



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2019-0983; Product Identifier 2019-NM-171-AD; Amendment 39-21010; AD 2019-25-12]**

**RIN 2120-AA64**

**Airworthiness Directives; The Boeing Company Airplanes**

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

**ACTION:** Final rule; request for comments.

**SUMMARY:** The FAA is superseding Airworthiness Directive (AD) 2016-18-02, which applied to certain The Boeing Company Model 777-200 and -300ER series airplanes.

AD 2016-18-02 required replacing the low-pressure oxygen flex hoses with new non-conductive low-pressure oxygen flex hoses in the gaseous passenger oxygen system in airplanes equipped with therapeutic oxygen. This AD retains those actions and adds actions for certain airplanes. AD 2016-18-02 was prompted by the determination that the low-pressure oxygen flex hoses in the gaseous passenger oxygen system can potentially be conductive. This AD was further prompted by the determination that the associated service information is inadequate for certain airplanes. The FAA is issuing this AD to address the unsafe condition on these products.

**DATES:** This AD is effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain other publication listed in this AD as of September 15, 2016 (81 FR 59834, August 31, 2016).

The FAA must receive any comments on this AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <https://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: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this final rule, contact Boeing Commercial Airplanes, Attention: Contractual & Data Services (C&DS), 2600 Westminister Blvd., MC 110-SK57, Seal Beach, CA 90740-5600; telephone 562-797-1717; Internet <https://www.myboeingfleet.com>. You may view this service information at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on

the availability of this material at the FAA, call 206-231-3195. It is also available on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2019-0983.

### **Examining the AD Docket**

You may examine the AD docket on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2019-0983; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, the regulatory evaluation, any comments received, and other information. The street address for Docket Operations is listed above. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Susan L. Monroe, Aerospace Engineer, Cabin Safety and Environmental Systems Section, FAA, Seattle ACO Branch, 2200 South 216th St., Des Moines, WA 98198; phone and fax: 206-231-3570; email: [susan.l.monroe@faa.gov](mailto:susan.l.monroe@faa.gov).

### **SUPPLEMENTARY INFORMATION:**

#### **Discussion**

The FAA issued AD 2016-18-02, Amendment 39-18632 (81 FR 59834, August 31, 2016) (“AD 2016-18-02”), for certain The Boeing Company Model 777-200 and -300ER series airplanes. AD 2016-18-02 required replacing the low-pressure oxygen flex hoses with new non-conductive low-pressure oxygen flex hoses in the gaseous passenger oxygen system in airplanes equipped with therapeutic oxygen. AD 2016-18-02 resulted from a determination that the low-pressure oxygen flex hoses in the gaseous passenger oxygen system can potentially be conductive. The FAA issued AD 2016-18-02

to address the potential for electrical current to pass through the low-pressure oxygen flex hoses in the gaseous passenger oxygen system, which can cause the flex hoses to melt or burn and result in an oxygen-fed fire in the passenger cabin.

#### **Actions Since AD 2016-18-02 Was Issued**

Since AD 2016-18-02 was issued, the FAA has been advised that the required service information omitted certain instructions for Group 4 airplanes.

#### **Related Service Information under 1 CFR Part 51**

The FAA reviewed Boeing Special Attention Service Bulletin 777-35-0041, Revision 1, dated August 14, 2019. This service information describes procedures for replacing the low-pressure oxygen flex hoses with new non-conductive low-pressure oxygen flex hoses in the gaseous passenger oxygen system in airplanes equipped with therapeutic oxygen. This service information adds instructions (i.e., Figures 6 and 10) that had previously been omitted for certain airplanes (i.e., Group 4).

This AD requires Boeing Special Attention Service Bulletin 777-35-0041, dated April 8, 2016, which the Director of the Federal Register approved for incorporation by reference as of September 15, 2016 (81 FR 59834, August 31, 2016).

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

#### **FAA's Determination**

The FAA is issuing this AD because the agency 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.

