INSTRUCTIONS

ASSEMBLY PART NO. BA-103
(6486180)

APPROVED ON AIRCRAFT MODELS: SEE FAA APPROVED APPLICABILITY LIST

REPLACES: 4155-2407, Fram CA-108PL

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. Remove original filter and discard. Clean canister. Position 3 alignment channels, PN BA-103-09, around the attaching stud, when applicable.

Step 2. Install filter using the same procedure as with the original filter.

Step 3. Apply service decal to or near the filter canister. PLACE SO IT IS READABLE.

Step 4: 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-9, 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 herein 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 of issuance: February 27, 1970
Date amended:

By direction of the Administrator

[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.

FAA Form 8110-2(10-98)  Page 1 of 2  This certificate may be transferred in accordance with FAR 21.47.
## SH12CE
BRACKETT AERO FILTERS, INC.
FOR INSTALLING AIR FILTERS

**ISSUE DATE:** June 20, 2000

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<tr>
<th>ITEM</th>
<th>AIR FILTER MODEL NUMBER</th>
<th>TOP DRAWING</th>
<th>AIRCRAFT MAKE</th>
<th>AIRCRAFT MODEL</th>
<th>ORIGINAL TYPE CERT. NUMBER</th>
<th>CERT. BASIS</th>
<th>AML AMENDMENT</th>
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<td>BA-103</td>
<td>BA-103 (6486180)</td>
<td>E  9/27/85</td>
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<td>R-22</td>
<td>H10WE</td>
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**FAA APPROVED:**

[Signature]
Manager, Propulsion Branch

**Date:** June 20, 2000
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.

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<th>PART</th>
<th>REPLACE</th>
<th>REWORK</th>
<th>INSTRUCTIONS</th>
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<tr>
<td>FRAME</td>
<td>X</td>
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<td>COMPLETE NEW ASSEMBLY</td>
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<tr>
<td>GASKET</td>
<td>X</td>
<td></td>
<td>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.</td>
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<tr>
<td>GRILL</td>
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<td>REPLACE WITH NEW GRILL</td>
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<tr>
<td>HARDWARE</td>
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<td>REPLACE UNSERVICEABLE WITH NEW</td>
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<tr>
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<tr>
<td>SCREEN/GASKET</td>
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<td>COMPLETE NEW ASSEMBLY (ASSEMBLIES USING SCREEN GASKETS PRE 1981; BA–4106, BA–5110 AND BA–8110)</td>
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<td>REPLACE ELEMENT</td>
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DATE: 3-16-94     CHART 1