



AIRWOLF FILTER CORP.

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TO THE MECHANIC:

This P/N AFC-K007 remote mount oil filter kit incorporates our generic STC approved for all Lycoming 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-K007 kit and the STC# SA00024NY. 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 a quarterly 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 Aircraft Certification Office which will clarify the details. They are very familiar with our filter kits and can address any concerns your FSDO inspector may have on your particular installation.

FAA - New York Aircraft Certification Office (ACO)
Engine and Propeller Division
1600 Stewart Ave
Suite 510
Westbury NY 11590
(516) 228-7332 / (516) 794-5531 Fax

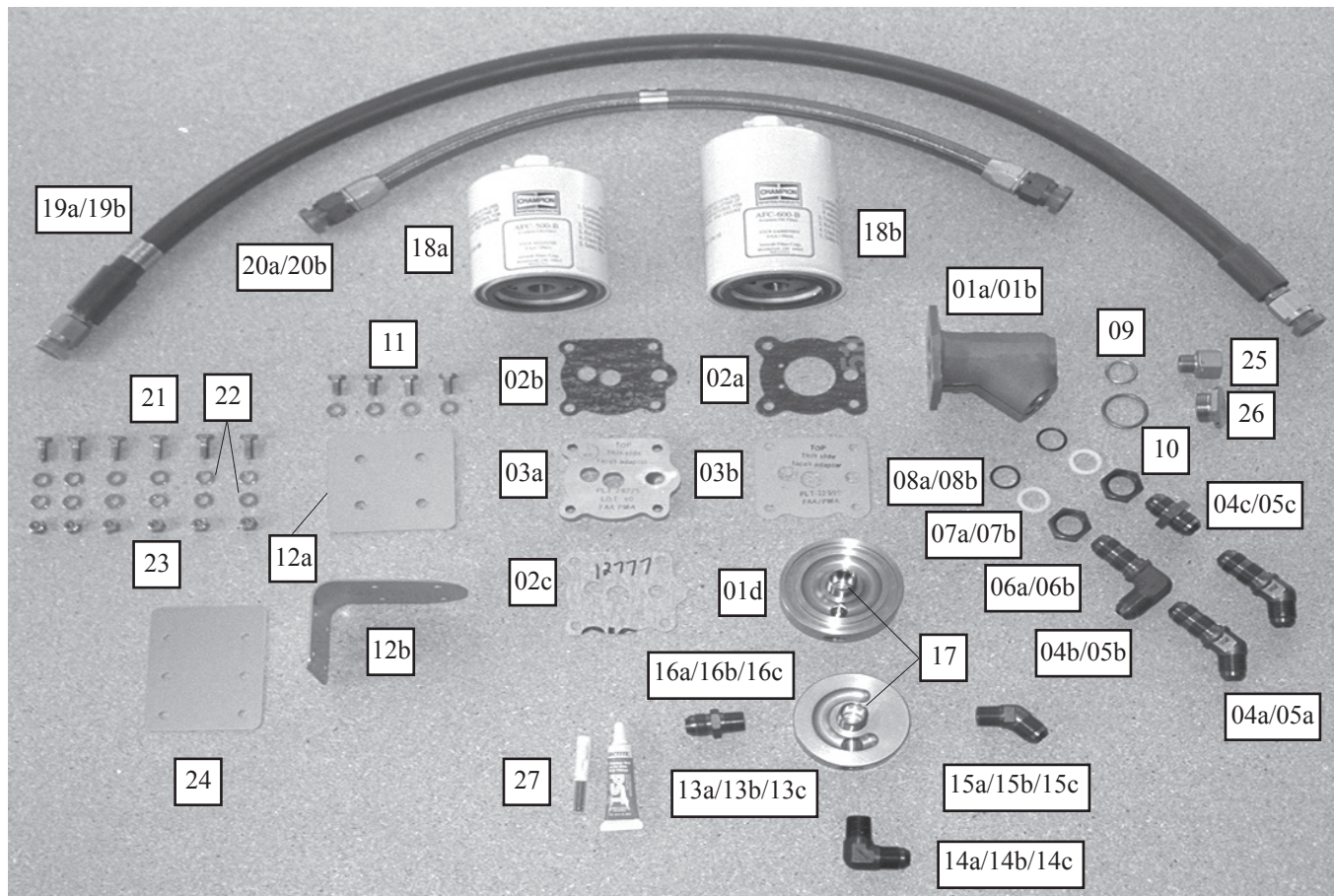
If your aircraft required a field approval, we must have a copy in order to update the (AML) list on our STC. Please send us a copy in addition to the one you will file with your local FSDO. We will then forward our copy to the Aircraft Certification Office for them to update the (AML) list on our STC.

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 hose ends needed on each hose ie: Straight to Straight, Straight to 90°, Straight to 45°, etc. allowing for engine torque and vibration per AC43.13.

Thank you for your help.

Airwolf Filter Corp.



Oil Filter Kit AFC-K007

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

Drawing: AFC-K007
Revision: A
Date: 10/01/02

Parts List No. AFC-K007-PL

Index	Part Number	Description	Quantity
01a.	LYC-10	Full Flow Engine Adapter, All O235-540 except below	(1)
01b.	LYC-11	Full Flow Engine Adapter, IO720	(1)
01c.	OFB-12	Full Flow Engine Adapter, Single Drive Dual Mags [Old Style]	(1)
01d.	OFB-17	Full Flow Engine Adapter, Single Drive Dual Mags [New Style]	(1)
01e.	M83248/1-230	"O" Ring, Viton, Single Drive Dual Mags [New Style]	(1)
01f.	AN919-15D-SP	Fitting, Reducer, -10 -> -8 Single Drive Dual Mags [New Style]	(2)
02a.	61173	Adapter Base Gasket, O235-540	(1)
02b.	12777	Adapter Base Gasket, IO720	(1)
02c.	12776	Adapter Base Gasket, IO720	(1)
03a.	PLT-28775	Adapter Plate, IO720	(1)
03b.	PLT-12999	Restrictor Plate, O235	(1)
04a.	AN837-8D	Bulkhead Fitting-45°, O235-540	(2)
04b.	AN833-8D	Bulkhead Fitting-90°, O235-540	(Opt)
04c.	AN815-8D	Union, O235-540	(Opt)
05a.	AN837-10D	Bulkhead Fitting-45°, IO720	(2)
05b.	AN833-10D	Bulkhead Fitting-90°, IO720	(Opt)
05c.	AN815-10D	Union, IO720	(Opt)
06a.	AN6289-8D	Bulkhead Nut, O235-540	(2)
06b.	AN6289-10D	Bulkhead Nut, IO720	(2)
07a.	MS28773-08	Boss Gasket, Teflon, O235-540	(2)
07b.	MS28773-10	Boss Gasket, Teflon, IO720	(2)
08a.	MS9387-08	"O" Rings, Viton, O235-540	(2)
08b.	MS9387-10	"O" Rings, Viton, IO720	(2)
09.	MS35769-11	Gasket, Oil Temperature Sensor	(1)
10.	MS35769-21	Gasket, Thermostatic Valve	(1)

