
AIRWORTHINESS DIRECTIVE

For the reasons set out in the background section, the CASA delegate whose signature appears below issues the following Airworthiness Directive (AD) under subregulation 39.001(1) of CASR 1998. The AD requires that the action set out in the requirement section (being action that the delegate considers necessary to correct the unsafe condition) be taken in relation to the aircraft or aeronautical product mentioned in the applicability section: (a) in the circumstances mentioned in the requirement section; and (b) in accordance with the instructions set out in the requirement section; and (c) at the time mentioned in the compliance section.

SMA Piston Engines

AD/SMA/3

Engine Primary Exhaust Assembly

7/2007

Applicability: Société de Motorisations Aéronautiques (SMA) SR305-230 or SR305-230-1 engines fitted with an exhaust collector assembly having a part number (P/N) SF01080014-0.

Note 1: These engines are known to be installed on, but not limited to, Cessna 182 series and Reims F182 series aeroplanes.

Requirement:

1. a. Perform a visual inspection in the area of the TIT probe mount weld for cracks as detailed in SMA Service Bulletin No. SB-01-78-001 revision 3 dated 27 March 2007 or later NAA approved revisions.
- b. If cracks in the exhaust collector assembly are found, replace the exhaust collector assembly.
2. Repeat the actions in Requirement 1 of this AD.
3. Replace the exhaust collector assembly P/N SF01080014-0 with a serviceable part.

Note 2: EASA AD 2007-0127 dated 7 May 2007 refers.

Compliance:

1. a. At 30 +/- 2 exhaust collector assembly flight hours since new.
- b. Before further flight after the effective date of this AD.
2. At 40 +/- 2 exhaust collector assembly flight hours since new.
3. At or before 50 exhaust collector assembly flight hours since new.

This Airworthiness Directive becomes effective on 5 July 2007.

SMA Piston Engines

AD/SMA/3 (continued)

Background: Several occurrences of cracks on the exhaust collector assembly have been reported in service. Failure of the engine primary exhaust can lead to a loss of engine manifold pressure and may result in a loss of engine power. In some recent occurrences, cracking has appeared near the weld of the Turbine Inlet Temperature (TIT) probe support. This eventually led to an open hole in the exhaust collector assembly. The resulting loss of engine power resulted in an emergency landing.



David Villiers
Delegate of the Civil Aviation Safety Authority

24 May 2007