



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

# SERVICE NO. 1366 BULLETIN

## PIPER CONSIDERS COMPLIANCE MANDATORY

Date: May 14, 2021

(S) (M)

**SUBJECT:**

**MAIN WING SPAR HARDWARE INSPECTION**

**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-28-181 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

**SERIAL NUMBERS AFFECTED:**

28-20001 through 28-26946; 28-7125001 through 28-7725290  
  
28-03; 28-1 through 28-4377 and 28-1760A  
28-03; 28-1 through 28-4377 and 28-1760A  
28-03; 28-671 through 28-5859;  
28-7105001 through 28-7205318  
  
28-1 through 28-1760 and 28-1760A  
28-671 through 28-5859; 28-7105001 through 28-7105234  
  
28-10001 through 28-11378; 28-7110001 through 28-7710089; 28E-11  
  
28-7911001 through 28-8611008; 2811001 through 2811050  
  
28-7415001 through 28-7715314  
2841001 through 2841365  
28-7716001 through 28-8616057; 2816001 through 2816109  
  
2816110 through 2816119; 2842001 and up  
28-E13; 28-7305001 through 28-7505260  
28-7690001 through 28-8690056; 28-8690061;  
28-8690062; 2890001 through 2890205  
2890206 through 2890231; 2843001 through 2843999;  
2881001 and up  
28020001 and up  
28-7921001 through 28-7921095  
28R-30002 through 28R-31270; 28R-7130001 through 28R-7130013  
28R-35001 through 28R-35820; 28R-7135001 through 28R-7135229  
28R-7235001 through 28R-7635545  
28R-7737002 through 28R-7837317; 2837001 through 2837061; 2844001 and up  
28R-7703001 through 28R-7803373; 2803001 through 2803012

ATA/JASC: 5711

(OVER)

PA-28RT-201 Arrow IV	28R-7918001 through 28R-8218026
PA-28RT-201T Turbo Arrow IV	28R-7931001 through 28R-8631005; 2831001 through 2831038
PA-32-260 Cherokee Six	32-03; 32-04; 32-1 through 32-1297; 32-7100001 through 32-7800008
PA-32-300 Cherokee Six	32-15; 32-21; 32-40000 through 32-40974; 32-7140001 through 32-7940290
PA-32S-300 Cherokee Six Seaplane	32S-15; 32S-40000 through 32S-40974; 32S-7140001 through 32S-7240137
PA-32R-300 Lance	32R-7680001 through 32R-7880068
PA-32RT-300 Lance II	32R-7885002 through 32R-7985106
PA-32RT-300T Turbo Lance II	32R-7787001; 32R-7887002 through 32R-7987126
PA-32R-301 Saratoga SP	32R-8013001 through 32R-8613006; 3213001 through 3213028; 3213030 through 3213041
PA-32R-301 Saratoga II HP	3213029; 3213042 through 3213103; 3246001 and up
PA-32R-301T Turbo Saratoga SP	32R-8029001 through 32R-8629008; 3229001 through 3229003
PA-32-301 Saratoga	32-8006002 through 32-8606023; 3206001 through 3206019; 3206042 through 3206044; 3206047; 3206050 through 3206055; 3206060
PA-32-301T Turbo Saratoga	32-8024001 through 32-8424002
PA-32R-301T Saratoga II TC	3257001 through 3257493
PA-32-301FT Piper 6X	3232001 through 3232074
PA-32-301XTC Piper 6XT	3255001 through 3255051
PA-34-200 Seneca	34-E4; 34-7250001 through 34-7450220
PA-34-200T Seneca II	34-7570001 through 34-8170092
PA-34-220T Seneca III	34-8133001 through 34-8633031; 3433001 through 3433172; 3448001 through 3448037
PA-34-220T Seneca IV	3448038 through 3448079; 3447001 through 3447029
PA-34-220T Seneca V	3449001 and up
PA-44-180 Seminole	44-7995001 through 44-8195026; 4495001 through 4495013; 4496001 and up
PA-44-180T Seminole Turbo	44-8107001 through 44-8207020

**COMPLIANCE TIME:**

Initial compliance is to coincide with the next regularly scheduled maintenance event, but not to exceed the next 100 hours time in service. Thereafter, compliance is to occur whenever the hardware common to the main wing spar and the spar box carry through is removed for any reason.