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

Drawing: AFC-K007
Revision: A
Date: 10/01/02

Parts List No. AFC-K007-PL (continued)

<u>Index</u>	<u>Part Number</u>	<u>Description</u>	<u>Quantity</u>
11.	AN4H-4A	Bolts, Drilled Head	(4)
12a.	OFM-10	Horizontal Oil Filter Mount Plate	(1)
12b.	OFM-11	Vertical Oil Filter Mount Plate	(1)
13a.	OFB-10	Oil Filter Base, -8 Ports, O235-540	(1)
13b.	OFB-11	Oil Filter Base, -10 Ports, IO720	(1)
13c.	OFB-15	Oil Filter Base, -12 Ports, GO/GSO/IGSO 435/480/540	(1)
14a.	MS20822-8D	90° Fitting, O235-540	(1)
14b.	MS20822-10D	90° Fitting, IO720	(1)
14c.	MS20822-12D	90° Fitting, GO/GSO/IGSO 435/480/540	(1)
14d.	AN842-16D	90° Fitting, W670	(1)
15a.	MS20823-8D	45° Fitting, O235-540	(1)
15b.	MS20823-10D	45° Fitting, IO720	(1)
15c.	MS20823-12D	45° Fitting, GO/GSO/IGSO 435/480/540	(1)
15d.	AN844-16D	45° Fitting, W670	(1)
16a.	AN816-8D	Nipple, Flared Tube, O235-540	(Opt)
16b.	AN816-10D	Nipple, Flared Tube, IO720	(Opt)
16c.	AN816-12D	Nipple, Flared Tube, GO/GSO/IGSO 435/480/540	(Opt)
16d.	AN840-16D	Nipple, W670	(Opt)
17.	OFS-10	Oil Filter Stud	(1)
18a.	AFC-500	Oil Filter, Std. or Equivalent [Champion CH48108]	(1)
18b.	AFC-600	Oil Filter, Long or Equivalent [Champion CH48109]	(1)
19a.	F13000008-0xxz	Titeflex® Firesleeved Teflon Hose, [-8], O235-540	(Opt)
19b.	F13000010-0xxz	Titeflex® Firesleeved Teflon Hose, [-10], IO720	(Opt)
19c.	F13000012-0xxz	Titeflex® Firesleeved Teflon Hose, [-12], GO/GSO/IGSO 435/480/540	(Opt)
20a.	AE7010000H0xxz	Aeroquip® Hose Assy, [-8], O235-540	(Opt)
20b.	AE7010000J0xxz	Aeroquip® Hose Assy, [-10], IO720	(Opt)
20c.	AE7010000K0xxz	Aeroquip® Hose Assy, [-12], GO/GSO/IGSO 435/480/540	(Opt)
20d.	MIL6000-1-25	MIL 6000 Hose, 25" Long, [Stearman]	(2)
20e.	MIL6000-3/4-25	MIL 6000 Hose, 25" Long, [Waco]	(2)
21.	AN4-5A	Bolts	(6)
22.	AN960-416	Flat Washers	(16)
23.	MS20365-428A	Locknuts	(6)
24.	DBL-10	Doubler Plate	(1)
25.	OTA-527	Oil Temp Adapter	(Opt)
26.	CAP-1350	Bypass Valve Cap	(Opt)
27.	LYC-12	Full Flow Engine Adapter-Engine Mounted	(1)
28.	PLT-200	2" Adapter Plate	(1)
29.	AN74A-6	Drilled Head Bolts	(4)
30.	MS35333-40	1/4" Star Washer	(8)
31.	56707	Loctite® 567 PST Teflon Thread Sealant	(1)
32.	AFC-K007-II	Installation Instructions, Generic	(1)
33.	AFC-K007-MI	Instructions for Continued Airworthiness	(1)
34.	AFC-K007-PL	Parts List	(1)

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

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 (B) *****

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

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

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)

Applicability:	Lycoming powered Single and Multi Engine Fixed Wing Aircraft with O235-O540 engines having firewalls of .021 ASTM A527 galvanized steel or equivalent.	Drawing:	AFC-K007
		Revision:	A
		Date:	10/01/02

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 Lycoming P/N 69510, 68974 or 62815 engine oil screen housing from the accessory case.
**** WARNING - DO NOT REUSE OIL SCREEN IN LYC-10 ADAPTER ****
02. Remove oil temperature sensor and thermostatic valve from old oil screen housing.
03. Install a new gasket (09) under the head of the oil temperature sensor, reinstall in the adapter-engine (01a). Turn the oil temp sensor until the sealing surfaces are in contact and then tighten an additional 135 degrees. Install a new gasket (10) under the head of the Lycoming P/N 75944 thermostatic valve, reinstall in the adapter-engine (01a), torque to 300 in/lbs and secure.

Note B: You must use the Bypass Valve Cap (26) if your aircraft uses an older Lycoming engine which does not utilize the newer type Lycoming P/N 53E22144 thermostatic bypass valve (Vernatherm) as your accessory case may not have been drilled by the Lycoming factory to utilize the Vernatherm.

Note C: If removing the 68974 or 62815 oil screen housing from your engine which uses the older type capillary tube oil temperature probe and you intend to reuse this probe in our LYC-10 Adapter, it may be necessary to use our Oil Temp Adapter (25).

04. Onto each bulkhead fitting (04a) or (04b), install in order 1 ea. bulkhead nut (06a), boss gasket (07a), and "O" Ring (08a). If using union (04c), use only "O" Ring (08a). Install each completed assembly into the adapter-engine (01a).
BE CAREFUL: O-ring and boss gasket must seal in the smooth area between the threaded areas of the bulkhead fitting.

Note D: Any combination of fittings (04a), (04b), or (04c) is acceptable.

