
AIRWORTHINESS DIRECTIVE

On the effective date specified below, and for the reasons set out in the background section, the CASA delegate whose signature appears below revokes Airworthiness Directive (AD) AD/AIRCON/13 Amdt 2 and issues the following 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.

Airconditioning Equipment

**AD/AIRCON/13
Amdt 3**

**Kelly Aerospace Fuel Regulator
Shutoff Valves & Cabin Heaters**

7/2005

Applicability: Kelly Aerospace part number (P/N) 14D11, A14D11, B14D11, C14D11, 23D04, A23D04, B23D04, C23D04 or P23D04 fuel regulator shutoff valve used with Kelly Aerospace B1500, B2030, B2500, B3040, B3500, B4050, or B4500 B-Series combustion heaters.

Note 1: The B1500, B2030, B2500, B3040, B3500, B4050, or B4500 B-Series combustion heaters were previously manufactured by Janitrol, C&D Airmotive Products, FL Aerospace, and Midland-Ross Corporation.

Note 2: B-Series combustion heater are installed on, but not limited to the following aircraft makes and models. Aircraft not on this list that have the heater installed through other methods are still affected by this AD.

Manufacturer	Aircraft Models and Series
<i>Bombardier</i>	<i>CL-215, CL-215T, and CLT-415.</i>
<i>Cessna</i>	<i>208, T303, 310F, 310G, 310H, 310I, 310J, 310K, 310L, 310N, 310P, 310Q, 320C, 320D, 320E, 320F, 337 Series, 340, 340A, 414, 414A, 421, 421A, 421B, and 421C.</i>
<i>Piper</i>	<i>PA-23 Series, PA-30, PA-31 Series, PA-34 Series, PA-39, and PA-44 Series.</i>
<i>Raytheon</i>	<i>95-B55 Series, 58, 58TC, 58P, 60, A60, and 76.</i>

Requirement:

1. Visually inspect or pressure test the fuel regulator shutoff valve for any signs of fuel leaks using procedures described in Kelly Aerospace Power Systems (KAPS) Service Bulletin (SB) No. A-107A dated 06 September 2002 or later FAA approved revisions.
2. If no fuel leaks or no signs of fuel stains are found during each inspection as per Requirement 1, make an aircraft log book entry with the date of inspection. Use the procedures described in KAPS SB No. A-107A or later FAA approved revisions.

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3. If any signs of fuel leaks or any signs of fuel stains are found during any inspection as per Requirement 1 of this AD, replace the valve with a new valve of appropriate part number (P/N) that has a manufacturer's date code of 02/02 or later.

For Piper PA-31-350 model aircraft, replace P/N A23D04-7.5 valve with P/N P23D04-7.5.

Use the procedures described in KAPS SB No. A-107A or later FAA approved revisions, Piper Vendor Service Publication VSP-150 dated 31 January 2003 or later FAA approved revisions and the applicable maintenance manuals.

4. Only install a fuel regulator shutoff valve with a manufacture date code of 02/02 or later.

Alternative Method of Compliance to this AD.

5. Disable the heater as follows, subject to the Minimum Equipment List (MEL) requirements or Permissible Unserviceabilities (PU) as per provisions of CAR 37 if applicable to the aircraft.
 - i. Cap the fuel supply line upstream of the fuel regulator and shutoff valve;
 - ii. Disconnect the electrical power and ensure that the connections are properly secured to reduce the possibility of electrical spark or structural damage;
 - iii. Inspect and test to ensure that the cabin heater system is disabled;
 - iv. Ensure that no other aircraft system is affected by this action;
 - v. Ensure there are no fuel leaks; and
 - vi. Fabricate a placard with the words: "System Inoperative". Install this placard at the heater control valve within the pilot's clear view.

Note 3: US FAA Airworthiness Directive 2004-25-16 R1 Amendment 39-14076 dated 06 May 2005 refers.

- Compliance:
1. Unless accomplished within the last 75 hours Aircraft Time In Service (TIS) before the effective date of AD/AIRCON/13 Amendment 2:-

Visually inspect or pressure test within the next 25 hours Aircraft TIS after the effective date of this AD. Repetitively inspect thereafter at intervals not to exceed 100 hours aircraft TIS or 12 months, whichever occurs first.

2. Before further flight after each inspection as per Requirement 1 of this AD.

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3. Before further flight after the inspection as per Requirement 1, where any fuel leak was found. Carryout and continue inspection and documentation per Requirements 1 and 2.
4. After the effective date of this AD.
5. If you choose this option, you must do it before the next required inspection specified in requirement 1 of this AD. To bring the heater back into service, you must do the actions specified in requirement 1 to 4 of this AD.

This Amendment becomes effective on 7 July 2005.

Background: The Amendment 2 of this AD required marking of valve cover after each satisfactory inspection (i.e. when no leak is found). Repetitive nature of the inspection rendered this requirement not feasible. Current Amendment deletes the valve marking requirement but retains the log book entry requirement.

There are continued reports of fuel leakage from fuel regulator shutoff valve used with Kelly Aerospace B-Series combustion heaters. Fuel leakage in aircraft could result in an aircraft fire and / or loss of aircraft. The actions specified in this Directive address the identified unsafe condition associated with fuel leakage and fire.

Amendment 2 also provided clarification of aspects relating to the disabling of the heater and became effective on 14 April 2005.

Amendment 1 of this AD became effective on 12 January 2005.

The original issue of this AD became effective on 1 November 2001.



James Coyne
Delegate of the Civil Aviation Safety Authority

27 May 2005