

Airworthiness Directive Schedule

Aeroplanes

Cessna 188 Series

30 June 2011

- Notes**
1. This AD schedule is applicable to Cessna A188, A188A, A188B and T188C series aircraft manufactured under FAA Type Certificate No. A9CE.
 2. The date above indicates the amendment date of this schedule.
 3. New or amended ADs are shown with an asterisk *

Contents

DCA/CESS188/101	Fuel Line Change - Modification	3
DCA/CESS188/102	Battery Installation - Modification	3
DCA/CESS188/103	Control System - Modification	3
DCA/CESS188/104	Hopper Outlet Forward Fairing - Modification	3
DCA/CESS188/105A	Cancelled	3
DCA/CESS188/106	Cancelled	3
DCA/CESS188/107	Cancelled	3
DCA/CESS188/108	Cancelled	3
DCA/CESS188/109	Cancelled	3
DCA/CESS188/110	Rudder Pedal - Modification	4
DCA/CESS188/111A	Mainplane Spars - Modification	4
DCA/CESS188/112	Cancelled	4
DCA/CESS188/113	Rudder Stop - Modification	4
DCA/CESS188/114B	Aileron Hinges at Wing Rear Spar and Ribs – Inspection.....	4
DCA/CESS188/115	Cancelled: Once only inspection	4
DCA/CESS188/116	Cancelled	4
DCA/CESS188/117	Cancelled	4
DCA/CESS188/118	Cancelled	4
DCA/CESS188/119	Throttle Linkage - Modification	5
DCA/CESS188/120	Cancelled: DCA/GEN/5 refers	5
DCA/CESS188/121	Cancelled	5
DCA/CESS188/122	Alternator Earth Lead - Inspection	5
DCA/CESS188/123	Elevator Trim Tab - Inspection	5
DCA/CESS188/124	Elevator Trim Tab - Modification.....	5
DCA/CESS188/125	Installation of Inertia Reel Harness - Modification.....	6
DCA/CESS188/126	Engine Controls - Modification.....	6
DCA/CESS188/127A	Main Wheel Axles - Inspection	6
DCA/CESS188/128	Aileron Control Cables - Inspection	6
DCA/CESS188/129	Aileron Control Cables - Inspection	7
DCA/CESS188/130	Aileron Control Cables - Renewal.....	7
DCA/CESS188/131	Wing Spar - Inspection	7
DCA/CESS188/132	Induction Air Duct - Replacement.....	7
DCA/CESS188/133	Throttle/Mixture Control Cable Attachment - Inspection	7
DCA/CESS188/134A	Fuel Cell Capacity Placard - Modification	8
DCA/CESS188/135	Flap Operating Lever - Repositioning	8
DCA/CESS188/136	Induction Airbox Seal - Inspection	8
DCA/CESS188/137	Fuel Cap - Modification.....	8
DCA/CESS188/138	Electrical System - Modification.....	8
DCA/CESS188/139	Alternator Installation - Modification and Inspection	9

DCA/CESS188/140	MLG Legs - Modification.....	9
DCA/CESS188/141	Bladder Type Fuel Cells - Inspection And Modification	10
* DCA/CESS188/142A	Cancelled – DCA/CESS188/146 refers	10
DCA/CESS188/143	Fuel, Oil or Hydraulic Hose - Removal	10
DCA/CESS188/144	Preflight Fuel System Check - Flight Manual Revision	10
DCA/CESS188/145	Cancelled – N/A to Cessna 188 Aircraft	11
* DCA/CESS188/146	Seat Adjustment Mechanism – Inspection and Replacement.....	11

DCA/CESS188/101 Fuel Line Change - Modification

Applicability: Model 188 Series All S/N's
Requirement: Embody Rex Aviation (NZ) Ltd Modification 204
Compliance: Before issue of C of A

DCA/CESS188/102 Battery Installation - Modification

Applicability: Model 188 Series All S/N's
Requirement: Embody Rex Aviation (NZ) Ltd Modification 205
Compliance: Before issue of C of A

