

Airworthiness Directive Schedule

Aeroplanes

Maule M-4, M-5, M-6, MX-7 and MXT-7 Series

30 January 2014

- Notes**
1. This AD schedule is applicable to Maule Aerospace Technology M-4-210C, M-5-180C, M-5-210C, M-5-235C, M-6-235, MX-7-180A, MX-7-180B and MXT-7-180 aircraft manufactured under Federal Aviation Administration (FAA) Type Certificate No. 3A23.
 2. The Federal Aviation Administration (FAA) is the National Airworthiness Authority (NAA) responsible for the issue of State of Design Airworthiness Directives (ADs) for these aircraft. State of Design ADs applicable to these aircraft can be obtained directly from the FAA web site. The link to the FAA web site is available on the CAA web site at http://www.caa.govt.nz/Airworthiness_Directives/states_of_design.html
 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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<u>From 1 October 2012 the Civil Aviation Authority of New Zealand (CAA) will no longer rewrite the text of State of Design ADs. Applicable State of Design ADs will be listed below and can be obtained directly from the National Airworthiness Authority (NAA) web site. The link to the NAA web site is available on the CAA web site at http://www.caa.govt.nz/Airworthiness_Directives/states_of_design.html 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.</u>		
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DCA/M-4/1A Fuel Lines - Inspection and Modification

- Applicability:** Models M-4-210C, S/Ns 1001C through 1117C
Models M-5-210C, S/Ns 6001C through 6069C, 6072C, 6076C, 6077C, 6079C, 6080C, 6084C and 6087C
- Requirement:** To prevent fuel leakage in the cabin area and allow fuel line flexibility, accomplish the following instructions per Maule Aircraft Corporation Service Letter 31:
1. Turn the fuel tank selector valve to off position.
 2. Remove the engine fuel injector return line from the firewall to the fuel header tank. (The fuel line is located in cabin wall to left of pilot's feet.)
 3. Short line inspection - Inspect the short line connected at the firewall to the check valve for cracking around the flares. If cracks are found, replace line with a serviceable line.
 4. Long line replacement - Remove existing long line and install an 8 - inch long, ¼ inch diameter aluminium tube between the return check valve and the header tank, using appropriate tube and fittings. This line is to incorporate a 1.5 to 2.0 inch diameter loop in the middle. Use caution when bending the tubing to prevent kinking. This looped tubing must be installed with the plane of the loop horizontal so that no low undrainable spots exist.
 5. The check valve must be reinstalled with the arrow pointing aft.
 6. Functional check the return line for leaks and repair as necessary.
(FAA AD 75-11-02 refers)
- Compliance:** Within the next 50 hours TIS, unless already accomplished.
- Effective Date:** DCA/M-4/1 - 21 May 1975
DCA/M-4/1A - 22 February 2007

DCA/M-4/2A Horizontal Tail Attachment - Inspection and Modification

- Applicability:** Model M-4-210C aircraft, S/Ns 1001C to 1117C
Model M-5-180C aircraft, S/Ns 8001C to 8004C
Model M-5-210C aircraft, S/Ns 6001C to 6206C
Model M-5-235C aircraft, S/Ns 7001C to 7283C
- Requirement:** Inspect per Parts (1) and (5) of Maule Aircraft Corporation Service Bulletin No 1. Defective parts are to be repaired or renewed, before further flight.
Modify per Parts (3) and (4) of Maule SB No 1.
(FAA AD 79-12-01 refers)
- Compliance:** Within the next 50 hours TIS or by 22 March 2007 whichever is the sooner, unless already accomplished.
- Effective Date:** DCA/M-4/2 - 20 December 1979
DCA/M-4/2A - 22 February 2007

DCA/M-4/3A Rudder Pedal Installation - Inspection and Modification

Applicability: Model M-4-210C aircraft, S/N 1001C through 1117C
 Model M-5-180C aircraft, S/N 8001C
 Model M-5-210C aircraft, S/N 6001C through 6204C
 Model M-5-235C aircraft, S/N 7001C through 7254C

Requirement: Inspect and modify rudder pedal installation per FAA AD 81-14-02. Repair or renew cracked components before further flight. Maule SB 2 refers.
 (FAA AD 81-14-02 refers)

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

Effective Date: DCA/M-4/3 - 7 August 1981
 DCA/M-4/3A - 22 February 2007

DCA/M-4/4 Fuel Tank Drains - Modification

Applicability: All model M-4 and M-5 series

Requirement: Modify main and auxiliary fuel tank drain valve installations per Maule SB 5 and SL 32 respectively.
 (FAA AD 84-09-07 refers)

Compliance: Within the next 50 hours TIS

Effective Date: 29 June 1984

DCA/M-4/5 Fuel System - Inspection

Applicability: Model M-5-180C aircraft, S/N 8001C through 8014C, 8016C through 8019C and 8021C
 Model M-5-210C aircraft, S/N 6001C through 6206C
 Model M-5-220C aircraft, S/N 5001C through 5057C
 Model M-5-235C aircraft, S/N 7001C through 7045C and 7047C through 7052C