05. Install a new gasket (02a) on base of adapter-engine (01a) and reinstall onto the engine accessory case. Torque to specifications 96 in/lbs. On O235 Series engines, a restrictor plate (03b) must be used to keep the engine oil pressure from following the throttle. Install as pictured using 1 ea. adapter base gasket (02a) on each side of the restrictor plate.
06. Using the horizontal oil filter mount (12a.) or vertical oil filter mount (12b.) as a drilling template, locate and drill mounting holes using a letter "F" drill.

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

- 07a. Secure oil filter mount plate - vertical (12b) to Fwd side of firewall and doubler plate (24) to Aft side of firewall using bolts (21), washers (22), and nuts (23).

OR

- 07b. Secure oil filter base (13a) to Fwd side of firewall and horizontal oil filter mount plate (12a) to rear side using bolts (11) and washers (22) and secure with .032 MS20995-C safety wire.

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

08. Install any combination of fitting (14a), (15b), or (16a) into oil filter base (13a). Mount to oil filter mount plate (12a.) or (12b.) using bolts (11), washers (22), and secure with .032 MS20995-C safety wire.

**** SEE WARNING (C) ABOVE ****

09. Determine hose lengths and order appropriate length hoses (19a) or (20a). 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 firesleeved hose 24 7/8" long is F13000008-0247.
10. Install assembled hose assy's (19a) or (20a) connecting the "A" port on the Adapter- Engine to the "A" port on the filter base and the "B" port on the Adapter- Engine to the "B" port on the filter base and torque to 270-350 in/ lbs.
11. Install oil filter (18a) or (18b) torque per instructions on oil filter, and secure with MS20995-C safety wire.
12. Run engine and check for leaks.
13. Determine weight and balance, initiate a 337 form, and update the equipment list.

Applicability:	Lycoming powered Single and Multi Engine Fixed Wing Aircraft less than 450hp, using Single Drive Dual Mags having firewalls of .021 ASTM A527 galvanized steel or equivalent.	Drawing:	AFC-K007
		Revision:	A
		Date:	10/01/02

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 existing spin on oil filter from rear of accessory case.
02. Remove Champion P/N CH48212 Converter Stud from rear of accessory case. DO NOT remove the Champion P/N CH48210 converter plate and gasket.
03. For old style OFB-14 (01c) oil filter adapter:
Remove square cut O-Ring from base of old Champion oil filter being removed from accessory case.
Reinstall square cut O-Ring previously removed from oil filter into base of oil filter adapter (01c). Apply liberal amount of Dow Corning DC-4 silicon grease to O-Ring and place in machined groove in oil filter adapter (01c) and install onto the accessory case. O-Ring should extend approximately .040 above the surface of the oil filter adapter(01c)

**** SEE WARNING (A) ABOVE ****
04. Install any combination of fitting (14a), (15a), or (16a) into oil filter adapter (01c).
05. For new style OFB-17 (01d) oil filter adapter :
Apply liberal amount of Dow Corning DC-4 silicon grease to O-Ring (01e.) Install O-ring (01e.) into machined groove in oil filter adapter (01d) and install onto the accessory case.
06. Place O-rings (08b) onto fittings (01f) and install into oil filter adapter (01d).
07. Install assembled oil filter adapter (01c) or (01d) onto rear of accessory case. Torque to specifications 16-18 ft./lbs. and secure with .032 MS20995-C safety wire.
08. Using the horizontal oil filter mount (12a.) or vertical oil filter mount (12b.) as a drilling template, locate and drill mounting holes using a letter "F" drill.

**** SEE WARNING (B) ABOVE ****
- 09a. Secure oil filter vertical mount plate (12b) to Fwd side of firewall and doubler plate (24) to Aft side of firewall using bolts (21), washers (22), and nuts (23).

OR
- 09b. Secure oil filter base (13a) to Fwd side of firewall and oil filter mount plate - horizontal (12a) to rear side using bolts (11) and washers (22) and secure with .032 MS20995-C safety wire.

**** SEE WARNING (A) ABOVE ****
10. Install any combination of fitting (14a), (15a), or (16a) into oil filter base (13a). Mount to oil filter mount plate (12a.) or (12b.) using bolts (09), washers (17), and secure with .032 MS20995-C safety wire.

**** SEE WARNING (C) ABOVE ****
11. Determine hose lengths and order appropriate length hoses (19a) or (20a). 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 firesleeved hose 24 7/8" long is F1300008-0247.
12. Install assembled hose assy's (19a) or (20a) connecting the "A" port on the oil filter adapter to the "A" port on the oil filter base and the "B" port on the oil filter adapter to the "B" port on the oil filter base and torque to 270-350 in/ lbs.
13. Install oil filter (18a) or (18b), torque per instructions on oil filter, and secure with MS20995-C safety wire.
14. Run engine and check for leaks.
15. Determine weight and balance, initiate a 337 form, and update the equipment list.

Applicability: Lycoming powered Single and Multi Engine
Fixed Wing Aircraft with IO-720 engines
having firewalls of .021 ASTM A527 galvanized steel or equivalent.

Drawing: AFC-K007
Revision: A
Date: 10/01/02

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 Lycoming P/N 73300 engine oil screen housing or P/N 77852 oil filter base assy. from the accessory case.
**** WARNING - DO NOT REUSE OIL SCREEN IN LYC-11 ADAPTER ****
02. Remove oil temperature sensor and thermostatic valve from old oil screen housing.
03. Install a new gasket (09) under the head of the oil temperature sensor and install into adapter-engine (01b). Turn the oil temp sensor until the sealing surfaces are in contact and then tighten an additional 135 degrees. Install a new gasket (10) under the head of the Lycoming P/N 75944 thermostatic valve, reinstall in the adapter-engine (01b), torque to 300 in/lbs and secure.
04. Onto each bulkhead fitting (05a) or (05b), install in order 1 ea. bulkhead nut (06b), boss gasket (07b), and "O" Ring (08b). If using union (05c), use only "O" Ring (08b). Install each completed assembly into the adapter-engine (01b).
BE CAREFUL: O-ring and boss gasket must seal in the smooth area between the threaded areas of the bulkhead fitting.

Note B: Any combination of fittings (05a), (05b), or (05c) is acceptable.

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

05. Onto accessory case, install in order 1 ea. gasket, oil filter adapter (02c), adapter plate IO720 (03), adapter base gasket (02b). Trim gaskets as necessary to assure oil flow returning to the engine (far RH hole) is not restricted and that there is a smooth flow from the gasket (02c), adapter (03) and gasket (02b). Install assembled adapter-engine (01b) onto the engine accessory case and torque to specifications 96 in/lbs.