DCA/CESS188/103 Control System - Modification

Applicability: Model 188 Series S/N 1880002 through 1880175
as detailed in Cessna SL 67-1
Requirement: Comply with Cessna SL 67-1
Compliance: Within the next 50 hours TIS
Effective Date: 30 June 1967

DCA/CESS188/104 Hopper Outlet Forward Fairing - Modification

Applicability: Model 188 Series All S/N's
Requirement: Embody Rex Aviation (NZ) Ltd Modification 220
Compliance: By 1 August 1967

DCA/CESS188/105A Cancelled

Note: This AD was originally issued as a result of MLG spring leg failures to ski and agricultural aircraft operating in NZ. The AD has been cancelled following an investigation into its effectiveness at preventing failure of the MLG spring legs.

Cessna has advised that the magnetic particle inspection is unlikely to be effective in detecting cracks before they reach the critical length. Also, repetitive paint removal from the legs to perform the inspection, may be harmful to the surface of the leg.

To ensure the continuing airworthiness of the spring legs, maintenance is important to provide and maintain a good paint surface to protect the legs from corrosion or stone damage.

DCA/CESS188/106 Cancelled**DCA/CESS188/107 Cancelled****DCA/CESS188/108 Cancelled****DCA/CESS188/109 Cancelled**

DCA/CESS188/110 Rudder Pedal - Modification

- Applicability:** Model 188 Series S/N 1880001 through 1880317
as detailed in Cessna SL 67-47
- Requirement:** Comply with Cessna SL 67-47
(FAA AD 68-07-07 refers)
- Compliance:** By 31 December 1967

DCA/CESS188/111A Mainplane Spars - Modification

- Applicability:** 1. Front spar model A188 S/N 188001 through 1880572
2. Rear spars model A188 S/N 1880001 through 1880338
- Requirement:** Modify front spars in accordance with Rex Aviation (NZ) Ltd Technical Memo TM 34
and rear spars in accordance with Rex Aviation (NZ) Ltd Technical Memo TM 50.
Where mod RA-491 has already been embodied, a doubler, Cessna P/N 16200581,
may be fitted as an approved alternative to Rex Technical Memo TM 50.
- Compliance:** By 1 December 1971

DCA/CESS188/112 Cancelled**DCA/CESS188/113 Rudder Stop - Modification**

- Applicability:** Model 188 Series S/N 1880001 through 1880317
excluding those detailed in Cessna SL 67-53
- Requirement:** Comply with Cessna SL 67-53
- Compliance:** By 31 July 1968

DCA/CESS188/114B Aileron Hinges at Wing Rear Spar and Ribs – Inspection

- Applicability:** Model A188 series that are not fitted with mod RA-B-965.
- Requirement:** Comply with Rex Aviation (Australia) TM 21.
- Compliance:** At intervals not exceeding 100 hours TIS.
- Effective Date:** DCA/CESS188/114A – 30 April 1969
DCA/CESS188/114B – 25 July 2002

DCA/CESS188/115 Cancelled: Once only inspection**DCA/CESS188/116 Cancelled****DCA/CESS188/117 Cancelled****DCA/CESS188/118 Cancelled**

DCA/CESS188/119 Throttle Linkage - Modification

Applicability: Model 188 Series All S/N's

Requirement: 1. Fit spring, Continental P/N 628371 between air to fuel lever P/N 625228 and fuel metering lever P/N 539989.
2. Check engine speed is approximately 2300 rpm on ground with throttle control disconnected.

Compliance: Before further flight

Effective Date: 30 June 1969

DCA/CESS188/120 Cancelled: DCA/GEN/5 refers**DCA/CESS188/121 Cancelled****DCA/CESS188/122 Alternator Earth Lead - Inspection**

Applicability: Model 188 Series All S/N's

Requirement: Cases have been reported where the earth lead from the alternator has broken and the negative current from the alternator arced across the adjacent metal bridges fuel pump return line, causing a puncture of the fuel line and a resultant fire on the ground.

