



# **BRACKETT AERO FILTERS, INC.**



## **INSTRUCTIONS**

ASSEMBLY PART NO BA-110

APPROVED ON AIRCRAFT MODELS: SEE FAA APPROVED APPLICABILITY LIST

REPLACES: Filter PN A-152C

FAA APPROVAL DATA: STC-SH12CE 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-23, 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* SH12CE

*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 AC Filter List(s) form a part of this STC.

*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 rotorcraft 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 rotorcraft. 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:* September 12, 1969

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

*Date of issuance:* February 27, 1970

*Date amended:*



*By direction of the Administrator*

*Michael J. 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.

**SH12CE  
BRACKETT AERO FILTERS, INC.  
FOR INSTALLING AIR FILTERS**

**ISSUE DATE: June 20, 2000**

ITEM	AIR FILTER MODEL NUMBER	TOP DRAWING		AIRCRAFT MAKE	AIRCRAFT MODEL	ORIGINAL TYPE CERT. NUMBER	CERT. BASIS	AML AMENDMENT
		NUMBER	REVISION & DATE					
2	BA-103 (6486180)		E 9/27/85	BELL	47G-4, 47G-4A, 47G-5	2H3	CAR 6	-----
					47J-2, 47J-2A	2H1	CAR 6	-----
3	BA-104 (6485710)		D 9/26/85	BRANTLY	47G-3B, 47G-3B-1, 47G-3B-2	2H3	CAR 6	-----
					B-2B	2H2	CAR 6	-----
4	BA-110		N/C 2/20/82	ROBINSON	R-22	H10WE	FAR 27	-----

FAA APPROVED:



Manager, Propulsion Branch

Date:

June 20, 2000

# 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