Piper Aircraft, Inc.
2926 Piper Drive
Vero Beach, FL, U.S.A. 32960

SERVICE BULLETIN NO. 1452

PIPER CONSIDERS COMPLIANCE MANDATORY

Date: September 15, 2026 (S) (M)

SUBJECT:

TEE-BAR SPROCKET INSPECTION

MODELS AFFECTED:

Group A:

PA-28-140 Cherokee 140	28-20001 thru 28-26946, 28-7125001 thru 28-7725290
PA-28-150 Cherokee 150	28-01, 28-1 thru 28-4377, 28-1760A
PA-28-160 Cherokee 160	28-03, 28-1 thru 28-4377, 28-1760A
PA-28-180 Cherokee 180	28-E10, 28-E13, 28-671 thru 28-5859, 28-7105001 thru 28-7505260
PA-28-235 Cherokee 235	28-E11, 28-10001 thru 28-11378, 28-7110001 thru 28-7710089
PA-28-151 Cherokee Warrior	28-7415001 thru 28-7715314
PA-28-161 Cherokee Warrior II	28-7716001 thru 28-7616057, 2816001 thru 2816109
PA-28-161 Warrior III / Warrior	2816110 thru 2816119, 2842001 thru 2842420
PA-28-161 Cadet	2841001 thru 2841350, 2841360 thru 2841365
PA-28-181 Archer II	28-7690001 thru 28-8690056, 2890001 thru 2890205
PA-28-181 Archer III	2890206 thru 2890231, 2843001 thru 2843949, 2881001 thru 2881454
PA-28-181 Piper Pilot	28020001 thru 28020015
PA-28-201T Turbo Dakota	28-7921001 thru 28-7921095
PA-28-236 Dakota	28-7911001 thru 28-8611009, 2811001 thru 2811050
PA-28R-180 Arrow	28R-30001 thru 28R-31270, 28R-7130001 thru 28R-7130013
PA-28R-200 Arrow / Arrow II	28R-35001 thru 28R-35820, 28R-7135001 thru 28R-7635545
PA-28R-201 Arrow III / Arrow	28R-7737001 thru 28R-7837317, 2837001 thru 2837061 2844001 thru 2844185
PA-28R-201T Turbo Arrow III	28R-7703001 thru 28R-7803373, 2803001 thru 2803015
PA-28RT-201 Arrow IV	28R-7918001 thru 28R-8218026
PA-28RT-201T Turbo Arrow IV	28R-7931002 thru 28R-8631005, 2831001 thru 2831038
PA-32-260 Cherokee Six 260	32-1 thru 32-1297, 32-7100001 thru 32-7800008
PA-32-300 Cherokee Six 300	32-40000 thru 32-40974, 32-7140001 thru 32-7940290
PA-32S-300 Cherokee Six Seaplane	32S-15, 32S-40001 thru 32S-40974, 32S-7140001 thru 32S-7240137
PA-32-301 Saratoga	32-8006003 thru 32-8606023, 3206001 thru 3206060

SERIAL NUMBERS AFFECTED:

ATA/JASC: 2710

(OVER)

MODELS AFFECTED (cont.):	**SERIAL NUMBERS AFFECTED** (cont.):
Group A (cont.):	
PA-32-301T Turbo Saratoga	32-8024001 thru 32-8424002
PA-32-301FT Piper 6X	3232001 thru 3232074
PA-32-301XTC Piper 6XT	3255001 thru 3255051
PA-32R-300 Lance	32R-7680001 thru 32R-7880068
PA-32R-301 Saratoga SP / Saratoga II HP	32R-8013001 thru 32R-8613005, 3213001 thru 3213103, 3246001 thru 3246244
PA-32R-301T Turbo Saratoga SP	32R-8029001 thru 32R-8629006, 3229001 thru 3229003
PA-32R-301T Saratoga II TC	3257001 thru 3257493
PA-32RT-300 Lance II	32R-7885001 thru 32R-7985106
PA-32RT-300T Turbo Lance II	32R-7787001, 32R-7887002 thru 32R-7987126
PA-34-200 Seneca	34-7250001 thru 34-7450220
PA-34-200T Seneca II	34-7570001 thru 34-8170092
PA-34-220T Seneca III	34-8133001 thru 34-8633014, 3448001 thru 3448037
PA-34-220T Seneca IV	3448038 thru 3447029
PA-34-220T Seneca V / Seneca	3449001 thru 3449514
PA-44-180 Seminole	44-7995001 thru 44-8195026, 4495001 thru 4495013, 4496001 thru 4496519
PA-44-180T Turbo Seminole	44-8107001 thru 44-8207020
Group B:	
PA-28-181 Archer III	2881455 thru 2881943
PA-28-181 Piper Pilot	28020016 thru 28020235
PA-44-180 Seminole	4496520 thru 4496619

