

# Airworthiness Directive Schedule

## Aeroplanes

### Piper PA-31 Series (Navajo, Chieftain, Mojave, Cheyenne and T1040)

27 February 2020

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- Notes:**
1. This AD schedule is applicable to Piper PA-31 series aircraft manufactured under the following Federal Aviation Administration (FAA) Type Certificate Numbers:

Aircraft Model:	FAA Type Certificate Number:
PA-31 (Navajo)	A20SO
PA-31-325 (Navajo C/R)	A20SO
PA-31-350 (Navajo Chieftain)	A20SO
PA-31P (Pressurized Navajo)	A8EA
PA-31-350 (Mojave)	A8EA
PA-31T (Cheyenne)	A8EA
PA-31T1 (Cheyenne 1)	A8EA
PA-31T3 (T1040)	A8EA

2. The 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 [http://rgl.faa.gov/Regulatory\\_and\\_Guidance\\_Library/rgAD.nsf/MainFrame?OpenFrameSet](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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<b>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 <a href="http://www.caa.govt.nz/airworthiness-directives/states-of-design/">http://www.caa.govt.nz/airworthiness-directives/states-of-design/</a> 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.</b> .....		
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**DCA/PA31/1 MLG Door Hinge Attaching Rivets - Modification****Applicability:** Model PA-31 and PA-31-300**Requirement:** Piper SB 286**Compliance:** Within the next 50 hours TIS**Effective Date:** 28 February 1969**DCA/PA31/2 Elevator Torque Tube Assembly - Inspection****Applicability:** Model PA-31 and PA-31-300**Requirement:** Piper SB 284**Compliance:** Not later than 100 hours TIS from last inspection. If over 100 hours since last inspection compliance required before further flight. Repetitive inspection every 100 hours TIS in accordance with SB 284**Effective Date:** 28 February 1969**DCA/PA31/3 Elevator Control System Friction - Inspection****Applicability:** Model PA-31 and PA-31-300**Requirement:** Piper SB 289**Compliance:** Next periodic inspection**Effective Date:** 30 April 1969**DCA/PA31/4 Fuel Crossfeed Line - Inspection****Applicability:** Model PA-31**Requirement:** A case has been reported of a fire caused by ignition of fuel leaking from a chafed crossfeed line in the vicinity of the fuel control panel. Inspect and modify if necessary as follows:

1. Remove fuel control panel cover assembly P/N 41448-00 and inspect the fuel crossfeed line for any sign or possibility of chafing, especially by contact with the edges of the spar cover cut-out, the fuel crossfeed control flexible conduit or the ends of the screws securing the light assembly P/N 472754 to the panel cover assembly P/N 41448-00.
2. If any possibility of chafing exists, suitably adjust or modify the installation to eliminate the risk. If the crossfeed line is displaced or bent to achieve greater clearance at any location, check positively that the adequate clearance is still maintained at all other locations. Where necessary fit the crossfeed line with a split sleeve for added protection.

*Note: If the fuel crossfeed control flexible conduit is found to run between the crossfeed line and the front face of the wing spar, it is recommended that it be re-routed to run forward of the crossfeed line. It is also recommended that the screws securing the light assembly P/N 472754 to the panel cover assembly be shortened by removal of any excess length.*

**Compliance:** Within the next 100 hours TIS**Effective Date:** 30 June 1969

<b>DCA/PA31/5</b>	<b>Fuselage Bulkhead - Modification</b>
<b>Applicability:</b>	Model PA-31 and PA-31-300 S/N as detailed in SL 523
<b>Requirement:</b>	Piper SL 523
<b>Compliance:</b>	Next periodic inspection
<b>Effective Date:</b>	30 June 1969
<b>DCA/PA31/6</b>	<b>Weldon Electric Fuel Pump - Modification</b>
<b>Applicability:</b>	Model PA-31 and PA-31-300 S/N as detailed in SL 524
<b>Requirement:</b>	Piper SL 524
<b>Compliance:</b>	Next periodic inspection
<b>Effective Date:</b>	31 July 1969
<b>DCA/PA31/7</b>	<b>Stall Strips - Modification</b>
<b>Applicability:</b>	Model PA-31 and PA-31-300 S/N as detailed in SB 294
<b>Requirement:</b>	Piper SB 294
<b>Compliance:</b>	By 31 July 1969
<b>DCA/PA31/9</b>	<b>Wing Flap Electrical System - Modification</b>
<b>Applicability:</b>	Model PA-31 and PA-31-300
<b>Requirement:</b>	Piper SB 307
<b>Compliance:</b>	By 30 June 1970
<b>DCA/PA31/10</b>	<b>Cancelled - DCA/PA31/11 refers</b>
<b>DCA/PA31/11</b>	<b>Cancelled – DCA/PA31/69 refers</b>
<b>DCA/PA31/12</b>	<b>Auto Pilot Servo and Bridle Cable Installations - Inspection</b>
<b>Applicability:</b>	Model PA-31 and PA-31-300 S/N 31-2 and up equipped with a III, IIIB or IIIB-1 Automated Flight Control System installation
<b>Requirement:</b>	Piper SB 320A
<b>Compliance:</b>	As detailed
<b>Effective Date:</b>	31 October 1970
<b>DCA/PA31/13</b>	<b>Alternator System - Modification</b>
<b>Applicability:</b>	Model PA-31 and PA-31-300 S/N as detailed in SB 306
<b>Requirement:</b>	Piper SB 306
<b>Compliance:</b>	Within the next 100 hours TIS
<b>Effective Date:</b>	31 December 1970

- DCA/PA31/14      Battery Drain - Modification**  
**Applicability:** Model PA-31 and PA-31-300 S/N 31-2 through 31-591  
**Requirement:** Piper SB 325  
**Compliance:** Within the next 100 hours TIS  
**Effective Date:** 31 March 1971
- DCA/PA31/15      Electric Trim Switch - Inspection**  
**Applicability:** Model PA-31 and PA-31-300 S/N as listed in SB 331  
**Requirement:** Piper SB 331  
**Compliance:** Within the next 100 hours TIS  
**Effective Date:** 31 March 1971
- DCA/PA31/16      Emergency Gear Extension Placard - Modification**  
**Applicability:** Model PA-31 and PA-31-300 S/N 31-2 through 31-751; 31-753 and 31-754  
**Requirement:** Piper SB 344  
**Compliance:** Within the next 50 hours TIS  
**Effective Date:** 30 November 1971
- DCA/PA31/17      Cancelled - Once only inspection, purpose fulfilled**
- DCA/PA31/18      Cancelled - Once only inspection, purpose fulfilled**
- DCA/PA31/19      Electric Fuel Pumps - Modification**  
**Applicability:** Model PA-31 and PA-31-300 S/N as detailed in SB 347  
**Requirement:** Piper SB 347  
**Compliance:** Within the next 50 hours TIS  
**Effective Date:** 31 March 1972
- DCA/PA31/20      Manual Heater Shut-off & Solenoid Fuel Regulator Shut-off Valves - Inspection**  
**Applicability:** Model PA-31 and PA-31-300 S/N 31-2 through 31-7401258  
**Requirement:** FAA AD 74-26-04 and Piper SB 417  
**Compliance:**  
1. Para (A) of FAA AD 74-26-04 within the next 25 hours TIS  
2. Para (B) of FAA AD 74-26-04 within the next 125 hours TIS  
**Effective Date:** 17 December 1974  
*Note: A copy of the reference document may be obtained from the Director.*

**DCA/PA31/21A Magneto Switch Guard Installation - Modification**

**Applicability:** Model PA-31 and PA-31-300 S/N 31-2 through 31-7300969 PA-31-350 S/N 31-5001 through 31-7305091 and PA-31P S/N 31P-1 through 31P-730061

**Requirement:** Piper the referenced SL.  
(FAA AD 74-26-10 also refers)

**Compliance:** Within the next 100 hours TIS unless already accomplished

**Effective Date:** DCA/PA31/21 - 18 March 1975  
DCA/PA31/21A - 27 July 1984

**DCA/PA31/22 Elevator Control Tube - Inspection**

**Applicability:** Model PA-31 and PA-31-300 S/N 31-1 through 31-7401248  
Model PA-31-350 S/N 31-5001 through 31-7405242 and 31-7405400 through 31-7405462

**Requirement:** Piper SB 433.  
(FAA AD 75-09-10 also refers)

**Compliance:** Within the next 100 hours TIS

**Effective Date:** 18 June 1975

**DCA/PA31/23B Landing Gear Selector Cable Forward Attach Pin - Modification**

**Applicability:** Model PA-31 and PA-31-325 S/N 31-7300950 through 31-7612017, PA-31-350 S/N 31-7305048, 31-7305049, and 31-7305052 through 31-7652032, PA-31P S/N 31P-7300128 through 31P-7630005 and PA-31T S/N 31T-7400002 through 31T-7620013.

