



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2011-1231; Directorate Identifier 2011-NM-088-AD]**

**RIN 2120-AA64**

**Airworthiness Directives; The Boeing Company Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** We propose to adopt a new airworthiness directive (AD) for certain The Boeing Company Model 737-600, -700, -700C, -800, -900, and -900ER series airplanes. This proposed AD would require inspecting to detect damage to the upper fire seals on the forward edge of the thrust reverser, where the fire seal contacts the 12-o'clock engine strut, and for correct stiffness and vent holes, and doing corrective actions if necessary; and installing a bracket for the fire seal. This proposed AD was prompted by reports of damaged fire seals on the forward edge of the thrust reverser. We are proposing this AD to detect and correct damage to the fire seals, which could result in damage to the strut structure and the thrust reverser firewall. Such damage could significantly deteriorate the protection capacity of the fire extinguishing system and result in an uncontrolled fire.

**DATES:** We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.

- Fax: 202-493-2251.

- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

- Hand Delivery: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P. O. Box 3707, MC 2H-65, Seattle, Washington 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; e-mail [me.boecom@boeing.com](mailto:me.boecom@boeing.com); Internet <https://www.myboeingfleet.com>. You may review copies of the referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221.

### **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (telephone 800-647-5527) is in the ADDRESSES section.

Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Chris R. Parker, Aerospace Engineer, Propulsion Branch, ANM-140S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue SW., Renton, Washington 98057-3356; phone: 425-917-6496; fax: 425-917-6590; email: [chris.r.parker@faa.gov](mailto:chris.r.parker@faa.gov).

## **SUPPLEMENTARY INFORMATION:**

### **Comments Invited**

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2011-1231; Directorate Identifier 2011-NM-088-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD because of those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

### **Discussion**

We have received reports of damaged fire seals on the forward edge of the thrust reverser, where the fire seal contacts the 12-o’clock engine strut. The damage has been reported as light wear marks, tears, and holes in the bulb-part of the fire seal. The damage to the seal is attributed to insufficient seal stiffness and/or missing vent holes. If a damaged seal remained in service for an extended time, damage also could result to the 12-o’clock strut structure and the thrust reverser firewall. Such damage could significantly deteriorate the protection capacity of the fire extinguishing system and result in an uncontrolled fire.

### **Relevant Service Information**

We have reviewed Boeing Special Attention Service Bulletin 737-78-1086, dated October 6, 2010. This service information describes procedures for a general visual inspection on the upper fire seals on the forward edge of the thrust reversers, where the

fire seals contact the 12-o'clock engine strut, for damage and correct stiffness, and for sufficient vent holes behind the upper fire seals; and corrective actions if necessary. Corrective actions include replacing any damaged fire seal, drilling vent holes in the upper fire seal if needed. The service information also specifies installing a new bracket behind the fire seal retainer to further stiffen the seal.

**FAA’s Determination**

We are proposing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

**Proposed AD Requirements**

This proposed AD would require accomplishing the actions specified in the service information described.

**Costs of Compliance**

We estimate that this proposed AD will affect 968 airplanes of U.S. registry.

We estimate the following costs to comply with this proposed AD:

**Estimated costs**

<b>Action</b>	<b>Labor cost</b>	<b>Parts cost</b>	<b>Cost per product</b>	<b>Cost on U.S. operators</b>
General visual inspection and bracket installation	18 work-hours X \$85 per hour = \$1,530	\$756	\$2,286	\$2,212,848

We estimate the following costs to do necessary repairs and replacements that would be required based on the results of the proposed inspection. We have no way of determining the number of aircraft that might need these repairs.

### On-condition costs

Action	Labor cost	Parts cost	Cost per product
Drill vent holes (up to 8)	1 work-hour X \$85 per hour = \$85	\$0	\$85
Replace fire seal (up to 4)	8 work-hours X \$85 per hour = \$680	\$8,010	\$8,690

#### Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA’s authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. “Subtitle VII: Aviation Programs,” describes in more detail the scope of the Agency’s authority.

We are issuing this rulemaking under the authority described in “Subtitle VII, Part A, Subpart III, Section 44701: General requirements.” Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

#### Regulatory Findings

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

(1) Is not a “significant regulatory action” under Executive Order 12866,

(2) Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),

(3) Will not affect intrastate aviation in Alaska, and

(4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

**List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

**The Proposed Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

**PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

**§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

**The Boeing Company:** Docket No. FAA-2011-1231; Directorate Identifier 2011-NM-088-AD.

**Comments Due Date**

(a) We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**Affected ADs**

(b) None.

**Applicability**

(c) This AD applies to The Boeing Company Model 737-600, -700, -700C, -800, -900, and -900ER series airplanes with line numbers 1 through 3029 inclusive; certificated in any category.

**Subject**

(d) Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 78: Engine exhaust.

**Unsafe Condition**

(e) This AD was prompted by reports of damaged upper fire seals on the forward edge of the thrust reversers. We are issuing this AD to detect and correct damage to the fire seals, which could result in damage to the strut structure and the thrust reverser firewall. Such damage could significantly deteriorate the protection capacity of the fire extinguishing system and result in an uncontrolled fire.

**Compliance**

(f) Comply with this AD within the compliance times specified, unless already done.

**Inspections and Corrective Actions**

(g) Within 36 months after the effective date of this AD: Do a general visual inspection of the left and right thrust reverser halves of each engine for damage to the upper fire seal, for stiffness of the upper fire seal, and for missing vent holes as applicable, in accordance with paragraph 3.B. of the Accomplishment Instructions of Boeing Special Attention Service Bulletin 737-78-1086, dated October 6, 2010.

(1) If, during the inspection required by paragraph (g) of this AD, no upper fire seal damage is found, and the fire seal has the correct stiffness: Before further flight, drill vent holes if they are missing, and install a new bracket behind the upper fire seal

retainer, in accordance with paragraph 3.B. of the Accomplishment Instructions of Boeing Special Attention Service Bulletin 737-78-1086, dated October 6, 2010.

(2) If, during the inspection required by paragraph (g) of this AD, upper fire seal damage or insufficient fire seal stiffness is found: Before further flight, install a new upper fire seal, drill vent holes if they are missing, and install a new bracket behind the upper fire seal retainer, in accordance with paragraph 3.B. of the Accomplishment Instructions of Boeing Special Attention Service Bulletin 737-78-1086, dated October 6, 2010.

**Alternative Methods of Compliance (AMOCs)**

(h)(1) The Manager, Seattle Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in the Related Information section of this AD. Information may be e-mailed to:

[9-ANM-Seattle-ACO-AMOC-Requests@faa.gov](mailto:9-ANM-Seattle-ACO-AMOC-Requests@faa.gov).

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

**Related Information**

(i) For more information about this AD, contact Chris R. Parker, Aerospace Engineer, Propulsion Branch, ANM-140S, FAA, Seattle ACO, 1601 Lind Avenue SW., Renton, Washington 98057-3356; phone: 425-917-6496; fax: 425-917-6590; email: [chris.r.parker@faa.gov](mailto:chris.r.parker@faa.gov).

Issued in Renton, Washington, on November 8, 2011.

Kalene C. Yanamura,  
Acting Manager,  
Transport Airplane Directorate,  
Aircraft Certification Service.

[FR Doc. 2011-29800 Filed 11/17/2011 at 8:45 am; Publication Date: 11/18/2011]