

Airworthiness Directive Schedule

Aeroplanes

Piper PA-24 Series (Comanche)

28 June 2018

- Notes:**
1. This AD schedule is applicable to Piper PA-24, PA-24-250 and PA-24-260 series aircraft manufactured under Federal Aviation Administration (FAA) Type Certificate No. 1A15.
 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 applicable to these aircraft can be obtained directly from the FAA web site at http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgAD.nsf/MainFrame?OpenFrameSet
 3. The date above indicates the amendment date of this schedule.
 4. New or amended ADs are shown with an asterisk *
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DCA/PA24/101B Fuel Tank Drains and Vents – Modification

Applicability: Model PA-24 and PA-24-250 aircraft, S/N 24-1 through to 24-3529.

Note 1: The requirement of DCA/PA24/101B amended to introduce requirements 1 and 2 in lieu of compliance with Piper SL No. 516. No action required if already in compliance with DCA/PA24/101A.

Requirement: To prevent fuel tank collapse which could result in loss of fuel through the tank filler caps and fuel exhaustion, accomplish the following:

1. Visually inspect the main fuel tanks and the auxiliary fuel tanks (if installed) for indications of fuel tank collapse. Inspect the upper and lower fasteners of the main fuel tanks and the upper fasteners of the auxiliary fuel tanks which retain the bladder tanks to ensure security per section VIII of Piper Comanche Service Manual No. 753516 or accomplish an equivalent inspection approved by the manufacturer.

The fuel tanks shall be empty when performing this inspection. Remove the tank filler caps and inspect the tank vent tubes under the wing for dirt or ice blockage. Apply suction to each vent tube outlet to assure that there is no blockage.

Inspect all fuel tank filler caps for security and ensure the correct P/N cap is fitted. If the rubber portion of the "thermos" type filler caps (S/N 24-581 onwards) have any indications of dryness, or hardness which can cause the cap to gradually loosen, replace the cap before further flight.

Accomplish a fuel quantity gauge sending unit check per section VIII of Piper Comanche Service Manual No. 753516 or accomplish an equivalent inspection approved by the manufacturer.

2. For aircraft S/N 24-581 through to 24-3495 modify the fuel tank drain tubes in accordance with Piper SB No. 216 dated 21 June 1963 or later FAA approved revisions, or embody an equivalent manufacturer approved modification.

Note 2: Compliance with SL No. 516, or later FAA approved revisions, or a manufacturer approved modification is a terminating action to the requirements of this AD.

Note 3: Piper SL No. 516 pertains to the embodiment of modification kit No. 760277 for fuel tank vents and drain tubes, and the embodiment of Kit No. 760281 for auxiliary tanks, if fitted.

Note 4: Piper SB Nos. 216 and 231A pertain to the subject of this AD, and Piper SL Nos. 367 and 516 also pertain to the subject of this AD.
(FAA AD 1968-13-03 refers)

Compliance: 1. Within the next 25 hours TIS unless previously accomplished, and thereafter at intervals not to exceed 100 hours TIS.

2. Within the 100 hours TIS, unless previously accomplished.

Effective Date: DCA/PA24/101A - 31 July 1969
DCA/PA24/101B - 27 August 2009

DCA/PA24/102 Vacuum Pump Splined Coupling - Replacement

Applicability: All

Requirement: Piper SB 218

Compliance: As detailed

Effective Date: 31 July 1969

DCA/PA24/103 30 Ampere Circuit Protector - Modification

Applicability: All not equipped with 30 amp circuit protector.
Requirement: Piper SL 356
Compliance: Within the next 100 hours TIS
Effective Date: 31 July 1969

DCA/PA24/104 Main Landing Gear Door Hinges and Nose Gear Door Hinge - Inspection

Applicability: As detailed.
Requirement: Piper SL 380
Compliance: Within the next 100 hours TIS and at intervals not exceeding 100 hours TIS thereafter
Effective Date: 31 July 1969

