Airworthiness Directive Schedule

Aeroplanes

Cirrus SR20 and SR22

19 December 2024

Notes

1. This AD schedule is applicable to Cirrus SR20 and SR22 aircraft manufactured by Cirrus Design Corporation under FAA Type Certificate No. A00009CH.
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: Dynamic Regulatory System (faa.gov)
3. The date above indicates the amendment date of this schedule.
4. New or amended ADs are shown with an asterisk *

Contents

DCA/CRS/1 **Cancelled - DCA/CRS/7 refers**

Effective Date: 26 October 2006

DCA/CRS/2 **Parachute System Activation - Modification**

Applicability: Model SR20 aircraft, S/Ns 1005 through 1195.

Model SR22 aircraft, S/Ns 0002 through 0209.

Requirement: To prevent failure of the Cirrus Airplane Parachute System (CAPS) activation system in an emergency situation, which could result in occupant injury and/or loss of life and loss of the aircraft, modify the Cirrus Airplane Parachute System (CAPS) by replacing the CAPS handle access cover, the CAPS activation handle bracket and the CAPS activation cable with parts of improved design, per Cirrus Service Bulletin SB 20-95-03, SB 20-95-04 and SB 20-95-05 for SR20 aircraft, and per Cirrus Service Bulletin SB 22-95-03, SB 22-95-04 and SB 22-95-05 for SR22 aircraft.

(FAA AD 2002-24-08 refers)

Note 1: On page 2 in Cirrus Service Bulletin SB 20-95-03 dated 10 June 2002, step 4 refers to SB 22-95-03, which is incorrect. The correct reference is SB 20-95-03.

Note 2: On page 9 in Cirrus Service Bulletin SB 20-95-05 dated 10 July 2002, step 15 refers to SB 22-95- 05, which is incorrect. The correct reference is SB 20-95-05.

Compliance: By 29 December 2005, unless already accomplished.

Effective Date: 29 September 2005

DCA/CRS/3 **Roll and Yaw Trim Cartridges Retaining Nut - Replacement**

Applicability: Model SR20 aircraft, S/Ns 1005 through 1241, except 1235, 1237, and 1238.

Model SR22 aircraft, S/Ns 0002 through 0333, except 0309, 0322, 0323, and 0328.

Requirement: To prevent loss of the self-locking retaining nut on the roll and yaw trim cartridges during flight, which could result in jamming of the flight control system and lead to loss of control of the aircraft, replace the self-locking retaining nut on the yaw trim cartridge and on the roll trim cartridge with a new self-locking retaining nut, P/N MS21044N3, per Cirrus Alert Service Bulletin SB A20–27–06 and Cirrus Alert Service Bulletin SB A22–27–03, as applicable.

(FAA AD 2002-21-02 refers)

Note: 1. This AD applies to all aircraft identified in the applicability section, regardless of whether the aircraft has been modified, altered, or repaired in the area subject to the requirements of this AD.

2. After the effective date of this AD only use self-locking retaining nuts P/N MS21044N3 on yaw trim cartridges and roll trim cartridges.

Compliance: Within the next 10 hours TIS, unless already accomplished.

Effective Date: 29 September 2005

DCA/CRS/4 Parachute System – Modification and AFM Amendment

Applicability: Model SR20 aircraft, S/Ns 1005 through 1178, except 1151.

Model SR22 aircraft, S/Ns 0002 through 0160, except 0159.

Requirement: To initially limit the chance of failure of the CAPS activation system in an emergency situation and prevent the cable housing from going into the rocket cone and allow the rocket to fire correctly, accomplish the following:

1. For model SR20 aircraft, S/Ns 1148 through 1178, except 1151 and model SR22 aircraft, S/Ns 0029 through 0160, except 0159.

In order to reduce the need to use the CAPS system in an emergency situation of loss of aircraft control, incorporate the following text into the Limitation Section of the aircraft AFM:

a) Do not operate the airplane in IFR conditions, only operate the airplane in VFR conditions, and

b) Operate the aircraft during daytime hours only, do not operate at night.

Note 1: The text specified in requirement one may be incorported in the AFM by the aircraft operator or a pilot holding at least a private pilot certificate as authorized by CAR Part 43.

Note 2: The AFM limitations requirement as specified in requirement one is no longer required when requirement two has been accomplished.

2. Install a cable clamp external to the cone adapter on the Cirrus Aircraft Parachute System (CAPS) activation cable, per the Ballistic Recovery Systems Inc. Service Bulletin SB 95-01, as specified in Cirrus Alert Service Bulletin A 20-95-01 and ASB A22-95-01, as applicable.

