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## AIRWORTHINESS DIRECTIVE

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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.

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### Boeing 737 Series Aeroplanes

**AD/B737/173**

**Power Distribution Panels**

**2/2002**

**Applicability:** Model 737-600, -700, and -800 series aeroplanes, equipped with power distribution panels (PDP) bearing any of the following Boeing part numbers, as listed in the "Existing Part Number" column of the table under paragraph 2.E., "Existing Parts Accountability," of Boeing Service Bulletin (SB) 737-24-1128, dated 29 April 1999.

S281A601-1000	S281A601-1074	S281A601-2003	S281A601-2199
S281A601-1001	S281A601-1108	S281A601-2007	S281A601-2216
S281A601-1002	S281A601-1110	S281A601-2032	S281A601-2217
S281A601-1003	S281A601-1111	S281A601-2038	S281A601-2220
S281A601-1018	S281A601-1120	S281A601-2039	S281A601-2222
S281A601-1020	S281A601-1122	S281A601-2055	S281A601-2226
S281A601-1045	S281A601-1128	S281A601-2057	S281A601-2228
S281A601-1054	S281A601-1162	S281A601-2109	S281A601-2234
S281A601-1055	S281A601-1216	S281A601-2110	S281A601-2275
S281A601-1056	S281A601-2001	S281A601-2111	S281A601-2434
S281A601-1057			

**Requirement:** 1. Unless previously accomplished, perform a one-time general visual inspection to verify proper installation of the power feeder terminals and associated hardware located in power distribution panels (PDP) P91 and P92, in accordance with the following procedures:

Using a flashlight, inspect each of the six power feeder terminals by looking into the access holes located in the plastic cover of the rigid bus assembly. The holes are located on the aft face of PDPs P91 and P92. (Refer to the Boeing 737-600, -700, -800, -900 Aeroplane Maintenance Manual (AMM), Section 24-21-71, Page 402, Figure 401 (Sheet 1), for the location of PDP P91 and P92.) On PDP P91, the holes are adjacent to terminal blocks TB5001 and TB5002. On PDP P92, the holes are adjacent to terminal blocks TB5005 and TB5006. There are a total of six holes per PDP. (Refer to the Boeing 737-600, -700, -800, -900 AMM, Section 24-21-71, Page 403, Figure 401 (Sheet 2), for the location of the access holes on the PDPs.) Note that although each PDP has nine power feeder terminals, only the six terminals adjacent to the access holes require inspection.

## Boeing 737 Series Aeroplanes

AD/B737/173 (continued)

Verify that the power feeder terminal is properly installed and held in place on the busbar by the No. 8 socket head cap screw, and verify that the cap screw is inserted into the hole in the terminal. For the proper power feeder terminal and screw buildup, refer to the Boeing 737-600, -700, -800, -900 AMM, Chapter 24-21-71, Page 405, Figure 401 (Sheet 4). The subject power feeder terminal is identified as item (7) and the cap screw as item (12).

This visual inspection does not require loosening or removing any fasteners. The inspection may require looking through the access hole at a slight angle to see the terminal clearly. The terminal can be identified by its shiny metal finish; the current transformer behind the terminal block is made of plastic with a flat black finish.

*Note 1: For the purposes of this Directive, a general visual inspection is defined as: "A visual examination of an interior or exterior area, installation, or assembly to detect obvious damage, failure, or irregularity. This level of inspection is made under normally available lighting conditions such as daylight, hangar lighting, flashlight, or drop-light, and may require removal or opening of access panels or doors. Stands, ladders, or platforms may be required to gain proximity to the area being checked."*

2. If the requirement 1 visual inspection reveals that the power feeder terminal and No. 8 socket head cap screw are not assembled as shown in Boeing 737-600, -700, -800, -900 AMM, Section 24-21-71, Page 405, Figure 401 (Sheet 4), replace the rigid bus assembly with a new assembly, in accordance with the procedures specified in Boeing 737-600, -700, -800, -900 AMM, Section 24-21-22
3. Perform a torque check of the attachment screws of the power feeder terminals in accordance with the procedures specified in Boeing Maintenance Tip 737 MT 24-003, dated 14 May 1998.
4. Replace the PDP rigid bus assemblies with new assemblies having the same part numbers as the removed assemblies, in accordance with the procedures specified in Boeing 737-600, -700, -800, -900 AMM, Chapter 24-21-22.

Replacement of existing PDP rigid bus assemblies with new, improved PDP rigid bus assemblies having part number 1032181-2 or 1032185-2, as applicable, according to Boeing Service Bulletin 737-24-1128, dated 29 April 1999, constitutes optional terminating action for the Requirements of this Directive.

*Note 3: FAA AD 2001-22-11 Amdt 39-12490 and AD 99-08-03 Amdt 39-11107 refer.*

Compliance: For Requirement 1 - Within 30 days after the effective date of this Directive.

For Requirement 2 - Prior to further flight, following the Requirement 1 inspection.

## Boeing 737 Series Aeroplanes

AD/B737/173 (continued)

For Requirement 3 - Initially concurrent with Requirement 1 and thereafter at intervals not to exceed 1,000 hours time in service (TIS), in accordance with the maintenance tip, until replacement of existing PDP rigid bus assemblies with new, improved PDP rigid bus assemblies having part number 1032181-2 or 1032185-2, as applicable, according to Boeing SB 737-24-1128 is accomplished.

For Requirement 4 - Within 1,000 hours TIS after accomplishment of the eighth Requirement 3 torque check and thereafter within 1,000 hours TIS after every subsequent eighth torque check, until replacement of existing PDP rigid bus assemblies with new, improved PDP rigid bus assemblies having part number 1032181-2 or 1032185-2, as applicable, according to Boeing SB 737-24-1128 is accomplished.

This Airworthiness Directive becomes effective on 21 February 2002.

**Background:** This Directive initially requires an inspection of the PDPs to verify proper installation of the power feeder terminals together with associated hardware and, if necessary, corrective actions. The Directive also requires repetitive torque checks of the terminal attachment screws and repetitive replacement of the PDP rigid bus assembly with a new assembly until optional terminating action is accomplished.

These actions are intended to prevent overheating, melting, and subsequent failure of the power feeder terminals, which could result in increased risk of fire and the loss of electrical power from the associated alternating current power source.



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Delegate of the Civil Aviation Safety Authority

14 January 2002