

SERVICE NO. 1244A BULLETIN

PIPER CONSIDERS COMPLIANCE MANDATORY

Date: April 1, 2013

(S) (M)

Service Bulletin (SB) 1244A supersedes SB 1244. Aircraft that have previously complied with SB 1244, are in compliance with SB 1244A until the next recurring inspection is due.

SUBJECT:

AFT WING ATTACH FITTING INSPECTION REQUIREMENTS

REASON FOR REVISION:

SB 1244A revises service effectivities and announces the availability of Aft Spar Corrosion Rework Kit, Piper part number (P/N) 764-998.

MODELS AFFECTED:

PA-28-140 Cherokee Cruiser

PA-28-150 Cherokee PA-28-160 Cherokee PA-28-180 Cherokee

PA-28S-160 Cherokee PA-28S-180 Cherokee PA-28-235 Cherokee Pathfinder

PA-28-236 Dakota PA-28-151 Warrior PA-28-161 Cadet PA-28-161 Warrior II

PA-28-161 Warrior III PA-28-180 Archer PA-28-181 Archer II

PA-28-181 Archer III PA-28-201T Turbo Dakota PA-28R-180 Arrow

PA-28R-200 Arrow

PA-28R-200 Arrow II PA-28R-201 Arrow III

PA-28R-201T Turbo Arrow III PA-28RT-201 Arrow IV

PA-28RT-201T Turbo Arrow IV

SERIAL NUMBERS AFFECTED:

28-20001 thru 28-26946: 28-7125001 thru 28-7725290 28-03; 28-1 thru 28-4377 and 28-1760A 28-03; 28-1 thru 28-4377 and 28-1760A 28-03; 28-671 thru 28-5859; 28-7105001 thru 28-7205318 28-1 thru 28-1760 and 28-1760A 28-671 thru 28-5859; 28-7105001 thru 28-7105234 28-10001 thru 28-11378; 28-7110001 thru 28-7210023 28E-11; 28-7310001 thru 28-7710089 28-7911001 thru 28-8611008; 2811001 thru 2811050 28-7415001 thru 28-7715314 2841001 thru 2841365 28-7716001 thru 28-8216300; 28-8316001 thru 28-8616057; 2816001 thru 2816109 2816110 thru 2816119; 2842001 and up 28-E13; 28-7305001 thru 28-7505260 28-7690001 thru 28-8690056; 28-8690061; 28-8690062; 2890001 thru 2890205 2890206 thru 2890231; 2843001 and up 28-7921001 thru 28-7921095 28R-30002 thru 28R-31270; 28R-7130001 thru 28R-7130013 28R-35001 thru 28R-35820; 28R-7135001 thru 28R-7135229 28R-7235001 thru 28R-7635545 28R-7737002 thru 28R-7837317; 2837001 thru 2837061; 2844001 and up 28R-7703001 thru 28R-7803373; 2803001 thru 2803012 28R-7918001 thru 28R-7918267, 28R-8018001 thru 28R-8218026 28R-7931001 thru 28R-8631005; 2831001 thru 2831038

