

Oil Filter Kit AFC-K006

Applicability:

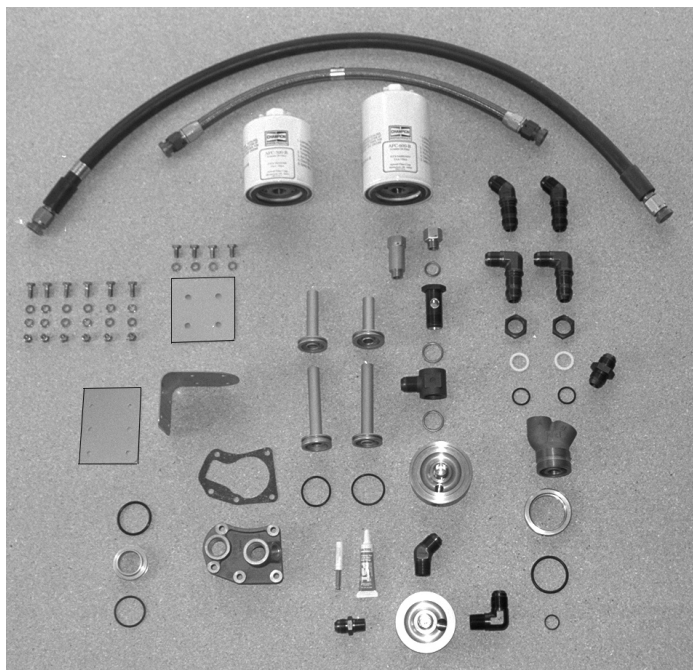
PIPER SUPER CUB MODELS
PA-18, PA-18S, PA-18A
PA-18-105 Special, PA-18S-105 Special
PA18-125, PA18S-125
PA18-135, PA-18A-135, PA-18S-135, PA18AS-135
PA18-150, PA-18A-150, PA-18S-150, PA18AS-150
with Lycoming engines O-235, O-290, O-320, & O-360 engines.

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

<u>Index</u>	<u>Part Number</u>	<u>Description</u>	<u>Quantity</u>
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)

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****First Release: 04/25/93****PA-18, PA-18S, PA-18A****PA-18-105 Special, PA-18S-105 Special****Amended: 01/08/2000****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**

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.

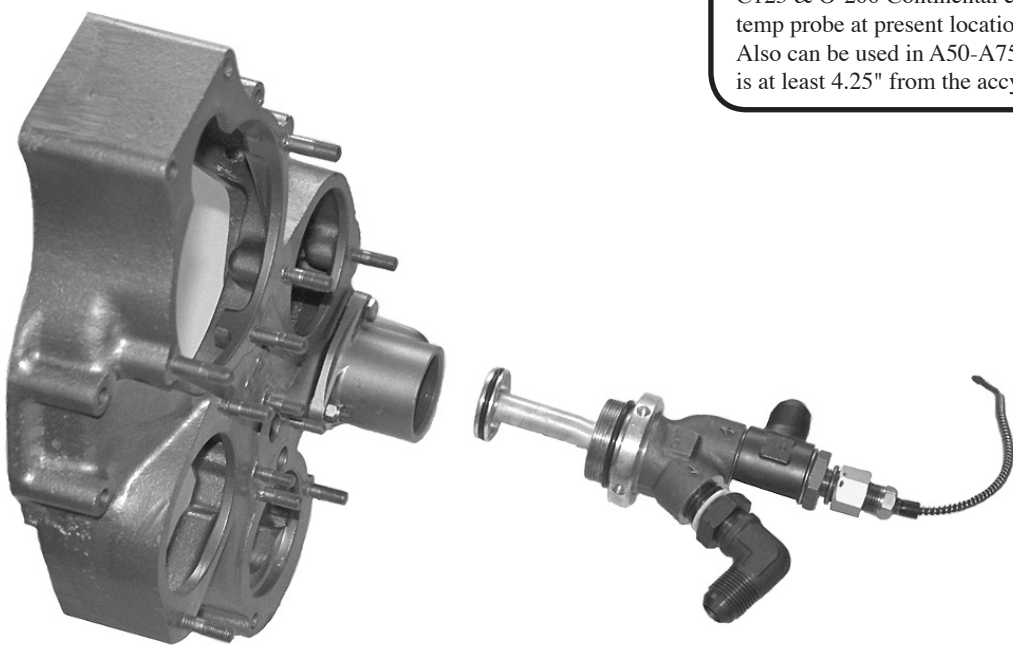
******* SEE WARNING (B) ABOVE *******

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 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		
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.	<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: <u>Piper PA-18 Super Cub with Lycoming:</u> <u>O235, O290, O320 & O360 or Continental: C85& C90</u> engines.</p> <p style="text-align: center;">Aircraft Model Engine Model</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-K006</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 & 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.</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: <u>N/A</u></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: <u>N/A</u></p>
8.	<p>Diagrams: Of access plates and information, if needed, to gain access for inspection.</p> <p>Comment: <u>N/A</u></p>
9.	<p>Special inspection requirements: Such as X-ray, ultrasonic testing, or magnetic particle inspection, if required.</p> <p>Comment: <u>N/A</u></p>
10.	<p>Application of protective treatments: To the affected area after inspection and/or maintenance, if any.</p>

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: <ul style="list-style-type: none"> 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.