COMPLIANCE TIME: Within the next 25 hours time in service or next scheduled annual inspection, whichever comes first.

APPROVAL: The content of this service document has been reviewed and determined to be in accordance with applicable Federal Aviation Regulations.

PURPOSE: There have been reports of a damaged (cracked, loose, etc.) stop pin on the pilot control wheel sprocket. In addition, some of the affected sprockets may also have a non-conforming inner diameter. Left uncorrected, this may result in the aileron flight controls jamming, over-steering, or over-stressing associated aileron flight control components. This service bulletin mandates a review of the aircraft logbook for installation of a service replacement sprocket, a one-time inspection as applicable and, on condition, replacement of the sprocket.

INSTRUCTIONS:

NOTE: To facilitate this inspection, a second qualified mechanic may be required.

1. Review 'Models Affected', above, and determine which group your aircraft is listed under. For aircraft in **Group B**, proceed to step 2; for aircraft in **Group A**, review the airplane maintenance records/logbook for the installation of pilot control wheel sprocket, Piper part number (P/N) 62839-000, between the years of 2021 thru 2026.
   - If there are records of a replacement sprocket being installed, proceed to step 2 and perform both Test #1 and Test #2.
   - If the records during this time period are incomplete or missing, presume a service replacement sprocket has been installed; proceed to step 2 and perform both Test #1 and Test #2.
   - If there are no records of a service replacement sprocket being installed, proceed to step 2 and only perform Test #2. (Test #1 is not required.)
2. Inspection

   Test and inspect the pilot control wheel sprocket for conformity. Perform the required tests as determined in step 1.

   a. Remove the pilot seat to gain access to the pilot control wheel sprocket, located forward of the instrument panel.

   b. Test #1 − Sprocket Inner Diameter

      Without removing the sprocket from the tee-bar assembly, measure the inner diameter of the sprocket.

      NOTE: A sprocket with an inner diameter exceeding 0.442 inches will typically have some free play and can wiggle when installed due to difference in the sprocket's inner diameter and the shaft pin's diameter.

      - If the inner diameter exceeds 0.442 inches, the sprocket is non-conforming. Proceed to step 3.
      - If the inner diameter is 0.441−0.442 inches, the sprocket is conforming. Proceed to step 2.c.

   c. Test #2 − Sprocket Stop Pin

      WARNING: TO PREVENT DAMAGE TO THE AILERON FLIGHT CONTROLS, DO NOT APPLY PULLING FORCE GREATER THAN 50 LBS.

      1) Using two straps and a spring scale as depicted in Figure 1, pull to rotate the pilot control wheel to the left full stop while applying a force of 45–50 lbs.
      2) Using the co-pilot control wheel, ensure the control column wheels are neutral and pushed full forward. Locate and inspect the stop pin of the pilot control wheel sprocket for signs of damage (cracked, loose, etc.).
         - If the stop pin is damaged, the sprocket is non-conforming. Proceed to step 3.
         - If the stop pin is not damaged, the sprocket is conforming. Proceed to step 4.
3. If the pilot control wheel sprocket is non-conforming, replace it.

