

PŘÍKAZ K ZACHOVÁNÍ LETOVÉ ZPŮSOBILOSTI

CAA-AD-4-080/98

Datum vydání: 10. listopadu 1998

LETADLO - ELEKTROINSTALACE PŘÍDAVNÉHO PALIVOVÉHO ČERPADLA - KONTROLA

Týká se: všech letadel vyrobených firmou Boeing typu 737-100, -200, -300, -400 a -500, certifikovaných v kterékoli kategorii.

Datum účinnosti: 31. prosince 1998

Provést v termínech: Jak je popsáno v FAA AD 98-19-09 (příloha tohoto PZZ).

Postup provedených prací: Dle FAA AD 98-19-09.

Poznámky: Provedení tohoto PZZ musí být zapsáno do letadlové knihy. Případné dotazy týkající se tohoto PZZ adresujte na ÚCL technický inspektorát - Ing. Tůma. Pokud to vyžaduje povaha tohoto PZZ musí být zapracován do příslušné části dokumentace pro obsluhu, údržbu a opravy letadla. Tento PZZ byl vypracován na základě FAA AD č. 98-19-09.

Ing. Pavel MATOUŠEK
Ředitel technického inspektorátu
Úřad pro civilní letectví

98-19-09 BOEING: Amendment 39-10751. Docket 98-NM-254-AD. Supersedes AD 98-11-52, Amendment 39-10611.

Applicability: All Model 737-100, -200, -300, -400, and -500 series airplanes; certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (m)(1) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To detect and correct chafing and electrical arcing between the fuel boost pump wiring and the surrounding conduit, which, if not corrected, could result in arc-through of the conduit, and consequent fire or explosion of the fuel tank, accomplish the following:

Inspections Required by AD 98-11-52:

- (a) For all airplanes that have accumulated 50,000 or more total flight hours as of June 29, 1998 (the effective date of AD 98-11-52, amendment 39-10611): Prior to further flight, remove the fuel boost pump wiring from the in-tank conduit for the aft boost pumps in main tanks numbers 1 and 2, and perform a detailed visual inspection to detect damage of the wiring, in accordance with the procedures specified in Boeing Alert Service Bulletin 737-28A1120, dated April 24, 1998, as revised by Notices of Status Change NSC 01, dated May 7, 1998, NSC 02, dated May 8, 1998, and NSC 03, dated May 9, 1998; or Revision 1, dated May 28, 1998.
- (b) For all airplanes that have accumulated less than 50,000 total flight hours as of receipt of telegraphic AD T98-11-51: Prior to the accumulation of 40,000 total flight hours, or within 14 days after June 29, 1998, whichever occurs later, remove the fuel boost pump wiring from the in-tank conduit for the aft boost pumps in main tanks numbers 1 and 2, and perform a detailed visual inspection to detect damage of the wiring, in accordance with the procedures specified in Boeing Alert Service Bulletin 737-28A1120, dated April 24, 1998, as revised by Notices of Status Change NSC 01, dated May 7, 1998, NSC 02, dated May 8, 1998, and NSC 03, dated May 9, 1998; or Revision 1, dated May

28, 1998.

(c) For all airplanes: Remove the fuel boost pump wiring from the in-tank conduit for the center tank left and right boost pumps, and perform a detailed visual inspection to detect damage of the wiring, in accordance with the procedures specified in Boeing Alert Service Bulletin 737-28A1120, dated April 24, 1998, as revised by Notices of Status Change NSC 01, dated May 7, 1998, NSC 02, dated May 8, 1998, and NSC 03, dated May 9, 1998; or Revision 1, dated May 28, 1998. Accomplish the inspection at the earliest of the times specified in paragraphs (c)(1), (c)(2), and (c)(3).

(1) For Model 737-300, -400, and -500 series airplanes: Inspect prior to the accumulation of 40,000 total flight hours, or within 14 days after June 29, 1998, whichever occurs later.

(2) For Model 737-100 and -200 series airplanes: Inspect prior to the accumulation of 40,000 total flight hours, or within 10 days after June 29, 1998, whichever occurs later.

(3) For all airplanes: Inspect prior to the accumulation of 50,000 total flight hours, or within 5 days after June 29, 1998, whichever occurs later.