## **AD Requirements**

Although this AD does not explicitly restate the requirements of AD 2016-18-02, this AD retains the requirements of AD 2016-18-02. Those requirements are referenced in the service information identified previously, which, in turn, is referenced in paragraph (g) of this AD. For certain airplanes, this AD adds actions that were omitted from the previous service information. This AD requires accomplishment of the actions identified as “RC” (required for compliance) in the Accomplishment Instructions of Boeing Special Attention Service Bulletin 777-35-0041, Revision 1, dated August 14, 2019, described previously. For information on the procedures and compliance times, see this service information at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2019-0983.

## **FAA’s Justification and Determination of the Effective Date**

There are currently no domestic operators of these products. Therefore, the FAA finds that notice and opportunity for prior public comment are unnecessary and that good cause exists for making this amendment effective in less than 30 days.

## **Comments Invited**

This AD is a final rule that involves requirements affecting flight safety and was not preceded by notice and an opportunity for public comment. However, the FAA invites you to send any written data, views, or arguments about this final rule. Send your comments to an address listed under the ADDRESSES section. Include the docket number FAA-2019-0983 and Product Identifier 2019-NM-171-AD at the beginning of your comments. The FAA specifically invites comments on the overall regulatory, economic, environmental, and energy aspects of this final rule. The FAA will consider all

comments received by the closing date and may amend this final rule because of those comments.

The FAA will post all comments received, without change, to <https://www.regulations.gov>, including any personal information you provide. The FAA will also post a report summarizing each substantive verbal contact received about this final rule.

### **Costs of Compliance**

Currently, there are no affected U.S.-registered airplanes. If an affected airplane is imported and placed on the U.S. Register in the future, the following are the cost estimates to comply with this AD:

#### **Estimated costs**

<b>Action</b>	<b>Labor cost</b>	<b>Parts cost</b>	<b>Cost per product</b>
Replacement (actions retained from AD 2016-18-02)	Up to 33 work-hours X \$85 per hour = Up to \$2,805	Up to \$15,173	Up to \$17,978
New actions for Group 4, Configuration 2 airplanes	6 work-hours X \$85 per hour = \$510	\$0	\$510

According to the manufacturer, some of the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected individuals. The FAA does not control warranty coverage for affected individuals. As a result, the FAA has included all costs in the cost estimate.

## **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.

The FAA is 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.

This AD is issued in accordance with authority delegated by the Executive Director, Aircraft Certification Service, as authorized by FAA Order 8000.51C. In accordance with that order, issuance of ADs is normally a function of the Compliance and Airworthiness Division, but during this transition period, the Executive Director has delegated the authority to issue ADs applicable to transport category airplanes and associated appliances to the Director of the System Oversight Division.

## **Regulatory Findings**

The FAA has determined that this AD will not have federalism implications under Executive Order 13132. This AD will 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 that this AD:

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

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

(3) 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.

### **Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 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 removing Airworthiness Directive

(AD) 2016-18-02, Amendment 39-18632 (81 FR 59834, August 31, 2016), and adding the following new AD:

**2019-25-12 The Boeing Company:** Amendment 39-21010 ; Docket No. FAA-2019-0983; Product Identifier 2019-NM-171-AD.

#### **(a) Effective Date**

This AD is effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**(b) Affected ADs**

This AD replaces AD 2016-18-02, Amendment 39-18632 (81 FR 59834, August 31, 2016) (“AD 2016-18-02”).

**(c) Applicability**

This AD applies to The Boeing Company Model 777-200 and -300ER series airplanes, certificated in any category, as identified in Boeing Special Attention Service Bulletin 777-35-0041, Revision 1, dated August 14, 2019.

**(d) Subject**

Air Transport Association (ATA) of America Code 35, Oxygen.

**(e) Unsafe Condition**

This AD was prompted by the determination that the low-pressure oxygen flex hoses in the gaseous passenger oxygen system can potentially be conductive. The FAA is issuing this AD to address the potential for electrical current to pass through the low-pressure oxygen flex hoses in the gaseous passenger oxygen system, which can cause the flex hoses to melt or burn and result in an oxygen-fed fire in the passenger cabin.