**Requirement:** To prevent the landing gear selector cable forward attachment pin assembly from becoming separated from the power-pack control arm and loss of landing gear retraction or extension, accomplish the following:-

Modify the landing gear selector cable forward attachment pin assembly by installing a safety lock wire per Piper SB 488.

(FAA AD 96-24-13 refers)

**Compliance:** Within next 50 hours TIS unless already accomplished.

**Effective Date:** DCA/PA31/23A - 27 July 1984  
DCA/PA31/23B - 14 February 1997

**DCA/PA31/24 Battery Drain and Vent - Modification**

**Applicability:** Model PA-31-350 S/N 31-5001 through 31-7552073

**Requirement:** Piper SB 460A.  
(FAA AD 76-04-10 also refers)

**Compliance:** Within the next 100 hours TIS

**Effective Date:** 31 March 1976

**DCA/PA31/25A Control Shaft Collar Attachment - Modification**

**Applicability:** Model PA-31 S/N 31-2 through 31-7612009, PA-31-350 S/N 31-5001 through 31-7652018, PA-31P S/N 31P-7630001 and 31P-7630003, also PA-31T S/N 31T-7400002 through 31T-7620002, 31T-7620004, 31T-7620005 and 31T-7620007

**Requirement:** Piper SB 487.  
(FAA AD 76-04-11 refers)

**Compliance:** Within the next 50 hours TIS unless already accomplished

**Effective Date:** DCA/PA31/25 - 31 March 1976  
DCA/PA31/25A - 27 July 1984

**DCA/PA31/26C Flap Control System - Inspection**

**Applicability:** Models PA-31, PA-31-300, PA-31-325 S/N 31-2 through 31-7812129; PA-31-350 S/N 31-5001 through 31-7852171, PA-31P S/N 31P-1 through 31P-7730012, not modified per Piper SL 959

**Requirement:** Inspect flap transmission for excessive wear per Instruction No. 1 of Piper SB 494B. If transmission or shaft replaced or reworked, inspect and correct as necessary per Instruction No. 2 of Piper SL 764A  
(FAA AD 81-11-03 refers)

**Compliance:** At intervals not exceeding 100 hours TIS

**Effective Date:** DCA/PA31/26B - 10 July 1981  
DCA/PA31/26C - 27 July 1984

**DCA/PA31/27 Elevator Balance Weight - Modification**

**Applicability:** Model PA-31-350 S/N 31-5001 through 31-7552108

**Requirement:** Piper SB 500

**Compliance:** Within the next 50 hours TIS

**Effective Date:** 31 May 1976

**DCA/PA31/28 Electric Trim Switch - Modification**

**Applicability:** Model PA-31 S/N 31-2 through 31-797 and PA-31-350 S/N 31-5001 through 31-5004 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/PA31/29B Cancelled – FAA AD 80-18-10 refers**

**Effective Date:** 31 January 2019

**DCA/PA31/30 Fuel Crossfeed Control Shaft - Modification**

**Applicability:** Model PA-31-350 S/N 31-5001 through 31-7752099

**Requirement:** Piper SB 574

**Compliance:** Within the next 50 hours TIS

**Effective Date:** 16 September 1977



**DCA/PA31/31 Aileron Cables and Flap Solenoid - Inspection**

**Applicability:** Model PA-31, PA-31-300, and PA-31-325, S/N 31-2 through 31-7712051 Model PA-31-350 S/N 31-5001 through 31-7752092

**Requirement:** 1. Inspect aileron balance and interconnect cables and flap solenoid for evidence of damage due to electrical arcing between flap solenoid and cables. If damaged repair prior to further flight.  
2. Modify flap solenoid installation by inverting in accordance with Piper SB 567. (FAA AD 77-19-06 refers)

**Compliance:** Part 1 of requirement:  
1. Not later than next 50 hours TIS.  
2. Within next 10 hours TIS if wing flap motor circuit breaker activates.  
3. When complying with Part 2 of requirement.  
Part 2 of requirement: Not later than next 100 hours TIS.

**Effective Date:** 29 September 1977

**DCA/PA31/32 Cabin Door Latch - Modification**

**Applicability:** Models PA-31, PA-31-300 and PA-31-325 S/N 31-2 through 31-7512029 and PA-31-350 S/N 31-5001 through 31-7552052 except aircraft embodying all three kits described in Piper SL 739

**Requirement:** Modify per Piper SL 803A. (FAA AD 78-05-05 refers)

**Compliance:** Not later than next 50 hours TIS

**Effective Date:** 14 April 1978

**DCA/PA31/33 Flexible Fuel Tanks - Inspection**

**Applicability:** Model PA-31 and PA-31-300 S/N 31-1 through 31-810. Also any other PA-31 series aircraft equipped with Goodyear BTC-39 series fuel tanks as described in Piper SB 591

**Requirement:** Accomplish a visual inspection and a pressure test per Piper SB 591. (FAA AD 78-05-06 and Goodyear SB FT-77-1 refer)

**Compliance:** 1. Within the next 25 hours TIS or 30 days, whichever is the sooner.  
2. Within the next 100 hours TIS or 6 months, whichever is the sooner; thereafter at intervals not exceeding 12 months

**Effective Date:** 28 April 1978

**DCA/PA31/34B Forward Baggage Door Lock - Inspection**

**Applicability:** Model PA-31, PA-31-300 and PA-31-325 S/N 31-1 through 31-7912061; PA-31-350 S/N 31-5001 through 31-7952117; PA-31P S/N 31P-1 through 31P-7730012; PA-31T S/N 31T-7400002 through 31T-7920038 and PA-31T1 S/N 31T-7804001 through 31T-7904017 as detailed in Parts I and II of Piper SB 604A

**Requirement:** Modify and inspect per Piper SB 604A Parts I and II

**Compliance:** Within the next 100 hours TIS unless already accomplished

**Effective Date:** DCA/PA31/34A - 3 August 1979  
DCA/PA31/34B - 27 July 1984

**DCA/PA31/35B Elevator Control System - Inspection**

<b>Applicability:</b>	Models	Serial Numbers
	PA-31, PA-31-300, PA-31-325	31-2 through 31-8312019
	PA-31-350	31-5001 through 31-8553002
	PA-31P	31P-1 through 31P-7730012

**Requirement:** To prevent failure of the elevator bungee spring, which could result in loss of control of the aircraft, accomplish the following:-

(a) For any affected aircraft incorporating a Piper P/N 42377-02 (or FAA-approved equivalent P/N) elevator bungee spring where the elevator bungee spring has 900 hours TIS or less, accomplish the following:

(1) Within the next 100 hours TIS unless already accomplished (compliance with DCA/PA31/35A), and thereafter at intervals not to exceed 100 hours TIS until the replacement required by paragraph (b) of this AD is accomplished, inspect the elevator bungee spring for cracks or surface deformities per the ACCOMPLISHMENT INSTRUCTIONS section of Piper SB 626C.

**Note 1:** The 100-hour TIS repetitive inspection compliance time is the same as that in DCA/PA31/35A (superseded by this action). This compliance time is being retained to provide credit and continuity for already-accomplished and future inspections.

**Note 2:** Piper SB 626C lists Piper Models PA-31, PA-31-300, PA-31-325, and PA-31-350 in the Models Affected section. For purposes of this AD, the inspection procedures included in this SB also apply to the Piper Model PA-31P.

(2) If any cracks or surface deformities are found during any inspection required by paragraph (a)(1) of this AD, prior to further flight, accomplish the following:

(i) For all affected Models PA-31, PA-31-300, PA-31-325, and PA-31-350, replace the elevator bungee link with a Piper P/N 71086-03 (or FAA-approved equivalent P/N) elevator bungee link;

(ii) For all the affected aircraft, replace the elevator bungee spring with a Piper P/N 71056-02 (or FAA-approved equivalent P/N) or Piper P/N 71056-03 (or FAA-approved equivalent P/N) elevator bungee spring. Accomplish this per Section IV, Surface Controls, of the applicable maintenance manual.

(b) Upon accumulating 1,000 hours TIS on a Piper P/N 42377-02, 71056-02, or 71056-03 (or FAA-approved equivalent P/N for any of the above) elevator bungee spring or within the next 100 hours TIS after the effective date of this AD, whichever occurs later, accomplish the following:

(1) For all affected Models PA-31, PA-31-300, PA-31-325, and PA-31-350, replace the elevator bungee link with a Piper P/N 71086-03 (or FAA-approved equivalent P/N) elevator bungee link per Section IV, Surface Controls, of the applicable maintenance manual, unless already accomplished.