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

06. Using the oil filter horizontal mount (12a.) or vertical oil filter mount (12b.) as a drilling template, locate and drill mounting holes using a letter "F" drill.
- 07a. Secure vertical oil filter mount plate (12b) to Fwd side of firewall and doubler plate (24) to Aft side of firewall using bolts (21), washers (22), and nuts (23).
- OR
- 07b. Secure oil filter base (13b) to Fwd side of firewall and horizontal oil filter mount plate (12a) to rear side using bolts (11) and washers (22) and secure with .032 MS20995-C safety wire.

**** SEE WARNING (C) ABOVE ****

08. Install any combination of fitting (14b), (15b), or (16b) into oil filter base (13b). Mount to oil filter mount plate (12a.) or (12b.) using bolts (11), washers (22), and secure with .032 MS20995-C safety wire.

**** SEE WARNING (D) ABOVE ****

09. Determine hose lengths and order appropriate length hoses (19b) or (20b). 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 firesleeved hose 24 7/8" long is F13000010-0247.
10. Install assembled hose assy's (19b) or (20b) connecting the "A" port on the Adapter- Engine to the "A" port on the filter base and the "B" port on the Adapter- Engine to the "B" port on the filter base and torque to 270-350 in/ lbs.
11. Install oil filter (18b), torque per instructions on oil filter, and secure with MS20995-C safety wire.
12. Run engine and check for leaks.

Installation Instructions No. AFC-K007-D-II

Applicability: Lycoming powered Single and Multi Engine
Fixed Wing Aircraft with G0/GSO/IGSO 435/480/540 engines
having firewalls of .021 ASTM A527 galvanized steel or equivalent.

Drawing: AFC-K007
Revision: A
Date: 10/01/02

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. Locate the scavenge oil hose connecting the scavenge oil pump to the oil cooler.
03. Locate and determine proposed oil filter location on firewall.
04. Using the vertical oil filter mount (12b.) as a drilling template, locate and drill mounting holes using a letter "F" drill.

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

05. Secure the vertical oil filter mount (12b.) to Fwd side of firewall and doubler plate (24) to Aft side of firewall using bolts (21), washers (22), and nuts (23).

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

06. Install any combination of fitting (14c), (15c), or (16c) into oil filter base (13a). Mount to oil filter mount plate (12a.) or (12b.) using bolts (11), washers (22), and secure with .032 MS20995-C safety wire.

**** SEE WARNING (C) ABOVE ****

07. Determine hose lengths and order appropriate length hoses (19a) or (20a). 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 firesleeved hose 24 7/8" long is F13000012-0247.
08. Install assembled hose assy's (19c) or (20c) connecting the outlet port on the scavenge oil pump to the "B" port on the oil filter base (13c). Connect the outlet ["A" port] of the oil filter base (13c) to the inlet of the oil cooler. Torque hoses to 270-350 in/ lbs.
09. Install oil filter (18b) torque per instructions on oil filter, and secure with MS20995-C safety wire.
10. Run engine and check for leaks.
11. Determine weight and balance, initiate a 337 form, and update the equipment list.

Applicability:	Lycoming powered Single and Multi Engine Fixed Wing Aircraft less than 450hp. having firewalls of .021 ASTM A527 galvanized steel or equivalent.	Drawing:	AFC-K007
		Revision:	A
		Date:	10/01/02

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 existing spin-on oil filter from Lycoming P/N 77852 Oil Filter Adapter.
02. Screw OFB-17 oil filter adapter completely into existing Lycoming P/N 77852 and see if both parts make contact. If any gap exists, measure the gap, add .187 to this dimension and trim the OFS-10 oil filter stud to this length. When trimmed to the correct length the OFB-17 will make contact with the 77852 adapter without the o-ring installed in our OFB-17 adapter.

Note B: Lycoming has recently changed the amount of threads inside their P/N 77852 adapter which can cause our OFS-10 stud to bottom out before the actual OFB-17 makes contact with the adapter, requiring the trimming of our OFS-10 stud.

03. Apply liberal amount of Dow Corning DC-4 silicon grease to the M83248/1-230 O-Ring. Install the O-ring into machined groove in OFB-17 oil filter adapter and install onto Lycoming P/N 77852 Oil Filter Adapter. Do not tighten completely at this time.
04. Place MS9387-10 o-rings onto AN919-15D-SP fittings and install into OFB-17 oil filter adapter.
05. Using the OFM-10 horizontal oil filter mount or OFM-11 vertical oil filter mount as a drilling template, locate and drill mounting holes using a letter "F" drill.

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

- 06a. Secure OFM-11 vertical oil filter mount plate to Fwd side of firewall and DBL-10 doubler plate to Aft side of firewall using AN4-5A bolts, AN960-416 washers and MS20365-428A nuts supplied.

OR

- 06b. Secure OFB-10 oil filter base to Fwd side of firewall and OFM-10 horizontal oil filter mount plate to rear side using An4H-4A bolts and AN960-416 washers supplied and secure with .032 MS20995-C safety wire.

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

07. Install any combination of fitting (14a), (15a), or (16a) into OFB-10 oil filter base. Mount to OFM-10 or OFM-11 oil filter mount plate using AN4H-4A bolts and AN960-416 washers, and secure with .032 MS20995-C safety wire.

**** SEE WARNING (C) ABOVE ****

08. Determine hose lengths and order appropriate length hoses (19a) or (20a). 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 firesleeved hose 24 7/8" long is F1300008-0247.
09. Install assembled hose assy's (19a) or (20a) connecting the "A" port on the oil filter adapter to the "A" port on the oil filter base and the "B" port on the oil filter adapter to the "B" port on the oil filter base and torque to 270-350 in/ lbs.
10. Install AFC-500 or AFC-600 oil filter and torque per instructions on oil filter, and secure with MS20995-C safety wire.
11. Torque tOFB-17 adapter at this time to specifications 16-18 ft./lbs. and secure with .032 MS20995-C safety wire.
12. Run engine and check for leaks.
13. Determine weight and balance, initiate a 337 form, and update the equipment list.

Installation of the remote oil filter kit on Boeing Model 75 series aircraft with Lycoming R-680 radial engines.

Drawing: AFC-K007
Revision: A
Date: 10/01/02

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.
10. Bolt oil filter base (OFB-15) to oil Vertical Filter Mount Plate (12b) 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.
13. Using the 2" piece of 3/4" Mil 6000 hose provided, secure to bottom of oil filter with (1) QS100M52W 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.

