



# SERVICE No. 621 BULLETIN

Piper Aircraft Corporation

Lock Haven, Pennsylvania, U.S.A.

FAA Approved

October 13, 1978

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<u>Subject:</u>	Elevator Cable Inspection and Cable Guard Installation
<u>Models Affected:</u>	<u>Serial Numbers Affected:</u>
PA-31-350 Chieftain	31-5001 through 31-7852151
<u>Compliance Time:</u>	Within the next twenty-five (25) hours of operation or at next scheduled inspection event, whichever occurs first.

Purpose:

Field reports have been received of contact occurring between the elevator control cable and the lightening hole flange at station 87.50 bulkhead. This service release provides instructions for adjusting elevator cable tension, installing cable guards, and adjusting hydraulic return line clearance.

Instructions:

1. Remove the pilot's seat and floor panels under the pilot's seat (between station 57 and station 123).
2. Inspect the elevator control cables for proper tension per the PA-31-350 Navajo Chieftain Service Manual and attached temperature conversion chart. If proper tension does not exist, rig and adjust elevator control cables per the above listed Service Manual and conversion chart.
3. Obtain a cable guide tube PAC Part Number 71045-02 or fabricate per Figure 1 on attached sketch. Install cable guide tube in lightening hole of bulkhead, station 87.50, as shown on sketch.
4. Obtain a 12 inch long piece of nylon spiral sleeving .250 O.D. x .023 wall thickness, PAC Part Number 189 545, and install on hydraulic return line as shown on sketch. Use two ty-raps for attachment.
5. Inspect clearance between hydraulic return line and fuselage skin, aft of station 87.50, as shown in Section A-A. Adjust line, if necessary, to obtain .25 distance.
6. Reinstall floor panels and pilot's seat.
7. Make proper logbook entry of Service Bulletin 621 compliance.

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Material Required:

One each per aircraft:

Cable Guide - Piper Part Number 71045-02 (or fabricate per Sketch).

Nylon Spiral Sleeving - Piper Part Number 189 545 (or fabricate per Sketch).

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 make arrangements for compliances with this Service Release in accordance with Compliance Time, above. Reimbursement for material required and for up to one (1) hour of labor expense is available from your Piper Field Service Facility in accordance with their respective material/labor allowance application procedure.

Cable Guide Tube - PAC P/N 71045-02 or  
See Figure 1

Ends of Cable Guide Tube Must  
Butt at Top of Hole.

Bulkhead Sta 87.50

FORWARD

Aft Elevator Control Cables

Aileron Control Cables (Ref.)

Rudder Control Cable (Ref.)

Hydraulic Return Line

TY-RAP

TY-RAP

Nylon Spiral Sleaving - .250 O.D. x .023 wall x 12 inches long  
(PAC P/N 189 545)

.375 O.D. x .0625 wall thickness  
Polyethylene Tube

9.85 (Ref.)

10.05

15°

.25 Clearance Between  
Hydraulic Return Line  
And Fuselage Skin

Split Along Entire  
Length Of Tube

SECTION A - A

FIGURE 1

Cable Guide Tube Detail

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# PA-31-350 CABLE RIGGING TENSION VS. TEMPERATURE

