



Piper Aircraft, Inc.
2926 Piper Drive
Vero Beach, FL, U.S.A. 32960

SERVICE NO. 1423A BULLETIN

PIPER CONSIDERS COMPLIANCE MANDATORY

Date: May 13, 2025

(S) (M)

Service Bulletin (SB) 1423A supersedes Service Letter (SL) 1087 and SB 1423 in its entirety. Aircraft that have complied with SB 1423 are in compliance with SB 1423A until the next recurring compliance interval.

SUBJECT:

WING AFT SPAR-TO-FUSELAGE ATTACHMENT HARDWARE INSPECTION

REASON FOR REVISION:

SB 1423A updates select serial numbers, revises instructions for clarity, in particular step 3.a to clarify the purpose of the torque values listed are for performing an off-torque (i.e., loosening torque) test of the bolt head, and revises instructions to direct customers to contact a DER for a suitable repair when a condition exists that is outside the scope of this service bulletin.

MODELS AFFECTED:

SERIAL NUMBERS AFFECTED:

Group A:

PA-32-260 Cherokee Six 260

PA-32-300 Cherokee Six 300

PA-32R-300 Lance

PA-32-S300 Cherokee Six Seaplane

32-03, 32-04, 32-1 thru 32-14,
32-16 thru 32-20, 32-22 thru 32-1297,
32-7100001 thru 32-7800008

32-15, 32-21, 32-40000 thru 32-40974,
32-7140001 thru 32-7940290

32R-7680001 thru 32R-7880068

32S-15, 32S-40000 thru 32S-40974,
32S-7140001 thru 32S-7240137

Group B:

PA-28-140 Cherokee 140

PA-28-150 Cherokee 150

PA-28-160 Cherokee 160

PA-28-180 Cherokee 180

PA-28-235 Cherokee 235

28-20001 thru 28-26946,
28-7125001 thru 28-7725290

28-03, 28-1760A, 28-1 thru 28-4377

28-03, 28-1760A, 28-1 thru 28-4377

28-03, 28-671 thru 28-5859,
28-7105001 thru 28-7205318,
28-E13, 28-7305001 thru 28-7505260

28-10001 thru 28-11378, 28-7110001 thru 28-7210023,
28E-11, 28-7310001 thru 28-7710089

ATA/JASC: 5740

(OVER)

MODELS AFFECTED:**Group B: (cont.)**

PA-28-151 Cherokee Warrior
PA-28-161 Cadet
PA-28-161 Warrior II

PA-28-161 Warrior III

PA-28-181 Archer II

PA-28-181 Archer III

PA-28-181 Piper Pilot 100i
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

PA-28-236 Dakota
PA-32-301 Saratoga

PA-32-301T Turbo Saratoga
PA-32-301FT Piper 6X
PA-32-301XTC Piper 6XT
PA-32R-301 Saratoga SP

PA-32R-301 Saratoga II HP

PA-32R-301T Turbo Saratoga SP

PA-32R-301T Saratoga II TC
PA-32RT-300 Lance II
PA-32RT-300T Turbo Lance II
PA-34-200 Seneca
PA-34-200T Seneca II
PA-34-220T Seneca III

PA-34-220T Seneca IV

PA-34-220T Seneca V

SERIAL NUMBERS AFFECTED:

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 thru 2842420
28-7690001 thru 28-8690056, 28-8690061,
28-8690062, 2890001 thru 2890205
2890206 thru 2890231, 2843001 thru 2843999,
2881001 and up
2881041, 28020001 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-7635462
28R-7737001 thru 28R-7837317, 2837001 thru 2837061
2844001 thru 2844185
28R-7703001 thru 28R-7803373,
2803001 thru 2803015
28R-7918001 thru 28R-8218026
28R-7931001 thru 28R-8631005,
2831001 thru 2831038
28-7911001 thru 28-8611008, 2811001 thru 2811050
32-8006002 thru 32-8606023, 3206001 thru 3206019,
3206042 thru 3206044, 3206047,
3206050 thru 3206055, 3206060
32-8024001 thru 32-8424002
3232001 thru 3232074
3255001 thru 3255051
32R-8013001 thru 32R-8613006,
3213001 thru 3213028, 3213030 thru 3213041
3213029, 3213042 thru 3213103,
3246001 thru 3246244
32-8029001 thru 32-8629008,
3229001 thru 3229003
3257001 thru 3257493
32R-7885002 thru 32R-7985106
32R-7787001, 32R-7887002 thru 32R-7987126
34-E4, 34-7250001 thru 34-7450220
34-7570001 thru 34-8170092
34-8133001 thru 34-8633031,
3433001 thru 3433172,
3448001 thru 3448037
3448038 thru 3448079,
3447001 thru 3447029
3449001 thru 3449514

