-ring (20) is positioned in the center of the non-threaded area, between the upper set of threads and the lower set of threads on the bulkhead fitting. Install each completed assembly into the engine adapter (12) and located towards intended direction of hoses.
- CAUTION: O-ring only seals in the center of the non-threaded area between the upper set of threads and lower set of threads on the bulkhead fitting. Failure to position the O-ring in this area, may cause a small oil leak.
- 6. On C-145 & O-300 installations, remove oil scavenge screen (TCM P/N 5300050), drill & tap a 5/8" x 18 thread for future installation of oil temperature bulb, and reinstall in engine accessory case. Transfer existing capillary temp probe adapter from oil pressure screen, to scavenge oil screen. Reroute oil temperature bulb into tachometer cable hole in firewall and install into adapter in scavenge oil screen and tighten.

CAUTION: Do not over torque or break capillary tube otherwise oil temperature gage will have to be replaced.

- NOTE D: Per Assembly Drawing AFC-D-0028, capillary tube may be kept at present location provided sufficient space exists between the engine and firewall. To utilize the existing location, 1 ea. optional 90° Fitting (11), Temp Probe Adapter (12), Oil Temp Adapter Gasket (13), and 2 ea. Temp Probe Adapter Gasket (13) must be used per assembly drawing.
- 7. Per Illustrated Parts List K008-PL, using the horizontal oil filter mount (7) or vertical oil filter mount (5) as a drilling template, locate and drill mounting holes using a letter "F" drill.
- 08a. Per Illustrated Parts List K008-PL, secure vertical oil filter mount (5) to Fwd side of firewall and doubler plate (6) to Aft side of firewall using bolts (8), washers (11), and locknuts (10) (see Assembly Drawing AFC-D-0024). OR
- 08b. Per Illustrated Parts List K008-PL, secure oil filter base (1) to Fwd side of firewall and horizontal oil filter mount plate (7) to rear side using bolts (9), washers (11) and secure with .032 MS20995-C safety wire.) (see Assembly Drawing AFC-D-0025).

## **Installation Instructions AFC -K008-II-B**

Applicability: Continental Engines using P/N 530003 Oil Screen Assy,

Fixed Wing Aircraft with C145, O-300, GO-300, & IO-360A, C, D, G, H, J, K, Engines. (continued)

## \*\*\*\*\* SEE WARNING (A) \*\*\*\*\*

9. Per Illustrated Parts List K008-PL, install any combination of fitting (2), (3), or (61) into oil filter base (1). Mount to vertical oil filter mount (5.) using bolts (9), washers (11), and secure with .032 MS20995-C safety wire.

## \*\*\*\* SEE TIP "How to get correct length of hose" \*\*\*\*

Determine hose lengths and order appropriate hoses. Ex: P/N for a 24-7/8" long fire sleeved hose with straight swivel fittings at each end of the hose is F13000010-0247.

## \*\*\*\*\* SEE WARNING (B) \*\*\*\*\*

- Per Illustrated Parts List K008-PL, install 2 ea. hose assy's (43) connecting the "A" port on the engine adapter to the "A" port on the oil filter base and the "B" port on the engine adapter to the "B" port on the oil filter base per installation drawings and tighten hose fittings to 270-350 in/lbs.
- 12. Per Installation Drawing AFC-D-0030, After hoses have taken natural set, and hose fittings tightened, tighten sealing ring (2) with 2" Pin Spanner wrench. Do not overtighten. Secure with safety wire. Note: Approximately 1/4-1/2 turn is all that is needed to compress the O-ring properly and no leakage will occur.
- 13. Install oil filter, torque per instructions on oil filter and secure with safety wire.
- 14. Run engine and check for leaks.
- 15. Determine weight and balance, initiate 337 form, and update the equipment list.

## Installation Instructions AFC -K008-II-C

Applicability: Continental Engines using P/N 538727 or 534862 Oil Screen Assy, [1-3/4"-16 Thread] Fixed Wing Aircraft with: O-470 A. B. E. G. J. K. L. M. P. R. S. U.

Fixed Wing Aircraft with: O-470 A, B, E, G, J, K, L, M, P, R, S, U, IO-470C, D, E, F, G, H, J, K, L, M, N, P, R, S, U, V

IO-520A, D, E, F, J, K, L TSIO-520C, G, H, M, P, R, T GTSIO-520C, D, F, H, K, L, M, N IO-550 Engines.

1. Remove the Continental screen assembly P/N 538727 or 534862, clean Screen housing and gasket surface.

- 2. Per Illustrated Parts List K008-PL, Assemble Engine Adapter (12) as follows:
  - (A) Lubricate threads of Engine Adapter (12) and Sealing Ring (13) with suitable lubricant.
  - (B) Thread Sealing Ring (13) onto Engine Adapter (12) past smooth area, onto second set of threads.
  - (C) Install lightly oiled O-ring, (17). and position in the center of the smooth area between the upper and lower threads.
  - (D) Run Sealing Ring (13) down against O-ring. [Assure O-ring is still centered in non-threaded area.]
  - (E) Insert lightly oiled O-ring, (15) into groove inside of center opening of Engine Adapter (12)
- 3. Insert Oil Screen Adapter EXT-12 (14) without O-ring installed into screen chamber of engine. When seated, tube will extend above face of engine casting approximately 1/4". Trim as necessary to achieve the 1/4" height. Remove Oil Screen Adapter (14) from engine
- 4. Per Illustrated Parts List K008-PL, lightly oil O-ring (16), install onto Oil Screen Adapter (14), and reinstall into oil screen chamber of oil pump. As adapter is inserted, resistance will be met. Continue pressure indicating compression of O-ring (16) until adapter is firmly seated in lower screen seat.
- 5. Thread engine adapter (12) into engine oil screen opening being sure that oil screen adapter (14) is started in center of the opening. Screw in engine adapter (12) until light resistance indicates that O-ring (16) is seated on the accessory case. Orient the engine adapter (12) as necessary, being careful not to screw the engine adapter (12) in or out more than 1/2 turn from present position. This assures that the O-Ring is still centered in the non-threaded area. Do not tighten sealing ring yet (see Installation Drawing AFC-D-0030).
- 6. Per Assembly Drawing AFC-D-0028, onto each bulkhead fitting (7a) or (7b), install in order 1 ea. bulkhead nut (8), boss gasket (9), and O-ring (10). If using a union (7c), install O-ring (10) only. When assembled correctly, the O-ring (10) is positioned in the center of the non-threaded area, between the upper set of threads and the lower set of threads on the bulkhead fitting. Install each completed assembly into the engine adapter (1) and located towards intended direction of hoses.

CAUTION: O-ring only seals in the center of the non-threaded area between the upper set of threads and lower set of threads on the bulkhead fitting. Failure to position the O-ring in this area, may cause a small oil leak.

- 7. Per Illustrated Parts List K008-PL, using the horizontal oil filter mount (7) or oil vertical filter oil filter mount (5) as a drilling template, locate and drill mounting holes using a letter "F" drill.
- 8a. Per Illustrated Parts List K008-PL, secure vertical filter oil filter mount (5) to Fwd side of firewall and doubler plate (6) to Aft side of firewall using bolts (8), washers (11), and locknuts (10). (see Assembly Drawing AFC-D-0024)

  OR
- 8b. Per Illustrated Parts List K008-PL, secure oil filter base (1) to Fwd side of firewall and horizontal oil filter mount (7) to rear side using bolts (9), washers (11) and secure with .032 MS20995-C safety wire. (see Assembly Drawing AFC-D-0025)

## Installation Instructions AFC -K008-II-C

Applicability:

Continental Engines using P/N 538727 or 534862 Oil Screen Assy, [1-3/4"-16 Thread] Fixed Wing Aircraft with: O-470 A, B, E, G, J, K, L, M, P, R, S, U,

IO-470C, D, E, F, G, H, J, K, L, M, N, P, R, S, U, V IO-520A, D, E, F, J, K, L TSIO-520C, G, H, M, P, R, T GTSIO-520C, D, F, H, K, L, M, N IO-550 Engines. (continued)

## \*\*\*\*\* SEE WARNING (A) \*\*\*\*\*

9. Install any combination of fitting (2), (3), or (61) into oil filter base (1). Mount to vertical oil filter mount plate (5) using bolts (9), washers (11), and secure with .032 MS20995-C safety wire.

## \*\*\*\* SEE TIP "How to get correct length of hose" \*\*\*\*\*

Determine hose lengths and order appropriate hoses (43). Last 2 xx's in part number is the length of the hose in inches and the z is the length in eighths of an inch. The letter "F" at the beginning of the P/N denotes fire sleeving. Ex: P/N for a 24-7/8" long fire sleeved hose with straight swivel fittings at each end of the hose is F13000010-0247.

## \*\*\*\*\* SEE WARNING (B) \*\*\*\*\*

- Per Illustrated Parts List K008-PL, install 2 ea. hose assy's (43) connecting the "A" port on the engine adapter to the "A" port on the oil filter base and the "B" port on the engine adapter to the "B" port on the oil filter base per installation drawings and tighten hose fittings to 270-350 in/ lbs.
- 12. Per Installation Drawing AFC-D-0030, after hoses have taken natural set, and hose fittings tightened, tighten sealing ring (2) with 2" Pin Spanner wrench. Do not overtighten. Secure with safety wire. Note: Approximately 1/4 1/2 turn is all that is needed to compress the O-ring properly and no leakage will occur.
- 13. Install oil filter, torque per instructions on oil filter and secure with safety wire.
- 14. Run engine and check for leaks.
- 15. Determine weight and balance, initiate 337 form, and update the equipment list.