(FAA AD 2002-05-05 refers)

Note 3: This AD applies to all aircraft identified in the applicability section, regardless of whether the aircraft has been modified, altered, or repaired in the area subject to the requirements of this AD.

Compliance: 1. Prior to further flight.

2. Within the next 10 hours TIS for model SR20 aircraft, S/Ns 1148 through 1178, except 1151 and model SR22 aircraft, S/Ns 0029 through 0160, except 0159, unless already accomplished.

Within the next 25 hours TIS for model SR20 aircraft, S/Ns 1005 through 1147 and model SR22 aircraft, S/Ns 0002 through 0028, unless already accomplished.

Effective Date: 29 September 2005

DCA/CRS/5 Elevator Torque Tube and Rudder Hinge Rivets – Inspection and Replacement

Applicability: Model SR20 aircraft, S/Ns 1134 through 1159.

Model SR22 aircraft, S/Ns 0003 through 0119.

Requirement: To detect and replace understrength rivets in the elevator torque tube and rudder hinge, which could result in failure of the control surfaces and lead to a loss of control of the aircraft in flight, inspect for under strength rivets, per the accomplishment instructions in Cirrus Design Service Bulletin SB 20-55-06 for model SR20 aircraft, and per the accomplishment instructions in Cirrus Design Service Bulletin SB 22-55-03 for model SR22 aircraft, as applicable.

If an under strength rivet is found, replace it with a new rivet P/N MS20470AD4 or a manufacturer approved equivalent rivet, per the accomplishment instructions in SB

20-55-06, for model SR20 aircraft, and per the accomplishment instructions in SB 22-55-03, for model SR22 aircraft, as applicable, before further flight.

(FAA AD 2001-25-03 refers)

Note 1: This AD applies to all aircraft identified in the applicability section, regardless of whether the aircraft has been modified, altered, or repaired in the area subject to the requirements of this AD.

Note 2: After the effective date of this AD do not install P/N MS20470A4 rivets on elevator torque tubes and rudder hinges.

Compliance: Within the next 10 hours TIS.

Effective Date: 29 September 2005

DCA/CRS/6 Fuel Line and Wire Harness – Inspection and Modification

Applicability: Model SR20 aircraft, S/N 1005 through 1581.

Model SR22 aircraft, S/Ns 0002 through 1643 and 1645 through 1662.

Requirement: To prevent damage to the fuel line and wire bundles, which could result in fuel leaks and lead to unsafe fuel vapor within the cockpit and possible fire, inspect the fuel line and wire harness for any chafing damage, per Cirrus Design Corporation Service Bulletin SB 2X–28–04 revision 1.

If any chafing damage is found, replace damaged fuel lines and repair damaged wires or wire harness sheathing, before further flight, per SB 2X–28–04.

Install a forward loop clamp, a fuel line shield, an aft loop clamp, and anti-chafe tubing, per SB 2X–28–04.

(FAA AD 2006-07-06 refers)

Compliance: Within the next 50 hours TIS.

Effective Date: 27 April 2006

DCA/CRS/7 Crew Seat Break-over Pins – Inspection and Replacement

Applicability: Model SR20 aircraft, S/Ns 1005 through 1600.

Model SR22 aircraft, S/Ns 0002 through 1727.

Requirement: To prevent the crew seats from folding forward during emergency landing dynamic loads with consequent occupant injury, accomplish the following:

1. For model SR20 aircraft, S/Ns 1005 through 1600 and model SR22 aircraft, S/Ns 0002 through 1727, accomplish the following actions per Cirrus Design Corporation Service Bulletin SB 2X-25-17 revision 1:

    Release the reclosable fasteners at the lower back of the crew seat to expose the lower seat frame.

    Replace the crew seat break-over bolt with a new crew seat break-over pin P/N 17063-002.

    Recover the seat frame by reclosing the fasteners.

    Inspect the crew seat.

    Repeat the above instructions for the opposite crew seat.

2. For model SR20 aircraft, S/Ns 1005 through 1455, and model SR22 aircraft, S/Ns 0002 through 1044, accomplish the following actions per Cirrus Design Corporation Service Bulletin SB 2X–25–06 R4:

    Identify whether the recline lock is secured with two bolts or three bolts. If the recline locks are secured with two bolts, replace with the new recline locks, kit number 70084–001.

