

Airworthiness Directive Schedule

Aeroplanes

Cessna 404 Series

29 November 2007

- Notes**
1. This AD schedule is applicable to Cessna Aircraft Company model 404 aircraft, manufactured under Federal Aviation Administration (FAA) Type Certificate No. A25CE.
 2. The date above indicates the amendment date of this schedule.
 3. New or amended ADs are shown with an asterisk *

Contents

DCA/CESS404/1	Nose Landing Gear Actuator Rod - Modification	2
DCA/CESS404/2	Engine Beam - Inspection and Modification	2
DCA/CESS404/3	Landing Gear, Emergency Extension System - Modification.....	2
DCA/CESS404/4	Passenger Seats - Modification.....	2
DCA/CESS404/5	Fuel Inlet Float Valve - Inspection and Replacement	3
DCA/CESS404/6	Fuel, Oil or Hydraulic Hose - Removal	3
DCA/CESS404/7	Severe Icing Conditions - Flight Manual Revision	4
DCA/CESS404/8	NLG Actuator Attachment Structure – Inspection.....	5
* DCA/CESS404/9	Autopilot – Disconnect and Modification	5
* DCA/CESS404/10	Passenger Seat Installation - Inspection and Rework	6
* DCA/CESS404/11	Fuel Flow Transducer - Replacement	6
* DCA/CESS404/12	Elevator Trim Tab – Inspection and Modification	6
* DCA/CESS404/13	Fuel Filler Openings – Modification & Placard Removal.....	7
* DCA/CESS404/14	Exhaust System – Inspection and Replacement	7
* DCA/CESS404/15	Avionics Bus Circuit Breaker Switch – Inspection and Replacement	9

DCA/CESS404/1 Nose Landing Gear Actuator Rod - Modification

Applicability: Model 404 S/N 404-0001 through 404-0859

Requirement: To preclude collapse of nose landing gear modify per Cessna SIL MEB 84-10.
(FAA AD 84-20-02 refers)

Compliance: Within the next 200 hours TIS

Effective Date: 4 August 1995

DCA/CESS404/2 Engine Beam - Inspection and Modification

Applicability: Model 404 S/N 404-0001 through 404-0859

Requirement: To ensure the structural integrity of the engine mount beams inspect and modify per Cessna MEB 86-7.
(FAA AD 86-20-12 refers)

Compliance: As detailed in MEB 86-7.

Effective Date: 4 August 1995

DCA/CESS404/3 Landing Gear, Emergency Extension System - Modification

Applicability: Model 404 All S/N's

Requirement: To preclude possible emergency extension system malfunction, embody an end fitting on operating cable which, when inner cable is operated, fully restrains cable outer conduit and positively locates clamp assembly

Compliance: By 30 September 1995

Effective Date: 4 August 1995

DCA/CESS404/4 Passenger Seats - Modification

Applicability: All model 404 series fitted with Enviroform seats

Requirement: To assure structural integrity of affected seats, modify per Cessna Service Kit SK 421-135A or SK 421-78A as applicable.
(FAA AD 92-16-18 refers)

Compliance: Upon installation of any Enviroform seat or within next 100 hours TIS, unless already accomplished

Effective Date: 4 August 1995

DCA/CESS404/5 Fuel Inlet Float Valve - Inspection and Replacement

Applicability Model 404, S/N 404-0001 through 404-0859.

Requirement: To prevent possible loss of engine power caused by failure of a fuel inlet float valve, accomplish the following:-

1. For aircraft fitted with fuel inlet float valve P/N 9910242-1, -4, -5, -6, -7, -8, -205, -206, -207 and -208:

(a) Perform the appropriate valve test per paragraph 2 or 3 of Cessna MEB93-10R1. Any valve which fails the tests, must be replaced with a P/N 9910242-11 or -12 valve before further flight.

(b) Replace the valve with a P/N 9910242-11 or -12 valve per MEB93-10R1.

2. For aircraft fitted with fuel inlet float valve P/N 9910242-9 or -10:

(a) Perform the appropriate valve test per paragraph 2 or 3 of Cessna MEB93-10R1. Any valve which fails the tests, must be replaced with a P/N 9910242-11 or -12 valve before further flight.

(b) Install the K74D retainer kit per MEB93-10R1.

(FAA AD 95-09-13 refers)

Compliance: 1. (a) Test within next 200 hours TIS and thereafter at intervals not to exceed 200 hours TIS until valve replacement per 1(b), then test at intervals not to exceed 600 hours TIS.