MODELS AFFECTED:**Group B: (cont.)**

PA-44-180 Seminole

PA-44-180T Turbo Seminole

SERIAL NUMBERS AFFECTED:44-7995001 thru 44-8195026,
4495001 thru 4495013,
4496001 and up

44-8107001 thru 44-8207020

COMPLIANCE TIME:

Initial compliance is to coincide with the next regularly scheduled maintenance event, but not to exceed the next one hundred (100) hours time in service (TIS). Thereafter, recurring compliance shall occur every 100 hours TIS.

APPROVAL:

The content of this service document has been reviewed and determined to already comply with applicable Federal Aviation Regulations.

PURPOSE:

There have been isolated reports that the left hand and right hand aft wing spar-to-fuselage attachment nut and bolt have loosened. This Service Bulletin requires inspection and corrective action to prevent recurrence of the bolts loosening.

All applicable Airplane Maintenance Manuals (AMMs) and Service Manuals (SM) will incorporate the requirements of this service bulletin into their one hundred (100) hour inspection programs in a future revision.

INSTRUCTIONS:

NOTE: The following applies to both the left hand side and right hand side of the aircraft. Perform the following with weight on wheels (i.e., not on jacks).

1. Remove the lower wing-to-fuselage fairing in the area of the wing aft spar. See Figures 1 and 2.
2. Lower the flaps to gain access to the head of the aft wing-to-fuselage attachment bolt.
3. Examine bolt to determine the nominal diameter. Inspect the bolt in the fittings.
 - a. Verify the bolt is secured by performing one of the following actions:
 - Visually confirm the bolt head or nut has an unbroken torque stripe.
 - Perform an off-torque (i.e., loosening torque) test to confirm the bolt head does not loosen (e.g., does not rotate in the counter-clockwise direction) when the following torque value range is applied:
 - For 5/16 inch diameter bolts, off-torque value is 100–115 in-lbs minimum.
 - For 3/8 inch diameter bolts, off-torque value is 180–195 in-lbs minimum.

If the bolt is secured, no further action is required. Proceed to step 4.
If the bolt is not secured, further action is required. Proceed to step b.
 - b. If the bolt head or nut has a missing/broken torque stripe or the bolt fails the off-torque test described in step a, perform the following:
 - 1) Remove the attachment hardware (bolt, washer, and nut – retain/replace hardware on condition) to inspect the holes in the fittings for size and make sure no out-of-round condition exists outside of allowable limits. The specified hole size is as follows:
 - For 5/16 inch diameter bolts, the specified hole size is 0.3115–0.3135 inch diameter.
 - For 3/8 inch diameter bolts, the specified hole size is 0.3745–0.3765 inch diameter.

If the holes meet the requirements specified above, proceed to step 2).
If the holes do not meet the requirements specified, proceed to step 3).

