



# SERVICE LETTER

No. 815

Piper Aircraft Corporation

Lock Haven, Pennsylvania, U.S.A.

March 8, 1978

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Subject: Radar Antenna Mounting Plate Inspection and Modification

Models Affected: Serial Numbers Affected:

PA-23-250 (6 place) Aztec "F".....27-7754001 to 27-7754142 inclusive -- with Bendix RDR-150 Radar installation only.

Compliance Time: At owner/operator's discretion; recommended at the next Programmed Inspection event, not to exceed the next fifty (50) hours of operation.

Purpose: It has been brought to our attention that, under certain conditions, the Bendix RDR-150 Radar installed in the above referenced aircraft may not display an accurate weather outline on the instrument panel mounted indicator. It has been determined that this condition can be caused by the radar antenna mounting plate "flexing" during turbulence, distorting antenna scan.

This Service Release contains instructions to inspect the antenna mounting plate to determine the type of plate installed, and, if necessary, to reinforce or replace the plate to provide a rigid radar antenna mounting surface.

Instructions: Refer to attached sketch/instruction data for inspection, reinforcement or replacement details.

Material Required: 1. To reinforce existing bracket, refer to attached sketch/instruction data for material specifications;  
2. To replace existing bracket, one (1) each per aircraft Mounting Bracket, Piper Part No. 48881-02 @ suggested unit list price \$28.70.

Availability of Parts: 1. Reinforcement material, obtain locally;  
2. Replacement material - available through your Piper Field Service Facility.

Effective Date: This Service Release is effective upon receipt.

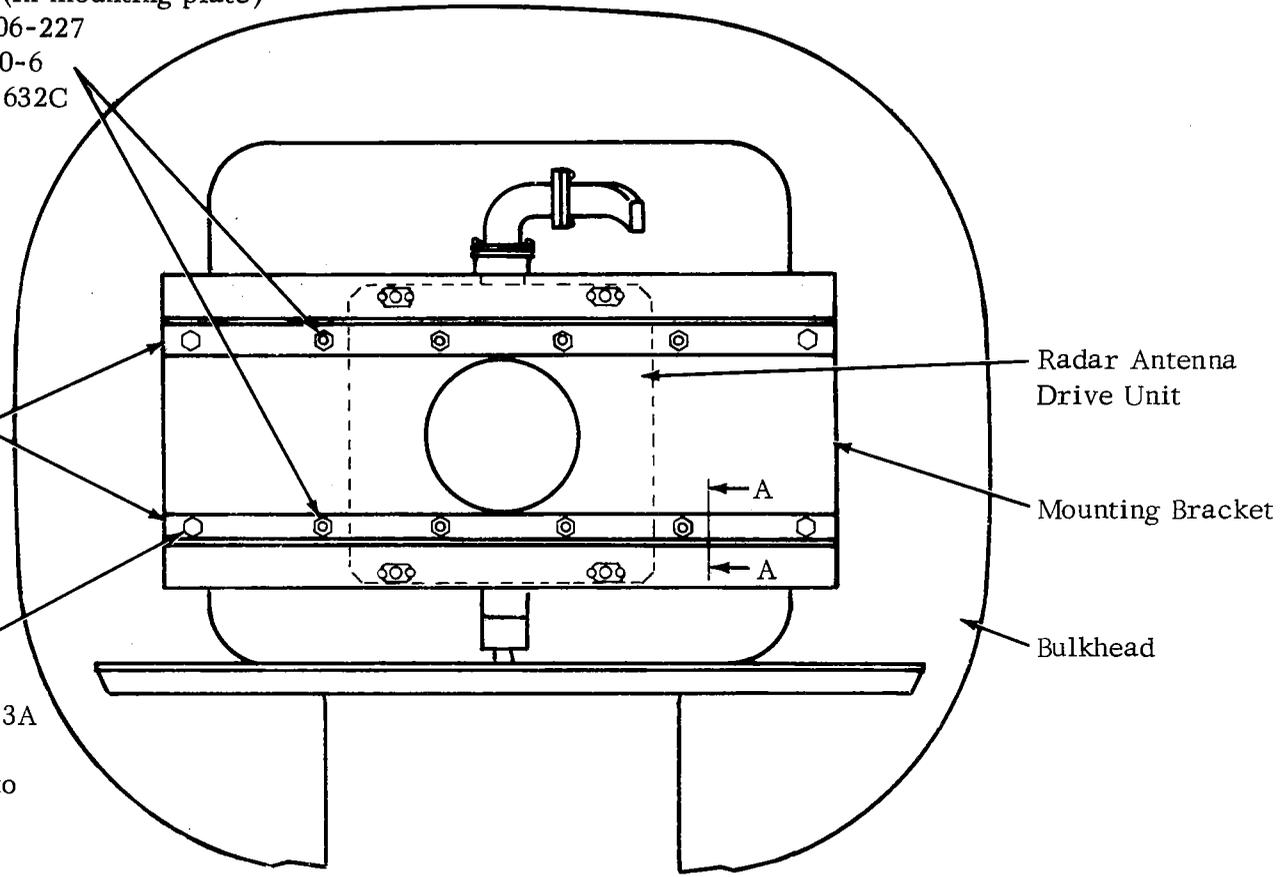
Summary: Please make arrangements with your Piper Field Service Facility for the inspection and (if required) the RDR-150 Radar System refinement described above. Either the reinforcement or replacement action (ref.: Material Required) may be accomplished - at your option. Reimbursement for one hour (per aircraft) labor charge is available through your Piper Field Service Facility in accordance with their respective credit application procedures.