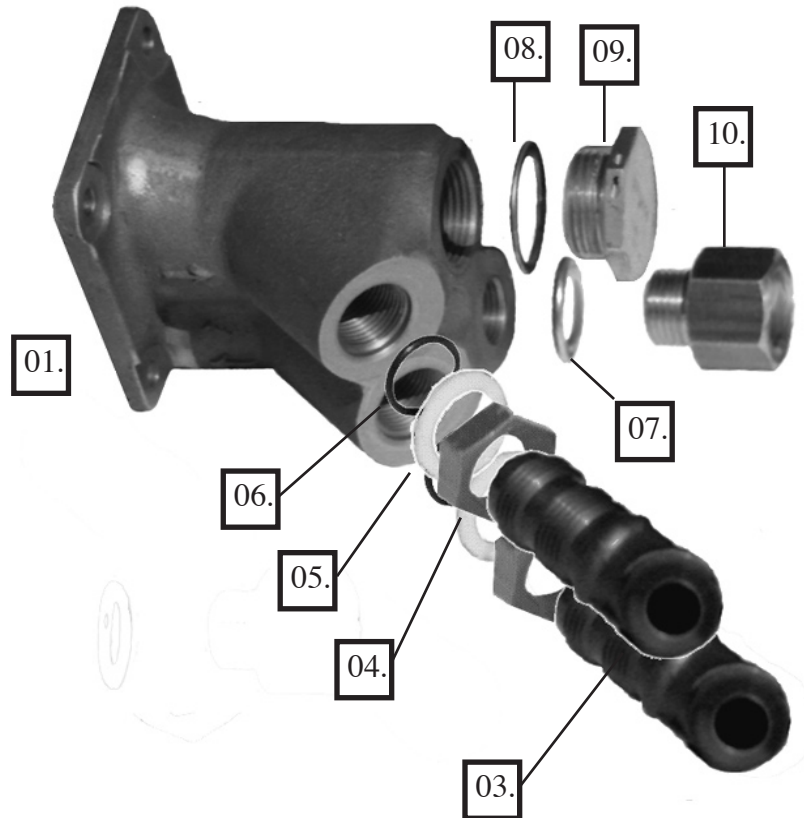
AND BALANCE REPORT

PA-18

SUPER CUB

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ASSEMBLY DRAWING# AFC-D-0020



