

PŘÍKAZ K ZACHOVÁNÍ LETOVÉ ZPŮSOBILOSTI

CAA-AD-106/1999

Nahrazuje CAA-AD-4-080/98

Datum vydání: .26. října 1999

LETADLO - ELEKTROINSTALACE PŘÍDAVNÉHO PALIVOVÉHO ČERPADLA - KONTROLA/VÝMĚNA

Týká se: letadel Boeing 737-100, -200, -300, -400 a -500 certifikovaných v kterékoliv kategorii.

Datum účinnosti: 12. listopadu 1999

Provést v termínech: Jak je popsáno v FAA AD 99-21-15 (příloha tohoto PZZ).

Postup provedení prací: Dle FAA AD 99-21-15.

Poznámky: Provedení tohoto PZZ musí být zapsáno do motorové knihy. Případné dotazy týkající se tohoto PZZ adresujte na ÚCL technický inspektorát - Ing. Toman. 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 99-21-15, který nahrazuje FAA AD 98-19-09.

Ing. Pavel MATOUŠEK
Ředitel technického inspektorátu
Úřad pro civilní letectví

99-21-15 BOEING: Amendment 39-11360. Docket 98-NM-318-AD. Supersedes AD 98-19-09, Amendment 39-10751. Issued September 29, 1999.

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 prevent electrical arcing between the fuel boost pump wiring and the surrounding conduit, which 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; Boeing Alert Service Bulletin 737-28A1120, Revision 1, dated May 28, 1998; or Boeing Service Bulletin 737-28A1120, Revision 2, dated November 26, 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; Revision 1, dated May 28, 1998; or Revision 2, dated November 26, 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; Revision 1, dated May 28, 1998; or Revision 2, dated November 26, 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; Revision 1, dated May 28, 1998; or Revision 2, dated November 26, 1998.

Inspections Required By AD 98-19-09

(e) For airplanes that have accumulated 20,000 or more total flight hours and less than 30,000 total flight hours as of October 15, 1998 (the effective date of AD 98-19-09, amendment 39-10751): Within 60 days after October 15, 1998, 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; Revision 1, dated May 28, 1998; or Revision 2, dated November 26, 1998.

New Inspection Requirements

(f) 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; at the time specified in paragraphs (f)(1) and (f)(2) of this AD, as applicable. Perform these actions 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; Boeing Alert Service Bulletin 737-28A1120, Revision 1, dated May 28, 1998; or Boeing Service Bulletin 737-28A1120, Revision 2, dated November 26, 1998.

(1) For airplanes having line numbers 1 through 3072 inclusive that have accumulated less than 20,000 total flight hours as of October 15, 1998: Inspect at the earlier of the

times specified in paragraph (f)(1)(i) and (f)(1)(ii) of this AD.

(i) Prior to the accumulation of 20,000 total flight hours, or within 60 days after the effective date of this AD, whichever occurs later.

(ii) Within 24 months after the effective date of this AD.

(2) For airplanes having line numbers 3073 and subsequent: Inspect prior to the accumulation of 30,000 total flight hours.

(g) For all airplanes: Repeat the inspection required by paragraph (d), (e), or (f) of this AD, as applicable, at intervals not to exceed 30,000 flight hours after initial accomplishment of the applicable inspection.

Corrective Actions

(h) 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 (h)(1), (h)(2), or (h)(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; Revision 1, dated May 28, 1998; or Revision 2, dated November 26, 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), (e), or (f) of this AD, as applicable, 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), (e), or (f) of this AD, as applicable, and install Teflon sleeving over the cable.

(i) 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 (i)(1) or (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; Boeing Alert Service Bulletin 737-28A1120, Revision 1, dated May 28, 1998; or Boeing Service Bulletin 737-28A1120, Revision 2, dated November 26, 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), (e), or (f) of this AD, as applicable, and install Teflon sleeving over the cable.

(j) 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 (j)(1) and (j)(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; Boeing Alert Service Bulletin 737-28A1120, Revision 1, dated May 28, 1998; or Boeing Service Bulletin 737-28A1120, Revision 2, dated November 26, 1998.

(1) Verify the integrity of the conduit in accordance with the instructions contained in NSC 03, Revision 1, or Revision 2 of the alert service bulletin. And

(2) Accomplish either paragraph (j)(2)(i) or (j)(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), (e), or (f) of this AD, as applicable, and install Teflon sleeving over the cable.

(k) 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 (k)(1) and (k)(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; Boeing Alert Service Bulletin 737-28A1120, Revision 1, dated May 28, 1998; or Boeing Service Bulletin 737-28A1120, Revision 2, dated November 26, 1998.

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

(2) Accomplish either paragraph (k)(2)(i) or (k)(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), (e), or (f) of this AD, as applicable, and install Teflon sleeving over the cable.

(l) 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 (h), (i), (j), or (k) of this AD, as applicable, replace the case ground wire with a new wire or remove the case ground 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; Boeing Alert Service Bulletin 737-28A1120, Revision 1, dated May 28, 1998; or Boeing Service Bulletin 737-28A1120, Revision 2, dated November 26, 1998.

Alternative Methods of Compliance

(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 Aircraft Certification Office, FAA, Transport Airplane Directorate. 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.

(2) Alternative methods of compliance, approved previously in accordance with AD 98-11-52 and AD 98-19-09, 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.

Special Flight Permits

(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.

Incorporation by Reference

(o) 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; Boeing Alert Service Bulletin 737-28A1120, Revision 1, dated May 28, 1998; or Boeing Service Bulletin 737-28A1120, Revision 2, dated November 26, 1998.

(1) The incorporation by reference of Boeing Service Bulletin 737-28A1120, Revision 2, dated November 26, 1998, as listed in the regulations, is approved by the Director of the Federal Register as of November 12, 1999.

(2) The incorporation by reference of Boeing Alert Service Bulletin 737-28A1120, Revision 1, dated May 28, 1998, was approved previously by the Director of the Federal Register as of October 15, 1998 (63 FR 52152, September 30, 1998).

(3) 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).

(4) 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 November 12, 1999.

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.