DCA/PA24/105 Muffler Shroud - Modification

Applicability: S/N as detailed.
Requirement: Piper SB 210
Compliance: Within the next 50 hours TIS
Effective Date: 31 July 1969

DCA/PA24/106 Landing Gear Safety Switch Harness - Modification

Applicability: S/N 24-1 through 24-3284.
Requirement: Piper SL 379
Compliance: Within the next 50 hours TIS
Effective Date: 31 July 1969

DCA/PA24/107 Auto Pilot Servo and Bridle Installation - Inspection

Applicability: PA-24-260 S/N 24-4567 and up.
Requirement: Piper SB 320A
Compliance: Within the next 100 hours TIS and thereafter at intervals not exceeding 100 hours TIS
Effective Date: 31 October 1970

DCA/PA24/108 Emergency Gear Extension Placard - Modification

Applicability: PA-24-260 S/N as detailed.
Requirement: Piper SL 574
Compliance: Next periodic inspection
Effective Date: 31 May 1971

DCA/PA24/109 Cancelled by DCA/PA24/110**DCA/PA24/110 Cancelled by DCA/PA24/111****DCA/PA24/111 Mass Balance Weights - Modification**

Applicability: All PA-24, PA-24-250 and PA-24-260.
Requirement: To prevent possible adverse vibration effects the FAA have issued AD 72-22-5. Piper Service Bulletin 362A and Piper SL 687 also refer.

Modify as follows:

Install rudder balance weight installation kit, Piper Part Number 760 705 (Piper SB 362A). Remove the operating limitation placard fitted in accordance with DCA/PA24/110 and alter the Red Radial V_{NE} line and the cautionary Yellow Arc of the Airspeed Indicator to reflect the following speed restrictions:

(a) For PA24 aircraft: V_{NE} of 202 MPH CAS.

(b) For PA-24-250 and PA-24-260 aircraft: V_{NE} of 203 MPH CAS and V_{NO} of 180 MPH CAS.

Note: For PA-24-250 and PA-24-260 aircraft only, installation of Piper kit part number 760 747 in addition to kit part number 760 705, will allow V_{NE} to be returned to the original limit of 227 MPH CAS

Compliance: By 1 March 1973
Effective Date: 31 December 1972

DCA/PA24/112A Stabilator Torque Tube Bearing Support Fittings - Inspection

Applicability: Model PA-24-180, PA-24-250 and PA-24-260 S/N 24-1 through 24-5047 and 26-2 through 26-148, that have not incorporated Piper P/N 760 835 (Hi-Shear Rivet Replacement Kit) on all four stabilator torque tube bearing support fittings.

Requirement: To prevent loss of pitch control because of looseness of the stabilator torque tube bearing support fittings, accomplish the following:-

Inspect the stabilator torque tube bearing support fittings for looseness per Piper SB 411A. If looseness is found incorporate Piper P/N 760 835 (Hi-Shear Rivet Replacement Kit) on the affected fitting prior to further flight.
 (FAA AD 94-13-10 refers)

Compliance: Within next 100 hours TIS and thereafter at intervals not to exceed 100 hours TIS.
Effective Date: DCA/PA24/112 - 3 August 1974
 DCA/PA24/112A - 2 September 1994

*** DCA/PA24/113B Stabilator Torque Tube Assembly Bolts - Inspection**

Applicability: Model PA-24, PA24-180, PA-24-250, PA-24-260, S/N 24-1 through 24-5047, and PA-24-400 S/N 26-2 through 26-148.

Note: DCA/PA24/113B revised to introduce a terminating action for requirement 2.