### Installation Instructions AFC -K008-II-D

Applicability: Continental Engines using P/N 536902 or A35996 Oil Screen Assy, [1-13/16"-16 Thread] Fixed Wing Aircraft with: O-470-11, & 15 as used in the Cessna 305 Series Aircraft,

- 1. Remove the Continental screen assembly, clean Screen housing and gasket surface.
- 2. Per Illustrated Parts List K008-PL, Assemble Engine Adapter (12) as follows:
- a. Lubricate threads of Engine Adapter (12) and Sealing Ring (13) with suitable lubricant.
- b. Thread Sealing Ring (13) onto Engine Adapter (12) past smooth area, onto second set of threads.
- c. Install lightly oiled O-ring, (17), and position in the center of the smooth area between the upper and lower threads.
- d. Run Sealing Ring (13) down against O-ring. [Assure O-ring is still centered in non-threaded area.]
- e. Insert lightly oiled O-ring, (15) into groove inside of center opening of Engine Adapter (12)
- 3. Insert Oil Screen Adapter EXT-14 (14) without O-ring installed into screen chamber of engine. When seated, tube will extend out of the face of the engine casting approximately 1/4". Trim as necessary to achieve the 1/4" height. Remove Oil Screen Adapter (14) from engine
- 4. Per Illustrated Parts List K008-PL, lightly oil O-ring (16), install onto Oil Screen Adapter (14), and reinstall into oil screen chamber of oil pump. As adapter is inserted, resistance will be met. Continue pressure indicating compression of O-ring (16) until adapter is firmly seated in lower screen seat.
- 5. Thread engine adapter (12) into engine oil screen opening being sure that oil screen adapter (14) is started in center of the opening. Screw in engine adapter (12) until light resistance indicates that O-ring (16) is seated on the accessory case. Orient the engine adapter (12) as necessary, being careful not to screw the engine adapter (12) in or out more than 1/2 turn from present position. This assures that the O-Ring is still centered in the non-threaded area. Do not tighten sealing ring yet. (see Installation Drawing AFC-D-0030).
- 6. Per Assembly Drawing AFC-D-0028, onto each bulkhead fitting (7a) or (7b), install in order 1 ea. bulkhead nut (8), boss gasket (9), and O-ring (10). If using a union (7c), install O-ring (10) only. When assembled correctly, the O-ring (10) is positioned in the center of the non-threaded area, between the upper set of threads and the lower set of threads on the bulkhead fitting. Install each completed assembly into the engine adapter (1) and located towards intended direction of hoses.
- 7. CAUTION: O-ring only seals in the center of the non-threaded area between the upper set of threads and lower set of threads on the bulkhead fitting. Failure to position the O-ring in this area, may cause a small oil leak.
- 8. Per Assembly Drawing AFC-D-0028, install in order Temp probe adapter (12), gasket (13), 90° fitting (11), and gasket (13) and install into engine adapter (1b). Note: Oil temp adapters (14) short or long may be interchanged depending on length of your oil temperature bulb.
- 9. Per Illustrated Parts List K008-PL, using the horizontal oil filter mount (7) or vertical oil filter mount (5) as a drilling template, locate and drill mounting holes using a letter "F" drill.
- Per Illustrated Parts List K008-PL, secure vertical oil filter mount (5) to Fwd side of firewall and doubler plate (6) to Aft side of firewall using bolts (8), washers (11), and locknuts (10). (see Assembly Drawing AFC-D-0024)

<u>OR</u>

10b. Per Illustrated Parts List K008-PL, Secure oil filter base (1) to Fwd side of firewall and horizontal oil filter mount (7) to rear side using bolts (9), washers (11) and secure with .032 MS20995-C safety wire. (see Assembly Drawing AFC-D-0025)

### \*\*\*\*\* SEE WARNING (A) \*\*\*\*\*

Install any combination of fitting (2), (3), or (61) into oil filter base (1). Mount to oil filter mount plate-vertical (5) using bolts (9), washers (11), and secure with .032 MS20995-C safety wire.

### Installation Instructions AFC -K008-II-D

Applicability: Continental Engines using P/N 536902 or A35996 Oil Screen Assy, [1-13/16"-16 Thread]
Fixed Wing Aircraft with: O-470-11, & 15 as used in the Cessna 305 Series Aircraft,

(continued)

### \*\*\*\* SEE TIP "How to get correct length of hose" \*\*\*\*\*

12. Determine hose lengths and order appropriate hoses. Ex: P/N for a 24-7/8" long fire sleeved hose with straight swivel fittings at each end of the hose is F13000010-0247.

### \*\*\*\*\* SEE WARNING (B) \*\*\*\*\*

- 13. Per Illustrated Parts List K008-PL, install 2 ea. hose assy's (43) connecting the "A" port on the engine adapter to the "A" port on the oil filter base and the "B" port on the engine adapter to the "B" port on the oil filter base per installation drawings and tighten hose fittings to 270-350 in/ lbs.
- 14. Per Installation Drawing AFC-D-0030, after hoses have taken natural set, and hose fittings tightened, tighten sealing ring (2) with 2" Pin Spanner wrench. Do not overtighten. Secure with safety wire. Note: Approximately 1/4-1/2 turn is all that is needed to compress the O-ring properly and no leakage will occur.
- 15. Install oil filter, torque per instructions on oil filter and secure with safety wire.
- 16. Run engine and check for leaks.
- 17. Determine weight and balance, initiate 337 form, and update the equipment list.

### Installation Instructions AFC -K008-II-E

Applicability: Continental Engines using P/N A25131 or A35996 Oil Screen Assy, Fixed Wing Aircraft with E165, E185, E205, & E225 Engines.

- 1. Gain access to the engine compartment.
- 2. Remove from rear of accessory case (1ea.) P/N A25131 or A35996 oil screen assembly, P/N 40660 housing, and P/N A25132 check valve assy. Note: the A25132 check valve is only found on dry sump engines in older Bonanza's
- 3. Clean gasket surface on rear of accessory case.
- 4. Per installation drawing AFC-D-0031, install lightly oiled O-ring (3b) onto Oil Divertor Ring (2c) and insert into bottom of oil gallery in rear of accessory case. Make sure nub is facing out. Note: Dry sump engines in the Bonanza's do not use this divertor ring. Reinstall A25132 check valve using new O-ring (0b) provided.
- 5. Per installation drawing AFC-D-0031, install lightly oiled O-ring (6a) onto top of Oil Divertor Ring (2c) or A25132 check valve assy.
- 6. Using new engine adapter gasket (13b), install engine adapter (1c) onto rear of accessory case and torque to specs75-85 in lbs. in three increments.

\*\*\*\*\* WARNING \*\*\*\*\* Do not over torque as binding of oil pump gears can occur.

### NOTE B: As adapter is inserted, resistance will be met. Continue pressure indicating compression of O-ring (6a)- until adapter (1c) is seated against gasket.

- 7. Per Illustrated Parts List K008-PL, onto each union (26) install O-ring (27), insert into engine adapter (28), and tighten.
- 8. Per Illustrated Parts List K008-PL, install new gasket (31) under the head of the 5/8" long (56) or 2-1/4" long (34) Temp probe adapter if used, into engine adapter (28). Note: Oil temp adapters (56) or (34) may be interchanged depending on length of your oil temperature bulb.
- 9. Install oil temperature bulb into oil temp adapter.

### NOTE C: If oil temp probe is not kept at present location on the aircraft, cap off hole with Continental P/N 532432 Oil drain plug and gasket (31).

- 10. Per Illustrated Parts List K008-PL, using the horizontal oil filter mount (7) or vertical oil filter mount (5) as a drilling template, locate and drill mounting holes using a letter "F" drill.
- Per Illustrated Parts List K008-PL, Secure vertical oil filter mount plate (5) to Fwd side of firewall and doubler plate (6) to Aft side of firewall using bolts (8), washers (11), and locknuts (10). (see Assembly Drawing AFC-D-0024)

OR

11b. Per Illustrated Parts List K008-PL, Secure oil filter base (1) to Fwd side of firewall and horizontal oil filter mount (7) to rear side using bolts (9), washers (11) and secure with .032 MS20995-C safety wire. (see Assembly Drawing AFC-D-0025)

#### \*\*\*\*\* SEE WARNING (A) \*\*\*\*\*

12. Install any combination of fitting (2), (3), or (61) into oil filter base (1). Mount to vertical oil filter mount (5) using bolts (9), washers (11), and secure with .032 MS20995-C safety wire.

### \*\*\*\* SEE TIP "How to get correct length of hose" \*\*\*\*

13. Determine hose lengths and order appropriate hoses (43). Last 2 xx's in part number is the length of the hose in inches and the z is the length in eighths of an inch. Ex: P/N for a 24-7/8" long fire sleeved hose with straight swivel fittings at each end of the hose is F13000010-0247.

### \*\*\*\*\* SEE WARNING (B) \*\*\*\*\*

- 14. Install 2 ea. hose assy's (43) connecting the "A" port on the engine adapter to the "A" port on the oil filter base and the "B" port on the engine adapter to the "B" port on the oil filter base per installation drawings and tighten hose fittings to 270-350 in/lbs.
- 15. Install oil filter, torque per instructions on oil filter and secure with safety wire.
- 16. Run engine and check for leaks.
- 17. Determine weight and balance, initiate 337 form, and update the equipment list.

### Installation Instructions AFC -K008-II-F

Applicability: Continental Engines using:

P/N 641574, 641575, 641639, 646253, 649217, 653489, or 653490 Oil Filter Adapters

Fixed Wing Aircraft with: TSIO-360, A, B, C, D, E, F, GB, H, JB, KB, LB, MB,

LTSIO-360, E, KB, O/IO-470 ALL IO-520B, C, M,

TSIO-520B, D, E, J, K, L, N, R, U, BE, VB, EB

IO-550B, C TSIO-550 Engines.

1. Remove existing spin on oil filter from rear of engine.

- 2. Clean oil filter base and gasket surface.
- 3. Per Illustrated Parts List K008-PL, verify oil filter stud in existing Continental oil filter base extends .375" above face of adapter. Using new engine adapter (50), without O-ring installed as a reference, screw completely down onto existing stud and determine that new engine adapter (50), bottoms out on existing Continental oil filter base. If not, trim oil filter stud to obtain this dimension.

Remove new engine adapter (50).

- 4. Per Illustrated Parts List K008-PL, apply liberal amount of Dow Corning DC-4 silicon grease to Viton O-ring (51), and place in machined groove in engine adapter (51) and reinstall onto the existing Continental oil filter adapter on rear of engine.
- 5. Per Illustrated Parts List K008-PL, screw engine adapter (50), onto existing oil filter stud and position as required. Install fitting (52), and O-ring (53) into Engine Adapter, torque to specifications and secure engine adapter with .032 MS20995-C safety wire.
- 6. Per Illustrated Parts List K008-PL, Using the horizontal oil filter mount (7) or vertical oil filter mount (5) as a drilling template, locate and drill mounting holes using a letter "F" drill.
- 07a. Per Illustrated Parts List K008-PL, Secure vertical oil filter mount (5) to Fwd side of firewall and doubler plate (6) to Aft side of firewall using bolts (8), washers (11), and locknuts (10). (see Assembly Drawing AFC-D-0024)
  - <u>OR</u>

07b. Per Illustrated Parts List K008-PL, Secure oil filter base (1) to Fwd side of firewall and horizontal oil filter mount (7) to rear side using bolts (9), washers (11) and secure with .032 MS20995-C safety wire. (see Assembly Drawing AFC-D-0025)

### \*\*\*\*\* SEE WARNING (A) \*\*\*\*\*

8. Install any combination of fitting (2), (3), or (61) into oil filter base (1). Mount to vertical oil filter mount (5) using bolts (9), washers (11), and secure with .032 MS20995-C safety wire.

#### \*\*\*\* SEE TIP "How to get correct length of hose" \*\*\*\*

9. Determine hose lengths and order appropriate hoses. Ex: P/N for a 24-7/8" long fire sleeved hose with straight swivel fittings at each end of the hose is F13000010-0247.

#### \*\*\*\*\* SEE WARNING (B) \*\*\*\*\*

- 10. Install 2 ea. hose assy's (43) connecting the "A" port on the engine adapter to the "A" port on the oil filter base and the "B" port on the engine adapter to the "B" port on the oil filter base per installation drawings and tighten hose fittings to 270-350 in/lbs.
- 11. Install oil filter, torque per instructions on oil filter and secure with safety wire.
- 12. Run engine and check for leaks.
- 13. Determine weight and balance, initiate 337 form, and update the equipment list.

### Installation Instructions AFC -K008-II-G

Applicability: Installation of the remote oil filter kit on Boeing Model 75 series aircraft with Continental W-670 Radial engines.

