



# SERVICE LETTER

No. 916

Piper Aircraft Corporation

Lock Haven, Pennsylvania, U.S.A.

FAA Approved (PA-31/31-300/31-325/31-350)

July 17, 1981

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Subject: Elevator Control Stop Screw Replacement

Models Affected:

PA-31/31-300/31-325 Navajo  
PA-31-350 Chieftain  
PA-31P Pressurized Navajo  
PA-31T Cheyenne II  
PA-31T1 Cheyenne I

Serial Numbers Affected:

31-2 through 31-8112009 Inclusive  
31-5001 through 31-8152014 Inclusive  
31P-3 through 31P-7730012  
31T-7400002 through 31T-8120023  
31T-7804001 through 31T-8104025

Compliance Time: At owner/operator's discretion.

Purpose:

Improved elevator stop screws which incorporate a redundant safety wire feature have been developed and incorporated in current production aircraft. This Service Release announces the availability of material and provides instructions for field installation of these new stop screws.

Instructions:

NOTE: Refer to Section V of the appropriate Service Manual entitled "Rigging and Adjustment of Elevator Controls," and Piper Service Bulletin No. 649.

1. Remove the upper and lower tail cone.
2. Measure and record the distances that the top and bottom stop screws extend from the center elevator hinge assembly.
3. Loosen the locknuts and remove and discard the stop screws and locknuts.
4. Install new stop screws, Piper Part No. 71533-02, and locknuts, Piper Part Number 506 619. Adjust the stop screw assemblies to their proper extension as recorded in Instruction 2, and measure the elevator travel. Adjust the stop screws, if necessary, to obtain the travel specified in the rigging information of the appropriate Service Manual.
5. Tighten the locknuts.
6. Insert MS20995-C32 safety wire through the head of the screw, make one complete wrap around the shank of the screw, pass the safety wire through the locknut, and finish the wire run through the holes in forging.  
(See Sketch A.)

(over)

Instructions: (continued)

NOTE: The lock wire should always be installed and twisted so that the loop around the head is held firmly down.

- 7. Reinstall tail cone.
- 8. Make appropriate logbook entry of compliance.

Material Required:

<u>Part Number</u>	<u>Nomenclature</u>	<u>Quantity</u>
71533-02	Stop Screws	Two (2) each
506 619	MS21340-22 Lock Nuts	Two (2) each
151 296	MS20995-C32 Safety Wire	As Required

Availability of Parts:

Your Piper Field Service Facility.

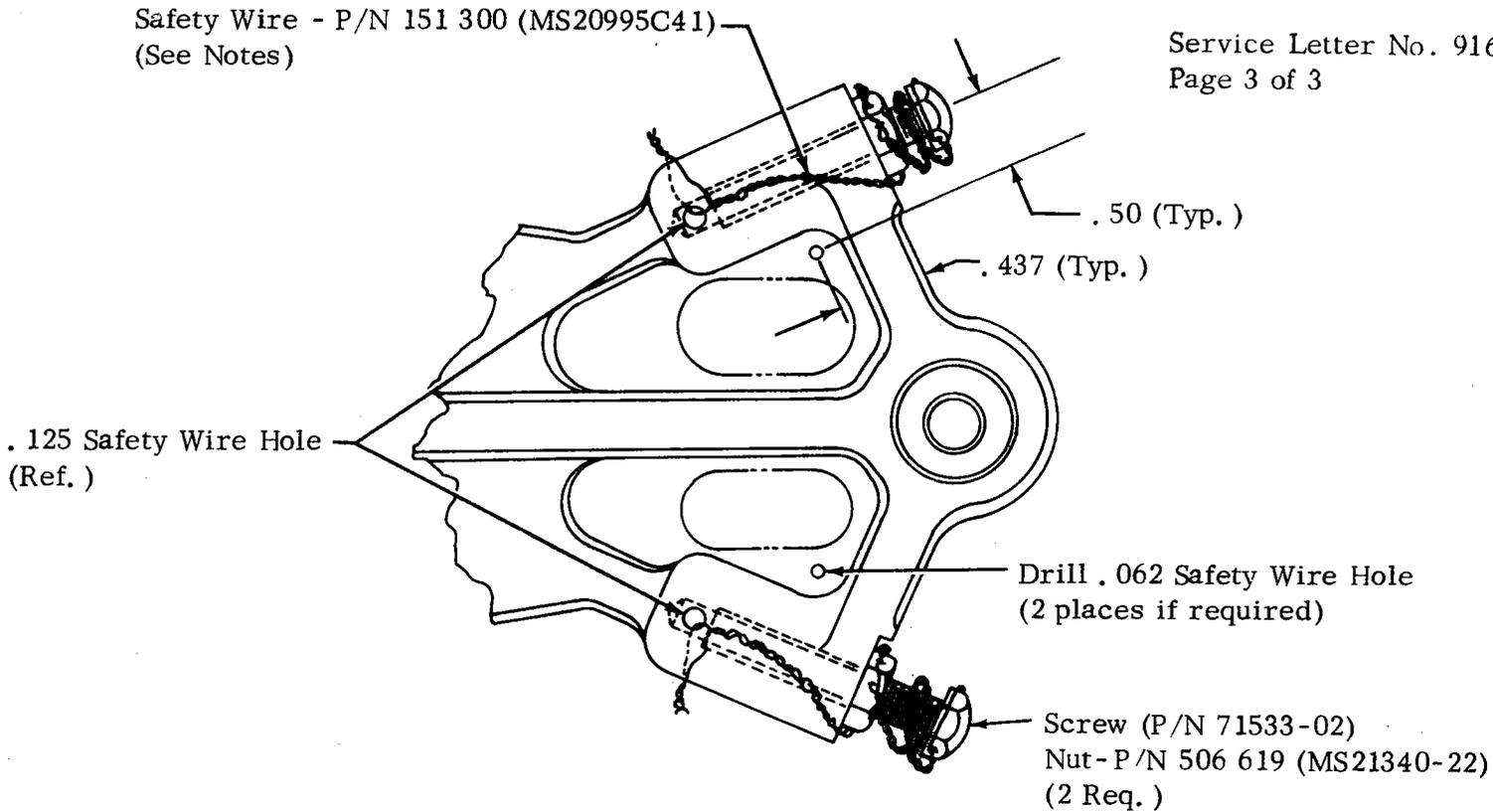
Effectivity Date:

