

# SERVICE NO. 1218 LETTER

Date: July 13, 2017 (S)(M)

#### SUBJECT:

**MODELS AFFECTED:** 

PA-28-161 Warrior II-III

PA-28-161 Cadet

PA-28-181 Archer II-III

PA-28-236 Dakota

PA-28R-201 Arrow III

PA-28R-201T Turbo Arrow III

PA-32-301 Saratoga

PA-32-301FT Piper 6X

PA-32-301XTC Piper 6XT

PA-32R-301 Saratoga SP

PA-32R-301 Saratoga II HP

PA-32R-301T Turbo Saratoga SP

PA-32R-301T Saratoga II TC

PA-34-220T Seneca III

PA-34-220T Seneca IV

PA-34-220T Seneca V

PA-44-180 Seminole

#### CREW SEAT CONTROL CABLE MODIFICATION

## **SERIAL NUMBERS AFFECTED:**

28-8616001 through 2842419

2841001 through 2841365

28-8690001 through 2843823

28-8611001 through 2811050

2837001 through 2844165

2803001 through 2803015

32-8606001 through 3206098

3232001 through 3232074

3255001 through 3255051

32R-8613001 through 3213028,

3213030 through 3213041

3213029, 3213042 through 3246244

32R-8629001 through 3229003

3257001 through 3257493

34-8633001 through 3448035

3448038 through 3447029

3449001 through 3449506

4495001 through 4496390

## **COMPLIANCE TIME**: Owner/operator discretion

**APPROVAL:** The engineering aspects of this service document have been shown to comply

with the applicable Federal Aviation Regulations and are FAA approved.

**PURPOSE:** In 2015, a production design change was incorporated into current production

airplanes to extend the life of the cable controlling the fore and aft movement of the crew seats. This service letter makes the design change available for the

affected aircraft.

ATA/JASC: 2510

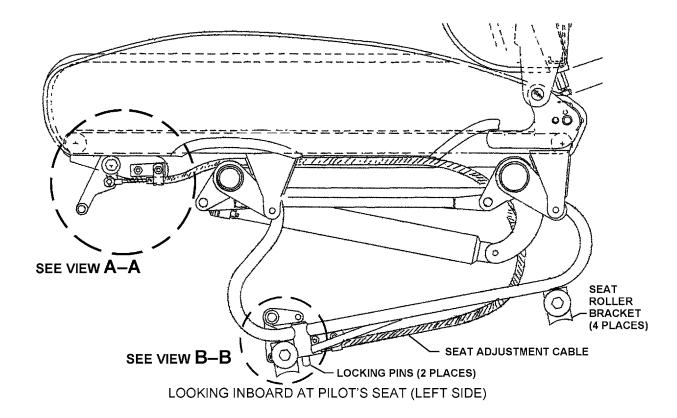
### **INSTRUCTIONS:**

This modification is recommended at the next crew seat adjustment control cable replacement.

- 1. The modification consists of replacing the existing seat platform support plate (P/N 76356-002) with a longer version (P/N 76356-003) which limits aft travel of the seat release handle assembly. If the seat release handle assembly is allowed to freely travel aft it can cause the adjustment cable to kink which contributes to unnecessary wear on the cable and shortened service life. Some of the associated hardware is also replaced.
- 2. The following steps address replacing the cable in one seat (refer to Figure 1):
  - a. Remove and discard the old adjustment cable.
  - b. Install the new adjustment cable as follows:
    - Cut the new spring (Piper P/N 487-490) in half.
    - 2) Install a half of the spring onto the upper end of the new adjustment cable: Rotate the cut end of the half spring onto the cable, and continue to rotate the half spring until it is on the cable as shown in View A–A.

NOTE: The upper end of the adjustment cable terminates in a swaged ball and clevis fitting. The lower end of the cable terminates in a swaged eye fitting.

- 3) Route the cable as shown in Figure 1. Take care to ensure the upper and lower ends are correctly positioned.
- 4) At the bottom right side of the seat base assembly, capture the cable with the P-clamps and loosely install the P-clamps to the seat bottom base assembly with screws, washers, and nuts.
- Position the cable housing end as shown in View B–B and secure in place by tightening nuts evenly at the P-clamps.
- 6) Connect the cable to the seat release arm by installing the pin, washers, and cotter pin.
- 7) At the upper right side of the seat base assembly, capture the cable with the P-clamps and loosely install the new plate (P/N 76356-003) and P-clamps to the seat platform support with screws, washers, and nuts.
- 8) Position the cable housing end as shown in View A–A and secure in place by tightening nuts evenly at the P-clamps.
- 9) Connect the cable to the seat release handle by installing the pin, washers, and cotter pin.
- 10) Observe the fore and aft locking pins while pulling and releasing the seat release handle. Ensure the pins retract and extend, respectively.
- c. Pull the seat release handle and slide the seat aft to the desired position.
- d. Release the seat release handle and ensure the seat locking pins engage the seat track.
- 3. Make a logbook entry documenting installation of this modification.



