



# ***BRACKETT AERO FILTERS, INC.***



## **INSTRUCTIONS**

ASSEMBLY PART NO. BA-104  
(6485710)

APPROVED ON AIRCRAFT MODELS: SEE FAA APPROVED APPLICABILITY LIST

REPLACES: Beech 169-380011, Piper 460-632, Fram CA-161PL  
Puro-AFP-2

FAA APPROVAL DATA: STC-SA693CE List No. 1  
FAA-PMA Supplement No. 1

Your new polyurethane air filter element has been designed to provide maximum dust collecting efficiency, non-restrictive air flow, and economical element replacement, while maintaining a lightweight filter. The element has been treated with a distinctive treatment called a wetted agent and is approximately 98% efficient. The wetted agent is an accompaniment in the efficient capturing of dust. In addition, the element has received a fire retardant treatment. For the above reasons, replace the element each 200 hours of use/12 months or when 50% covered with foreign material. DO NOT WASH AND REUSE.

## **INSTALLATION INSTRUCTIONS**

Step 1. Install filter using the same procedure as with the original filter.

Step 2. Apply service decal to or near the filter canister. PLACE SO IT IS READABLE.

Step 3: NOTE: After initial installation of filter assembly, fill out FAA Form 337 for return to service. On future replacement of parts this form will not be required.

SERVICING: Under normal conditions, replace filter element, PN BA-3, 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.

# Supplemental Type Certificate

*Number* SA693CE

*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* Specified under : "Certification Basis" on the applicable Data Sheets or Aircraft Specifications  
*Regulations.*

*Original Product Type Certificate Number :* As shown on Approved Model List(s)

*Make :* " "

*Model :* " "

Note: FAA - Approved Model List(s) form a part of this Certificate.

*Description of Type Design Change:* Replace existing engine induction air filter with AC Spark Plug Division filter in accordance with Approved AC Filter List(s).

*Limitations and Conditions:* This approval should not be extended to other specific airplanes of these models 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 the airplanes. If the holder agrees to permit another person to use this certificate to alter the product, the holder shall give the other person written evidence of that permission.

*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 :* March 2, 1970

*Date reissued :* February 22, 1978, March 3, 1983, June 20, 2000

*Date of issuance :* March 26, 1970

*Date amended :*



*By direction of the Administrator*

*Michael A. Murphy*  
(Signature)

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

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

**SA693CE  
BRACKETT AERO FILTERS, INC.  
FOR INSTALLING AIR FILTERS**

**ISSUE DATE: MARCH 26, 1970**

ITEM	AIR FILTER MODEL NUMBER	TOP DRAWING		AIRCRAFT MAKE	AIRCRAFT MODEL	ORIGINAL TYPE CERT. NUMBER	CERT. BASIS	AML AMENDMENT
		NUMBER	REVISION & DATE					
1	BA-100	100-BA-100 (6484696)	C 3/29/84	RAYTHEON (BEECH)	E50(L-23D, RL-23D; F50; G50; H50; J50	5A4		11/7/00
				RAYTHEON (BEECH)	A65; 70; 65-B80; 65-88	3A20		
				PIPER	PA-31; PA-31-300; PA-31-350	A20S0		
2	BA-101	BA-101 (6486197)	E 9/23/85	PIPER	PA-32RT-300T	A3S0		
				CESSNA	175; 175A; 175B; 175C	3A17		
				CHAPARRAL MOTORS (GREAT LAKES)	2T-1A-2	A18EA		
3	BA-104	BA-104 (6485710)	D 10/17/85	AIRCRAFT PARTS & DEV. (AERO COMMANDER) (INTERMOUNTAIN) (CALLAIR)	A-9; A9B	A-758		
				AIRCRAFT PARTS & DEV. (AERO COMMANDER) (INTERMOUNTAIN AIR) (CALLAIR)	A-9A	A4WE		
con't								

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3	BA-104 (6485710)	D 10/17/85	RAYTHEON (BEECH)	19A; 23; A23; A23A; A23-19; B23	AICE			
				PILATUS BRITTEN NORMAN	BN-2, -2A, -2A-2, -2A-3, -2A-6, -2A-8, -2A-9, -2A-20, -2A-21, -2A-27; BN-2B-20, -2B-21, -2B-26, -2B-27	A17EU		
				PIPER	PA-23-235,-250; (S/N 27-1 thru 27-2504)	1A10		
				PIPER	PA-24, -250 (S/N 24- 1477 and up);	1A15		
				PIPER	PA-25, -235,-260;	2A8		
				PIPER	PA-25, -235, -260	2A10		
				PIPER	PA-28-140, -150, -160, -180, -181, -235; PA-28-201T PA-28R-201T; PA-28RT-201T	2A13		
con't								

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3	BA-104 (6485710)		D 10/17/85	PIPER	PA-32-260 PA-32-300 (S/N 32-7640001 and up)	A3S0		
					PA-32R-300 PA-32RT-300 PA-32-301 PA-32R-301			
					PA-34-200T PA-34-220T			
				PIPER	PA-36-285 (with Continental 6-285B engine) PA-36-300 PA-36-375	A9S0		

# 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