



# SERVICE LETTER

No. 629

Piper Aircraft Corporation

Lock Haven, Pennsylvania, U.S.A.

September 5, 1972

Subject:

Fuselage Frame Tube Corrosion Inspection

Models Affected:

PA-23-150, PA-23-160 Apache  
PA-23-235, PA-23-250, PA-E23-250,  
PA-23-250 (Six Place) Aztec

Serial Numbers Affected:

23-1 to 23-2046 incl.  
27-1 to 27-4916 incl.

Compliance Time:

1. Above referenced aircraft that are five (5) years of age or older from date of original certification -- inspect at the next annual inspection or 100-hour inspection, whichever occurs first.
2. Above referenced aircraft less than five (5) years of age from date of original certification -- inspect at the first subsequent annual inspection or 100-hour inspection after the aircraft has reached five (5) years of age from date of original certification.

Purpose:

Field reports have been received describing the presence of fuselage frame tube corrosion. The reports involved aircraft that were at least five (5) years of age from date of original certification.

This Service Letter provides (1) instructions for inspecting the fuselage frame for evidence of tube corrosion, and (2) a corrosion preventative procedure.

Instructions:

1. Level the aircraft, in accordance with appropriate service manual Longitudinal and Lateral Leveling Procedures.
2. Remove the wing spar bolt cover plate, left and right side; exposed to view are the two front spar side attachment bolts (refer to attached sketch for a pictorial description).
3. Drill a 3/16 inch hole in each lower longeron equidistant between the two bolts referenced above.
4. Visually inspect the interior surface of the longeron through the 3/16 inch hole for evidence of internal corrosion; this point is the lowest point of the fuselage frame structure and would be the area where corrosion

Instructions: (continued)

would likely to be detectable first.

5. Should evidence of corrosion be detected by Step No. 4, above, repair in accordance with F.A.R. 43:13:1, Inspection and Repair Section. Then, accomplish Steps (a) thru (e) inclusive, below.
6. If no evidence of corrosion is detected by Step No. 4, above, proceed with the following corrosion prevention procedure:
  - a. Pump approximately one quart of L-1 Lionoil through each 3/16 inch inspection hole.
  - b. Drain into drip pans for approximately two hours.
  - c. Purge excess oil from tubes by applying air pressure to each 3/16 inch inspection hole, one at a time.
  - d. Insure that at least a total of one quart of Lionoil is retrieved in the drip pans.
  - e. Install Longeron Reinforcement Kit, Part No. 760 703, which will insure that the 3/16 inch inspection hole is sealed and that the structural integrity of the frame is maintained.
7. Make appropriate log book entry.

Material Required:

1. Two (2) quarts (per aircraft) L-1 Lionoil, manufactured by Minnesota Paints, Inc.
2. One (1) each (per aircraft) Longeron Reinforcement Kit, Piper Part No. 760 703.

Availability of Parts:

Your Piper Dealer.

Effectivity Date:

This Service Letter is effective October 16, 1972.

Summary:

Please contact your Piper Dealer to make arrangements for compliance with the provisions of this Service Letter with respect to the guidelines established in Compliance Time, above. The Longeron Reinforcement Kit referenced above will be provided to you at no charge, providing Piper Distributor/Dealer material credit application procedures are followed.

Sta.  
91 1/2  
Ref.

← Fwd

Fuselage Frame

Main Spar

Wing Spar Bolt Cover

A

A

Replace Existing AN960-516  
Washers With Link Assy. 33430-00

Existing Bolt - (AN5-25A)  
Nut - (MS20365-524C)  
Torque to 75 in. lbs.

Lower  
Fuselage Skin

Drill .189 Inspection  
Hole in Bottom of Tubes

VIEW A-A

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