INSTRUCTIONS FOR CONTINUED AIRWORTHINESS

Form AFC-K007-ICA Revised 10/01/00
Supersedes Form AFC-K007-MI

A/C Make : _____ Model: _____ S/N: _____ Reg#: _____

Revision: _____ Date: _____

This sixteen item checklist are Instructions for Continued Airworthiness (ICA), to comply with FAA Handbook Bulletin for Airworthiness (HBAW-98-18 Dated October 7, 1998), are applicable to the aircraft above when the following equipment is installed:

SYSTEM: Airwolf Remote Mount Oil Filter System.

Airwolf Filter Corp
15369 Madison Rd
Middlefield, OH 44062



ITEM	CHECKLIST INFORMATION
1.	<p>Introduction: This section briefly describes the aircraft, engine, propeller, or component that has been altered. Include and other information on the content, scope, purpose, arrangement, applicability, definitions, abbreviations, precautions, units of measurement, referenced publications, and distribution of the ICA as applicable.</p> <p>Comment: _____ with Lycoming _____ engine. <div style="display: flex; justify-content: space-around; width: 100%; font-size: small;"> Aircraft Model Engine Model </div> </p>
2.	<p>Description: _____ Of the major alteration, it's function including an explanation of it's interface with other systems, if any.</p> <p>Comment: Installation of Airwolf Remote Mounted Oil Filter Kit P/N AFC-K007</p>
3.	<p>Control: Operation information: Or special procedures if any.</p> <p>Comment: Pre-heating of both the engine and engine oil is recommended prior to starting the engine during periods of cold weather where the temperature is 30°F or below.</p>
4.	<p>Servicing information: Such as types of fluids used, servicing points, and location of access panels, as appropriate.</p> <p>Comment: Oil System to be serviced in accordance with Lycoming Service Bulletin 480C or higher. Oil should be changed at least once each 12 months. Cut the old filter open with Airwolf AFC-470 oil filter cutter at each oil change and inspect for metal contamination or any evidence that may indicate impending engine problems.</p>
5.	<p>Maintenance Instructions: Such as recommended inspection/maintenance periods in which each of the major alteration components are inspected, cleaned, lubricated, adjusted, tested, including applicable wear tolerances and work recommended at each scheduled maintenance period. This section can refer to the manufactures instructions for the equipment installed where appropriate e.g. functional checks, repairs, inspections. It should also include any special notes, cautions, or warnings as applicable.</p> <p>Comment: Inspect for security at each annual or 100 hr . inspection. After any oil change, always ground run the engine and check for leaks before flight.</p>
6.	<p>Trouble shooting information: Information describing probably malfunctions, how to recognize those malfunctions, and the remedial actions to be taken.</p> <p>Comment: __N/A</p>
7.	<p>Removal and replacement information: This section describes the order and method of removing and replacing products, parts, and any necessary precautions. This section should also describe or refer to the manufacture's instructions to make required tests, trim checks, alignment, calibrations, center of gravity changes, lifting or shoring, etc., if any.</p> <p>Comments: __N/A</p>
8.	<p>Diagrams: Of access plates and information, if needed, to gain access for inspection.</p> <p>Comment: __N/A</p>
9.	<p>Special inspection requirements: Such as X-ray, ultrasonic testing, or magnetic particle inspection, if required.</p> <p>Comment: __N/A</p>
10.	<p>Application of protective treatments: To the affected area after inspection and/or maintenance, if any.</p> <p>Comment: __N/A</p>

INSTRUCTIONS FOR CONTINUED AIRWORTHINESS

Form AFC-K007-ICA Revised 10/01/00
Supersedes Form AFC-K007-MI

11.	Data: Relative to structural fasteners such as type, torque, and installation requirements if any. Comment: __N/A
12.	List of special tools: Special tools that are required, if any. Comment: __N/A
13.	For commuter category aircraft: The following additional information must be furnished, as applicable: A. Electrical Loads B. Methods of balancing flight controls. C. Identification of primary and secondary structures> D. Special repair methods applicable to the airplane. Comment: __N/A
14.	Recommended overhaul periods: Are required to be noted on the ICA when an overhaul period has been set by the manufacturer of a component, or equipment. If there is no overhaul period, the ICA should state for item 14: "No additional overhaul time limitations." Comment: __N/A
15.	Airworthiness Limitation Section: Include any "approved" airworthiness limitations identified by the manufacturer of FAA type Certificate Holding Office (e.g., An STC incorporated in a larger field approved major alteration may have an airworthiness limitation.) The FAA inspector should not establish, alter, or cancel airworthiness limitations without coordinating with the appropriate FAA type Certificate Holding Office. If there are no changes to the airworthiness limitations, the ICA should state for item 15: "No additional airworthiness limitations" or "Not Applicable." Comment: __N/A
16.	Revision: This section should include information on how to revise the ICA. For example, a letter will be submitted to the local FSDO with a copy of the revised FAA Form 337 and revised ICA. The FAA inspection accepts the change by signing Block 3 and including the following statement: "The attached revised/new Instructions for Continued Airworthiness (date _____) for the above aircraft or component major alteration have been accepted by the FAA, superseding the Instructions for Continued Airworthiness (date _____)." Once the revision has been accepted, a maintenance record entry will be made, identifying the revision, its location, date of the Form 337. Comment: __ A letter will be submitted to the local FSDO with a copy of the revised FAA Form 337 and revised ICA. The FAA inspector accepts the change by signing Block 3 and including the following statement: "The attached revised/new Instructions for Continued Airworthiness (date _____) for the above aircraft or component major alteration have been accepted by the FAA, superseding the Instructions for Continued Airworthiness (date _____)." Once the revision has been accepted, a maintenance record entry will be made, identifying the revision, its location, date of the Form 337.

NOTE:

Implementation and Record Keeping: For major alterations performed in accordance with FAA Field Approval policy, the owner operator operating under part 91 is responsible for ensuring that the ICA is made part of the applicable section 92.409 inspection program for their aircraft. This is accomplished when a maintenance entry is made in the aircraft's maintenance record in accordance with section 43.9. This entry recorded the major alteration and identifies the original ICA location (e.g., Block 8 of FAA Form 337, dated 5/28/98) along with a statement that the ICA is now part of the aircraft's inspection/maintenance requirements.

