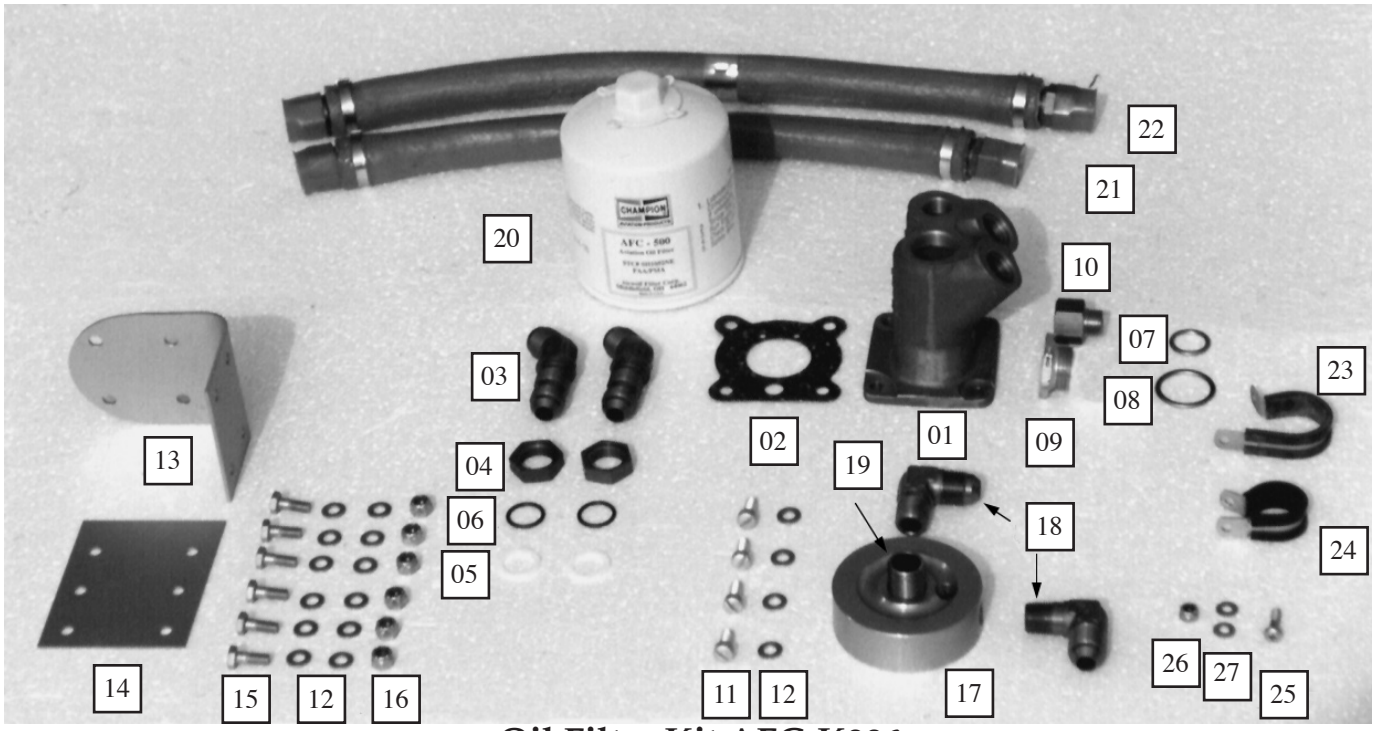


Oil Filter Kit AFC-K006

Applicability:

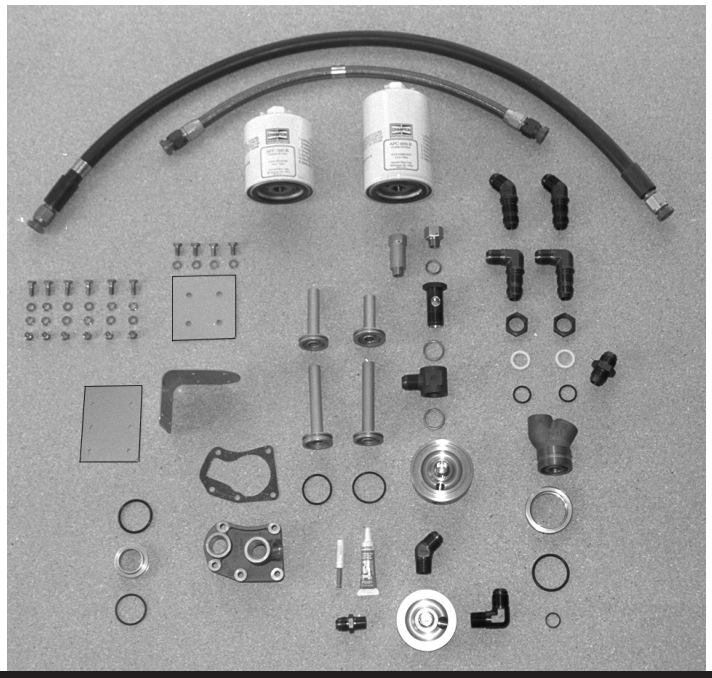
PIPER SUPER CUB MODELS
PA-18, PA-18S, PA-18A
PA-18-105 Special, PA-18S-105 Special
PA18-125, PA18S-125
PA18-135, PA-18A-135, PA-18S-135, PA18AS-135
PA18-150, PA-18A-150, PA-18S-150, PA18AS-150
with Lycoming engines O-235, O-290, O-320, & O-360 engines.

First Release: 04/25/93

Amended: 01/08/2000

Parts List No. AFC-K006-PL

Index	Part Number	Description	Quantity
01.	LYC-10	Adapter- Engine, Full Flow	(1)
02.	61173	Adapter Base Gasket	(1)
03.	AN837-8D	Bulkhead Fitting, 45°	(2)
04.	AN6289-8D	Bulkhead Nut	(2)
05.	MS28773-08	Boss Gasket, Teflon	(2)
06.	MS9387-08	“O” Rings, Viton	(2)
07.	MS35769-11	Gasket, Oil Temperature Sensor	(1)
08.	MS35769-21	Gasket, Thermostatic Valve	(1)
09.	CAP-1350	Bypass Valve Cap	(1)
10	OTA-527	Oil Temp Adapter	(1)
11.	AN4H-4A	Bolts, Drilled Head	(4)
12.	AN960-416	Flat Washers	(16)
13.	OFM-11	Oil Filter Mount Plate, Vertical	(1)
14.	DBL-10	Doubler Plate	(1)
15.	AN4-5A	Bolts	(6)
16.	MS20365-428A	Locknuts	(6)
17.	OFB-10	Oil Filter Base	(1)
18.	MS20822-8D	Fitting, 90°	(2)
19.	OFS-10	Oil Filter Stud	(1)
20.	AFC-500	Oil Filter, or Equivalent [Champion CH48108]	(1)
21.	F13000008-0152	Hose Assy, TSO'D, Firesleeved	(1)
22.	F13000008-0172	Hose Assy, TSO'D, Firesleeved	(1)
23.	MS21919WDG-14	Clamp, Adel	(1)
24.	MS21919WDG-12	Clamp, Adel	(1)
25.	AN3-4A	Bolt	(1)
26.	MS20365-1032A	Locknut	(1)
27.	AN960-10	Washer	(2)
28.	56707	Loctite 267® Thread Sealant	(1)
29.	AFC-K006-II	Installation Instructions	(1)
30.	AFC-K006-MI	Instructions for Continued Airworthiness	(1)
31.	AFC-K006-PL	Parts List	(1)



Applicability: **PIPER SUPER CUB MODELS**
PA-18, PA-18S, PA-18A
PA-18-105 Special, PA-18S-105 Special
PA18-125, PA18S-125
PA18-135, PA-18A-135, PA-18S-135, PA18AS-135
PA18-150, PA-18A-150, PA-18S-150, PA18AS-150
with Continental engines C85 & C90