- 1. Remove left engine cowl (top and door) and bottom engine cowl.
- 2. Drain oil (optional).
- 3. Remove engine oil return line P/N A75N1-3004 (note this may be a length of 1" Mil 6000 hose). This line runs from the engine to the oil tank.
- 4. Turn the AN842-16D on top of the oil tank to where it points to the engine primer mounted in the step.
- 5. Remove the screw that goes through the end of the firewall stiffener P/N 75-2912. This is located on the left side of the firewall on the aft side. Loosen the screw that goes through the firewall stiffener and the tab welded on the fuselage. This screw is approximately 4-3/4" inboard of the removed screw. (see attached drawing AFC-D-0019). Drill the hole of the removed screw to 1/4" (.250).
- 6. Measure 3-9/16" out from a vertical line drawn from the C/L of the left engine mount studs. Using reinforcing plate P/N DBL-10 (6) as a template drill the other 5 holes 1/4" (.250). The previously drilled hole is the middle outboard hole.
- 7. Slip reinforcement plate DBL-10 (6) between the firewall and stiffeners. The long side goes up.
- 8. Bolt oil filter base support angle P/N OFM-11 (5) to firewall and reinforcement plate using(6ea) provided AN 4-5A (8) bolts.

### \*\*\*\*\* SEE WARNING (A) \*\*\*\*\*

- 9. Per Illustrated Parts List K008-PL, install provided AN842-16D fittings (59) in the oil filter base. The fitting in B hole points horizontal with the filter base. The other points over the first fitting.
- Per Illustrated Parts List K008-PL, bolt oil filter base OFB-15 (1) to Vertical Filter Mount Plate OFM-11(5) using provided AN4H-4A bolts (9) and Washers AN960-416 (11). Oil inlet hole "B" on the oil filter base is positioned to the front of the aircraft. Secure bolts with safety wire.
- 11. Per Illustrated Parts List K008-PL, install one 25" piece of 1" Mil 6000H hose (46) using provided QS100M16H hose clamps (47). The "B" hole on the oil filter base is the oil inlet and comes from the outlet of the scavenge oil pump. The "A" port is the outlet of the oil filter base is the return line to the top of the oil tank or inlet to cooler if so equipped. Tighten clamps.
- 12. Install oil filter as per manufacturers specifications and safety wire.
- 13. Using the 2" piece of 3/4" Mil 6000 hose (42) provided, secure to bottom of oil filter with QS100M52H Clamp, 3-3/4" (41) and locate between bottom of oil filter and existing firewall. This will strengthen the oil filter mount and dampen the vibrations of the engine.
- 14. Safety wire drain and refill oil tank with 4.4 gals. oil. (If step #2 is omitted this step is not necessary).
- 15. Run engine and check for leaks.
- 16. Determine weight and balance, initiate 337 form, and update the equipment list.

#### \*\*\*\*\* NOTE OF CAUTION \*\*\*\*\*

NEVER, EVER INSTALL AN OIL FILTER ON THE ENGINE OIL PUMP INLET. THE OIL LINES CAN COLLAPSE, THERE BY STARVING THE ENGINE OF OIL.

THE OIL ROUTING AND OIL FLOW IS ALWAYS.

ENGINE SCAVENGE PUMP OUTLET -TO- AIRWOLF OIL FILTER -TO- OIL COOLER [if applicable] -TO- OIL TANK.

### WEIGHT AND BALANCE REPORT

SURPLUS EQUIPMENT	WEIGHT	ARM-INCHES		MOMENT - IN/LBS.		
EQUIPMENT - ITEM	LBS.	LONG		LONG		
REMOTE OIL FILTER	4.25					

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REVISIONS							
REV.	DESCRIPTION	BY	DATE				





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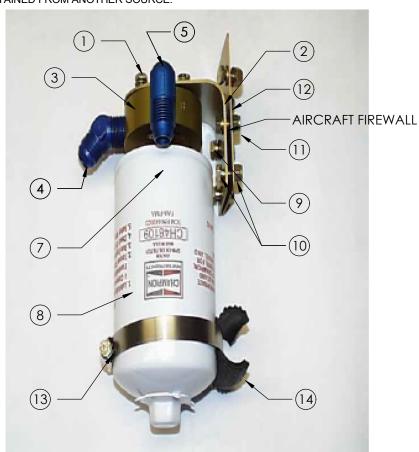
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REVISIONS							
REV.	DESCRIPTION	BY	DATE				



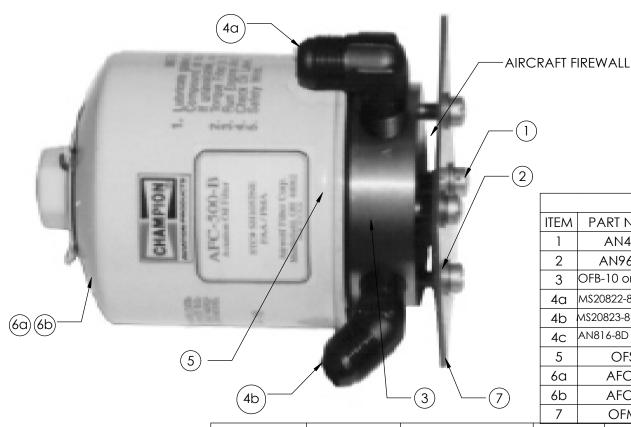
		MATERIAL LIST	
ITEM	PART NUMBER	DESCRIPTION	QTY.
1	AN4H-4A	BOLT, DRILLED HEAD	4
2	OFM-11	OIL FILTER MOUNT PLATE - 90°	1
3а	OFB-10	OIL FILTER BASE	1
3b	OFB-11	OIL FILTER BASE, 10720	1
4a	MS20823-8D	FITTING, 45°	1
4b	MS20823-10D	FITTING, 45°, IO720	1
5a	MS20822-8D	FITTING, 90°	1
5b	MS20822-10D	FITTING, 90°, IO720	1
6a	AN816-8D	UNION	OPT
6b	AN816-10D	UNION, 10720	OPT
7	OFS-10	OIL FILTER STUD	1
8a	AFC-500	OIL FILTER	1
8b	AFC-600	OIL FILTER, LONG	1
9	AN4-5A	BOLT	6
10	AN960-416	FLAT WASHER	16
11	MS20365-428A	LOCKNUT	6
12	DBL-10	DOUBLER PLATE	1
13	Q\$100M52H	CLAMP	1
14	MIL6000-1/2-2	DAMPENER	1
	NAME DATE	A: 16 E:11 O	

		UNLESS OTHERWISE SPECIFIED:		NAME	DATE		Airwolf Filte	r Cori	n	
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REVISIONS							
REV.	DESCRIPTION	BY	DATE				
А	REDRAWN IN SOLIDWORKS	GM	12/28/2020				



	material list							
ITEM	PART NUMBER	DESCRIPTION	QTY.					
1	AN4H-4A	BOLT, DRILLED HEAD	4					
2	AN960-416	FLAT WASHER	4					
3	OFB-10 or OFB-11	OIL FILTER BASE	1					
4a	MS20822-8D or - 10D	FITTING, 90°	1					
4b	MS20823-8D or -10D	FITTING, 45°	1					
4c	AN816-8D or -10D	UNION	OPT					
5	OFS-10	OIL FILTER STUD	1					
6a	AFC-500	OIL FILTER	1					
6b	AFC-600	OIL FILTER, LONG	1					
7	OFM-10	OIL FILTER MOUNT PLATE	1					

		UNLESS OTHERWISE SPECIFIED:		NAME	DATE		Airwolf Filter Corp.			<b>1</b>
		DIMENSIONS ARE IN INCHES TOLERANCES:	DRAWN	GM	12/28/2020		$\overline{}$		COIL	J.
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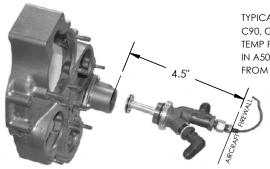
# OBSOLETE

AIRWOLF FILTER CO	AIRWOLF FILTER CORP PROPRIETARY					REVISIONS						
THIS DOCUMENT IS THE PROPERTY OF AIRV EXPRESS CONDITION THAT IT IS NOT TO BE OR USED FOR MANUFACTURE FOR ANYONE	DISCLOSED OR RE	PRODUCED IN WH	IOLE OR IN PART	REV.			DESCR	RIPTION		BY	DATE	
WRITTEN CONSENT, AND THAT NO RIGHT IS CONTAINED IN SAID DOCUMENT. THIS REST	<b>GRANTED TO DISC</b>	LOSE OR SO USE	ANY INFORMATION	Α		RED	RAWN IN	SOLIDWORKS	3	GM	12/28/2020	
INFORMATION OBTAINED FROM ANOTHER S			TYPICAL CONTIN C125, O	. ASSEMBLIES IN IENTAL A50, A6 1200, C145, O30 O520, TSIO520,	5, A75, 00, GO	A80, C	:75, C85, C 360, O470	090, ,				
	10								NATERIAL LIST			
ta	(1b)	East of				ITEM	PART NUM	BER DESCRIPTION	٧		QTY.	
(9)	(E)	1033	\			1a	CON-10	ENGINE ADA	APTER - (1-3/4"-16	THREADS)	1	
(10) — (2a)	(2b)—//	(5l	b) \			1b	CON-11	ENGINE AD	APTER - (1-13/16"-	16 THREADS)	1	
(10) — (20)	(20)	(50	9			2a	RNG-10		IG - (1-3/4"-16 TH		1	
50	(3) —//_		)			2b	RNG-11		IG - (1-13/16"-16	THREADS)		
(5a)						3	M83248/1-2					
(6a)—	4) —	(6l	9			4 5a	M83248/1-0 EXT-10	016 NOSEPIECE OIL SCREEN			1	
(5C)	O-RING M	UST BE FIRMLY INST.	ALLED INTO			5b	EXT-10	OIL SCREEN			1	
(7b)		O GROOVE INSIDE		Tab W		5c	EXT-12				1	
		DAPTER (1A) OR (1		No. of Concession,		5d	EXT-14	OIL SCREEN			1	
(15) — \	-	EASE INSERTION (				6a	M83248/1-	126 O-RING, USE	W/EXT-10 & EXT-	12 ADPATER	1	
(14)	ADAPIER (	5A), (5B), (5C), OR	(5D).			6b	M83248/1-	128 O-RING, USE	W/EXT-11 & EXT-	14 ADPATER	1	
(14)	21-			8.9		7a	AN837-10	D 45° BULKHEA	AD FITTING		2	
	<b>医翻</b> 7			100		7b	AN833-10	90° BULKHEA	AD FITTING		2	
						7c	AN815-10	D UNION			1	
						8	AN6289-10				2	
(12a) / <b>(</b>						9	MS28773-		Ŧ		2 2	
(13)	OPTIONAL AS	SEMBLY USED IN AI	RCRAFT USING			10	M83248/1-9				1	
			90, C125 & O-200			11 12a	AN776-10 TPA-775		ADAPTER		1	
		. ENGINES KEEPING OCATION. IF RELO				12b	TPA-776		ADALTER ADAPTER & GAS	SKFT	1	
		O DRAIN PLUG OF				13	MS35769-		ADAPTER GASKI		2	
		AWINGS FOR FITTIN	- , -			14	OTA-527	OIL TEMP AD	PATER		1	
OIL TEMPERATURE						15	MS35769-	11 OIL TEMP AD	DAPTER GASKET		1	
PROBE SHOWN FOR			UNLESS OTHERWISE SPEC			NAME	DATE	Δ	irwolf F	ilter C	orn	
illustration only.			DIMENSIONS ARE IN INCHE TOLERANCES:	DRAWN		ЭM	12/28/2020	,	MI WOII I	iitei e	orp.	
			1 PLACE ±.030 2 PLACE ±.010	APPR. BY	В	BDA	12/28/2020	TITLE:	SSEMBLY [	JR A WIN	iG.	
			3 PLACE ±.005	ENG APPR.				CON-10	) ADAPTE	R - ENG	INE. FULL	
			4 PLACE ±.0005 ANGULAR ±0°30'	MFG APPR				FLO	W CON-1	1 ADAP	TER -	
			INTERPRET GEOMETRIC TOLERANCING PER: ANSY Y	Q.A. 14.5H				ENGIN	ie, full fl Optic		SEMBLY	
			MATERIAL					SIZE DWG		0000	REV	
	NEXT ASSY	USED ON	FINISH	COMMENTS	S:				FC-D-			
	APPLIC	:ATION			1			SCALE:	WEIGHT:		SHEET 1 OF 1	
5	1	ı	3				2		•	1		