ATA: 5740

MODELS AFFECTED: (Continue	ed) SERIAL NUMBERS AFFECTED: (Continued)
PA-32-260 Cherokee Six	32-03; 32-04; 32-1 thru 32-1297;
	32-7100001 thru 32-7800008
PA-32-300 Cherokee Six	32-15; 32-21; 32-40000 thru 32-40974;
	32-7140001 thru 32-7940290
PA-32S-300 Cherokee Six Seap	
	32S-7140001 thru 32S-7240137
PA-32R-300 Lance	32R-7680001 thru 32R-7880068
PA-32RT-300 Lance II	32R-7885002 thru 32R-7985106
PA-32RT-300T Turbo Lance II	32R-7787001; 32R-7887002 thru 32R-7987126
PA-32R-301 Saratoga SP	32R-8013001 thru 32R-8613006; 3213001 thru 3213028; 3213030 thru 3213041
PA-32R-301 Saratoga II HP	3213029; 3213042 thru 3213030 thru 3213041
TA-5211-501 Salatoga II III	3246001 and up
PA-32R-301T Turbo Saratoga SF	
	3229001 thru 3229003
PA-32-301 Saratoga	32-8006002 thru 32-8606023;
	3206001 thru 3206019; 3206042 thru 3206044;
	3206047; 3206050 thru 3206055; 3206060
PA-32-301T Turbo Saratoga	32-8024001 thru 32-8424002
PA-32R-301T Saratoga II TC	3257001 and up
PA-32-301FT Piper 6X	3232001 and up
PA-32-301XTC Piper 6XT	3255001 and up
PA-34-200 Seneca	34-E4; 34-7250001 thru 34-7450220
PA-34-200T Seneca II	34-7570001 thru 34-8170092
PA-34-220T Seneca III	34-8133001 thru 34-8633031;
	3433001 thru 3433172; 3448001 thru 3448037
PA-34-220T Seneca IV	3448038 thru 3448079; 3447001 thru 3447029
PA-34-220T Seneca V	3449001 and up
PA-44-180 Seminole	44-7995001 thru 44-8195026;
DA 44 1907 Cominals	4495001 thru 4495013; 4496001 and up
PA-44-180T Seminole	44-8107001 thru 44-8207020
COMPLIANCE TIME:	Upon reaching two thousand (2,000) operating hours or seven (7) calendar years time-in-service, whichever occurs first, initial inspection to coincide with the next regularly scheduled maintenance event.
	Thereafter, compliance to be accomplished on a recurring basis, at an interval not to exceed two thousand (2,000) operating hours or seven (7) calendar years time-in-service, whichever occurs first.
APPROVAL:	The technical content of this service document has been shown to comply with the applicable Federal Aviation Regulations and is FAA approved.
<u>PURPOSE</u> :	This service bulletin provides specific instructions for the recurring inspection of the aft wing attach fittings and adjacent structure for corrosion. Additionally, this service bulletin announces the availability of a kit which provides parts and instructions to repair any corrosion discovered during these inspections.

INSTRUCTIONS:

- **NOTE:** Refer to the applicable Piper Maintenance Manual for model specific details.
- **NOTE:** Instructions that follow apply to both left and right wings.
- **NOTE**: Refer to the following document (available for download at <u>http://www.airweb.faa.gov</u>) for additional information:
 - FAA Advisory Circular AC43-4A "Corrosion Control for Aircraft"

Part I. Aft Wing Spar/Attach Fitting Inspection

- 1. Remove wing inspection plates and fairings, as required to gain visual access to the aft wing attach fittings.
 - **NOTE**: The access and inspection provisions for the airplane are typically shown in the applicable maintenance/service manual. In maintenance manuals, see Chapter 6. In service manuals, see Section II. All access plates and panels are secured by either metal fasteners or screws. "Access plates and panels" includes all forms of covers, cowlings, fairings, plates, panels, tips, etc. which may be removed for access to any component or space.
- 2. Identify the aft wing attach fittings which are riveted to the aft wing spars. See Figure 1. Using a solvent-based degreaser spray that conforms to SAE AMS 1525 (such as LPS Presolve Orange Degreaser) and/or an alkaline cleaner that complies with SAE AMS 1526 (such as Chemetall Ardrox 6333A), thoroughly clean the aft wing attach fittings and the adjacent wing spar structure (fore and aft sides of each wing spar), removing surface oil, grease, loose paint, and soil, followed by a clean water rinse and dry.
- 3. Carefully inspect for evidence of corrosion. The initial stages of corrosion are often masked by paint coatings and hidden under faying surfaces such as riveted lap joints. Since corrosion products occupy more volume than the original metal, carefully inspect these areas for irregularities such as blisters, flakes, chips, lumps, bulging skins and missing rivets.
 - If no corrosion is present, proceed to Part III.
 - If superficial corrosion is detected, remove per FAA Advisory Circular AC 43.12-1B, Chapter 6, Section 7 and treat corrosion from affected areas using guidance from FAA Advisory Circular AC 43.13-1B, Chapter 6, Section 8 or 10. Upon completion of procedure, verify that all affected areas meet or exceed the minimum thicknesses shown in TABLE 1. Paint affected areas using a good quality aircraft primer that complies with MIL-PRF-23377 (such as Akzo-Nobel 10P30-5). Proceed to Part III.
 - If corrosion is detected, and removal of corrosion in the affected areas will result in a part thickness in any location that is less than the minimum values shown in TABLE 1, structural repair is required. Proceed to Part II.