SKETCH "A"

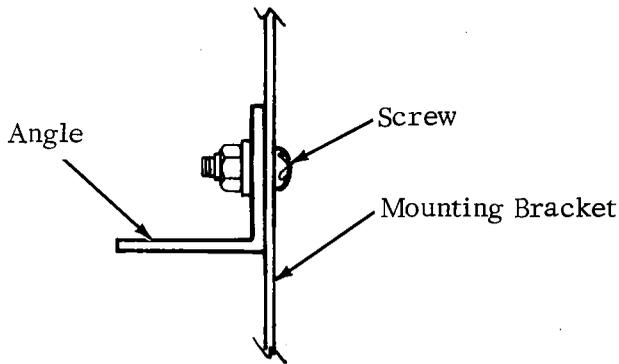
Drill .156 hole (in mounting plate)  
 Screw - MS35206-227  
 Washer - AN960-6  
 Nut - MS20365-632C  
 (8 req.)

Fabricate Angles  
 Per Figure 1

Existing Bolt - AN4-3A  
 (4 req.)  
 (.250 hole in Angle to  
 match .250 hole in  
 mounting bracket)



REAR VIEW OF BULKHEAD STA. - 24.50



SECTION A-A  
 Typical Screw Installation

Pre-Formed Angle - .063 2024-T4 Alum.  
 or  
 Fabricated Angle - .063 2024-T3 Alum.  
 (2 req.)