#### AIRWOLF FILTER CORP PROPRIETARY

THIS DOCUMENT IS THE PROPERTY OF AIRWOLF FILTER CORP AND IS DELIVERED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE DISCLOSED OR REPRODUCED IN WHOLE OR IN PART OR USED FOR MANUFACTURE FOR ANYONE OTHER THAN AIRWOLF FILTER CORP WITHOUT ITS WRITTEN CONSENT, AND THAT NO RIGHT IS GRANTED TO DISCLOSE OR SO USE ANY INFORMATION CONTAINED IN SAID DOCUMENT. THIS RESTRICTION DOES NOT LIMIT THE RIGHT TO USE INFORMATION OBTAINED FROM ANOTHER SOURCE.

REVISIONS							
REV.	DESCRIPTION	BY	DATE				
Α	REDRAWN IN SOLIDWORKS	GM	12/28/2020				

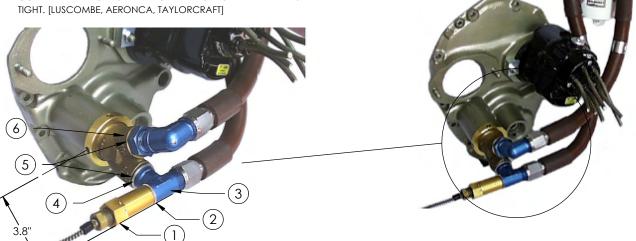


TYPICAL INSTALLATION IN AIRCAFT USING C75, C85, C90, C125 & O-200 CONTINENTAL ENGINES KEEPING OIL TEMP PROBE AT PRESENT LOCATION. ALSO CAN BE USED IN A50-A75 ENGINES WHERE THERE IS AT LEAST 4.25" FROM THE ACCY CASE TO THE FIREWALL.

TYPICAL INSTALLATION IN AIRCRAFT USING A50, A65, A75, & A80, CONTINENTAL ENGINES WHERE CLEARANCE TO THE FIREWALL IS VERY

CAPILLARY OIL TEMPERATURE

PROBE SHOWN FOR ILLUSTRATION ONLY.



#### NOTES:

1 SELECT THE APPROPRIATE THICKNESS OF P/N TPA-776 WASHER/SPACER THAT WILL ALLOW YOU TO TIGHTEN THE TPA-776 ADAPTER AT THE CORRECT ORIENTATION FOR OIL LINE ATTACHMENT.

MATERIAL LIST											
ITEM	PART NUMBER	DESCRIPTION									
1	OTA-2250	2-1/4" LONG OIL TEMP ADAPTER	1								
2	M\$35769-11	OIL TEMP ADAPTER GASKET	1								
3	TPA-776	TEMP PROBE ADAPTER & GASKET	1								
4	TPA-776	WASHER/SPACER SET	6								
5	M83248/1-910	O-RING	2								
6	M\$28773-10	BOSS GASKET, TEFLON	1								

Airwolf Filter Corp. TITLE: ASSEMBLY DRAWING,

**INSTALLATION OF ASSEMBLED CON-10** ADAPTER IN CONTINENTAL A50, A65, A75, A80, C75, C85, C90, C125, O-200, IO240 ENGINES

SIZE DWG. NO. AFC-D-0029 **REV** 

SCALE:

WEIGHT: SHEET 1 OF 1

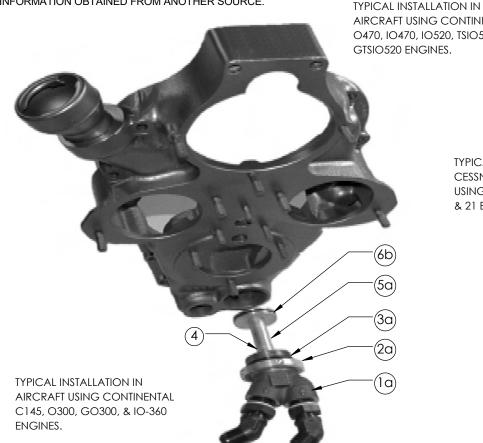
		UNLESS OTHERWISE SPECIFIED:		NAME	DATE	
		DIMENSIONS ARE IN INCHES	DRAWN	GM	12/28/2020	
		1 PLACE ±.030 2 PLACE ±.010	APPR. BY	BDA	12/28/2020	TI
		3 PLACE ±.005 4 PLACE ±.0005	ENG APPR.			
		ANGULAR ±0°30'	MFG APPR.			
		INTERPRET GEOMETRIC TOLERANCING PER: ANSY Y 14.5H	Q.A.			
		MATERIAL	1	-	1	S
NEXT ASSY	USED ON	FINISH	COMMENTS:			4

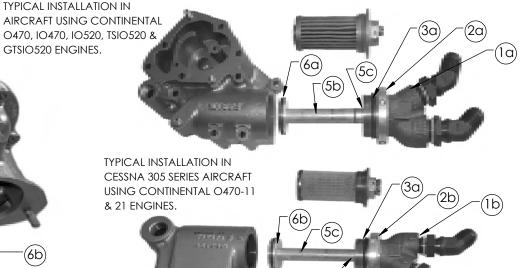
APPLICATION

### AIRWOLF FILTER CORP PROPRIETARY

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	REVISIONS		
REV.	DESCRIPTION	BY	DATE
Α	REDRAWN IN SOLIDWORKS	GM	12/28/2020





	MATERIAL LIST							
TEM	PART NUMBER	DESCRIPTION	QTY.					
1a	CON-10	ENGINE ADAPTER - (1-3/4"-16 THREADS)	1					
1b	CON-11	ENGINE ADAPTER - (1-13/16"-16 THREADS)	1					
2a	RNG-10	SEALING RING - (1-3/4"-16 THREADS)	1					
2b	RNG-11	SEALING RING - (1-13/16"-16 THREADS)	1					
3a	M83248/1-223	SEALING RING O-RING	1					
4	M83248/1-016	NOSEPIECE O-RING	1					
5a	EXT-11	OIL SCREEN ADAPTER - C145/O- 300/GO-300/IO-360	1					
5b	EXT-12	OIL SCREEN ADAPTER - O470/IO470/IO520	1					
5c	EXT-14	OIL SCREEN ADAPTER - O470-7/11/13	1					
6a	M83248/1-126	O-RING, USE W/EXT-12	1					
6b	M83248/1-128	O-RING, USE W/EXT-11 & EXT-14 ADPATER	1					

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		UNLESS OTHERWISE SPECIFIED:		NAME	DATE	Airwolf Filter Corp.		,		
		DIMENSIONS ARE IN INCHES TOLERANCES:	DRAWN	GM	12/28/2020		·			
		1 PLACE ±.030 2 PLACE ±.010	APPR. BY	BDA	12/28/2020					
		3 PLACE ±.005 -4 PLACE ±.0005	ENG APPR.			С				
		ANGULAR ±0°30'	MFG APPR.			GTSIO520 CONTINENTAL ENGINES, ANI INSTALLATION OF CON-11 ADAPTER IN O4				AND
		INTERPRET GEOMETRIC TOLERANCING PER: ANSY Y 14.5H	Q.A.			11 & 15 CONTINENTAL ENGINES				
		MATERIAL					DWG.		20	REV A
NEXT ASSY	USED ON	FINISH COMMENTS:		MMENTS:		A	А	FC-D-003	30	А
APPLICATION					SCALE:		WEIGHT:	SHE	ET 1 OF 1	

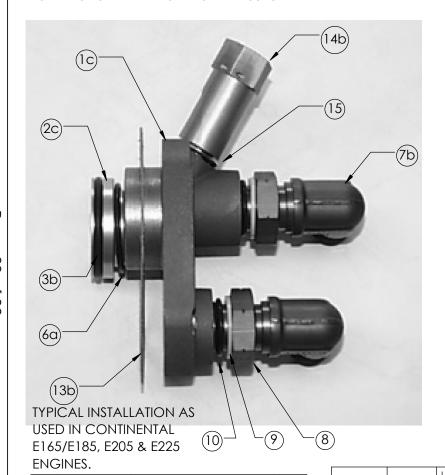
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SHEET 1 OF 1

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	REVISIONS		
REV.	DESCRIPTION	BY	DATE





General Table								
	MATERIAL LIST							
ITEM	PART NUMBER	DESCRIPTION	QTY.					
1c	CON-12	ENGINE ADAPTER - "E" SERIES	1					
2c	RNG-17	OIL DIVERTER RING, "E" SERIES	1					
3b	M83248/1-222	O-RING, OIL DIVERTER RING	1					
6a	M83248/1-126	O-RING, OIL DIVERTER RING	1					
7b	AN833-10D	90° BULKHEAD FITTING	2					
8	AN6289-10D	BULKHEAD NUT	2					
9	MS28773-10	BOSS GASKET	2					
10	M83248/1-910	O-RING	2					
13b	352067 OR Equivalent	ENGINE ADAPTER GASKET	1					
14b	OTA-2250	OIL TEMP ADAPTER	1					
15	MS35769-11	OIL TEMP ADAPTER GASKET	1					

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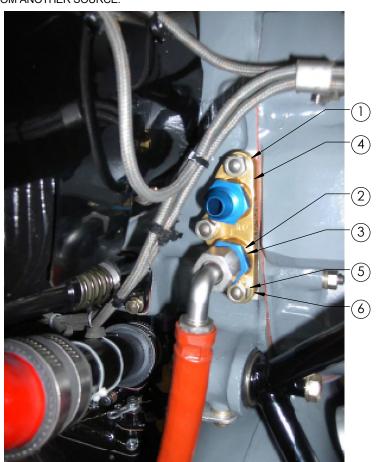
		UNLESS OTHERWISE SPECIFIED:		NAME	DATE		۸	invalf Filtor	Cor	^		
		DIMENSIONS ARE IN INCHES TOLERANCES:	DRAWN	GM	12/28/2020		Airwolf Filter Corp.			<b>J</b> .		
		1 PLACE ±.030 2 PLACE ±.010	APPR. BY	BDA	12/28/2020	TITLE:	TITLE:					
		3 PLACE ±.005 -4 PLACE ±.0005	ENG APPR.			IN:	ASSEMBLY DRAWING, INSTALLATION OF CON-12 ADAI			APTER		
	ANGULAR ±0°30'	MFG APPR.			IN E165, E185, E205, & E225			5				
		INTERPRET GEOMETRIC TOLERANCING PER: ANSY Y 14.5H	Q.A.				CONTINENTAL ENGINES					
		MATERIAL		•		SIZE				REV		
NEXT ASSY	USED ON	FINISH COMMENTS:		OMMENTS:		COMMENTS:		A	A	FC-D-00	<b>3</b> I	IR
APPLIC	ATION			SCAL	E:			WEIGHT:	SHE	ET 1 OF		
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### AIRWOLF FILTER CORP PROPRIETARY