Inspect to ensure that the alternator lead is in a good condition and securely attached.

Compliance: Within the next 10 hours TIS thereafter at intervals not exceeding 100 hours TIS

Effective Date: 31 August 1970

DCA/CESS188/123 Elevator Trim Tab - Inspection

Applicability: Model 188 Series All S/N's

Requirement: Inspect elevator trim tab horn P/N 0734603-1AGW for security and tab top and bottom skin for cracks in the vicinity of horn attachment

Compliance: Before each flight until mod Rex-AD-92 is embodied, thereafter at intervals not exceeding 100 hours TIS

Effective Date: 31 August 1970

DCA/CESS188/124 Elevator Trim Tab - Modification

Applicability: Model 188 Series All S/N's

Requirement: Embody Rex-AK-92 modification

Compliance: By 30 September 1970

DCA/CESS188/125 Installation of Inertia Reel Harness - Modification

- Applicability:** Model 188 Series All S/N's
- Requirement:** To allow greater freedom of pilot movement during all operating conditions, an approved inertia reel harness must be installed.
- Compliance:** By 31 January 1971

DCA/CESS188/126 Engine Controls - Modification

- Applicability:**
1. Model 188 Series S/N 18800832 and below
 2. Model 188 Series S/N 18800833 and up
- Requirement:**
1. On aircraft S/N 18800832 and below, embody Rex Aviation (NZ) Ltd modification REX-AK-65 issue 2. This revises the engine controls and repositions the auxiliary fuel pump switch more conveniently.
 2. On aircraft S/N 18800833 and up, reposition the auxiliary fuel pump switch in accordance with relevant instructions in modification REX-AK-65 issue 2.
- Note that on these aircraft the engine controls modification is accomplished at manufacture*
- Compliance:**
1. By 1 February 1971
 2. Before issue of C of A

DCA/CESS188/127A Main Wheel Axles - Inspection

- Applicability:** Model 188 Series All S/N's
with axles that have over 1000 hours TIS
- Requirement:** Inspect all main wheel axles, irrespective of part numbers, for cracks in radius between axle and mounting flange
- Compliance:** At intervals not exceeding 100 hours TIS
- Effective Date:** 19 May 1976

DCA/CESS188/128 Aileron Control Cables - Inspection

- Applicability:** Model 188 Series S/N 1880001 through 18800707
except those modified in accordance with Cessna Service Letter SE 72-1
- Requirement:** Inspect those portions of the aileron control cables that move in the area of the fair-leads near BL20, for fraying or broken strands. Defective cables are to be renewed.
- Compliance:** Within the next 25 hours TIS and thereafter at intervals not exceeding 100 hours TIS.
(FAA AD 73-16-02 refers)
- Effective Date:** 30 September 1973

DCA/CESS188/129 Aileron Control Cables - Inspection

- Applicability:** Model 188 Series S/N 1880001 through 18800707 including those modified in accordance with Cessna service letter SE 72-1
- Requirement:** Identify those portions of the aileron control cables that pass around the pulleys and either disconnect both ends of each aileron cable, or remove the cables to conduct the following inspection. Rotate the cable so that the cable tends to untwist and simultaneously simulate the curvature of the cable over the pulley and check for fraying or broken outer and inner cable strands. Defective cables are to be renewed.
- Compliance:** Within the next 25 hours TIS and thereafter at intervals not exceeding 100 hours TIS. (FAA AD 73-16-02 refers)
- Effective Date:** 30 September 1973

DCA/CESS188/130 Aileron Control Cables - Renewal

- Applicability:** Model 188 Series S/N 1880001 through 18800707 including those modified in accordance with Cessna service letter SE 72-1
- Requirement:** Renew all aileron cables.
- Compliance:** At 500 hours TIS and thereafter at intervals not exceeding 500 hours TIS. (FAA AD 73-16-02 refers)
- Effective Date:** 30 September 1973

