

Comanche Wing Root Fairings	Issue Date: 7-4-87
STC No. SA516GL	Rev. B
Manual No. 30WR-M	Rev Date: 3-1-2011

PIPER COMANCHE PA-30 WING ROOT FAIRING INSTALLATION AND MAINTENANCE MANUAL

Aircraft Eligibility: Piper PA-30, PA-39.

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Section 1.0

Introduction

This manual describes the installation of Comanche wing root fairings. The installer must follow all guidelines set forth in AC43.13. The fairings have a gel coat finish and do not require primer. The surfaces should be scuffed with a scotch brite or equivalent and thoroughly cleaned before painting.

Section 2.0

Right Side Installation

2.1 Locating Holes In P/N WRR.

Referring to detail #1, locate and mark hole locations on P/N WRR. Place part WRR in position on the right wing while holding it tightly to the wing and the fuselage. (The flange around the edge of the part may need to be trimmed to accomplish the best fit.)

Note the location of any existing rivets or skin seams that may interfere with the hole locations previously marked. If an existing rivet or skin seam falls under a proposed hole location the hole may be moved forward or aft to clear the obstruction. Hole locations may also be moved forward or aft up to 2" if required to achieve ultimate fit.

2.2 Drilling Holes in Fuselage and Fairing

Caution must be used when drilling into the fuselage to avoid drilling deeper than necessary. While holding part WRR in place and starting at the leading edge of the fairing drill #40 (.098") holes at the previously marked locations through the fairing and the fuselage, cleco as you go.

2.3 Enlarging Mounting Holes

Enlarge all mounting holes in the fairing P/N WRR to a #12 (.189") hole size. These holes may now be countersunk as required to fit the washers.

Enlarge all holes in the airframe to a #12 (.189") hole size, (proper hole size is critical for Rivnut installation, it is suggested to use a dial calipers to confirm the exact drill is used) De-burr holes and clean shavings from aircraft. Corrosion proof holes with alodine or equivalent.

2.4 Installing Rivnuts

Install rivnuts P/N A6K-75 into fuselage in #12 holes previously drilled.

2.5 Installing Foam Tape

Apply foam tape P/N 189-715 to fairing per Detail #1.

2.6 Mounting Fairing P/N WRR

Install fairing P/N WRR using A6K-75 screws, and DP1075-12SS washers. If desired a small bead of RTV silicone may be applied around the perimeter of the part. Masking tape should be used on the part and the aircraft to make a small bead.

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Section 3.0

Left Side Installation

Repeat steps 2.1 thru 2.7 on left side of aircraft to install P/N WRL.

Section 4.0

Removal of Wing Root Fairings

The fairings can be removed by simply removing the screws and washers.