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	REVISIONS							
REV.	DESCRIPTION	BY	DATE					



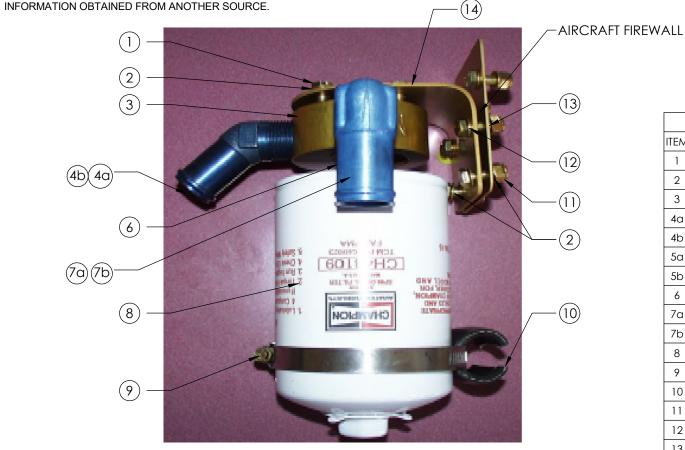
	General Table									
	MATERIAL LIST									
ITEM	PART NUMBER	DESCRIPTION	QTY.							
1	CON-16	ENGINE ADAPTER	1							
2	AN919-15D-SP	-SP FITTING 2								
3	M83248/1-910	O-RING	2							
4	652070 OR Equivalent	GASKET	1							
5	AN960-513	60-513 WASHER								
6	MS20365-524A	NUT	3							

			UNLESS OTHERWISE SPECIFIED:		NAME	DATE	^	irwolf Filter	Corr	`
			DIMENSIONS ARE IN INCHES TOLERANCES:	DRAWN	GM	12/28/2020			COIL	J.
			1 PLACE ±.030 2 PLACE ±.010	APPR. BY	BDA	12/28/2020	TITLE: INICT	ALLATION DR.	Λ \Λ/IN I	)
			3 PLACE ±.005 4 PLACE ±.0005	ENG APPR.				-16 ADAPTER		
			ANGULAR ±0°30'	MFG APPR.				CONTINENTA		
			INTERPRET GEOMETRIC TOLERANCING PER: ANSY Y 14.5H	Q.A.						
			MATERIAL				SIZE DWG		20	REV
	NEXT ASSY	USED ON	FINISH	COMMENTS:		A	FC-D-00	32	IR	
_	APPLIC	CATION					SCALE:	WEIGHT:	SHE	ET 1 OF 1
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SHEET 1 OF 1

AIRWOLF FILTER CORP PROPRIETARY		REVISIONS		
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WRITTEN CONSENT, AND THAT NO RIGHT IS GRANTED TO DISCLOSE OR SO USE ANY INFORMATION CONTAINED IN SAID DOCUMENT. THIS RESTRICTION DOES NOT LIMIT THE RIGHT TO USE				



APPLICATION

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	MATERIAL LIST									
ITEM	PART NUMBER	DESCRIPTION	QTY.							
1	AN4H-4A	BOLT, DRILLED HEAD	4							
2	AN960-416	FLAT WASHER	16							
3	OFB-15	OIL FILTER BASE	1							
4a	AN844-16D	HOSE ELBOW, 45°	2							
4b	AN844-12D	HOSE ELBOW, 45°	2							
5a	AN840-16D	HOSE FITTING, STRAIGHT	2							
5b	AN840-12D	HOSE FITTING, STRAIGHT	2							
6	OFS-10	OIL FILTER STUD	1							
7a	AN842-16D	HOSE ELBOW, 90°	2							
7b	AN842-12D	HOSE ELBOW, 90°	2							
8	AFC-600	OIL FILTER, LONG, OR EQUIVALENT (CHAMPION CH48109)	1							
9	Q\$100M52H	HOSE CLAMP, 3-1/4"	1							
10	MIL6000-3/4-2	DAMPENER	1							
11	MS20365-428A	LOCKNUT	6							
12	AN4-5A	BOLT	6							
13	DBL-10	DOUBLER PLATE	1							
14	OFM-11	OIL FILTER MOUNT PLATE, VERTICAL	1							
$\overline{}$										

WEIGHT:

SCALE:

					1-7	017// 11	OIL HEILK MOOITH LATE, TEKIN	C/ (L   1
		UNLESS OTHERWISE SPECIFIED:		NAME	DATE	Airwolf Filter Corp		<u> </u>
		DIMENSIONS ARE IN INCHES TOI FRANCES:	DRAWN	GM	12/8/2020		All Woll I litter Golf	J.
		1 PLACE ±.030 2 PLACE ±.010	APPR. BY	BDA	12/8/2020	TITLE:		
		3 PLACE ±.005	ENG APPR.			<i> </i>	ASSEMBLY DRAWING	G
		4 PLACE ±.0005 ANGULAR ±0°30'	MFG APPR.			OFB-	-15 OIL FILTER ADAF	PTER,
		INTERPRET GEOMETRIC TOLERANCING PER: ANSY Y 14.5H	Q.A.			FIREWALL - VERTI		\L
		MATERIAL				SIZE D	WG. NO.	REV
NEXT ASSY	USED ON	FINISH	COMMENTS:			A	AFC-D-0059	IR

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### AIRWOLF FILTER CORP FOR INSTALLING REMOTE MOUNTOIL FILTER KIT

				T T			e Date: April 5, 199
			ORIGINAL			ALLATION	
			TYPE	CERTIFICATION	INSTI	RUCTIONS	
ITEM	AIRCRAFT	AIRCRAFT	CERTIFICATE	BASIS FOR		REVISION NO.	AMLAMEND
A A A A A A A A A A A A A A A A A A A	MAKE	MODEL	NUMBER	ALTERATION	NUMBER	AND DATE	MENTDATE
1	AD AEROSPACE INC. (Thorp)	T-211	A-791	CAR PART 3 and Amendments Listed in TCDS No. A-791	AFC-K008	C 11/11/2010*	10/31/2012
2	AERONAUTICA MACCHI S.p.A.	AM-3	A19EU	14 CFR PART 23 and Amendments Listed in TCDS No. A19EU	AFC-K008	C 11/11/2010*	10/31/2012
3	ALEXANDRIA AIRCRAFT LLC (Bellanca)	14-19-2, 14-19-3, 14-19-3A 17-30	1A3	CAR PART 3 and Amendments Listed in TCDS No. 1A3	AFC-K008	C 11/11/2010*	10/31/2012
4	ALEXANDRIA AIRCRAFT LLC (Bellanca)	17-30A	A18CE	14 CFR PART 23 and Amendments Listed in TCDS No. A18CE	AFC-K008	C 11/11/2010*	05/23/1995
5	ALLIED AG CAT PRODUCTIONS, INC.	G-164	1A16	CAR PART 8.10(a)(1) and Amendments Listed in TCDS No. 1A16	AFC-K008	C 11/11/2010*	10/31/2012
6	AMERICAN CHAMPION AIRCRAFT CORP (Bellanca)	7AC, S7AC, 7BCM (L-16A), 7CCM (L-16B), S7CCM, 7DC, 7EC, S7EC, 7ECA, 7FC, S7DC, 7JC,	A-759	CAR PART 4a and Amendments Listed in TCDS No. A-759	AFC-K008	C 11/11/2010*	10/31/2012
7	AMERICAN CHAMPION AIRCRAFT CORP (Bellanca)	11AC, S11AC, 11BC, S11BC	A-761	CAR PART 4a and Amendments Listed in TCDS No. A-761	AFC-K008	C 11/11/2010*	10/31/2012
8	AMERICAN CHAMPION AIRCRAFT CORP (Bellanca)	11CC, S11CC	A-796	CAR PART 3 and Amendments Listed in TCDS No. A-796	AFC-K008	C 11/11/2010*	10/31/2012
9	ARIZONA AEROSPACE FOUNDATION (Taylorcraft)	DC-65, DCO-65	A-746	CAR PART 4a and Amendments Listed in TCDS No. A-746	AFC-K008	C 11/11/2010*	10/31/2012
10	BOEING AIRPLANE CO (Stearman)	A75N1 (Army PT-17, -17A, Navy N2S-1, -4), B75N1 (Navy N2S-3), D75N1 (Army PT-27)	A-743	CAR PART 4a and Amendments Listed in TCDS No. A-743	AFC-K008	C 11/11/2010*	10/31/2012

### AIRWOLF FILTER CORP FOR INSTALLING REMOTE MOUNTOIL FILTER KIT

							e Date: April 5, 1994
			ORIGINAL			ALLATION	
			TYPE	CERTIFICATION	INSTI	RUCTIONS	
ITEM	AIRCRAFT	AIRCRAFT	CERTIFICATE	BASIS FOR		REVISION NO.	AMLAMEND
I I I IVI	MAKE	MODEL	NUMBER	ALTERATION	NUMBER	AND DATE	MENTDATE
11	BOEING AIRPLANE CO (Stearman)	75 (Army PT-13), A75L3, A75 (Army PT-13A, -13B, -13C), B75 (Navy N2S-5), E75 (Army PT-13D, Navy N2S-5), A75J1 (Army PT-18), A75L-300, IB75A, E75N1 With Continental engine installed	A-743	CAR PART 4a and Amendments Listed in TCDS No. A-743	AFC-K008	C 11/11/2010*	10/31/2012
12	BRITTISH AEROSPACE	B.206 Series 1	AllEU	CAR PART 3 and Amendments Listed in TCDS No. A11EU	AFC-K008	C 11/11/2010*	10/31/2012
13	BURL A. ROGERS (Aeronca)	15AC, S15AC	A-802	CAR PART 3 and Amendments Listed in TCDS No. A-802	AFC-K008	C 11/11/2010*	10/31/2012
14	CESSNA AIRCRAFT COMPANY	120, 140	A-768	CAR PART 4a and Amendments Listed in TCDS No. A-768	AFC-K008	C 11/11/2010*	05/15/1999
15	CESSNA AIRCRAFT COMPANY	140A	5A2	CAR PART 3 and CAR PART 4a and Amendments Listed in TCDS No. 5A2	AFC-K008	C 11/11/2010*	10/31/2012
16	CESSNA AIRCRAFT COMPANY	150, 150A, 150B, 150C, 150D, 150E, 150F, 150G, 150H, 150J, 150K, 150L, 150M, A150K, A150L, A150M	3A19	CAR PART 3 and Amendments Listed in TCDS No. 3A19	AFC-K008	C 11/11/2010*	10/31/2012
17	CESSNA AIRCRAFT COMPANY	F150F, F150G, F150H, F150J, F150K, F150L, FA150L, FRA150L, F150M, FRA150M	A13EU	CAR PART 3 and Amendments Listed in TCDS No. A13EU	AFC-K008	C 11/11/2010*	10/31/2012
18	CESSNA AIRCRAFT COMPANY	170, 170A, 170B	A-799	CAR PART 3 and Amendments Listed in TCDS No. A-799	AFC-K008	C 11/11/2010*	11/22/1994
19	CESSNA AIRCRAFT COMPANY	172, 172A, 172B, 172C, 172D, 172E, 172F (USAF T-41A), 172G, 172H (USAF T-41A)	3A12	CAR PART 3 and Amendments Listed in TCDS No. 3A12	AFC-K008	C 11/11/2010*	05/23/1995
20	CESSNA AIRCRAFT COMPANY	F172D, F172E, F172F, F172G, F172H, F172K	A4EU	CAR PART 3 and Amendments Listed in TCDS No. A4EU	AFC-K008	C 11/11/2010*	10/31/2012

