



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

SERVICE NO. 1273A BULLETIN

PIPER CONSIDERS COMPLIANCE MANDATORY

Date: October 22, 2015

(M)

Service Bulletin (SB) 1273A supersedes SB 1273 and SB 636A in their entirety. Aircraft that have previously complied with SB 636A must also comply with SB 1273A. Aircraft that have previously complied with SB 1273 are already in compliance with SB 1273A.

SUBJECT:

**BULKHEAD MODIFICATION AT FUSELAGE
STATION 317.75**

REASON FOR REVISION:

SB 1273A specifies Piper Kit No. 764-028 Rev. 10/26/2015, whereas SB 1273 specified Rev. 04/03/2015. Kit 764-028 Rev. 10/26/2015 contains radius block configuration options which may provide a better fit on some aircraft.

MODELS AFFECTED:

PA-31/PA-31-300/325 Navajo
PA-31-350 Chieftain/T-1020

SERIAL NUMBERS AFFECTED:

31-2 thru 31-900; 31-7300901 thru 31-8312019
31-5001 thru 31-5004; 31-7305005 thru 31-8553002

COMPLIANCE TIME:

For aircraft with 2,000 or more hours of time in service (TIS), compliance is to coincide with the next regularly scheduled maintenance event, but not to exceed the next 100 hours TIS.

APPROVAL:

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

PURPOSE:

A review of service history reveals that cracks may develop in the bulkhead assembly located at fuselage station (FS) 317.75, Piper part number (P/N) 40682-008. This service bulletin provides instructions for repair of these cracks, as well as installation of structure which has been shown to prevent cracks from developing.

SAFETY INTENT:

The safety intent of this service bulletin is to reduce the likelihood of cracks developing in the bulkhead assembly at FS 317.75. If not identified and repaired, such a crack in the airframe structure could expand to a critical length and result in loss of structural integrity of the vertical fin front spar attachment.

ATA: 5300

(OVER)

CONFIGURATION**DESCRIPTION:**

Incorporating this service bulletin results in installing a doubler and supporting structure on the forward upper surface of the bulkhead assembly located at FS 317.75. Depending on the existing configuration of the aircraft, this doubler may replace a smaller doubler at the same location. For some aircraft, the required doubler may already be installed. For these aircraft, no airframe modification is required.

INSTRUCTIONS:

NOTE: Some steps in these instructions are identified as “required for compliance” (RC). If this service bulletin is mandated by an airworthiness directive (AD), the steps identified as RC must be done to comply with the AD. Steps not identified as RC are recommended and may be deviated from, done as a part of other actions, or done with accepted methods different from those given in this SB, if the RC steps can be done and the airplane can be put back in a serviceable condition.

NOTE: Temporary removal of some components and/or access panels may be required in order to accomplish the instructions described in this service bulletin.

NOTE: The part number naming convention used by Piper has changed over the years. A dash number with zeros in front is equivalent to the same dash number with no zeros in front. For example, part number (P/N) 40682-008 is equivalent to P/Ns 40682-08 and 40682-8. All three part numbers describe the same part.