This Service Release is effective upon receipt.

Summary:

Please contact your Piper Field Service Facility to arrange for compliance with the provisions of this Service Release in accordance with Compliance Time, above.

Safety Wire - P/N 151 300 (MS20995C41)  
(See Notes)



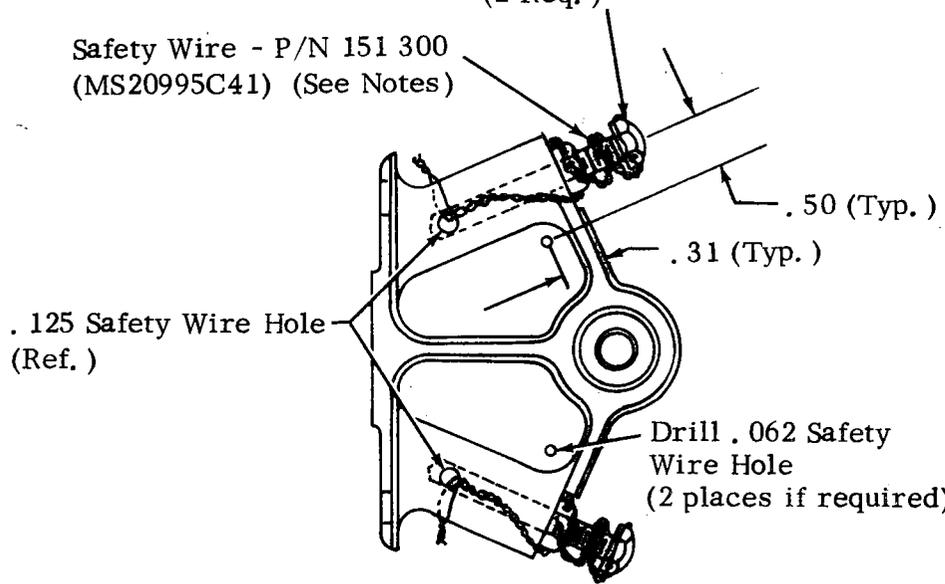
ELEVATOR CENTER HINGE  
(PA-31P, PA-31T and PA-31T1)

Screw (P/N 71533-02)  
Nut -P/N 506 619 (MS21340-22)  
(2 Req.)

Safety Wire - P/N 151 300  
(MS20995C41) (See Notes)

NOTES

1. If forging does not have two (2) .125 safety wire holes as shown, locate and drill two (2) .062 safety wire holes as indicated.
2. Insert safety wire thru head of screw and make one complete wrap around shank of screw next to locknut. Pass safety wire thru locknut and finish wire run thru safety wire hole in forging.
3. The safety wire should always be installed and twisted so that the loop around the screw head stays down and does not tend to come up over the screw head and leave a slack loop.



ELEVATOR CENTER HINGE  
(PA-31-300/310/325 and PA-31-350)