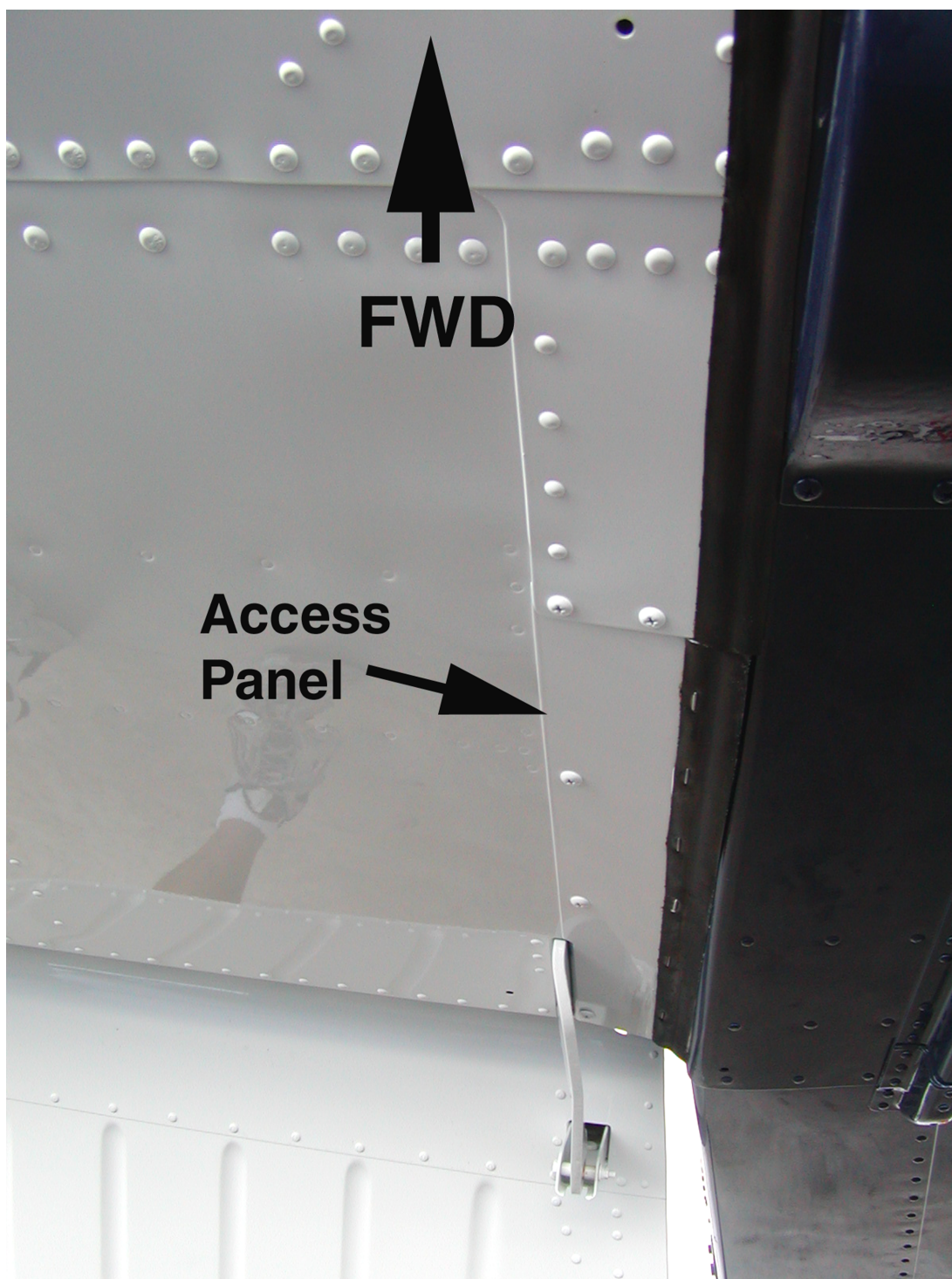
- 2) If the holes meet the requirements specified above, inspect gap between the fittings.
 - a) If gap is below 0.032 inches, reinstall the attachment hardware. Refer to chapter 57-40-00 of the applicable Piper AMM/SM for installation instructions. Then proceed to step 4.
 - b) If gap is above 0.032 inches, but does not exceed 0.15 inches (before shimming with washers), install replacement hardware as required per Chart 1. Ensure that 1 1/2 threads of the bolt protrude from the nut. Then proceed to step 4.
 - c) If the measured gap (before shimming with washers) exceeds 0.15 inches, contact an FAA designated engineering representative (DER) (or the equivalent authorized by civil aviation regulators outside the U.S.) for an approved repair before returning the airplane to service. The FAA website provides a DER directory that lists designees by their location and lists their credentials. Visit <https://designee.faa.gov/#/designeeLocator> for more details.
- 3) If the holes do not meet the requirements of step 1), perform the following action:
 - a) Group A:

