## **Airworthiness Directive Schedule**

## Aeroplanes Cessna 182 Series, R182, T182 Series and TR182 26 November 2020

# Notes: 1. This AD schedule is applicable to Cessna 182 series, R182, T182, T182T and TR182 aircraft manufactured under FAA Type Certificate No. 3A13.

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: <u>Dynamic</u> <u>Regulatory System (faa.gov)</u>

- 3. The date above indicates the amendment date of this schedule.
- 4. New or amended ADs are shown with an asterisk \*

DCA/CESS182/101	Narco Model 300 Position Light Flasher - Modification
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DCA/CESS182/103	Cancelled purpose fulfilled
DCA/CESS182/104	Cancelled – DCA/ROLE/3 refers
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(NAA) websites. Links https://www.aviation.g	Ds listed below are available directly from the National Airworthiness Authority s to NAA websites are available on the CAA website at ovt.nz/aircraft/airworthiness/airworthiness-directives/links-to-state-of-design- es/ If additional NZ ADs need to be issued when an unsafe condition is found to exist	
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	e Oil Pressure Switch – Inspection and Replacement	
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DCA/CESS182/101	Narco Model 300 Position Light Flasher - Modification			
Applicability:	Model 182 Series S/N 33000 through 34500 that incorporate a Narco flasher model 300 in the lighting system			
Requirement:	Comply with Cessna SL 180/182-41-1. (FAA AD 59-10-03 refers)			
Compliance:	By 1 September 1959			
DCA/CESS182/102	Cancelled			
DCA/CESS182/103	Cancelled purpose fulfilled			
DCA/CESS182/104	Cancelled – DCA/ROLE/3 refers			
Effective Date:	24 September 2015			
DCA/CESS182/105	Cancelled			
DCA/CESS182/106	Cancelled			
DCA/CESS182/107	Cancelled purpose fulfilled			
DCA/CESS182/108/	A Mainplane Rear Spar - Inspection			
Applicability:	Model 182 series S/N 18267715 and lower.			
Requirement:	1. Examine each mainplane rear spar for cracks in the area of the root attachment fitting. Cracking originates around the spar web radius below the root end fitting, and may extend to the spar upper flange at the outboard end of the root fitting where the reinforcing angle is joggled.			
	2. The rear spar web may be examined after the wing root lower fairings are removed. If a crack is present it may be obscured by the root ribs and the spar root end fittings. Careful inspection should be made of the inboard edge and radius of the spar web visible below the root fittings and inboard of the root ribs. The edge of the rear spar upper flange should be inspected through the inboard inspection hole behind the rear spar. Where doubt exists, the trailing edge root end rib shall be removed to permit a more detailed inspection.			
Compliance:	At intervals not exceeding 100 hours TIS and immediately following any case of mainplane damage or ground looping.			
Effective Date:	DCA/CESS182/108 - 31 December 1966 DCA/CESS182/108A - 27 January 2000			
DCA/CESS182/109	Cancelled purpose fulfilled			
DCA/CESS182/110	Cancelled			
DCA/CESS182/111	Cancelled			
DCA/CESS182/112	Cancelled			

DCA/CESS182/113	Door Latch and Fuel Line - Modification		
Applicability:	Model 182 Series S/N 18256685 through 18257313		
Requirement:	Comply with Cessna SL 66-49		
Compliance:	Within the next 25 hours TIS		
Effective Date:	31 December 1966		
DCA/CESS182/114	Flap Actuator - Maintenance		
Applicability:	All model 182 Series with electric wing flaps.		
Requirement:	Comply with Cessna SESL SE 70-16 Supl. 1 & Supl. 2. (For aircraft which have complied with DCA/CESS182/116 the inspection requirement may be amended as detailed in Cessna SE 72-2 & Supl. 1).		
Compliance:	Clean and relubricate every 12 months or 1000 hours.		
Effective Date:	30 November 1970		
DCA/CESS182/115	Nose Gear Fork - Inspection and Modification		
Applicability:	Model 182 Series S/N 33000 through 18254335		
Requirement:	Comply with Cessna SESL SE 71-34. (FAA AD 71-22-02 refers)		
Compliance:	At intervals not exceeding 100 hours TIS until modified in accordance with Cessna service kit 182-34 or approved equivalent.		
Effective Date:	31 December 1971		
DCA/CESS182/116	Flap Actuator - Modification and Inspection		
Applicability:	Model 182 Series S/N 18253599 through 18260698		
Requirement:	Comply with Cessna SESL SE 72-2		
Compliance:	1. Modification by 1 January 1973		
	2. Inspection every 100 hours TIS or annually post inspection		
Effective Date:	31 March 1972		
DCA/CESS182/117	Cancelled – FAA AD 72-07-09 refers		
Effective Date:	26 February 2015		
DCA/CESS182/118	Javelin Auxiliary Fuel System - Modification		
Applicability:	All model 182 Series aircraft equipped with Javelin auxiliary fuel system		
Requirement:	Comply with Cessna SESL SE 69-24. (FAA AD 73-17-01 refers)		
Compliance:	Within the next 100 hours TIS		
Effective Date:	30 September 1973		