Requirement: To detect corroded stabilator torque tube assembly bolts accomplish the following:-

1. Inspect stabilator attachment bolts (4 places) per Piper SL 667A. Replace bolts found corroded before further flight.
(FAA AD 74-13-03 refers)
2. Inspect the following bolts for corrosion paying particular attention to their condition where they pass inside the stabilator torque tube;
 - (a) Bolts (2 places), attaching the balance weight tube to stabilator torque tube assembly. Replace bolts found corroded before further flight.
 - (b) Bolts (2 places), attaching the collar assembly to stabilator torque tube assembly. Replace bolts found corroded before further flight.
(Occurrence 95/2477 refers)

Compliance:

1. Within next 100 hours TIS after 19 January 1996 (the effective date of DCA/PA24/113A) and thereafter at intervals not to exceed 3 years or 500 hours TIS whichever is the sooner. May be discontinued upon fitment of P/N 502 329 or 502 342 corrosion resistant bolts.
2. Within next 100 hours TIS after 19 January 1996 (the effective date of DCA/PA24/113A) and thereafter at intervals not to exceed 3 years or 500 hours TIS whichever is the sooner. The repetitive inspections per requirement 2.(a) and/or 2.(b) may be discontinued upon fitment of equivalent corrosion resistant bolts approved by the aircraft manufacturer.

Effective Date: DCA/PA24/113 - 30 August 1974
DCA/PA24/113A - 19 January 1996
DCA/PA24/113B – 28 June 2018

DCA/PA24/114 Fin Forward Spar to Fuselage, Attachment Assembly - Inspection

Applicability: All model PA-24, PA-24-250 and PA-24-260

Requirement: Affects the fin forward spar to fuselage attachment assembly where the channel P/N 20749-0 and the straps P/N 20749-5 and -6 are riveted together.

1. Inspect the channel P/N 20749-0 and the two straps P/N 20749-5 and -6 in the area of the channel bend relief holes for cracks using a dye penetrant method or an approved equivalent inspection. Polish the rough edges of the bend relief holes.
2. Visually inspect the channel and straps in the area of the channel relief holes for cracks using a magnifying glass of at least 5 power or an approved equivalent inspection.

Repair cracked parts with an approved repair or replace parts with an unused part of the same number prior to further flight. Equivalent inspections may be approved by the CAA.
(FAA AD 75-12-06 and Piper SL 751 refer)

Compliance:

1. Para 1 of the AD Supplement - within the next 25 hours TIS.
2. Para 2 of the AD Supplement - within the next 125 hours TIS and thereafter at intervals not exceeding 100 hours TIS.

Effective Date: 17 June 1975

DCA/PA24/115 Stabilator Torque Tube Bearing Block - Inspection

Applicability: Model PA-24, PA-24-250 and PA-24-460 S/N 24-1 through 24-5047.
Requirement: Piper SB 464
Compliance: Within the next 50 hours TIS
Effective Date: 14 November 1975

DCA/PA24/116 Stabilator Balance Weight Tube - Modification

Applicability: Model PA-24-250 and PA-24-260 S/N 24-1, 24-103 through 24-3687, 24-4000 through 24-5047 which have Piper kit P/N 760747 embodied.
Requirement: Piper SB 496
Compliance: Within the next 100 hours TIS
Effective Date: 30 July 1976

DCA/PA24/117 Electric Trim Switch - Modification

Applicability: Model PA-24-260 S/N 24-4783 and 24-4804 through 24-5047 which have Piper kit 760505 embodied per SB 331, or as otherwise detailed in SB 527.
Requirement: Piper SB 527
Compliance: Within the next 100 hours TIS
Effective Date: 14 December 1976

DCA/PA24/118 Aileron Spar - Inspection

Applicability: Model PA-24, PA-24-250, PA-24-260 S/N 24-1 through 24-5047. Model PA-24-400 S/N 26-2 through 26-148.
Requirement: Piper SL 787
(FAA AD 77-08-01 refers)
Compliance: At 1000 hours TTIS and thereafter at intervals not exceeding 100 hours TIS until modified per Piper kit no. 760 914
Effective Date: 9 May 1977

DCA/PA24/119A Landing Gear Extension System – Inspection and Bungee Renewal

Applicability: Model PA-24, PA-24-250 and PA-24-260 aircraft, all S/N
Model PA- 24-400 aircraft, all S/N except S/N 1
Note: This AD revised to correct the Piper SB reference with no change to the AD requirement.
Requirement: To prevent possible landing gear collapse after manual extension, accomplish the following:

1. Inspect the landing gear per the instructions in Piper SL No. 782A. Replace components which exceed the manufacturer specified wear limits.
2. Inspect the main landing gear bungee cords for frayed protective covering, breaks and soft areas. Replace cords found with defects.