First Release: 04/25/93

Amended: 01/08/2000

Parts List No. AFC-K006-PL

Index	Part Number	Description	Quantity
01a.	CON-10	Full Flow Engine Adapter [1-3/4"-16 Threads]	(1)
02a.	RNG-10	Sealing Ring [1-3/4"-16 Threads]	(1)
03a.	M83248/1-223	Sealing O-Ring	(1)
04.	M83248/1-016	O-Ring, Nosepiece	(1)
05a.	EXT-10	Oil Screen Adapter - A50, A65, A75, A80, C75, C85, C90, C125, O-200, IO240	(1)
06a.	M83248/1-126 or	O-Ring, Use w/EXT-10 or 1Ring	(1)
07a.	AN837-10D or	45° Bulkhead Fitting	(2)
07b.	AN833-10D or	90° Bulkhead Fitting	(Opt)
07c.	AN815-10D	Union	(Opt)
08.	AN6289-10D	Bulkhead Nut	(2)
09.	MS28773-10	Boss Gasket	(2)
10.	MS9387-10	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)
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)
17.	AN960-416	Flat Washers	(16)
18.	OFB-11	Oil Filter Base, -10 Port	(1)
19a.	MS20822-10D or	90° Elbow	(1)
19b.	MS20823-10D or	45° Elbow	(1)
19c.	AN816-10D	Flared Tube Nipple	(Opt)
20.	OFS-10	Oil Filter Stud	(1)
21a.	AFC-500 or	Std Oil Filter or Equivalent [Champion CH48108]	(1)
22a.	OFM-10	Horizontal Oil Filter Mount	(1)
22b.	OFM-11	Vertical Oil Filter Mount	(1)
23.	DBL-10	Doubler Plate	(1)
24.	AN4-5A	Bolts	(6)
25.	MS20365-428A	Locknuts	(6)
26b.	F13000010-0xxz	Titeflex® Teflon Hose Assy with Fire Sleeving.	(Opt)
31.	56707	Loctite® 567 PST Teflon Thread Sealant	(1)

Installation Instructions No. AFC-K006-II

Applicability: **PIPER SUPER CUB MODELS**
PA-18, PA-18S, PA-18A
PA-18-105 Special, PA-18S-105 Special
PA18-125, PA18S-125
PA18-135, PA-18A-135, PA-18S-135, PA18AS-135
PA18-150, PA-18A-150, PA-18S-150, PA18AS-150
with Lycoming engines O-235, O-290, O-320, & O-360 and Continental engines C85 & C90

First Release: 04/25/93

Amended: 01/08/2000

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. Open and remove top cowl.

02. Loosen and remove nut holding oil temp bulb onto oil screen. Be sure to hold the adapter screwed into the oil screen housing to prevent it from turning while loosening nut. Remove bulb from oil screen. Do not bend capillary tube sharply or excessively.

03. Remove four bolts securing Lycoming oil screen housing and remove from accessory case.

04. Per installation drawings, install a new gasket (08) under the head of the bypass valve cap (09), install a new gasket (07) under the oil temp adapter (10) and install both in the adapter - engine (01). Turn in until the sealing surfaces are in contact and then tighten an additional 135 degrees. Do not install oil temperature probe at this time. Onto bulkhead fitting (03), install **(in order)** 1 ea. bulkhead nut (04), boss gasket (05), and "O" Ring (06). Install each completed assembly into the adapter - engine (01). **BE CAREFUL:** O-ring and boss gasket must seal in the smooth area between the threaded areas of the bulkhead fitting.Do not tighten fittings until after routing of hoses has been determined in step 09**.**

05. Reinstall the oil temp capillary tube into the oil temp adapter (10), install gasket (02) on base of filter adapter (01) and reinstall onto the engine accessory case. Torque adapter - engine (01) to specifications 96 in/lbs. Tighten oil temp bulb into oil temp adapter (10) at this time . Secure bypass valve cap (09) to oil temp adapter (10) with .032 MS20995-C safety wire.

06. Per installation drawings, locate the cowl securing rod on the upper right side (facing forward) of the firewall and remove. Using doubler plate(14) as a drilling template (short side up), locate and drill mounting holes using a letter "F" drill.

**** SEE WARNING (B) BELOW ****

07. Per installation drawings, install fittings (18) into the **"A"** and **"B" side** of the oil filter base (17) and tighten. Mount to oil filter mount plate (13) using bolts (11), washers (12), and secure with .032 MS20995-C safety wire.

08. Secure oil filter mount plate (13) to Fwd side of firewall and doubler plate (14) to aft side (again short side up) using bolts (15), nuts (16), and washers (12).

**** SEE WARNING (A) BELOW ****

09. Install hose assy (22) connecting the **"A" port** on the adapter - engine (01) to the **"A" port** on the oil filter base (17). Install hose assy (21) from the **"B" port** on the adapter - engine (01) to the **"B" port** on the oil filter base (17) per installation drawings. Tighten bulkhead nuts (04) at this time and then tighten hose fittings to 270-350 in/ lbs.

10. Secure hoses per installation drawings using clamps (23) & (24), screw (25), washers (27), and nut (26) provided.

11. Install oil filter (20), torque per instructions on oil filter 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.

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

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 (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.

Applicability: **PIPER SUPER CUB MODELS**
PA-18, PA-18S, PA-18A
PA-18-105 Special, PA-18S-105 Special
PA18-125, PA18S-125
PA18-135, PA-18A-135, PA-18S-135, PA18AS-135
PA18-150, PA-18A-150, PA-18S-150, PA18AS-150
with Lycoming engines O-235, O-290, O-320, & O-360 and Continental engines C85 & C90

First Release: 04/25/93
Amended: 01/08/2000

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.

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 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.

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

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.

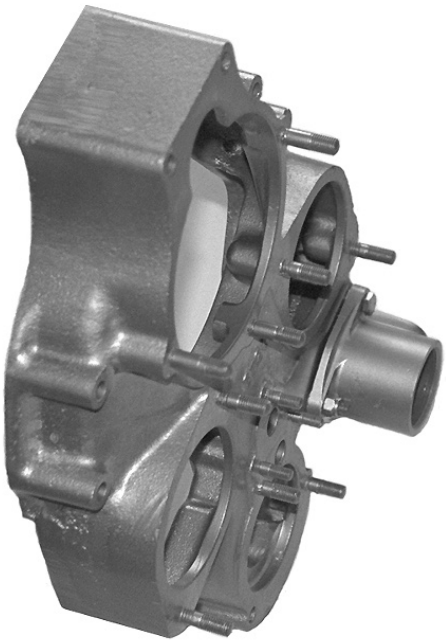
14. After hoses have taken natural set, and hose fittings tightened, tighten sealing ring (02a) with 2" Pin Spanner wrench. Do not over-tighten. Secure with safety wire. Note: Approximately 1/4-1/2 turn is all that is needed to compress the Viton O-ring properly and no leakage will occur.

15. Install oil filter (21a), torque per instructions on oil filter and secure with safety wire.

16. Run engine and check for leaks.

17. Determine weight and balance, initiate 337 form, and update the equipment list.

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.



MATERIAL LIST

Index	Part Number	Description
01a.	CON-10	Engine Adapter - [1-3/4"-16 Threads]
01b.	CON-11	Engine Adapter -[1-13/16"-16 Threads]
02a.	RNG-10	Sealing Ring [1-3/4"-16 Threads]
02b.	RNG-11	Sealing Ring [1-13/16"-16 Threads]
03.	M83248/1-223	Sealing Ring O-Ring
04.	M83248/1-016	Nosepiece O-Ring
05a.	EXT-10	Oil Screen Adapter
05b.	EXT-11	Oil Screen Adapter
05c.	EXT-12	Oil Screen Adapter
05d.	EXT-14	Oil Screen Adapter
06a.	M83248/1-126	O-Ring, Use w/EXT-10 & EXT-12 Adapter
06b.	M83248/1-128	O-Ring, Use w/EXT-11 & EXT-14 Adapter
07a	AN837-10D	45° Bulkhead Fitting
07b.	AN833-10D	90° Bulkhead Fitting
07c.	AN815-10D	Union
08.	AN6289-10D	Bulkhead Nut
09.	MS28773-10	Boss Gasket
10.	MS9387-10	O-Ring
11.	AN776-10D	90° Fitting
12a.	TPA-775	Temp Probe Adapter
12b.	TPA-776	Temp Probe Adapter & Gasket
13.	MS35769-18	Temp Probe Adapter Gasket
14.	OTA-527	Oil Temp Adapter
15.	MS35769-11	Oil Temp Adapter Gasket