(d) For all airplanes: Prior to the accumulation of 30,000 total flight hours or within 45 days after June 29, 1998, whichever occurs later, remove the fuel boost pump wiring from the in-tank conduit for the aft boost pumps in main tanks numbers 1 and 2, and the center tank left and right boost pumps, and perform a detailed visual inspection to detect damage of the wiring, in accordance with the procedures specified in Boeing Alert Service Bulletin 737-28A1120, dated April 24, 1998, as revised by Notices of Status Change NSC 01, dated May 7, 1998, NSC 02, dated May 8, 1998, and NSC 03, dated May 9, 1998; or Revision 1, dated May 28, 1998.

New Inspection Requirement:

(e) For airplanes that have accumulated 20,000 or more total flight hours and less than 30,000 total flight hours as of the effective date of this AD: Within 60 days after the effective date of this AD, remove the fuel boost pump wiring from the in-tank conduit for the aft boost pumps in main tanks numbers 1 and 2, and the center tank left and right boost pumps, and perform a detailed visual inspection to detect damage of the wiring; in accordance with the procedures specified in Boeing Alert Service Bulletin 737-28A1120, dated April 24, 1998, as revised by Notices of Status Change NSC 01, dated May 7, 1998, NSC 02, dated May 8, 1998, and NSC 03, dated May 9, 1998; or Revision 1, dated May 28, 1998.

Corrective Actions:

(f) If red, yellow, blue, or green wire insulation cannot be seen through the outer jacket of the electrical cable during any inspection required by this AD: Prior to further flight, accomplish paragraph (f)(1), (f)(2), or (f)(3) of this AD in accordance with procedures specified in Boeing Alert Service Bulletin 737-28A1120, dated April 24, 1998, as revised by Notices of Status Change NSC 01, dated May 7, 1998, NSC 02, dated May 8, 1998, and NSC 03, dated May 9, 1998; or Revision 1, dated May 28, 1998.

(1) Install Teflon sleeving over the electrical cable, and reinstall the cable. Or

(2) Reinstall the electrical cable without Teflon sleeving over the cable. Within 500 flight hours after accomplishment of the reinstallation, repeat the inspection described in paragraph (d) of this AD; and install Teflon sleeving over the cable. Or

(3) Replace the electrical cable with new cable without Teflon sleeving. Within 18 months or 6,000 flight hours, whichever occurs first, repeat the inspection specified in paragraph (d) of this AD, and install Teflon sleeving over the cable.

(g) If red, yellow, blue, or green wire insulation can be seen through the outer jacket of the electrical cable during any inspection required by this AD, but no evidence of electrical arcing is found: Prior to further flight, accomplish either paragraph (g)(1) or (g)(2) of this AD in accordance with the procedures specified in Boeing Alert Service Bulletin 737-28A1120, dated April 24, 1998, as revised by Notices of Status Change NSC 01, dated May 7, 1998, NSC 02, dated May 8, 1998, and NSC 03, dated May 9, 1998; or Revision 1, dated May 28, 1998.

(1) Replace the damaged electrical cable with a new cable, install Teflon sleeving over the cable, and reinstall the cable. Or

(2) Replace the electrical cable with a new cable without Teflon sleeving. Within 18 months or 6,000 flight hours, whichever occurs first, repeat the inspection described in paragraph (d) of this AD; and install Teflon sleeving over the cable.

(h) If any evidence of electrical arcing but no evidence of fuel leakage is found on the removed electrical cable during any inspection required by this AD: Prior to further flight, accomplish paragraphs (h)(1) and (h)(2) of this AD in accordance with the procedures specified in Boeing Alert Service Bulletin 737-28A1120, dated April 24, 1998, as revised by Notices of Status Change NSC 01, dated May 7, 1998, NSC 02, dated May 8, 1998, and NSC 03, dated May 9, 1998; or Revision 1, dated May 28, 1998.

(1) Verify the integrity of the conduit in accordance with the instructions contained in NSC 03 or Revision 1 of the alert service bulletin. And

(2) Accomplish either paragraph (h)(2)(i) or (h)(2)(ii) of this AD in accordance with the alert service bulletin.

(i) Replace the damaged electrical cable with a new cable, install Teflon sleeving over the cable, and reinstall the cable. Or

(ii) Replace the electrical cable with a new cable without Teflon sleeving. Within 18 months or 6,000 flight hours, whichever occurs first, repeat the inspection described in

paragraph (d) of this AD; and install Teflon sleeving over the cable.