If the recline locks are secured with three bolts, replace with the new recline locks, kit number 70084–002. Check break-over pin alignment and adjust as necessary.

Check that the locks engage with the break-over bolts with the seat in the full recline position. If full seat recline is not possible or is difficult to engage, grinding of the lower aft seat frame is necessary.

Repeat the above instruction for the opposite crew seat.

(FAA AD 2006-19-10 refers)

Compliance: 1. & 2. Within the next 50 hours TIS or by 26 April 2007, whichever occurs sooner.

Effective Date: 26 October 2006

DCA/CRS/8 **MLG Brakes and Wheel Fairings – Inspection, Modification and AFM Amendment**

Applicability: Model SR20 aircraft, S/Ns 1005 through 1600.
Model SR22 aircraft, S/Ns 0002 through 1739.

Requirement: To detect, correct, and prevent damage to the brake calliper piston o-ring seals due to overheating, which could result in hydraulic leakage and loss of braking and directional control or brake fire, accomplish the following:

1. Inspect the aircraft maintenance records to determine whether the brake calliper piston o-ring seals were replaced within the last 100 hours TIS.

If no record is found that the brake calliper piston o-ring seals were replaced within the last 100 hours TIS, replace the o-ring seals, per the brake maintenance procedures in section 32–42 of the applicable Aircraft Maintenance Manual before further flight, or replace brake callipers, per Cirrus Design Corporation Service Bulletin SB 2X–32–13 revision 1, before further flight.

2. Amend the Pilot's Operating Handbook (POH) by inserting the applicable revision A6 amendment into the POH, per table 2 of FAA AD 2006-21-03.

Note 1: The AFM amendment may be accomplished by the pilot in accordance with CAR Part 43, Appendix A. The pilot must be trained and authorised (Part 43, Subpart B refers) and certification must be provided (Part 43, Subpart C refers).

3. For model SR20 aircraft, S/Ns 1005 through 1592 and model SR22 aircraft, S/Ns 0002 through 1727:

Modify the MLG wheel fairings and install a brake calliper temperature indicator sticker, per SB 2X–32–14 revision 1.

(FAA AD 2006-21-03 refers)

Note 2: Before installing MLG fairings or MLG brake callipers on model SR20 aircraft, S/Ns 1005 through 1592 and model SR22 aircraft, S/Ns 0002 through 1727 modify per SB 2X–32–14 revision 1.

Compliance: 1. & 2. Within the next 50 hours TIS, unless already accomplished.

3. Modify within the next 50 hours TIS, unless already accomplished, and thereafter replace the temperature indicator stickers when the calliper o-ring seals are replaced due to a brake assembly overheating occurrence. (The temperature indicator sticker turns black when overheated).

Effective Date: 26 October 2006

DCA/CRS/9 **Parachute System - Modification**

Applicability: Model SR20 aircraft, S/N 1005 through to 1798

Model SR22 aircraft, S/N 0002 through to 2437.

Requirement: To prevent failure of the pick-up collar support fasteners of the Cirrus Aircraft Parachute System (CAPS) possibly resulting in premature separation of the pick-up collar and an unsuccessful parachute deployment, replace the pick-up collar support of the CAPS with a new design pick-up collar support and aluminium tension screws per Cirrus Alert Service Bulletin No. SB A2X-95-10 revisions 1 or 2.

Note: Only persons trained in the maintenance of the Cirrus parachute system shall accomplish the requirements of this AD.

(FAA AD 2007-14-03 refers)

Compliance: Within the next 50 hours TIS or by 30 September 2007 whichever occurs sooner, unless already accomplished.

Effective Date: 26 July 2007

DCA/CRS/10 Wing Tip Drain Hole

Applicability: Model SR22 airplanes, serial numbers 2334, 2420, and 2438 through 2749.

Requirement: To prevent moisture from accumulating along the wing shear web where it may freeze in certain conditions and prevent proper operation of the aileron control pulley, install a drain hole in the left and right outboard wing tips in accordance with Cirrus Design Service Bulletin SB 2X-57-08.

(FAA AD 2007-24-13 refers)

Compliance: Before 30 January 2008.

Effective Date: 20 December 2007

DCA/CRS/11 Aileron & Rudder Rigging – Inspection and Rework

Applicability: Model SR20 aircraft, S/N 1005 through to 1861.

Model SR22 aircraft, S/N 0002 through to 2333, 2335 through to 2419 and 2421 through to 2437.