(2) For all affected aircraft, replace the elevator bungee spring with a Piper P/N 71056-02 (or FAA-approved equivalent P/N) or Piper P/N 71056-03 (or FAA-approved equivalent P/N).

(i) For all affected Models PA-31, PA-31-300, PA-31-325, and PA-31-350, accomplish this replacement per Section IV, Surface Controls, of the applicable maintenance manual.

(ii) For the affected Model PA-31P accomplish the replacement per the INSTRUCTIONS section in Piper SB 1002.

(c) For all affected aircraft, repetitively replace the elevator bungee spring with a Piper P/N 71056-02 (or FAA-approved equivalent P/N) or Piper P/N 71056-03 (or FAA-approved equivalent P/N) elevator bungee spring at intervals not to exceed 1,000 hours TIS.

(1) Accomplish the repetitive replacements per the applicable service information specified in either paragraph (b)(2)(i) or (b)(2)(ii) of this AD.

(2) If an affected aircraft already had the elevator bungee spring and link replaced as specified in paragraphs (b)(1) and (b)(2) of this AD, then only the repetitive replacements of the elevator bungee spring as specified in paragraph (c) of this AD are required.

(d) The repetitive inspections required by paragraph (a) of this AD may be terminated when the replacements specified in paragraphs (a)(2) and (b)(1) and (b)(2) of this AD are accomplished.

(e) As of the effective date of this AD, Piper P/N 42377-02 (or FAA-approved equivalent P/N) elevator bungee spring or a Piper P/N 42376-02 (or FAA-approved equivalent P/N) elevator bungee link, shall no longer be fitted to any aircraft.

**Note 3:** The actions specified by this AD are different from those in Piper SB No. 626C. This AD takes precedence over the SB. Piper SB No. 626C, specifies replacing the bungee links every 1,000 flight hours, and specifies repetitive inspections of both the Piper P/N 42377-02 and P/N 71056-02 elevator bungee springs. This AD requires a one-time replacement of the elevator bungee link, and does not require repetitive inspections of the Piper P/N 71056-02 elevator bungee springs on any of the affected aircraft.  
(FAA AD 98-08-18 refers)

**Compliance:** Compliance is required at the times specified within the requirement of this airworthiness directive.

**Effective Date:** DCA/PA31/35A - 3 August 1979  
DCA/PA31/35B - 5 June 1998

**DCA/PA31/36 Elevator Cable Installation - Inspection**

**Applicability:** Model PA-31-350 S/N 31-5001 through 31-7852151

**Requirement:** Inspect cable installation and embody modifications as detailed in Piper SB 621  
(FAA AD 78-26-11 refers)

**Compliance:** Within the next 100 hours TIS

**Effective Date:** 9 February 1979

**DCA/PA31/37 Elevator Control Stops - Inspection**

**Applicability:** Model PA-31, PA-31-300 and PA-31-325 S/N 31-5 through 31-7912049. Model PA-31-350 S/N 31-5001 through 31-7952091

**Requirement:** Comply with Piper SB 649

**Compliance:** Within the next 25 hours TIS

**Effective Date:** 23 April 1979

*Note: Requirement notified to registered owners on effective date.*

**DCA/PA31/38 Heater Fuel Drain - Modification**

- Applicability:** Model PA-31, PA-31-300, PA-31-325, S/N 31-2 through 31-7912036. Model PA-31-350 S/N 31-5001 through 31-7952061
- Requirement:** Modify per Piper SB 641
- Compliance:** Within the next 100 hours TIS, unless already accomplished
- Effective Date:** 15 June 1979

**DCA/PA31/39A Control Wheel Attachment - Inspection**

- Applicability:** Model PA-31, PA-31-300 PA-31-325 S/N 31-5 through 31-7912059; PA-31-350 S/N 31-5001 through 31-7952111; PA-31P S/N 31P-1 through 31P-7730012; PA-31T S/N 31T-7400002 through 31T-7920060 and PA-31T1 S/N 31T-7804001 through 31T-7904033
- Requirement:** To avoid possible separation of control wheel control shaft stud from control shaft tube, inspect per Piper SB 651  
(FAA Emergency AD dated 3 May 1979 refers)
- Compliance:** Within the next 5 hours TIS unless already accomplished
- Effective Date:** DCA/PA31/39 - 15 May 1979  
DCA/PA31/39A - 27 July 1984

*Note: Requirement notified to registered owners on effective date*

**DCA/PA31/40C Cancelled – FAA AD 2013-10-04 refers**

- Effective Date:** 17 July 2013

**DCA/PA31/41 Flap Position Indicator - Modification**

- Applicability:** Model PA-31-350 S/N 31-5001 through 31-8052129 not incorporating Piper SB 707 and operated per POH revision PR810130
- Requirement:** Modify flap position indicator per Piper SB 684 Part II.
- Compliance:** Within the next 25 hours TIS unless already accomplished.
- Effective Date:** 9 May 1980

*Note: Requirement notified to registered owners on effective date*

**DCA/PA31/42B      Outboard Flap Track - Inspection**

**Applicability:** Models PA-31 and PA-31-300 S/N 31-2 through 31-8012010, PA-31-325 S/N 31-7512006 through 31-8012010 and PA-31-350 S/N 31-5001 through 31-8052025

**Requirement:** To prevent cracking of outboard flap tracks, wing rib flanges and rear spar web, accomplish the following:

1. Using 10 power magnification, inspect for cracks in area of wing station 147.5 flap attach point on both wings as follows:

(a) Lower flaps to 40°.

(b) Inspect attachment of flap track to rear spar on inboard and outboard sides of flap track.

(c) Remove rectangular access plate from bottom skin, located forward of spar at wing station 153 and through access hole inspect wing station 147.5 rib attachment angle.

If any cracks found, repair and modify per Piper SB 647A before further flight.

2. Modify per Piper SB 647A.

(FAA AD 96-10-15 refers)

**Compliance:** 1. Within the next 100 hours TIS and thereafter at intervals not exceeding 100 hours TIS until modified per Piper SB 647A.

2. Within next 1000 hours TIS.

**Effective Date:** DCA/PA31/42A - 27 July 1984  
DCA/PA31/42B - 5 July 1996

**DCA/PA31/43      Engine Alternate Air Door - Modification**

**Applicability:** Model PA-31-350 S/N 31-5001 through 31-7652066

**Requirement:** Modify alternate air door installation per Piper SB 479B.  
(FAA AD 80-13-06 refers)

**Compliance:** Within the next 50 hours TIS

**Effective Date:** 15 August 1980

**DCA/PA31/44B      Cancelled – FAA AD 2016-05-01 refers**

**Effective Date:** 15 April 2016

**DCA/PA31/45      Elevator Balance Weight Installation - Inspection**

**Applicability:** Model PA-31 S/N 31-7401201 through 31-8012076 and PA-31-350 S/N 31-7405401 through 31-8052169 and 31-8052172

**Requirement:** Inspect per Piper SB 690. Fit correct weights and/or reidentify as specified.  
(FAA AD 80-17-02 refers)

**Compliance:** Within the next 100 hours TIS

**Effective Date:** 12 September 1980

**DCA/PA31/46 Flap Position Indicator - Modification**

**Applicability:** Models PA-31 and PA-31-325 S/N 31-2 through 31-8012086 not incorporating Piper SB 708 and operated per POH Revision PR810220

**Requirement:** Placard and modify flap position indicator per Piper SB 697 Parts I and II

**Compliance:** Placard - within the next 25 hours TIS.  
Modification - By 31 October 1980

**Effective Date:** 8 September 1980

*Note: Requirement notified to registered owners on effective date*

**DCA/PA31/47A Cancelled – FAA AD 80-18-10 refers**

**Effective Date:** 31 January 2019

**DCA/PA31/48C MLG Door Installation - Inspection**

**Applicability:** Models PA-31, PA-31-300, PA-31-325; PA-31-350, PA-31P, PA-31T, PA-31T1 and PA-31T3.

**Requirement:** To prevent hazards associated with failed landing gear door attachments interfering with landing gear operation, inspect door hinges and attachment angles per Piper SB 682. Renew cracked fittings before further flight.  
(FAA AD 2000-25-01 refers)

**Compliance:** For hinge assembly P/N 47529-32, inspect within the next 1000 hours TIS and thereafter at intervals not to exceed 1000 hours TIS. For other P/N hinge assemblies, inspect within the next 100 hours TIS and thereafter at intervals not exceeding 100 hours TIS.