INSTRUCTIONS FOR CONTINUED AIRWORTHINESS

Form AFC-K006-ICA Revised 10/01/00

A/C Make : Piper **Model:** PA-18 Super Cub **S/N:** _____ **Reg#:** _____

Revision: Date: 01/08/2000

This sixteen item checklist are Instructions for Continued Airworthiness (ICA), to comply with FAA Handbook Bulletin for Airworthiness (HBAW-98-1 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.	**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, reverenced publications, and distribution of the ICA as applicable. **Comment: Piper PA-18 Super Cub with Lycoming: O235, O290, O320 & O360 or Continental: C85& C90 engines.**
	~~Aircraft Model~~ ~~Engine Model~~
2.	**Description:** Of the major alteration, it's function including an explanation of it's interface with other systems, if any. ~~**Comment: Installation of Airwolf Remote Mounted Oil Filter Kit P/N AFC-K006**~~
3.	**Control:** Operation information: Or special procedures if any. **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.**
4.	**Servicing information:** Such as types of fluids used, servicing points, and location of access panels, as appropriate. **Comment: Oil System to be serviced in accordance withLycoming Service Bulletin 480C or higher &** Continental Aircraft **Engine Service Bulletin M87-12 Rev 1 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.**
5.	**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. **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.**
6.	**Trouble shooting information:** Information describing probably malfunctions, how to recognize those malfunctions, and the remedial actions to be taken. ~~**Comment: N/A**~~
7.	**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. ~~**Comments: N/A**~~
8.	**Diagrams:** Of access plates and information, if needed, to gain access for inspection. ~~**Comment: N/A**~~
9.	**Special inspection requirements:** Such as X-ray, ultrasonic testing, or magnetic particle inspection, if required. ~~**Comment: N/A**~~
10.	**Application of protective treatments:** To the affected area after inspection and/or maintenance, if any.

INSTRUCTIONS FOR CONTINUED AIRWORTHINESS

Form AFC-K006-ICA Revised 10/01/00

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).

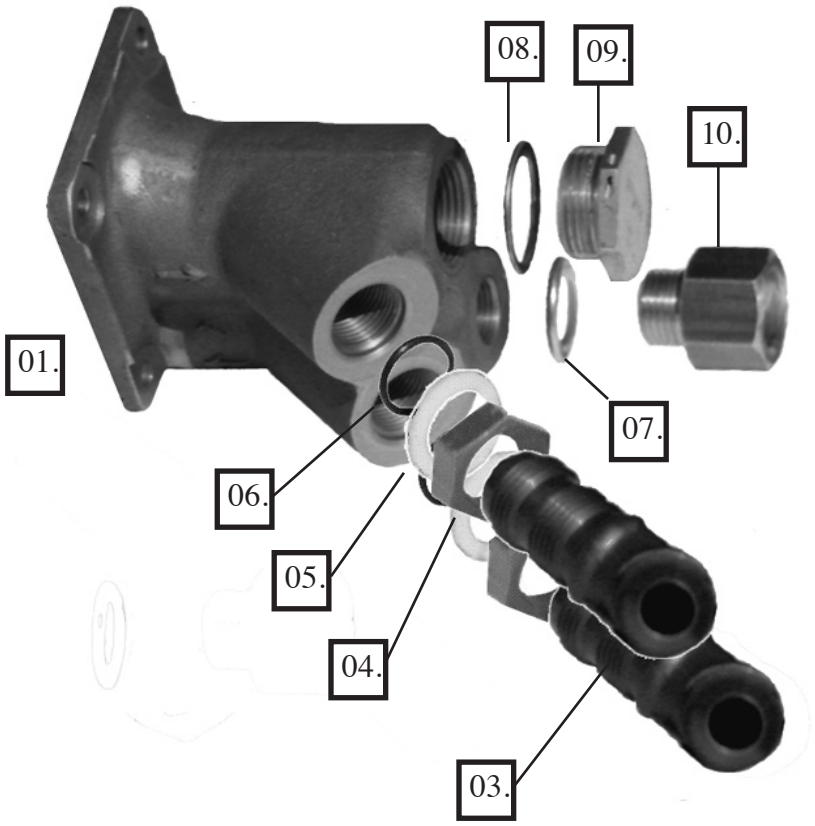
For aircraft inspected under an Approved Aircraft Inspection Program (AAIP), the operator will submit a change to the CHDO in accordance with section 135.419b).

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.

WEIGHT AND BALANCE REPORT
PA-18
SUPER CUB

SURPLUS EQUIPMENT	WEIGHT	ARM-INCHES		MOMENT - IN/LBS.	
EQUIPMENT - ITEM	LBS.	LONG		LONG	
REMOTE OIL FILTER	4.25	-29.0		-123.25	

ASSEMBLY DRAWING# AFC-D-0020



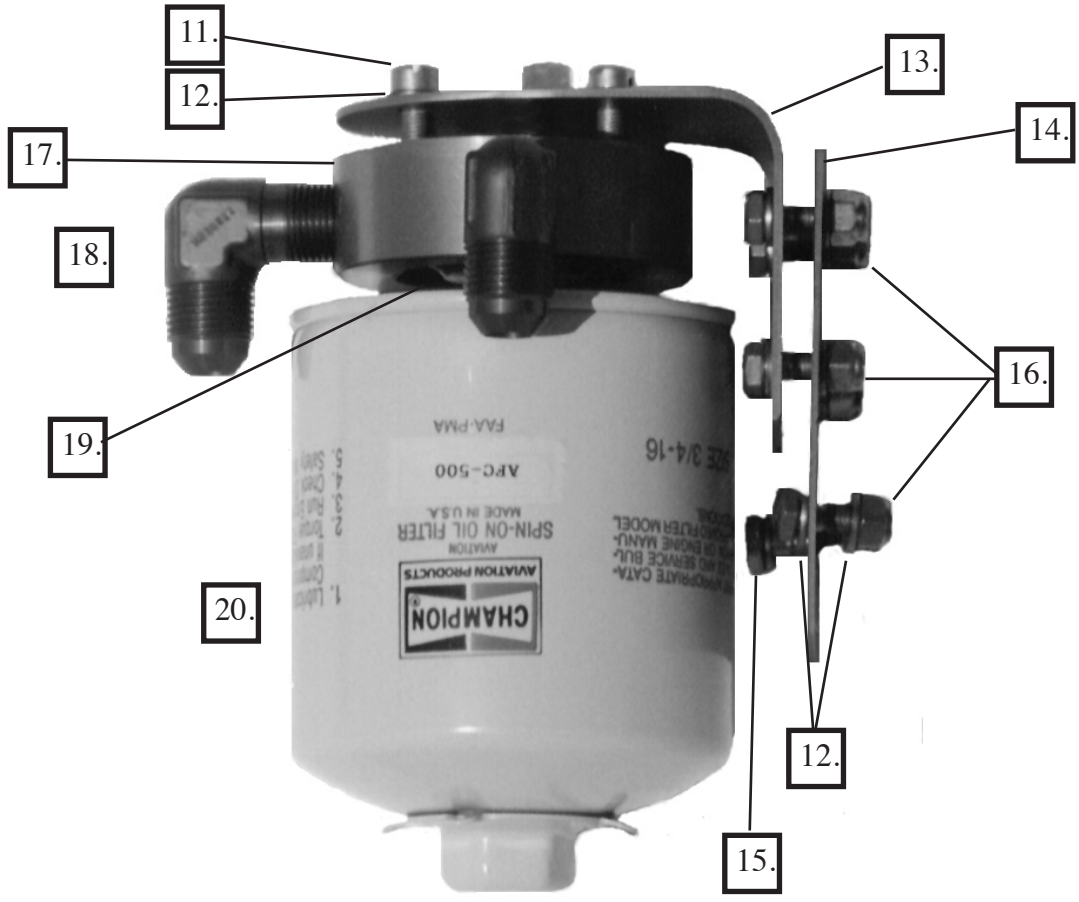
MATERIAL LIST

Index	Part Number	Description	Qty
01.	LYC-10	Adapter-Engine, Full Flow	(1)
02.	61173	Adapter Base Gasket	(1)
03.	AN837-8D	Bulkhead Fitting - 45°	(2)
04.	AN6289-8D	Bulkhead Nut	(2)
05.	MS28773-08	Boss Gasket	(2)
06.	MS9387-08	"O" Ring	(2)
07.	MS35769-11	Gasket, Oil Temperature Sensor	(1)
08.	MS35769-21	Gasket, Thermostatic Valve	(1)
09.	CAP-1350	Cap, Bypass Valve	(1)
10.	OTA-527	Oil Temp Adapter	(1)

Airwolf Filter Corp.

