INSTRUCTIONS

ASSEMBLY PART NO BA-105
(6485709)

APPROVED ON AIRCRAFT MODELS: SEE FAA APPROVED APPLICABILITY LIST

REPLACES: Piper 460-630, CA-144PL

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-10, 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.
<table>
<thead>
<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>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>BA-105</td>
<td>BA-105</td>
<td>AG CAT CORP. (GRUMMAN)</td>
<td>G164B</td>
<td>1A16</td>
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<td></td>
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<td>B 10/17/85</td>
<td>PIPER</td>
<td>PA-28R-180, -200, -201; PA-28RT-201</td>
<td>2A13</td>
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<td>PIPER</td>
<td>PA-30; -39</td>
<td>A1EA</td>
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<td></td>
<td>PIPER</td>
<td>PA-34-200 with Lycoming IO-360-C16 or LIO-360-C1E6 engine</td>
<td>A7S0</td>
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<td>PIPER</td>
<td>PA-44-180</td>
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United States Of America  
Department of Transportation - Federal Aviation Administration  

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 therefore 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 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 of issuance:  March 26, 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(10-68)  
Page 1 of 2  
This certificate may be transferred in accordance with FAR 21.47.
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.

<table>
<thead>
<tr>
<th>PART</th>
<th>REPLACE</th>
<th>REWORK</th>
<th>INSTRUCTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRAME</td>
<td>X</td>
<td></td>
<td>COMPLETE NEW ASSEMBLY</td>
</tr>
<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 3M847 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>
<td>X</td>
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<td>REPLACE WITH NEW GRILL</td>
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<tr>
<td>HARDWARE</td>
<td>X</td>
<td></td>
<td>REPLACE UNSERVICEABLE WITH NEW</td>
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<tr>
<td>SCREEN</td>
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<td>COMPLETE NEW ASSEMBLY</td>
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<tr>
<td>SCREEN/GASKET</td>
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<td>COMPLETE NEW ASSEMBLY</td>
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<tr>
<td>ELEMENT</td>
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<td>REPLACE ELEMENT</td>
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DATE: 3-16-94

CHART 1