**Effective Date:** DCA/PA31/48B – 4 June 1999  
DCA/PA31/48C – 22 February 2001

**DCA/PA31/49B Nose Wheel - Inspection**

**Applicability:** Models PA31, PA31-300, and PA31-325 S/N 31-2 through 31-8112038, PA31-350 S/N 31-5001 through 31-8152088, and PA31P S/N 31P-3 through 31P-7730012 equipped with Cleveland P/N 40-76B (Piper P/N 451 784) nose wheel assembly.

**Requirement:** To prevent the failure of the nose wheel, accomplish the following:-

Inspect the nose wheel assembly, Cleveland P/N 40-76B (Piper P/N 451 784), for cracks per Piper SB 700A.

If cracked, prior to further flight:

(a) Replace with a new Cleveland P/N 40-76B (Piper P/N 451 784) nose wheel assembly; or,

(b) Replace with a serviceable Cleveland P/N 40-140 (Piper P/N 551 791) nose wheel assembly of improved design per Piper SB 700A.

(FAA AD 97-07-03 refers)

**Note:** The installation of Cleveland P/N 40-140 (Piper P/N 551 791) is terminating action for this AD.

**Compliance:** At 2,000 hours TTIS (nose wheel assembly), or within next 100 hours TIS whichever occurs later. Thereafter at intervals not to exceed 100 hours TIS, or at each tyre change, whichever occurs first.

**Effective Date:** DCA/PA31/49A - 27 July 1984  
DCA/PA31/49B - 9 May 1997

**DCA/PA31/50A Horizontal Stabiliser and Elevator Installation - Inspection**

**Applicability:** Model; PA-31, PA-31-300, and PA-31-325 S/N 31-2 through 31-8312019; PA-31-350 S/N 31-5001 through 31-8553002; PA-31P-350 S/N 31P-8414001 through 31P-8414050.

**Requirement:** To prevent failure of the horizontal stabiliser rear spar caused by cracks at the elevator outboard hinge attachment, which could result in loss of control of the aircraft, accomplish the following:-

1. Inspect the horizontal stabiliser rear spar in the area of the outboard hinge attachment and the outboard hinge attach bracket for cracks per the INSTRUCTIONS section of Piper SB 1007.

If cracks are found in the horizontal stabiliser rear spar during this inspection, prior to further flight, modify the horizontal stabiliser rear spar by incorporating Piper Kit No. 766-646. Accomplish this modification per the INSTRUCTIONS contained in Piper Kit No. 766-646, which is referenced in Piper SB 1007.

2. Modify the horizontal stabiliser rear spar by incorporating Piper Kit No. 766-646. Accomplish this modification per the INSTRUCTIONS contained in Piper Kit No. 766-646, which is referenced in Piper SB 1007.

**Note:** Incorporating Piper Kit No. 766-646 is considered terminating action for the inspections required by this AD.  
(FAA AD 99-06-01 refers)

**Compliance:** 1. Within next 100 hours TIS and thereafter at intervals not to exceed 100 hours TIS.  
2. Within next 500 hours TIS, or when cracks are found, whichever occurs first,

**Effective Date:** DCA/PA31/50 - 18 September 1981  
DCA/PA31/50A - 9 April 1999

**DCA/PA31/51B Cancelled – FAA AD 82-27-13R2 refers**

**Effective Date:** 25 February 2016

**DCA/PA31/52A Fuselage Bulkhead - Inspection**

**Applicability:** Models PA-31T S/N 31T-7400002 through 31T-8120104, PA-31T1 S/N 31T-7804001 through 31T-8104101, 31T-8304003, 31T-1104004 through 31T-1104007; PA-31T2 S/N 31T-8166001 through 31T-8166032, 31T-8166034 through 31T-8166065, 31T-8166067 through 31T-8166071, 31T-8166073 through 31T-8166075, and PA-31T3 S/N 31T-8275001, 31T-8275003 through 31T-8275012, 31T-8275014 through 31T-8275017, 31T-8275025, 31T-8375001 through 31T-8375005.

**Requirement:** To prevent structural failure of the horizontal stabiliser and the aft fuselage attachment caused by cracks in the FS 332 bulkhead, accomplish the following:-

1. Inspect using dye penetrant methods per Piper SB 773. If cracks are found reinforce or replace cracked bulkheads per SB 773 before further flight.

2. Install reinforcement kit 764-983 or replace bulkhead assembly P/N 45583-16 or 45583-17 per SB 773.

(FAA AD 96-10-13 refers)

**Compliance:** 1. At intervals not exceeding 200 hours TIS until modified per part 2.  
2. Within next 600 hours TIS.

**Effective Date:** DCA/PA31/52 18 May 1984  
DCA/PA31/52A 5 July 1996

**DCA/PA31/53 Fuel Quantity - Placard**

**Applicability:** Models PA-31T S/N 31T-7400002 through 31T-8120104; PA-31T1 (tip tank equipped only) S/N 31T-7804001 through 31T-8104102; PA-31T2 S/N 31T-8166001 through 31T-8166076

**Requirement:** To ensure that correct capacity and usable fuel quantity information is available, install placards per Piper SB 776

**Compliance:** By 30 June 1984

**Effective Date:** 8 June 1984

**\* DCA/PA31/54 Cancelled – FAA AD 82-27-13R2 refers**

**Effective Date:** 27 February 2020

**DCA/PA31/55 Landing Gear Installation - Inspection**

**Applicability:** Models PA-31, PA-31-300, PA-31-325 S/N 31-2 through 31-8312014, PA-31-350 S/N 31-5001 through 31-8352042; PA-31P S/N 31P-1 through 31P-7730012; PA-31T S/N 31T-7400002 through 31T-8120104; PA-31T1 S/N 31T-7804001 through 31T-8304003 and 31T-1104004 through 31T1-1105006, PA-31T2 S/N 31T-8166001 through 31T-8166071, 31T-8166073 and 31T-8166076; PA-31T3 S/N 31T-8275001 through 31T-8375003.  
(FAA AD 85-08-05 refers)

**Requirement:** Inspect, renew parts and modify per Piper SB 779A.

**Compliance:** Within the next 100 hours TIS

**Effective Date:** 31 August 1984

**DCA/PA31/56 Fuselage Bulkhead - Inspection**

**Applicability:** Model PA-31P S/N 31P-3 through 31P-7730012

**Requirement:** Inspect per Piper SB 802 and reinforce or replace cracked bulkheads as prescribed before further flight

**Compliance:** At 1000 hours TTIS, or within the next 25 hours TIS, whichever is the later and thereafter at intervals not exceeding 200 hours TIS

**Effective Date:** 8 February 1985



**DCA/PA31/57A Parking Brake Operation - Placard**

**Applicability:** Model PA-31P, S/N 31P-1 through 31P-7730012.

**Requirement:** To prevent aircraft controllability problems while involved in ground operation because of improper brake operation, install one of the following in a central location on the pilot's instrument panel in full view of the pilot a Piper P/N 81090-02 placard; or a Piper P/N 683-107 placard.

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

<p><b>WARNING</b></p> <p><b>NO BRAKING WILL OCCUR IF AIRCRAFT BRAKES ARE APPLIED WHILE PARKING BRAKE HANDLE IS PULLED AND HELD.</b></p>
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(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/PA31/57 - 22 March 1985  
DCA/PA31/57A - 19 December 1997

**DCA/PA31/58A Hydraulic Hoses - Removal**

**Applicability:** Model PA31, PA31-300, and PA31-325 S/N 31-2 through 31-8312019; PA31-350 S/N 31-5001 through 31-8553002; PA31P S/N 31P-1 through 31P-7730012; PA31P-350 S/N 31P-8414001 through 31P-8414050; PA31T S/N 31T-7400002 through 31T-8120104; PA31T1 S/N 31T-7804001 through 31T-8304003, and 31T-1104004 through 31T-1104017; PA31T2 S/N 31T-8166001 through 31T-8166076 and, 31T-1166001 through 31T-1166008; PA31T3 S/N 31T-8275001 through 31T-8475001 and, 31T-5575001.

**Requirement:** To prevent hydraulic hose failure which could cause loss of hydraulic capabilities resulting in a gear-up landing, accomplish the following:-

Inspect and replace all hydraulic hoses identified as P/N 17766-02 or 465-138 and having a smooth rubber surface and a blue coloured end nut, with hoses of the same P/N having a woven outer covering and black coloured end nut, per Piper SB 822.