(FAA AD 77-13-21 refers)

Compliance: 1. For aircraft with 1000 hours or more TIS:

Within the next 100 hours TIS unless previously accomplished and thereafter at intervals not to exceed 1000 hours TIS.

For aircraft with less than 1000 hours TIS:

By 1100 hours TIS unless previously accomplished and thereafter at intervals not to exceed 1000 hours TIS.

2. For aircraft with 1000 hours or more TIS:

Within the next 100 hours TIS unless previously accomplished and thereafter at intervals not to exceed 500 hours TIS or 12 months whichever occurs sooner.

For aircraft with less than 1000 hours TIS:

By 1100 hours TIS unless previously accomplished and thereafter at intervals not to exceed 500 hours TIS or 12 months whichever occurs sooner.

Replace bungee cords at intervals not to exceed 500 hours TIS or 3 years whichever occurs sooner.

Effective Date: 29 September 2011

DCA/PA24/120 Aileron Nose Rib - Inspection

Applicability: Model PA-24 and PA-24-250 S/N 24-1 and up, model PA-24-260 S/N 24-3642, 24-4000 and up, model PA-24-400 S/N 26-1 and up not incorporating Piper kit P/N 763893

Requirement: Inspect per Piper SL 850.
(FAA AD 79-20-10 refers)

Compliance: Within the next 50 hours TIS and thereafter at intervals not exceeding 100 hours TIS

Effective Date: 9 November 1979

DCA/PA24/121 Cancelled - Purpose fulfilled

DCA/PA24/122 Spar Cap - Inspection

Applicability: Model PA-24-180, -250 and -260 S/N 24-1 and up

Requirement: To preclude possible loss of structural integrity, inspect per Piper SB 751. Rectify or replace defective parts before further flight.

Compliance: Within the next 100 hours TIS

Effective Date: 15 July 1983

DCA/PA24/123A Parking Brake Operation - Placard

Applicability: Model PA-24, PA-24-250, and PA-24-260 S/N 24-1 through 24-5034, PA-24-400 S/N 26-1 through 26-148.

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/PA24/123 - 22 March 1985
DCA/PA24/123A - 19 December 1997

DCA/PA24/124 Heated Alternate Air Induction System - Modification

Applicability: Model PA-24-260 (fuel injected), S/N 24-3642, 24-4000 through 24-4255, 24-4257 through 24-4782, and 24-4784 through 24-4803

Requirement: To prevent inadvertent engine stoppage while flying in weather conditions conducive to induction system icing, install the manually operated heated alternate air induction system kit per Piper SB 861.
(FAA AD 91-21-09 refers)

Compliance: Within the next 100 hours TIS unless already accomplished

Effective Date: 22 February 1991

DCA/PA24/125C Main Landing Gear Sidebrace Stud – Inspection and Replacement

Applicability Models PA24, PA24-250, PA24-260 and PA24-400 aircraft, all S/N.

Note 1: This AD revised to remove note 3. There is no terminating action to the repetitive inspections mandated by this AD for affected PA-24 aircraft. The larger 5/8" sidebrace stud P/N 78717-02 and bushing cannot be installed in the existing sidebrace bracket assembly. And bracket assembly P/N 95643-06, 95643-07, 95643-08 or 95643-09 cannot be installed on affected PA-24 aircraft.

Requirement: To prevent main landing gear (MLG) collapse due to possible main gear sidebrace stud cracks which if not detected and corrected could result in loss of aircraft control during landing, accomplish the following:

Remove both the left and right main gear sidebrace studs from the aircraft per the instructions in the landing gear section of the aircraft MM. Inspect both the main gear sidebrace stud for cracks using Type I (fluorescent) liquid penetrant or magnetic particle inspection methods. Figure 1 of this AD depicts the area where the sidebrace stud is to be inspected.