Requirement: To preclude possible fuel flow restriction in crossover supply line, inspect and rectify as necessary, per Maule SB 7.
 (FAA AD 86-17-11 refers)

Compliance: Within the next 50 hours TIS

Effective Date: 14 November 1986

*** DCA/M-4/6D Cancelled – FAA AD 98-15-18R1 refers**

Effective Date: 21 January 2014

DCA/M-4/7A Control Cable Crimped Sleeve Terminal Ends - Inspection

Applicability: Model M-4-210C aircraft, S/N 1001C through 1117C
 Model M-5-210C aircraft, S/N 6001C through 6206C
 Model M-5-235C aircraft, S/N 7001C through 7248C, 7250C through 7353C, A7354C, A7355C, 7356C, 7357C, A7358C, 7359C, A7360C, A7361C, 7362C through 7365C, A7366C, A7367C, 7368C through 7376C, 7445C, 7451C, 7460C, 7467C, 7470C, 7478C through 7480C, 7484C through 7487C, and 7515C

Model M-5-180C aircraft, S/N 8001C through 8014C, 8016C through 8019C, 8021C, 8023C through 8042C, 8044C through 8064C, and 8068C through 8094C.

Model M-6-235 aircraft, S/N 7249C, 7356C, 7379C through 7444C, 7446C through 7450C, 7452C through 7459C, 7461C through 7466C, 7468C, 7469C, 7471C through 7475C, 7488C through 7507C, 7509C, 7511C through 7514C, and 7517C

Model MX-7-180A aircraft, S/N 20001C through 20063C

Model MX-7-180B aircraft, S/N 22001C through 22016C

Model MXT-7-180 aircraft, S/N 14000C through 14095C

Requirement: To detect and correct improper crimping of the Nicopress sleeve, which could cause a control cable to slip from the sleeve and result in loss of rudder, elevator, aileron, or flap control, accomplish the following:-

1. Inspect all Nicopress sleeve terminal ends for correct size compression per Maule MSB 20. Adjust or replace any terminal compressions that are outside of the limits specified in the MSB prior to further flight.

2. Do not install a Nicopress sleeve without assuring that the terminal compressions are within the limits specified in MSB 20.

(FAA AD 2000-09-06 refers)

Compliance: 1. Within the next 100 hours TIS unless already accomplished.
2. From 22 February 2007.

Effective Date: DCA/M-4/7 - 25 May 2000
DCA/M-4/7A - 22 February 2007

DCA/M-4/8 Rudder Trim Tab Hinges - Modification

Applicability Model M-4 aircraft, S/Ns 3 thru 94
Model M-4C aircraft, S/Ns 1C thru 10C
Model M-4S aircraft, S/Ns 1S thru 3S
Models M-4T aircraft, S/Ns 1T thru 3T
Model M-4-210 aircraft, S/Ns 1001 thru 1045
Model M-4-210C aircraft, S/Ns 1001C thru 1064C
Model M-4-220S aircraft, S/Ns 2001S thru 2003S
Model M-4-220C aircraft, S/Ns 2001C thru 2006C.

Requirement: To prevent loss of rudder trim tab control due to the possibility of the hinges corroding and seizing, modify the rudder trim tab hinges per the instructions in Maule Aircraft Corporation Service Letter Number 14, dated February 19, 1968, or per an manufacturer approved modification.

(FAA AD 68-07-08 refers)

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

Effective Date: 22 February 2007

DCA/M-4/9 Aileron Control System Pulley – Rework**Applicability**

Model M-4 aircraft, S/Ns 3 through 94
 Model M-4T aircraft S/Ns 1T through 3T
 Model M-4C aircraft S/Ns 1C through 11C
 Model M-4S aircraft S/Ns 1S through 3S
 Model M-4-210 aircraft S/Ns 1001 through 1045
 Model M-4-210C aircraft, S/Ns 1001C through 1075C, 1079C and 1080C
 Model M-4-220C aircraft, S/Ns 2001C through 2029C and 2032C.

Requirement:

To prevent the aileron pulley assembly fitted at the bottom of the control column separating from its bearing, accomplish the following instructions per Maule Service Letter No. 19, dated September 4, 1969.

Remove the aileron control pulley to control column attachment bolt. Re-assemble the aileron control pulley assembly with the addition of washers P/Ns AN 970-5 and AN 960-516, and bolt P/N AN 5-27 instead of the original bolt in the following order from front to rear:

- i. AN 5-27 bolt, head forward.
- ii. AN 970-5 washer.
- iii. AN 960-516 washer.
- iv. Original pulley.
- v. Control column.
- vi. AN 960-516 washer.
- vii. AN 365-524 nut

(FAA AD 69-20-02 refers)

Compliance:

Within the next 50 hours TIS, unless already accomplished.