**Note:** These hoses were available for installation starting February 1, 1985, and may have been installed in newly manufactured aircraft or as spares at any subsequent time. (FAA AD 96-21-04 refers)

**Compliance:** Within next 25 hours TIS

**Effective Date:** DCA/PA31/58 - 14 November 1986  
DCA/PA31/58A - 22 November 1996

**DCA/PA31/59A MLG Side Braces - Inspection**

**Applicability:** Models PA-31-300, PA-31-310, PA-31-325 S/N 31-2 through 31-8312019, PA-31-350 S/N 31-5001 through 31-8553002, PA-31P S/N 31P-2 through 31P-7730012, PA-31P-350 S/N 31P-8414001 through 31P-8414050, PA-31T S/N 31T-7400002 through 31T-8120104, PA-31T1, S/N 31T-7804001 through 31T-1104017, PA-31T2 S/N 31T-8166001 through 31T-8166076 and 31T-1166001 through 31T-1166008.

**Requirement:** To prevent the main landing gear from retracting because of a cracked forward side brace, accomplish the following:

1. Inspect (using dye penetrant methods) per Part I of Piper SB 845A. If cracks are found, replace cracked parts with improved design side braces per Part II of Piper SB 845A, before further flight.
2. Replace both left and right side braces with parts of improved design per Part II of Piper SB 845A.  
(FAA AD 96-10-14 refers)

**Compliance:** 1. At intervals not exceeding 100 hours TIS until modified per Part 2.  
2. Within next 1200 hours TIS.

**Effective Date:** DCA/PA31/59 - 13 May 1988  
DCA/PA31/59A - 5 July 1996

**DCA/PA31/60 Elevator Assembly - Inspection**

**Applicability:** Models PA-31, PA-31-300, PA-31-325 S/N 31-2 through 31-7612039, and PA-31-350 S/N 31-5001 through 31-7652070

**Requirement:** Inspect per Piper SB 864.  
Repair cracked structure as prescribed before further flight. Modify per Piper SB 323 if not already accomplished

**Compliance:** Within the next 100 hours TIS

**Effective Date:** 5 July 1988

**DCA/PA31/61A MLG Actuator Reinforcement Bracket - Replacement**

**Applicability:** Model PA31, PA31-300, and PA31-325 S/N 31-2 through 31-8312019; PA31-350 S/N 31-5001 through 31-8553002; PA31P S/N 31P-1 through 31P-7730012; PA31P-350 S/N 31P-8414001 through 31P-8414050; PA31T S/N 31T-7400001 through 31T-8120104; PA31T1 S/N 31T-7804001 through 31T-8304003 and 31T-1104004 through 31T-1104017; PA31T2 S/N 31T-8166001 through 31T-8166076 and 31T-1166001 through 31T-1166008; PA31T3 S/N 31T-8275001 through 31T-8475001 and 31T-5575001.

**Requirement:** To prevent inadvertent MLG extension due to actuator reinforcement bracket failure, accomplish the following:-  
Replace the MLG actuator reinforcement bracket having P/N 40776-00 with a new bracket, P/N 73786-02 per Piper SB 923.  
(FAA AD 96-21-11 refers)

**Compliance:** Within next 50 hours TIS, unless already accomplished.

**Effective Date:** DCA/PA31/61 - 18 February 1994  
DCA/PA31/61A - 22 November 1996

**DCA/PA31/62A Elevator Control Tube - Inspection**

**Applicability:** All model PA31, PA31P, and PA31T series.

**Requirement:** To prevent elevator control problems, which could lead to loss of control of the aircraft, accomplish the following:-

Ensure that the elevator control tube assembly area is not damaged by accomplishing the following inspections and procedures:

1. Gain access to the elevator controls in the tail by removing the bottom half of the tailcone and the fuselage side panels.
2. Remove the long pushrod that connects the bellcrank and the elevator horn.
3. Secure the aft end of the bungee link to the elevator horn with safety wire for removal and installation of the bungee attach bolt.
4. Inspect, using FAA-approved magnetic procedures, the rod end shank and threads for cracks. If found cracked, prior to further flight, replace the rod end with part number (P/N) 49261-02 or P/N 452-658.
5. Visually inspect the bearing in the rod end for wear and free movement. IF wear is found or the bearing will not move, prior to further flight, replace the rod end with P/N 49261-02 or P/N 452-658.
6. Inspect, using a 10X magnifying glass, the forward attach holes in the pushrod for cracks, corrosion, or elongation. If cracks, corrosion, or elongation is found, prior to further flight, replace the pushrod with P/N 40847-00, 40847-04, or 40847-07, as applicable.
7. Visually inspect the forward and aft attach area to ensure that both a forward bolt, P/N 402 311 (AN 174-12A), and an aft bolt, P/N 402 317 (AN 174-11A), are installed. If either one of these bolts is not installed, prior to further flight, install the applicable bolt or replace the existing bolt with one of the applicable part number.
8. Remove the safety wire, reinstall the pushrod, check to ensure that the elevator rigging is correct, and reinstall the bottom half of the tailcone and the fuselage side panels.

*Note 1: Figure 1 of this AD illustrates the elevator assembly and the specific areas that are to be inspected.*

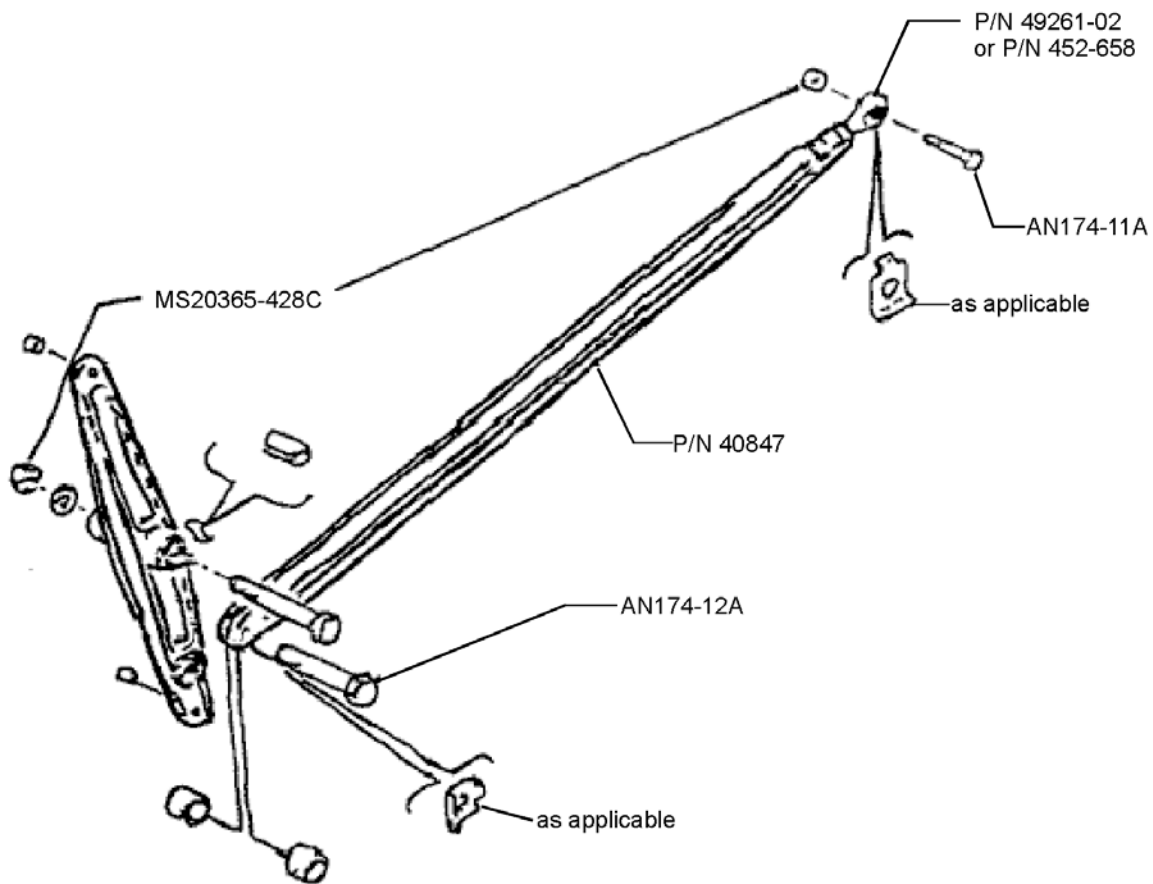


Figure 1

(FAA AD 93-24-02 R1 refers)

**Compliance:** Within next 50 hours TIS.

**Effective Date:** DCA/PA31/62 - 18 February 1994  
DCA/PA31/62A - 15 April 1994

*NZCAR, Part III Leaflet B11-27/1 is hereby cancelled*

**DCA/PA31/63 Inboard Aileron Hinge Brackets - Inspection**

**Applicability:** The following models and S/Ns that are not equipped with P/N 74461-02 (left) and P/N 74461-03 (right) inboard aileron hinge brackets.

