Airworthiness Directive Schedule

Aeroplanes

Piper PA-44 Series (Seminole)

30 May 2024

Notes

1. This AD schedule is applicable to Piper PA-44-180 (Seminole) and PA-44-180T (Turbo Seminole) aircraft manufactured under Federal Aviation Administration (FAA) Type Certificate No. A19SO.
2. The Federal Aviation Administration (FAA) is the National Airworthiness Authority (NAA) responsible for the issue of State of Design Airworthiness Directives (ADs) for these aircraft.

   State of Design ADs can be obtained directly from the FAA website at: Dynamic Regulatory System (faa.gov)
3. The date above indicates the amendment date of this schedule.
4. New or amended ADs are shown with an asterisk *

Contents

DCA/PA44/1 Aileron Balance Weight Installation - Inspection and Modification

Applicability: Model PA-44-180T S/N 44-8107001 through 44-8107044.

Requirement: 1. Initially inspect visually per Piper SB 725A Part I and accomplish subsequent inspections using at least 10 x magnification. If cracks found, embody reinforcing kit Piper P/N 764 148V before further flight.

2. Modify per Piper SB 725A Part II.

(FAA AD81-16-10 refers)

Compliance: 1. Inspection - before next flight and thereafter at intervals not exceeding 25 hours TIS until modified.

2. Modification - within next 100 hours TIS.

Effective Date: 26 August 1981

DCA/PA44/2 Electrical System - Modification

Applicability: Model PA-44-180T S/N 44-8107001 through 44-8107066.

Requirement: Modify per Piper SB 775.

Compliance: Within next 100 hours TIS.

Effective Date: 31 August 1984

DCA/PA44/3A Parking Brake Operation - Placard

Applicability: Model PA-44-180 S/N 44-7995001 through 44-8195026, PA-44-180T S/N 44-8107001 through 44-8207020.

Requirement: To prevent aircraft controllability problems while involved in ground operation because of improper brake operation, accomplish the following:-

Install one of the following in a central location on the pilot's instrument panel in full view of the pilot;

(1) A Piper P/N 81090-02 placard; or

(2) A Piper P/N 683-107 placard.

Note: The above referenced placards both contain the following wording:

WARNING
NO BRAKING WILL OCCUR IF AIRCRAFT BRAKES ARE APPLIED WHILE PARKING BRAKE HANDLE IS PULLED AND HELD

(FAA AD 85-02-05R1 refers)

Compliance: Required within 100 hours time-in-service after 22 March 1985 or prior to the next flight after the effective date of this AD, whichever occurs later, unless already accomplished.

Effective Date: DCA/PA44/3 - 22 March 1985
DCA/PA44/3A - 19 December 1997

DCA/PA44/4D Main Landing Gear Trunnion - Inspection and Replacement

Applicability: The following model and S/N aircraft that are not equipped with MLG trunnions (both left and right side) that have either P/N 67926-30, 67926-31, 67926-32, 67926-33, 39486-14 or 39486-15 as applicable.

Model PA-44-180 S/N 44-7995001 through 44-8195026, 4495001 through 4495013 and PA-44-180T S/N 44-8107001 through 44-8207020.

Requirement: To prevent failure of the MLG trunnions accomplish the following:-

1. Inspection. Properly clean the trunnion housing of dirt and paint on the aft side at the lower end of the fillet. Piper SB 787B refers.

Inspect the lower end of the fillet by dye penetrant method for cracks per FAA AC 43.13 Section 3 para 300, except that a penetrant dwell time of not less than 10 minutes and a developer application time not less than 30 minutes shall be used to ensure that indication of any crack presence will be better achieved. If there are any indications of cracks, replace the trunnion with a part of improved design per SB 787B before further flight.

Blend out any grinding marks in the web area, using aluminium oxide paper, 300 grit or finer, or an equivalent material. Alodine and repaint areas where grinding marks are blended out.

2. Replacement. Replace trunnions per SB 787B at 2500 hours TTIS.

(FAA AD 94-13-11 refers)

Compliance: 1. Inspection. At 500 hours TTIS or within next 100 hours TIS whichever is the later and thereafter at intervals not to exceed 100 hours TIS until 2000 hours TTIS. Thereafter at intervals not to exceed 50 hours TIS until replacement.

2. Replacement. At 2500 hours TTIS or within next 100 hours TIS whichever is the later. If TTIS can not be determined, replace trunnion within next 100 hours TIS.