DCA/CESS188/131 Wing Spar - Inspection

- Applicability:** Model 188 Series S/N 1880001 through 18800832 as detailed in SL
- Requirement:** Comply with Cessna SESL SE 74-4
- Compliance:** Within the next 100 hours TIS and thereafter at intervals not to exceed 100 hours TIS
- Effective Date:** 15 May 1974

DCA/CESS188/132 Induction Air Duct - Replacement

- Applicability:** Model 188 Series S/N 18800833 through 18801824
- Requirement:** Comply with Cessna SESL SE 74-23 and SE 75-5 (FAA AD 74-23-07 and 75-09-06 refers)
- Compliance:** By 30 July 1975
- Effective Date:** 2 June 1975

DCA/CESS188/133 Throttle/Mixture Control Cable Attachment - Inspection

- Applicability:** Model 188 Series S/N 18800833 through 18801629, 18801643 and 18801644
- Requirement:** Comply with Cessna SESL SE 74-20
- Compliance:** Unless already accomplished, within the next 100 hours TIS and thereafter at intervals not exceeding 100 hours TIS
- Effective Date:** 2 June 1975

DCA/CESS188/134A Fuel Cell Capacity Placard - Modification

- Applicability:** Model 188 Series S/N 18801347 through 18802027 as identified in S.L. and all other 188 series aircraft in which original fuel cells have been replaced with cells manufactured in June 1973 or later
- Note also applies to aircraft incorporating suffix T in S/N*
- Requirement:** Comply with Cessna SESL SE 75-7 (FAA AD 75-16-01 refers)
- Compliance:** Within the next 100 hours TIS
- Effective Date:** 15 October 1975

DCA/CESS188/135 Flap Operating Lever - Repositioning

- Applicability:** Model 188 Series S/N 1880833 and up with mod RAL 334 or other similar seat installation
- Requirement:** Install Rex Aviation modification RAL 423
- Compliance:** By 31 August 1976

DCA/CESS188/136 Induction Airbox Seal - Inspection

- Applicability:** Model 188 Series S/N 18800001 through 18802348
Model A188 Series S/N 18800001 through 18800707
- 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/CESS188/137 Fuel Cap - Modification

- Applicability:** Model 188 Series S/N 188-0446 through 188-0572 and S/N 18800573 through 18803296 with wing tanks
- Requirement:** Fit vented fuel cap per Cessna SEB 92-27 (FAA AD 79-10-14R1 refers)
- Compliance:** Within the next 100 hours TIS unless already accomplished
- Effective Date:** 23 March 1979

DCA/CESS188/138 Electrical System - Modification

- Applicability:** Model 188 Series S/N 188-0001 through 188-0572 and 18800573 through 18803046
- Requirement:** To prevent inflight electrical system failure, smoke in cockpit and/or fire in wire bundle, behind instrument panel, accomplished the following:
- 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:
1. Reconnect wire to bus using an existing or newly installed circuit protection device properly rated for wire gauge used, or

2. disconnect wire from lighter receptacle and remove it from aircraft, or
3. 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/CESS188/139 Alternator Installation - Modification and Inspection

Applicability: Model 188 Series S/N 18800050 through 18803240

Requirement:

1. Install either additional ground strap per Cessna SESIL SE 79-59 or embody Cessna service kit SK-210-84 per SESIL SE 79-5.
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 the next 50 hours TIS unless already accomplished

Effective Date: 8 February 1980

DCA/CESS188/140 MLG Legs - Modification

Applicability: Model 188, A188 and T188 Series with mudguards installed per Rex Aviation (NZ) Ltd mod RAL 359

Requirement: To preclude possible leg failure due to corrosion-pit initiated fatigue cracking, accomplish the following:

1. remove spring legs and mudguard assemblies
2. thoroughly clean area between extreme edges of mudguard attachment brackets on legs and
 - (a) visually inspect leg surfaces for corrosion pitting,
 - (b) using magnetic particle method inspect area for cracks. Remove from service before further flight any leg found cracked. Polish out corrosion pitting and reprotect before returning uncracked legs to service.