DCA/CESS182/119/	A Fuel Cell Capacity Placard - Modification			
Applicability:	Model 182 Series S/N 62251 through 63590			
	AND any other 182 S/N aircraft in which original fuel cells have been replaced with cells manufactured in June 1973 or later			
Requirement:	Comply with Cessna SESL SE 75-7 & Supl. 1			
	(FAA AD 75-16-01 refers)			
Compliance:	Within the next 100 hours TIS			
Effective Date:	15 October 1975			
DCA/CESS182/120 Replacement	Wing Flap Actuator Ball Nut Assembly - Inspection, Placard and			
Applicability:	Model 182 Series S/N 18265065 through 18265254			
Requirement:	Inspect and Replace per Cessna SESL SE 76-25.			
	(FAA AD 77-02-09 refers)			
	If the date code stamp on the actuator is OH, HH, WH or ZH, install a placard near the flap control which reads:			
	"FLAP EXTENSION PROHIBITED",			
	until the ball nut assembly has been replaced per Cessna SESL SE 76-25.			
Compliance:	Inspection - before further flight, unless already accomplished. If assembly found defective, placard as above before further flight and replace assembly within next 50 hours TIS			
Effective Date:	18 February 1977			
DCA/CESS182/121	Induction Airbox Seal - Inspection			
Applicability:	Model 182 Series S/N 18251557 through 18264790			
Requirement:	Comply with Cessna SESL SE 76-18			
	(FAA AD 77-04-05 refers)			
Compliance:	Within the next 50 hours TIS			
Effective Date:	31 March 1977			
DCA/CESS182/122	Cancelled: Purpose fulfilled			
DCA/CESS182/123	Horizontal Stabiliser - Inspection			
Applicability:	Model 182 Series S/N 18262466 through 18265327 as identified in SESL.			
Requirement:	Comply with Cessna SESL SE 77-11			
	(FAA AD 77-14-09 refers)			
Compliance:	Within the next 100 hours TIS			
Effective Date:	17 August 1977			

DCA/CESS182/124	ELT Installation - Inspection and Modification
Applicability:	Model 182 Series S/N 18260797 through 18265965
	AND any other 182 with ELT installation per Cessna SESL SE 73-41 and kits AK 150- 97F or AK 150-104A
Requirement:	Comply with Cessna SESL SE 77-41
	(FAA AD 77-23-11 and 78-01-14 refers)
Compliance:	Inspection - within next 50 hours TIS
	Modification - within next 100 hours TIS
Effective Date:	16 December 1977
DCA/CESS182/125	Flexible Fuel Tanks - Inspection
Applicability:	Model 182 Series S/N 18253599 through 18260825 AND any other model 182 aircraft equipped with Goodyear BTC-39 series fuel tanks.
Requirement:	Accomplish the following:
	1. Visual inspection per Part A of Cessna SESL SE 78-10 & Supl. 1.
	<ol><li>Detailed inspection per Part B of Cessna SESL SE 78-10 &amp; Supl. 1 followed by Part C as necessary.</li></ol>
	(Goodyear SB FT-77-1 and FAA AD 78-05-06 also refer)
Compliance:	1. Within next 25 hours TIS or 30 days whichever is the sooner.
	2. Within next 100 hours TIS or 6 months whichever is the sooner, thereafter at intervals not exceeding 12 months.
Effective Date:	28 April 1978
DCA/CESS182/126/	A Fuel Cap - Modification
Applicability:	Model 182 Series S/N 33000 through 53007 and S/N 18253008 through 18268434 Model A182 Series S/N A182-0001 through A182-0146 Model F182 Series S/N F18200001 through F18200169 Model R182 Series S/N R18200001 through R18201999 Model FR182 Series S/N FR18200001 through FR18200070

- **Requirement:** Fit vented fuel caps with related adapters and fuel servicing placards per Cessna SEB 92-27.
  - (FAA AD 79-10-14 R1 refers)
- **Compliance:** Within next 100 hours TIS unless already accomplished.

Effective Date: DCA/CESS182/126 - 23 March 1979 DCA/CESS182/126A - 20 December 1996

DCA/CESS182/127	Electrical System - Modification
Applicability:	Model 182 Series S/N 33000 through 34999 and S/N 51001 through 51556 and S/N 18254680 through 18265965.
Requirement:	To prevent inflight electrical system failure, smoke in cockpit and/or fire in wire bundle behind instrument panel, disconnect at ammeter or electrical system bus as applicable, wire which connects bus to cigar lighter receptacle (wire is connected to either the bus side, or equipment side of a circuit breaker, or to the ammeter) then either:
	(a) Reconnect wire to bus using an existing or newly installed circuit protection device properly rated for wire gauge used, or
	(b) Disconnect wire from lighter receptacle and remove it from aircraft, or
	(c) Insulate disconnected end of wire and secure it to bundle in which it is routed. (FAA AD 79-08-03 refers)
Note:	FAA AC 43.13-1A contains guidance information on wire gauge/circuit protection device ratings.
Compliance:	Within next 100 hours TIS
Effective Date:	29 June 1979
DCA/CESS182/128	Alternator Installation - Modifications And Inspection
Applicability:	Model 182 Series S/N 18257446 through 18266590 Model F182 Series S/N F18200001 through S/N F1820094
Requirement:	<ol> <li>Install either additional ground strap per Cessna SESIL SE 79-59 or, embody Cessna service kit SK 182-55A per SESIL SE 79-58.</li> </ol>
	2. Visually inspect alternator installation for, and if necessary provide, at least ½ inch clearance between alternator and adjacent flammable fluid carrying lines, power plant controls and electrical wiring.
	3. Visually inspect existing alternator to airframe ground for proper installation (SE 79-59 view A-A refers), evidence of looseness at the terminal and adequate length to allow for relative motion between alternator and airframe. Also, confirm that ground straps between engine and airframe mount are installed and provide continuity between engine and mount. Correct any unsatisfactory conditions found per FAA AC 43.13-1A. (FAA AD 79-25-07 refers)
Compliance:	Within next 50 hours TIS unless already accomplished.
Effective Date:	8 February 1980
DCA/CESS182/129	Aileron Hinge Pin Installation - Inspection
Applicability:	Models 182 & T182 Series S/N 18266591 through 18268350 Models R182 & TR182 Series S/N R18200584 through R18201954 Model F182 Series S/N F18200095 through F18200169 Model FR182 Series S/N FR18200021 through FR18200070
Requirement:	Inspect per Cessna SIL SE 83-18 and rectify defective installations as prescribed.
	(FAA AD 83-22-06 refers)
Compliance:	Within next 100 hours TIS unless already accomplished.
Effective Date:	16 December 1983

