



# SERVICE BULLETIN

No. 487

Piper Aircraft Corporation

Lock Haven, Pennsylvania, U.S.A.

"DOA EA-1 Approved"

November 7, 1975

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Subject:

Control Shaft Collar Attachment Modification

Models Affected:

PA-31-300, PA-31-310 Navajo &  
PA-31-325 Navajo "C/R"  
PA-31-350 Navajo Chieftain  
PA-31P Pressurized Navajo  
PA-31T Cheyenne

Serial Numbers Affected:

31-2 to 31-7612009 Inclusive  
31-5001 to 31-7652018 Inclusive  
31P-1 to 31P-7630001 Inclusive, and 31P-7630003  
31T-7400002 to 31T-7620002 Inclusive, 31T-7620004,  
31T-7620005 and 31T-7620007

Compliance Time:

Within the next fifty (50) hours of operation.

Purpose:

A recent report from the field indicates that the AN 3H3A bolts which attach the control shaft collar to the control shaft tube can be of insufficient length to allow proper bolt thread engagement. Should this condition exist, the bolts can become detached from the assembly, affecting control column function.

This release provides material and instructions to replace the existing control shaft collar attachment bolts with longer attachment bolts and related hardware to insure a secure attachment of the control shaft collar to the control shaft tube (refer to attached sketch for an illustrated view of the area).

Instructions:

1. Refer to attached sketch; move control wheel to gain access to roller assembly. Rotate control wheel as required to gain access to each bolt.
2. Cut lock wire, as shown on sketch detail.

NOTE: There are two attachment bolts and washers for each collar; steps 3 and 4, below, are to be accomplished on one bolt/washer assembly at a time; i.e., do not remove or replace both bolts simultaneously.

3. Remove AN 3H3A bolt and corresponding AN 960-10 washer.

Instructions: (Continued)NOTE:

PA-31-300 and PA-31-310 Navajos (serial number 31-2 to 31-7300928 Inclusive) and PA-31P Pressurized Navajos (serial numbers 31P-1 to 31P-7300113 Inclusive): If any aircraft within this group have not complied with Piper Service Letter No. 643 dated February 5, 1973 (Control Shaft Collar Restraining Strap Installation), it is recommended that this be accomplished at this time.

4. Install AN 3H4A bolt (Piper part number 401 264) and AN 960-10L washer (Piper part number 407 584).
  5. Using a 3/8" socket and a low-scale, inch-pound torque wrench, tighten bolt to 20 inch-pounds  $\pm$  2 inch-pounds; if this torque value can be maintained without stripping the threads repeat steps 3, 4, and 5 on other bolt.
    - a. If 20 inch-pounds  $\pm$  2 inch-pounds torque value cannot be maintained on either bolt, contact the factory (Lock Haven Facility) Customer Service Dept. for further information.
  6. After completion of above steps, lock-wire bolts (see sketch).
  7. Repeat steps 1 through 6 with other control wheel.
  8. Make appropriate log book entry indicating compliance with this Service Bulletin.
1. Four (4) each per aircraft AN 3H4A bolt, Piper part number 401 264;
  2. Five (5) each per aircraft AN 960-10L washer, Piper part number 407 584.

Material Required:

Your Piper Field Service Facility.

