# **Airworthiness Directive Schedule**

# Lycoming GO-480-G1A6 Engine 28 February 2019

#### Notes:

- 1. This AD schedule is applicable to the Lycoming **GO-480-G1A6** engine manufactured under FAA Type Certificate Number **E-275**.
- The Federal Aviation Administration (FAA) is the National Airworthiness Authority (NAA) responsible for the issue of State of Design Airworthiness Directives (ADs) for Lycoming reciprocating engines. State of Design ADs applicable to these engines can be obtained directly from the FAA website at <a href="http://rgl.faa.gov/Regulatory\_and\_Guidance\_Library/rgAD.nsf/MainFrame?OpenFrameSet">http://rgl.faa.gov/Regulatory\_and\_Guidance\_Library/rgAD.nsf/MainFrame?OpenFrameSet</a>
- 3. Where a NZ AD is based on a foreign AD, compliance may be shown with either the NZ AD or the equivalent State of Design AD, because they will have essentially the same requirements i.e. the logbook will need to list all the NZ ADs, but the CAA will accept compliance with the equivalent State of Design AD as a means of compliance with the NZ AD. (The same as happens now for an imported aircraft.)
- 4. Manufacturer service information referenced in Airworthiness Directives listed in this schedule may be at a later approved revision. Service information at later approved revisions can be used to accomplish the requirements of these Airworthiness Directives.
- 5. The date above indicates the amendment date of this schedule.
- 6. New or amended ADs are shown with an asterisk \*

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DCA/LYC/103A FAA AD 59-10-07 Cylinder Baffle Clamps – Modification

Applicability: Model O-320, O-340, O-360, GO-480, IGSO-480 and O-540 series engines.

Note: No action required if already in compliance with DCA/LYC/103. This AD revised with

Lycoming SB No. 254A no longer active. There is no change to the AD requirement. This AD is applicable to engines that are fitted with spring loaded baffle clamps and

nuts.

Requirement: To prevent spring loaded baffle clamps becoming wedged between the cylinders

replace the baffle clamps and nuts with newer designed retainers P/N 71611 and

hooks P/N 71610 or 71629 as applicable, or with approved alternate parts.

(FAA AD 59-10-07 refers)

**Compliance:** Within the next 100 hours TIS or annual inspection whichever occurs sooner, unless

previously accomplished.

Effective date: DCA/LYC/103A - 27 November 2008

DCA/LYC/136 Crankcase Bearing Dowel Replacement - Modification

**Applicability:** As detailed

Requirement: Accomplish Lycoming SI 1225D

Compliance: At next overhaul

Effective Date: 30 June 1972

DCA/LYC/150 FAA AD 73-23-01 Piston Pins - Inspection

Applicability: As detailed

Requirement: Accomplish Lycoming SB 367F.

(FAA AD 73-23-01)

**Compliance:** Within the next 50 hours TIS

Effective Date: 30 September 1973

DCA/LYC/190A FAA AD 97-01-03 Piston Pin - Removal

Applicability: Piston Pins P/N LW-14077 that were originally shipped from Textron Lycoming during

the time period 15 December 1995 through 17 September 1996.

These piston pins may have been obtained individually, or be installed in:-Models and S/Ns of engines listed in Textron Lycoming Service Bulletin 527C. Overhauled engines and cylinder kits (including Superior Air Parts supplied kits that

use P/N LW-14077 piston pins).

Note 1: Piston pins P/N LW-14077, are not fitted to O-235 series engines.

**Requirement:** To prevent piston pin failure and engine stoppage, accomplish SB 527C. Piston Pins

marked with code 17328 (per SB527B Figure 1) must be removed before further

flight.

(FAA AD 97-01-03 refers)

Compliance: Before 50 hours TTIS (piston pins). For piston pins that have already exceeded 50

hours TTIS, before further flight.

Note 2: The aircraft may be operated to a location where the requirements of this AD

can be accomplished.