Compliance: Within the next 50 hours TIS and thereafter at intervals not exceeding 400 hours TIS

Effective Date: 8 June 1984

DCA/CESS188/141 Bladder Type Fuel Cells - Inspection And Modification

Applicability: Models 188, A188 and T188 Series
 S/N 1880446 through 18803856 (wing tanks only)
 S/N 18800967T through 18803966T with bladder fuel cells
 S/N T18803307T through T18803966T with bladder 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 per Cessna SIL SE 82-34. 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.
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 next 100 hours TIS.
3. Install quick drains in fuel tank sumps and reservoirs where applicable, per Cessna SILs SE 79-45 and SE 84-8.
 (FAA AD 84-10-01R1 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/CESS188/142A Cancelled – DCA/CESS188/146 refers**

Effective Date: 30 June 2011

DCA/CESS188/143 Fuel, Oil or Hydraulic Hose - Removal

Applicability: All model 188 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 spiral pattern external reinforcement wrap with a P/N S51-10 hose that has a criss-cross 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

DCA/CESS188/144 Preflight Fuel System Check - Flight Manual Revision

Applicability: Model A188 (S/N 653, 188-0001 through 188-0572), A188A (S/N 18800573 through 18800832), A188B (S/N 678T, 18800833 and on) and T188C (S/N T18803307T, T18803308T, T18803325T and on) equipped with fuel reservoir(s).

Requirement: To preclude possible power loss or engine stoppage due to fuel contamination, accomplish the following:-

Insert the following paragraphs into the aircraft flight manual. Alternatively, a manufacturer's flight manual revision with the same wording is acceptable. (FAA AD 86-19-11 refers)

PILOT OPERATING PROCEDURES - PREFLIGHT FUEL SYSTEM CHECK

Fuel sampling: Fuel strainer, wing tank and reservoir quick drains.

1. Place a suitable container under the fuel strainer drain outlet prior to operating the strainer drain control for at least 4 seconds. Check strainer drain closed.
2. Inspect the fluid drained from the fuel strainer and each wing tank quick drain for evidence of fuel contamination in the form of water, rust, sludge, ice or any other substance not compatible with fuel. Also check for proper fuel grade before the first flight of each day and after each refueling. If any contamination is detected, comply with 4 below.
3. Repeat Steps 1 and 2 on each wing tank quick drain.
4. If the aircraft has been exposed to rain, sleet or snow, or if the wing fuel tanks or fuel strainer drains produce water, the fuel reservoir(s) must be checked for the presence of water by operating the fuel reservoir quick drains. The aircraft fuel system must be purged to the extent necessary to insure that there is no water, ice or other fuel contamination.

NOTE 1: The fuel reservoir(s) are located under the fuselage between the firewall and forward door post on all airplane models. Consult the pilots Aircraft Flight Manual, Operating Handbook or Owners Manual in order to determine if one or two reservoir(s) are installed.

NOTE 2: A check for the presence of water using the fuel reservoir quick drains prior to the first flight of each day is considered good operating practice.

DCA/CESS188/144 refers

Compliance: By 1 February 2000

Effective Date: 19 November 1999

DCA/CESS188/145 Cancelled – N/A to Cessna 188 Aircraft

Effective Date: 25 November 2010

*** DCA/CESS188/146 Seat Adjustment Mechanism – Inspection and Replacement**

Applicability: Model 188, 188A, A188, A188A, 188B, A188B and T188C aircraft, all S/N.

Note 1: This AD supersedes DCA/CESS188/142A 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 following:

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.

Note 2: A copy of FAA AD 2011-10-09 can be obtained from the FAA website at:
http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgAD.nsf/MainFrame?OpenFrameSet

(FAA AD 2011-10-09 refers)

Compliance: Within the next 100 hours TIS after the last inspection accomplished per DCA/CESS188/142A (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