

Airworthiness Directive Schedule

Engines

Safran Helicopter Engines – Arrius 2 Series

27 February 2020

- Notes:**
1. This AD schedule is applicable to Safran Helicopter Engines (formerly Turbomeca) Arrius 2 series engines manufactured under the following Type Certificate (TC) Number:

Engine Model:	EASA TC Number:
Arrius 2B1	E.029
Arrius 2B2	E.029
Arrius 2K1	E.029

2. The European Aviation Safety Agency (EASA) 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 EASA website at <http://ad.easa.europa.eu/>
 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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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 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.		
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DCA/TUR/23 Engine Operation - Limitation

Applicability: Arrius 2B1, 2B1A, 2B1A_1 and 2K1 series engines.

Requirement: To ensure continued reliable operation of the engine, operation of the engine at the OEI 2.5 minute power setting is limited to 5 minutes cumulative time before the engine must be removed for checks to the Module 2. Engines that have accumulated 5 minutes or more of operation at OEI 2.5 must be inspected per Turbomeca SL 2174/02/ARRIUS 2B1/19 for 2B1, 2B1A, and 2B1A_1 variants or SL 2175/ARRIUS 2K1/3 for the 21B1A-2K1 variants.

(DGAC AD 2003-98 refers)

Compliance: Before further flight

Effective Date: 30 October 2003

DCA/TUR/24 Fuel Control System – Software Upgrade

Applicability: Arrius 2B1, 2B1A, 2B1A_1 and 2B2 series turboshaft engines.

Requirement: To prevent the possible simultaneous transition of both engines to manual control, which in certain phases of flight could prove difficult for the pilot to control, install fuel control system software upgrades per the applicable SB listed below:

2B1	with overspeed option	SB 319 732080R1
	without overspeed option	SB 319 732081R1
2B1A, 2B1A_1		SB 319 732082R1
2B2		SB 319 732090

(DGAC AD F-2004-017R1 refers)

Compliance: Before 30 June 2004.

Effective Date: 25 March 2004

DCA/TUR/40 Oil Check-valve Piston O-ring – Inspection

Applicability: Arrius 2B1, 2B1A, 2B1A_1, 2B2, 2K1 and 2K2 engines which do not have modification Tu122 embodied.

These engines may be fitted to, but not limited to, EC135 T1, EC135 T2, A 109 and A 109 LUH aircraft.

Requirement: To prevent uncommanded in-flight engine shutdown, replace the o-rings on the lubrication unit check-valve piston, per paragraph 2 of Turbomeca Mandatory Alert Service Bulletin No A319 79 2832, update No. 1 for Arrius 2 B series engines, or Turbomeca Mandatory Alert Service Bulletin No A319 79 2833, update No. 1 for Arrius 2K series engines.

(EASA AD 2006-0142 refers)

Compliance: For engines operating with STD class-oil since their introduction into service:

Within next 50 hours TIS for engines with more than 450 hours TTIS, unless already accomplished, and thereafter at intervals not to exceed 500 hours TIS.

For engines operating with HTS-class oil and engines for which the history of the oils used is not available or engines which used to operate with HTS-class oil and which no longer do so:

Within next 50 hours TIS for engines with more than 300 hours TTIS, unless already accomplished, and thereafter at intervals not to exceed 300 hours TIS.

Note: Standard (STD) and High Thermal Stability (HTS) oils are listed in the engine maintenance manual section 71-00-03.

Effective Date: 29 June 2006

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 <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..

*** 2013-0082 Cancelled – EASA AD 2020-0033 refers**

Effective Date: 10 March 2020

2016-0003R1 Main Injector Half-manifolds and Preference Injector – Inspection

Applicability: Arrius 2B1 engines, all S/N.

These engines are known to be installed on, but not limited to, Airbus Helicopters Deutschland EC135 helicopters.

Effective Date: 2016-0003 - 19 January 2016
2016-0003R1 - 6 December 2016

2008-0018 Electronic Engine Control (EEC) Unit – Inspection

Applicability: Arrius 2B1, 2B1A, 2B2, 2K1 and 2K2 engines, all S/N.

These engines are known to be installed on, but not limited to, Airbus Helicopters Deutschland EC135 helicopters and Leonardo A109 helicopters.

Compliance: Before the issue of a New Zealand Certificate of Airworthiness, or at the next Review of Airworthiness (RA), whichever is the sooner, unless previously accomplished.

Effective Date: 27 October 2016

2018-0044 Cancelled by EASA – Purpose fulfilled

Effective Date: 25 July 2019

*** 2020-0033 Hydro-Mechanical Metering Unit – Inspection**

Applicability: Arrius 2B1, 2B1A, 2B2, 2G1, 2K1 and 2K2 engines, all S/N.

These engines are known to be installed on, but not limited to, Airbus Helicopters Deutschland EC135, Leonardo A109 helicopters and KAMOV 226T helicopters

Effective Date: 10 March 2020