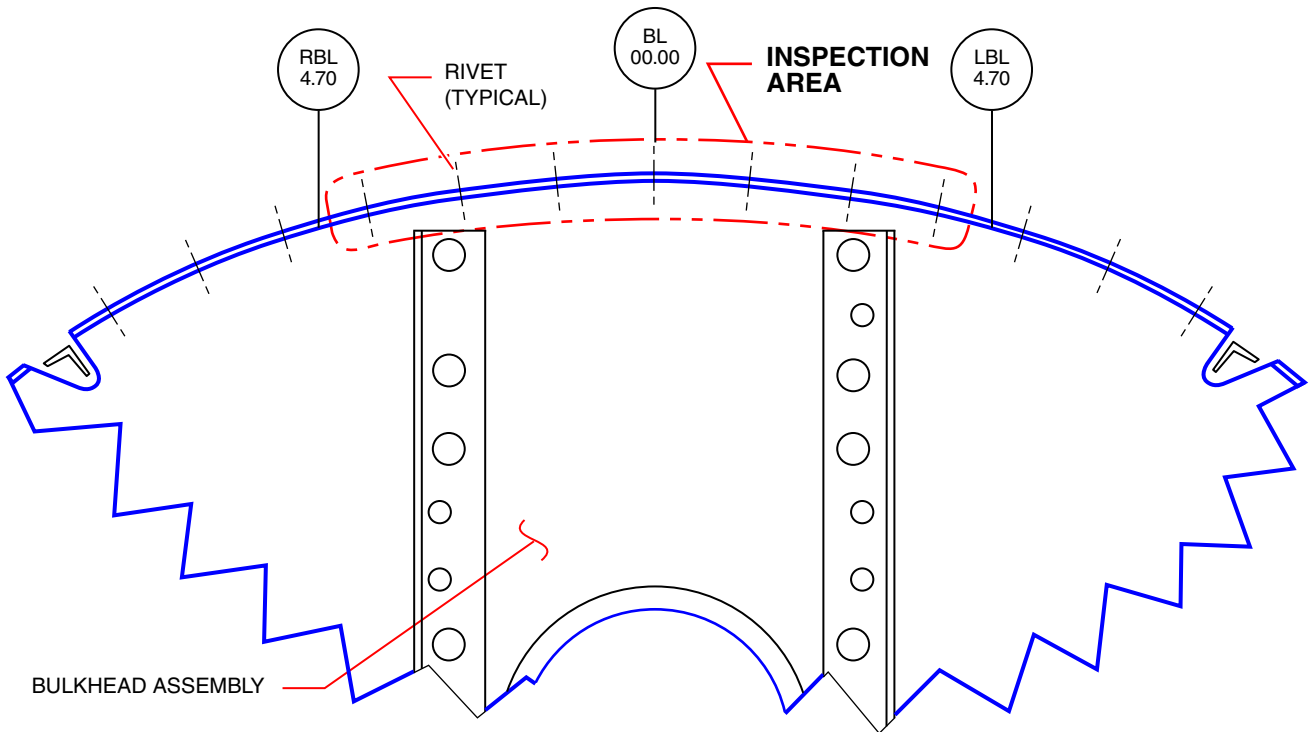
Part I. Inspection and Repair

1. RC – Gain visual access to the bulkhead assembly at FS 317.75, as shown in Figure 1, Sheet 1.
2. RC – Inspect
 - a. Prior to inspection, wipe surfaces clean using a soft cloth dampened with isopropyl alcohol, mineral spirits, naphtha, or other suitable cleaning agent or method.
 - b. Examine the area shown in View A–A labeled “INSPECTION AREA” for cracks. The inspection shall be accomplished using a 10X magnifier, a mirror and a suitable light source or other equipment capable of providing equal or better resolution.
3. RC – Assess inspection results
 - a. If a crack is found, follow repair instructions described in Piper Kit P/N 764-028 Rev. 10/26/2015, “Bulkhead Reinforcement and Drag Angle Installation.” Repairs must be accomplished prior to next flight.

WARNING: FLIGHT WITH KNOWN CRACKS IN THE AIRCRAFT STRUCTURE IS NOT ALLOWED. AN AIRPLANE WITH A CRACK IN STRUCTURE NO LONGER MEETS ITS TYPE DESIGN AND MAY NO LONGER POSSESS ITS TYPE DESIGN STRENGTH. ANY CRACKS DISCOVERED IN THE AIRCRAFT STRUCTURE MUST BE REPAIRED PRIOR TO THE NEXT FLIGHT.

- b. If no cracks are found, complete one of the following steps:
 - 1) Prior to next flight: accomplish Part II – Modification.
 - 2) Continuing inspection until modification
 - a) Make a logbook entry documenting the initial inspection.
 - b) Within 500 hours TIS, accomplish Part II – Modification.

Until modification is accomplished, the inspection from Step 2 must be performed on a recurring basis, at an interval not to exceed every 100 hours TIS. Make a logbook entry for each recurrent inspection. If any cracks are found during any inspection, they must be repaired prior to the next flight.



NOTE: Fuselage skins omitted for clarity.