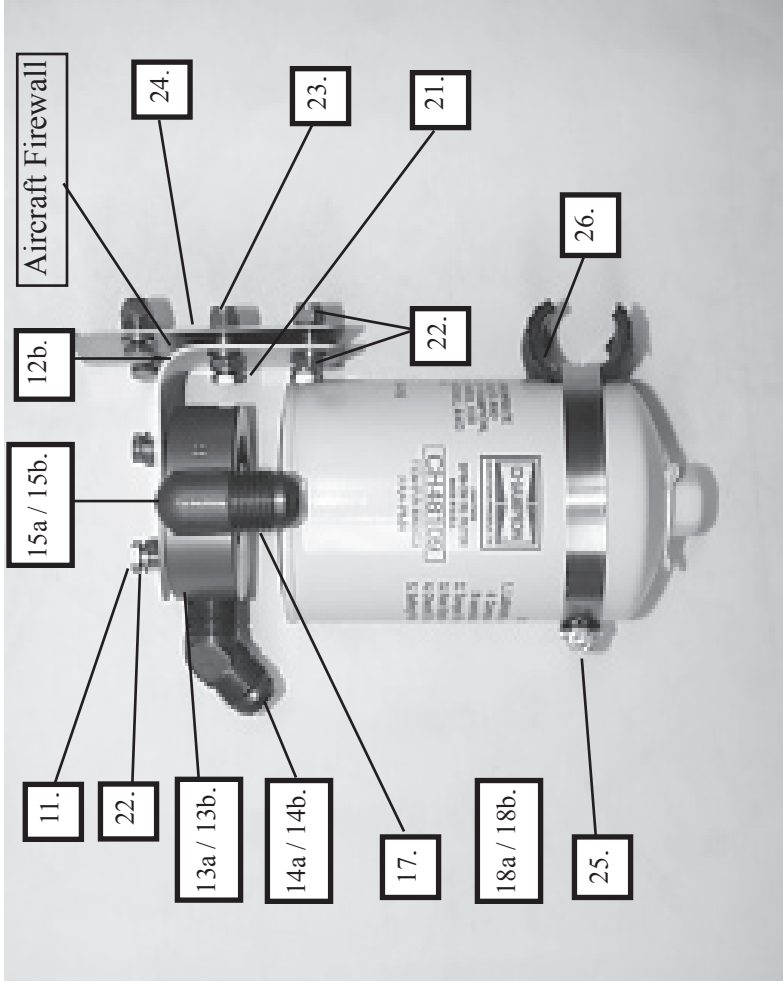
For major alterations performed in accordance with field approval on air carrier aircraft, the air carrier operator is responsible for ensuring that the ICA is made part of the applicable inspection/maintenance program for their aircraft. If a procedure is not currently included in the operator's manual to incorporate ICA, this process will need to be appropriately addressed (i.e. the operator submits a revision to its maintenance program to the applicable certificate-holding district office (CHDO).

For aircraft inspected under an Approved Aircraft Inspection Program (AAIP), the operator will submit a change to the CHDO in accordance with section 135.419b).

For air carrier aircraft inspected using an annual/100 hour inspection program, a reference to the new ICA will be made in the aircraft's maintenance record in accordance with section 43.9. This entry records the major alteration and identifies the original ICA location (e.g., ICA are located/attached to Block 8 of FAA Form 337, dated 5/28/98). In addition, the operator will request a revision to the operator's Operations Specifications, additional maintenance requirements, which incorporates the ICA into the inspection program.

ASSEMBLY DRAWING# AFC-D-0025

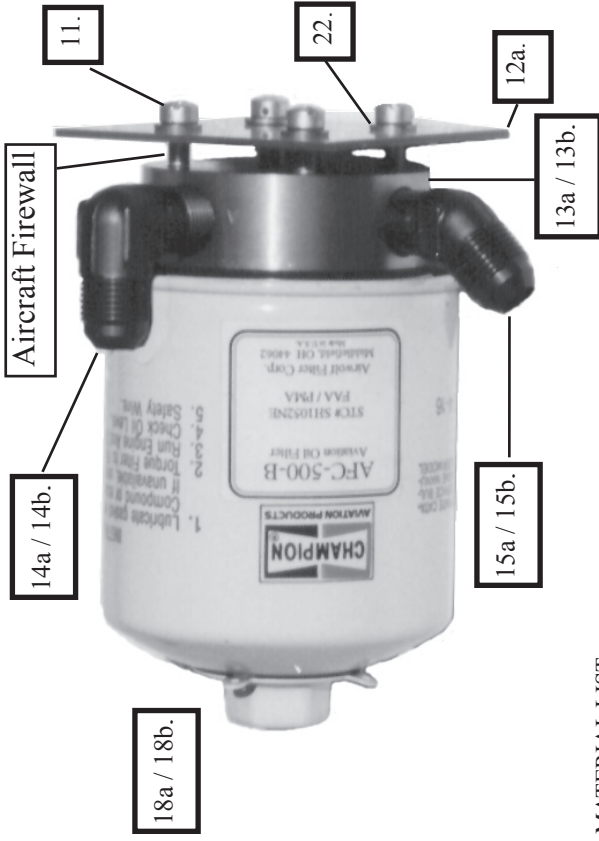
VERTICAL INSTALLATION



MATERIAL LIST

Index	Part Number	Description	Qty
11.	AN4H-4A	Bolts, Drilled Head	(4)
12b.	OFM-11	Vertical Oil Filter Mount Plate	(1)
13a.	OFB-10	Oil Filter Base	(1)
13b.	OFB-11	Oil Filter Base, IO720	(1)
14a.	MS20822-8D	90° Fitting	1)
14b.	MS20822-10D	90° Fitting, IO720	(1)
15a.	MS20823-8D	45° Fitting	(1)
15b.	MS20823-10D	45° Fitting, IO720	(1)
16a.	AN816-8D	Union	(1)
16b.	AN816-10D	Union, IO720	(Opt)
17.	OFS-10	Oil Filter Stud	(Opt)
18a.	AFC-500	Oil Filter, Std.	(1)
18b.	AFC-600	Oil Filter, Long	(1)
21.	AN4-5A	Bolt	(6)
22.	AN960-416	Flat Washers	(16)
23.	MS20365-428A	Locknut	(6)
24.	DBL-10	Doubler Plate	(1)
25.	QS100M52H	Clamp	(1)
26.	MIL6000-1/2-2	Dampener	(1)

HORIZONTAL INSTALLATION



MATERIAL LIST

Index	Part Number	Description	Qty
11.	AN4H-4A	Drilled Head Bolts	(4)
12a.	OFM-10	Horizontal Oil Filter Mount	(1)
13a.	OFB-10	Oil Filter Base	(1)
13b.	OFB-11	Oil Filter Base, IO720	(1)
14a.	MS20822-8D	90° Fitting	(1)
14b.	MS20822-10D	90° Fitting IO720	(1)
15a.	MS20823-8D	45° Fitting	(1)
15b.	MS20823-10D	45° Fitting IO720	(1)
16a.	AN816-8D	Union	(Opt)
16b.	AN816-10D	Union, IO720	(Opt)
17.	OFS-10	Oil Filter Stud	(1)
18a.	AFC-500	Oil Filter, Std.	(1)
18b.	AFC-600	Oil Filter, Long	(1)
22.	AN960-416	Flat Washers	(4)
24.	DBL-10	Doubler Plate	(1)

Airwolf Filter Corp.

