



# **BRACKETT AERO FILTERS, INC.**



## **INSTRUCTIONS**

ASSEMBLY PART NO. BA-8110

FAA APPROVAL DATA:  
STC-SA71GL LIST NO. 1  
FAA-PMA Supplement No. 1

REPLACES FILTER PART NUMBERS:  
0750038-1, -4  
0750127-12, -14  
0750146-1  
P10-4145 and P10-6150

AIRCRAFT MODELS:  
Cessna 180A,B, 182, 182A Use Instructions II  
Cessna 180C thru K Use Instructions I  
Cessna 182B thru R Use Instructions I  
Cessna 185 thru F Use Instructions I  
Bellanca 14-19-13A Use Instructions III  
Bellanca 17-30,1730A Use Instructions III  
Bellanca 7GCAA, 7GCB, 7KCAB Use Inst. III  
Bellanca 7ECA, 8KCAB, 8GCBC Use Inst. III

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### **I INSTRUCTIONS (for Cessna 180C thru K, 182B thru R, 185 thru F)**

- Step 1. Remove the original filter.
- Step 2. Install frame assembly the same as the original filter. NOTE: Be sure frame is mounted tight. Bolt or screw down if necessary. THIS IS A MUST. Check entire induction system for cracks, leaks, loose heat doors, etc.
- Step 3. Install element PN BA-8103-1. Be sure the denser foam stamped "Engine Side" is toward the carburetor.
- Step 4. Install grill PN BA-8102 or BA-8102-2 with the 4 ea. 832-R6 screws, and 4 ea. MS35333-38 lock washers.
- Step 5. For future element replacements remove the grill only and replace element PN BA-8103-1.

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### **II INSTRUCTIONS (for Cessna 180A, B and 182, 182A)**

- Step 1. The KIT "O" provides 4 EA. MS35206-247 screws, 4 EA. AN960-8 washers, and 4 ea. AN365-832 nuts. These are used to bolt the filter frame directly to the carburetor heat box.
- Step 2. Remove the airlock pins from the BA-8110 frame. These are used on the airplane where the filter fits into the cowling. We suggest you use side cutters to pull out the small pins.
- Step 3. Hold the filter frame over the air box as close to center as possible by eyeballing. Next take a pencil and draw a line around the frame onto the air box. Remove the filter frame and check the area inside your pencil line to see if box was centered so that there is at least 1/4" metal for the gasket to sit on.



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- Step 4. Place frame back into position on carburetor heat box and clamp and locate the four holes for drilling.
- Step 5. Drill 4 ea. 3/16" holes through the heat box as located.
- Step 6. Bolt frame tight with the 4 screws, nuts, and washers provided. Torque to compress gasket 50%.
- Step 7. See steps 3,4, and 5 of Instructions I above for further steps.

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### **III INSTRUCTIONS (for Bellanca and Champion)**

Remove the 4 ea. airlock pins from the frame assembly. Attach frame assembly to aircraft with the 4 ea. MS35206-264 screws provided in Bellanca Kit "H". Complete installation steps as outlined 3 thru 5 in Instructions I.

**SPECIAL NOTE:** After installation of filter assembly; fill out FAA Form 337 for return to service. On future replacement of parts this form will not be required.

**NOTE:** Because your filter has been treated with a special wetting agent and a fire retardant it should NOT be washed out. We recommend replacing element BA-8103-1 after 200 hours use or every 12 months or when 50% covered with foreign material.

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**Servicing:** Under normal conditions, replace filter element, PN BA-8103-1, after 200 hours use or 1 year intervals. Under severely dusty conditions, check daily and replace when element is 50% covered with foreign material. For Continued Airworthiness Instructions, see Form I-194.

United States Of America  
Department of Transportation - Federal Aviation Administration  
**Supplemental Type Certificate**

*Number* SA71GL

*This Certificate issued to* BRACKETT AERO FILTERS, INC.  
7052 Government Way  
Kingman, Arizona 86401

*certifies that the change in the type design for the following product with the limitations and conditions therefor as specified hereon meets the airworthiness requirements of Part \* of the \* Regulations.*

*Original Product Type Certificate Number:* \* \*See attached Approved Model List (AML)

*Make:* \*(AML) No. SA71GL for list of approved aircraft

*Model:* \*models and applicable airworthiness regulations.

*Description of Type Design Change:* Installation of air filters in accordance with AML No. SA71GL dated April 17, 1995, or later FAA approved revision.

*Limitations and Conditions:* Approval of this change in type design applies to the above aircraft model(s) only. This approval should not be extended to aircraft of this model on which other previously approved modifications are incorporated unless it is determined that the interrelationship between this change and any of those other previously approved modifications will introduce no adverse effect upon the airworthiness of that aircraft. A copy of this Certificate and FAA Approved Model List (AML) No. SA71GL dated April 17, 1995, or later FAA approved revision must be maintained as part of the permanent records for the modified aircraft.

