



SERVICE BULLETIN

No. 664

Piper Aircraft Corporation

Lock Haven, Pennsylvania, U.S.A.

FAA/DOA SO-2 Approved

December 14, 1979 M

Subject: Elevator Torque Tube Attachment Inspection

Models Affected: Serial Numbers Affected:

PA-31, PA-31-325 Navajos
PA-31-350 Chieftain

31-7712059 through 31-7912094
31-7752101 through 31-7952185

Compliance Time: Within the next one hundred (100) hours of operation or at the next scheduled inspection, whichever occurs first.

Purpose:

On the above-listed aircraft, a possibility exists of the elevator torque tube attachment to the elevator butt ribs having anchor nuts which do not meet the self-locking requirement. Should the bolts back out of the anchor nuts, impairment of elevator operation or loss of elevator control could result.

This Service Release provides instructions for the inspection of the anchor nuts for self-locking capability, and for bolt replacement and safetying, if required.

Instructions:

1. Remove tail fairing to gain access to the elevator torque tube assembly (see attached sketch).
2. Remove one of the bolts that attach the torque tube to the elevator.
3. Reinstall the bolt using just the fingers. If using just the fingers to tighten, the head of the bolt contacts the forging, loss of the self-locking feature of the anchor nut is indicated.
4. Repeat steps 2 and 3 above on each of the eight (8) affected bolts.

NOTE:

Leaving two (2) bolts per side intact will retain the elevator in the rigged position and will facilitate reinstallation of the bolts.

(over)

Instructions: (continued)

5. If all eight (8) anchor nuts prove to be self-locking, torque bolts to 35-40 inch-pounds, replace tail fairing, and make appropriate logbook entry of compliance with this service release.
6. If one (1) or more of the anchor nuts are not self-locking, then all eight (8) of the affected bolts must be replaced as follows:
 - a. Refer to attached Sketch, Figure 1.
 - b. Replace the eight (8) bolts with drilled head AN3H-5A bolts (Piper Part Number 401 267). Use existing AN960-10L washers.
 - c. Torque bolts to 35-40 inch-pounds.
 - d. Safety wire the forward two (2) bolts and the aft two (2) bolts together with MS20995-C32 Safety Wire (Piper Part Number 151 296).
 - e. Reinstall tail fairing and make appropriate logbook entry of compliance with this Service Release.

Material Required:

If required:

1. Eight (8) each AN3H-5A Bolts, Piper Part Number 401 267.
2. As necessary, MS20995-C32 Safety Wire (Piper Part Number 151 296).

Availability of Parts:

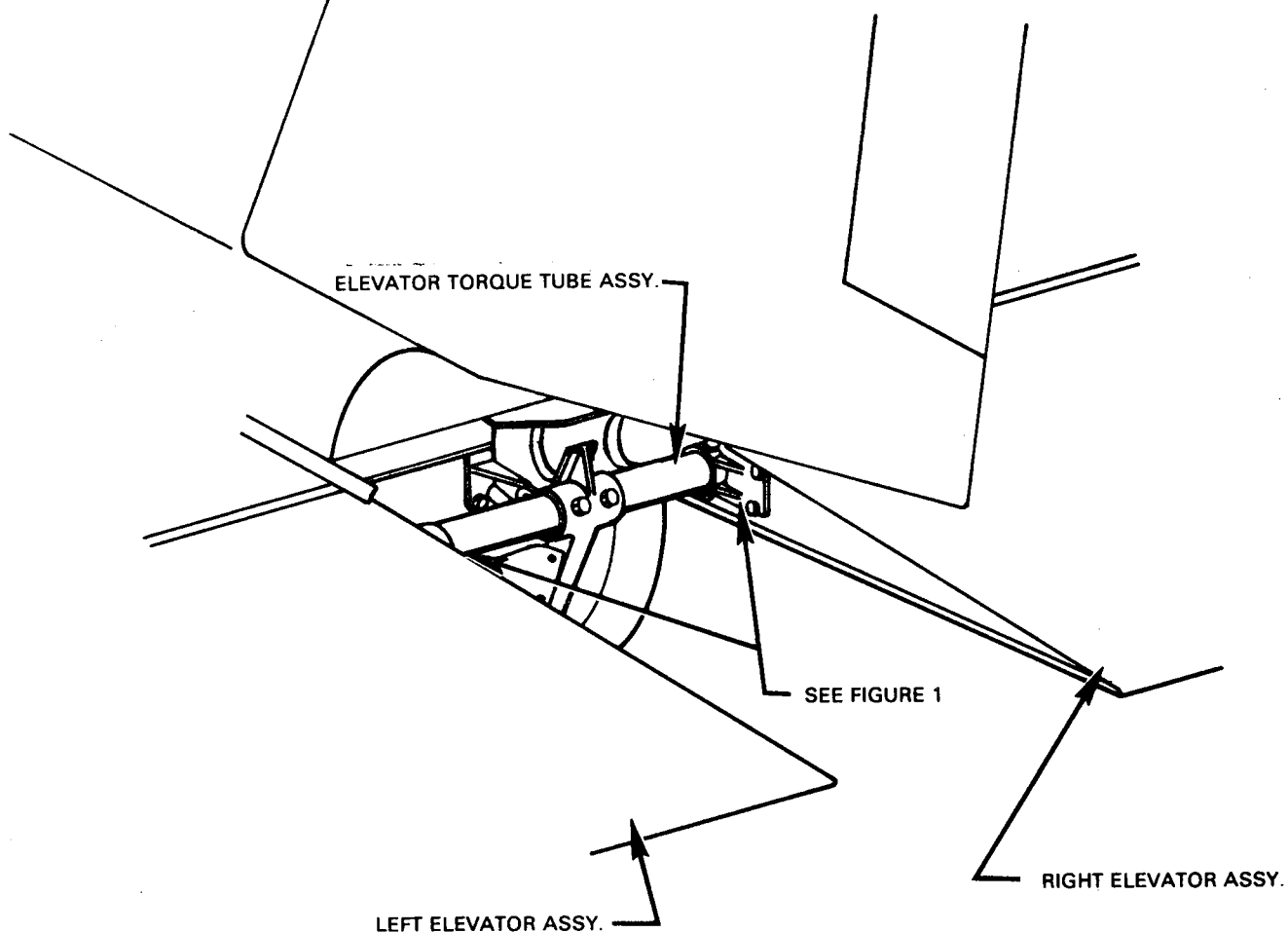
Your Piper Field Service Facility.