Models PA31, PA31-300, and PA31-325 S/N 31-2 through 31-8312019; PA31-350 S/N 31-5001 through 31-8553002; PA31P-350 S/N 31P-8414001 through 31P-8414050; PA31T3 S/N 31T-8275001 through 31T-8475001, and 31T-5575001; PA31P S/N 31P-1 through 31P-7730012 and 31P-03; PA31T S/N 31T-400002 through 31T-7400009 and 31T-7520001 through 31T-8120104; PA31T1 S/N 31T-7804001 through 31T-8304003, and 31T-1104004 through 31T-1104017; PA31T2 S/N 31T-8166001 through 31T-8166076 and 31T-1166001 through 31T-1166008.

**Requirement:** To prevent structural failure of the aileron caused by cracks in the area of the inboard aileron hinge bracket, accomplish the following:-

1. Inspect (using dye penetrant methods) the area beneath and in the area of the inboard aileron hinge bracket on the aileron spar for cracks per Piper SB 967 or 974 as applicable.

If cracks are found on the aileron spar, accomplish the following before further flight:

- (i) Inspect the corresponding aileron rib at the inboard aileron hinge bracket location;
- (ii) Replace any cracked spar assembly and any cracked aileron rib per the applicable Maintenance Manual;
- (iii) Replace the inboard aileron hinge brackets with an inboard aileron hinge bracket of improved design, part number (P/N) 74461-02 (left) and P/N 74461-03 (right), per SB 967 or 974 as applicable.

If no cracks are found, prior to further flight, replace the inboard aileron hinge brackets with a part of improved design P/N 74461-02 (left) and P/N 74461-03 (right), per SB No. 967 or 974 as applicable.

2. If the inboard aileron hinge brackets, P/N 74461-02 (left) or P/N 74461-03 (right) have been ordered from the manufacturer but are not available, dye penetrant inspect beneath and in the vicinity of the inboard aileron hinge bracket for cracks per SB No. 967 or 974 as applicable.

If an inboard aileron bracket hinge, aileron spar or aileron rib is found cracked, before further flight, replace any cracked aileron rib and any cracked spar assembly (if applicable), and replace the inboard aileron hinge bracket as specified in this AD. (FAA AD 96-21-03 refers)

- Compliance:**
- 1. At 3000 hours TIS or within the next 100 hours TIS, whichever is the later.
  - 2. At intervals not to exceed 100 hours TIS until either parts become available or 1000 hours TIS have accumulated since the initial inspection required by this AD.

**Effective Date:** 22 November 1996

**DCA/PA31/64                      Positioning of Power Levers – AFM Revision**

**Applicability:** Models PA-31T, PA-31T1, PA-31T2 and PA-31T3.

**Requirement:** To prevent loss of control of the aircraft or engine overspeed caused by the power levers being positioned below the flight idle stop while the airplane is in flight, accomplish the following:-

Amend the Limitations Section of the aircraft flight manual (AFM) by inserting the following wording:

“Positioning of power levers below the flight idle stop while the aircraft is in flight is prohibited. Such positioning could lead to loss of aircraft control or may result in an engine overspeed condition and consequent loss of engine power.”

This action may be accomplished by incorporating a copy of this AD into the Limitations Section of the AFM.

(FAA AD 97-26-12 refers)

**Compliance:** By 31 March 1998

**Effective Date:** 13 February 1998

**DCA/PA31/65A Severe Icing Conditions – AFM Revision**

**Applicability:** Models PA-31, PA-31-300, PA-31-325 and PA-31-350.  
Models PA-31P, PA-31T, PA-31T1, PA-31T2 and PA31P-350.

**Requirement:** To minimise the potential hazards associated with operating the aircraft in severe icing conditions (by providing more clearly defined procedures and limitations associated with such conditions), incorporate the following into the Aircraft Flight Manual (AFM):-

**1. Limitations Section of the Aircraft Flight Manual**

“WARNING

Severe icing may result from environmental conditions outside of those for which the aircraft is certificated. Flight in freezing rain, freezing drizzle, or mixed icing conditions (supercooled liquid water and ice crystals) may result in ice build-up on protected surfaces exceeding the capability of the ice protection system, or may result in ice forming aft of the protected surfaces. This ice may not be shed using the ice protection systems, and may seriously degrade the performance and controllability of the aircraft.

- During flight, severe icing conditions that exceed those for which the aircraft is certificated shall be determined by the following visual cues. If one or more of these visual cues exists, immediately request priority handling from Air Traffic Control to facilitate a route or an altitude change to exit the icing conditions.
- Unusually extensive ice accumulation on the airframe and windshield in areas not normally observed to collect ice.
- Accumulation of ice on the upper surface of the wing aft of the protected area.
- Accumulation of ice on the engine nacelles and propeller spinners farther aft than normally observed.
- Since the autopilot, when installed and operating, may mask tactile cues that indicate adverse changes in handling characteristics, use of the autopilot is prohibited when any of the visual cues specified above exist, or when unusual lateral trim requirements or autopilot trim warnings are encountered while the aircraft is in icing conditions.
- All wing icing inspection lights must be operative prior to flight into known or forecast icing conditions at night. This supersedes any relief provided by the Master Minimum Equipment List (MMEL).”

**2. Normal Procedures Section of the Aircraft Flight Manual**

“THE FOLLOWING WEATHER CONDITIONS MAY BE CONDUCIVE TO SEVERE IN-FLIGHT ICING:

- Visible rain at temperatures below 0 degrees Celsius ambient air temperature.
- Droplets that splash or splatter on impact at temperatures below 0 degrees Celsius ambient air temperature.

PROCEDURES FOR EXITING THE SEVERE ICING ENVIRONMENT:

These procedures are applicable to all flight phases from takeoff to landing. Monitor the ambient air temperature. While severe icing may form at temperatures as cold as -18 degrees Celsius, increased vigilance is warranted at temperatures around freezing with visible moisture present. If the visual cues specified in the Limitations Section of the AFM for identifying severe icing conditions are observed, accomplish the following:

- Immediately request priority handling from Air Traffic Control to facilitate a route or an altitude change to exit the severe icing conditions in order to avoid extended exposure to flight conditions more severe than those for which the aircraft has been certificated.

- Avoid abrupt and excessive manoeuvring that may exacerbate control difficulties.
- Do not engage the autopilot.
- If the autopilot is engaged, hold the control wheel firmly and disengage the autopilot.
- If an unusual roll response or uncommanded roll control movement is observed, reduce the angle-of-attack.
- Do not extend flaps when holding in icing conditions. Operation with flaps extended can result in a reduced wing angle-of-attack, with the possibility of ice forming on the upper surface further aft on the wing than normal, possibly aft of the protected area.
- If the flaps are extended, do not retract them until the airframe is clear of ice.
- Report these weather conditions to Air Traffic Control.”

**Note:** This may be accomplished by inserting a copy of this AD in the AFM or by incorporating a manufacturer’s AFM revision that contains the wording per this AD.

**3. Flight Crew Notification**

Operators must ensure that flight crew are aware of the flight manual revision. (FAA AD 99-14-01 refers)

**Compliance:** For models PA-31, PA-31-300, PA-31-325 and PA-31-350 by 10 May 1998.  
For models PA-31P, PA-31T, PA-31T1, PA-31T2 and PA31P-350 by 30 August 1999.

**Effective Date:** DCA/PA31/65 - 10 April 1998  
DCA/PA31/65A - 30 July 1999

**DCA/PA31/66 Wing Spar Splice Plate - Replacement**

<b>Applicability:</b>	Models	Serial Numbers
	PA-31, PA-31-300, PA-31-325	31-2 through 31-8312019
	PA-31-350	31-5001 through 31-8553002

**Requirement:** To prevent failure of the lower spar splice plate caused by fretting and cracking, which could result in loss of control of the aircraft, accomplish the following:-

Replace the lower spar splice plate and rework the lower spar caps per the instructions included in the following kits, as applicable, and as referenced in Piper SB 1003:

1. Models PA-31, PA-31-300, and Piper PA-31-325  
Main Spar Splice Plate Replacement (Lower) Kit No. 766-640, Drawing 88254, Revision A, dated May 12, 1997.

