

Cessna 525 Series Aeroplanes

## 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 39.1 (1) of CAR 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.

### **AD/CESSNA 525/2      Direct Current Power Battery Switch      4/2001 DM**

**Applicability:** Model 525 (CitationJet 1) aeroplanes, serial numbers 525-0360 through 525-0400, that incorporate a direct current (DC) power battery switch, Eaton Part Number (P/N) A3-205-01/P.

**Requirement:**

1. Inspect the aeroplane to determine whether a DC power battery switch, Eaton P/N A3-205-01/P, with a manufacturer's date code of 9926 through 0039, is installed. If the affected DC power switch is not installed further action is not required.
2. If, as a result of the Requirement 1 inspection, one of the affected DC power battery switches is found to be installed, or the switch cannot be positively identified as not being one of the affected types, replace the switch in accordance with the Accomplishment Instructions section of Cessna Service Bulletin SB525-24-20, dated 16 November 2000, with a new switch of the same part number that has a manufacturer's date code of 0040 or later.
3. DC power battery switches, Eaton P/N A3-205-01/P with a manufacturer's date code of 9926 through 0039 may not be installed on any aeroplane as a replacement part.

*Note: FAA AD 2001-02-13 Amdt 39-12099 refers.*

**Compliance:** For Compliance 1 - During the next phase check or within 60 days after the effective date of this Directive, whichever occurs first.

For Compliance 2 - Before further flight after the inspection.

For Compliance 3 - As of the effective date of this Directive.

This Airworthiness Directive becomes effective on 28 February 2001.

**Background:** The Federal Aviation Administration received reports of a potential problem with 8-pole DC battery switches that were installed on Cessna Model 525 (CitationJet 1) aeroplanes. Eaton is the original equipment manufacturer of the affected switch (Eaton P/N A3-205-01/P).

Analysis of the problem shows that the switch could fail to make contact or may make intermittent contact. Certain manufacturing lots were assembled using components that were out-of-tolerance. The application of the switch from this lot, as used in the Cessna Model 525, could result in the pilot's inability to select "EMER" power or the inability to disconnect an overheated main ship's battery.

When a battery overheat indication occurs, the Aircraft Flight Manual instructs the pilot to disconnect the battery and, if the problem cannot be fixed, immediately land the aeroplane. The main ship's battery that remains powered in an overheated condition may become hot enough to damage adjacent components and structure and may interfere with continued flight and a safe landing.



Eugene Paul Holzapfel  
Delegate of the Civil Aviation Safety Authority

22 February 2001

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