Effectivity Date:

This Service Release is effective upon receipt.

Summary:

Please contact your Piper Field Service Facility to make arrangements for compliance with this Service Release in accordance with Compliance Time, above.



BOLT — P/N 401 267 (AN3H-5A)
 WASHER — AN960-10L (REF.)
 4 REQ. (LEFT AND RIGHT)
 (TORQUE BOLTS 35-40 IN/LBS)

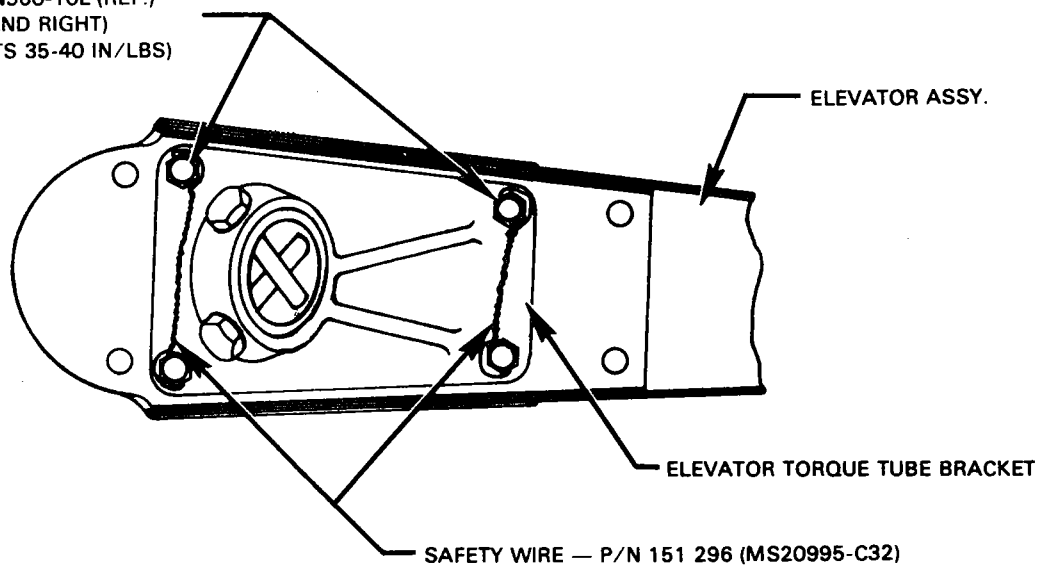


FIGURE 1

RIGHT ELEVATOR BRACKET SHOWN - LEFT ELEVATOR BRACKET OPPOSITE