
AIRWORTHINESS DIRECTIVE

For the reasons set out in the background section, the CASA delegate whose signature appears below revokes Airworthiness Directive (AD) AD/SWSA226/88 and issues the following AD under subregulation 39.1 (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.

Fairchild (Swearingen) SA226 and SA227 Series Aeroplanes**AD/SWSA226/88****Fuel Boost Pump Wiring****4/2004****Amdt 1**

Applicability: All Model SA226 and SA227 aeroplanes.

- Requirement:
1. If not previously accomplished in accordance with CASA Letter F92/0725, dated 1 October 2000, or CAA(NZ) Emergency Airworthiness Directive DCA/SA226/42 remove each fuel boost pump and inspect the wiring for any sign of exposed wires, chafing or electrical arcing.
 2. If any exposed wire, chaffing or arcing is evident repair or replace the wiring in accordance with either the airframe manufacturer's instructions or an approved repair scheme.

Note 1: Before removal of the boost pumps it is necessary to defuel the tank. For the initial inspection, fuel boost pumps should not be used to transfer the fuel out of the tank to be inspected.

Note 2: Following each inspection reinstall the boost pumps in accordance with the airframe manufacturer's maintenance manual ensuring that adequate clearance exists between the boost pump wiring and the fuel check valves.

3. Forward the results from the initial inspection, both positive or negative, to CASA as follows:

By Mail Section Head - Systems
 Certification Standards Branch
 Civil Aviation Safety Authority
 GPO Box 2005
 CANBERRA ACT 2601

By Facsimile (02) 6217 1914

Compliance: For Requirement 1 - Within three days from the effective date of this Directive and thereafter on any occasion a fuel boost pump is removed until the boost pump wiring is protected in accordance with AD/SWSA 226/94.

For Requirement 2 - Before further flight.

Fairchild (Swearingen) SA226 and SA227 Series Aeroplanes

AD/SWSA226/88 Amdt 1 (continued)

For Requirement 3 - Within seven days after the effective date of the original issue of this Directive.

This Amendment becomes effective on 15 April 2004.

Background: The CAA(NZ) has advised that six SA227-AC aeroplanes have been inspected and found to have evidence of chafing to either the inboard or outboard fuel boost pump wiring. In one case evidence of electrical arcing was found on the fuel check valve located immediately above the pump. Subsequent to this advice three Australian aeroplanes have been found to have chafed fuel boost pump wiring.

The original issue of this Directive required initial and repetitive inspections of the fuel boost pump wiring to detect chafing and, if necessary, repair or replacement of any damaged wiring. These actions were intended to prevent possible electrical arcing in the fuel tank and possible fire/explosion in the fuel tank.

This amendment introduces a terminating action to the repetitive inspection requirements.

The original issue of this Airworthiness Directive became effective on 11 September 2000.



James Coyne
Delegate of the Civil Aviation Safety Authority

5 March 2004