### AIRWOLF FILTER CORP FOR INSTALLING REMOTE MOUNTOIL FILTER KIT

			ODICTILI		TATOOR		le Date: April 5, 1994
			ORIGINAL	OPDITIES ANTON		ALLATION RUCTIONS	
	A TD CD A ET	A FD CD A FT	TYPE	CERTIFICATION	INSTI		
ITEM	AIRCRAFT	AIRCRAFT	CERTIFICATE	BASIS FOR	MIMADED	REVISION NO.	AMLAMEND
	MAKE	MODEL	NUMBER	ALTERATION	NUMBER	AND DATE	MENTDATE
21	CESSNA AIRCRAFT COMPANY	172RG, P172D, R172E (USAF T-41B, T-41C, T-41D), R172F (USAF T-41D), R172G (USAF T-41C, T-41D), R72H (USAF T-41D), R172J, R172K, 175, 175A, 175B, 175C	3A17	CAR PART 3 and Amendments Listed in TCDS No. 3A17	AFC-K008	C 11/11/2010*	11/22/1994
22	CESSNA AIRCRAFT COMPANY	180, 180A, 180B, 180C, 180D, 180E, 180F, 180G, 180H, 180J, 180K	5A6	CAR PART 3 and Amendments Listed in TCDS No. 5A6	AFC-K008	C 11/11/2010*	11/22/1994
23	CESSNA AIRCRAFT COMPANY (Reims Aviation SA)	F182P; F182Q	A42EU	CAR PART 3 and Amendments Listed in TCDS No. A42EU	AFC-K008	C 11/11/2010*	10/31/2012
24	CESSNA AIRCRAFT COMPANY	182, 182A, 182B, 182C, 182D, 182E, 182F, 182G, 182H, 182J, 182K, 182L, 182M, 182N, 182P, 182Q, 182R,	3A13	CAR PART 3 and Amendments Listed in TCDS No. 3A13	AFC-K008	C 11/11/2010*	10/31/2012
25	CESSNA AIRCRAFT COMPANY	185, 185A, 185B, 185C, 185D, 185E, A185E, A185F	3A24	CAR PART 3 and Amendments Listed in TCDS No. 3A24	AFC-K008	C 11/11/2010*	05/23/1995
26	CESSNA AIRCRAFT COMPANY	188, A188, 188A, A188A, 188B, A188B, T188C	A9CE	14 CFR PART 21 and 14 CFR PART 23 and Amendments Listed in TCDS No. A9CE	AFC-K008	C 11/11/2010*	05/23/1995
27	CESSNA AIRCRAFT COMPANY	190	A-790	CAR PART 3 and Amendments Listed in TCDS No. A-790	AFC-K008	C 11/11/2010*	10/31/2012
28	CESSNA AIRCRAFT COMPANY	206, P206, U206, P206A, TP206A, TU206A, U206A, P206B, TP206B, TU206B, U206B, P206C, TP206C, TU206C, U206C, P206D, TP206D, TU206D, U206D, P206E, TP206E, U206E, TU206E, TU206F, U206G,	A4CE	CAR PART 3 and Amendments Listed in TCDS No. A14CE	AFC-K008	C 11/11/2010*	05/23/1995

### AIRWOLF FILTER CORP FOR INSTALLING REMOTE MOUNTOIL FILTER KIT

Issue Date: April 5, 1994

			ORIGINAL			ALLATION	le Date: April 5, 199
			TYPE	CERTIFICATION	INST	RUCTIONS	
ITEM	AIRCRAFT	AIRCRAFT	CERTIFICATE	BASIS FOR		REVISION NO.	AMLAMEND
	MAKE	MODEL	NUMBER	ALTERATION	NUMBER	AND DATE	MENTDATE
29	CESSNA AIRCRAFT COMPANY	207, 207A, T207, T207A	A16CE	14 CFR PART 23 and Amendments Listed in TCDS No. A16CE	AFC-K008	C 11/11/2010*	02/05/1996
30	CESSNA AIRCRAFT COMPANY	210, 210A, 210B, 210C, 210D, 210E, 210F, 210G, 210H, 210J, 210K, 210L, 210M, 210N, 210R, T210F, T210G, T210H, T210J, T210K, T210L, T210M, T210N, T210R, P210N, P210R, 210-5 (205), 210-5A (205A)	3A21	CAR PART 3 and Amendments Listed in TCDS No. 3A21	AFC-K008	C 11/11/2010*	10/31/2012
31	CESSNA AIRCRAFT COMPANY	T303	A34CE	14 CFR PART 23 and Amendments Listed in TCDS No. A34CE	AFC-K008	C 11/11/2010*	10/31/2012
		310, 310A (USAF U-3A), 310B,					
		310C, 310D, 310E (USAF U-3B),		CAR PART 3 and			
32	CESSNA AIRCRAFT COMPANY	310F, 310G, 310H, 310I, 310J, 310J-1, 310K, 310L, 310N, 310P, 310Q, 310R, E310H, E310J, T310P, T310Q, T310R	3A10	Amendments Listed in TCDS No. 3A10	AFC-K008	C 11/11/2010*	02/05/1996
33	CESSNA AIRCRAFT COMPANY	320, 320A, 320B, 320C, 320D, 320E, 320F, 320-1, 335, 340, 340A	3A25	CAR PART 3 and Amendments Listed in TCDS No. 3A25	AFC-K008	C 11/11/2010*	05/15/1999
34	CESSNA AIRCRAFT COMPANY	336	A2CE	CAR PART 3 and Amendments Listed in TCDS No. A2CE	AFC-K008	C 11/11/2010*	02/05/1996
35	CESSNA AIRCRAFT COMPANY	337, 337A (USAF O2B), 337B, 337C, 337D, 337E, 337F, 337G, 337H, T337B, T337C, T337D, T337E, T337F, T337G, T337H, T337H-SP, P337H, M337B (USAF O2A)	A6CE	CAR PART 3 and 14 CFR PART 23 and Amendments Listed in TCDS No. A6CE	AFC-K008	C 11/11/2010*	10/31/2012
36	CESSNA AIRCRAFT COMPANY (Reims Aviation SA)	F337E, FT337E, F337F, FT337F, F337G, FT337GP, F337H, FT337HP	A23EU	14 CFR PART 23 and Amendments Listed in TCDS No. A23EU	AFC-K008	C 11/11/2010*	10/31/2012
37	CESSNA AIRCRAFT COMPANY	401, 401A, 401B, 402, 402A, 402B, 402C, 411, 411A, 414, 414A, 421, 421A, 421B, 421C	A7CE	CAR PART 3 and Amendments Listed in TCDS No. A7CE	AFC-K008	C 11/11/2010*	10/31/2012

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### AIRWOLF FILTER CORP FOR INSTALLING REMOTE MOUNTOIL FILTER KIT

			ORIGINAL TYPE	CERTIFICATION		ALLATION RUCTIONS	e Date. April 3, 1994
	AIRCRAFT	AIRCRAFT	CERTIFICATE	BASIS FOR	I I I	REVISION NO.	AMLAMEND
ITEM	MAKE	MODEL	NUMBER	ALTERATION	NUMBER	AND DATE	MENTDATE
38	CESSNA AIRCRAFT COMPANY (Columbia, Lancair)	LC40-550FG, LC42-550FG, LC41-550FG	A00003SE	14 CFR PART 23 and Amendments Listed in TCDS No. A00003SE	AFC-K008	C 11/11/2010*	10/31/2012
39	CIRRUS DESIGN CORP	SR20, SR22, SR22T	A00009CH	14 CFR PART 23 and Amendments Listed in TCDS No. A00009CH	AFC-K008	C 11/11/2010*	10/31/2012
40	COMMONWEALTH	175, 180, 185	A-729	CAR PART 4a and Amendments Listed in TCDS No. A 729	AFC-K008	C 11/11/2010*	05/07/1997
41.	CONSOLIDATED- VULTEE AIRCRAFT CORP, STINSON DIVISION	.10, HW-75	A-709	CAR PART 4a and Amendments Listed in TCDS No. A 709	AFC-K008	C 11/11/2010*	10/31/2012
42	DE HAVILLAND SUPPORT LIMITED	Beagle B.121 Series 1	A22EU	14 CFR PART 23 and Amendments Listed in TCDS No. A22EU	AFC-K008	C 1 <u>1</u> /11/2010*	10/31/2012
43	DIAMOND AIRCRAFT INDUSTRIES INC.	DA 20-C1	TA4CH	14 CFR PART 23 and Amendments Listed in TCDS No. TA4CH	AFC-K008	C 11/11/2010*	10/31/2012
44	FS 2001 CORP (Piper)	J5A (Army L-4F), J5A-80	A-725	CAR PART 4a and Amendments Listed in TCDS No. A 725	AFC-K008	Ć 11/11/2010*	10/31/2012
45	GENERAL AVIA (Costruzaioni Aeronautiche)	F.20 "Pegaso"	A38EU	14 CFR PART 23 and Amendments Listed in TCDS No. A38EU	AFC-K008	C 11/11/2010*	10/31/2012
46	HAWKER BEECHCRAFT CORPORATION (Beechcraft)	35, A35, B35, C35, D35, E35, F35, G35, 35R	A-777	CAR PART 3 and Amendments Listed in TCDS No. A-777	AFC-K008	C 11/11/2010*	02/05/1996
47	HAWKER BEECHCRAFT CORPORATION (Beechcraft)	35-33, 35-A33, 35-B33, 35-C33, 35-C33A, E33, E33A, E33C, F33, F33A, F33C, G33, H35, J35, K35, M35, N35, P35, S35, V35, V35A, V35B, 36, A36, A36TC, B36TC, G36	3A15	CAR PART 3 and Amendments Listed in TCDS No. 3A15	AFC-K008	C 11/11/2010*	10/31/2012