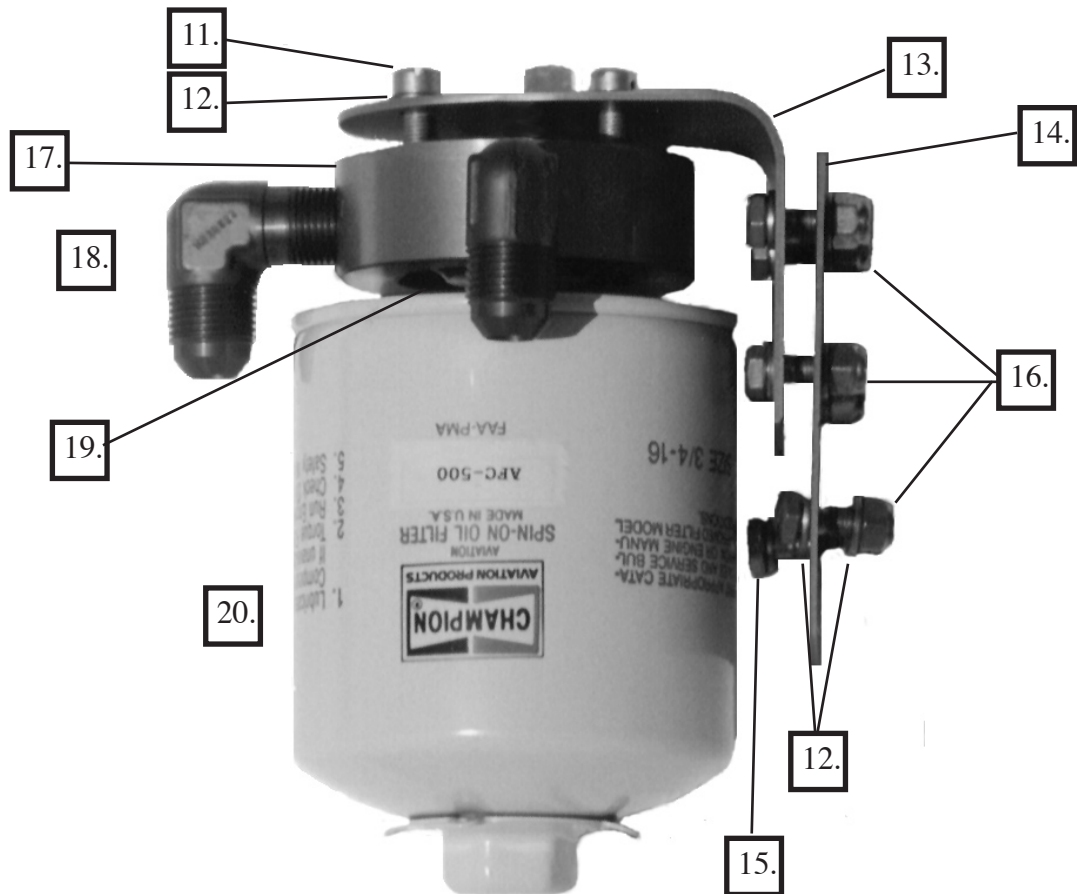
MATERIAL LIST

<u>Index</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
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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

<u>Index</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
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

This photograph shows the engine compartment of a twin-engine aircraft. The engines are prominently displayed, with the left engine's cowling clearly visible. Various components are labeled with numbers in white boxes: 21 points to the left engine cowling, 22 to a fuel filter, 23 to the right engine cowling, 24 to the right engine, 25 to a fuel line, 26 to a fuel filter, and 27 to a fuel line. The image is a high-contrast black and white photograph.

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)

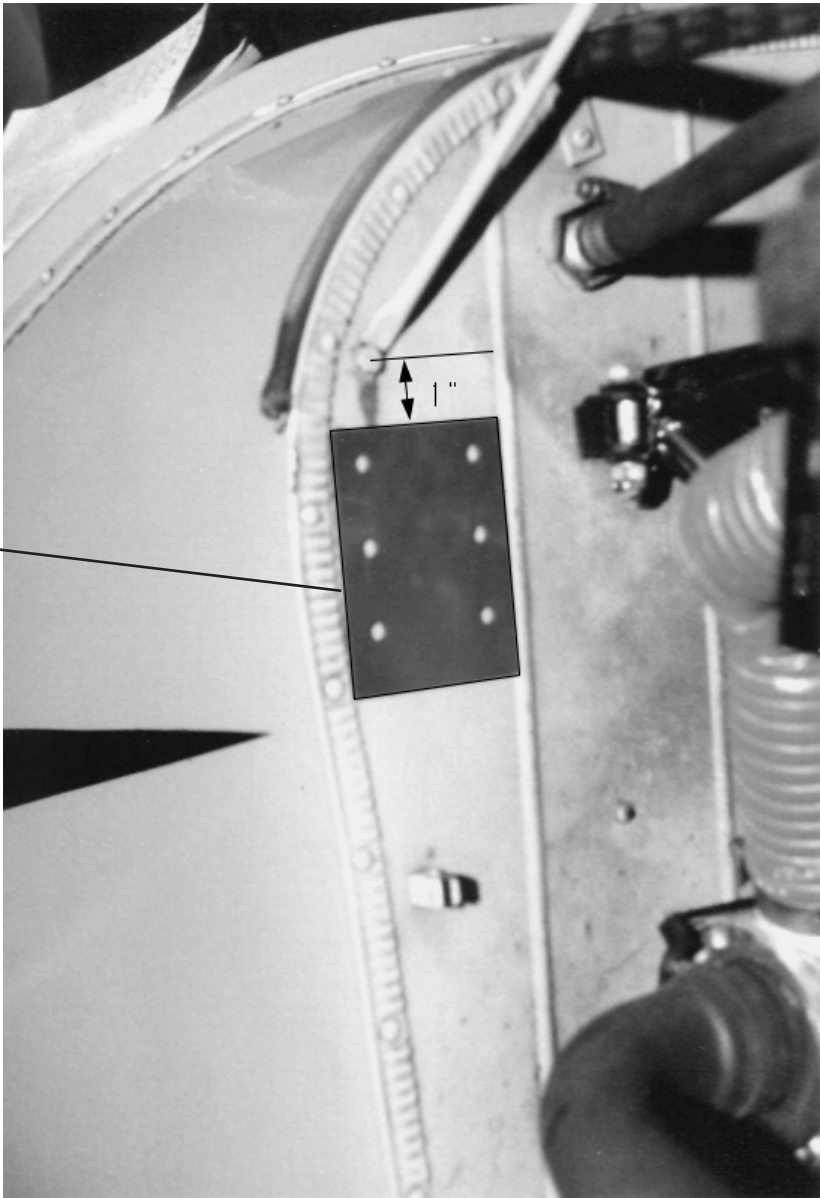
Airwolf Filter Corp.

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 Verti-
cal Bead.
_____ SHORT SIDE UP

14.



MATERIAL LIST

<u>Index</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
14.	DBL-10	Doubler Plate	(1)

	Airwolf Filter Corp.		
	Installation Drawing. DBL-10 Doubler Plate		