Airworthiness Directive Schedule

Engines Continental IO-240-A/-B Series and Rolls-Royce O-240-A Series 28 May 2020

Notes: 1. This AD schedule is applicable to the following Continental engine series, including those Continental engine series manufactured under license by Rolls-Royce: Engine Series: FAA Type Certificate: IO-240-A/-B E7SO Rolls-Royce O-240-A E11EU 2 The Federal Aviation Administration (EAA) is the National Airworthinges Authority

- The Federal Aviation Administration (FAA) is the National Airworthiness Authority (NAA) responsible for the issue of State of Design Airworthiness Directives (ADs) for these engines. State of Design ADs can be obtained directly from the FAA website at <u>http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgAD.nsf/MainFrame?OpenFra</u> meSet
- 3. The date above indicates the amendment date of this schedule.
- 4. New or amended ADs are shown with an asterisk *

Contents

DCA/CON/151	Crankshaft - Inspection	2
DCA/CON/154	Fuel Pump - Inspection	2
DCA/CON/167	Carburettor Air Intake Housing Assembly - Inspection	2
DCA/CON/176A	Cancelled - Refer to Continental Motors Publication M-O	2
DCA/CON/185	Magneto Drive Gear – Inspection and Replacement	3
DCA/CON/195	Hydraulic Valve Lifters – Inspection and Replacement	3
DCA/CON/198	AVStar Fuel Servos – Inspection and Replacement	4

DCA/CON/151	Crankshaft - Inspection	
Applicability:	All O-240 engines manufactured by Rolls Royce.	
Requirement:	1. Inspect crankshaft O/D between propeller flange and oil seal per Rolls Royce SB	
-	T-416 and replace before further flight any crankshaft found cracked.	
	2. Rework, inspect and plug crankshaft internal bore per SB T-416. Crankshafts with evidence of corrosion pitting may remain in service until replaced subject to satisfactory inspection at intervals not exceeding 10 hours TIS.	
Compliance:	Before further flight and thereafter at intervals not exceeding 10 hours TIS until reworked or replaced.	
Effective Date:	3 July 1980	
DCA/CON/154 Fuel Pump - Inspection		
Applicability:	All A-65, A-75, C-75, C-85, C-90, A-100, C-125, O-200, O-240 and O-300 engines with AC fuel pumps P/N 40585, 50695 and 631391.	
Requirement:	Inspect and renew parts as necessary per TCM SB M81-8. (FAA AD 81-07-06 refers)	
Compliance:	Within the next 50 hours TIS or 30 days whichever is the sooner and thereafter at intervals not exceeding 12 months.	
Effective Date:	7 August 1981	
DCA/CON/167 Carburettor Air Intake Housing Assembly - Inspection		
Applicability:	Model O-200A, S/N 256030 through to 256037 and models C85, C90, O-200 and O-240 series with carburettor air intake housing assemblies P/Ns CE11141, CE11142, 639814, 639815, 6413534 and repair kit assemblies P/N 641689 purchased after 31 August 1991 without a permanent ink stamp "CSB 93-13" located on the inside of the housing assembly.	
Requirement:	To prevent engine failure due to a cracked air valve in the carburettor air intake housing assembly, inspect housing assembly per TCM Critical Service Bulletin (CSB) 93-13. If the assembly meets the requirements of paragraph 2A of TCM CSB93-13, no further action is required. If the assembly meets the requirements of paragraph 2B of CSB 93-13, inspect the assembly for cracks per CSB 93-13. If cracks are found anywhere in the assembly, prior to further flight replace with a serviceable assembly. (FAA AD 93-22-05 refers)	
Compliance:	Within the next 25 hours TIS.	
	For those assemblies that meet the requirements of paragraph 2B of CSB 93-13, thereafter at intervals not to exceed 25 hours TIS.	
Effective Date:	24 December 1993	
DCA/CON/176A	Cancelled - Refer to Continental Motors Publication M-O	
Note:	DCA/CON/176A mandated the part replacement requirements in Teledyne Continental SB97-6B. The AD and the SB identified certain parts to be replaced at the next and each subsequent engine overhaul. Continental Motors advised that SB97- 6B is no longer active. The requirements in SB97-6B have now been incorporated into the Continental Aircraft Engine Maintenance Manual - Standard Practice for Spark Ignited Engines, Publication M-O.	
Effective Date:	27 June 2019	

