

Airworthiness Directive Schedule

Engines

Blackburn Cirrus

27 June 2002

The date above indicates the amendment date of this schedule.

New or amended ADs are shown with an asterisk *

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- *DCA/CIRRUS/1 Propeller Hub - Modification**
- Applicability:** Cirrus Minor II & IIA engines fitted with wooden propellers.
- Requirement:** Accomplish modifications 687, 688 and 689 on propeller hubs per SI J.10 issue 2. (CAA UK AD 1746 PRE 80 refers)
- Compliance:** Before flight
- Effective Date:** 27 June 2002
- *DCA/CIRRUS/2 Cylinder Hold Down Studs - Modification.**
- Applicability:** Cirrus Minor II & IIA engines.
- Requirement:** Replace any light alloy distance pieces (Part No. JA.266) with steel distance pieces (Part No. JA.2226) as introduced by modification No. 1243, per SI J.20 issue 2 and SI J.34 issue 2. (UK CAA AD 1747 PRE 80 refers)
- Compliance:** Whenever any looseness of the cylinder and/or oil leakage from the cylinder base becomes apparent.
- Effective Date:** 27 June 2002
- *DCA/CIRRUS/3 Rotax Vacuum Pumps - Installation**
- Applicability:** Cirrus Minor II & IIA and Cirrus Major II & III engines fitted with ROTAX vacuum pumps.
- Requirement:** The only ROTAX vacuum pump approved for these engines is the type M.0106. SI J.22/G.5 issue 2 refers. Type M.0105 pumps may be modified by fitting a new shaft P/N 56168/2 or by reworking the original shaft per the SI. (UK CAA AD 1748 PRE 80 and 1756 PRE 80 refer)
- Compliance:** Before flight.
- Effective Date:** 27 June 2002
- *DCA/CIRRUS/4 Carburettor Diaphragm - Replacement**
- Applicability:** Cirrus Minor II & IIA engines fitted with Zenith Type 40 F.A.I.H.B. carburettors.
- Requirement:** Zenith Type 40 F.A.I.H.B. carburettors fitted to these engines must have their enrichment diaphragm assemblies P/N A.733 replaced by the later type, P/N A.838 per SI J.30 issue 2. (UK CAA AD 1749 PRE 80 refers)
- Compliance:** Before flight.
- Effective Date:** 27 June 2002
- *DCA/CIRRUS/5 Propeller Hub and Front Plate - Modification**
- Applicability:** Cirrus Major II and III engines.
- Requirement:** Perform modifications 446 and 447 by installing P/N GB.2320 propeller hub (that has serrations on its front outer diameter) and a steel front plate P/N GB.2324/1 (that has internal serrations to suit the new hub).
Note: The superseded front plates P/N GA.324/2 were made from L3 light alloy. (UK CAA AD 1750 PRE 80 refers)
- Compliance:** Before flight
- Effective Date:** 27 June 2002

***DCA/CIRRUS/6 Simms Vernier Magneto Couplings - Installation**

Applicability: Cirrus Major II and III engines.

Requirement: The only currently approved "Simms Vernier Magneto Couplings" for these engines are those introduced by modifications 710 or 2032 to replace the original couplings P/N AA.536 that were coloured grey-green.

The following list gives the P/N and means of identification of the approved couplings.

<u>Mod No.</u>	<u>P/N</u>	<u>Colour</u>	<u>Identification</u>
710	AA.2536/4	(Bright green) (Drab white)	Marked N5 on periphery Marked N6 on periphery
2032	GA.5536	Gloss black	Pronounced chamfer on periphery of one set of teeth

(UK CAA AD 1751 PRE 80 and SI G.1 refer)

Compliance: Before flight, inspect the couplings and replace (with P/N AA.2536/4 or GA.5536) any couplings that are not the modified type, or are damaged.

Effective Date: 27 June 2002

***DCA/CIRRUS/7 Piston Type Oil Pumps - Modification**

Applicability: Cirrus Major engines prior to S/N 3500 fitted with piston type oil pumps.

Requirement: 1. All piston type oil pumps Part No. GC.1601/11 and earlier stroke (/) numbers are to be modified per SI G.2 issue 2.

2. Inspect all piston type oil pumps per SI G.2 para 3.

(UK CAA AD 1752, 1753, 1754, 1755 and 1763 PRE 80 refer)

Compliance: 1. Modify before flight

2. Inspect within 10 hours TIS and thereafter at intervals not exceeding 300 hours TIS.

Effective Date: 27 June 2002

***DCA/CIRRUS/8 Die Cast Cylinder Heads - Replacement**

Applicability: Cirrus Minor II and IIA engines with die cast cylinder heads P/N JD.201.

Requirement: 1. Remove and discard any die cast cylinder heads that are cracked or have accumulated more than 400 hours TIS. Replacement cylinder heads may be serviceable P/N JD.201 (die cast cylinder heads) with less than 400 hours TIS or serviceable sand cast cylinder heads.