Section 5.0

Parts list

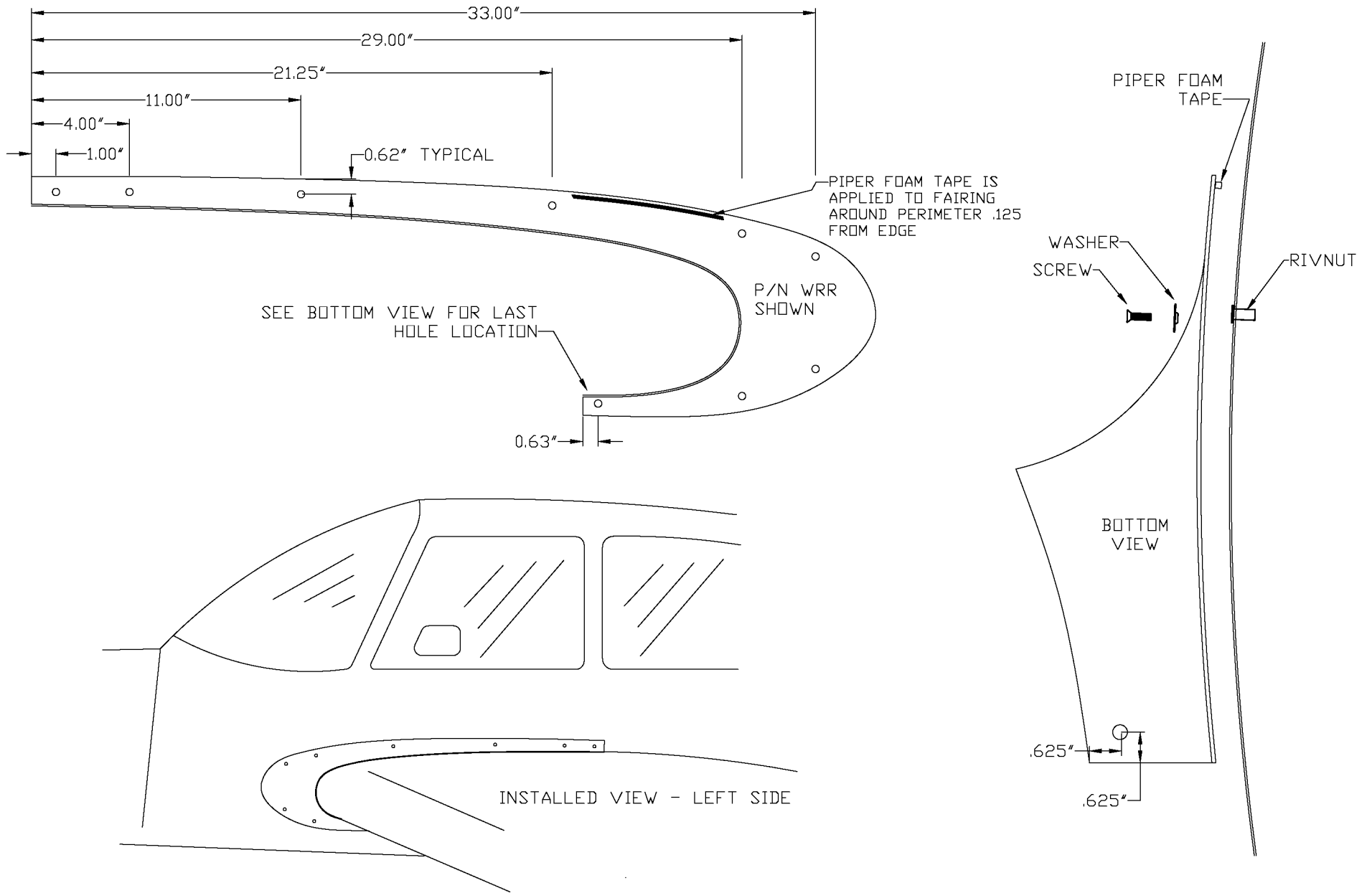
Part No.	Qty	Description
WRL	1	Left Wing Root Fairing
WRR	1	Right Wing Root Fairing
AN507C-632R8	20	Screw, Stainless Steel
DP1075-12SS	20	Tinnerman Style Stainless Steel Countersunk Washer
A6K-75	20	#632 Keyed Rivnut
189-715	16'	Piper Foam Tape

5.1 Weight and Balance

Wing root fairing and attachment hardware weight 1.4 lbs
 Arm 66.0"

5.2 Paperwork

Complete FAA Form 337 and log book entry. Place this manual in aircraft logs for future reference.



DETAIL #1

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Section 6.0

Maintenance / Instructions for Continued Airworthiness

The Airworthiness Limitations section is FAA approved and specifies maintenance required under Secs. 43.16 and 91.403 of the Federal Aviation Regulations unless an alternative program has been FAA approved.

For the current copy of this manual please contact Knots 2U, Ltd. at 262 763-5100 or via email at technical@knots2u.com.

1. Before each flight visually inspect the wing root fairings for cracks, loose screws and proper fit.
2. At annual or 100 hour inspections visually inspect the wing root fairings for cracks, loose screws and proper fit. Remove the fairings and check for separated plies of glass throughout the fairing.
3. If cracks or separated plies of glass are found in the fairing they should be repaired in accordance with AC43.13-1B Chapter 3.