**APPROVAL:**

The engineering aspects of this service document have been shown to comply with the applicable Federal Aviation Regulations and are FAA approved.

**PURPOSE:**

All threaded fastener stack-ups common to the wing spar and spar box are located to provide a positive nominal clearance from the radii of adjacent structure. However, depending on the type and orientation of washers installed, due to normal manufacturing tolerances, the outer edge of the washer that is installed against the structure may ride up into the adjacent radius of the structure. This service bulletin provides instructions for inspecting the washers in the hardware stack-up that are common to the wing spar and spar box for proper configuration, as well as verifying positive clearance of the washer from the radii of adjacent structure.

**INSTRUCTIONS:**

**NOTE:** The following instructions apply to both left and right sides of the aircraft.

**NOTE:** Temporary removal of adjacent access plates and inspection panels will facilitate this inspection.

- Using the applicable Piper Airplane Maintenance Manual (AMM), Chapter 57, or Service Manual (SM), Section IV (Structures), identify the location and usage of washers, Piper part number (P/N) 96352-002 and/or 96352-003. These washers feature a radius along the circumference of the outside diameter, to provide additional clearance from the adjacent structure when installed.

**NOTE:** The following aircraft models were factory delivered with flat washers installed at the locations where P/N 96352-003 washers are identified in Piper Cherokee SM, P/N 753-586. For these aircraft, skip Step 2 and proceed to Step 3:

- All Piper PA-28-150, PA-28-160, and PA-28R-180 aircraft
- Piper PA-28-140, PA-28-180, PA-28-235, and PA-28R-200 aircraft not included in the table below

The table below shows the effectivities for Piper PA-28-140, PA-28-180, PA-28-235, and PA-28R-200 aircraft for which Step 2 does apply. (They were delivered with P/N 96352-003 installed.)

<b>PA-28-140, PA-28-180, PA-28-235, AND PA-28R-200 SERIAL NUMBERS DELIVERED WITH WASHERS P/N 96352-003 INSTALLED</b>	
<b>MODEL</b>	<b>SERIAL NUMBERS</b>
PA-28-140 Cherokee Cruiser	28-7225518 through 28-7725290
PA-28/S-180 Cherokee/Archer	28-7205297 through 28-7205318; 28-E13; 28-7305001 through 28-7505260
PA-28-235 Cherokee Pathfinder	28-7310001 through 28-7710089
PA-28R-200 Arrow II	28-7235292 through 28R-7635545

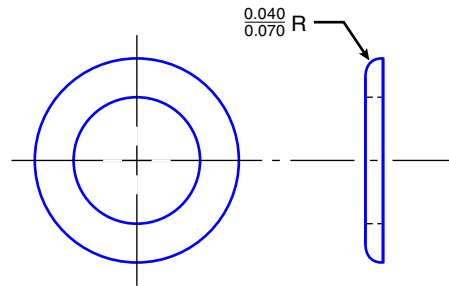
- Visually examine the corresponding fasteners installed at the location common to wing spar and spar box. The P/N 96352-002 and/or P/N 96352-003 washers, when properly installed, will have the radius feature of the washer oriented to match the radius of the adjacent structure, as shown in Figure 2, Details C, D, E, and F.
- Examine all washers which share a common mating surface with the aircraft structure, including existing washers and replacement washers which were ordered and installed.

For P/N 96352-002 and/or P/N 96352-003 washers, verify the presence of the radius feature, as shown in Figure 1. A conforming washer will have an external radius measuring between 0.040 and 0.070 inches.