Effective Date: DCA/LYC/190 16 October 1996

DCA/LYC/190A 6 June 1997

# DCA/ LYC/195B Torque Checks

# FAA AD 2003-14-03 Rotary Fuel Pump Relief Valve Attach Screws –

#### Applicability:

Model IO-320, LIO-320, IO-360, HIO-360, TIO-360, LTIO-360, GO-435, GO-480, IGO-480-A1B6, IO-540, IGO-540, AEIO-540, HIO-540, TIO-540, LTIO-540, TIGO-541, IO-720 and TIO-720 fuel injected reciprocating engines fitted with Crane/Lear Romec "AN" rotary fuel pump model series RG9080, RG9570 or RG17980.

These engines are installed on but not limited to fuel injected, reciprocating engine powered aircraft manufactured by Cessna, Piper, Mooney, Beech, Bellanca, Champion, Partenavia, Rockwell, Schweizer, Enstrom, Aerospatiale (SOCATA), Maule, Aero Commander, Hiller, and Pacific Aerospace.

#### Note 1:

No action required if already in compliance with DCA/LYC/195A. This AD revised with Lycoming SB No. 529 now at revision B and to include note 2 with no change to the AD requirement.

#### Requirement:

To prevent rotary fuel pump leaks, which could result in an engine failure, engine fire and damage to or loss of the aircraft, accomplish the following:

Perform initial and repetitive torque check inspections of pump relief valve attaching screws per the instructions in Textron Lycoming SB 529B as follows:

- 1. Perform the initial torque check inspection. If the torque does not meet the specifications in SB 529B, tighten screws to the required torque per SB 529B.
- 2. Perform a follow-up torque check inspection. If the torque does not meet the specification in SB 529B, during follow-up inspections, tighten screws to the required torque in accordance with SB 529B.
- 3. Replacement of a rotary fuel pump series RG9080, RG9570, or RG17980, with a modified pump (with the "/M" after the part number) is a terminating action for the inspection requirements of parts 1 and 2 of this AD.

#### Note 2:

Lycoming SB No. 529B or later FAA approved revisions pertains to the subject of this AD.

(FAA AD 2003-14-03 refers)

### Compliance:

- 1. Within the next 10 hours TIS or 30 days, whichever occurs sooner unless previously accomplished.
- 2. Repetitive Torque Check Inspections after accumulating 50 hours TIS, or 6 months since the initial torque check inspection, whichever occurs first. Continue the repetitive torque check inspections per requirement 2 of this AD until:
- (i) The accumulation of 100 hours TIS since the initial inspection with the torque remaining within the SB specification for 50 hours TIS, or
- (ii) The torque meets the SB specification during the initial inspection and a subsequent inspection taking place at least 50 hours TIS later.

#### **Effective Date:**

DCA/LYC/195 - 25 September 1998 DCA/LYC/195A - 28 August 2003 DCA/LYC/195B - 18 December 2008

# DCA/LYC/196A Piston Pin Plug Wear - Inspection

**Applicability:** All Lycoming engines fitted with piston pin end plugs P/N 60828 or LW-11775.

**Note 1:** This AD revised to clarify the applicability and the compliance.

**Note 2:** This AD is not applicable to engines fitted with piston pin end plugs P/N 72198.

Engines manufactured, overhauled or rebuilt by Lycoming after February 1999 are

fitted with piston pin end plugs P/N 72198.

**Requirement:** To prevent abnormal wear of piston pin plugs which could result in engine failure,

inspect the oil screen, the oil filter element, the oil suction screen and the oil from the

filters as applicable per Lycoming SI 1492C of later FAA approved revisions.

If abnormal aluminium or iron content is found accomplish corrective actions per

manufacturer instructions before further flight.

(Lycoming Service Instructions 1267C and 1492C refer)

**Compliance:** For all remanufacturered and overhauled engines fitted with affected piston pin end

plugs:

Within the first 10 hours TIS and the next 25 hours TIS, and thereafter at intervals not

to exceed 50 hours TIS.