DCA/CESS182/130	Bladder Type Fuel Cells - Inspection And Modification
Applicability:	Models 182 Series S/N 18233000 through 18266590 Model R182 Series S/N R18200001 through R18200583 with bladder type fuel cells
Requirement:	To preclude possible power loss or engine stoppage due to water contamination of fuel system accomplish the following:
	1. Inspect fuel tank filler areas and caps for proper sealing, check fuel cap seal by actuating locking tab and noting that force is maintained between cap seal and adaptor when tab is in over-centre locked position, or accomplish leak test per Cessna SIL SE 82-34.
	Note: No longer required when raised neck fuel caps installed per Cessna SK 182-85 (SIL SE 84-16 refers)
	2. Inspect fuel cell for wrinkles per Cessna SIL SE 84-4. If wrinkles found, modify and rework fuel cell per Cessna SIL SE 84-9 within the next 100 hours TIS.
	Note: No longer required when modification embodied.
	<ol><li>Install quick drains in fuel tank sumps and reservoirs where applicable, per Cessna SILs SE 79-45 and SE 84-8.</li></ol>
	(FAA AD 84-10-01 R1 refers)
Compliance:	1 and 2 inspections - within next 50 hours TIS and thereafter at intervals not exceeding 12 months.
	3. Modification - within next 100 hours TIS.
Effective Date:	27 July 1984
DCA/CESS182/131	A Cancelled – DCA/CESS182/152 refers
Effective Date:	30 June 2011
DCA/CESS182/132	Fuel, Oil or Hydraulic Hose - Removal
Applicability:	All model 182 series, all S/Ns.
Requirement:	To prevent fuel, oil or hydraulic systems failure caused by a collapsed hose, check the aircraft maintenance records for any fuel, oil or hydraulic hose, Cessna P/N S51- 10, replaced between March 1995 and 14 March 1997. If any fuel, oil or hydraulic hose, Cessna P/N S51-10, has been replaced between March 1995 and 14 March 1997, accomplish the following:-
	Before further flight physically check for a diagonal or spiral external reinforcement wrap per Cessna SB SEB96-15. Replace any P/N S51-10 hose that has a diagonal or

wrap per Cessna SB SEB96-15. Replace any P/N S51-10 hose that has a diagonal or spiral pattern external reinforcement wrap with a P/N S51-10 hose that has a crisscross pattern external wrap per SB SEB96-15.

(FAA AD 97-01-13 refers)

**Compliance:** Within next 60 hours TIS or 60 days, whichever is the sooner.

Effective Date: 14 March 1997

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Applicability: Models 182S

**Requirement:** To prevent carbon monoxide gas from entering the cabin heating system and cabin, which, could result in passenger and pilot injury with consequent loss of control of the aircraft, accomplish the following:-

For Model 182S with S/N 18280050 through 18280060, 18280062, 18280063, 18280066, 18280067 through 18280070, and 18280083. Replace the left and right engine exhaust mufflers with an equivalent part per the appropriate Cessna maintenance manual. Cessna SB97-78-01 also refers.

For all Model 182S. Aeroquip engine exhaust muffler, P/N 71379-1254017-8 must not be installed.

(FAA AD 98-01-14 refers)

**Compliance:** Before further flight.

Effective Date: 13 February 1998

#### DCA/CESS182/134 Alternate Static Air Source - Placard and Inspection

Applicability: Model 182S S/N 18280001, 1820002, 18280004 through 18280045, 18280048 through 18280060, 1820062 through 18280064, 18280067, and 18280070.

**Requirement:** To prevent erroneous indications from the altimeter, airspeed, and vertical speed indicators, which could cause the pilot to react to incorrect flight information and possibly result in loss of control of the aircraft, accomplish the following:-

1. Fabricate a placard with the following words, using letters at least 1/8-inch in height, and install this placard in the cockpit within the pilot's clear view:

IFR operation is prohibited.

Use of the alternate static air source is prohibited.

2. Inspect the alternate static air source valve to assure that the alternate static air source valve is not restricted by the identification placard and to assure that the valve body does not separate from the valve flange per Cessna SB 97-34-02, Revision 1.

If the alternate static air source valve is restricted, prior to further flight rework the alternate static air source assembly per SB 97-34-02, Revision 1.

If the valve body separates from the valve flange, replace the alternate static air source assembly per the maintenance manual at one of the following compliance times. Prior to further flight to eliminate the operating limitations required by the placard above, or within the next 25 hours TIS provided the operating limitations required by the placard are adhered to.

Note 1: The placard requirements of this AD may be eliminated when the inspection, rework, and replacement requirements are accomplished.

Note 2: Within 28 days after the inspection send the results of the inspection to the CAA.

(FAA AD 98-01-01 refers)

**Compliance:** 1. Before further flight.

2. Within the next 100 hours TIS or within the next 4 calendar months, whichever occurs first.

Effective Date: 13 March 1998

#### DCA/CESS182/135B Engine Exhaust Muffler – Inspection and Replacement

Applicability: Model 182S S/N 18280001 through 18280286 that do not have Cessna SB 98-78-03 incorporated.