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

ASSEMBLY DRAWING# AFC-D-0021



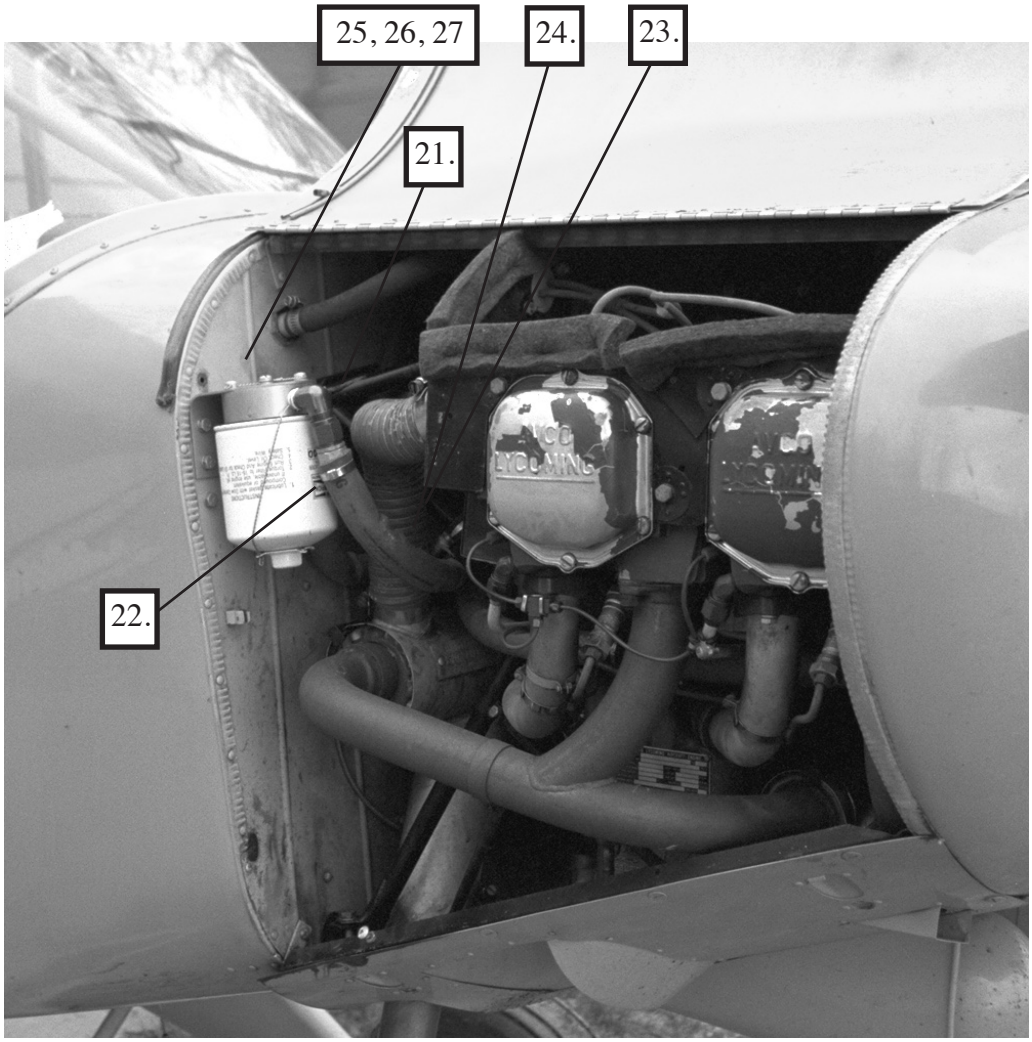
MATERIAL LIST

Index	Part Number	Description	Qty
11.	AN4H-4A	Bolt, Drilled Head	(4)
12.	AN960-416	Flat Washers	(16)
13.	OFM-11	Oil Filter Mount Plate - 90°	(1)
14.	DBL-10	Doubler Plate	(1)
15.	AN4-5A	Bolt	(6)
16.	MS20365-428A	Locknut	(6)
17.	OFB-10	Oil Filter Base	(1)
18.	MS20822-8D	Fitting, 90°	(2)
19.	OFS-10	Oil Filter Stud	(1)
20.	AFC-500	Oil Filter	(1)

Airwolf Filter Corp.

Assembly Drawing. OFB-10 Oil Filter Base,
Piper Super Cub

INSTALLATION DRAWING# AFC-D-0022



MATERIAL LIST

Index	Part Number	Description	Qty
21.	F13000008-0152	Hose Assy w/Firesleeving TSO'D	(1)
22.	F13000008-0172	Hose Assy w/Firesleeving TSO'D	(1)
23.	MS21919WDG-14	Adel Clamp	(1)
24.	MS21919WDG-12	Adel Clamp	(1)
25.	AN3-4A	Bolt	(1)
26.	MS20365-1032	Locknut	(1)
27.	AN960-10	Flat Washer	(1)

Airwolf Filter Corp.

Installation Drawing. OFB-10, OFM-11 & Hose Assemblies.

INSTALLATION DRAWING# AFC-D-0023

Locate Doubler Plate (14) 1"Down from cowl securing rod, Left of Vertical Bead
SHORT SIDE UP

14.

MATERIAL LIST

Index	Part Number	Description	Qty
14.	DBL-10	Doubler Plate	(1)

Airwolf Filter Corp.

Installation Drawing. DBL-10 Doubler Plate

Reference Data
for
AFC-K006-II
for
STC SA00008NY
Oil Filter Kit
AFC-K006

Dated: 4/2/2021

Airwolf Filter, Corp
12801 Hwy. 75 N.
OKMULGEE, OK 74447
(918) 561-8696 Ph
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List of Effective Pages

Page Number	Revision	Revision Date
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1	IR	4/2/2021
2	IR	4/2/2021
3	IR	4/2/2021
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12	IR	4/2/2021
13	IR	4/2/2021
14	IR	12/28/2020
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READ THIS BEFORE INSTALLING OIL FILTER KITS, DATA PERTINENT TO ALL INSTALLATIONS

TO THE MECHANIC:

This P/N AFC-K006 remote mount oil filter kit incorporates our STC approved for Piper 1A2, Powered by Lycoming engine models O-235, O-290, O-320, & O360 Series or Continental C85 and C90 Series Engines.

Upon installing this filter kit, you will need to fill out and file a 337 form for this installation referencing the P/N AFC- K006 kit and the STC# SA00008NY.

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
Fax: (918) 561-8695

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°, Straight to 45°, etc. allowing for engine torque and vibration per AC43.13.