VIEW A-A

LOOKING AFT AT FS 317.75
INSPECTION AREA

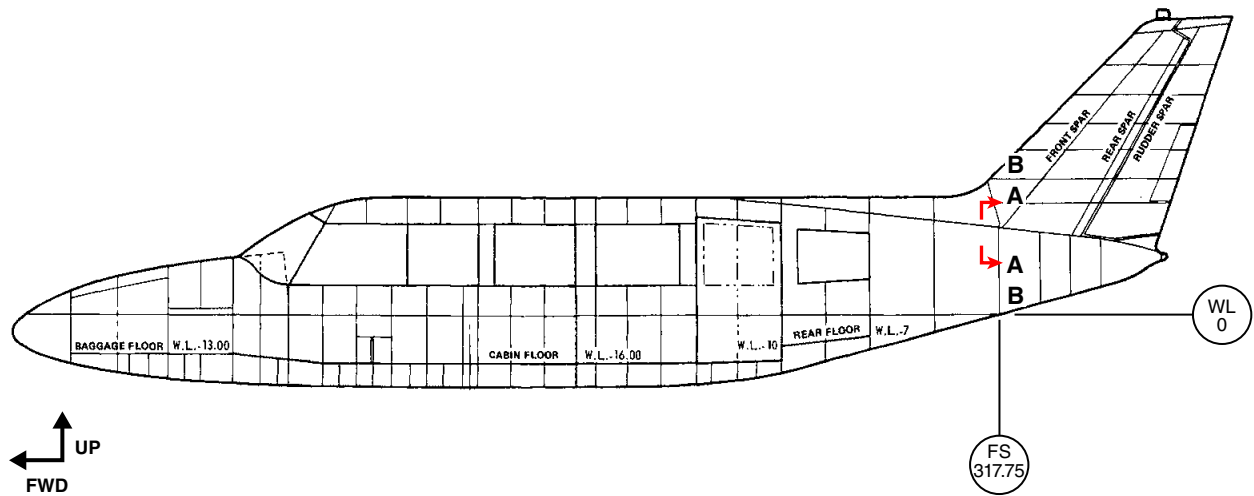
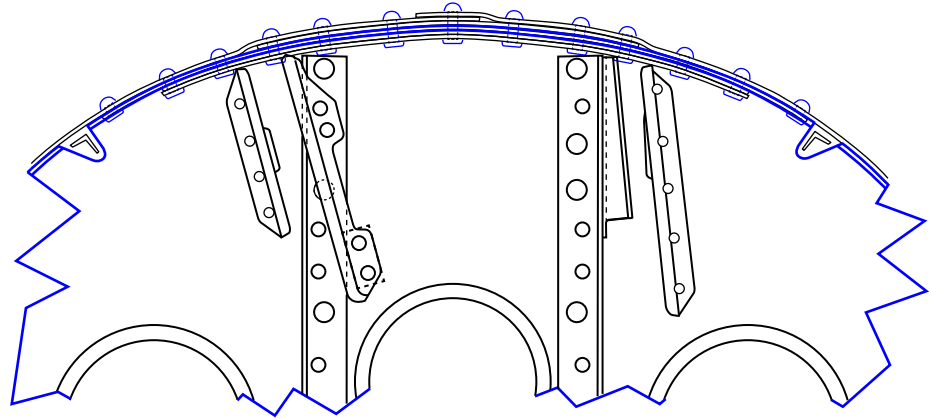
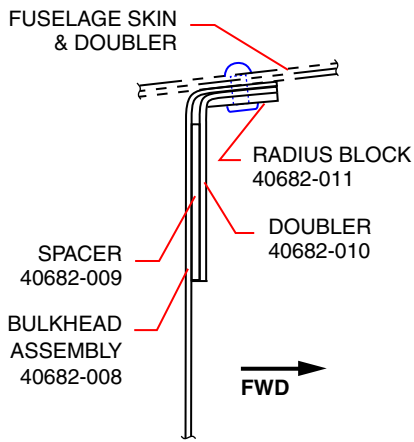


