
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.

Boeing 727 Series Aeroplanes**AD/B727/196****Fuel Tank Float Switches****10/2005**

Applicability: Model 727, 727C, 727-100, 727-100C, 727-200 and 727-200F series aeroplanes.

- Requirement:
1. Inspect the wing and auxiliary fuel tanks to determine if any float switches are present. Instead of an inspection of the fuel tanks, a review of aeroplane maintenance records is acceptable if the presence of any float switch can be conclusively determined from that review. If float switches are not present, further action is not required.
 2. If any float switch is present, inspect to identify the float switch models. Instead of an inspection of the fuel tanks, a review of aeroplane maintenance records is acceptable if the identity of the float switch can be conclusively determined from that review.
 3. If a float switch other than an Ametek Model F8300-146 float switch is installed - Install a liner system inside the float switch electrical cable conduit in the fuel tanks in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin (ASB) 727-28A0127, dated 26 August 2004.
 4. If any Ametek Model F8300-146 float switch is installed - Replace the float switch with a new switch and install a liner system inside the float switch electrical cable conduit in the fuel tanks in accordance with the Accomplishment Instructions of ASB 727- 28A0127.

Note 1: ASB 727-28A0127 segregates the work into nine work packages for the six fuel tank configurations identified in the service bulletin. The work packages do not have to be completed sequentially. Each work package can be done independently or simultaneously. However, all work packages, as applicable for each fuel tank configuration, must be done to complete the requirements of this Directive.

5. Ametek Model F8300-146 float switches may not be installed in any fuel tank on any aeroplane as a replacement spare.

Note 2: FAA AD 2005-16-07 Amdt 39-14212 refers.

Compliance: For Requirement 1 - Within 48 months after the effective date of this Directive.

For Requirement 2 - Before further flight, after the Requirement 1 inspection/determination.

Boeing 727 Series Aeroplanes

AD/B727/196 (continued)

For Requirement 3 - Before further flight, after the Requirement 2 inspection/determination.

For Requirement 4 - Before further flight, after the Requirement 2 inspection/determination.

For Requirement 5 - As of the effective date of this Directive.

This Airworthiness Directive becomes effective on 29 September 2005.

Background: Boeing has received reports of contamination of the fueling float switch by moisture or fuel, together with chafing of the float switch wiring against the fuel tank conduit. This Directive, which requires an inspection to determine if float switches are installed and, if necessary, the installation of new float switches and protective sheathing in the electrical cable conduit; is issued to prevent the contamination and chafing, which could present an ignition source inside the fuel tank that could cause a fire or explosion.



James Coyne
Delegate of the Civil Aviation Safety Authority

18 August 2005