*This certificate and the supporting data which is the basis for approval shall remain in effect until surrendered, suspended, revoked or a termination date is otherwise established by the Administrator of the Federal Aviation Administration.*

*Date of application:* January 9, 1975

*Date reissued:* March 3, 1983, June 20, 2000

*Date of issuance:* February 21, 1975

*Date amended:* April 17, 1995



*By direction of the Administrator*

for Jim Liza Phalabanan  
(Signature)

Manager, Tech. and Admin. Support Staff  
Los Angeles Aircraft Certification Office  
(Title)

Any alteration of this certificate is punishable by a fine of not exceeding \$1,000, or imprisonment not exceeding 3 years, or both.

**FAA APPROVED MODEL LIST (AML) NO. SA71GL  
BRACKETT AERO FILTERS, INC.  
FOR  
INSTALLING AIR FILTERS**

Issue Date: April 17, 1995

ITEM	AIR FILTER MODEL NUMBER	TOP DRAWING		AIRCRAFT MAKE	AIRCRAFT MODEL	ORIGINAL TYPE CERTIFICATE NUMBER	CERT. BASIS	AML AMENDMENT DATE
		NUMBER	REVISION & DATE					
51	BA-7810	BA-7810	A 1/20/86	Beech	95, B95, B95A, D95A	3A16	CAR 3	-----
52	BA-8010	BA-8010	B 4/5/85	Cessna	180 (Landplane and Seaplane)	5A6	CAR 3	-----
					*** END OF DATA ***			
					*** END OF DATA ***			
				Bellanca	14-19-3A, 17-30	1A3	CAR 3	-----
				American Champion	Bellanca (Champion) (Aeronca) 7GCAA, 7GCBC, 7KCAB	A-759	CAR 4a	-----
				American Champion	Bellanca (Champion) 8KCAB, 8GCBC	A21CE	FAR 23	-----
				Cessna	180A/B/C/D/E/F/G/H/J/K	5A6	CAR 3	-----
				Cessna	182A/B/C/D/E/F/G/H/J/K/L/M/N/P/Q/R	3A13	CAR 3	-----
				Cessna	185A/B/C/D/E, A185E/F	3A24	CAR 3	-----
53	BA-8110	BA-8110	C 1/26/90	Reims Aviation	(Cessna) F182P, F182Q	A42EU	CAR 3	7/12/95
					*** END OF DATA ***			

# BRACKETT AIR FILTER DOCUMENT I-194

PLACE IN AIRCRAFT RECORDS

CONTINUED AIRWORTHINESS INSPECTION  
 REQUIREMENTS AS PER FAR 23.1529  
 AND GENERAL PROCEDURES OF PART 43

INSPECTION INTERVALS: Pre-flight inspections, engine backfire inspection, 100 hour inspections, annual inspections, filter element replacements.

## INSPECTION PROCEDURES

- A. Pre-flight inspection: Per Pilots Operating Handbook, check filter assembly for security, damage or 50% contamination of element face. If found report to maintenance personnel prior to flight.
- B. Engine start-up backfire inspection: Prior to flight, check the entire intake system for security or damage. If a fire was present, the downstream face of the foam element will show erosion. If any irregularities are found see Chart I and also refer to the Aircraft Maintenance Manual for the intake system.
- C. At element replacement intervals: With the element removed, inspect the filter grill, filter frame, filter mountings and entire intake system for security, wear and any deformation. Note: On filter assemblies with gaskets, visually inspect inside and outside of frame for any signs of gasket looseness, movement or deterioration. If found refer to Chart I or the proper maintenance manual for your aircraft or component.

PART			INSTRUCTIONS
	REPLACE	REWORK	
FRAME	X		COMPLETE NEW ASSEMBLY
GASKET	X		ON FILTER FRAME, REMOVE OLD NEOPRENE GASKET AND ALL TRACES OF ADHESIVE DOWN TO A CLEAN ANODIZED FRAME SURFACE. USE ADHESIVE 3M#847 OR DOW CORNING RTV-732. COAT ENTIRE MATING SURFACE (GASKET TO FRAME). APPLY ADHESIVE FOLLOWING MANUFACTURER'S LABEL DIRECTIONS. WHEN FRAME AND GASKET ARE PLACED TOGETHER, CLAMP OR WEIGHT DOWN AT .75 LB./SQ. IN. OF CONTACT AREA. ALLOW TO CURE 24 HOURS PRIOR TO INSTALLATION. PRIOR TO REINSTALLATION OF FILTER, CHECK AIRBOX MATING SURFACE FOR IRREGULARITIES. IF FOUND, CORRECT PER MANUFACTURER'S REQUIREMENTS. UPON REINSTALLATION CHECK THAT THE GASKET MAKES 100% CONTACT. THE GASKET SHOULD BE COMPRESSED 50% FOR OPTIMUM SEAL.
GRILL	X		REPLACE WITH NEW GRILL
HARDWARE	X		REPLACE UNSERVICEABLE WITH NEW
SCREEN	X		COMPLETE NEW ASSEMBLY
SCREEN/GASKET	X		COMPLETE NEW ASSEMBLY ( ASSEMBLIES USING SCREEN GASKETS PRE 1981; BA-4106, BA-5110 AND BA-8110. )
ELEMENT	X		REPLACE ELEMENT