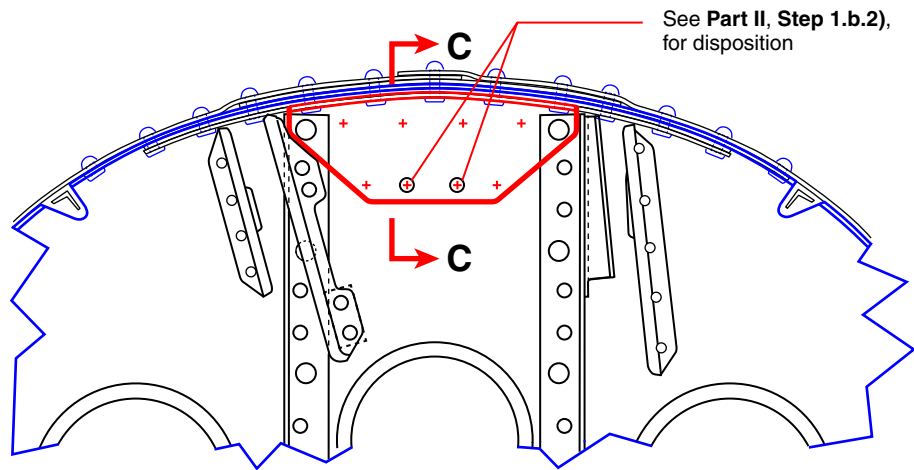
Figure 1, Sheet 1
Aft Fuselage Inspection Area