If your aircraft is in Group A and does not meet the 5/16 hole requirements of step 1), contact an FAA designated engineering representative (DER) (or the equivalent authorized by civil aviation regulators outside the U.S.) for an approved repair before returning the airplane to service. The FAA website provides a DER directory that lists designees by their location and lists their credentials. Visit <https://designee.faa.gov/#/designeeLocator> for more details.
 - b) Group B:
 - (1) For 5/16 inch diameter bolt holes: If a 0.3724–0.3765 inch diameter reamed hole will clean out an out-of-round hole, open up the hole to 0.3724–0.3765 inch diameter and install 3/8 inch diameter replacement hardware, as specified in Chart 1.
 - (2) For 3/8 inch diameter bolt holes, as well as 5/16 inch diameter bolt holes that do not meet the above criteria: If a 0.437–0.438 inch diameter reamed hole will clean out an out-of-round hole, order and install Piper Kit - Wing Aft Spar/Fuselage Attach FTG, Piper Part Number (P/N) 88365-002 (767-383), revision A or later.
 - (3) If the above criteria cannot be met, contact an FAA designated engineering representative (DER) (or the equivalent authorized by civil aviation regulators outside the U.S.) for an approved repair before returning the airplane to service. The FAA website provides a DER directory that lists designees by their location and lists their credentials. Visit <https://designee.faa.gov/#/designeeLocator> for more details.
4. Reinstall the fairings and make a logbook entry documenting compliance with this service bulletin.

CHART 1
ACCEPTABLE REPLACEMENT HARDWARE

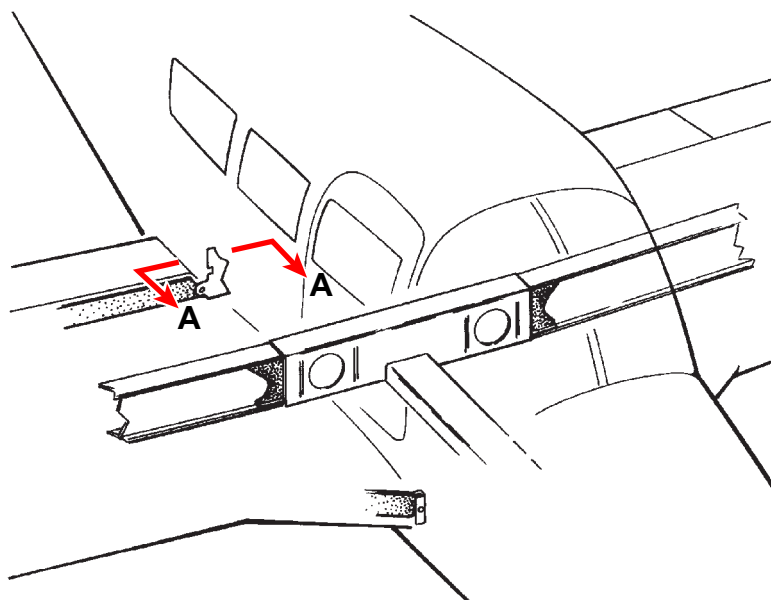
Model / Group	Bolt	Washer	Nut	Torque (in-lbs)
Group A (Excluding PA-32S-300)	AN5-6A or AN5-7A ⁽¹⁾	NAS1149F0516P and / or AN960-516 ⁽¹⁾	MS210045-5	200–225
Group A (PA-32S-300 Only)	NAS1105-7	NAS1149F0516P and / or AN960-516 ⁽¹⁾	MS210045-5	200–225
Group B (5/16 Inch Bolt)	AN5-6A or AN5-7A ⁽¹⁾	NAS1149F0516P and / or AN960-516 ⁽¹⁾	MS210045-5	200–225
Group B (3/8 Inch Bolt)	NAS464P6LA6 or NAS464P6LA4 ^{(1) (2)}	NAS1149F0632P and / or NAS1149F0663P ⁽¹⁾	MS21042-6	360–390

- (1) Use bolt and thick or thin washer options listed as required to ensure that gap between fuselage and wing fittings is less than 0.032 inches, and 1 1/2 threads of the bolt protrude from the nut.
- (2) For PA-28-181 aircraft only, if a NAS464P6LA4 bolt is required, installation is only permissible when no gap exists between the fuselage and wing fittings. If a gap of 0.015 inch or greater exists, installation of a NAS464P6LA6 bolt, along with washers as required to ensure 1 1/2 threads protrude from the nut, is required.

