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

SERVICE LETTER NO. 1315

Date: April 27, 2023 (S)

MAINTENANCE ALERT

This service letter supersedes those portions of SB 962 addressing elevator trim tab pushrods in their entirety. Airplanes in compliance with SB 962 are in compliance with SL 1315 until the next five year inspection is due.

SUBJECT: **ELEVATOR TRIM TAB PUSHRODS CORROSION CONTROL**

MODELS AFFECTED:	**SERIAL NUMBERS AFFECTED**:
PA-46-310P Malibu	46-8408001 through 46-8608067, 4608001 through 4608140
PA-46R-350T Matrix	4692001 through 4692214
PA-46-350 Mirage / M350	4622001 through 4622200, 4636001 through 4636804
PA-46-500TP Meridian / M500	4697001 through 4697690
PA-46-600TP M600	4698001 through 4698214

COMPLIANCE TIME: At a recurring interval, not to exceed every five (5) calendar years.

APPROVAL: The engineering aspects of this service document have been shown to comply with the applicable Federal Aviation Regulations and are FAA approved.

PURPOSE: The factory installed elevator trim pushrods on the affected aircraft may trap moisture inside the tube, when exposed to the elements for an extended period of time. Left untreated, this condition could lead to corrosion and loss of structural integrity.

This service letter reemphasizes procedures introduced with Service Bulletin 962 dated September 23, 1993. It repeats instructions for a five (5) year recurring inspection of factory installed elevator trim pushrods for corrosion, followed by an application of corrosion inhibiting compound that are included in applicable airplane maintenance manuals (AMM) excepting only the Malibu/Mirage AMM P/N 761-783.

This service letter also announces the availability of replacement elevator trim pushrods, which feature pre-applied internal corrosion protection and sealed bearing threads that will prevent moisture from entering the pushrod tube. Installation of these new replacement elevator trim pushrods will eliminate the recurring inspection requirement.

ATA/JASC: 5520

(OVER)

INSTRUCTIONS:

1. Remove the elevator trim tab pushrods from the airplane. Refer to Chapter 55-20-00 of the applicable Airplane Maintenance Manual (AMM) for removal instructions.
2. Disassemble and inspect factory installed fwd and aft pushrods, excluding PA-46-600TP fwd pushrods (P/N 46F420027-003), as shown in Figure 1. Inspect for damage and evidence of corrosion inside, outside, and/or extending through the tubes. Replace as required.
   - If no corrosion is discovered and the factory installed pushrods are retained, proceed to step 3. If factory installed pushrods are replaced with the improved pushrods (listed in Table 1), proceed to step 5.
   - If corrosion is discovered, replace the factory pushrods with the improved pushrods (listed in Table 1) and proceed to step 5.

   NOTE: Any part exhibiting flaking of the metal due to rust must be replaced. The pushrods must be replaced if rust is evident extending from inside the tubes.

   NOTE: When replacing factory installed pushrods, replace in pairs.
3. Once inspection and replacement have been completed, clean and dry the pushrods using a cleaning solvent approved for Ardox AV 8.
4. Apply Ardrox AV 8 (formerly Dinitrol) to factory installed pushrod tubes, excluding PA-46-600TP fwd pushrods (P/N 46F420027-003). Avoid puddling and running when applying.

   CAUTION: WHEN APPLYING ARDROX AV 8, FOLLOW ALL SAFETY PRECAUTIONS AS INSTRUCTED BY THE MANUFACTURER.

   CAUTION: CHARCOAL FILTER BREATHING MASKS SHALL BE WORN WHEN SPRAYING IN ENCLOSED AREAS.

   a. Spray Ardrox AV 8 onto the outside of the pushrod tubes and directly into the tube's mating points. Spray Ardrox AV 8 inside the lower (curved) pushrod tubes until the inside walls are completely coated.

   b. Allow pushrod tubes to dry for at least 60 minutes before reassembling.
5. Adjust the pushrod end bearings to achieve the assembled dimension listed in Table 1 and shown in Figure 2.
6. Install the elevator trim pushrods. Refer to Chapter 55-20-00 of the applicable AMM for installation instructions.
7. Perform a functional check on any systems that were disturbed during this inspection.
8. Make a logbook entry documenting compliance with this service letter.