(b) At 1800 hours TTIS or within next 12 months, whichever is the later.

2. (a) Test within next 200 hours TIS and thereafter at intervals not to exceed 200 hours TIS until valve modification per 2(b), then test at intervals not to exceed 600 hours TIS.

(b) Within next 12 months.

Effective Date: 4 August 1995

DCA/CESS404/6 Fuel, Oil or Hydraulic Hose - Removal

Applicability: Model 404 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 MEB96-10. 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 MEB96-10.

(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/CESS404/7 Severe Icing Conditions - Flight Manual Revision**Applicability:** All model 404**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 flight manual 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 98-04-28 refers)

Compliance: By 10 May 1998

Effective Date: 10 April 1998

DCA/CESS404/8 NLG Actuator Attachment Structure – Inspection

Applicability: Cessna Model 404 series aircraft.

Requirement: To prevent failure of NLG actuator attachment structure, accomplish the following:-

Inspect the attachment lugs, channel sections, support zee sections and the baggage shelf skin for fatigue cracking and associated damage. Without removing NLG actuator, inspect from within nose wheel well with torch and mirror. Also inspect baggage shelf skin from within forward baggage compartment.

Any NLG actuator support structure damage must be repaired before further flight.

Compliance: Inspect within next 100 hours TIS, and thereafter at intervals not to exceed 200 hours TIS.

Effective Date: 27 Sept 2001

* DCA/CESS404/9 Autopilot – Disconnect and Modification

Applicability: Model 404 aircraft, S/N 404-0001 through to 404-0218 and 404-0220 through to 404-0222 fitted with model 400B autopilot.

Requirement: To prevent increased flight control forces caused by an autopilot actuator that has failed to disengage when the autopilot is disconnected, accomplish the following:

For aircraft not modified per Cessna Service Letter No. AV78-6, disable the model 400B autopilot by pulling and banding the autopilot computer (COMP) circuit breakers and the actuator (ACT) circuit breaker.

Install a placard in plain view of the pilot with the following text:

AUTOPILOT INOPERATIVE

(FAA AD 78-11-05 refers)

Note: The embodiment of the autopilot actuator modification per SL No. AV78-6 is a terminating action to the requirements of this AD and the placard may also be removed.

Compliance: Before further flight, unless already accomplished.

Effective Date: 29 November 2007

*** DCA/CESS404/10 Passenger Seat Installation - Inspection and Rework**

Applicability: Model 404 aircraft, S/N 404-0001 through to 404-0223.

Requirement: To prevent seat failure due to the possibility that the seat to seat track fittings and seats are incorrectly installed, inspect all affected passenger seats for correct installation per Cessna Multi-Engine Service Letter ME78-17.

Correct any discrepancies found, before further flight.

(FAA AD 78-13-05 refers)

Compliance: Within the next 25 hours TIS, unless already accomplished.

Effective Date: 29 November 2007

*** DCA/CESS404/11 Fuel Flow Transducer - Replacement**

Applicability: Model 404 aircraft, S/N 0612, 0620, 0623 and 0628 fitted with fuel flow transducer P/N 9910395-9 (Aerosonics Corp P/N 33184-2), S/N 2364 through to 2930.

Requirement: To prevent failure of the fuel flow transducer possibly resulting in fuel leakage in the engine compartment, accomplish the following on both engines:

Remove the engine cowlings and establish the S/N of the fuel flow transducer fitted to the engines.

If an affected fuel flow transducer is fitted, replace with an unaffected part before further flight.

(FAA AD 80-13-14 refers)

Compliance: Before further flight, unless already accomplished.

Effective Date: 29 November 2007

*** DCA/CESS404/12 Elevator Trim Tab – Inspection and Modification**

Applicability: Model 404 aircraft, S/N 404-0001 through to 404-0637.

Note: Accomplishment of requirement 4 of this AD is a terminating action to the requirements of this AD.

Requirement: To ensure the structural integrity of the elevator trim tab actuator screw assemblies accomplish the following:

1. Replace both the left and right elevator trim tab actuator screw assemblies per the instructions in Cessna Multi-engine Customer Care Service Information Letter No. ME80-2 revision 2 or revision 3.

2. Install a decal on the tachometer which restricts the lower edge of the normal engine operating range to 1750 RPM and operate the aircraft in accordance with this limitation.