**(f) Compliance**

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

**(g) Replacement Actions**

Within 72 months after September 15, 2016 (the effective date of AD 2016-18-02): Do all applicable actions identified as “RC” (required for compliance) in, and in accordance with, paragraph (g)(1) or (2) of this AD, as applicable.

(1) Except as required by paragraph (g)(2) of this AD: Do the actions in accordance with the Accomplishment Instructions of Boeing Special Attention Service Bulletin 777-35-0041, dated April 8, 2016; or Revision 1, dated August 14, 2019.

(2) For airplanes identified as Group 4 in Boeing Special Attention Service Bulletin 777-35-0041, Revision 1, dated August 14, 2019: Do the actions in accordance with the Accomplishment Instructions of Boeing Special Attention Service Bulletin 777-35-0041, Revision 1, dated August 14, 2019.

**(h) Parts Installation Prohibition**

As of September 15, 2016 (the effective date of AD 2016-18-02), no person may install on any airplane a low-pressure oxygen flex hose having a part number that is specified to be removed from an airplane in the Accomplishment Instructions of Boeing Special Attention Service Bulletin 777-35-0041, Revision 1, dated August 14, 2019.

**(i) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, Seattle ACO Branch, 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 paragraph (j) of this AD. Information may be emailed to:

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.

(3) An AMOC that provides an acceptable level of safety may be used for any repair, modification, or alteration required by this AD if it is approved by The Boeing Company Organization Designation Authorization (ODA) that has been authorized by the Manager, Seattle ACO, FAA, to make those findings. To be approved, the repair method, modification deviation, or alteration deviation must meet the certification basis of the airplane, and the approval must specifically refer to this AD.

(4) AMOCs approved previously for AD 2016-18-02 are approved as AMOCs for the corresponding provisions of paragraph (g) of this AD.

(5) For service information that contains steps that are labeled as Required for Compliance (RC), the provisions of paragraphs (i)(5)(i) and (ii) of this AD apply.

(i) The steps labeled as RC, including substeps under an RC step and any figures identified in an RC step, must be done to comply with the AD. If a step or substep is labeled “RC Exempt,” then the RC requirement is removed from that step or substep. An AMOC is required for any deviations to RC steps, including substeps and identified figures.

(ii) Steps not labeled as RC may be deviated from using accepted methods in accordance with the operator’s maintenance or inspection program without obtaining approval of an AMOC, provided the RC steps, including substeps and identified figures, can still be done as specified, and the airplane can be put back in an airworthy condition.

**(j) Related Information**

For more information about this AD, contact Susan L. Monroe, Aerospace Engineer, Cabin Safety and Environmental Systems Section, FAA, Seattle ACO Branch,

2200 South 216th St., Des Moines, WA 98198; phone and fax: 206-231-3570; email: susan.l.monroe@faa.gov.

**(k) Material Incorporated by Reference**

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.

(3) The following service information was approved for IBR on [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(i) Boeing Special Attention Service Bulletin 777-35-0041, Revision 1, dated August 14, 2019.

(ii) [Reserved]

(4) The following service information was approved for IBR on September 15, 2016 (81 FR 59834, August 31, 2016).

(i) Boeing Special Attention Service Bulletin 777-35-0041, dated April 8, 2016.

(ii) [Reserved]

(5) For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Contractual & Data Services (C&DS), 2600 Westminister Blvd., MC 110-SK57, Seal Beach, CA 90740-5600; telephone 562-797-1717; Internet <https://www.myboeingfleet.com>.

(6) You may view this service information at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

(7) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email [fedreg.legal@nara.gov](mailto:fedreg.legal@nara.gov), or go to: <https://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Des Moines, Washington, on December 12, 2019.

Jeffrey E. Duven,  
Director,  
System Oversight Division,  
Aircraft Certification Service.

[FR Doc. 2019-28464 Filed: 1/3/2020 8:45 am; Publication Date: 1/6/2020]