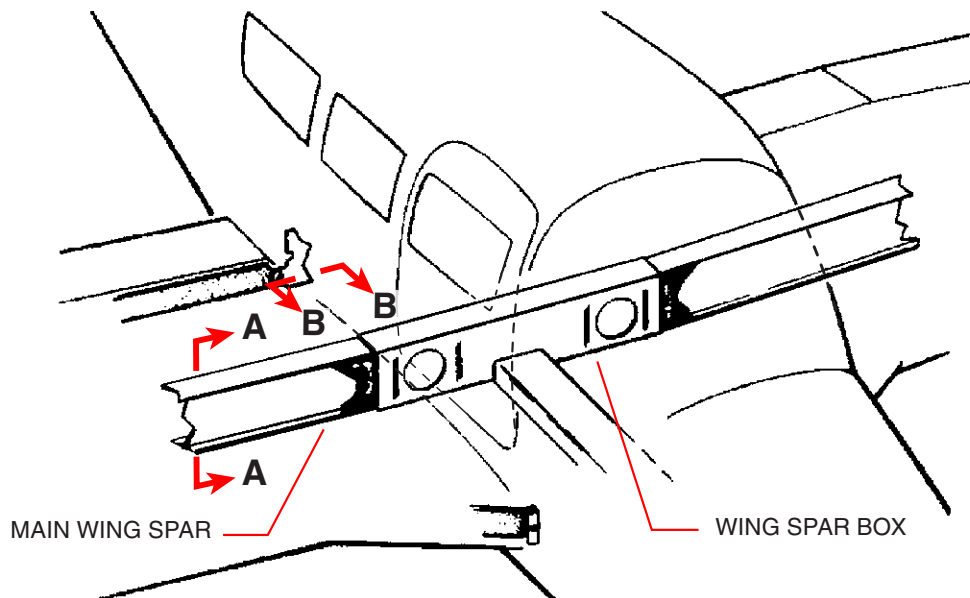
**NOTE:** Some washers that are purchased or in inventory may be identified as P/N 96352-002 or P/N 96352-003, but may have been manufactured without the radius (that is, they are flat washers). Check all replacement washers for the radius prior to installation.

Verify that the outer edge of all washers, both flat and radiused, have positive clearance from the radius of adjacent structure.

- If positive clearance exists at all locations, proceed to Step 4.
  - If any washer rides into the radius of adjacent structure, remove the washer and examine for damage to the structure, and disposition with an FAA-approved repair as needed. Where applicable, replace existing flat washers with P/N 96352-002 and/or P/N 96352-003 washers. Then, proceed to Step 4.
4. Make a logbook entry documenting compliance with this service bulletin.

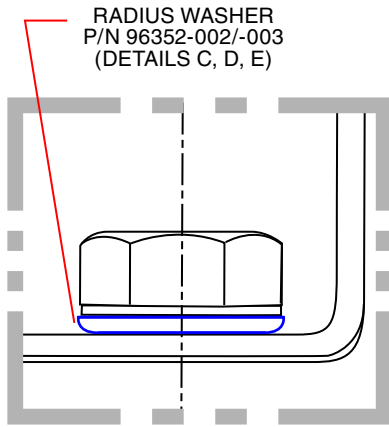


**Figure 1**  
Radius Feature Required on Washers P/N 96352-002 and 96352-003

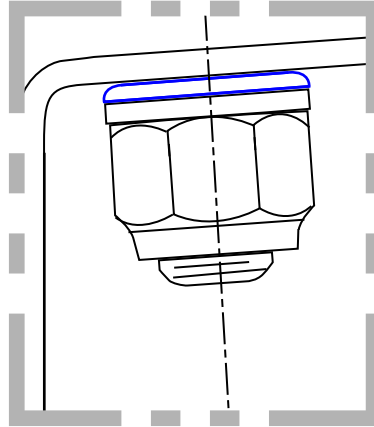


**WARNING:** Do not drive bolts into or out of the main spar attaching bolt holes (see Views A-A and B-B). Cautiously prevent damage to the bolt holes while removing or installing these bolts.

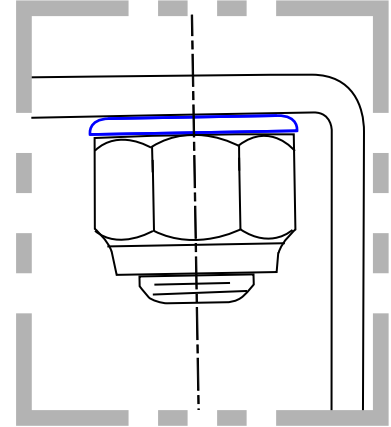
**Figure 2 – Sheet 1 of 3**  
Main Wing Spar Hardware Stack-up