2. Model PA-31-350  
Main Spar Splice Plate Replacement (Lower) Kit No. 766-641, Drawing 88255, Revision A, dated May 12, 1997.  
(FAA AD 98-09-25 refers)

**Compliance:** 1. Models PA-31, PA-31-300, and PA-31-325:  
Upon accumulating 6,000 hours on the lower spar splice plate or within the next 100 hours TIS, whichever occurs later.

2. Model PA-31-350:  
Upon accumulating 13,000 hours TIS on the lower spar splice plate or within the next 100 hours TIS, whichever occurs later.

**Effective Date:** 5 June 1998

**DCA/PA31/67 Elevator Spar - Inspection**

**Applicability:** The following models and S/Ns, that are not equipped with the applicable improved design elevators or elevator spar assemblies specified in the "Replacement Elevator P/N" and "Replace Spar P/N" columns of the "Material Required Table" on page 4 of Piper SB 998A.

PA-31, PA-31-300, and PA-31-325, S/N 31-2 through 31-8312019  
PA-31-350, S/N 31-5001 through 31-8553002  
PA-31P-350, S/N 31P-8414001 through 31P-8414050.

**Requirement:** To prevent failure of the elevator spar caused by fatigue cracking, which could result in reduced aircraft controllability, accomplish the following per the INSTRUCTIONS section of Piper SB 998A:-

- Install access holes for the inspection of the elevator spar,
- Inspect the elevator ice protection boots for looseness, and
- Inspect the elevator spars for cracks.

If the elevator ice protection boots are found loose prior to further flight, reinstall or replace the elevator ice protection boots per the INSTRUCTIONS section of Piper SB 998A.

If cracks are found on any elevator spar assembly, prior to further flight, replace the elevator or elevator spar assembly with a part of improved design as specified in the "Replacement Elevator P/N" and "Replace Spar P/N" columns of the "Material Required Table" on page 4 of Piper SB 998A. Accomplish these replacements in accordance with the applicable maintenance manual.

Within 1,000 hours TIS after the initial inspection required by this AD replace both the left and right elevators or elevator spar assemblies with parts of improved design as specified above.

*Note: Replacing both the left and right elevators or elevator spar assemblies with parts of improved design as specified, is considered terminating action for the repetitive inspection requirement of this AD.*

This action may be accomplished at any time to terminate the repetitive inspections, but must be accomplished prior to further flight on any elevator spar found cracked or within 1,000 hours TIS after the initial inspection, whichever occurs first.

If one elevator spar assembly is replaced prior to further flight when a crack is found, the other elevator spar assembly must still be repetitively inspected every 100 hours TIS until replacement at 1,000 hours TIS after the initial inspection or when cracks are found, whichever occurs first.

(FAA AD 99-12-05 refers)

**Compliance:** Upon accumulating 2,500 hours TIS on each elevator spar assembly or within the next 100 hours TIS, whichever occurs later.

If no cracks are found in the elevator spars reinspect the elevator spars for cracks at intervals not to exceed 100 hours TIS. Within 1,000 hours TIS after the initial inspection required by this AD replace both the left and right elevators or elevator spar assemblies with parts of improved design as specified.

**Effective Date:** 2 July 1999



**DCA/PA31/68 Ice Protection Systems – AFM Revision**

**Applicability:** Models PA-31, PA-31-300, PA-31-325, PA-31-350, PA-31P, PA-31T, PA-31T1, PA-31T2, PA-31T3, and PA-31P-350 equipped with pneumatic de-icing boots.

**Requirement:** To prevent reduced controllability of the aircraft due to adverse aerodynamic effects of ice adhering to the aircraft prior to the first deicing cycle, revise the Limitations Section of the Aircraft Flight Manual (AFM) to include the following:-

"Except for certain phases of flight where the AFM specifies that deicing boots should not be used (e.g., take-off, final approach, and landing), compliance with the following is required.

Wing and Tail Leading Edge Pneumatic Deicing Boot System, if installed, must be activated:

- At the first sign of ice formation anywhere on the aircraft, or upon annunciation from an ice detector system, whichever occurs first; and

- The system must either be continued to be operated in the automatic cycling mode, if available; or the system must be manually cycled as needed to minimize the ice accretions on the airframe.

The wing and tail leading edge pneumatic deicing boot system may be deactivated only after:

- leaving known or observed/detected icing that the flight crew has visually observed on the aircraft or was identified by the on-board sensors; and

- after the airplane is determined to be clear of ice."

(FAA AD 2000-06-06 refers)

**Notes:** *This may be accomplished by inserting a copy of this AD in the AFM or by incorporating a manufacturer's flight manual revision that contains the wording per this AD.*

*Operators must ensure that flight crew are aware of the flight manual revision.*

*Periodic treatment of deicing boots with approved ice release agents, such as ICExä , in accordance with the manufacturer's application instructions is recommended.*

**Compliance:** By 27 May 2000

**Effective Date:** 27 April 2000

**DCA/PA31/69 Rudder and Elevator Structure – Inspection**

**Applicability:** All PA-31 series aircraft.

**Requirement:** To detect and correct damage to the elevator structure, accomplish the following:-

Part 1A

Model PA-31 and PA-31-300, S/N 31-2 through 31-694.

Inspect the rudder and elevator spars and elevator butt ribs for cracks per Piper SB 323. If cracks are found in the rudder or elevator structure, prior to further flight replace the cracked part, and either continue to re-inspect or incorporate Kit No 760 465.

Within next 100 hours TIS, and thereafter at intervals not to exceed 100 hours TIS until Piper Elevator and Rudder Hinge Replacement Kit No 760 465 is incorporated.

Part 1B

Model PA-31 and PA-31-300, S/N 31-2 through 31-694.

Incorporate Piper Elevator and Rudder Hinge Replacement Kit No. 760 465.

At 2,000 hours TTIS or within the next 100 hours TIS, whichever occurs later.

Part 2A

PA-31T S/N 31T-7400002 through 31T-7620012.

Modify per Piper SB 477A, the elevator trim tab system and elevator control tube, by incorporating Piper Kit No. 760 989.

At 2,000 hours TTIS or within the next 100 hours TIS, whichever occurs later.

Part 2B

PA-31P S/N 31P-1 through 31P-7730012

PA-31T S/N 31T-7400002 through 31T-8120104

PA-31T1 S/N 31T-7804001 through 31T-8304003, and 31T-1104004 through 31T-1104017

PA-31T2 S/N 31T-8166001 through 31T-8166076, and 31T-1166001 through 31T-1166008

PA-31T3 S/N 31T-8275001 through 31T-8475001 and 31T-5575001.

Incorporate per Piper SB 897B, Elevator Butt Rib Refinement Kit, Piper P/N 766-219.

At 2,000 hours TTIS or within the next 100 hours TIS, whichever occurs later.

Part 3

PA-31, PA-31-300, and PA-31-325 S/N 31-2 through 31-8312019

PA-31-350 S/N 31-5001 through 31-8452021 and 31-8253001 through 31-8553002

PA-31P-350 S/N 31P-8414001 through 31P-8414050.

Incorporate per Piper SB 1008, Elevator Butt Rib Reinforcement Kit, Piper P/N 766-642.

At 2,000 hours TTIS or within the next 100 hours TIS, whichever occurs later.

**Note:**

*If DCA/PA31/67 is applicable, then the actions of DCA/PA31/67 must be accomplished prior to incorporating Elevator Butt Rib Reinforcement Kit, Piper P/N 766-642. No credit towards this AD is given for accomplishing the actions of Piper SB 864.*

*(FAA AD 2001-06-01 refers)*

**Compliance:** Compliance is required at the times specified within the requirement of this airworthiness directive.

**Effective Date:** 26 April 2001

**DCA/PA31/70 Rudder Torque Tube Assembly and Rudder Rib – Inspection**

**Applicability:** Models PA-31, PA-31-300 and PA-31-325, S/N 31-2 through 31- 8312019.  
PA-31-350, S/N 31-5001 through 31- 8553002.  
PA-31P, S/N 31P-1 through 31P- 7730012.  
PA-31P-350, S/N 31P-8414001 through 31P-8414050.  
PA-31T, S/N 31T-7400001 through 31T-8120104.  
PA-31T1, S/N 31T-7804001 through 31T-1104017.  
PA-31T2, S/N 31T-8166001 through 31T-1166008.  
PA-31T3, S/N 31T-8275001 through 31T-5575001.