Requirement: To prevent jamming of the aileron and rudder controls which could result in loss of aircraft control, inspect the rudder, aileron and rudder-aileron interconnect rigging per Cirrus Service Bulletin No. SB 2X-27-14 revision 3.

Correct any out-of-rig condition and replace the attachment hardware of the rudder-aileron interconnect arm per SB 2X-27-14 before further flight.

Report any out-of-rig condition, to the CAA by completing a defect report form CAA005D within 10 days after the inspection. Describe the out-of-rig condition in as much detail as possible, and include the corrective action taken. Also provide log entry details of any previously accomplished flight control system maintenance, preventative maintenance or control system alteration.

(FAA AD 2008-03-16 refers)

Compliance: Within the next 25 hours TIS, or by 11 June 2008, whichever occurs sooner.

Effective Date: 11 March 2008

DCA/CRS/12 Exhaust System – Inspection and Replacement

Applicability: Model SR20 aircraft, S/N 1005 through to 1815.

Requirement: To prevent carbon monoxide entering the cabin heating system due to possible leaks in the exhaust system which could result in pilot incapacitation, accomplish a pressurization inspection/test on the exhaust system per the instruction in Cirrus Service Bulletin SB 2X-78-07 revision 1. If any defects are found, or if an exhaust gas odour is detected in the aircraft cabin, replace the heat exchanger weldment and shroud with a new improved heat exchanger before further flight, per the instruction in Cirrus Service Bulletin SB 2X-78-07.

Note: In lieu of the initial inspection the heat exchanger weldment and shroud can be replaced. Thereafter accomplish the 100-hour repetitive inspection.
(FAA AD 2008-11-18 refers)

Compliance: Within the next 25 hours or by 7 October 2008 whichever occurs first, and thereafter at intervals not to exceed 100 hours TIS.

Effective Date: 7 July 2008

DCA/CRS/13 Cabin Door – Inspection and Modification

Applicability: Model SR20 aircraft, S/N 1423 through to 1906.
Model SR22 aircraft, S/N 0795 and 0820 through to 2912.

Requirement: To prevent inflight failure of the cabin door, which could result in the door separating from the aircraft, inspect the cabin door per the instructions in Cirrus Design Corporation SB 2X-52-07 R4. If a threaded sleeve is fitted at the cabin door rod end, embody cabin door rod end Kit 70186-004. If a threaded sleeve is not fitted at the cabin door rod end, embody cabin door rod end Kit 70186-005 before further flight.
(FAA AD 2008-14-13 refers)

Compliance: Within the next 50 hours TIS or by 28 February 2009, whichever occurs sooner.

Effective Date: 28 August 2008

DCA/CRS/14 Anti-ice System – Placard and Inspection

Applicability: Model SR22 aircraft, S/N 3409, 3411 through to 3430, 3432 through to 3441, 3443 through to 3450, 3455 through to 3465, 3467, 3468, 3470 through to 3472, 3485, 3486, 3488, 3489, 3491 through to 3493, 3495 through to 3500, 3504, 3505, 3512, 3513, 3517, 3524, 3525, 3528 and 3546 fitted with an anti-ice system approved for flight into known icing.

Requirement: To prevent separation of anti-ice fluid distribution lines due to incorrectly installed compression fittings which could result in total loss of ice protection fluid supply to the protected surfaces, ice accumulation on the aircraft, and degraded aircraft handling and performance, accomplish the following:

1. Fabricate a placard (using at least 1/8-inch letters) with the following text and install a placard on the instrument panel within view of the pilot:

FLIGHT INTO KNOWN OR FORECAST ICING PROHIBITED.

2. Inspect the anti-ice fluid line compression fittings per Cirrus SR22 SB 2X-30-08, dated 9 November 2009 and repair any incorrectly installed compression fittings per Cirrus SR22 SB 2X-30-08 before further flight.

Note: The accomplishment of all the requirements in Cirrus SR22 SB 2X-30-08 is a terminating action to requirement 1 of this AD.
(FAA AD 2009-26-01 refers)

Compliance: 1. Before further flight unless requirement 2 of this AD has been accomplished.
2. At the next scheduled maintenance inspection, or within the next 100 hours TIS, whichever occurs sooner.

Effective Date: 21 January 2010

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 Links to state of design airworthiness directives | aviation.govt.nz
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.

*** FAA AD 2024-24-11 Upper Power Lever - Inspection**

Applicability: SR20, SR22, and SR22T aircraft fitted with an upper power lever with P/N 19181-001, 19181-002, or 46505-001.

Effective Date: 23 December 2024