Effective Date: DCA/PA44/4C 29 October 1993
DCA/PA44/4D 2 September 1994

DCA/PA44/5 Main Landing Gear Trunnion - Inspection

Applicability: Model PA-44-180 S/N 44-7995001 through 44-8195026 and PA-44 -180T S/N 44-8107001 through 44-8107066 with trunnions incorporating a web that extends the length of the barrel.

Requirement: To prevent failure of the MLG trunnions accomplish the following:-

Properly clean the trunnion housing of dirt and paint on the aft side at the lower end of the fillet. Piper SB 787B refers.

Inspect the lower end of the fillet by dye penetrant method for cracks per FAA AC 43.13 Section 3 para 300, except that a penetrant dwell time of not less than 10 minutes and a developer application time not less than 30 minutes shall be used to ensure that indication of any crack presence will be better achieved. If there are any indications of cracks, replace the trunnion per SB 787B before further flight.

Compliance: At 500 hours TTIS or within next 100 hours TIS whichever is the later and thereafter at intervals not to exceed 100 hours TIS.

Effective Date: 29 October 1993

DCA/PA44/6 Nose Landing Gear - Modification

Applicability: Models PA-44-180 S/N 44-7995001 through 44-8195026, and PA-44-180T S/N 44-8107001 through 44-8207002.

Requirement: To prevent nose landing gear collapse, modify per Piper SL 988.
(FAA AD 94-14-14 refers)

Compliance: Within next 100 hours TIS.

Effective Date: 2 September 1994

DCA/PA44/7 Flap Lever and Bolt - Inspection and Replacement

Applicability Model PA-44-180 S/N 44-7995001 through 44-8195026 and 4495001 through 4495013 and PA-44-180T S/N 44-8107001 through 44-8107066.

Requirement: To prevent failure of the flap handle attach bolt and sudden retraction of the flaps which could result in loss of control of the aircraft, accomplish the following:-

Measure the cable mounting attach hole diameter and enlarge the hole to 0.316 inch diameter. If the diameter of the cable mount attach hole is larger than 0.316 inch, prior to further flight, replace the flap lever handle per Piper SB 965.

Install a new bushing (using Piper P/N 63900-174) into the cable mounting attach hole per SB 965.

Replace the flap lever handle attach bolt with a new clevis bolt (Piper P/N 400 673 or standard P/N AN23-11) per SB 965.

Inspect the washer, nut, and cotter pin, and if damaged, prior to further flight, replace washer (Piper P/N 407-564 or standard P/N AN960-10), nut (Piper P/N 404-392 or standard P/N AN320-3), and cotter pin (Piper P/N 424-051 or standard P/N MS24665-132) as applicable per SB 965.
(FAA AD 96-10-03 refers)

Note: The requirement of this airworthiness directive takes precedence over SB 965 instructions and requires installing the clevis bolt, regardless of the condition of the current part.

Compliance: At 2000 hours TTIS or within next 100 hours TIS, whichever is the later.

Effective Date: 5 July 1996

DCA/PA44/8 Cancelled – Superseded by DCA/PA44/11

Effective Date: 23 February 2006

DCA/PA44/9 Control Wheel Attachment – Inspection and Modification

Applicability: Group A: PA-44-180 S/N 4496020 through 4496173, and 4496175.
Group B: PA-44-180 S/N 4496174 and 4496176 through 4496180.

Requirement: To detect and correct inadequate control wheel attachment design, which could result in loss of control, accomplish the following:

1. For aircraft listed in Group A, inspect the control wheel attachment screw and nut-plate for proper thread engagement (minimum one thread showing past the end of the nut plate), and replace the screw and/or nut plate if insufficient thread engagement is found. Reassemble the control wheel onto the control wheel shaft and apply Loctite thread-locking compound.

2. For Group A and B aircraft, install the retainer clip P/N 104687-002, per Part II of New Piper Aircraft SB 1139A.
(FAA AD 2004-14-12 refers)

Compliance: 1. Inspect within 25 hours TIS.

2. Install the retainer clip within 100 hours TIS.

Effective Date: 26 August 2004

DCA/PA44/10 Nose Cone Spar – Inspection and Modification

Applicability: Model PA-44-180, S/N 44-7995001 through 44-8095021.

Requirement: To prevent cracks in the nose cone spars which could result in malfunction of the nose landing gear, accomplish the following:

1. Visually inspect the nose cone spars for cracks, per Part I of Piper SB 695, dated 10 September 1980. If cracks are found, either modify per paragraph 2 below, or replace parts as required by Part I of SB 695.