   a. For PA-28-140 (S/Ns 28-20001 thru 21845, 28-21931 thru 21934), PA-28-150 (S/Ns 28-1 thru 28-670, 28-725 thru 28-3377), PA-28-160 (S/Ns 28-1 thru 28-670, 28-725 thru 28-3377), PA-28-180 (S/Ns 28-671 thru 28-3377), PA-28-235 (S/Ns 28-10001 thru 28-10719), PA-32-260 (S/Ns 32-1 thru 32-600), perform the following:

      1) Procure a replacement sprocket.
      2) Remove the existing sprocket from the tee-bar and retain fastener hardware on condition. Inspect the existing sprocket and note the position of the bolt hole that is drilled through the hub.
      3) Drill a 0.186 +0/-0.0005 inch hole through the hub of the replacement sprocket matching the position of the hole in the hub of the original (existing) sprocket (see Detail B of Figure 2 for an example). To facilitate drilling, a drill bushing may be fabricated to concentrically drill the replacement sprocket.

         If difficulties arise when drilling the sprocket and a 0.186 +0/-0.0005 inch hole cannot be accomplished, place the replacement sprocket onto the shaft of the shaft assembly and enlarge the hole in the sprocket and shaft to 0.1898−0.1913 inches.

b. For all other aircraft, perform the following:

1) Procure a replacement sprocket and shaft assembly.

2) Remove and replace the sprocket and shaft assembly on the pilot controls column. Secure the shaft assembly to the control wheel column tube with fastener hardware. (Replace hardware on condition.) See View C-C of Figure 2. Discard fastener hardware used to secure the sprocket to the tee-bar/ shaft assembly.

3) Prior to drilling, ensure the aileron flight controls (i.e. control wheels) are at neutral. Position the sprocket onto the shaft assembly so the stop pin of the sprocket is on the outboard side of the tee-bar, parallel with the arm of the tee-bar, and maintains equal distance between both stop bolts on the tee-bar as shown in View A-A of Figure 2.

4) Drill a 0.1898−0.1913 inch hole in the sprocket and shaft of the shaft assembly as shown in Detail B of Figure 2. To facilitate drilling, a drill bushing may be fabricated to concentrically drill the replacement sprocket.

c. If not yet accomplished, route the aileron roller chain around the replacement sprocket and install the replacement sprocket.

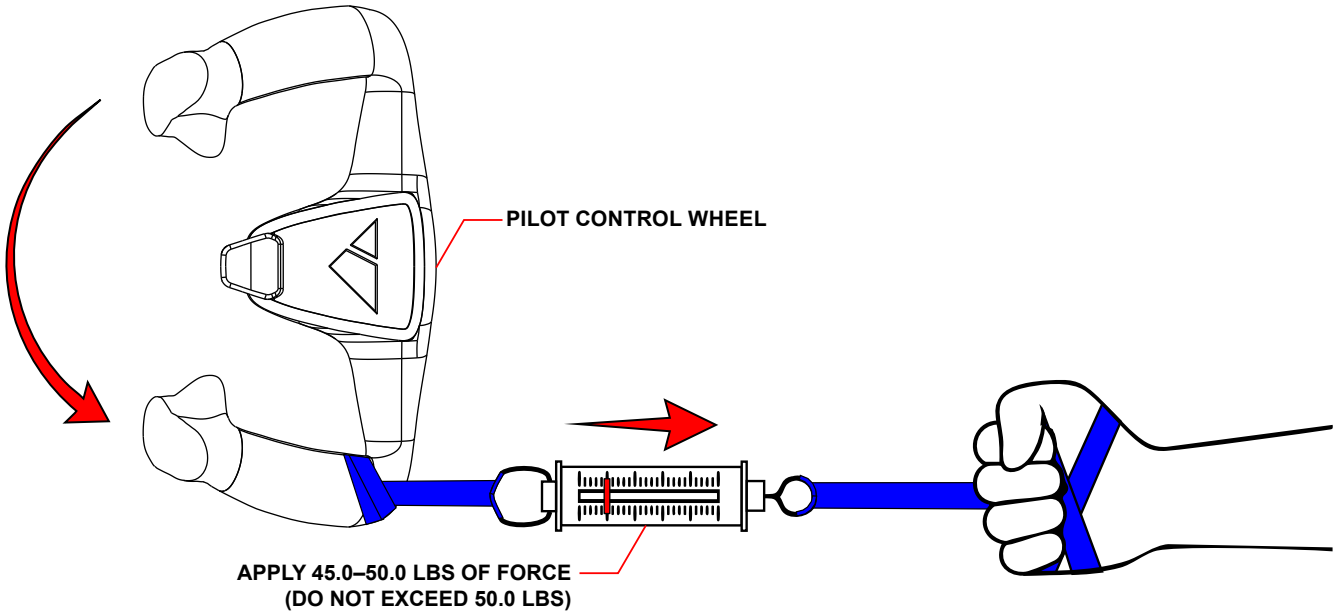
d. Verify that free play between the sprocket and tee-bar does not exceed 0.010 inches and no drag exists. If necessary, add brass shims, Piper P/N 62833-152, between the sprocket and tee-bar to eliminate any free play that may occur due to tolerance stack up. See View C-C of Figure 2. Ensure no drag exists.

