

Initial Inspection: Procedures

(b) Remove the fueling float switch and wiring from the center fuel tank and perform a detailed inspection of the float switch wiring to detect discrepancies (*i.e.*, evidence of electrical arcing, exposure of the copper conductor, presence or scent of fuel on the electrical wires, or worn insulation), in accordance with Part 1 of the Accomplishment Instructions of Boeing Alert Service Bulletin 737–28A1132, dated December 2, 1998; Revision 1, dated January 15, 1999; or Revision 2, dated June 17, 1999. After the effective date of this AD, only Revision 2 may be used. Pay particular attention to the wire bundle where it passes through the wing pylon vapor seals and under the wire bundle clamps.

Note 2: For the purposes of this AD, a detailed inspection is defined as: “An intensive visual examination of a specific structural area, system, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at intensity deemed appropriate by the inspector. Inspection aids such as mirror, magnifying lenses, etc., may be used. Surface cleaning and elaborate access procedures may be required.”

Initial Inspection: Follow-On Actions

(1) If no discrepancy is detected, prior to further flight, accomplish either paragraph (b)(1)(i) or (b)(1)(ii) of this AD.

(i) Measure the resistance between the wires and the float switch housing, in accordance with Boeing Alert Service Bulletin 737–28A1132, dated December 2, 1998; Revision 1, dated January 15, 1999; or Revision 2, dated June 17, 1999.

(A) If the resistance is less than 200 megohms, prior to further flight, replace the float switch and wiring with a new float switch and wiring, and install double Teflon sleeving over the wiring of the float switch, in accordance with Boeing Alert Service Bulletin 737–28A1132, dated December 2, 1998; Revision 1, dated January 15, 1999; or Revision 2, dated June 17, 1999; or replace the float switch and wiring with a new, improved float switch and wiring in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 737–28A1141, Revision 1, dated December 19, 2002. After the effective date of this AD, only a new, improved float switch and wiring may be installed. If a replacement float switch and wiring are not available, prior to further flight, accomplish the requirements specified in paragraphs (c) and (d) of this AD.

(B) If the resistance is greater than or equal to 200 megohms, prior to further flight, blow dirt out of the conduit, install double Teflon sleeving over the wiring of the float switch, and reinstall the existing float switch, in accordance with Boeing Alert Service Bulletin 737–28A1132, dated December 2, 1998; Revision 1, dated January 15, 1999; or Revision 2, dated June 17, 1999.

(ii) Replace the float switch and wiring with a new float switch and wiring, and install double Teflon sleeving over the wiring of the float switch, in accordance with Boeing Alert Service Bulletin 737–28A1132, dated December 2, 1998; Revision 1, dated

January 15, 1999; or Revision 2, dated June 17, 1999; or replace the float switch and wiring with a new, improved float switch and wiring in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 737–28A1141, Revision 1, dated December 19, 2002. After the effective date of this AD, only a new, improved float switch and wiring may be installed. If a replacement float switch and wiring are not available, prior to further flight, accomplish the requirements specified in paragraphs (c) and (d) of this AD.

(2) If any worn insulation is detected, and if no copper conductor is exposed, and if no evidence of arcing is detected; accomplish the requirements specified in either paragraph (b)(1)(i) or (b)(1)(ii) of this AD.

(3) If any electrical arcing or exposed copper conductor is detected, prior to further flight, accomplish either paragraph (b)(3)(i) or (b)(3)(ii) of this AD.

(i) Replace any section of the electrical conduit where the arcing occurred with a new section, in accordance with Boeing Alert Service Bulletin 737–28A1132, dated December 2, 1998; Revision 1, dated January 15, 1999; or Revision 2, dated June 17, 1999; and accomplish the requirements specified in paragraph (b)(1)(ii) of this AD.

(ii) Perform a detailed inspection to detect fuel leaks of the electrical conduit, in accordance with Boeing Alert Service Bulletin 737–28A1132, dated December 2, 1998; Revision 1, dated January 15, 1999; or Revision 2, dated June 17, 1999.