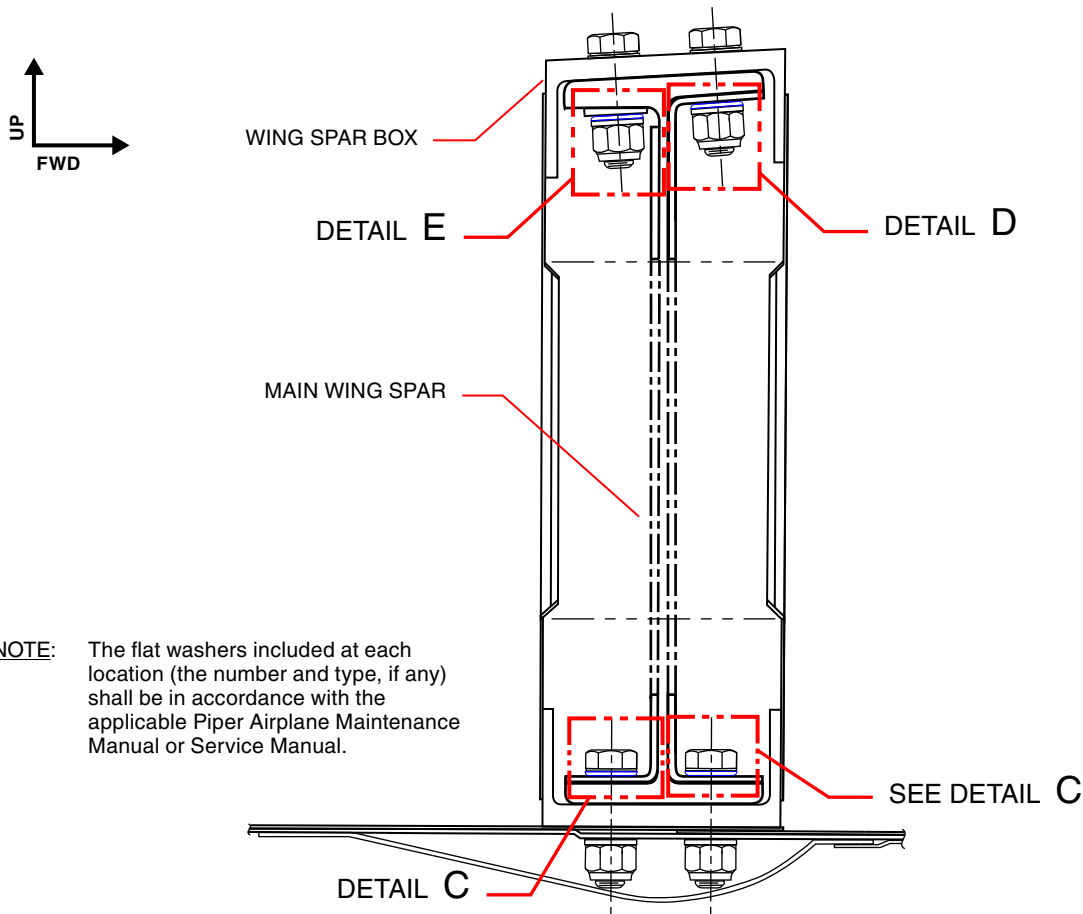
**DETAIL C**  
 RADIUS WASHER  
 CORRECT ORIENTATION  
 AFT SIDE SHOWN  
 (FORWARD SIDE OPPOSITE)



**DETAIL D**  
 RADIUS WASHER  
 CORRECT ORIENTATION



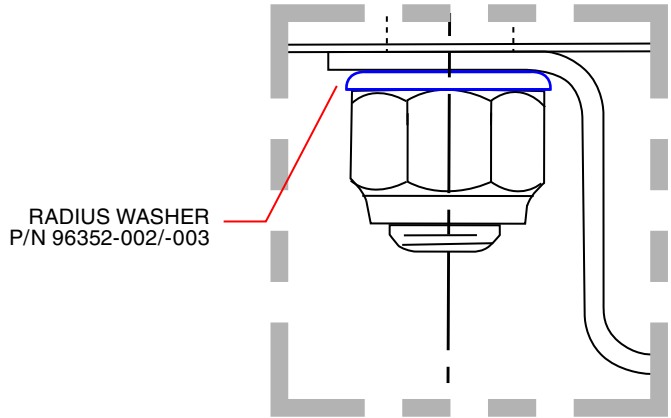
**DETAIL E**  
 APPLICABLE TO SENECA III, IV, V  
 RADIUS WASHER  
 CORRECT ORIENTATION