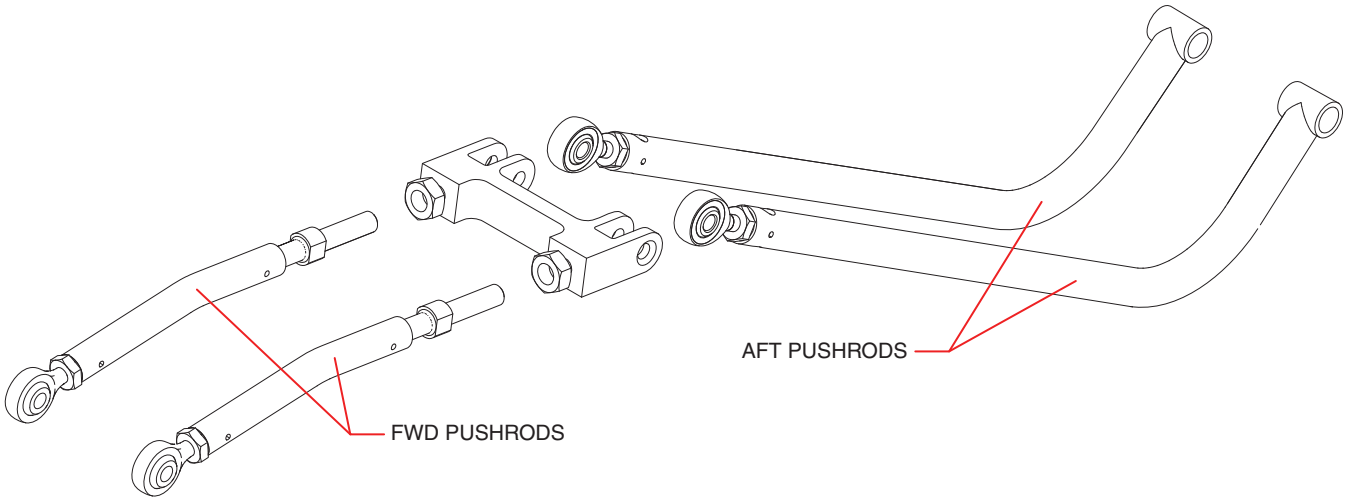


Figure 1
Elevator Trim Tab Pushrod Assembly
(PA-46-600TP shown, others similar)