### AIRWOLF FILTER CORP FOR INSTALLING REMOTE MOUNTOIL FILTER KIT

			ORIGINAL TYPE	CERTIFICATION		ALLATION RUCTIONS	Date. April 3, 199
ITEM	AIRCRAFT MAKE	AIRCRAFT MODEL	CERTIFICATE NUMBER	BASIS FOR ALTERATION	NUMBER	REVISION NO. AND DATE	AMLAMEND MENTDATE
48	HAWKER BEECHCRAFT CORPORATION (Beechcraft)	95-55, 95-A55, 95-B55, 95-B55A, 95-B55B (T-42A), 95-C55, 95-C55A, D55, D55A, E55, E55A, 58, 58A, G58	3A16	CAR PART 3 and Amendments Listed in TCDS No. 3A16	AFC-K008	C 11/11/2010*	11/22/1994
49	HAWKER BEECHCRAFT CORPORATION (Beechcraft)	58P, 58PA, 58TC, 58TCA	A23CE	14 CFR PART 23 and Amendments Listed in TCDS No. A23CE	AFC-K008	C 11/11/2010*	10/31/2012
50	HAWKER BEECHCRAFT CORPORATION (Beechcraft)	45 (YT-34), A45 (T-34A, B-45), D45 (T-34B)	5A3	CAR PART 3 and Amendments Listed in TCDS No. 5A3	AFC-K008	C 11/11/2010*	10/31/2012
51	HELIO AIRCRAFT LLC	20	3A3	CAR PART 4a and Amendments Listed in TCDS No. 3A3	AFC-K008	C 11/11/2010*	10/31/2012
52	INTERCEPTER AIRCRAFT CORPORATION (Prop-Jet, Meyers)	200, 200A, 200B, 200C, 200D	3A18	CAR PART 3 and Amendments Listed in TCDS No. 3A18	AFC-K008	C 11/11/2010*	10/31/2012
53	JGS PROPERTIES LLC (Luscombe)	11A, 11E	A-804	CAR PART 3 and Amendments Listed in TCDS No. A-804	AFC-K008	C 11/11/2010*	`10/31/2012
54	JOE RANKIN (Porterfield)	CP-55, CP-65, CS-65, LP-65	A-720	CAR PART 4a and Amendments Listed in TCDS No. A-720	AFC-K008	C 11/11/2010*	10/31/2012
55	LIBERTY AEROSPACE INC.	XL-2	A00008DE	14 CFR PART 23 and Amendments Listed in TCDS No. A00008DE	AFC-K008	C 11/11/2010*	10/31/2012
56	MAULE AEROSPACE TECHNOLOGY, INC	Bee Dee M-4, M-4, M-4C, M-4S, M-4T, M-4-210, M-4-210C, M-4-210S, M-4-210T, M-5-210C	3A23	CAR PART 3 and Amendments Listed in TCDS No. 3A23	AFC-K008	C 11/11/2010*	10/31/2012
57	MICCO AIRCRAFT CO INC.	MAC-125C, MAC-145,	3A1	CAR PART 4a and Amendments Listed in TCDS No. 3A1	AFC-K008	C 11/11/2010*	10/31/2012

### AIRWOLF FILTER CORP FOR INSTALLING REMOTE MOUNTOIL FILTER KIT

			ORIGINAL			LLATION	le Date: April 5, 199
			TYPE	CERTIFICATION	INSTI	RUCTIONS	
ITEM	AIRCRAFT	AIRCRAFT	CERTIFICATE	BASIS FOR		REVISION NO.	AMLAMEND
I I LIVI	MAKE	MODEL	NUMBER	ALTERATION	NUMBER	AND DATE	MENTDATE
	MOONEY			CAR PART 3 and		С	
58	AVIATION	M20K, M20R, M20S, M20TN	2A3	Amendments Listed in	AFC-K008	11/11/2010*	10/31/2012
	COMPANY INC			TCDS No. 2A3		11/11/2010	
	MOONEY MTE			CAR PART 3 and		С	
59	AIRCRAFT CORP	M18-C, M18-C55	A-803	Amendments Listed in	AFC-K008	11/11/2010*	10/31/2012
	United to be the control of the cont			TCDS No. A-803		11/11/2010	
	NATIONAL	50-TC, 65-TC (Army L-3J),		CAR PART 4a and		C	
60	AERONCA	65-TAC (Army L-3E),	A-728	Amendments Listed in	AFC-K008	C 11/11/2010*	10/31/2012
	ASSOCIATION	YO-58 (Army L-3),		TCDS No. A-728	1 4 5 55	11/11/2010*	
1 7	NATIONAL	O-58A (Army L-3A),	-	CAR PART 4a and		C	The state of the s
61	AERONCA	O-58B (Army L-3B, L-3C),	A-751	Amendments Listed in	AFC-K008	C 11/11/2010*	10/31/2012
(a. 1. 2. E.)	ASSOCIATION	SO-58B		TCDS No. A-751		11/11/2010*	
70.	PIPER AIRCRAFT	J3C-40, J3C-50, JC3-50S, JC3-65,	and the second of the second o	CAR PART 4a and			- came on 1275
62			A-691	Amendments Listed in	AFC-K008	C	02/05/1996
	INC.	JC3-65S, PA-11, PA-11S		TCDS No. A-691		11/11/2010*	
	DIDED AIDCDAFT		. 127.57	CAR PART 4a and		•	reference
63	PIPER AIRCRAFT	J4, J4A, J4A-S	A-703	Amendments Listed in	AFC-K008	C	10/31/2012
	INC.			TCDS No. A-703	***************************************	11/11/2010*	100 personal and an analysis of the second
	DIDED AIDCDAFT		÷	CAR PART 4a and	9	С	Para Same
64	PIPER AIRCRAFT INC.	J4E (Army L-4E)	A-740	Amendments Listed in	AFC-K008		10/31/2012
	INC.		7 1 1 1 1 1 1 1 1 1 1 1	TCDS No. A-740		11/11/2010*	
	PIPER AIRCRAFT			CAR PART 3 and		0	
65	INC.	PA-17	A-805	Amendments Listed in	AFC-K008	C	10/31/2012
	INC.			TCDS No. A-805		11/11/2010*	8
	PIPER AIRCRAFT	DA 20D 201T DA 20DT 201T		CAR PART 3 and		C	
66	INC.	PA-28R-201T, PA-28RT-201T, PA-28-201T	2A13	Amendments Listed in	AFC-K008	C 11/11/2010*	02/05/1996
	INC.	PA-28-2011		TCDS No. 2A13		11/11/2010*	2 T 1120 AW 1551 92 16
	DIDED AIDODAED	DA 24 200T		14 CFR PART 23 and		C	
67	PIPER AIRCRAFT	PA-34-200T	A7SO	Amendments Listed in	AFC-K008	C	10/31/2012
	INC.	PA-34-220T		TCDS No. A7SO	100000000000000000000000000000000000000	11/11/2010*	
	DIDED AID OD ART			14 CFR PART 23 and			
68	PIPER AIRCRAFT	PA-36-285	A9SO	Amendments Listed in	AFC-K008	C	10/31/2012
2000	INC.		.c.anc.co.met.Codification	TCDS No. A9SO		11/11/2010*	
	DIDED AID OD ADD			14 CFR PART 23 and			
69	PIPER AIRCRAFT	PA-46-310P	A25SO	Amendments Listed in	AFC-K008	C	10/31/2012
	INC.			TCDS No. A25SO		11/11/2010*	

### AIRWOLF FILTER CORP FOR INSTALLING REMOTE MOUNTOIL FILTER KIT

							ie Date: April 5, 199
			ORIGINAL			ALLATION	
			TYPE	CERTIFICATION	INSTI	RUCTIONS	
ITEM	AIRCRAFT	AIRCRAFT	CERTIFICATE	BASIS FOR		REVISION NO.	AMLAMEND
A A AZIVA	MAKE	MODEL	NUMBER	ALTERATION	NUMBER	AND DATE	MENTDATE
	PROCAER Progetti			14 CFR PART 23 and		C	
70	Costruzioni	F 15/E	A28EU	Amendments Listed in	AFC-K008	C 11/11/2010*	10/31/2012
	Aeronautiche			TCDS No. A28EU		11/11/2010	
	REGAL AIR, INC.	Cessna 305A (USAF 0-1A),		14 CFR PART 23 and		С	
71	(Bird Dog)	305C (USAF 0-1E),	5A5	Amendments Listed in	AFC-K008	11/11/2010*	11/22/1994
	(Bird Dog)	305D (USAF 0-1G), 305F (L-19)		TCDS No. 5A5		11/11/2010	
	REGAL AIR, INC.	Cessna 305B		CAR PART 3 and		C	
72	(Bird Dog)	(TO-1D, 0-1D, 0-1F),	3A14	Amendments Listed in	AFC-K008	C 11/11/2010*	10/31/2012
	(Blid Dog)	305E (L-19)		TCDS No. 3A14	- 27	11/11/2010	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	SIERRA HOTEL	Navion (L-17A),	2	CAD DADTO 1	27.5		
73	AERO, INC.	Navion A (L-17B, L-17C),	A 702	CAR PART 3 and	A EC TODO	C	05/02/1005
1 /3	(Navion, Ryan)	Navion D, Navion E, Navion F,	A-782	Amendments Listed in	AFC-K008	11/11/2010*	05/23/1995
100 mg/1	(Navioli, Kyali)	Navion G, Navion H		TCDS No. A-782			
	S.O.C.A.T.A. –	D. II. G : MGGGGD MGGGG	7.1.	CAR PART 3 and			
74.	GROUPE	Rallye Series MS880B, MS885,	7A14	Amendments Listed in	AFC-K008	C	10/31/2012
E PAG	AEROSPATIALE	100S		TCDS No. 7A14	1.00	11/11/2010*	
	STOL AVIATION	6.11	W.S.	CAR PART 4 and	121-		
75	LLC (Interstate	S-1A	A-737	Amendments Listed in	AFC-K008	C	10/31/2012
	Engineering)		500.000 Mark N 50 . 01	TCDS No. A-737	4-1-1	11/11/2010*	
	SUPERIOR	1 100		CAR PART 4a and	1.50		ę.
76	AIRCRAFT CO	LCA	A-730	Amendments Listed in	AFC-K008	C	10/31/2012
	(Culver)		100000000000000000000000000000000000000	TCDS No. A-730		11/11/2010*	
	SWIFT MUSEUM			CAR PART 4a and		6	
77	FOUNDATION, INC.	GC-1A, GC-1B	A-766	Amendments Listed in	AFC-K008	C	05/07/1997
	(Globe)			TCDS No. A-766		11/11/2010*	
	TAYLORCRAFT			CAR PART 3 and		-	
78	2000 LLC	19, F19	1A9	Amendments Listed in	AFC-K008	C	02/05/1996
	(Taylorcraft)			TCDS No. 1A9	PROPERTY OF STREET, STATE	11/11/2010*	2178670.00570.00505050505
		BC, BCS, BC-65, BCS-65,					
		BC12-65 (Army L-2H),					
	TAYLORCRAFT	BCS12-65,		CAR PART 4 and		~	
79	2000 LLC	BC12-D, BCS12-D, BC12-D1,	01, A-696	Amendments Listed in	in AFC-K008	C	05/07/1997
	(Taylorcraft)	BCS12-D1, BC12D-85,		TCDS No. A-696		11/11/2010*	30,0,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
		BCS12D-85, BC12D-4-85,	1				
		BCS12D-4-85					
		DC012D-4-03		<u></u>			