e. Secure the replacement sprocket with the appropriate fastener hardware listed in View A-A of Figure 2.

f. Perform a system check of the flight controls to ensure proper function. Verify the aileron control cables have the correct tension and adjust if necessary. Refer to Chapter 27-10-00 of the applicable airplane maintenance manual or Section V of the applicable service manual for instructions.

g. Install the pilot seat.

4. Make a logbook entry documenting compliance with this service bulletin.



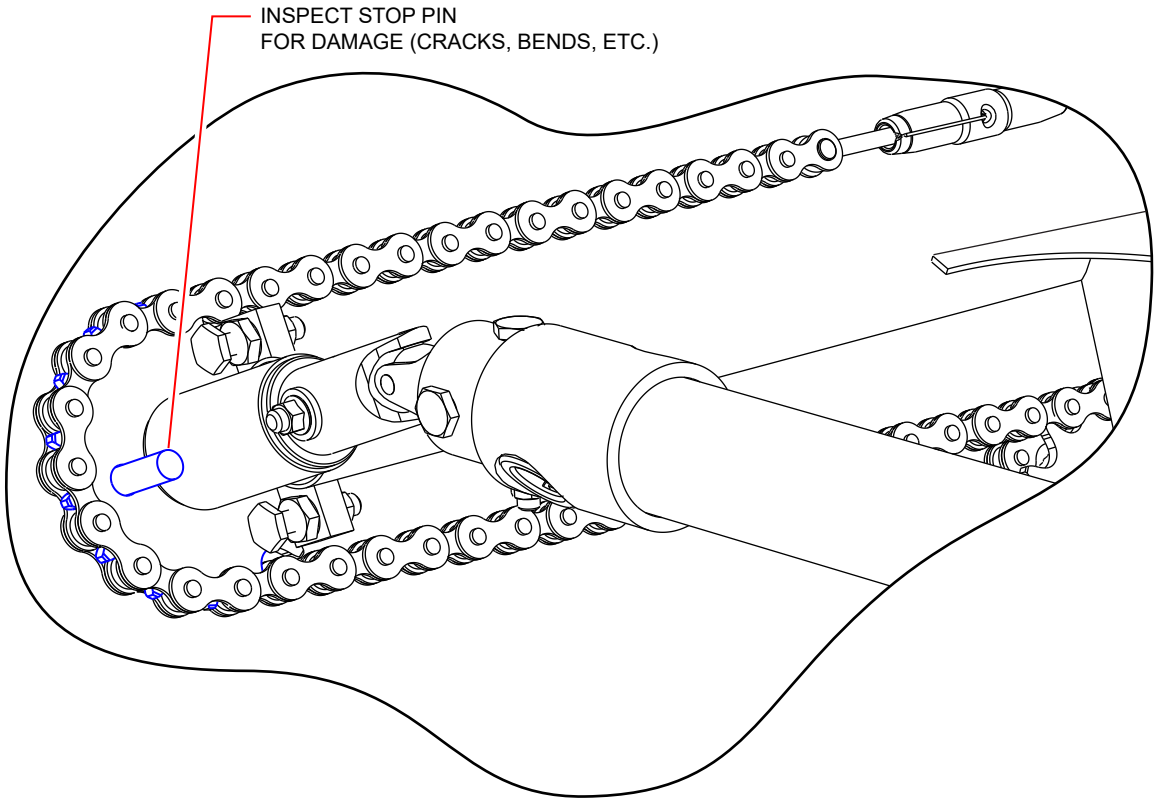


Figure 1
Stop Pin Test on Pilot Control Sprocket

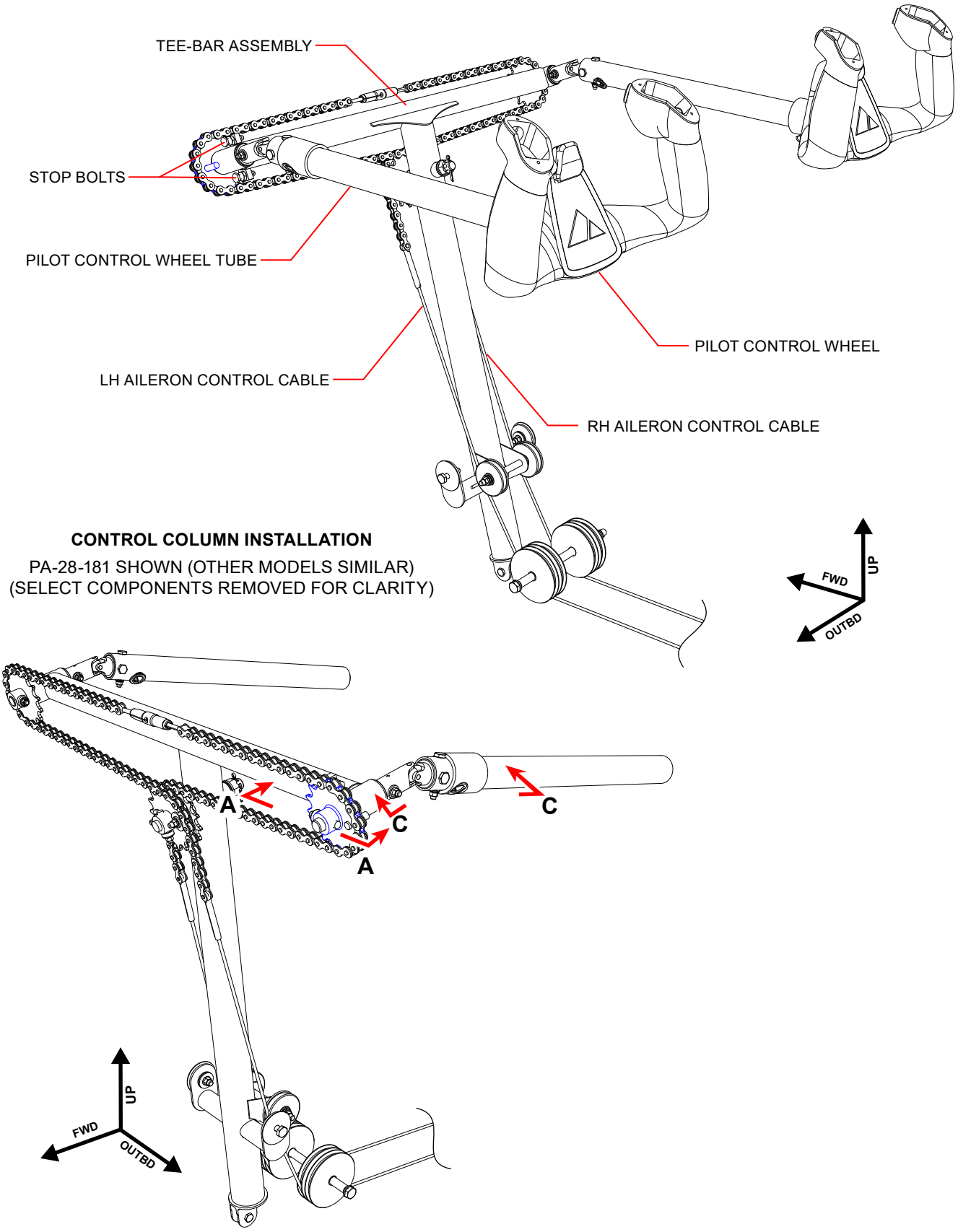
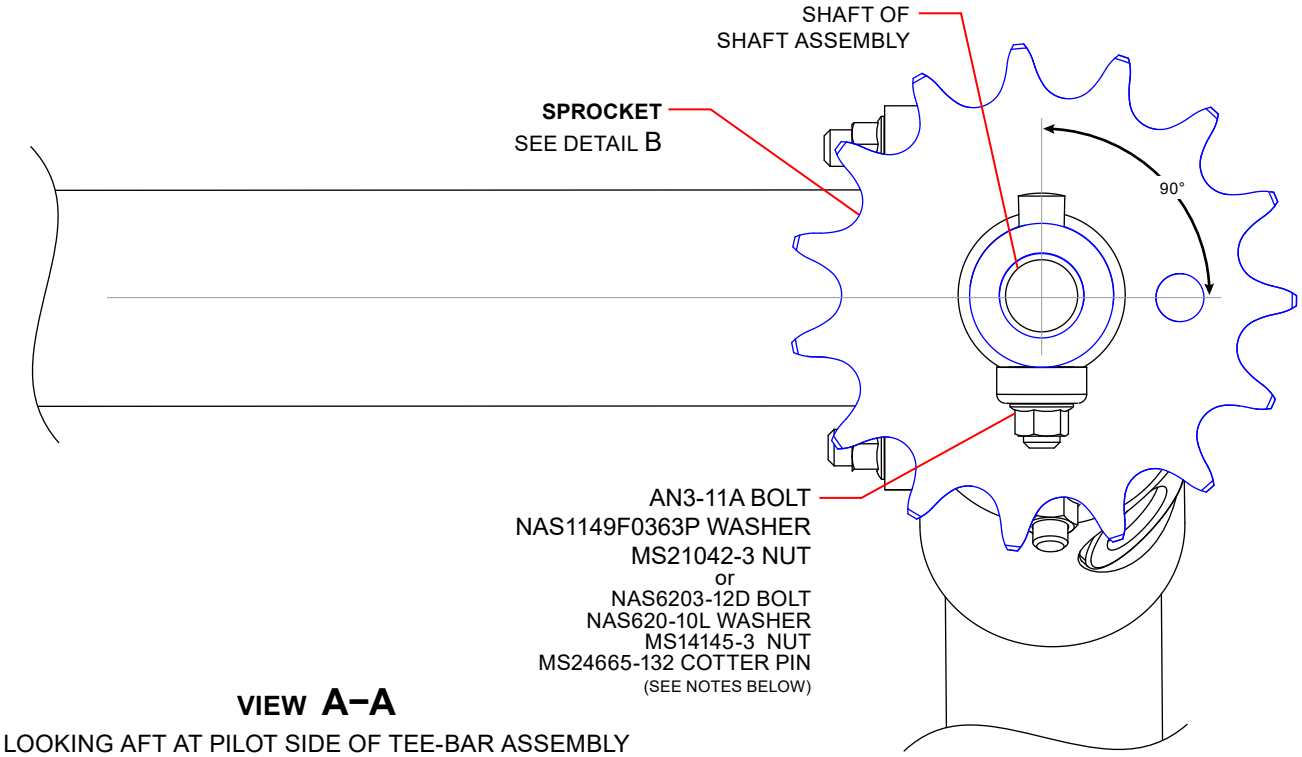