If our instructions do not specifically say you can do something, assume 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. **Do not** over tighten the fittings on Adapters or housings. This can distort or crack housings, causing oil to leak.
4. It is ***EXTREMELY*** 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 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:

ALL O-235 & O-290 OPERATORS

ON LYCOMING O-235 & O-290 SERIES ENGINES, LYCOMING MADE A DIFFERENCE IN THE PRODUCTION OF THE REAR ACCESSORY CASES. THE OIL MUST BE METERED THRU A .070 HOLE IN THE OIL SCREEN HOUSING TO PREVENT ALL THE ENGINE OIL FROM DUMPING ONTO THE OIL PUMP IDLER GEARS INSTEAD OF THRU THE OIL SCREEN. IF A REMOTE FILTER IS INSTALLED, THE OIL PRESSURE WILL TEND TO FOLLOW THE THROTTLE. BY USING THIS ENCLOSED RESTRICTOR PLATE, YOU WILL NOT EXPERIENCE THIS PROBLEM. INSTALLATION IS AS FOLLOWS:

1. **INSTALL NEW 61173 OR GT-61173 ADAPTER GASKET ON ACCESSORY CASE.**
2. **INSTALL LW-12999 OR PLT-12999 RESTRICTOR PLATE.**
3. **INSTALL NEW 61173 OR GT-61173 ADAPTER GASKET.**
4. **INSTALL LYC-10 ENGINEADAPTER.**

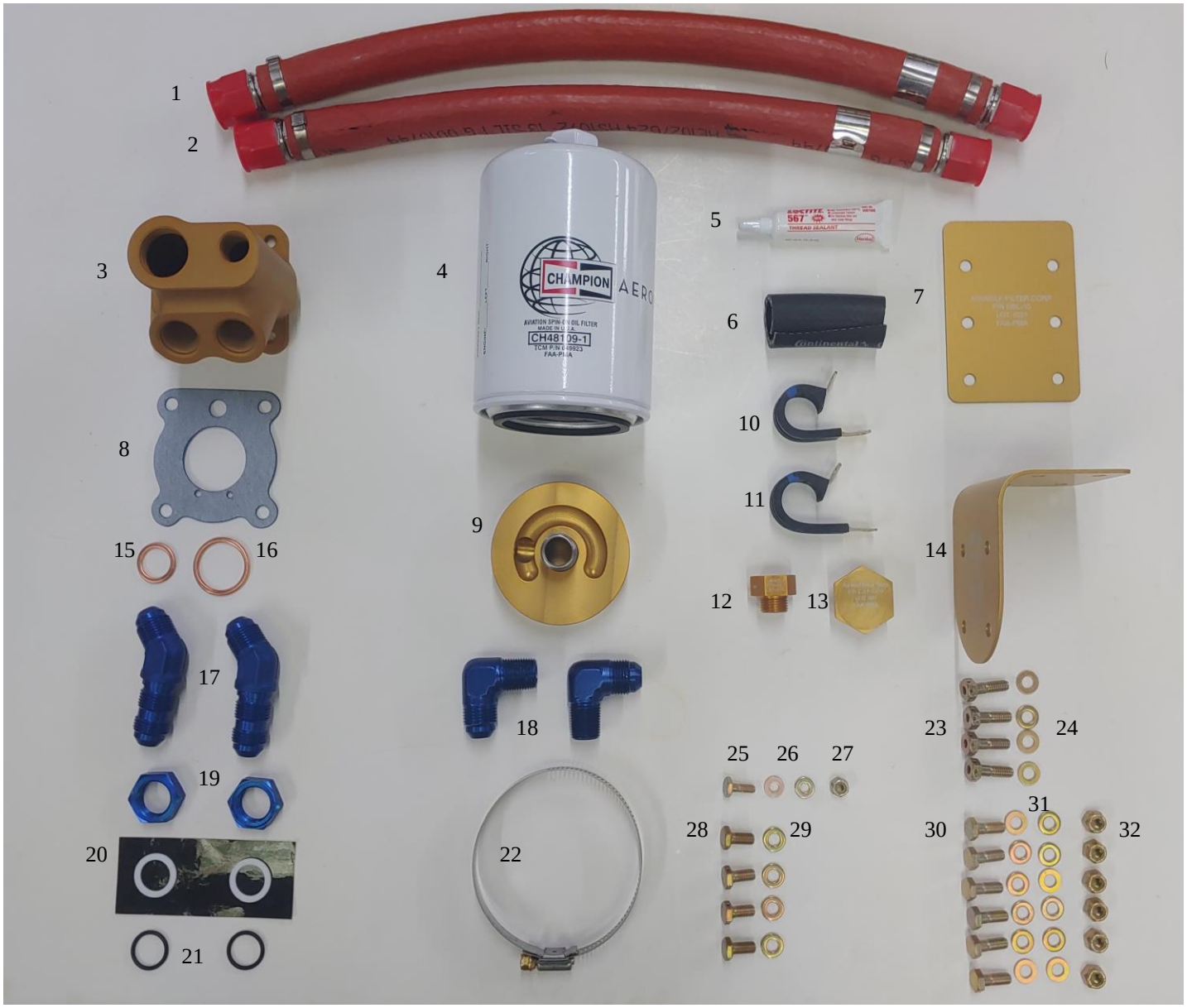
NOTE.

COMMON TO ALL INSTALLATIONS

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.

Illustrated Parts List No. AFC-K006-PL-Lycoming

Applicability: **Piper Super Cub Models: PA-18, PA-18S, PA-18A,**
PA-18-105 Special, PA-18S-105 Special
PA-18-125, PA-18S-125,
PA-18-135, PA-18A-135, PA-18S-135, PA-18AS-135,
PA-18-150, PA-18A-150, PA-18S-150, PA-18AS-150,
with Lycoming Engines O-235, O-290, O-320, O-360.



Parts Illustration Lycoming Engine Series

Parts List No. AFC-K006-PL-Lycoming

Applicability: **Piper Super Cub Models: PA-18, PA-18S, PA-18A, PA-18-105 Special, PA-18S-105 Special PA-18-125, PA-18S-125, PA-18-135, PA-18A-135, PA-18S-135, PA-18AS-135, PA-18-150, PA-18A-150, PA-18S-150, PA-18AS-150, with Lycoming Engines O-235, O-290, O-320, O-360.**

Index	Part Number	Description	Quantity
1	F13000008-0172	Fire sleeved Hose Assy, TSO'D,	1
2	F13000208-0152	Fire sleeved Hose Assy, TSO'D,	1
3	LYC-10	Adapter - Engine, Full Flow	1
4	AFC-500 or AFC-600	Oil Filter, or Equivalent [Champion CH48108/CH48109}]	1
5	567	Locktite Thread Sealant	1
6	MIL6000-3/4-2	Dampener, Vibration	1
7	DBL-10	Doubler Plate	1
8	61173 or GT-61173	Adapter Base Gasket	1
9	OFB-10	Oil Filter Base (with OFS-10 Installed)	1
10	MS21919DG-12	Adel Clamp	1
11	MS21919DG-14	Adel Clamp	1
12	OTA-527	Oil Temp Bulb Adapter	1
13	CAP-1350	Bypass Valve Cap (opitional)	1
14	OFM-11	Oil Filter Mount Plate - 90°	1
15	MS35769-11	Gasket, Oil Temperture Sensor	1
16	MS35769-21	Gasket, Thermostatic Valve	1
17	AN837-8D	Bulkhead Fitting - 45°	2
18	MS20822-8D	Fitting, NPT to Flare - 90°	2
19	AN6289-8D	Bulkhead Nut	2
20	MS28773-08	Boss Gasket	2
21	M83248/1-908	Viton "O" Ring	2
22	QS100M52H	Clamp	1
23	AN74A-6	Bolt	4
24	AN960-416	Flat Washer	4
25	AN3-4A	Bolt	1
26	AN960-10	Flat Washer	2
27	MS20365-428A	Locknut	1
28	AN4-4A	Bolt	4
29	AN960-416	Flat Washer	4
30	AN4-5A	Bolt	6
31	AN960-416	Flat Washer	12
32	MS20365-428A	Locknut	6

Illustrated Parts List No. AFC-K006-PL-Continental

Applicability: **Piper Super Cub Models: PA-18, PA-18S, PA-18A, PA-18-105 Special, PA-18S-105 Special PA-18-125, PA-18S-125, PA-18-135, PA-18A-135, PA-18S-135, PA-18AS-135, PA-18-150, PA-18A-150, PA-18S-150, PA-18AS-150, with Continental Engines C-85 & C-90.**

Parts Illustration Continental Engine Series

Parts List No. AFC-K006-PL-Continental

Applicability: **Piper Super Cub Models: PA-18, PA-18S, PA-18A, PA-18-105 Special, PA-18S-105 Special PA-18-125, PA-18S-125, PA-18-135, PA-18A-135, PA-18S-135, PA-18AS-135, PA-18-150, PA-18A-150, PA-18S-150, PA-18AS-150, with Continental Engines C-85 & C-90.**