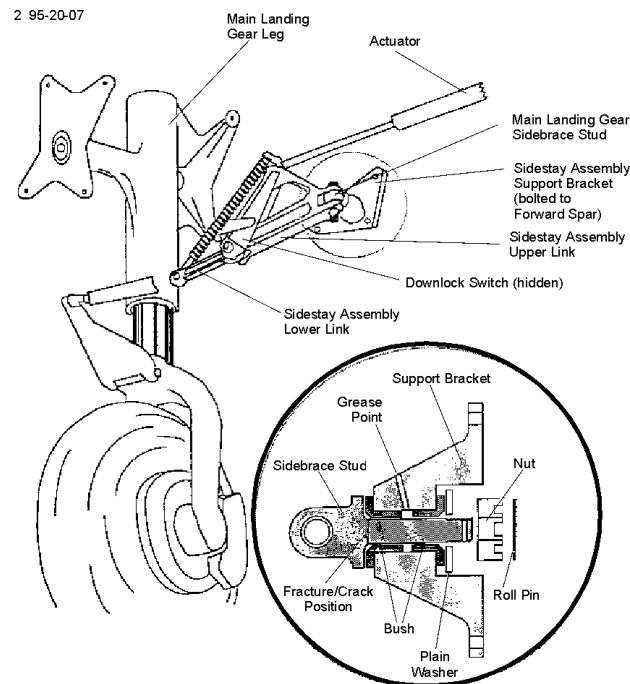


Figure 1

Note: This figure is provided to depict the area of the sidebrace stud to be inspected. This is not intended to represent the configuration of all models affected.

For any main gear sidebrace stud not found cracked, before to further flight reinstall the stud per the instructions in the Landing Gear section of the applicable MM, and reinspect and replace (as necessary) per this AD.

For any main gear sidebrace stud found cracked, before to further flight replace the cracked stud with a serviceable part per the instructions in the Landing Gear section of the applicable MM, and reinspect and replace (as necessary) per this AD.

Note 2: Models PA24 and PA24-250 aircraft were fitted with main gear sidebrace studs P/N 20829-00 at production. Models PA24-260 and PA24-400 aircraft were fitted with main gear sidebrace studs P/N 22512-00 at production. (FAA AD 97-01-01R1 refers)

Compliance: Within the next 100 hours TIS unless previously accomplished and thereafter at intervals not to exceed 1000 hours TIS.

Effective Date: DCA/PA24/125A - 14 March 1997
DCA/PA24/125B - 29 September 2011
DCA/PA24/125C - 27 October 2011

DCA/PA24/126 Induction Air Filters – Removal from Service

Applicability: The following models and S/Ns that are equipped with Purolator air filter P/N 638873, Model CA161PL, or Piper P/N 460-632 (PS60007-2);

PA-24-180 and PA-24-250 S/N 24-103 through 24-3687

PA-24-260 S/N 24-3642, and 24-4000 through 24-5028

Requirement: To prevent pieces of a damaged induction air filter from being ingested into the engine, which could result in reduced or loss of engine power, accomplish the following:-

Replace, per the maintenance manual, any Purolator/Facet induction air filter, Purolator P/N 638873, Model No. CA161PL, Piper P/N 460-632 (PS60007-2), that meets the following conditions:

- Was manufactured anytime from January 1997 through September 1998; and
- Is identified with a ¼ inch high (white) ink stamp "FACET - 638873", and may include "FAA-PMA".

Note: Piper SB 1022, and Purolator SB 090298.01 provide information relating to this AD, including procedures on how to identify the affected air filters.
(FAA AD 99-05-09 refers)

Compliance: Within next 25 hours TIS.

Effective Date: 25 March 1999

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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.

2012-17-06 Stabilator Horn Assembly – Inspection and Replacement

Effective Date: 22 October 2012

68-05-01 Exhaust Mufflers – Inspection

Effective Date: 31 March 1968

2015-24-05 Fuel System – Inspection

Effective Date: 12 January 2016