Insert a copy of this paragraph in the limitations section of the Aircraft Flight Manual to reflect this temporary restriction.

Accomplish these requirements per the instructions in Cessna Multi-engine Customer Care Service Information Letter No. ME80-2 revision 2 or revision 3.

3. For aircraft with S/N 404-0001 through to 404-0613 disconnect the aft end of Cessna pushrod P/N 5815160-1 from the trim tab horn and inspect the elevator trim tab pushrod for inboard/outboard alignment at the pushrod attachment to the elevator trim tab horn for both left and right hand trim tabs.

If the misalignment does not exceed .12 inch, reconnect the pushrod and return the aircraft to service.

If pushrod P/N 5815160-1 has to be forced more than .12 inches inboard/outboard to align with the trim tab actuator bracket, replace before further flight.

Accomplish these requirements per the instructions in Cessna Multi-engine Customer Care Service Information Letter No. ME80-2 revision 2 or revision 3.

4. Modify the horizontal stabilizer per Cessna Service Information Letter ME80-2, revision 3 and Cessna Service Kit SK404-31.

(FAA AD 80-15-06 refers)

- Compliance:**
1. At 150 hours TTIS or within 25 hours TIS whichever occurs later, and thereafter at intervals not to exceed 150 hours TIS.
 2. & 3. Within the next 25 hours TIS.
 4. By 29 May 2008, unless already accomplished.

Effective Date: 29 November 2007

*** DCA/CESS404/13 Fuel Filler Openings – Modification & Placard Removal**

Applicability: Model 404 aircraft, S/N 404-0001 through to 404-0859.

Requirement: To prevent engine failure due to the possibility of the aircraft being refueled with the incorrect fuel, modify all the fuel filler opening(s) per the instructions in Cessna Service Information Letter ME84-31.

Note: This AD is introduced to embody fuel filler modification kits which reduce the size of the fuel filler openings and the removal of all external placards identifying the aircraft is turbocharged.

(FAA AD 87-21-02R1 refers)

Compliance: By 29 November 2008, unless already accomplished.

Effective Date: 29 November 2007

*** DCA/CESS404/14 Exhaust System – Inspection and Replacement**

Applicability: Model 404 aircraft, all S/N.

Requirement: To prevent cracks and corrosion in the exhaust system, which could result in exhaust system failure and possible inflight fire, accomplish the following:

1. Visually inspect the exhaust system for burned areas, cracks and looseness per the requirements in the appendix of FAA 2000-01-16. If any damage is found, repair or replace damaged parts before further flight.

Note 1: Cessna Service Bulletins (SB) No. MEB99-6, SB No. MEB99-9 and SB No. MEB99-12 introduces instructions for the installation of access panels to assist with the exhaust system inspections. Each service bulletin is applicable to various Cessna aircraft models.

2. Remove the tailpipes and visually inspect for cracks, corrosion, holes and distortion.

If any defects are found, repair or replace the tailpipe before further flight.

Note 2: Although not required by this AD, the CAA recommends inspecting and cleaning the tailpipes internally at the compliance times specified for requirement 2 of this AD. Inspect the tailpipe for cracks, pinholes, corrosion buildup and general airworthiness, and either overhaul the tailpipe, or replace all suspect parts.

Note 3: The CAA recommends checking the turbocharger wheel for ease of rotation any time the tailpipe is removed. Excessive friction in the turbocharger wheel bearings can cause high exhaust back pressure, which can adversely affect the cylinder compression, the exhaust valve guides, and the exhaust valve and piston life. The turbine wheel should continue to rotate for at least three seconds after spinning induced by fingers or a wooden tool.

Note 4: The CAA also recommends examining the system to insure that cables and torque tag values are intact on single-piece V-band clamps.

3. Visually inspect the outboard engine beam (adjacent to the tailpipe) and the canted bulkheads for signs of distress, chafing, corrosion and cracking. Even though some aircraft may have stainless steel engine beams, carefully inspect the areas of contact between the engine beam and canted bulkhead for corrosion.

If damage to the engine beams is found to exceed 10-percent of the material thickness or there is evidence of overheating on the firewall beyond that which can be removed with "scotchbrite " or equivalent method, replace the firewall and the aluminum fuel lines behind the firewall before further flight.

Repair all chafed, corroded or cracked engine beams and canted bulkheads, and repair distress or damage which is found to exceed 10-percent of the material thickness in accordance with an approved repair scheme and replace any parts as required before further flight.