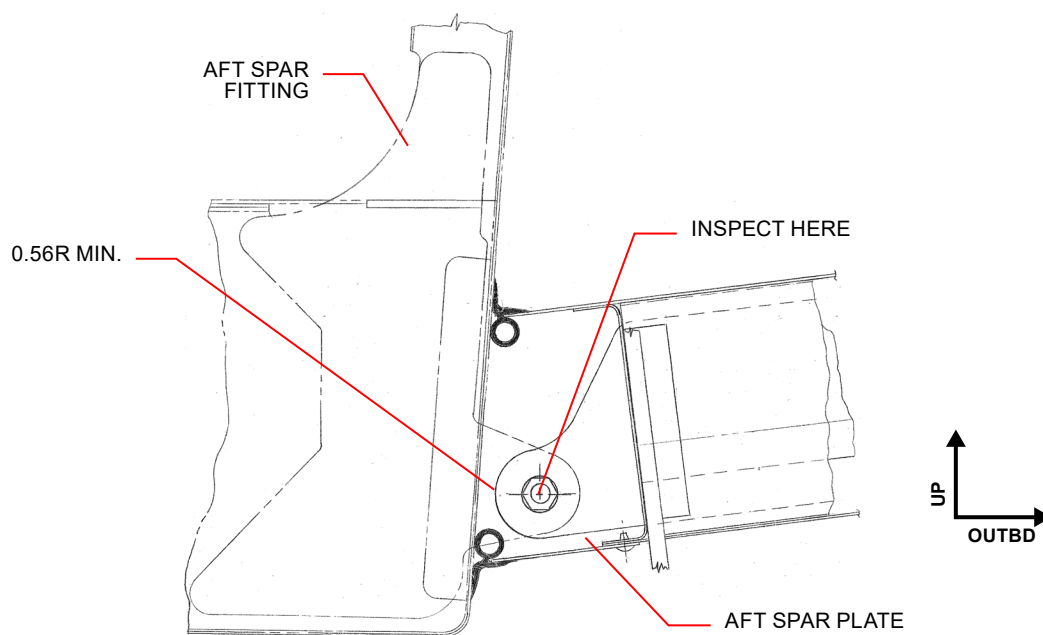


TYPICAL ACCESS PANEL LOCATION
LOOKING UP AT INBOARD
SECTION OF RH WING

Figure 1
Typical Panel Location (Under RH Wing)



ATTACHMENT BOLT LOCATION
LOOKING DOWN AT INBOARD
SECTION OF RH WING



VIEW A-A
LOOKING FWD AT AFT SPAR ATTACHMENT
RIGHT WING SHOWN (LEFT WING OPPOSITE)

Figure 2
Wing-to-Fuselage Attachment Bolt Location

MATERIAL REQUIRED: Per aircraft, as required:

- Up to two (2) each, AN or NAS Series Bolts, see Chart 1 for applicable P/Ns
- As required, AN or NAS Series Washer(s), see Chart 1 for applicable P/Ns
- Up to two (2) each, MS Series Nuts, see Chart 1 for applicable P/Ns

AVAILABILITY OF PARTS: Procure from your General Aviation Supplier or your Piper Approved Service Center – Find your local service center at <https://www.piper.com/>

EFFECTIVITY DATE: This service bulletin is effective on May 14, 2025.

SUMMARY: There is no warranty participation for the accomplishment of the additional one hundred (100) hour re-torquing of the aft spar-to-fuselage attach hardware inspection introduced in this service bulletin. If the wing aft spar-to-fuselage attachment nut and bolt have loosened and any of the Instruction steps 1) through 3) are required, contact the Piper Warranty department for warranty compensation.

Please contact your Piper Approved Service Center 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 aircraft model, serial number, and 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

or:

CustomerService@piper.com

Please include in subject line: "Aircraft ownership update"