For all other engines in service fitted with affected piston pin end plugs:

At the next oil/oil filter change or before 50 hours TIS whichever is the sooner, and

thereafter at intervals not to exceed 50 hours TIS.

Effective Date: DCA/LYC/196 - 28 January 1999

DCA/LYC/196A - 25 June 2009

# DCA/LYC/223A FAA AD 2012-03-07 Carburettors – Inspection

Applicability: All Lycoming reciprocating engines fitted with model HA-6 carburettors P/N 10-5219-

XX, 10-5224-XX, 10-5230-XX, 10-5235-XX, 10-5253-XX, 10-5255-XX, 10-5283-XX,

10-6001-XX, 10-6019-XX and 10-6030-XX including all dash numbers.

Note 1: DCA/LYC/223A revised to clarify the applicability with no change to the AD

requirement. Affected carburettors have a 'machined-from-billet' body.

**Requirement:** To prevent the mixture control sleeve from rotating in the carburetor body which could

result in fuel restriction and a loss of engine power, accomplish the inspections and

corrective actions specified in FAA AD 2012-03-07.

Note 2: A copy of FAA AD 2012-03-07 can be obtained from the FAA AD website at

http://rgl.faa.gov/Regulatory and Guidance Library/rgAD.nsf/MainFrame?OpenFram

eSet

(FAA AD 2012-03-07 refers)

Compliance: Within the next 50 hours TIS from 29 March 2012 (the effective date of

DCA/LYC/223), unless previously accomplished.

Effective Date: DCA/LYC/223 - 29 March 2012

DCA/LYC/223A - 31 May 2012

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) website. The link to the FAA web site is available on the CAA website at

http://www.caa.govt.nz/airworthiness-directives/states-of-design/

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.

## \* DCA/LYC/224A Lycoming Parallel Valve Cylinder and Head Assemblies – Inspection

Applicability: All Lycoming engines fitted with parallel valve cylinder and head assemblies listed in

Table 1 of Lycoming Mandatory Service Bulletin (MSB) 634, dated 11 October 2018,

or later FAA approved revision.

Note: DCA/LYC/224A revised to introduce a repetitive inspection requirement for affected

parallel valve cylinder and head assemblies, until replacement per requirement 2 of this AD. Affected cylinder and head assemblies were supplied in cylinder kits and installed on all parallel valve engines (except O-235 model engines), that were supplied by Lycoming Engines between 1 September 2013 and 30 April 2015. To identify affected cylinder and head assemblies refer to Lycoming MSB 634.

**Requirement:** To prevent loss of engine power due to a cracked cylinder assembly, accomplish the following:

1. Inspection:

Inspect affected parallel valve cylinder and head assemblies for visible discolouration/residue on the cylinder fins. If residue is found on the cylinder fins, then the cylinder may be cracked and further investigation is required. Accomplish a compression test on affected cylinders (refer to Lycoming Service Instruction 1191A). If the compression value does not meet OEM requirements, then the cylinder may be cracked and further investigation is required. Any loss of compression may be due to a cracked cylinder assembly. If a whistling sound is evident while accomplishing the compression test, then the

cylinder may be cracked and further investigation is required.

If a cracked cylinder assembly is found, then <u>replace all affected parallel valve</u> cylinder and head assemblies fitted on the engine, before further flight.

Replacement:

Remove and replace all parallel valve cylinder and head assemblies listed in Table 1 of MSB 634, dated 11 October 2018, or later FAA approved revision.

Affected parallel valve cylinder and head assembly listed in Table 1 of MSB 634 shall not be overhauled, refurbished, or repaired and returned to service.

From the effective date of this AD, an affected parallel valve cylinder and head assembly listed in Table 1 of MSB 634, shall not be installed on any engine.

Compliance: 1. Inspection:

Within the next 50 hours TIS and thereafter at intervals not to exceed 50 hours TIS until requirement 2 of this AD is accomplished.

2. Replacement:

Replace all affected cylinder and head assemblies at the next engine overhaul.

Effective Date: DCA/LYC/224 - 25 October 2018

DCA/LYC/224A - 28 February 2019