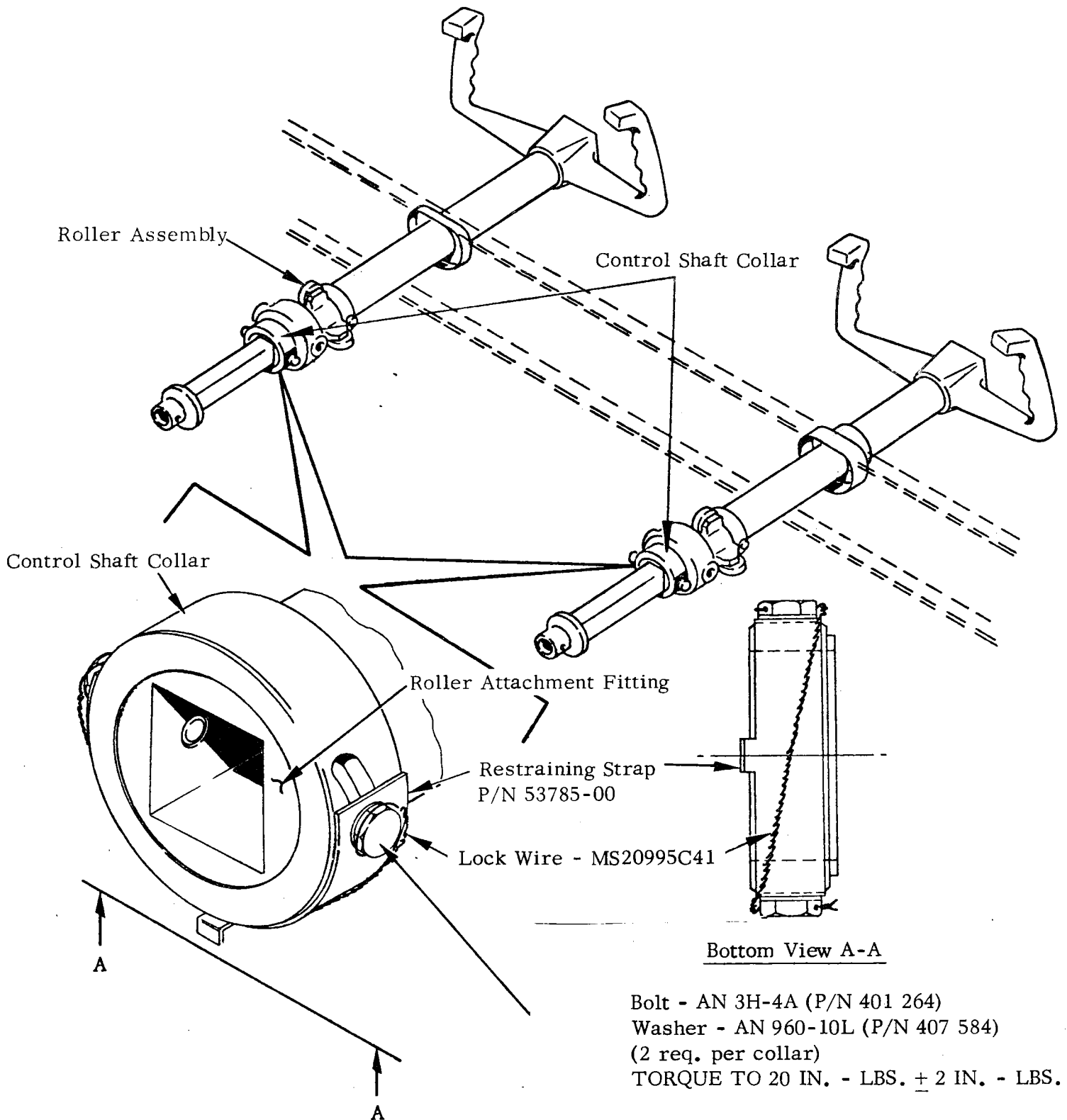
Availability of Parts:

This Service Bulletin is effective upon receipt.

Effectivity Date:

Please contact your Piper Field Service Facility to make arrangements for compliance with this Service Bulletin in accordance with the provisions of Compliance Time, above. Material required for this modification is available at no charge through your Piper Field Service Facility.

Summary:



Bolt - AN 3H-4A (P/N 401 264)  
 Washer - AN 960-10L (P/N 407 584)  
 (2 req. per collar)  
 TORQUE TO 20 IN. - LBS.  $\pm$  2 IN. - LBS.

**NOTE:** Inspect to insure that the bolts are not protruding through the Roller Attachment Fitting by placing a .040 feeler gage between the fitting and the square tube. Should the bolt protrude, add one (1) additional AN 960-10L washer under the head and recheck clearance at 20 IN. - LBS.  $\pm$  2 IN. - LBS.