Assembly Drawing:

OFM-10 Oil Filter Mount Plate - Horizontal,

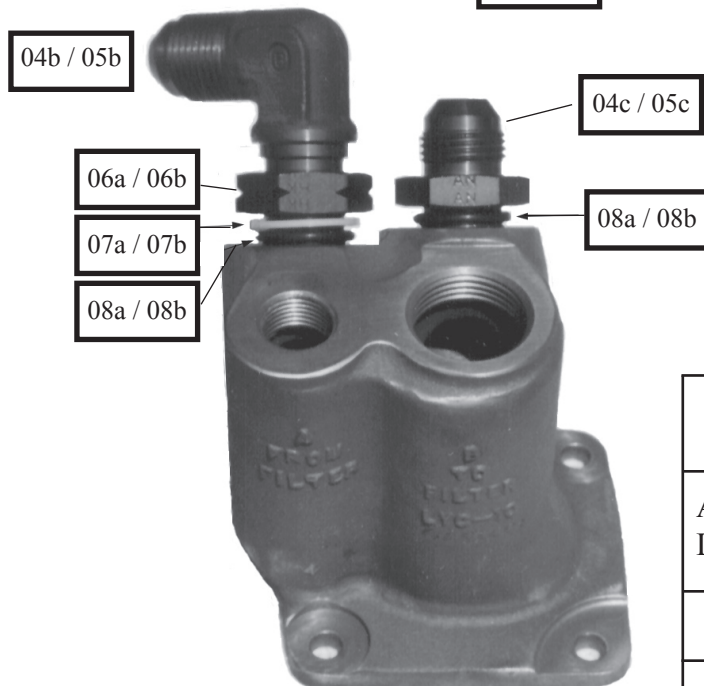
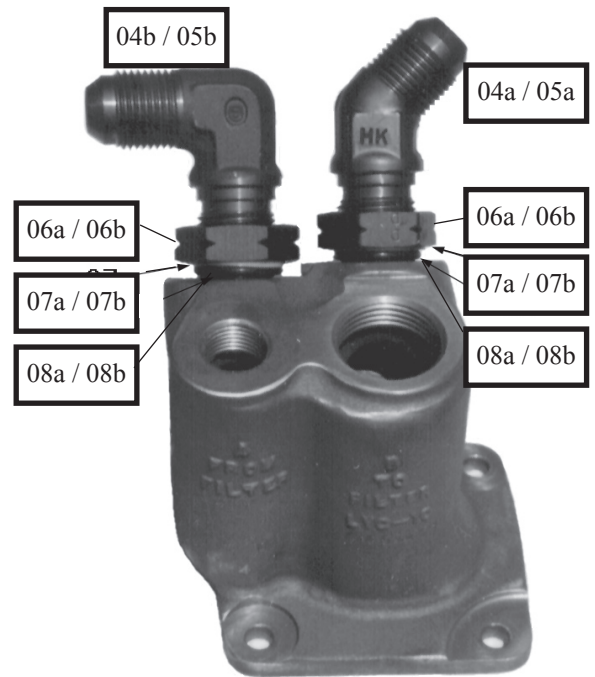
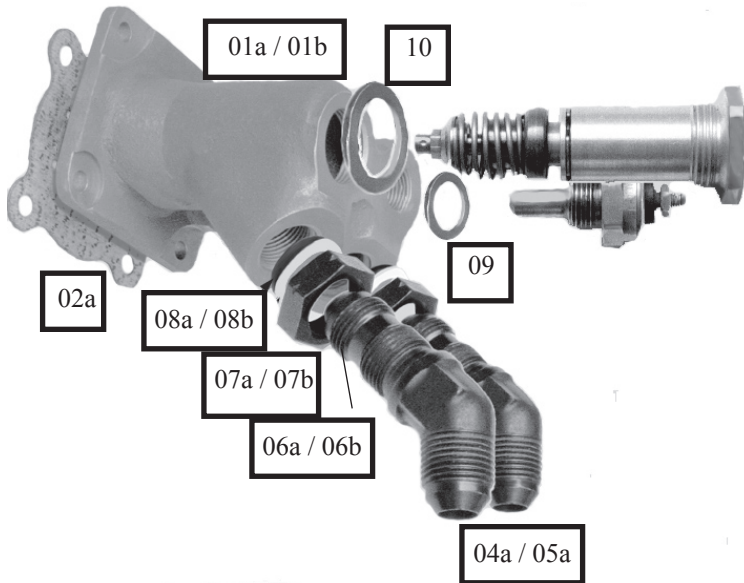
OFB-11 Oil Filter Mount Plate - Vertical,

DBL-10 Doubler Plate & OFB-10 Oil Filter Base

ASSEMBLY DRAWING# AFC-D-0026

MATERIAL LIST

Index	Part Number	Description	Qty
01a.	LYC-10	Full Flow EngineAdapter, O235-540	(1)
01b.	LYC-11	Full Flow EngineAdapter, IO720	(1)
02a.	61173	Adapter Base Gasket O235-540	(1)
02b.	12777	Adapter Base Gasket, IO720, [Not Shown]	(1)
02c.	12776	Adapter Base Gasket, IO720, [Not Shown]	(1)
03a.	PLT-12775	Adapter Plate, IO720 [Not Shown]	(1)
03b.	PLT-12999	Restrictor Plate, O235 [Not Shown]	(1)
04a.	AN837-8D	45° Bulkhead Fitting	(2)
04b.	AN833-8D	90° Bulkhead Fitting	(Opt)
04c.	AN815-8D	Union	(Opt)
05a.	AN837-10D	45° Bulkhead Fitting, IO720	(2)
05b.	AN833-10D	90°Bulkhead Fitting, IO720	(Opt)
05c.	AN815-10D	Union, IO720	(Opt)
06a.	AN6289-8D	Bulkhead Nut	(2)
06b.	AN6289-10D	Bulkhead Nut, IO720	(2)
07a.	MS28773-08	Teflon Boss Gasket	(2)
07b.	MS28773-10	Teflon Boss Gasket, IO720	(2)
08a.	MS9387-08	Viton "O" Ring	(2)
08b.	MS9387-10	Viton "O" Ring, IO720	(2)
09.	MS35769-11	Oil Temperature Sensor Gasket	(1)
10.	MS35769-21	Vernatherm® Gasket	(1)

