

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

SERVICE NO. 1095B LETTER

Date: November 20, 2020

(S) (M)

Service Letter (SL) 1095B supersedes SL 1095A in its entirety. Aircraft that were previously made compliant with SL 1095 or SL 1095A are in compliance with SL 1095B.

SUBJECT:

CLASSIFICATION AND DISPOSITION OF DENTS CAUSED BY HAIL DAMAGE

REASON FOR REVISION:

SL 1095B returns the allowable depths of dents in service to SL 1095 (Rev. New) measurements.

MODELS AFFECTED:

PA-28-140/150/160 Cherokee	All
PA-28-180 Cherokee	All
PA-28-235 Cherokee Pathfinder	All
PA-28-236 Dakota	All
PA-28-151 Warrior	All
PA-28-161 Cadet	All
PA-28-161 Warrior II/III	All
PA-28-180 Archer	All
PA-28-181 Archer II/III	All
PA-28-201T Turbo Dakota	All
PA-28R-180 Arrow	All
PA-28R-200 Arrow/II	All
PA-28R-201 Arrow/III	All
PA-28R-201T Turbo Arrow III	All
PA-28RT-201 Arrow IV	All
PA-28RT-201T Turbo Arrow IV	All
PA-32-260/-300 Cherokee Six	All
PA-32R-300 Lance	All
PA-32RT-300/-300T Lance II/Turbo Lance II	All
PA-32R-301 Saratoga SP/II HP	All
PA-32R-301T Turbo Saratoga SP	All
PA-32-301 Saratoga	All
PA-32-301T Turbo Saratoga	All
PA-32R-301T Saratoga II TC	All
PA-32-301FT Piper 6X	All
PA-32-301XTC Piper 6XT	All

SERIAL NUMBERS AFFECTED:

PA-34-200 Seneca	All
PA-34-200T Seneca II	All
PA-34-220T Seneca III	All
PA-34-220T Seneca IV	All
PA-34-220T Seneca V	All
PA-44-180 Seminole	All
PA-44-180T Turbo Seminole	All

- **<u>COMPLIANCE TIME</u>**: On condition; then, a repetitive inspection every 250 hours, or annually, whichever comes first
- APPROVAL: The engineering aspects of this service document have been shown to comply with the applicable Federal Aviation Regulations and are FAA approved.
- **PURPOSE:** This service letter provides guidelines for classifying dents to the aircraft surfaces as a result of hail, and establishes corrective action based on the severity of the damage.
 - <u>NOTE</u>: Piper Aircraft makes no representation as to the aesthetic quality resulting from compliance with this service letter.

INSTRUCTIONS:

WARNING: ANY CRACKS DISCOVERED IN THE AIRCRAFT STRUCTURE MUST BE REPAIRED PRIOR TO THE NEXT FLIGHT. AN AIRPLANE WITH CRACKS IN ITS STRUCTURE DOES NOT MEET ITS TYPE DESIGN AND NO LONGER POSSESSES ITS REQUIRED TYPE DESIGN STRENGTH.

1. Inspection of Dents

- a. Determine the locations where dents are present.
 - Metal skin of the fuselage, wings or empennage
 - · Control surfaces
 - Composite component
- b. Measure the maximum depth and circumscribable diameter of the dents from the aircraft exterior. For depth measurements on curved surfaces, measure the maximum depth of the dent from the general contour. The dent diameter is measured to the point where the skin material rejoins the general contour. See Figure 1.
- c. Measure the distance from the circumscribable diameter (defined in Step b) to the nearest fastener. Note the diameter of the fastener.
- d. Visually inspect the dent area for cracks, abrasions, creases, or abrupt changes in contour within an area encompassing two times the circumscribable diameter. Use a 10X magnifier or an equivalent inspection method.
- e. Visually inspect adjacent interior structural components for deformation.

