

# Airworthiness Directive Schedule

## Engines

### Safran Helicopter Engines – Artouste III Series

27 October 2016

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

Engine Model:	EASA Type Certificate Number:
Artouste IIIB	E.091
Artouste IIIB1	E.091
Artouste IIID	E.091

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 Turbomeca turbine engines. State of Design ADs applicable to these engines can be obtained directly from the EASA web site. The link to the EASA web site is available on the CAA web site at [http://www.caa.govt.nz/Airworthiness\\_Directives/states\\_of\\_design.html](http://www.caa.govt.nz/Airworthiness_Directives/states_of_design.html)
  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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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) web site. The link to the NAA web site is available on the CAA web site at [http://www.caa.govt.nz/Airworthiness\\_Directives/states\\_of\\_design.html](http://www.caa.govt.nz/Airworthiness_Directives/states_of_design.html) 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/2A Electric Fuel Valve - Modification**

**Applicability:** Artouste III series engines

**Requirement:** To prevent power loss due to partial closing of the fuel valve, modify as follows:  
Artouste III D; per Turbomeca SB 218 80 0098 (Mod TU 164),  
Artouste III B and B1; per Turbomeca SB 218 80 0093 (Mod TU 167).

Until modified, the engine operating cycle (start up to shut down) is limited to a maximum of 2 hours.

(DGAC AD 1999-005(A) refers)

**Compliance:** By 1 January 2000.

**Effective Date:** DCA/TUR/2 - 29 July 1988  
DCA/TUR/2A - 12 March 1999

**DCA/TUR/36 Turbine Shaft Labyrinth – Inspection and Replacement**

**Applicability:** Model Artouste III B, B1 and D engines.

**Requirement:** To prevent deterioration of the turbine shaft labyrinth which may induce overheating and possibly lead to the distortion of the turbine shaft and ultimate in-flight engine shutdown, accomplish the following:

1. Inspect for smoke during engine rundown and once the engine has stopped, per the requirements in Turbomeca Alert Service Bulletin No. A218 72 0099.

Depending on the inspection findings, accomplish the required actions per ASB No. A218 72 0099, before further flight.

2. Inspect the turbine shaft central labyrinth, per Turbomeca Alert Service Bulletin No. A218 72 0100. If the labyrinth is damaged, replace per the instructions in ASB No. A218 72 0100, before further flight.

(DGAC AD F-2004-016 refers)

**Compliance:** 1. After every flight, and if smoke is detected inspect the fuel system before the next flight, or after the last flight of the day, whichever is the later. (Accomplish AD by addition of note to tech log)

2. Inspect within the next 50 hours TIS, or by 30 August 2006, whichever occurs sooner, if the turbine shaft central labyrinth hours TIS are unknown, or if the hours TSN or since last inspection is greater than 1750 hours TIS, and inspect thereafter at intervals not to exceed 1750 hours TIS.

**Effective Date:** 30 March 2006

**DCA/TUR/38 Flexible Fuel Pipe – Inspection and Replacement**

**Applicability:** Artouste III B and III B1 engines

**Requirement:** To prevent fuel leakage due to the possibility of cracks on the lower union of the flexible fuel pipe between the electric fuel cock and the start valve, which if left undetected could lead to loss of engine power and pose a fire hazard, inspect per Turbomeca Mandatory Service Bulletin No. A218 73 0803.

Remove fuel pipe P/N 0 202 12 800 0 and inspect the lower union of the fuel pipe (start electro-valve side) for cracks, per the instructions in MSB No. A218 73 0803.

Replace if cracked, per MSB No. A218 73 0803 before further flight.

(EASA AD 2006-0154 refers)

**Compliance:** Within the next 50 hours TIS, or at the next engine/airframe maintenance operation, or by 29 August 2006, whichever occurs the sooner.

**Effective Date:** 29 June 2006

**DCA/TUR/45 Engine Fuel Pump Maximum Flow – Inspection and Replacement**

**Applicability:** Artouste III B, III B1 and III D turboshaft engines.

These engines are installed on, but not limited to Alouette III (SE 3160 / SA 316 B) and Lama (SA 315 B) aircraft.

**Requirement:** The European Aviation Safety Agency (EASA) has advised that an additional 58 fuel pumps may have been returned to service after overhaul with a low fuel flow rate. This may restrict the power available at maximum power settings.

To prevent an unsafe condition, inspect the fuel pumps listed in table 1 of this AD, per the instructions in Turbomeca Mandatory Service Bulletin (MSB) No. 218 73 0802, revision 1, dated 08 January 2007.

Replace fuel pumps that fail to deliver the required maximum fuel flow rate, per the instructions in MSB No. 218 73 0802, before further flight.

**Table 1 Fuel Pump S/Ns**

158B	3220	4241B	F48B
1749	3277	B52B	F551B
1750	3293	B82B	F620B
2103	3323	C01B	F652B
2577	3326	D14B	F66B
2665	3395	D2B	F776B
2728	3438	D71B	F801B
2837	3581	D93B	F817B
2882	3725	E67B	F833B
2887	3729	F129B	F944B
2894	3884	F151B	F971B
2933	3923	F164B	G58B
3045	4123	F335B	G61B
3120	4129	F350B	3200
4213	F472B		

**Note:** Table 1 of this AD lists affected fuel pumps additional to those that were listed in DCA/TUR/35. That AD is canceled as those affected pumps should all have been addressed by DCA/TUR/35 (or equivalent DGAC F-2005-201). For a complete list of all affected engine fuel pumps, refer to MSB No. 218 73 0802 revision 1, dated 08 January 2007.

(EASA AD 2007-0030 refers)

**Compliance:** By 22 March 2007

**Effective Date:** 22 February 2007

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