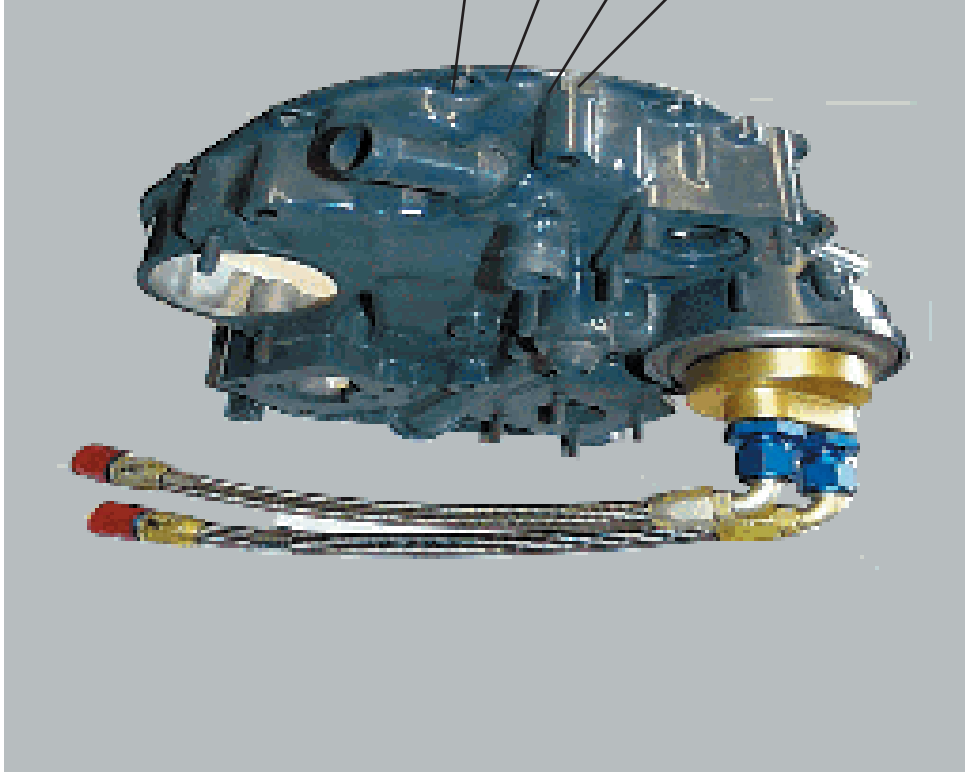
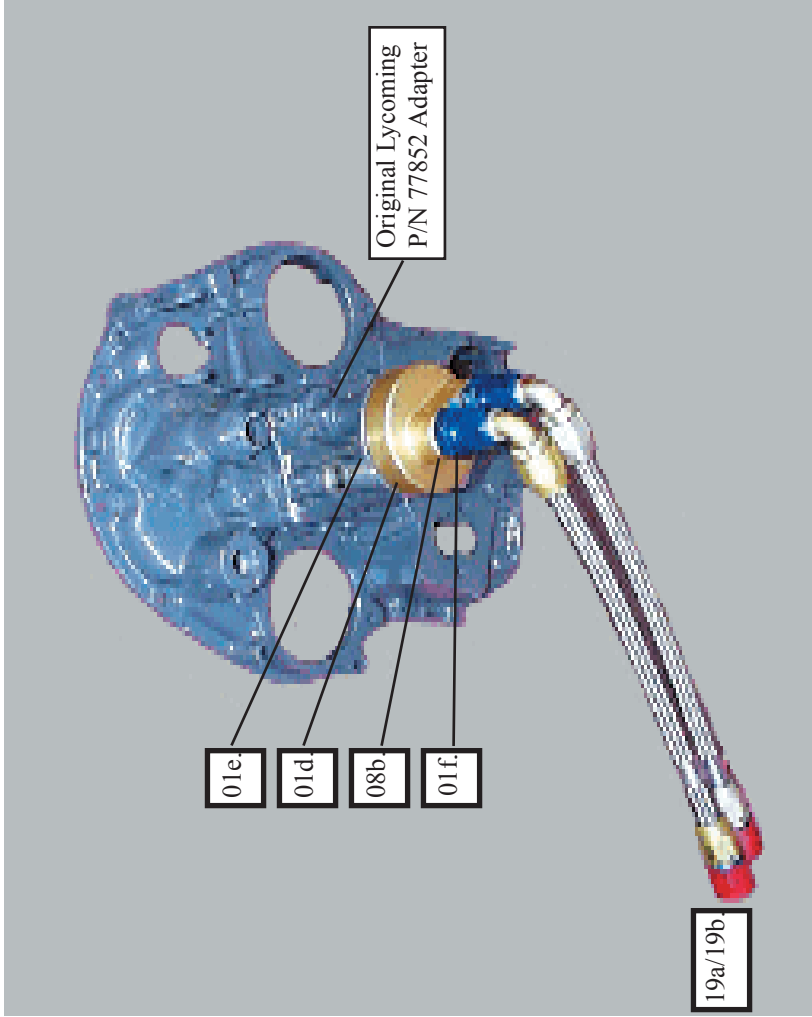


Airwolf Filter Corp.

Assembly Drawing.
LYC-10 Adapter, Engine - Full Flow

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ASSEMBLY DRAWING# AFC-D-0048



Index	Part Number	Description	Quantity
01d.	OFB-17	Full Flow Engine Adapter-Single Drive Dual Mags [New Style]	(1)
01e.	M83248/1-230	Viton "O" Ring, Single Drive Dual Mags [New Style]	(1)
01f.	AN919-15D-SP	Reducer Fitting, -10 -> -8 Single Drive Dual Mags [New Style]	(2)
08b.	MS9387-10	Viton "O" Rings, IO720	(2)
19a.	F13000008-0xxx	Titeflex® Firesleeved Teflon Hose, [-8], O235-540	(Opt)

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Assembly Drawing.
OFB-17 Adapter, Engine - Full Flow