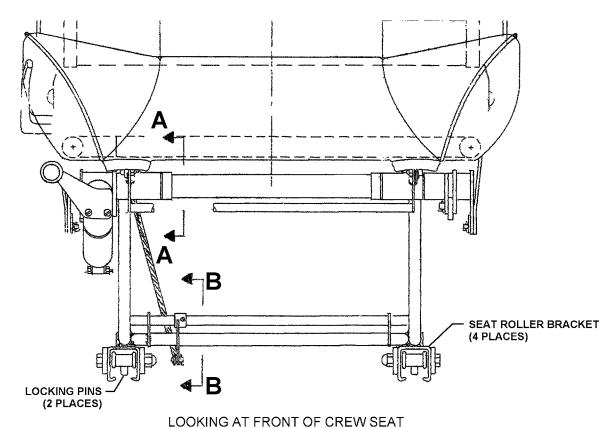
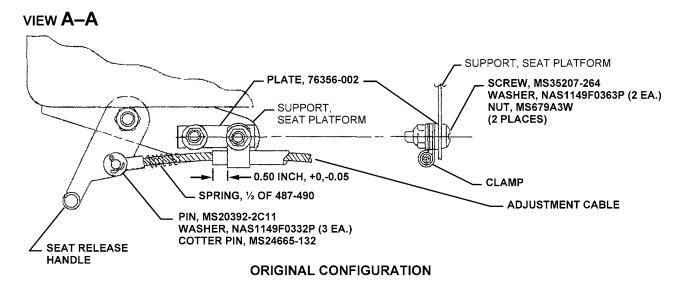
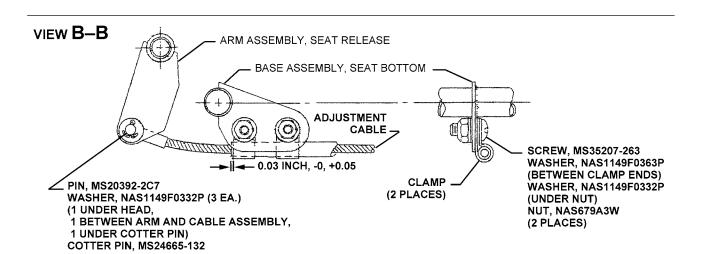


Figure 1, Sheet 1 of 2
Crew Seat Adjustment Cable Installation



#### SCREW, MS35207-264 WASHER, NAS1149F0332P (UNDER HEAD) \* WASHER, NAS1149F0363P (UNDER NUT) NUT, MS21042-3 \* SUPPORT, SEAT PLATFORM PLATE, 76356-003 \* SCREW, MS35207-265 \* WASHER, NAS1149F0332P \* SUPPORT. (UNDER HEAD) SEAT PLATFORM WASHER, NAS1149F0363P (2 EA.) (1 BETWEEN CLAMP ENDS, 1 UNDER NUT) NUT, MS21042-3 \* ATTIZE. --- 0.50 INCH, +0,-0.05 CLAMP SPRING, 1/2 OF 487-490 \* ADJUSTMENT CABLE. PIN, MS20392-2C11 554-422 \* WASHER, NAS1149F0363P (2 EA.) \* (1 UNDER HEAD, 1 BETWEEN HANDLE AND CABLE ASSEMBLY) WASHER, NAS1149F0332P (UNDER COTTER PIN) **SEAT RELEASE COTTER PIN, MS24665-132 HANDLE** \* NEW / MOVED PARTS



AFTER MODIFICATION

Figure 1, Sheet 2 of 2
Crew Seat Adjustment Cable Installation

**MATERIAL REQUIRED:** Per seat to be modified:

• One (1) each, Seat Adjustment Cable, Piper P/N 554-422

• One (1) each, Spring, Piper P/N 487-490

• One (1) each, Screw (MS35207-265), Piper P/N 411-534

• Two (2) each, Nut (MS21042-3), Piper P/N 404-526

• One (1) each, Washer (NAS1149F0363P), Piper P/N 690-612

· Additional hardware, as required, upon condition

**AVAILABILITY OF PARTS:** Your Piper Approved Service Center

**EFFECTIVITY DATE:** This service letter is effective upon receipt.

**SUMMARY:** 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