**Requirement:** To detect and correct damage to the engine exhaust mufflers caused by high stresses imposed on the attachment of the exhaust at the area of the firewall, which could result in cracking and exhaust gases entering the aircraft cabin with consequent crew and passenger injury, accomplish the following:-

1. Fabricate a placard that specifies the following, and install on the instrument panel within the pilot's clear view. The placard should utilize letters of at least 0.10-inch in height and contain the following words:

If the engine backfires upon start-up, prior to further flight, inspect and replace (as necessary) all engine exhaust muffler end plates in accordance with airworthiness directive DCA/CESS182/135.

2. Insert a copy of this AD into the Limitations Section of the aircraft flight manual.

3. Inspect all engine exhaust muffler end plates (four total) for cracks on the forward (upstream) or aft (downstream) end of each muffler can. Prior to further flight, replace any engine exhaust muffler where an end plate is found cracked. The replacement does not eliminate the repetitive inspection requirement of this AD.

Note: Cessna SB98-78-02, depicts the area to be inspected. The actions of this SB are different from those required by this AD. This AD takes precedence over the actions specified in the SB, and accomplishment of the SB is not considered an alternative method of compliance to the actions of this AD.

4. Replace the engine exhaust mufflers with ones of improved design, P/N 1254017-19 or P/N 9954200-9 per Cessna Service Bulletin SB98-78-03. Replacements terminate the repetitive inspection and placard requirements of this AD. (FAA AD 2000-02-14 refers)

Compliance: 1. By 28 July 1998

2. By 28 July 1998

3. Within the next 25 hours TIS and thereafter at intervals not to exceed 25 hours TIS after the previous inspection (including any inspection accomplished after an engine backfire).

4. By 24 February 2001

Effective Date: DCA/CESS182/135A - 17 December 1999 DCA/CESS182/135B - 24 February 2000

#### DCA/CESS182/136 Wing Extension STC SA00276NY - Inspection

- Applicability: Models 182, 182A, 182B, 182C, 182D, 182E, 182F, 182G, 182H, 182J, 182K, 182L, 182M, 182N, 182P, 182Q, 182R, 182S, R182, T182 and TR182 that have wing extension supplemental type certificate (STC) SA00276NY or supplemental type approval (STA) SA93-136 incorporated. The STA is the Canadian version of the U.S. STC.
- **Requirement:** To prevent wing failure during flight caused by the absence of an angle stiffener, and loss of the aircraft, accomplish the following:-

Inspect inside the left and right wings, aft of the spar, closest to where the strut connects to the wing, for an angle stiffener along the lower spar cap between Wing Station (W.S.) 90 and W.S. 110 per Part A of the Accomplishment Instructions of Air Research Technology, Inc. (ART) SB-1-96, Issue 1, dated April 11, 1996.

If an angle stiffener is not installed, prior to further flight, install a stainless steel reinforcement strap on the underside of each wing, along the spar at W.S. 100.50 per Part B of the Accomplishment Instructions of ART SB-1-96, Issue 1, dated April 11, 1996.

(FAA AD 98-16-04 refers)

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

**Effective Date:** 25 September 1998

#### DCA/CESS182/137 Cancelled – FAA AD 2013-11-11 refers

Effective Date: 1 August 2013

#### DCA/CESS182/138 Fuel Strainer Assembly – Inspection

 Applicability:
 Models 182H, 182J, 182K, 182L, 182M, 182N, 182P, 182Q, 182R/T182, 182R, R182, R182/TR182, A182J, A182J, A182L, A182N, F182P, F182Q and FR182 that have fitted a Cessna P/N 0756005-2 top assembly, P/N 0756005-8 fuel strainer assembly, or a P/N 0756005-9 fuel strainer assembly shipped from Cessna between 12 December 1996, and 5 September 1997.

Note: All aircraft S/Ns, including those manufactured in France that have a capital "F" or "FR" prefix on the model number:

**Requirement:** To prevent foreign material from entering the fuel system and engine, which could result in loss of engine power or complete engine stoppage during flight, accomplish the following:-

1. Measure the standpipe in the fuel strainer assembly (tube in the filter strainer top assembly) for a visible maximum length of 1.68 inches, per Cessna SEB 97-9 If the standpipe measures greater than 1.68 inches, prior to further flight, replace the filter strainer top assembly per SEB 97-9.

2. Do not fit to any aircraft a fuel strainer assembly where the standpipe measures greater than 1.68 inches.

(FAA AD 2000-06-01 refers)

Compliance: 1. By 27 April 2001

2. From 27 April 2000

Effective Date: 27 April 2000

#### DCA/CESS182/139A Honeywell KAP 140 Autopilot Computer System - Modification

**Applicability:** The following models and S/Ns that are equipped with a Honeywell KAP 140 autopilot computer system,

(P/N) 065-00176-2501, P/N 065-00176-2602, P/N 065-00176-5001, P/N 065-00176-5101, P/N 065-00176-5201, P/N 065-00176-5402, or P/N 065-00176-7702, all serial numbers; and

Model 182S S/N 18280001 through 18280944. Model 182T S/N 18280945 through 18281064, 18281067 through 18281145, 18281147 through 18281163, 18281165 through 18281167, and 18281172. Model T182T S/N T18208001 through T18208109, and T18208111 through T18208177.

**Requirement:** To prevent unintentional engagement of the KAP 140 autopilot computer system, which could cause the pilot to take inappropriate actions, accomplish the following per Cessna Service Bulletin SB02-22-01, and Honeywell Service Bulletin No: KC 140-M1, as specified in Honeywell Installation Bulletin No. 491, Rev. 3.

Update the KC 140 autopilot computer system operating software.

Change the unit P/N by attaching sticker, P/N 057-02203-0003, on the unit's serial tag.