Index	Part Number	Description	Quantity
1	CON-10	Full Flow Engine Adapter, 1-3/4”-16 Threads	1
2	M83248/1-223	O-Ring, Sealing Ring	1
3	RNG-10	Sealing Ring, 1-3/4”-16 Threads	1
4	M83248/1-016	O-Ring, Nose Piece	1
5	EXT-10	Adapter, Oil Screen	1
6	M83248/1-126	O-Ring, Use with EXT-10	1
7	AFC-500 or AFC-600	Oil Filter, or Equivalent [Champion CH48108/CH48109}]	1
8	OFM-10	Oil Filter Mount Plate-Horizontal	1
9	DBL-10	Doubler Plate	1
10	OFM-11	Oil Filter Mount Plate - 90°	1
11	AN833-10D	Bulkhead 90°	2 Opt
12	AN816-10D	Nipple, Flared Tube	2 Opt
13	AN837-10D	Bulkhead 45°	2 Opt
14	AN815-10D	Union	2 Opt
15	TPA-776	Spacers	6 Opt
16	AN4H-4A	Bolts, Drilled	4
17	AN960-416	Flat Washer	4
18	AN4-5A	Bolts	6
19	AN960-416	Flat Washer	12
20	MS20365-428A	Locknut	6
21	OTA-2250	Oil Temp Bulb Adapter, 2-1/4 Long	1 Opt
22	OTA-527	Oil Temp Bulb Adapter, 5/8 long	1 Opt
23	OFB-11	Oil Filter Base (with OFS-10 Installed) -10 Ports	1
24	TPA-775	Temp Probe Adapter	1 Opt
25	MS35769-11	Gasket, Oil Temperture Sensor	1
26	MS35769-18	Gasket, Oil Temperture Probe Adapter	2 Opt
27	AN776-10D	Fitting - 90°	1 Opt
28	M83248/1-908	Viton “O” Ring	2
29	MS28773-08	Boss Gasket	2
30	AN6289-8D	Bulkhead Nut	2
31	TPA-776	Temp Probe Adapter	1 Opt
32	MS20823-8D	Fitting - 45°	1
33	MS20822-8D	Fitting - 90°	1
34	567	Locktite Thread Sealant	1

Installation Instructions No. AFC-K006-II

Applicability: **Piper Super Cub Models: PA-18, PA-18S, PA-18A, PA-18-105 Special, PA-18S-105 Special PA-18-125, PA-18S-125, PA-18-135, PA-18A-135, PA-18S-135, PA-18AS-135, PA-18-150, PA-18A-150, PA-18S-150, PA-18AS-150, with Lycoming Engines O-235, O-290, O-320, O-360.**

1. Open and remove top cowl.

2. Loosen and remove nut holding oil temp bulb onto oil screen. Be sure to hold the adapter screwed into the oil screen housing to prevent it from turning while loosening nut. Remove bulb from oil screen. Do not bend capillary tube sharply or excessively.

3. Remove four bolts securing Lycoming oil screen housing and remove from accessory case.

4. Per assembly drawing AFC-D-0020, install a new gasket (8) under the head of the bypass valve cap (9), install a new gasket (7) under the oil temp adapter (10) and install both in the engine adapter (1). Turn in until the sealing surfaces are in contact and then tighten an additional 135 degrees. Do not install oil temperature probe at this time. Onto bulkhead fitting (3), install **(in order)** 1 ea. bulkhead nut (4), boss gasket (5), and "O" Ring (6). Install each completed assembly into the engine adapter (1). **BE CAREFUL:** O-ring and boss gasket must seal in the smooth area between the threaded areas of the bulkhead fitting. Do not tighten fittings until after routing of hoses has been determined in step 9**.**

5. Per assembly drawing AFC-D-0020, reinstall the oil temp capillary tube into the oil temp adapter (10), install gasket (2) on base of engine adapter (1) and install onto the engine accessory case. Torque engine adapter (1) to specifications 96 in/lbs. Tighten oil temp bulb into oil temp adapter (10) at this time. Secure bypass valve cap (9) to oil temp adapter (10) with .032 MS20995-C safety wire.

6. Per Assembly Drawing, AFC-D-0023, locate the cowl securing rod on the upper right side (facing forward) of the firewall and remove. Using doubler plate (1) as a drilling template (short side up), locate and drill mounting holes using a letter "F" drill.

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

7. Per Assembly Drawing, AFC-D-0021, install fittings (8) into the **"A"** and **"B" side** of the oil filter base (7) and tighten. Mount to oil filter mount plate (3) using bolts (1), washers (2), and secure with .032 MS20995-C safety wire.

8. Per Assembly Drawing, AFC-D-0021, Secure oil filter mount plate (3) to Fwd. side of firewall and doubler plate (4) to aft side (again short side up) using bolts (5), nuts (6), and washers (2).

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

9. Per Parts List AFC-K006-PL-Lycoming, install hose assy (2) connecting the **"A" port** on the engine adapter (3) to the **"A" port** on the oil filter base (9). Install hose assy (1) from the **"B" port** on the engine adapter (3) to the **"B" port** on the oil filter base (9). Tighten bulkhead nuts (19) and then tighten hose fittings to 270-350 in/ lbs.

10. Secure hoses per Installation Drawing AFC-D-0022 using clamps (3) & (4), bolt (5), washers (7), and nut (6) provided.

11. Install oil filter (4), torque per instructions on oil filter 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 Instructions No. AFC-K006-II

Applicability: **Piper Super Cub Models: PA-18, PA-18S, PA-18A, PA-18-105 Special, PA-18S-105 Special PA-18-125, PA-18S-125, PA-18-135, PA-18A-135, PA-18S-135, PA-18AS-135, PA-18-150, PA-18A-150, PA-18S-150, PA-18AS-150, with Continental Engines C-85 & C-90.**

1. Remove the Continental screen assembly **P/N A3568,** clean Screen housing and gasket surface.

2. Per Parts List AFC-K006-PL-Continental, A s s e m b l e Engine Adapter (1) as follows:
   (A) Lubricate threads of Engine Adapter (1) and Sealing Ring (3) with suitable lubricant.
   (B) Thread Sealing Ring (3) onto Engine Adapter (1) past smooth area, onto second set of threads.
   (C) Install lightly oiled O-Ring, (2). and position in the smooth area between the upper and lower threads.
   (D) Run Sealing Ring (3) down against O-ring. [Assure O-ring is still centered in non-threaded area.]
   (E) Insert lightly oiled O-ring, (4) into groove inside of center opening of Engine Adapter (1)

3. Per Parts List AFC-K006-PL-Continental, install lightly oiled O-ring (6) onto Oil Screen Adapter (5) 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 (6)- until adapter is seated in lower screen seat.

4. Per Installation Drawing AFC-D-0008, thread engine adapter (1) into engine oil screen opening being sure that oil screen adapter (5) is started in center of the opening. Screw in engine adapter (1) until light resistance indicates that O-ring (6) is seated on the accessory case. Orient the engine adapter (1) as necessary, being careful not to screw the engine adapter (1) 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.

5. Per Parts List AFC-K006-PL-Continental, onto each bulkhead fitting (11) or (13), install in order 1 ea. bulkhead nut (30), boss gasket (29), and O-Ring (28). If using a union (14), install O-Ring (28) only. When assembled correctly, the O-Ring (28) 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 threads and lower set of threads on the bulk-head fitting. Failure to position the O-Ring in this area, may cause a small oil leak.

6. On A50 & A65 engines, remove the oil drain plug and relocate the oil temperature capillary tube and oil temp adapter using oil temp gasket (25) 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 D: Per Installation Drawing AFC-D-0008, 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 (11), Temp Probe Adapter (14), Oil Temp Adapter Gasket (15), and 2 ea. Temp Probe Adapter Gasket (13) must be used.

8. Remove the oil drain plug and relocate the oil temperature capillary tube and oil temp adapter using oil temp gasket (25) provided and safety wire.

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

9. Using the horizontal oil filter mount (8) or vertical oil filter mount (10) as a drilling template, locate and drill mounting holes using a letter “F” drill.

(Continued)

Installation Instructions No. AFC-K006-II

Applicability: **Piper Super Cub Models: PA-18, PA-18S, PA-18A, PA-18-105 Special, PA-18S-105 Special PA-18-125, PA-18S-125, PA-18-135, PA-18A-135, PA-18S-135, PA-18AS-135, PA-18-150, PA-18A-150, PA-18S-150, PA-18AS-150, with Continental Engines C-85 & C-90.**

10a. Secure vertical oil filter mount (10) to Fwd. side of firewall and doubler plate (9) to Aft side of firewall using bolts (18), washers (19), and locknuts (20). OR

10b. Secure oil filter base (23) to Fwd. side of firewall and horizontal oil filter mount plate (8) to rear side using bolts (16), washers (17) and secure with .032 MS20995-C safety wire.