**VIEW A-A**

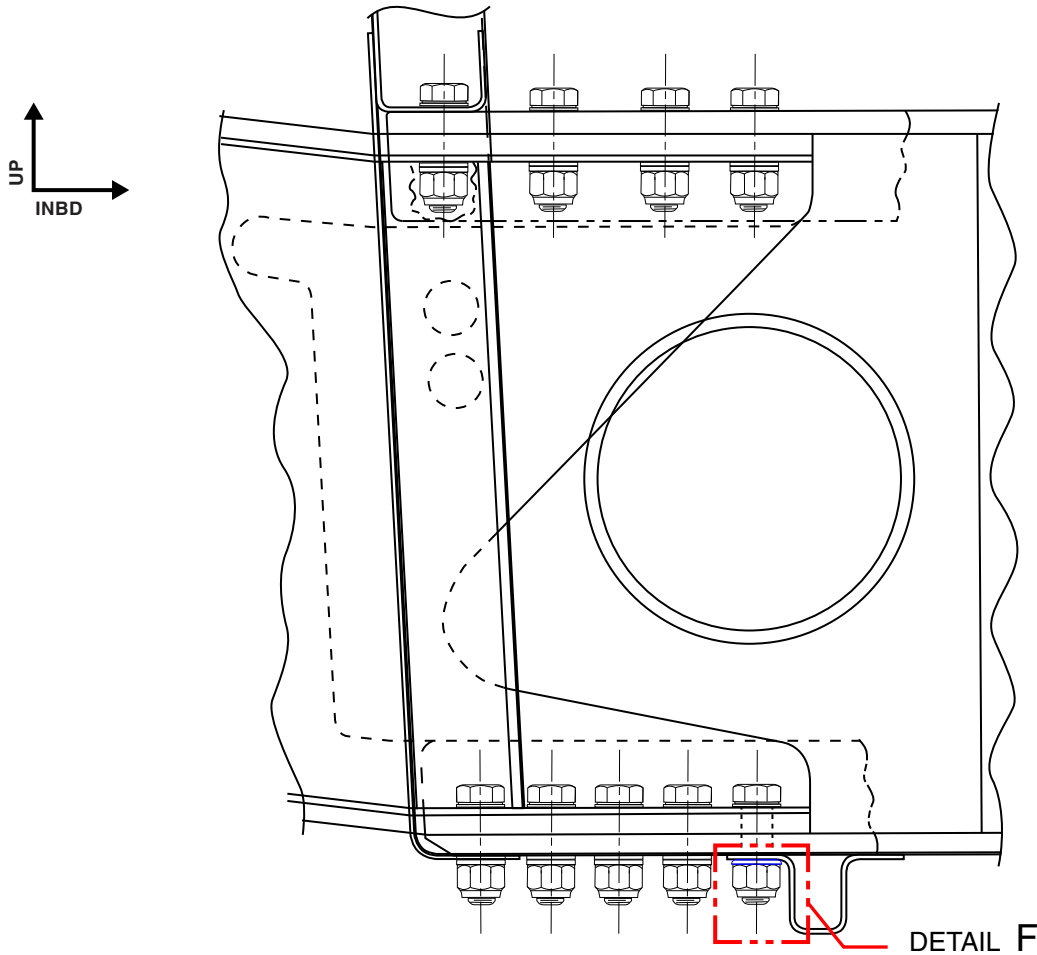
TYPICAL WING SPAR CROSS SECTION  
 SHOWN AS INSTALLED IN WING SPAR BOX

**Figure 2 – Sheet 2 of 3**  
 Main Wing Spar Hardware Stack-up



RADIUS WASHER  
P/N 96352-002/-003

**DETAIL F**  
RADIUS WASHER  
SHOWING CORRECT ORIENTATION



UP  
INBD

DETAIL F

NOTE: See the note in View A-A.

**VIEW B-B**  
LOOKING FORWARD  
AFT SIDE SHOWN (FORWARD SIDE OPPOSITE)

**Figure 2 – Sheet 3 of 3**  
Main Wing Spar Hardware Stack-up

**MATERIAL REQUIRED:** As required per aircraft: Washer (Radius), Piper P/N 96352-002 and/or P/N 96352-003 (according to the applicable Piper Airplane Parts Catalog)

**AVAILABILITY OF PARTS:** Your Piper Approved Service Center

**EFFECTIVITY DATE:** This service bulletin is effective upon receipt.

**SUMMARY:** Applicable factory participation is limited to new aircraft in warranty at the time of compliance. Factory participation will remain in effect for a period of time not to exceed 180 days from the date of this service bulletin.  
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"