2. Modify the nose cone spars per Piper kit P/N 764 080V or alternatively, replace the nose cone spars with improved assemblies as detailed in Piper SB 1143.

Note: Modification with Piper Kit P/N 764 080V or replacement per SB 1143 is terminating action for the inspection requirements of this AD.
(FAA AD 81-10-01 refers)

Compliance: 1. Inspect within next 50 hours TIS, and thereafter at intervals not to exceed 100 hours TIS until modified.

2. Modify within next 300 hours TIS.

Effective Date: 26 August 2004U

DCA/PA44/11 Combustion Heater Fuel Pump – Inspection

Applicability: Model PA–44–180 aircraft, S/Ns 44–7995001 through 4496190, and

Model PA–44–180T aircraft, S/Ns 44–8107001 through 44–8207020, and

fitted with either a model 91E92-1 or model 91E93-1 aircraft heater fuel pump.

Requirement: To prevent combustion heater fuel pump fuel leakage, which could result in failure of the pump and fire or explosion, inspect the aircraft heater fuel pump (model 91E92–1 or model 91E93–1) for leakage, per The New Piper Aircraft, Inc. Service Bulletin No. 1127B, dated 18 April 2005, and Kelly Aerospace Power Systems Service Information Letter Bulletin No. A–110B, dated 20 December 2004.

If any leak is found, inspect the pump sealing surface for abnormalities (for example, nicks, gouges, or warping). Correct any abnormality, per SB 1127B and SIL A–110B, prior to further flight.

If any abnormality cannot be corrected, replace the header fuel pump, prior to further flight.

Note 1: Before installing a model 91E92–1 or model 91E93–1 heater fuel pump, visually inspect the pump and correcting any abnormalities, per SB 1127B and SIL A–110B.

Note 2: Inspections and corrections which have already been accomplished per SB 1127 dated 26 February 2003, and SIL A–110A dated 6 March 2003, are acceptable.

(FAA AD 2005-15-10 refers)

Compliance: Within the next 10 hours TIS, unless already accomplished.

Effective Date: 23 February 2006

DCA/PA44/12 Control Wheel Shafts – Inspection and Rework

Applicability: Model PA-44-180 aircraft, S/N 44-7995001 through to 44-8195026, 4495001 through to 4495013 and 4496001 through to4496251
Model PA-44-180T aircraft, S/N 44-8107001 through to 44-8207020.

Requirement: To prevent failure of the control wheel shafts due to possible incorrect assembly which can result in loss of pitch and roll control, accomplish the following:

Inspect the pilot and copilot control wheel columns for correct shaft installation per the instructions in Piper Aircraft, Inc. MSB No. 1197A dated 1 September 2009 or Piper Aircraft, Inc. MSB No. 1197B dated 3 May 2010. If the control wheel shaft is found incorrectly installed, replace with a new shaft per the instructions in MSB No. 1197A or MSB No. 1197B before further flight.

Inspect the universal joint and all the other control wheel parts for any deterioration, excess wear and damage. If any defects are found, replace affected parts per the instructions in MSB No. 1197A or MSB No. 1197B before further flight.

Note: Accomplish the requirements of this AD per the instructions in Piper Aircraft, Inc. MSB No. 1197A dated 1 September 2009 or Piper Aircraft, Inc. MSB No. 1197B dated 3 May 2010.

(FAA AD 2010-15-10 refers)

Compliance: Within the next 100 hours TIS or by 31 August 2011 whichever occurs sooner.

Effective Date: 31 August 2010

The State of Design ADs listed below are available directly from the National Airworthiness Authority (NAA) websites. Links to NAA websites are available on the CAA website at https://www.aviation.govt.nz/aircraft/airworthiness/airworthiness-directives/links-to-state-of-design-airworthiness-directives/
If additional NZ ADs need to be issued when an unsafe condition is found to exist in an aircraft or aeronautical product in NZ, they will be added to the list below.

2013-02-13 Horizontal Stabilator Control System – Inspection
Effective Date: 11 March 2013

2015-26-08 Emergency Gear Extension Cable – Inspection
Effective Date: 20 January 2016

*** 2024-10-04 Wing Spar Attachment Fittings – Inspection**
Applicability: Piper PA-44-180 aircraft, with a S/N identified in Piper SB No. 1413, dated April 9, 2024.
Effective Date: 6 June 2024