Attach an M decal, P/N 057-02984-0501, in front of the unit S/N to indicate that the unit's P/N has been changed.

Attach a software mod tag, P/N 057-05287-0301, in place of the old tag to indicate the software change to SW MOD 03/01.

(FAA AD 2004-15-18 refers)

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

Effective Date: DCA/CESS182/139 - 29 January 2004 DCA/CESS182/139A - 30 September 2004

DCA/CESS182/140	Should	ler Harr	ness – Inspection & Modification
Applicability:	Model	182 182A	S/N 613 and 33000 through 33842. S/N 33843 through 34753, 34755 through 34999, and 51001 through 51556,
		182B 182C	S/N 34754, 51557 through 51622, and 51624 through 52358, S/N 631 and 52359 through 53007,
		182D	S/N 51623 and 18253008 through 18253598,
		182E	S/N 18253599 through 18254423,
		182F 182G	S/N 18254424 through 18255058, S/N 18255059 through 18255844,
		182H	S/N 634 and 18255846 through 18256684,
		182J	S/N 18256685 through 18257625,
		182K	S/N 18255845, 18257626 through 18257698,
			and 18257700 through 18258505.
		182L	S/N 18258506 through 18259305,
		182M	S/N 662, 18257699, and 18259306 through 18260055,
			S/N 18260056 through 18260445,
		which I	have incorporated Cessna Mod Kit AK182-75.
Requirement:			of the pilot and copilot shoulder harness, which could result in pilot and copilot, accomplish the following:

1. Inspect the upper shoulder harness adjuster P/N 443030-401 for the presence of a retainer spring, in accordance with Cessna Single Engine Service Bulletin SEB86-8, Revision 1.

	2. If a retainer spring is found during the inspection of the upper shoulder harness adjuster, prior to further flight remove the spring by cutting each side; and stamp out the -401 identification number in accordance with Cessna Single Engine Service Bulletin SEB86-8, Revision 1
	3. If a retainer spring is not found during the inspection of the upper shoulder harness adjuster, make an entry in the airplane log book showing compliance with this AD.
	4. Only incorporate Cessna Accessory Kits that have been inspected and modified in accordance with this AD.
	(FAA AD 2004-19-01 refers)
Compliance:	Within the next 100 hours TIS
Effective Date:	25 November 2004
DCA/CESS182/141	Flight Control Systems – Inspection and Rework.
Applicability:	Model 182T aircraft S/N 18281522 through 18281525, and 18281537.
	Model T182T aircraft S/N T18208353 through T18208365, T18208367 through T18208369, T18208371, and T18208372.
Requirement:	To prevent loss of aircraft control due to incorrect or inadequate rigging of critical flight systems, accomplish the following:
	Do a one-time detailed inspection of the flight control system, correct installations that do not conform to type design, and repair any damage, per Model 182/T182T Maintenance Manual, Chapter 5 Time Limits/Maintenance Checks.
	(FAA AD 2005-05-53R1 refers)
Compliance:	Before further flight or by 29 April 2005, whichever is later.
Effective Date:	31 March 2005
DCA/CESS182/142	Power Junction Box Circuit Breakers – Inspection and Replacement
Applicability:	Model 182T aircraft, S/Ns 18281242 through 18281502, 18281506, and 18281507.
	Model T182T aircraft, S/Ns T18208212 through T18208357.
Requirement:	To prevent premature tripping of the power junction box main feeder circuit breakers, which could lead to partial or complete loss of electrical power to the navigation system, communication equipment and lighting in the cockpit, inspect all MC01–3A I.C. 9 (P/N S3100–297) and MC01–3A I.C. 10 (P/N S3100–344) main electrical power junction boxes for any incorrect amperage circuit beakers, per Cessna Service Bulletin No. SB05–24– 01. Replace any incorrect amp circuit breaker with the required 40-amp circuit breaker, prior to further flight.
	(FAA AD 2005-13-10 refers)
Note:	The required 40-amp circuit breakers are to be installed on all main electrical power junction boxes MC01–3A I.C. 9 (P/N S3100–297) or MC01–3A I.C. 10 (P/N S3100–344).
Compliance:	By the 25 September 2005.
Effective Date:	25 August 2005
DCA/CESS182/143	Cancelled - DCA/CESS182/145 refers
Effective Date:	17 April 2007

