



*The New Piper Aircraft, Inc.
2926 Piper Drive
Vero Beach, Florida, U.S.A. 32960*

SERVICE No. 1002 BULLETIN

PIPER CONSIDERS COMPLIANCE MANDATORY

Date: June 5, 1997 (M)

SUBJECT:

**Elevator Down Spring Inspection
/Replacement**

MODELS AFFECTED:

PA-31P, Pressurized Navajo

SERIAL NUMBERS AFFECTED:

31P-1 through 31P-7730012

COMPLIANCE TIME: Within the next one hundred (100) hours time in service or at the next scheduled inspection event, whichever occurs first and as noted below, each one thousand (1000) hours time in service thereafter.

APPROVAL:

The technical contents of this Service Bulletin have been approved by the Federal Aviation Administration (F.A.A.).

PURPOSE:

During the recent revision of Piper Service Bulletin 626C (Elevator Down Spring Inspection and Replacement) it was noted that the PA31P Pressurized Navajo was not included on the publication as originally issued. Since the function of the elevator down spring is the same as on the other PA31 series aircraft, the condition of damaged or broken springs and links which developed on those aircraft have the possibility of occurring on the Pressurized Navajo. Left uncorrected, a broken or damaged spring or link may result in loss of elevator down spring tension which will cause a variation in longitudinal control input force requirements.

This Service Bulletin requires the replacement of the existing elevator down spring with an improved Elevator Down Spring and a replacement Link and announces a life limit of 1000 hours time in service on current Elevator Down Springs.

INSTRUCTIONS:

1. Remove the bottom half of the tail cone and side access plate(s) from the aft fuselage to gain access to the elevator down spring as necessary. (Also known as a "bungee spring".)
2. Inspect the Elevator Down Spring and Link, if it can be ascertained that Elevator Down Spring, Piper Part Number 71056-03, and Elevator Down Spring Link, Piper Part No. 42376-05 are installed, no further action is required until the accumulation of 1000 hours time in service is reached. If any other part number is installed or if the part numbers installed cannot be identified, replacement must occur per the compliance time above. (See illustration on page 3)
3. If required by the previous instruction, carefully remove the elevator down spring and link.

(OVER)
ATA: 2739

INSTRUCTIONS: (cont'd)

4. Install a new Elevator Down Spring, Piper Part Number 71056-03, and a Elevator Down Spring Link, Piper Part No. 42376-05. Set proper tension of the elevator balance spring by connecting a scale to the aft end of the spring and pulling rearward until proper tension is obtained with the elevator in the neutral position (PA-31P, $30.0 \pm .05$ lbs.). At this point observe which hole in the link is in line with the hook at the end of the spring and connect the spring into this hole in the link. *Installation of the spring in reverse will damage the spring and link.* (Reference rigging instructions in the appropriate Service Manual.)

NOTE:

The springs and links *must not* remain in service beyond one thousand (1000) hours time in service. When installed, new spring and link must be replaced at each one thousand (1000) hours time in service thereafter.

5. Re-install the bottom half of the tail cone and side access plate from the aft fuselage.
6. Make an appropriate logbook entry of compliance with this Service Bulletin.

MATERIAL REQUIRED: If required by inspection or Life Limit, one (1) each, Elevator Down Spring, Piper Part Number 71056-03, and (1) each, Elevator Down Spring Link, Piper Part No. 42376-05, per aircraft.

AVAILABILITY OF PARTS: Your Piper Field Service Facility.

