

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

This certificate is issued to:
 Causey Aviation Services, Inc.
 6120 Saitheod Road
 Liberty, NC 27298

Numbers: SA117250

This certificate is issued to the holder of the following certificate with the limitations and conditions:
 Original Certificate Number: 2A11 3 of the CIVIL AIR

Applicable:
 Piper Saa Construction Shack

Replacement of Piper Piper Engine: Replacement of Piper stabilator trim barrel (Part # 63350-000) with Causey Aviation stabilator trim barrel (Causey Aviation E/N CA-63350-100) as shown on Causey Aviation Drawing L-1, Rev. Original dated 8/26/91, or later FAA Approved revision level.

Limitations of this certificate: This approval should not be extended to other aircraft or models which other previously approved modifications are incorporated unless it is determined by the Administrator that the Interrelationship between this change and any of those other previously approved modifications will produce no adverse effect upon the airworthiness of these airplanes.

This certificate is issued to the holder of the following certificate with the limitations and conditions:
 Original Certificate Number: SA117250

Date of Issuance: September 3, 1991
Signature: [Signature]



Signature of the Administrator:
 John H. [Signature]
 Director, Atlanta Aircraft
 Certification Office
 1300

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

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 (Continuation Sheet)

Numbers: SA117250

Model Eligibility

- PA-28-140, S/N 28-20657 and up and earlier S/N's IE Kit 756-896 has been installed.
- PA-28-150, -160 and -180, S/N 28-2172 and up;
- PA-28-235, S/N 28-10606 and up.
- PA-28R-180, S/N 28R-30005 to 28R-30481 inclusive and 28R-30483 and up.
- PA-28R-200, S/N 28R-30482, 28R-35001 and up.
- All PA-28-151, -161, -181, -236, -201T Series
- All PA-28R-201 and 201T Series.

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

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

This certificate is issued to:
 Causey Aviation Services, Inc.
 6120 Saitheod Road
 Liberty, NC 27298

Numbers: SA11950

This certificate is issued to the holder of the following certificate with the limitations and conditions:
 Original Certificate Number: A30 of the CIVIL AIR

Applicable:
 Piper PA-17, 32R, Series

Replacement of Piper Piper Engine: Replacement of Piper stabilator trim barrel (Part # 63350-000) with Causey Aviation stabilator trim barrel (Causey Aviation E/N CA-63350-100) as shown on Causey Aviation Drawing L-1, Rev. Original dated 8/26/91, or later FAA Approved revision level.

Limitations of this certificate: This approval should not be extended to other aircraft or models which other previously approved modifications are incorporated unless it is determined by the Administrator that the Interrelationship between this change and any of those other previously approved modifications will produce no adverse effect upon the airworthiness of these airplanes.

This certificate is issued to the holder of the following certificate with the limitations and conditions:
 Original Certificate Number: SA117250

Date of Issuance: February 12, 1992
Signature: [Signature]



Signature of the Administrator:
 John H. [Signature]
 Director, Atlanta Aircraft
 Certification Office
 1300

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

FAA - PMA
 PMA PRODUCTS, INC.
 Trim Barrel P/N CA63530-100
 Replaces: Piper p/n 63530-000
 ELIGIBILITY

Piper: PA28-140 S/N 28-20657 and up earlier S/N's if kit 756-896 has been installed.
 PA28-150, -160, and -180 S/N 28-2172 and up.
 PA28-235 S/N 28-10606 and up.
 PA28R-180 S/N 28R-30005 to 28R-30481 inclusive, and 28R-30483 and up.
 PA28R-200 S/N 28R-30482, 28R-35001 and up.
 All PA28-151, -161, -181, -236, -201T series
 All PA28R-201 / 201T series
 All PA32, PA32R, PA32S, and PA32RT series

This part is to be installed under STC SA3172SO for PA28 and PA28R series aircraft and STC SA3159SO for PA32, PA32R, PA32S, and PA32RT series aircraft. Only first time installation requires a 357 form. There is no weight change.

Replacement of Stabilator Trim Barrel for PMA Products, Inc. p/n CA63530-100 (ref. Fig. L1-2 and L1-3)

1. Remove the access panel to the aft section of the fuselage. Operate trim system until turnbuckles are side by side.
2. Block the trim cables at the first set of pulleys (33) forward of the cable turnbuckles (10 and 11) in the aft section of the fuselage by a method shown in Fig. L1-3.
3. Loosen the cable (12) at the turnbuckles (10 and 11) in the aft section of the fuselage two full turns each.
4. Remove the tail cone by removing its attaching screws.
5. Disconnect the link (25) between the trim screw (23) and the trim control arm (28) by removing the nut, washer, and bolt (24) that connects the link to the screws.
6. Remove the cotter pin from the top of the screw (23), and turn the screw down and out of the barrel (20), counting the number of turns to remove, and record for reinstallation later.
7. Remove the snap ring (32), washer (31), and thrust washer (30) from the bottom of the barrel.
8. Disconnect the diagonal rib (22) from the horizontal rib (16) that supports the trim assembly by removing the four attaching nuts, washers, and bolts.
9. Remove the barrel (20) from its supports, pulling aft to maintain slight tension on the cables.
10. While maintaining cable tension, unwrap the cable from the barrel, one turn at a time, alternating from top to bottom, and counting the number of turns (wraps) until the barrel is completely unwrapped. Remove cable from diagonal slots.
11. Keeping a finger on the cable at the top of the vertical slot for reference, completely remove the old barrel and replace with a new p/n CA63530-100 at the same place on the cable.
12. With a shop towel or rag, check entire length of exposed cable for broken wires. If broken wires are found, replace cable (ref. appropriate maintenance manual).
13. Rewrap new trim barrel using reverse procedure of #10 above. When fully wrapped, there should be 23 wraps on the barrel as viewed from the side opposite the slot and with the cables extending out from the slotted side.
14. Ascertain that the barrel bushings (19 and 29) are installed in the rib plate (17) and clip (21).
15. Lubricate the bushings and install the trim barrel (20) in the bushings between the two support ribs. Attach the bottom diagonal rib (22) to horizontal rib (16) and secure with bolts, washers, and nuts.
16. Install the thrust washer (30), washer (31), and snap ring (32) on the lower end of the barrel.
17. Install the trim screw (23) into the barrel (20) the same number of turns as removed and secure each end with a cotter pin through the screw. Reinstall connecting hardware removed in step #5.
18. Retighten both turnbuckles the number of turns that were loosened.
19. Set cable tension and check rigging and adjustment per the appropriate maintenance manual.