DCA/CESS182/144	Seatback Lock Assembly – Modification and Inspection			
Applicability:	Model 182S aircraft, S/Ns 18280001 through 18280944			
	Model 182T aircraft, S/Ns 18280945 through 18281701			
	Model T182T aircraft, S/Ns T18208001 through T18208453			
Requirement:	To prevent the seatback cylinder lock assembly from bending, cracking or failing a possibly resulting in the seat backrest collapsing during flight, accomplish the following:			
	1. For aircraft <u>not embodied with</u> Modification Kit MK172-25-10A or Modification Kit MK172-25-10B:			
	Embody Modification Kit MK172-25-10C per Cessna Single Engine Service Bulletin SB04-25-01, revision 4, dated 26 December 2006, or fabricate and install a steel lock rod/bar, per Cessna Single Engine Service Bulletin SB04-25-02, revision 1, dated 17 October 2005 or revision 2, dated 5 June 2006 on both crew seats.			
	2. For aircraft <u>embodied with</u> Modification Kit MK172-25-10A or Modification Kit MK172-25-10B:			
	Inspect the installation of both crew seats per SB04-25-01.			
	If any discrepancies are found, accomplish the corrective actions per SB04-25-01, before further flight.			
	If no discrepancies are found, not further action is required.			
	(FAA AD 2007-05-10 refers)			
Note:	The steel lock rod/bar installed per Cessna SB04-25-02 may be replaced with Modification Kit MK172-25-10C.			
Compliance:	1. By 31 July 2007 for aircraft with more than 1000 hours TTIS.			
	By 30 November 2007 for aircraft with 501 to 1000 hours TTIS.			
	By 29 March 2008 for aircraft with up to 500 hours TTIS.			
	2. By 30 April 2007			
Effective Date:	29 March 2007			
DCA/CESS182/145	Fuel Hose End Fittings – Inspection and Rework			
Applicability:	Model 182T aircraft, S/N 18281527 through to 18281889, 18281892, 18281895, 18281897, 18281899, 18281901 and 18281904.			
	Model T182T aircraft, S/N T18208381 through to T18208659, T18208661, T18208663 through to T18208678, T18208680 through to T18208686, T18208689 and T18208690.			
Note:	This AD requires the torque values of the fuel hose end fittings to be re-established because a visual inspection is not sufficient.			
Requirement:	To detect and correct the torque values of the end fittings of engine fuel hoses, which if left uncorrected could result in the loss of fuel flow and fuel leakage, with the possibility of loss of engine power and an engine compartment fire, accomplish the following:			
	1. For aircraft <u>not fitted with</u> the Garmin G1000 System, re-establish the torque of the following end fittings:			
	(i) Fuel strainer to engine fuel pump.			
	(ii) Engine fuel pump to fuel injector servo.			
	(iii) Fuel injector servo to fuel manifold valve (except turbo models).			

- (iv) Turbo models only: Fuel injector servo to fuel flow transducer.
- (v) <u>Turbo models only</u>: Fuel flow transducer to fuel manifold valve.
- (vi) Fuel injector servo return to firewall fitting.

Re-establish the torque per the following procedure and Cessna Service Bulletin No. SB07-71-01, revision 1, dated 16 March 2007:

Remove the engine upper and side cowlings and the old torque putty or paint around the fuel line end fittings. Loosen the hose end fitting of each fuel hose while using another tool to restrain the attach fitting to prevent joint rotation.

Tighten the hose end fittings to the correct torque, per the table in this AD, and apply the torque paint or putty.

If the hose attach fittings rotate, stop the torque procedure. Disconnect the hose and remove the attach fitting that has rotated. Clean, inspect and/or replace the attach fitting, and/or any seals or sealant. Reinstall the attach fitting and tighten to the correct torque. Reconnect the hose end fitting and tighten to the correct torque, per the table in this AD, and apply the applicable torque paint or putty.

Flare Hex Sizes in Fractions of an Inch	Hose Size	Correct Torque in Inch-pounds	
		Minimum	Maximum
9/16	-4	135	150
11/16	-6	270	300
7/8	-8	450	500

**Torque Values for Hose End Fittings** 

2. For aircraft <u>fitted with</u> the Garmin G1000 System, re-establish the torque of the following end fittings:

- (i) Fuel strainer to engine fuel pump.
- (ii) Engine fuel pump to fuel injector servo.
- (iii) Fuel injector servo to fuel flow transducer.
- (iv) Fuel flow transducer to fuel manifold valve.
- (v) Fuel injector servo return to firewall fitting.

Re-establish the torque per the following procedure and SB No. SB07-71-01:

Remove the engine upper and side cowlings and the old torque putty or paint around the fuel line end fittings. Loosen the hose end fitting of each fuel hose while using another tool to restrain the attach fitting to prevent joint rotation.

Tighten the hose end fittings to the correct torque, per the table in this AD, and apply the torque paint or putty.

If the hose attach fittings rotate, stop the torque procedure. Disconnect the hose and remove the attach fitting that has rotated. Clean, inspect and/or replace the attach fitting, and/or any seals or sealant. Reinstall the attach fitting and tighten to the correct torque. Reconnect the hose end fitting and tighten to the correct torque, per the table in this AD, and apply the applicable torque paint or putty.

(FAA AD 2007-08-03 refers)

**Compliance:** 1. & 2. Within the next 5 hours TIS.

Effective Date: 17 April 2007

#### DCA/CESS182/146 Fuel Line Chafing – Rework

Applicability: Models 182H, 182J, 182K, 182L, 182M, 182N, 182P, 182Q and 182R aircraft, all S/N fitted with:

Air Plains Services Corporation Supplemental Type Certificate (STC) SA00152WI, and

A ground power receptacle mounted on the firewall (forward ground power receptacle).

**Requirement:** To detect and correct interference between the ground power electrical cable, the fuel strainer cable, and the fuel line between the auxiliary electric fuel pump and the engine-driven fuel pump, which could result in an engine compartment fire, accomplish the following:

1. Remove power to the ground power electrical cable by accomplishing either of the following two instructions per Air Plains Services Corporation Mandatory Service Bulletin APS-07-01-01, dated 5 March 2007:

- a) Disconnect the electrical cable at the forward ground power relay and the starter relay, or
- b) Remove the electrical cable between the forward ground power relay and the starter relay.

Fabricate and install a placard as close as possible to the forward ground power receptacle with the following words (using at least 1/8-inch red letters on a white background and a red border):

Ground Power Receptacle is Inoperable

2. Reposition the fuel strainer cable per MSB APS-07-01-01.

3. Inspect the fuel line from the auxiliary electric fuel pump to the engine-driven fuel pump for chafing.

If any chafing is detected beyond the limits defined in MSB APS-07-01-01 replace the fuel line between the auxiliary electric fuel pump and the engine-driven fuel pump with a fuel line P/N AE3663161G0190, or an approved equivalent fuel line, and remove the electrical cable between the forward ground power relay and the starter relay, per MSB APS-07-01-01.