Effective Date:

22 February 2007

DCA/M-4/10 Engine Fuel Lines – Inspection and Replacement**Applicability:**

Model M-5- 210C aircraft, S/N 6190C through 6204C
 Model M-5-235C aircraft, S/N 7061C through 7160C, 7163C through 7167C, 7169C through 7192C, 7194C and 7197C.

Requirement:

To prevent restriction of fuel flow to the engine, due to the possibility of the ends of the fuel lines being crushed by the hose attachment clamps, accomplish the following instructions per Maule Service Letter 39:

Remove the wing root fairings on both sides to gain access to both main tank outlets (two outlets per tank).

If the fuel line tube clamps do not have hexagonal heads, no further action is required.

If the fuel line tube clamps have hexagonal heads, drain the fuel tanks and loosen the clamp(s). Pull the fuel hoses off the fuel lines and the tank outlets and inspect the lines for deformation.

If any fuel lines are deformed, replace as required per the instructions in SL 39, before further flight.

(FAA AD 78-13-08 refers)

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

Effective Date: 22 February 2007

DCA/M-4/11 Engine Air Hose - Modification

Applicability: Model M-5-235C aircraft, S/Ns 7322C, 7350C, A7354C, A7355C, A7358C, A7360C, A7361C, 7364C, 7365C, A7366C and A7367C

Model M-6-235 aircraft, S/Ns 7356C, 7379C, 7380C, 7382C through 7388C and 7390C.

Requirement: To prevent engine failure, install a drain tube P/N 5393A and two hose clamps P/N 10047A-32 to the engine air hose, per the instructions in Maule Service Bulletin No. 3, dated November 6, 1981.

(FAA AD 82-03-05 refers)

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

Effective Date: 22 February 2007

DCA/M-4/12 Fuel Gascolator and Electric Fuel Pump - Relocation

Applicability: Model M-4-210 aircraft, S/N 1001 through 1045

Model M-4-210C aircraft, S/N 1001C through 1080C

Requirement: To prevent an engine fire due the fuel gascolator and electric fuel pump being located too close to the dual exhaust system, relocate the gascolator and fuel pump to the left-side of the aircraft, per the instructions in Maule Service Bulletin No. 10, dated September 16, 1994.

(FAA AD 96-10-05 refers)

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

Effective Date: 22 February 2007

DCA/M-4/13 Elevator Control – Rework and MM Amendment

Applicability: Model M-4-210C aircraft, all S/N

Model M-5-180C aircraft, all S/N

Model M-5-210C aircraft, all S/N

Model M-5-235C aircraft, all S/N

Model M-6-235 aircraft, S/N 7249C, 7356C, 7379C through 7444C, 7446C through 7450C, 7452C through 7459C, 7461C through 7466C, 7468C, 7469C, 7471C through 7475C, 7488C through 7514C, 7516C through 7522C

Model MX-7-180A aircraft, S/N 20001C through 20064C

Model MX-7-180B aircraft, S/N 22001C through 22025C, 22027C

Model MXT-7-180 aircraft, S/N 14000C through 14125C

Requirement: To prevent opposite elevator movement due to possible reversed elevator control rigging which could result in loss of aircraft control, accomplish the following:

1. With yellow enamel paint colour code the top of the rear elevator control horn, the elevator control cable end (which is attached to the top of the rear control horn), the bottom of the forward elevator control horn and the elevator control cable end (which is attached to the bottom of the forward control horn), per Maule Aerospace Technology, Inc. MSB No. 30, dated 4 March 2008.

2. Insert the following text into the rigging procedure section of the aircraft maintenance manual:

“CAUTION – BEFORE FURTHER FLIGHT WHENEVER ELEVATOR CABLES ARE RECONNECTED OR NEW CABLES FITTED: Always inspect elevator operation by moving the control backwards and confirming that the elevator is in the UP position.”

Note:

Requirement 2 of this AD may be accomplished by inserting a copy of this AD or the text on the bottom of page 3 of MSB No. 30 into the rigging procedure section of aircraft maintenance manual.

(FAA AD 2008-24-02 refers)

Compliance:

1. By 30 December 2009 or the next time the elevator control cable is disconnected for any reason, whichever occurs sooner.

2. By 30 December 2009 or the next time the elevator control cable is disconnected for any reason, whichever occurs sooner.

Effective Date:

30 December 2008

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http://www.caa.govt.nz/Airworthiness_Directives/states_of_design.html

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.

* **98-15-18R1** Wing Lift Struts – Inspection and Replacement

Note: FAA AD 98-15-18R1 supersedes DCA/M-4/6D. For aircraft already in compliance with cancelled AD DCA/M-4/6D, compliance with FAA AD 98-15-18R1 is required at the next inspection required by the cancelled AD.

An inspection method accomplished in accordance with [Radiographic Technique 57-20-01 Rev 1](#) may be used as an alternate to the two inspection methods defined in paragraph (i)(1) and (i)(2) of FAA AD 98-15-18R1. If the radiographic technique is used, inspect at intervals not to exceed 4 years.

Effective Date: 21 January 2014