PART DESCRIPTION	MINIMUM THICKNESS	
Aft wing spar (aluminum)	0.060 inches	
Aft wing attach fitting (steel)	0.117 inches	

TABLE 1

NOTE: Thickness measurements shall be accomplished using a nondestructive inspection method, such as ultrasound, eddy current, or equivalent, provided that such method achieves a measurement accuracy of +/- 0.005 inches or better.

Part II. Structural Repair

1. Order and install Kit, Corrosion - Aft Spar Rework, Piper part number (P/N) 764-998. This kit provides parts and instructions to replace (via a splicing operation) the aft spar fitting, as well as the inboard 10.80 inches of the aft wing spar on both left and right hand sides. Corrosion damage beyond these areas may require additional and/or different repairs.

For guidance, contact Piper Aircraft at (772) 299-2141. Piper normal business hours are 7:30 AM to 4:30 PM EST, Monday through Friday.

2. Proceed to Part III.

Part III. Corrosion Protection

1. Treat the area identified in Figure 1, View A-A, with Ardrox (Dinitrol) AV8, or other MIL-PRF-16173 Class I or II, Grade 1 or 4 compliant Corrosion Preventive Compound (procure locally, or order Piper P/N 89500-800). The treatment may be brushed or sprayed.

NOTE: Verify that all drain holes and drain passages are clear before proceeding.

- 2. Reinstall inspection plates and fairings. Perform a functional test of any system or component that may have been disconnected or removed.
- 3. Proceed to Part IV.

Part IV. Make a logbook entry indicating compliance with this service bulletin.

MATERIAL REQUIRED:

<u>Qty</u>	<u>Piper P/N</u>	<u>Nomenclature</u>
A/R*	89500-800	Ardrox (Dinitrol) AV 8 Corrosion Preventative Compound
1**	764-998	Kit, Corrosion - Aft Spar Rework

- * Quantity is as required.
- ** On condition, if required.
- **NOTE**: The 764-998 kit was originally offered with a limited serial number effectivitity. For these kits, the instructional paperwork is marked as drawing number 87584, revision NEW or revision A. Only 764-998 kits with instructional paperwork identified with drawing number 87584, revision B or higher, are applicable for all airplanes covered by this service bulletin.

Procure locally:

LPS Presolve Orange Degreaser (SAE AMS 1525) or equivalent

Chemetall Ardrox 6333A (SAE AMS 1526) or equivalent

Akzo-Nobel 10P30-5 (MIL-PRF-23377) or equivalent

AVAILABILITY OF PARTS: Your Piper Service Facility.

<u>EFFECTIVITY DATE</u>: This service bulletin is effective upon receipt.

- **SUMMARY**: Please contact your Piper Approved Service Facility to make arrangements for compliance with this service bulletin in accordance with the compliance time indicated.
- **NOTE**: Please notify the factory of any address/ownership corrections. Changes should include airplane model, serial number, current owner's name and address.

Corrections and/or changes should be directed to:

PIPER AIRCRAFT, INC. Attn: Customer Service 2926 Piper Drive Vero Beach, FL 32960

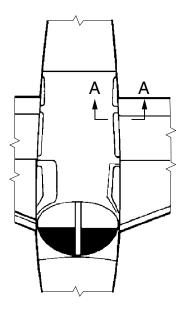
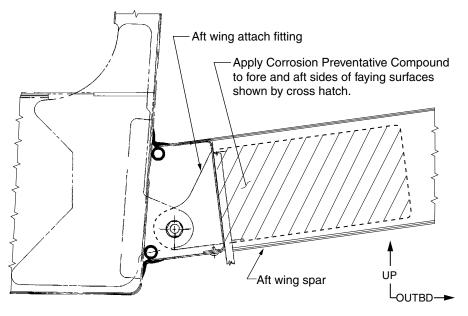


Figure 1 Aft wing attach fitting location



VIEW A-A LOOKING AFT AT LEFT HAND SIDE