Note 5: Stainless steel fuel lines are available from the Cessna Aircraft Company. Replacement of the fuel lines behind the firewall may require removing and replacing the firewall, or accomplishing a major repair of the firewall.

4. Inspect the exhaust system from the slip joints aft and perform a pressure test per the appendix in FAA 2000-01-16.

Repair per an approved repair scheme and replace defective parts as required before further flight.

5. Replace all multi-segment V-band clamps per the appropriate Cessna Service Manual.

6. Remove the exhaust system from the slip joints aft of the turbo-charger attachment components, and inspect this portion of the exhaust system for condition per an approved inspection method and repair as required, per an approved repair scheme. No overlay patch-type or parallel multi-seam weld repairs are permitted. Inlay patch repairs and multi-seam welds at joints that are similar to the original construction are acceptable.

Note 6: Exhaust system repairs are to be accomplished in accordance with an approved exhaust repair. Exhaust part replacement shall be accomplished in accordance with the appropriate Cessna Service Manual. The Cessna service information and Maintenance Manual provides general guidance information, disassembly and assembly of the exhaust system. These documents should not be utilized for repairs as this AD takes precedence over those documents.

(FAA AD 2000-01-16 refers)

- Compliance:**
1. Within the next 50 hours TIS or by 29 December 2007 whichever occurs later, and thereafter at intervals not to exceed 50 hours TIS or 30 calendar days, whichever occurs later.
 2. At 5 years TTIS since new or overhaul or within the next 100 hours TIS, whichever occurs later, and thereafter at intervals not to exceed 12 months.
 3. Within the next 100 hours TIS and thereafter at intervals not to exceed 500 hours TIS.
 4. At 5 years TTIS since new or overhaul within the next 100 hours TIS, whichever occurs later, and thereafter at intervals not to exceed 12 months.
 5. Within 500 hours TIS since the last replacement or within the next 500 hours TIS, whichever occurs sooner, and thereafter at intervals not to exceed 500 hours TIS.
 6. At 2500 hours TIS since installing a new or overhauled exhaust system, or within the next 100 hours TIS whichever occurs later, and thereafter at intervals not to exceed 2500 hours TIS or 12 years, whichever occurs sooner.

Note 7: These inspection intervals per compliance 6 of this AD are established to coincide with each scheduled engine overhaul.

Effective Date: 29 November 2007

*** DCA/CESS404/15 Avionics Bus Circuit Breaker Switch – Inspection and Replacement**

Applicability: Model 404 aircraft, S/N 682, 404-0001 through to 404-0136, 404-0201 through to 404-0246, 404-0401 through to 404-0460, 404-0601 through to 404-0695, and 404-0801 through to 404-0859 fitted with avionics bus circuit breaker switch P/N CM3589-50, 593-250-101, 593-250-102, W31-X2M5A-50 or W31-X1000-50.

Requirement: To prevent failure of the avionics bus circuit breaker switch, which could possibility result in smoke and a burning smell in the cockpit which could lead to reduced ability to control the aircraft, accomplish the following:

1. Inspect the avionics bus circuit breaker switch and determine the P/N and the date code, per the instructions in Cessna Multi-engine Service Bulletin MEB05-1 and the applicable maintenance manual.

If an affected P/N avionics bus circuit breaker switch is fitted and the date code is 0434 or later, no further action is required.

If an affected P/N avionics bus circuit breaker switch is fitted and there is no date code, replace the avionics bus circuit breaker switch with P/N CM3589-50 and date code 0434 or later, before further flight.

2. Replace affected P/N avionics bus circuit breaker switches which have a date code earlier than 0434 with a avionics bus circuit breaker switch with P/N CM3589-50 and date code 0434 or later.

3. Avionics bus circuit breaker switches with P/N CM3589-50, 593-250-101, 593-250-102, W31-X2M5A-50 or W31-X1000-50 with no date code or with a date code earlier than 0434, shall not be fitted to any aircraft.

Note: Accomplish these requirements per the instructions in SB MEB05-1 and the applicable maintenance manual.

(FAA AD 2005-20-25 refers)

- Compliance:**
1. Within the next 200 hours TIS or by 29 November 2008 or the next scheduled inspection, whichever occurs sooner.
 2. At 1000 hours TTIS for the avionics bus circuit breaker switch.
 3. From 29 November 2007.

Effective Date: 29 November 2007