4. Adjust the position of the fuel line fitting at the engine-driven fuel pump per MSB APS-07-01-01.

(FAA AD 2007-09-01 refers)

Compliance: 1. 2. 3. & 4. By 15 May 2007.

Effective Date: 01 May 2007

#### DCA/CESS182/147 BRS-182 Parachute System – Rework

- Applicability: All model 182G, 182H, 182J, 182K, 182L, 182M, 182N, 182P, 182Q, 182R, 182S, 182T, T182 and T182T aircraft fitted with Ballistic Recovery Systems (BRS), Inc. BRS-182 Parachute System per STC No. SA01999CH.
- **Requirement:** To prevent premature separation of the pick-up collar from the launch tube, which could adversely affect the rocket trajectory during deployment and possibly result in the parachute failing to deploy successfully, remove and replace the pick-up collar support and two retaining screws per BRS SB 07-02. (FAA AD 2008-02-18 refers)

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

Effective Date: 28 February 2008

#### DCA/CESS182/148 Seat Backrest Attach Brackets – Modification

Applicability: Model 182T aircraft, S/N 18281328 through to 18281867, 18281869 through to 18281871, 18281873 through to 18281875 and 18281877.

Model T182T aircraft, S/N T18208240 through to T18208651, T18208654, T18208656 through to T18208659, T18208663, T18208664 and T18208667 through to T18208668.

- **Requirement:** To prevent the seat backrest to seatbase attach brackets failing and possibly resulting in the seat backrest collapsing during flight, remove the seats and embody Cessna Aircraft Company Single Engine Modification Kit No. MK206-25-10 per the instructions in Cessna Aircraft Company Service Bulletin No. SB07-25-04. (FAA AD 2008-05-09 refers)
- **Compliance:** Within the next 50 hours TIS or by 8 October 2008 whichever occurs sooner.
- Effective Date: 8 April 2008

DCA/CESS182/149 Alternate Static Air Source Selector Valve – Inspection

Applicability: The following aircraft fitted with an alternate static air source selector valve P/N 2013142-18 since 19 November 2007:

Model 182 aircraft, all S/N.

Model 182S aircraft, S/N 18280001 through to 18280944. Model 182T aircraft, S/N 18280945 through to 18282062 and 18282065. Model R182 aircraft, all S/N. Model T182 aircraft, all S/N. Model TR182 aircraft, all S/N. Model T182T aircraft, S/N T18208001 through to T18208822 and T18208828. Model F182P aircraft, all S/N. Model F182Q aircraft, all S/N. Model F182Q aircraft, all S/N.

- Note 1: Model 182T aircraft, S/N 18282062 and 18282065, and model T182T aircraft, S/N T18208822 and T18208828 had an alternate static air source selector valve P/N 2013142-18 installed at manufacture.
- Note 2: P/N 2013142-18 superseded P/N 2013142-9, -13 and -17.
- **Requirement:** To prevent erroneous indications from the altimeter, airspeed and vertical speed indicator which could cause the pilot to react to incorrect flight information and possibly result loss of aircraft control, accomplish the following:

1. Inspect the alternate static air source selector valve and establish whether the static air port on the forward end of the valve is clearly visible and not covered by the P/N identification placard.

If the static air port is found covered by the P/N identification placard, remove the placard from the selector valve body and ensure the port is open and unobstructed. Discard the placard and record the P/N of the alternate static air source selector valve in the aircraft logbook.

**Note 3:** If the alternate static air source selector valve port is found covered by the P/N identification placard, submit a defect report form CA005D to the Civil Aviation and provide the aircraft model, S/N and aircraft TTIS.

2. Before fitting an alternate static air source selector valve P/N 2013142–18 to any aircraft, accomplish requirement 1 of this AD. (FAA AD 2008-10-02 refers)

- **Compliance:** 1. Before further flight.
  - 2. From 12 May 2008.
- Effective Date: 12 May 2008

#### DCA/CESS182/150 Alternate Static Source Selector – Inspection

- Applicability: Model 182, 182A, 182B, 182C, 182D, 182E, 182F,182G, 182H, 182J, 182K, 182L, 182M, 182N, 182P, 182Q, 182R, 182S, 182T, F182P, F182Q, FR182, R182, T182, T182T and TR182 aircraft, all S/N manufactured between 1 January 1993 and 31 March 2008, or fitted with an alternate static air source selector valve P/N 2013142-18 as a replacement part between 1 January 1993 and 31 March 2008, unless already in compliance with DCA/CESS182/149.
- Note 1: This AD includes aircraft not previously affected by DCA/CESS182/134 and DCA/CESS182/149 and all those aircraft fitted with an alternate static air source selector valve P/N 2013142-18 between 1 January 1993 and 31 March 2008. Alternate static air source selector valve P/N 2013142-18 replaced P/N 2013142-9, - 13 and -17.
- **Requirement:** To prevent erroneous indications from the altimeter, airspeed and vertical speed indicator which could cause the pilot to react to incorrect flight information and possibly result in loss of aircraft control, accomplish the following:

1. Inspect the alternate static air source selector valve and establish whether the static air port on the forward end of the valve is clearly visible and not covered by the P/N identification placard per the procedures in Cessna Single Engine SB SB08-34-02 revision 1 dated 6 October 2008, Cessna Caravan SB CAB08-4 revision 1 dated 6 October 2008, Cessna Single Engine SB SEB08-5 dated 13 October 2008 or Cessna Multi-engine SB MEB08-6 dated 13 October 2008, as applicable.

If the static air port is found covered by the P/N identification placard, remove the placard from the selector valve body and ensure the port is open and unobstructed. Discard the placard and record the P/N of the alternate static air source selector valve in the aircraft logbook.