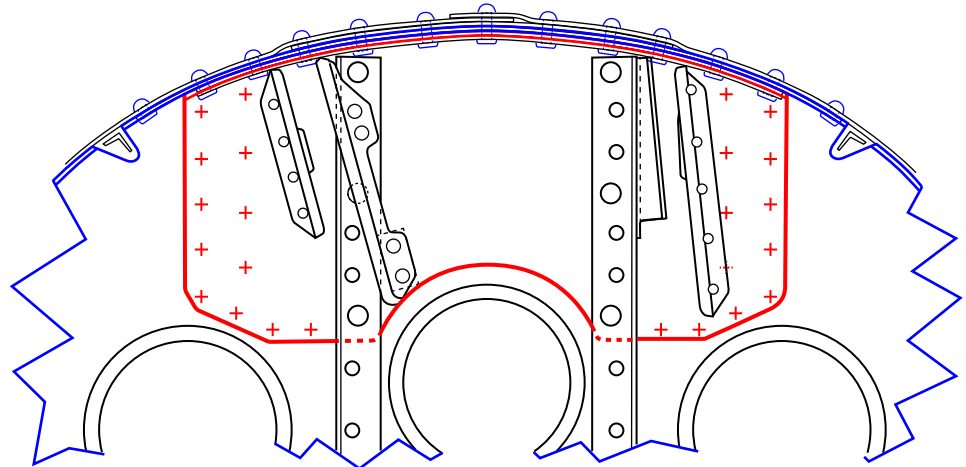
CONFIGURATION 1



VIEW C-C



CONFIGURATION 2



CONFIGURATION 3

VIEW B-B
CONFIGURATIONS 1 - 3
LOOKING AFT AT F.S. 317.75

Figure 1, Sheet 2
Aft Fuselage Inspection Area

Part II. Modification

1. RC – Examine the existing configuration of the bulkhead assembly at FS 317.75. Match it with one of the three configurations shown in View B–B. Complete Step a., b. or c., depending on the existing configuration.
 - a. Configuration 1: Order Piper Kit P/N 764-028 Rev. 10/26/2015, “Bulkhead Reinforcement and Drag Angle Installation,” and install per kit instructions.
 - b. Configuration 2: Order Piper Kit P/N 764-028 Rev. 10/26/2015, “Bulkhead Reinforcement and Drag Angle Installation,” and install per kit instructions, with the following exceptions:
 - 1) Remove these parts from the airplane, and discard:
 - P/N 40682-009 Spacer
 - P/N 40682-010 Doubler – Reinforcement
 - P/N 40682-011 Block – Radius
 - 2) Removal of the parts listed in Step 1), above, results in two (2) open holes not addressed by the instructions in Piper Kit P/N 764-028 Rev. 10/26/2015. These holes are identified in View B–B, illustration “Configuration 2” with the text “See Part II, Step 1.b.2), for disposition.”
 - a) At the two fastener locations, match drill 0.144 inch diameter holes in the new P/N 71681-002 Reinforcement Doubler to match existing holes in the P/N 40682-008 Bulkhead Assembly.
 - b) Install NAS1739B4-3 rivets (or other industry standard rivets of equivalent or higher strength) through the reinforcement doubler and bulkhead assembly.
 - 3) Discard the following kit components, which are already installed on the airplane:
 - P/N 71059-006 Angle – Drag, Left
 - P/N 71059-007 Angle – Drag, Right
 - c. Configuration 3: No rework is required. Piper Kit P/N 764-028, “Bulkhead Reinforcement and Drag Angle Installation,” has already been installed.
2. Make a logbook entry documenting compliance with Part II of this service bulletin.

MATERIAL REQUIRED: On condition, one (1) each per aircraft, Piper P/N 764-028 Rev. 10/26/2015, Bulkhead Reinforcement and Drag Angle Installation Kit

AVAILABILITY OF PARTS: Your Factory Authorized Piper Service Facility

EFFECTIVITY DATE: This service bulletin is effective upon receipt.

SUMMARY: Please contact your Factory Authorized Piper 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 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



U.S. Department
of Transportation
**Federal Aviation
Administration**

Small Airplane Directorate
Atlanta Aircraft Certification Office
1701 Columbia Ave.
College Park, Georgia 30337

FAA #117A-15307-06

November 3, 2015

Eric Wright, ODA administrator
Piper Aircraft, Inc.
2926 Piper Drive
Vero Beach, Florida 32960

Dear Mr. Wright:

The Federal Aviation Administration (FAA) received your letter dated November 2, 2015, proposing an alternative method of compliance (AMOC) to Airworthiness Directive (AD) 96-12-12. This AD requires owners/operators to inspect and modify the fuselage station 317 bulkhead in accordance with Piper Service Bulletin (SB) 636A dated August 26, 1980, by incorporating kit 764-028 or 763-917.

Piper SB 1273A dated October 22, 2015, provides an updated inspection and modification incorporating kit 764-028 revision dated 10/26/2015. SB 1273A is intended to supersede SB 636A. Your letter proposed SB 1273A as an AMOC to AD 96-12-12. Piper assessed SB 1273A for compliance to the regulations and provided the results to support the proposal. We have reviewed both SB 1273A and the revised kit 764-028, comparing them to the requirements in the AD and related SB 636A.

The Atlanta Aircraft Certification Office (ACO) approves your AMOC proposal to paragraph (a) and (d) of AD 96-12-12 using the alternate inspection and modification from SB 1273A dated October 22, 2015, in lieu of SB 636A dated August 26, 1980. Note: When using SB 1273A as an AMOC, only the kit called out in SB 1273A may be installed, regardless of the kit options presented in the AD. The AMOC approval applies to all Piper Model PA-31, PA-31-300, PA-31-325 and PA-31-350 aircraft listed in the "Applicability" table of the AD. All provisions of AD 96-12-12 that are not specifically referenced above remain fully applicable and must be complied with accordingly. This AMOC does not incorporate any additional requirements of SB 1273A into the AD. Please include a copy of this AMOC when distributing SB 1273A.

Before using this AMOC, owners/operators notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. When complying or verifying compliance with AD 96-12-12 using this AMOC, a copy of this letter shall be inserted into the maintenance records of the airplane.

This FAA AMOC is transferable with the aircraft to an owner/operator who operates the aircraft under U.S. registry. The ACO will revoke this AMOC if the ACO later determines that this AMOC does not provide an acceptable level of safety.

If you have any questions or need additional information, please contact Gregory K. (Keith) Noles at (404) 474-5551, fax at (404) 474-5606, or electronic mail at gregory.noles@faa.gov.

Sincerely,



Melvin D. Taylor, Manager, *BOTING*
Atlanta Aircraft Certification Office

cc: ACE-100
ACE-113 (Showers/Wessley)