### AIRWOLF FILTER CORP FOR INSTALLING REMOTE MOUNTOIL FILTER KIT

			ORIGINAL TYPE	CERTIFICATION		ALLATION RUCTIONS	le Date. April 3, 199
YENN 6	AIRCRAFT	AIRCRAFT	CERTIFICATE	BASIS FOR	11/511	REVISION NO.	AMLAMEND
ITEM	MAKE	MODEL	NUMBER	ALTERATION	NUMBER	AND DATE	MENTDATE
80	THE DON LUSCOMBE AVIATION HISTORY FOUNDATION INC (Luscombe)	8, 8A, 8C, 8D, 8E, 8F, T-8F	A-694	CAR PART 4a and Amendments Listed in TCDS No. A-694	AFC-K008	C 11/11/2010*	10/31/2012
81	THE WACO AIRCRAFT CO	QCF	ATC 416	ATC 416 as specified	AFC-K008	C 11/11/2010*	10/31/2012
82	THE WACO AIRCRAFT CO	QDC	ATC 412	ATC 412 as specified	AFC-K008	C 11/11/2010*	10/31/2012
83	THE WACO AIRCRAFT CO	UEC	ATC 467	ATC 467 as specified	AFC-K008	C 11/11/2010*	10/31/2012
84	THE WACO AIRCRAFT CO	UIC	ATC 499	ATC 499 as specified	AFC-K008	C 11/11/2010*	10/31/2012
85	THE WACO AIRCRAFT CO	UKC, UKC-S, UKS-6, VKC, VKC-S, VKS-6	ATC 528	ATC 528 as specified	AFC-K008	C 11/11/2010*	10/31/2012
86	THE WACO AIRCRAFT CO	UMF	ATC 546	ATC 546 as specified	AFC-K008	C 11/11/2010*	10/31/2012
87	THE WACO AIRCRAFT CO	UPF-7, VPF-7	A-642	A-642 as specified and Aero Bulletin 7A	AFC-K008	C 11/11/2010*	02/05/1996
88	THOMAS H.  McCLISH  (Funk)	B85C	A-715	CAR PART 4a and Amendments Listed in TCDS No. A-715	AFC-K008	C 11/11/2010*	10/31/2012
89	TWIN COMMANDER AIRCRAFT LLC (Rockwell)	500-A	6A1	CAR PART 3 and Amendments Listed in TCDS No. 6A1	AFC-K008	C 11/11/2010*	10/31/2012
90	TWIN COMMANDER AIRCRAFT LLC (Rockwell)	685	2A4	CAR PART 3 and Amendments Listed in TCDS No. 2A4	AFC-K008	C 11/11/2010*	10/31/2012
91	UNIVAIR AIRCRAFT CORPORATION (Stinson)	108, 108-1, 108-2, 108-3, 108-5 With Continental engine installed	A-767	CAR PART 3 and Amendments Listed in TCDS No. A-767	AFC-K008	C 11/11/2010*	10/31/2012

### AIRWOLF FILTER CORP FOR INSTALLING REMOTE MOUNTOIL FILTER KIT

Issue Date: April 5, 1994

						1550	e Date. April 3, 199
		el .	ORIGINAL TYPE	CERTIFICATION		ALLATION RUCTIONS	
ITEM	AIRCRAFT MAKE	AIRCRAFT MODEL	CERTIFICATE NUMBER	BASIS FOR ALTERATION	NUMBER	REVISION NO. AND DATE	AMLAMEND MENTDATE
92	UNIVAIR AIRCRAFT CORPORATION (Ercoupe)	415-D, F-1, F-1A, A-2, A-2A, M-10	A-787	CAR PART 3 and Amendments Listed in TCDS No. A-787	AFC-K008	C 11/11/2010*	10/31/2012
93	UNIVAIR AIRCRAFT CORPORATION (Ercoupe)	415-C, 415-CD	A-718	CAR PART 4a and Amendments Listed in TCDS No. A-718	AFC-K008	C 11/11/2010*	10/31/2012
94	WDL LUFTSCHIFFGESEL L-SCHAFT MBH	-WDL 1B	AS4EU	14 CFR PART 23 and Amendments Listed in TCDS No. AS4EU	AFC-K008	C 11/11/2010*	10/31/2012
95	WILLIAM J. GORES (Aeronca)	ŘCA, 50-C, S-50-C, 65-C, S-65-C, 65-CA (L-3F), S-65-CA	A-675	A-675 as specified and Aero Bulletin 7A	AFC-K008	C 11/11/2010*	10/31/2012
96	WSK PŽL MIELEC	PZL M20 03	A68EU	14 CFR PART 23 and Amendments Listed in TCDS No. A68EU	AFC-K008	C 11/11/2010*	10/31/2012

\* Or Later FAA Approved Revisions

FAA Approved:

Timothy Smyth

Manager, Propulsion & Program Management Branch

Chicago Aircraft Certification Office

Date Amended: 11/22/94, 5/23/95, 2/5/96, 5/7/97, 5/15/99, 10/31/12

Airwolf Filter Corp. 15369 Madison Road Middlefield, OH 44062 AFC-K000-ICA Date July 5, 2012 Revision A Date October 25, 2013 Page 1 of 4

### **INSTRUCTIONS FOR CONTINUED AIRWORTHINESS**

## AIRWOLF FILTER CORP. REMOTE MOUNTED OIL FILTER

On
Aircraft Models Described on
the Applicable AML or Otherwise Approved

Make:	
Model:	
Serial Number:	
Rea Number	

STC SA00024NY STC SA00079NY STC SA00433NY STC SA01282NY STC SA01406NY

### **RECORD OF REVISIONS**

REV.	EFFECTED	DESCRIPTION	DATE	APPROVED BY
NO.	PAGE(S)			
IR	All	Initial Release	07/05/2012	David Braun, P.E., DER
		Remove reference to Chapter 71 in Chapter 1 Section 4 (page 2). Revise Record of Revisions Table and page headers to agree with accepted		
Α	All	format.	10/25/2013	David Braun, P.E., DER

#### **CHAPTER 1 INTRODUCTION**

1. Type Design Change:

This type design change consists of the installation of the Airwolf Filter Corp. Remote Mount Oil Filter Kit pursuant to STCs SA00024NY, SA00079NY, SA00433NY, SA01282NY and SA01406NY on various aircraft makes and models as approved on the AML associated with the applicable STC. Each STC is tailored for aircraft powered by the engine applications as follows:

STC SA00024NY – Lycoming Engines STC SA00079NY – Continental Engines STC SA00433NY – Franklin Engines

STC SA01282NY - Pratt & Whitney Engines

STC SA01406NY – Curtis-Wright, Jacobs, Kinner, Ranger and Warner Engines.

Many aircraft engines were built with oil screens, or filters mounted on the engine in locations difficult to access. Oil screens are not filters and only prevent the large pieces from going through the engine. Oil filters trap small contaminates (dirt) preventing them from circulating through the engine. Remote Mount Oil Filter Kits replace the screen or difficult to access filter with a replaceable oil filter in a location which minimizes potential oil spills when servicing the oil filter.

2. Scope: The scope of this Instruction for Continued Airworthiness (ICA) focuses

exclusively on Maintenance, Inspection & Airworthiness Limitations of

this FAA-approved type design change.

3. Purpose: The purposes of this ICA are to apprise Owner/Operators who have

modified their airplane pursuant to this type design change: (1) When, where & how to inspect; and (2) When to replace this type design to

assure continued operational safety.

4. Arrangement: This ICA is a single document comprised of five (5) Chapters:

Chapter 1, Introduction;

Chapter 4. Airworthiness Limitations:

Chapter 5, Inspection Requirements & Overhaul Schedule;

Chapter 8, Weight and Balance;

Chapter 12, Servicing.

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5. Applicability: This ICA is applicable to the aircraft noted on each STCs AML. In

addition, it is applicable to aircraft which install the remote mounted oil

filter system and receive a field approval.

6. Precautions: There are no Precautionary Notes in Airwolf Filter Corp. AFC-K000-

ICA.

7. Referenced Publications: Airwolf Filter Corp. Installation Instructions as follows:

STC SA00024NY - AFC-K007 STC SA00079NY - AFC-K008 STC SA00433NY - AFC-K010 STC SA01282NY - AFC-K015 STC SA01406NY - AFC-K017

The maintenance and operations manual for the engine and the

aircraft.

8. Distribution: Airwolf Filter Corp, will distribute this ICA to purchasers of Remote Oil

Filter kits, and should the need arise to modify this ICA, the AEG-accepted revision will available to all Owner/Operators. For

Owner/Operators having internet access, the latest AEG- accepted revision to this ICA will be available for downloading from the Airwolf

Filter Corp. website: http://www.airwolf.com/

### CHAPTER 4 AIRWORTHINESS LIMITATIONS

There are no Airworthiness Limitations associated with this type design change.

The Airworthiness Limitations section is FAA approved and specifies maintenance required under Secs. 43.16 and 91.403 of the Federal Aviation Regulations unless an alternative program has been FAA

approved."

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### CHAPTER 5 INSPECTION REQUIREMENTS & OVERHAUL SCHEDULE

#### 1. INSPECTION REQUIREMENTS

Inspect for security at each annual or 100 hr. inspection. After any oil change, always ground run the engine and check for leaks..

At each oil change cut the old filter open with Airwolf AFC-470 oil filter cutter (or equivalent) and inspect for metal contamination or any evidence that may indicate impending engine problems.

#### 2. OVERHAUL SCHEDULE

There are no changes to the overhaul schedule relating to Power Plant associated with this type design change.

#### CHAPTER 8 WEIGHT and BALANCE

#### 1. NET EFFECT:

Installation of the Remote Oil Filter Kit typically results in a five pound addition in weight. Because of the variety of the aircraft covered on each STC's AML, prior to installing the filter kit on the aircraft, weigh the filter kit, add the weight of the hoses, and subtract the oil screen or oil filter adapter removed from the engine and determine the net weight being added to the aircraft. Measure the locations relative to the datum for the moment arms if needed.

Airwolf Filter Corp. recommends that aircraft are weighed and a new weight and balance calculated after all modifications are made.

### **CHAPTER 12 SERVICING**

### 1. OIL SYSTEM

Oil system to be serviced in accordance with the most recent available engine operation manual or maintenance manual for the engine installed on the aircraft, and the applicable aircraft maintenance manual. Oil should be changed at least once every 12 months. Prior to each oil change run up the engine to operating temperature to assure complete draining of the oil. At each oil change, cut the old filter open with Airwolf AFC-470 oil filter cutter (or equivalent) and inspect for metal contamination or any evidence that may indicate impending engine problems.

To install the new oil filter, position the filter on the remote mounting adapter and tighten the filter to a torque of 18 to 20 ft. lbs. If a torque wrench is not available, tighten the filter with a suitable wrench, three quarters to one full turn after the filter gasket makes contact with the adapter face. Safety wire the filter to the remote mount adapter.

### 2. STANDARD HARDWARE

Hardware associated with this type design change are standard AN and MS hardware. Contact Airwolf Filter Corp. for spares and refer to the installation instructions when ordering.