**Requirement:** To detect and correct corrosion of the rudder torque tube assembly and rudder rib, which could result in failure of the rudder torque tube and loss of rudder control, accomplish the following:-

1. Install an inspection hole in the rudder skin for the rudder torque tube assembly per New Piper SB 1105A, or use the tooling hole in the rudder bottom rib. The diameter of the tooling hole may be enlarged by no more than 0.25 inches to facilitate inspection and corrosion treatment. Protect bare metal per Section 8, FAA Advisory Circular (AC) 43.13-1B.
2. Visually inspect the rudder torque tube and associated ribs for corrosion per SB 1105A. If corrosion damage is found, before further flight;  
(i) Replace the rib/rudder torque assembly; OR  
(ii) Repair the damaged torque tube using an approved repair design. FAA AD 2003-24-07 provides further information regarding the design of any repair.  
(FAA AD 2003-24-07 refers)

**Compliance:** 1. Within next 150 hours TIS.  
2. Within next 150 hours TIS and thereafter at intervals not to exceed 12 months.

**Effective Date:** 29 January 2004

**DCA/PA31/71A Nose Baggage Door – Inspection**

**Applicability:** Model PA-31, PA-31-300, PA-31-325, PA-31-350, PA-31P, PA-31P-350, PA-31T, PA-31T1, PA-31T2 and PA-31T3 aircraft, all S/N fitted with a baggage door in the fuselage nose section (a nose baggage door).

**Note 1:** This AD revised to clarify the AD requirement. The nose baggage compartment interior light inspection per SB No. 1194A to determine correct operation is not mandated by this AD.

**Requirement:** To prevent the nose baggage door opening in flight due to possible damaged, worn, corroded or non-conforming door assembly parts which could result in baggage striking the propeller or affect aircraft handling, accomplish the following:

1. Inspect the nose baggage door assembly for damaged, worn, corroded or non-conforming parts per part 1 of Piper Aircraft, Inc. SB No. 1194A, dated 10 November 2008.

Replace life limited parts per SB No. 1194A and ensure a nose baggage placard is fitted per the instructions in SB No. 1194A.

If any damaged, worn, corroded or non-conforming nose baggage door parts are found, repair or replace as required per the instructions in SB No. 1194A before further flight.

2. Inspect the nose baggage door latch and lock assemblies for damage, wear, corrosion, or non-conforming components, and lubricate as required per SB No. 1194A. Determine that the key can only be removed from the lock assembly in the locked position per the instructions in part II of the SB No. 1194A.

If any damaged, worn, corroded or non-conforming nose baggage door parts are found, repair or replace as required per the instructions in SB No. 1194A before further flight.

**Note 2:** As an alternative to fitting placard P/N 100700-079 per SB No. 1194A, manufacturer a placard (using at least 1/8-inch letters) with the following text and install the placard directly above the nose baggage door handle.

**CLOSE AND LOCK NOSE BAGGAGE DOOR BEFORE FLIGHT**

1. CLOSE DOOR FULLY AGAINST DOOR FRAME
2. PRESS DOOR HANDLE FLUSH WITH SKIN, AND ROTATE KEY INTO LOCKED POSITION
3. REMOVE KEY
4. PUSH ON FORWARD END OF DOOR HANDLE, TO CONFIRM THAT HANDLE IS LOCKED AND SECURE

**Note 3:** This AD does not require an inspection of the nose baggage compartment interior light to determine correct operation as specified in part 1, paragraph 1 of Piper MSB No. 1194A dated 10 November 2008.

(FAA AD 2009-13-06R1 refers)

**Compliance:**

1. Within the next 1000 hours TIS since replacement of all life limited parts listed in SB No. 1194A, or within the next 100 hours TIS whichever occurs later, and thereafter at intervals not to exceed 1000 hours TIS.
2. Within the next 100 hours TIS unless previously accomplished and thereafter at intervals not to exceed 100 hours TIS.

**Effective Date:** DCA/PA31/71 - 30 July 2009  
DCA/PA31/71A - 27 October 2011

**DCA/PA31/72 Aircraft Data Plate – Inspection**

**Applicability:** Model PA-31T and PA-31T1 aircraft listed in the applicability section of FAA AD 2012-10-09.

**Requirement:** To correct the aircraft data plate which may have been modified in error because of confusion in the S/N applicability, accomplish the corrective actions specified in FAA AD 2012-10-09.

**Note 1:** A copy of FAA AD 2012-10-09 can be obtained from the FAA AD website at [http://rgl.faa.gov/Regulatory\\_and\\_Guidance\\_Library/rgAD.nsf/MainFrame?OpenFrameSet](http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgAD.nsf/MainFrame?OpenFrameSet)

**Note 2:** Piper Aircraft MSB No 1235 dated 3 November 2012 pertains to the subject of this AD.

(FAA AD 2012-10-09 refers)

**Compliance:** Within the next 100 hours TIS unless previously accomplished.

**Effective Date:** 29 June 2012

**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 <http://www.caa.govt.nz/airworthiness-directives/states-of-design/>. 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.**

**2013-10-04 Exhaust System - Inspection**

**Note:** FAA AD 2013-10-04 dated 5 September 2013 re-issued with corrections. The AD effective date remains 17 July 2013.

**Effective Date:** 17 July 2013

**2014-23-03 Exhaust System – Inspection**

**Effective Date:** 18 December 2014

**2015-24-05 Fuel System – Inspection**

**Effective Date:** 12 January 2016

**82-27-13R2 Flap Extension System – Inspection**

**Applicability:** Piper PA-31 aircraft, S/N 31-2 through to 31-7812129,  
Piper PA-31-300 aircraft, S/N 31-2 through to 31-511,  
Piper PA-31-325 aircraft, S/N 31-7300932 through to 31-7812129,  
Piper PA-31-350 aircraft, S/N 31-5001 through to 31-7852171),  
Piper PA-31T aircraft, S/N 7400002 through to 31T-7820092, except S/N 31T-7820067),  
Piper PA-31T1 aircraft, S/N 31T-7804001 through to 31T-7804011 and  
Piper PA-31P aircraft, S/N 31P-1 through to 31P-7730012.

**Note:** FAA AD 82-27-13R2 supersedes DCA/PA31/51B (FAA AD 82-27-13 refers) and DCA/PA31/54 (FAA AD 82-27-13R1 refers) to revise the AD applicability.

- Compliance:**
1. Flap extension restriction: Within the next 25 hours TIS after 27 July 1984 (the effective date of DCA/PA31/51B).
  2. Flap Flexible Drive Shaft Assemblies Inspection: Within the next 100 hours TIS after 27 July 1984 (the effective date of DCA/PA31/51B and thereafter at intervals not to exceed 500 hours TIS).
  3. Wing Flap Transmission Inspection: Within the next 100 hours TIS after 27 July 1984 (the effective date of DCA/PA31/51B and thereafter at intervals not to exceed 100 hours TIS).
  4. Modification: By 31 May 1983 (Compliance mandated by DCA/PA31/51B).

**Effective Date:** 25 February 2016

**2016-05-01 Bulkhead Assembly at Fuselage Station 317.75 – Inspection**

**Effective Date:** 15 April 2016

**2016-08-18 (Correction) Fuel Hose Assemblies – Inspection**

**Effective Date:** FAA AD 2016-08-18 - 6 June 2016  
FAA AD 2016-08-18 (Correction dated 31 May 2016) – 6 June 2016

**2017-02-06          Wiring below Main Circuit Breaker Panel – Inspection**

**Effective Date:** 22 February 2017

**2017-10-20 Fuselage Station 332.00 Bulkhead Assembly – Inspection**

**Applicability:** Piper Navajo PA-31, PA-31-300 and PA-31-325 aircraft, S/N 31-2 through to 31-900, and S/N 31-7300901 through to 31-8312019.

Piper Chieftain/T-1020 PA-31-350 aircraft, S/N 31-5001 through to 31-5004, and S/N 31-7305005 through to 31-8553002.

**Note:** Piper PA-31 aircraft may also be identified as a PA-31-310 aircraft, even though the PA-31-310 is not a model recognised by the FAA in their TCDS.

**Effective Date:** 29 June 2017

**80-18-10 Fuel Valves and Cables – Inspection**

**Applicability:** All Piper PA-31, PA-31-300, PA-31-325, PA-31-350 and PA-31P aircraft.

**Note:** This AD supersedes DCA/PA31/29B (FAA AD 77-26-02 refers) and DCA/PA31/47A (FAA AD 80-18-10 refers).

**Compliance:** Initial compliance required before the issue of a New Zealand Certificate of Airworthiness, or at the next Review of Airworthiness (RA), or the next annual inspection, whichever is the sooner, unless previously accomplished. Repetitive inspections, if required, are to be accomplished at intervals not to exceed the times specified in the FAA AD 80-18-10.

**Effective Date:** 31 January 2019