(i) If any evidence of fuel is found on the removed electrical cable during any inspection required by this AD: Prior to further flight, accomplish paragraphs (i)(1) and (i)(2) of this AD in accordance with the procedures specified in Boeing Alert Service Bulletin 737-28A1120, dated April 24, 1998, as revised by Notices of Status Change NSC 01, dated May 7, 1998, NSC 02, dated May 8, 1998, and NSC 03, dated May 9, 1998; or Revision 1, dated May 28, 1998.

(1) Replace the conduit section where electrical arcing was found. And

(2) Accomplish either paragraph (i)(2)(i) or (i)(2)(ii) of this AD.

(i) Replace the damaged electrical cable with a new cable, install Teflon sleeving over the cable, and reinstall the cable. Or

(ii) Replace the electrical cable with a new cable without Teflon sleeving. Within 18 months or 6,000 flight hours, whichever occurs first, repeat the inspection described in paragraph (d) of this AD; and install Teflon sleeving over the cable.

(j) For Groups 1 and 2 airplanes, as identified in Boeing Alert Service Bulletin 737-28A1120, dated April 24, 1998: Concurrent with the first accomplishment of corrective action in accordance with paragraph (f), (g), (h), or (i) of this AD, as applicable, replace the case ground wire with a new wire in accordance with Boeing Alert Service Bulletin 737-28A1120, dated April 24, 1998; as revised by Notices of Status Change NSC 01, dated May 7, 1998, NSC 02, dated May 8, 1998, and NSC 03, dated May 9, 1998; or Revision 1, dated May 28, 1998.

(k) Installation of Teflon sleeving over any electrical cable that is new or has been inspected in accordance with paragraph (a), (b), (c), (d), or (e) of this AD, constitutes terminating action for the requirements of this AD.

(l) If any damage specified in paragraph (g), (h), or (i) of this AD is found during any inspection required by this AD, within 10 days after accomplishing the inspection required by paragraph (a), (b), (c), (d), or (e) of this AD, as applicable, accomplish paragraphs (l)(1) and (l)(2) of this AD. Information collection requirements contained in this regulation have been approved by the Office of Management and Budget (OMB) under the provisions of the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq.) and have been assigned OMB Control Number 2120-0056.

(1) Submit any damaged electrical cables and conduits to Boeing, in accordance with Boeing Alert Service Bulletin 737-28A1120, dated April 24, 1998, as revised by Notices of Status Change NSC 01, dated May 7, 1998, NSC 02, dated May 8, 1998, and NSC 03, dated May 9, 1998; or Revision 1, dated May 28, 1998; include the serial number of the airplane, the number of total flight hours and flight cycles accumulated on the airplane, and the location of the electrical cable on the airplane.

(2) For airplanes that are inspected after June 29, 1998, submit the serial number of the airplane, the number of total flight hours and flight cycles accumulated on the airplane, and the location of the electrical cable on the airplane to the Manager, Seattle Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; fax (425) 227-1181.

(m) (1) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Seattle ACO. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Seattle ACO.

(m) (2) Alternative methods of compliance, approved previously in accordance with AD 98-11-52 are approved as alternative methods of compliance with this AD.

NOTE 2: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Seattle ACO.

(n) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

(o) Except as provided in paragraph (k)(2) of this AD, the actions shall be done in accordance with Boeing Alert Service Bulletin 737-28A1120, dated April 24, 1998, as revised by Notice of Status Change NSC 01, dated May 7, 1998, Notice of Status Change NSC 02, dated May 8, 1998, and Notice of Status Change NSC 03, dated May 9, 1998; or Boeing Alert Service Bulletin 737-28A1120, Revision 1, dated May 28, 1998.

(1) The incorporation by reference of Boeing Alert Service Bulletin 737-28A1120, Revision 1, dated May 28, 1998, as listed in the regulations, is approved by the Director of the Federal Register as of October 15, 1998.

(2) The incorporation by reference of Boeing Alert Service Bulletin 737-28A1120, dated April 24, 1998, as revised by Notice of Status Change NSC 01, dated May 7, 1998, Notice of Status Change NSC 02, dated May 8, 1998, and Notice of Status Change NSC 03, dated May 9, 1998, was approved previously by the Director of the Federal Register as of June 29, 1998 (63 FR 34271, June 24, 1998).

(3) Copies may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124-2207. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(p) This amendment becomes effective on October 15, 1998.

FOR FURTHER INFORMATION CONTACT:

Dorr Anderson, Aerospace Engineer, Propulsion Branch, ANM-140S, FAA, Transport Airplane Directorate, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2684; fax (425) 227-1181.