DCA/CON/185 Magneto Drive Gear – Inspection and Replacement

- Applicability: IO-240-B3B and B9B engines listed by S/N in Teledyne Continental SSI 2001-1.
- **Requirement:** To prevent wear of the magneto drive gear teeth which can lead to failure of the magneto drive and engine stoppage, inspect per Teledyne Continental SSI 2001-1.
- **Compliance:** Within next 50 hours TIS.
- Effective Date: 29 April 2004

DCA/CON/195 Hydraulic Valve Lifters – Inspection and Replacement

- Applicability: Model TCM 240, 346, 360, 470, 520 and 550 series engines, and
 - Rolls-Royce Motors, Ltd. (R-RM) IO-240-A engines, and
 - Fitted with hydraulic lifters P/N 657913, 657915 or 657916.
- **Note 1:** These engines are installed on, but not limited to general aviation aircraft.
- Note 2: This AD supersedes DCA/CON/194A. The applicability of this AD revised to include TCM 346 series engines and R-RM IO-240-A engines. No action required if already in compliance with DCA/CON/194A.
- **Requirement:** To prevent excess hydraulic valve lifter wear possibly resulting in loss of engine power and aircraft control, accomplish the following:
 - 1. Review the aircraft logbooks and determine the manufacture date or the rebuild date of the engine, and determine if the hydraulic valve lifters have been replaced after 19 June 2009.
 - If the <u>engine was manufactured or rebuilt before 19 June 2009</u> and if none of the <u>hydraulic lifters have been replaced after 19 June 2009</u> no further AD action is required.
 - If the <u>engine was manufactured or rebuilt after 19 June 2009</u>, or if any of the <u>hydraulic</u> <u>lifters have been replaced after 19 June 2009</u> accomplish requirement 2 of this AD.
 - 2. If the <u>engine was manufactured or rebuilt after 19 June 2009</u>, or if any of the <u>hydraulic lifters have been replaced after 19 June 2009</u> and the P/N of the hydraulic lifters cannot be determined from the engine records refer to the list of affected engine S/N in section A of TCM MSB No. MSB09-8A dated 4 December 2009.
 - For engines listed in section A of MSB No. MSB09-8A inspect the hydraulic lifters fitted to each cylinder and determine the P/N of the hydraulic lifters per paragraphs 1 through to 3 in Section I. Action Required of MSB No. MSB09-8A, dated 4 December 2009.
 - If an affected hydraulic valve lifter is found fitted, replace all affected hydraulic lifters per paragraphs 2.a.1) through to 2.b.4) in Step 2 of MSB No. MSB09-8A before further flight.
 - 3. Affected hydraulic lifters P/N 657913, 657915 or 657916 shall not be fitted to any TCM 240, 346, 360, 470, 520 or 550 series engines or any R-RM IO-240-A engines.
- Note 3: Accomplish the requirements of this AD per the instructions in Teledyne Continental Motors MSB No. MSB09-8A dated 4 December 2009. (FAA AD 2010-11-04 refers)
- **Compliance:** 1. Before further flight unless previously accomplished.
 - 2. Before further flight unless previously accomplished.
 - 3. From 24 June 2010.

Effective Date: 24 June 2010

DCA/CON/198 AVStar Fuel Servos – Inspection and Replacement

Applicability: All Teledyne Continental Motors (TCM) fuel injected engines fitted with a AVStar Fuel Systems, Inc. (AFS) fuel servo diaphragm P/N AV2541801 or P/N AV2541803.

Requirement: To prevent fuel servo failure which could result in loss of engine power and aircraft control, accomplish the following:

1. Review the aircraft records and determine if an AFS fuel servo diaphragm P/N AV2541801 or P/N AV2541803 from an affected production lot listed in AFS MSB No. AFS-SB6 revision 2, dated 6 April 2011 was installed in the fuel servo any time after 20 May 2010. If the fuel servo is found fitted with an affected diaphragm, replace the fuel servo before further flight.2. Fuel servos with an affected AFS fuel servo diaphragm P/N AV2541801 or P/N AV2541803 from the production lots listed in AFS MSB No. AFS-SB6 revision 2 shall not be fitted to any aircraft. (FAA AD 2012-03-06 refers)

- **Compliance:** 1. Within the next 5 hours TIS unless previously accomplished.
 - 2. From 24 February 2012.
- Effective Date: 24 February 2012