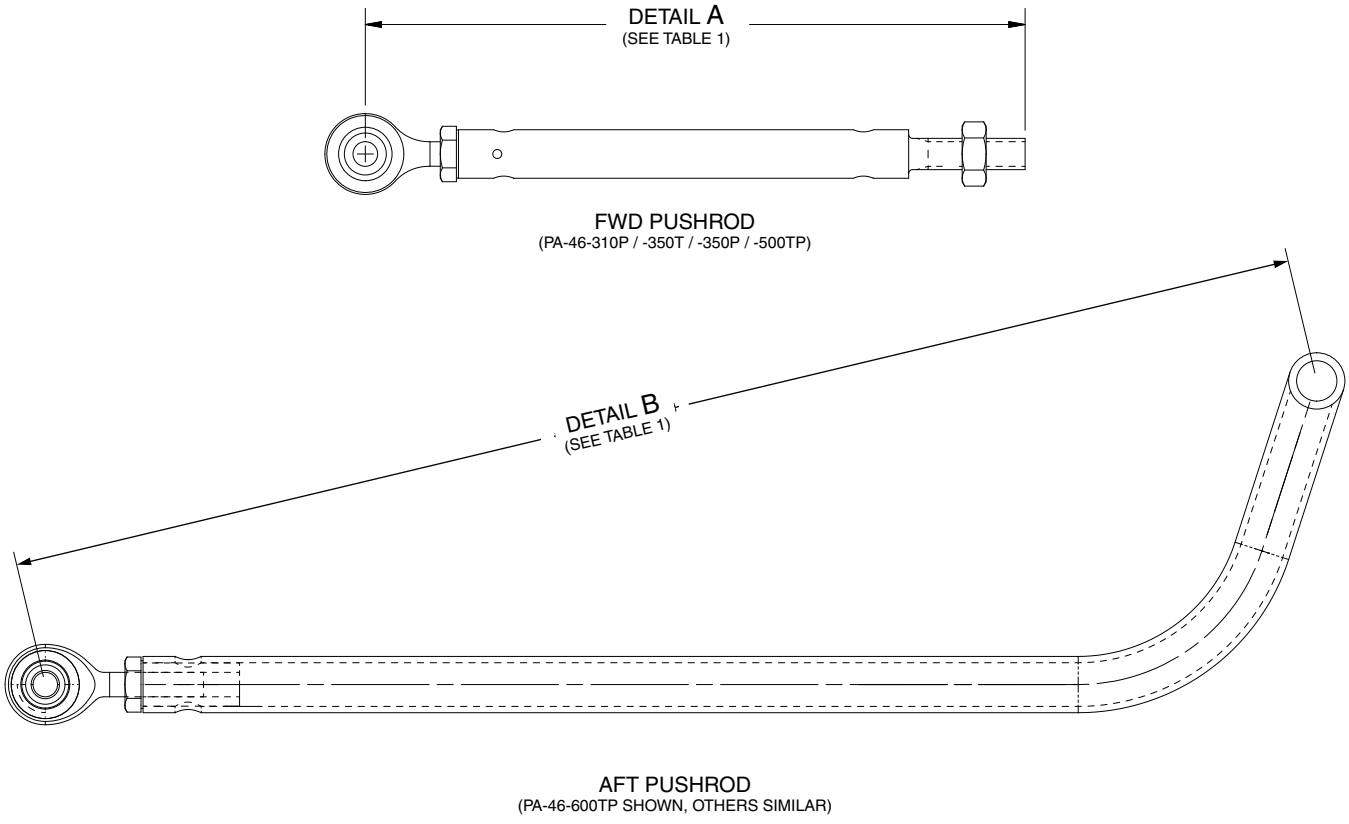


Figure 2
Elevator Trim Tab Pushrods, Assembled Dimension

Table 1

PUSHROD PART NUMBERS AND DIMENSIONS

	Aircraft Model	Factory Installed P/N	Replacement P/N (1)	Assembled Dimension
Fwd Pushrods	PA-46-310P Malibu	82998-008	82998-015	5.48 inches (3)
	PA-46-350P Mirage / M350	82998-002	82998-013	5.10 inches (3)
	PA-46R-350T Matrix			
	PA-46-500TP Meridian / M500	82998-008	82998-015	5.48 inches (3)
Aft Pushrods	PA-46-310P Malibu	82836-002	82836-007 (2)	9.12 inches (4)
	PA-46-350P Mirage / M350			
	PA-46R-350T Matrix			
	PA-46-500TP Meridian / M500	102846-002	102846-005 (2)	10.16 inches (4)
	PA-46-600TP M600			

(1) Installation of the replacement pushrods eliminates the 5 year recurring inspection requirement.
(2) Or P/N with a higher dash number.
(3) See Detail A in Figure 2.
(4) See Detail B in Figure 2.

MATERIAL REQUIRED: Per aircraft, as required:

- Two (2), Fwd Elevator Trim Tab Pushrod, Piper P/N 82998-013 or 82998-015
- Two (2), Aft Elevator Trim Tab Pushrod, Piper P/N 82836-007 or 102846-005

AVAILABILITY OF PARTS: Your Piper Approved Service Center

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

EFFECTIVITY DATE: This service letter is effective on May 2, 2023.

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 letter.

Please contact your Piper Approved Service Center to make arrangements for compliance with this service letter 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: Customer Service
2926 Piper Drive
Vero Beach, FL 32960
or:
CustomerService@piper.com
Please include in subject line: "Aircraft ownership update"