(A) If no fuel leak is detected, prior to further flight, accomplish the requirements specified in paragraph (b)(1)(ii) of this AD. Repeat the inspection required by paragraph (b)(3)(ii) of this AD thereafter at intervals not to exceed 1,500 flight hours, until the replacement required by paragraph (b)(3)(ii)(B) of this AD is accomplished.

(B) If any fuel leak is detected, prior to further flight, replace, with new conduit, any section of the electrical conduit where a leak is found, in accordance with Boeing Alert Service Bulletin 737–28A1132, dated December 2, 1998; Revision 1, dated January 15, 1999; or Revision 2, dated June 17, 1999. Prior to further flight after accomplishment of the replacement, accomplish the requirements specified in paragraph (b)(1)(ii) of this AD. Accomplishment of electrical conduit replacement constitutes terminating action for the repetitive inspection requirements of paragraph (b)(3)(ii)(A) of this AD.

(4) If any presence or scent of fuel on the electrical wires is detected, prior to further flight, locate the source of the leak and replace the damaged conduit with a new conduit, in accordance with the alert service bulletin; and accomplish the requirements specified in either paragraph (b)(1)(i) or (b)(1)(ii) of this AD, unless accomplished previously in accordance with paragraph (b)(1), (b)(2), or (b)(3) of this AD.

Deactivation of Float Switch

(c) Accomplish the requirements specified in either paragraph (c)(1) or (c)(2) of this AD, in accordance with Part 2 of the Accomplishment Instructions of Boeing Alert Service Bulletin 737–28A1132, dated

December 2, 1998; Revision 1, dated January 15, 1999; or Revision 2, dated June 17, 1999.

(1) Deactivate the center tank float switch (*i.e.*, cut the two wires for the float switch at the splices on the front spar and cap and stow the four wire ends), paint a “Caution” sign that shows a conservative maximum fuel capacity for the center tank on the underside of the right-hand wing near the fueling station door, and install an INOP placard on the fueling panel.

(2) Deactivate the center tank float switch (*i.e.*, cut, stow, and splice the two wires for the float switch at the splices on the front spar), and paint a “Caution” sign that shows a conservative maximum fuel capacity for the center tank on the underside of the right-hand wing near the fueling station door.

Deactivation of Float Switch: Additional Requirements

(d) For airplanes on which the requirements specified in paragraph (c) of this AD have been accomplished:

Accomplish the requirements specified in paragraphs (d)(1), (d)(2), and (d)(3) of this AD.

(1) Operators must ensure that airplane fueling crews are properly trained in accordance with the procedures specified in Boeing Telex M–7200–98–04486, dated December 1, 1998, or procedures approved by the FAA. This one-time training must be accomplished prior to utilizing the procedures specified in paragraph (d)(3) of this AD.

(2) Prior to fueling the airplane, perform a check to verify that the fueling panel center tank quantity indicator is operative. Repeat this check thereafter prior to fueling the airplane. If the fueling panel center tank quantity indicator is not operative, prior to further flight, replace the fueling panel center tank quantity indicator with a serviceable part.

(3) One of the two manual fueling procedures for the center fuel tank must be used for each fueling occurrence, in accordance with Boeing Telex M–7200–98–04486, dated December 1, 1998, or a method approved by the FAA.

Note 3: For the purposes of this AD, the term “the FAA,” is defined in paragraph (d) of this AD as “the cognizant Principal Maintenance Inspector (PMI).”

Note 4: Where there are differences between Boeing Alert Service Bulletin 737–28A1132 and this AD, the AD prevails.

Deactivation of Float Switch: Dispatch

(e) Dispatch with the center fuel tank float switch deactivated, in accordance with Boeing Alert Service Bulletin 737–28A1132, dated December 2, 1998; Revision 1, dated January 15, 1999; or Revision 2, dated June 17, 1999; is allowed until replacement float switches and wiring are available for installation or until the compliance time for the replacement required by paragraph (h) of this AD. Where there are differences between the Master Minimum Equipment List (MMEL) and the AD, the AD prevails.