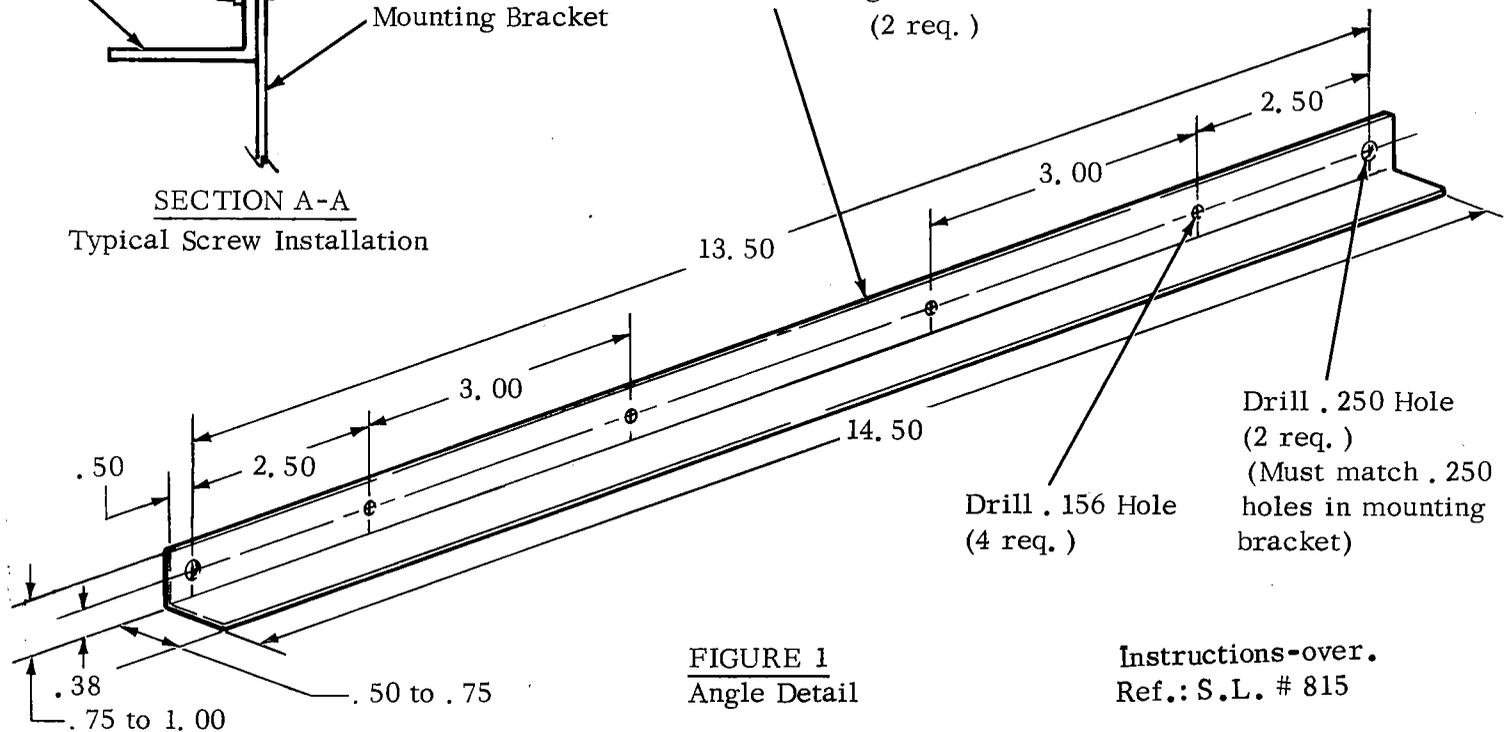


FIGURE 1  
 Angle Detail

Instructions-over.  
 Ref.: S.L. # 815

## INSTRUCTIONS

1. Gain access to the inside of the radome, bulkhead sta. -24.50, and inspect the zinc chromated mounting bracket which supports the radar antenna drive unit. If the mounting bracket is marked 48881-02 (flanged at top and bottom edges), there is no need for modification or replacement. If the mounting bracket is marked 28209-2 (flat .040" stock with no flange at top or bottom), it must be modified per step a., or replaced per step b.
  - a. MODIFICATION OF EXISTING BRACKET: (Refer to Sketch "A").
    - (1) Remove radar antenna drive unit mounting bracket from airplane.
    - (2) Fabricate two angles per Figure 1.
    - (3) Locate and drill (4) .156 holes and (2) .250 holes in each angle per Figure 1.
    - (4) Locate and drill (8) .156 holes in mounting bracket, as shown using the two angles fabricated in step (2) and (3) as a template.
    - (5) Attach the two angles to the mounting bracket using hardware as shown on Sketch "A".
    - (6) Reinstall mounting bracket assembly to bulkhead using existing hardware for attachment.
  - b. REPLACEMENT OF EXISTING BRACKET:
    - (1) Replace existing radar antenna drive unit mounting bracket with mounting bracket part no. 48881-02. Use existing hardware for attachment.
2. Make proper logbook entry of Service Letter compliance.

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LETTER SUPPLEMENT - PROCEDURAL OPERATING INFORMATION

Material Allowance: Not applicable.

Labor Allowance: One (1) hour per aircraft; comply with Product Condition/Compliance Report procedure.

Disposition of Parts in Stock:

<u>Part Number</u>	<u>Nomenclature</u>	<u>Code</u>
28209-02	Plate Assy., Radar Mounting	To be replaced by 48881-02

Disposition of Replaced Parts: Not applicable.