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

11. Install any combination of fitting (12), (32), or (33) into oil filter base (23). Mount to vertical oil filter mount (10) 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 fire sleeved hose with straight swivel fittings at each end of the hose is F13000010-0247.

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

13. 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 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 (3) with 2" Pin Spanner wrench. Do not over- tighten. 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 (7), torque per instructions on oil filter and secure with safety wire.

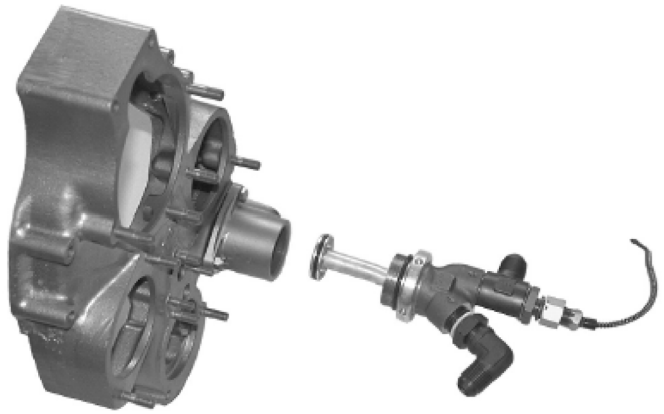
16. Run engine and check for leaks.

17. Determine weight and balance, initiate 337 form, and update the equipment list.

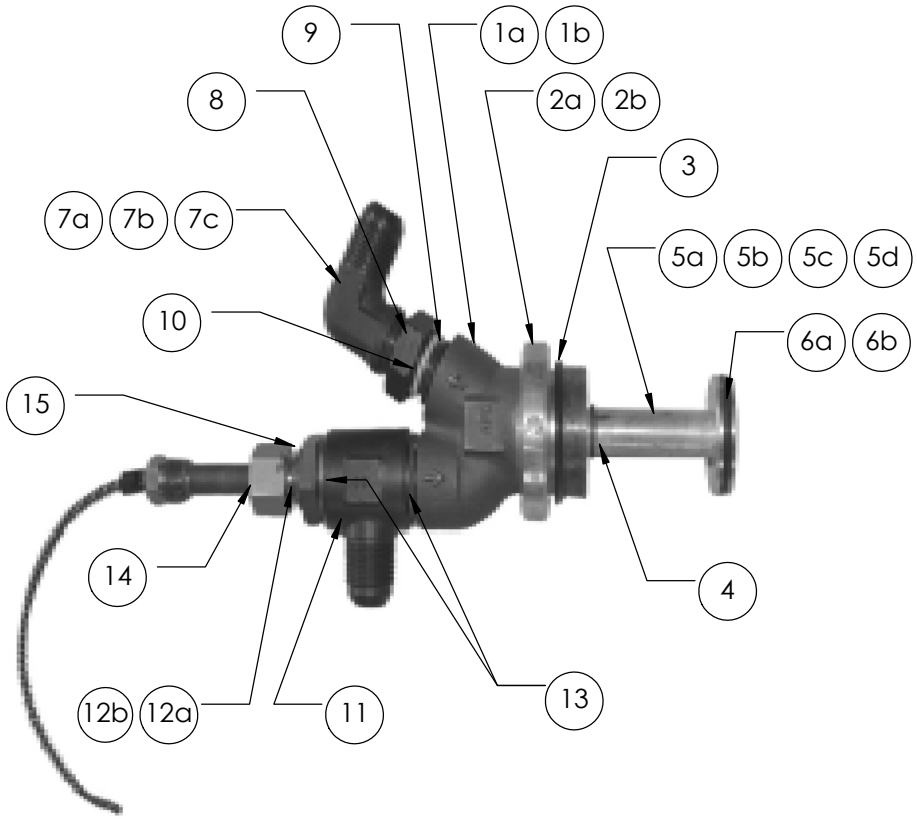
WEIGHT AND BALANCE REPORT
PIPER PA-18
SUPER CUB

SURPLUS EQUIPMENT	WEIGHT	ARM-INCHES		MOMENT - IN/LBS.	
EQUIPMENT - ITEM	LBS.	LONG		LONG	
REMOTE OIL FILTER	4.25	-29.0		-123.25	

REVISIONS			
REV.	DESCRIPTION	BY	DATE



TYPICAL INSTALLATION IN AIRCRAFT 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.



MATERIAL LIST			
ITEM	PART NUMBER	DESCRIPTION	QTY.
1a	CON-10	ENGINER ADAPTER - (1-3/4"-16 THREADS)	1
1b	CON-11	ENGINER ADAPTER - (1-13/16"-16 THREADS)	1
2a	RNG-10	SEAL RING (1-3/4"-16 THREADS)	1
2b	RNG-11	SEAL RING (1-13/16"-16 THREADS)	1
3	M83248/1-223	SEALING RING O-RING	1
4	M83248/1-016	NOSEPIECE O-RING	1
5a	EXT-10	OIL SCREEN ADAPTER	1
5b	EXT-11	OIL SCREEN ADAPTER	1
5c	EXT-12	OIL SCREEN ADAPTER	1
5d	EXT-14	OIL SCREEN ADAPTER	1
6a	M83248/1-126	O-RING, USE W/EXT-10 & EXT-12 ADAPTER	1
6b	M83248/1-128	O-RING, USE W/EXT-11 & EXT-14 ADAPTER	1
7a	AN837-10D	45° BULKHEAD FITTING	1
7b	AN833-10D	90° BULKHEAD FITTING	1
7c	AN815-10D	UNION	1
8	AN6289-10D	BULKHEAD NUT	1
9	MS28773-10	BOSS GASKET	1
10	M83248/1-910	O-RING	1
11	AN776-10D	90° FITTING	1
12a	TPA-775	TEMP PROBE ADAPTER	1
12b	TPA-776	TEMP PROBE ADAPTER & GASKET (NOT SHOWN)	1
13	MS35769-18	TEMP PROBE ADAPTER & GASKET	1
14	OTA-527	OIL TEMP ADAPTER	1
15	MS35769-11	OIL TEMP ADAPTER GASKET	1

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

Airwolf Filter Corp.