Figure 2 (Sheet 1 of 3)
Pilot Control Wheel Sprocket Inspection



NOTES: For the following aircraft:

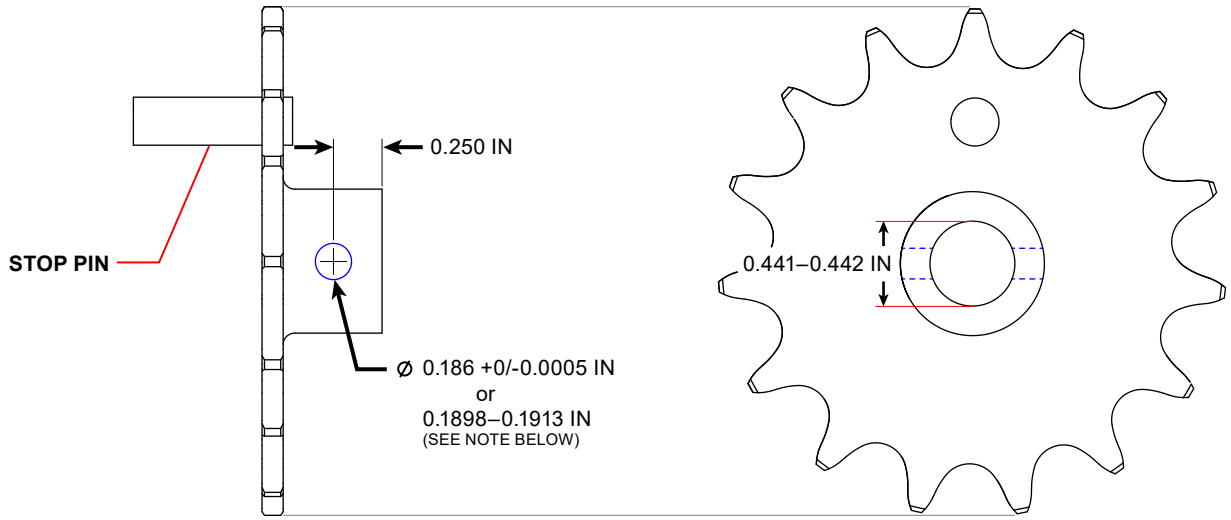
- PA-28-140 (S/Ns 28-20001 thru 21845, 28-21931 thru 21934)
- PA-28-150 (S/Ns 28-1 thru 28-670, 28-725 thru 28-3377)
- PA-28-160 (S/Ns 28-1 thru 28-670, 28-725 thru 28-3377)
- PA-28-180 (S/Ns 28-671 thru 28-3377)
- PA-28-235 (S/Ns 28-10001 thru 28-10719)
- PA-32-260 (S/Ns 32-1 thru 32-600)

Use the following fastener hardware to secure the replaced sprocket:

- For 0.186 +0/-0.0005 inch drilled holes, use AN3-11A Bolt NAS1149F0363P Washer, and MS21042-3 Nut.
- For 0.1889–0.1913 inch drilled holes, use NAS6203-12D Bolt, NAS620-10L Washer, MS14145-3 Nut, and MS24665-132 Cotter Pin.

For all other aircraft, secure the replacement sprocket with NAS6203-12D Bolt, NAS620-10L Washer, MS14145-3 Nut, and MS24665-132 Cotter Pin.