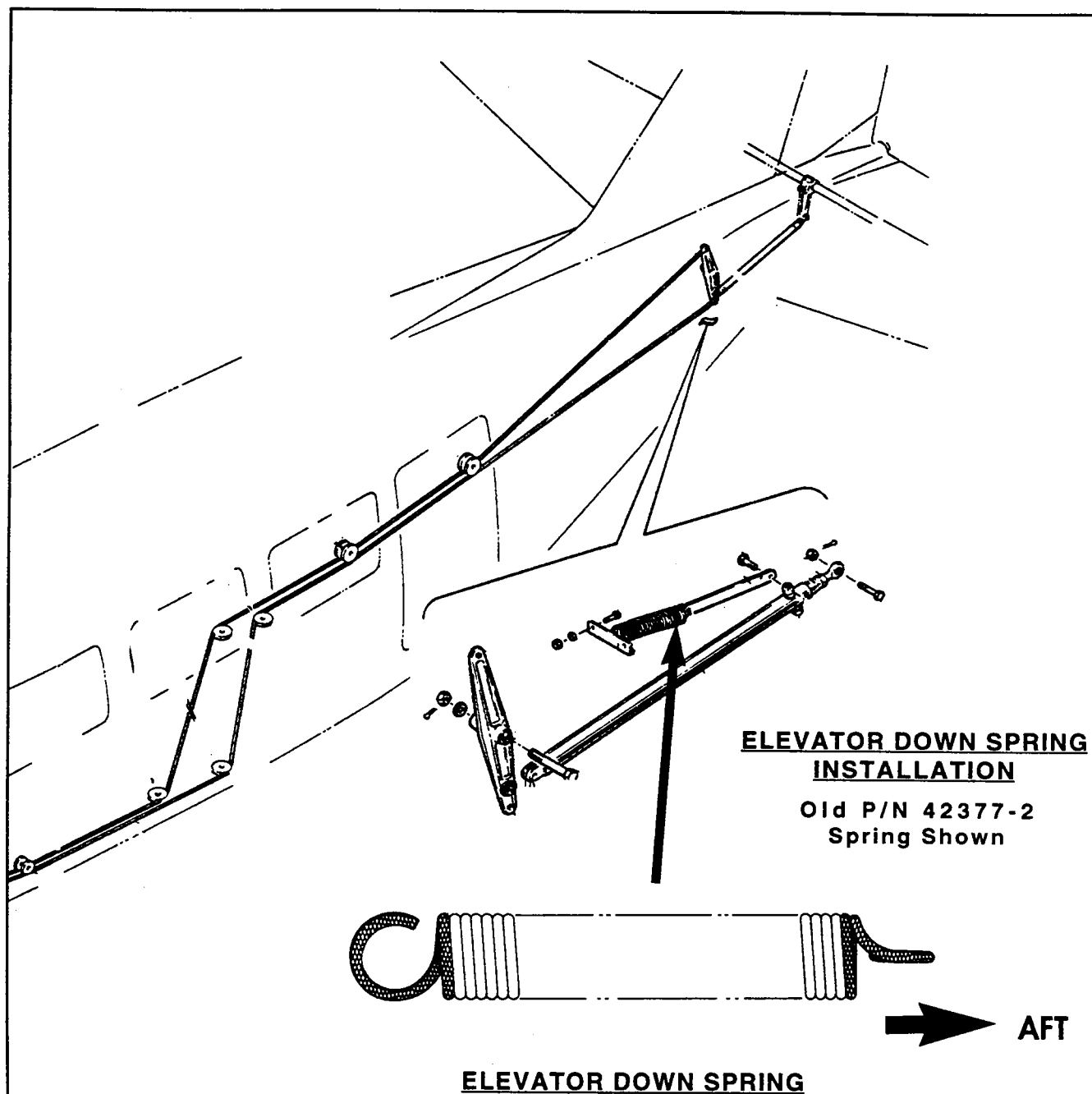
SUMMARY: There is no applicable factory participation for this Service Bulletin.

Please contact your factory authorized Piper Field Service Facility to make arrangements for compliance with this Service Bulletin in accordance with the compliance time indicated.

NOTE: If you are no longer in possession of this aircraft, please forward this information to the present owner/operator and notify the factory of address/ownership corrections. Changes should include aircraft model, serial number, current owner's name and address.

Corrections/Changes should be directed to:

The New Piper Aircraft, Inc.
ATTN: Customer Services
2926 Piper Drive
Vero Beach, FL 32960



Note:

Effective the date of this Service Bulletin, new Piper P/N 71056-03, elevator down springs will have the P/N painted on the body of the spring to assure positive identification.

Note:

All Piper P/N elevator down springs in service must be replaced at repetitive intervals not to exceed each 1000 hours time in service.