2. Inspect all die cast cylinder heads per SI J.19 issue 2 at intervals not exceeding 10 hours TIS.

(UK CAA AD 1757 PRE 80 refers)

Compliance: As detailed

Effective Date: 27 June 2002

- *DCA/CIRRUS/9 Amal Type 120 Fuel Pumps - Inspection and Modification**
- Applicability:** Cirrus Minor I, II and IIA engines with Amal Type 120 fuel pumps.
- Requirement:** At intervals not exceeding 50 hours TIS, inspect the cadmium plated lower diaphragm washers P/N 120/030 per SI F.7 J.35 issue 3 for evidence of corrosion, flaking and/or porosity. If any of these defects are observed, fit corrosion resistant steel washers (marked "C.R.S." P/N 120/321) per modification 1668 (Cirrus Minor I) or modification 1645 (Cirrus Minor II & IIA). Embodiment of modifications 1668 or 1645 terminates the 50 hour inspection requirement.
(UK CAA AD 1758 PRE 80 refers)
- Compliance:** For in service pumps inspect and modify as detailed. For uninstalled pumps, modify prior to installation.
- Effective Date:** 27 June 2002
- *DCA/CIRRUS/10 Crankshaft - Inspection and Rework**
- Applicability:** Cirrus Minor II and IIA engines with S/N up to and including 4768, and all Cirrus Minor engines that have suffered a magneto drive failure.
- Requirement:** Inspect per SI J.14 issue 2 and rework per paragraph 6.
(UK CAA AD 1759 PRE 80 refers)
- Compliance:** Before further flight.
- Effective Date:** 27 June 2002
- *DCA/CIRRUS/11 Carburettor Blanking Plug - Rework**
- Applicability:** Cirrus Minor II and IIA engines with Zenith Type F.A.I.H.B. carburetors, S/N 0823 and under.
- Requirement:** Rework per SI J.17 issue 2.
(UK CAA AD 1760 PRE 80 refers)
- Compliance:** Before flight unless already accomplished.
- Effective Date:** 27 June 2002
- *DCA/CIRRUS/12 Carburettor Main Discharge Assembly - Modification**
- Applicability:** Cirrus Minor II and IIA engines fitted with Zenith carburetors that have not complied with SI J.27 issue 2 or modification M.1498 (Zenith Mod 6554).
- Requirement:** 1. Load test the main discharge assembly per SI J.27 issue 2.
2. Embody modification No. 1498.
(UK CAA AD 1761 PRE 80 refers)
- Compliance:** 1. Before further flight.
2. At next engine overhaul.
- Effective Date:** 27 June 2002

***DCA/CIRRUS/13 Crankshaft - Inspection**

- Applicability:** Cirrus Minor I, II and IIA and Cirrus Major II and III engines.
- Requirement:** Perform a dye penetrant inspection of the front end of the crankshaft per SI F.1/G.13/J.36 issue 4.
(UK CAA AD 1762 PRE 80 refers)
- Compliance:** At intervals not exceeding 200 hours TIS and after any shock loading.
- Effective Date:** 27 June 2002

***DCA/CIRRUS/14 Hobson Carburettors - Inspection**

- Applicability:** Cirrus Major II and III engines fitted with Type AI48GM1 carburettors not incorporating modification 2014.
- Requirement:** Inspect the carburettor per SI G.8 issue 2 paragraph 3.
(UK CAA AD 1764 PRE 80 refers)
- Compliance:** At intervals not exceeding 10 hours TIS.
- Effective Date:** 27 June 2002

***DCA/CIRRUS/15 Amal Fuel Pumps Internal - Inspection**

- Applicability:** Cirrus Major II and III engines fitted with Type 136 fuel pumps.
- Requirement:** Perform inspections and tests detailed in SI G.10 issue 2.
(UK CAA AD 1765 PRE 80 refers)
- Compliance:** At intervals not exceeding 150 hours TIS or 12 months, whichever is the sooner.
- Effective Date:** 27 June 2002

***DCA/CIRRUS/16 Amal Type 136/AD/2 Fuel Pumps - Inspection**

- Applicability:** Cirrus Major II and III engines fitted with Amal fuel pumps. This AD is not applicable to fuel pumps type 136/AD/2A, or if SI G.11 has been accomplished.
- Requirement:** Accomplish SI G.11 issue 2.
(UK CAA AD 1766 PRE 80 refers)
- Compliance:** Before further flight.
- Effective Date:** 27 June 2002

***DCA/CIRRUS/17 Engine Controls - Inspection**

Applicability: Cirrus Minor or Major engines fitted with Type EA.767/3 control rod ball and socket joints.

Requirement:

1. Inspect all ball and socket joints type EA 767/3 and ensure that there is at least 1/16" clearance between the socket and the lever arm to which the threaded portion of the ball joint is attached.
2. Ensure that the controls do not foul any adjacent structure or mechanism throughout their entire range of movement.
3. Ensure that the screwed end of the control rods are safely in the socket, but do not protrude into the socket housing.
4. Ensure that the spring behind the inner concave pad in the socket is serviceable.
5. With the controls assembled, screw up the adjusting pad in each socket until the ball joint is clamped tight, then slacken off until the next split pin hole in the socket is in line with the slot in the adjustment pad. Under no circumstances should the adjustment pad be slackened more than ¼ of a turn. Lock in the approved manner with a 1/16" split pin.
(UK CAA AD 1767 PRE 80 refers)

Compliance: At intervals not exceeding 50 hours TIS.

Effective Date: 27 June 2002