Figure 2 (Sheet 2 of 3)
Pilot Control Wheel Sprocket Inspection



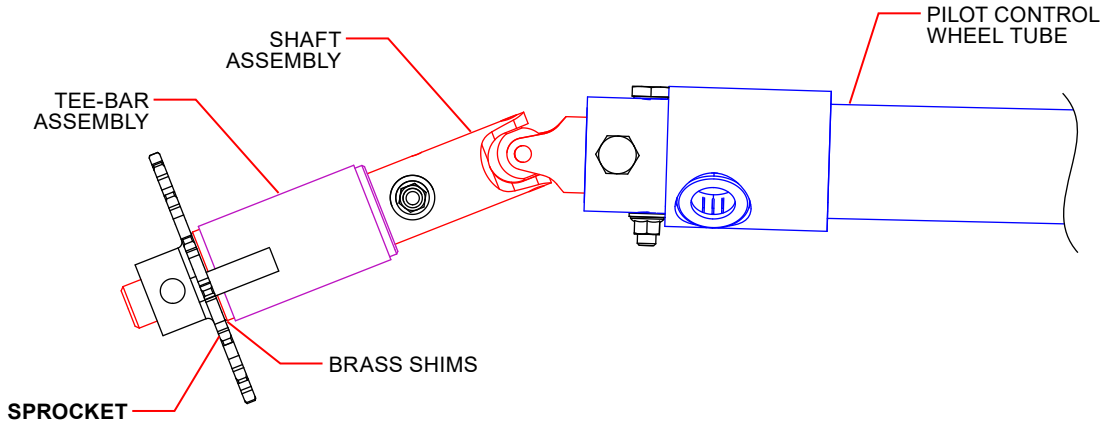
DETAIL B
PILOT CONTROL WHEEL SPROCKET

NOTE: The following aircraft must drill a 0.186 +0/-0.0005 inch hole in the sprocket:

- PA-28-140 (S/Ns 28-20001 thru 21845, 28-21931 thru 21934)
- PA-28-150 (S/Ns 28-1 thru 28-670, 28-725 thru 28-3377)
- PA-28-160 (S/Ns 28-1 thru 28-670, 28-725 thru 28-3377)
- PA-28-180 (S/Ns 28-671 thru thru 28-3377)
- PA-28-235 (S/Ns 28-10001 thru 28-10719)
- PA-32-260 (S/Ns 32-1 thru 32-600)

To avoid difficulties, a drill bushing may be fabricated to facilitate drilling. If difficulties still arise, drill 0.1898–0.1913 inch hole instead.

All other aircraft must drill a 0.1898–0.1913 inch hole in the sprocket.



VIEW C–C

Figure 2 (Sheet 3 of 3)
Pilot Control Wheel Sprocket Inspection

MATERIAL REQUIRED: If required, per aircraft:

Procure from Piper Aircraft, Inc.

- One (1) each, Sprocket (Pilot Side), Piper P/N 28F400002-001
- One (1) each, Shaft Assembly, Refer to the applicable Airplane Parts Catalog (IPC) for P/N
- As Required, Brass Shims, Piper P/N 62833-152

Procure from your General Aviation Supplier

- Fastener Hardware, one (1) each:
  - AN3-11A Bolt
  - NAS1149F0363P Washer
  - MS21042-3 Nut

    or
  - NAS6203-12D Bolt
  - NAS620-10L Washer
  - MS14145-3 Nut
  - MS24665-132 Cotter Pin

NOTE: Refer to Figure 2 for fastener hardware effectivity.

AVAILABILITY OF PARTS: Your Piper Approved Service Center –
Find your local service center at https://www.piper.com/

EFFECTIVITY DATE: This service bulletin is effective on October 27, 2026.

SUMMARY: Applicable factory participation is limited to new aircraft in warranty at the time of compliance. Factory participation will remain in effect for a period of time not to exceed 180 days from the effectivity date of this service bulletin.

Please contact your Piper Approved Service Center to make arrangements for compliance with this service bulletin in accordance with the compliance time indicated.

NOTE: Please notify the factory of any address/ownership corrections. Changes should include aircraft model, serial number, and current owner's name and address.

Corrections and/or changes should be directed to:

PIPER AIRCRAFT, INC.
Attn: Technical Publications
2926 Piper Drive
Vero Beach, FL 32960
or:
Publications@piper.com
Please include in subject line: "Aircraft Ownership Update"