TITLE: INSTALLATION DRAWING, CON-10 or CON-11, ENGINE ADAPTER

SIZE	DWG. NO.	REV
A	AFC-D-0008	IR

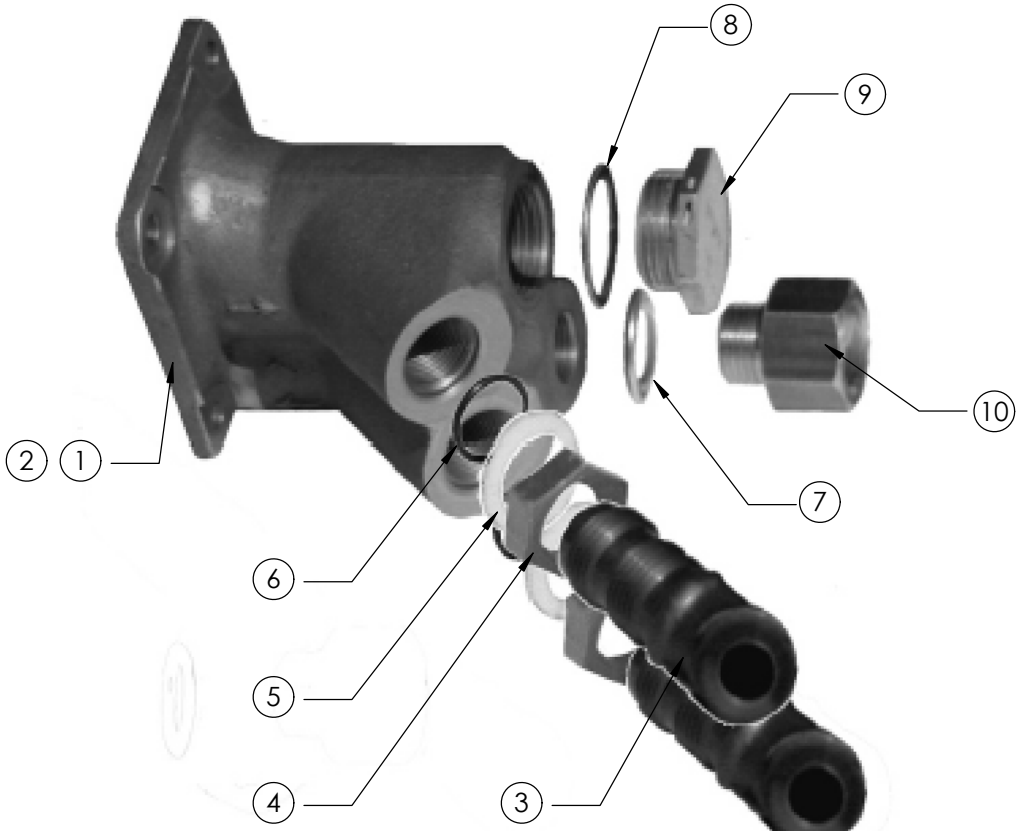
SCALE:	WEIGHT:	SHEET 1 OF 1

5 4 3 2 1

Part Number: AFC-K006-II

Date: 4-2-2021

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



MATERIAL LIST			
ITEM	PART NUMBER	DESCRIPTION	QTY.
1	LYC-10	ADAPTER - ENGINE, FULL FLOW	1
2	61173 OR GT-61173	ADAPTER GASKET	1
3	AN837-8D	BULKHEAD FITTING, 45°	2
4	AN6289-8D	BULKHEAD NUT	2
5	MS28773-08	BOSS GASKET	2
6	M83248/1-908	"O" RING	2
7	MS35769-11	GASKET, OIL TEMPERATURE SENSOR	1
8	MS35769-21	GASKET, THERMOSTATIC VALVE	1
9	CAP-1350	CAP, BYPASS VALVE	1
10	OTA-527	OIL TEMP ADAPTER	1

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

Airwolf Filter Corp.

TITLE:
ASSEMBLY DRAWING,
LYC-10 ADAPTER - ENGINE,
FULL FLOW

SIZE	DWG. NO.	REV
A	AFC-D-0020	A

SCALE:	WEIGHT:	SHEET 1 OF 1

5 4 3 2 1

Part Number: AFC-K006-II

Date: 4-2-2021

REVISIONS			
REV.	DESCRIPTION	BY	DATE
A	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	16
3	OFM-11	OIL FILTER MOUNT PLATE - 90°	1
4	DBL-10	DOUBLER PLATE	1
5	AN4-5A	BOLT	6
6	MS20365-428A	LOCKNUT	6
7	OFB-10	OIL FILTER BASE	1
8	MS20822-8D	FITTING, 90°	2
9	OFS-10	OIL FILTER STUD	1
10	AFC-500	OIL FILTER	1

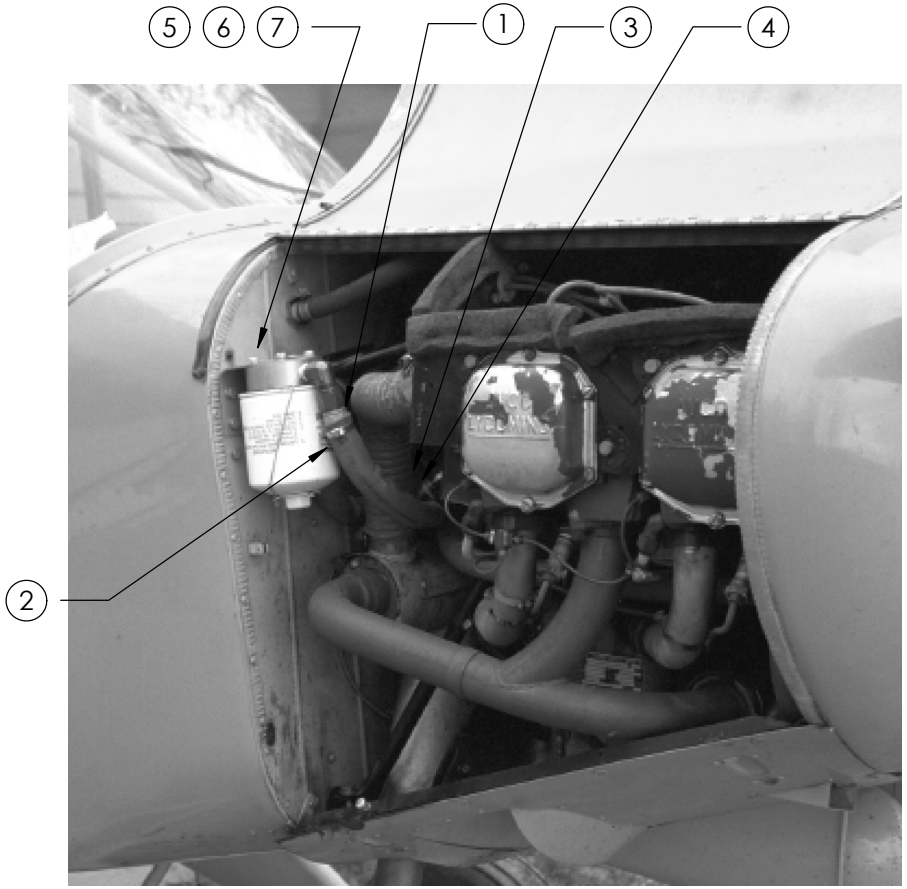
		UNLESS OTHERWISE SPECIFIED:		NAME	DATE	Airwolf Filter Corp.
		DIMENSIONS ARE IN INCHES TOLERANCES: 1 PLACE ±.030 2 PLACE ±.010 3 PLACE ±.005 4 PLACE ±.0005 ANGULAR ±0°30'	DRAWN	GM	12/28/2020	TITLE: ASSEMBLY DRAWING, OFB-10 OIL FILTER BASE, PIPER SUPER CUB
			APPR. BY	BDA	12/28/2020	
			ENG APPR.			
			MFG APPR.			
		INTERPRET GEOMETRIC TOLERANCING PER: ANSY Y 14.5H	Q.A.			
		MATERIAL				SIZE A / DWG. NO. AFC-D-0021 / REV A
NEXT ASSY	USED ON	FINISH	COMMENTS:			
APPLICATION						SCALE: / WEIGHT: / SHEET 1 OF 1

Part Number: AFC-K006-II

Date: 4-2-2021

5 4 3 2 1

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



MATERIAL LIST			
ITEM	PART NUMBER	DESCRIPTION	QTY.
1	F13000008-0152	HOSE ASSY W/FIRESLEEVING TSO'D	1
2	F13000008-0172	HOSE ASSY W/FIRESLEEVING TSO'D	1
3	MS21919WDG-14	ADEL CLAMP	1
4	MS21919WDG-12	ADEL CLAMP	1
5	AN3-4A	BOLT	1
6	MS20365-1032	LOCKNUT	1
7	AN960-10	FLAT WASHER	1

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

Airwolf Filter Corp.

TITLE:
ASSEMBLY DRAWING, OFB-10, OFB-11 & HOSE ASSEMBLIES

SIZE	DWG. NO.	REV
A	AFC-D-0022	A

SCALE:	WEIGHT:	SHEET 1 OF 1

5 4 3 2 1

Part Number: AFC-K006-II

Date: 4-2-2021

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

LOCATE DOUBLER PLATE (1) 1"DOWN FROM COWL SECURING ROD, LEFT OF VERTICAL BEAD.

SHORT SIDE UP

(1)

MATERIAL LIST			
ITEM	PART NUMBER	DESCRIPTION	QTY.
1	DBL-10	DOUBLER PLATE	1

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

Airwolf Filter Corp.

TITLE:
ASSEMBLY DRAWING,
DBL-10 DOUBLER PLATE

SIZE	DWG. NO.	REV
A	AFC-D-0023	A

SCALE:	WEIGHT:	SHEET 1 OF 1

5 4 3 2 1