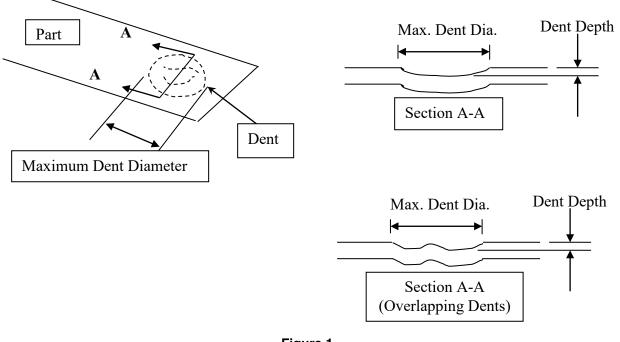


Figure 1 Dent Profile Definitions

2. Classification of Dents

- <u>NOTE</u>: Dents classified as minor or major require an additional inspection of the inner surface of the dent, using criteria defined in Step 1.d.
- a. Negligible Must meet all of the following dent limitations:
 - 1) Dents only in the metal skin of the fuselage, wings and empennage (not applicable to control surfaces and substructure such as spars, frames and stringers).
 - 2) Dents must have a depth of no greater than 0.030 inches. Dents must have a circumscribable diameter no greater than two (2.0) inches.
 - 3) Dents are a minimum distance of two times (2X) the nearest fastener's diameter from that fastener, when measured from a dent's circumscribable diameter to the nearest fastener.
 - 4) There are no cracks, abrasions or creases within an area encompassing 2X the dent's circumscribable diameter.
 - 5) There are no deformations of the interior structure adjacent to the dents.
- b. Minor Must meet all of the dent limitations provided under Negligible, except for item 3; the dents may be less than 2X the nearest fastener's diameter from that fastener.
- c. Major Exceed any or all of dent limitations 2, 4 and/or 5, provided under Negligible.
- d. Composite Components
- e. Control Surfaces Do not meet negligible dent limitation 1.

3. Disposition of Dents

- <u>NOTE</u>: For repair guidance (where applicable), see Federal Aviation Administration Advisory Circular AC 43.13-1B. This free document is available for download from the FAA, at https://www.faa.gov/regulations_policies/advisory_circulars/.
- a. Negligible Acceptable as is. Cosmetic repair is not required.
- b. Minor The affected parts must be replaced, or they may be repaired as follows:

For each fastener that is within a distance of 2X the applicable fastener's diameter from the edge of any dent, install one matching (same size and type) fastener adjacent to the applicable fastener.

New fasteners shall be installed in accordance with the following limitations:

- · a minimum of 2X the fastener diameter from the edge of the dent
- a minimum of 3X the fastener diameter from existing fasteners
- · a minimum of 2X the fastener diameter from any component's edge
- c. Major The affected parts must be replaced, or they may be repaired using FAA-approved procedures.
- d. Composite Components Evaluate and disposition per FAA AC 43.13-1B, Chapter 3, "Fiberglass and Plastics," prior to returning to service.
- e. Control Surfaces
 - Replace a control surface if dents exceed any of the negligible dent limitations 2, 4 and/or 5.
 - Replace a control surface if dents disturb its trailing edge contour or any formed radius.
 - <u>NOTE</u>: Movable control surfaces must remain free of body filler or any other modification that could affect weight and balance.

4. Continued Inspection Requirements

Regardless of classification and disposition, visually inspect all dents for cracks every 250 hours, or annually, whichever comes first. Paint cracking around the area of the dent may indicate cracking of the skin and requires further inspection.

However, dents previously classified as minor that have not been repaired require a recurring inspection at an interval not to exceed 50 hours time in service, until a suitable repair is accomplished.

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AVAILABILITY OF PARTS: Your Piper Approved Service Center

EFFECTIVITY DATE: This service letter is effective upon receipt.

SUMMARY: Please contact your Piper Approved Service Center to make arrangements for compliance with this service letter in accordance with the compliance time indicated.

<u>NOTE</u>: 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"