2. Before fitting an alternate static air source selector valve P/N 2013142–18 to any aircraft, accomplish requirement 1 of this AD.

- Note 2: If the alternate static air source selector valve port is found covered by the P/N identification placard, submit a defect report form CA005D to the Civil Aviation and provide the aircraft model, S/N and aircraft TTIS. (FAA AD 2008-26-10 refers)
- Compliance:1. By 3 February 2009 for IFR aircraft, and within the next 100 hours TIS or by 23May 2009 whichever occurs sooner for non IFR aircraft.
  - 2. From 23 January 2009.
- Effective Date: 23 January 2009

#### DCA/CESS182/151 Intercooler Hoses – Inspection and Replacement

- Applicability: Model 182Q and 182R aircraft, all S/N fitted with Societé de Motorisations Aéronautiques (SMA) aircraft diesel engine (ADE) Model SR305-230-1 per STC SA03302AT, or fitted with SMA ADE model SR305-230 per STC SA03302AT and converted to model SR305-230-1 per SMA SB-01-76-002.
- Note 1: This AD is only applicable if the aircraft is embodied with STC SA03302AT.
- **Requirement:** To prevent loose intercooler inlet and outlet hoses and clamps possibly resulting in loss of turbo boost and engine power, accomplish the following:

1. Remove intercooler P/N SF01170004-0 and fit a reworked intercooler P/N SF01170004-1. Remove the intercooler inlet and outlet hoses and fit a new intercooler inlet hose P/N SF01170083-0 and an intercooler outlet hose P/N SF01170048-0.

2. Inspect the intercooler inlet and outlet hoses and clamps for displacement, and retorque the clamps. If any displacement is found accomplish the corrective actions per SB-C182-75-004 before further flight.

3. Inspect the intercooler outlet and inlet hose assembly installation for displacement, damaged clamps and hoses. If any defects are found accomplish the corrective actions per SB-C182-75-004 before further flight.

4. An intercooler P/N SF01170004-0 shall not be fitted to any aircraft.

Note 2: Accomplish the requirements of this AD per SMA SAFRAN Group SB-C182-75-004 revision No. Basic Issue, dated 8 July 2008. (FAA AD 2009-04-05 refers)

#### **Compliance:** 1. Before further flight unless previously accomplished.

2. Within the next 25 hours TIS after accomplishing requirement 1, unless previously accomplished.

3. Within the next 100 hours TIS after accomplishing requirement 1 or by 27 March 2010 whichever occurs sooner, and thereafter at intervals not to exceed 100 hours TIS or 12 months, whichever occurs sooner.

4. From 27 March 2009.

Effective Date: 27 March 2009

#### DCA/CESS182/152 Seat Adjustment Mechanism – Inspection and Replacement

Applicability: Model 182, 182A, 182B, 182C, 182D, 182E, 182F, 182G, 182H, 182J, 182K, 182L, 182M, 182N, 182P, 182Q, 182R, F182P, F182Q, FR182, R182, T182 and TR182 aircraft, all S/N.

- Note: This AD supersedes DCA/CESS182/131A to introduce additional inspection requirements, to improve the clarity of the required inspections, and provide improved figures/graphics. The FAA continue to receive reports of inadvertent seat movement. These reports included an incident of a seat separating from the seat track due to wear of the seat roller housing tangs.
- **Requirement:** To prevent seat slippage or disengagement of the seat roller housing from the seat rail which could result in the pilot/copilot being unable to reach all the controls and loss of aircraft control, accomplish the inspections and corrective actions in FAA AD 2011-10-09 on the seat rails; seat rollers, washers, and axle bolts or bushings; seat roller housings and the tangs; and the lock pin springs. (FAA AD 2011-10-09 refers)
- Compliance: Within the next 100 hours TIS after the last inspection accomplished per DCA/CESS182/131A (FAA AD 87-20-03 R2 refers) or by 30 June 2012 whichever occurs sooner, and thereafter at intervals not to exceed 100 hours TIS or every 12 months whichever occurs sooner.

Effective Date: 30 June 2011

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 <u>https://www.aviation.govt.nz/aircraft/airworthiness/airworthiness-directives/links-to-state-of-</u> <u>design-airworthiness-directives/</u>

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.

#### 2013-11-11 Engine Oil Pressure Switch – Inspection and Replacement

Effective Date: 1 August 2013

#### DCA/CESS182/153A Cancelled – FAA AD 72-07-09 refers

Effective Date: 25 August 2016

#### 72-07-09 Vertical Stabiliser - Inspection

- **Note 1:** This AD is applicable to aircraft <u>not embodied</u> with an improved aft tailcone bulkhead installation per Cessna Single Engine Service Bulletin SEB99-12 original issue, dated 13 September 1999, or later FAA approved revision.
- **Note 2:** SEB99-12 introduces an improved vertical stabiliser aft spar attachment bulkhead which is approved as a terminating action to the repetitive inspections mandated by FAA AD 72-07-09. For aircraft <u>embodied with</u> the modification specified in SEB99-12, the repetitive inspections/corrective actions specified in the Cessna Maintenance Manual are applicable.
- **Note 3:** Cessna Service Letter SE72-3 dated 11 February 1972, or later FAA approved revision, pertains to the subject of this AD.

Effective Date: 25 August 2016

2020-18-01 Forward Cabin Doorpost Bulkhead – Inspection

Applicability: Refer to FAA AD 2020-18-01.

Effective Date: 12 November 2020

\* 2020-21-22 Tailcone and Horizontal Stabiliser – Inspection

Applicability: Model 182, 182A, 182B, 182C and 182D aircraft, all S/N.

Effective Date: 7 December 2020