



# 適航指令發布單

## Airworthiness Directive Issuance Form

民航局AD編號 AD number	CAA-2024-08-009	發布日期 Date issued	2024/08/26												
適用之航空產品 Applied to (models, serial numbers or part numbers, as applicable)	This AD applies to The Boeing Company Model 787-8, 787-9, and 787-10 airplanes, certificated in any category, identified in paragraphs (c)(1) and (2) of this AD. (1) Airplanes with a Captain's seat having Ipeco part number P/N 3A380-0007-XX-X or First Officer's seat having Ipeco P/N 3A380-0008-XX-X. (2) Airplanes that do not have a seat identified in paragraph (c)(1) of this AD.														
主旨摘要 Subject	This AD requires inspections of affected Captain's and First Officer's seats for missing or cracked rocker switch caps and for cracked or nonfunctional switch cover assemblies, a rocker switch cap pull test, marking of the seats, and applicable on-condition actions. This AD also limits the installation of affected seats.														
民航局 CAA  <input type="radio"/> 本國產品 Native product  <input type="radio"/> 其他個案 Other	設計國民航主管機構 Original Authority <table><tr><td><input checked="" type="radio"/> FAA</td><td><input type="radio"/> Germany LBA</td></tr><tr><td><input type="radio"/> EASA</td><td><input type="radio"/> CAA-NL</td></tr><tr><td><input type="radio"/> Brazil</td><td><input type="radio"/> UK CAA</td></tr><tr><td><input type="radio"/> Transport Canada Civil Aviation</td><td><input type="radio"/> Japan CAB</td></tr><tr><td><input type="radio"/> DGAC</td><td><input type="radio"/> CAA of Israel</td></tr><tr><td></td><td><input type="radio"/> Other_____</td></tr></table>			<input checked="" type="radio"/> FAA	<input type="radio"/> Germany LBA	<input type="radio"/> EASA	<input type="radio"/> CAA-NL	<input type="radio"/> Brazil	<input type="radio"/> UK CAA	<input type="radio"/> Transport Canada Civil Aviation	<input type="radio"/> Japan CAB	<input type="radio"/> DGAC	<input type="radio"/> CAA of Israel		<input type="radio"/> Other_____
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	<input type="radio"/> Other_____														
	設計國AD編號 Original AD number	2024-16-14													
	1. 直接採用原AD之內容? (Is the original AD directly adopted?) <input checked="" type="radio"/> 是(Yes) <input type="radio"/> 否(No)_ a. 生效日期另訂為(Re-specify the effective date as): b. 執行時限另訂為(Re-specify the compliance time or period as): 2. 使用人是否需要將AD執行結果向民航局提出報告? (Do users need to report the status of compliance to the CAA?) <input type="radio"/> 需要(Yes) <input checked="" type="radio"/> 不需要(No)														
備註 Note	ATA 25. Ref. Ipeco Service Bulletin 380-25-06, Issue 03, dated July 17, 2024.														

- 註：
1. AD內容後附。
  2. 航空器產品使用人得向民航局提出豁免、替代符合方法、執行時限之展延之申請。
  3. 如有任何問題，請聯絡交通部民用航空局初始適航科。Tel：(02)2349-6330 / 6332, Fax：(02)2545-8464, [adcaa@mail.caa.gov.tw](mailto:adcaa@mail.caa.gov.tw)

Note：1. The AD text is enclosed.

2. Exemption, an alternative method of compliance or adjustment of the compliance time may be proposed to the CAA for approval.
3. For further information, please contact Civil Aeronautics Administration on Tel：(02)2349-6330 / 6332, Fax：(02)2545-8464, [adcaa@mail.caa.gov.tw](mailto:adcaa@mail.caa.gov.tw)

## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. FAA-2024-2017; Project Identifier AD-2024-00204-T; Amendment 39-22820; AD 2024-16-14]**

**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 adopting a new airworthiness directive (AD) for certain The Boeing Company Model 787-8, 787-9, and 787-10 airplanes. This AD was prompted by a report of uncommanded movement of the Captain's seat in the forward direction that caused a rapid descent. This AD requires inspections of affected Captain's and First Officer's seats for missing or cracked rocker switch caps and for cracked or nonfunctional switch cover assemblies, a rocker switch cap pull test, marking of the seats, and applicable on-condition actions. This AD also limits the installation of affected seats. The FAA is issuing this AD to address the unsafe condition on these products.

#### **DATES:**

This AD is effective August 21, 2024.

The Director of the Federal Register approved the incorporation by reference of a certain publications listed in this AD as of August 21, 2024.

The FAA must receive comments on this AD by October 7, 2024.

#### **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 *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.

*AD Docket*: You may examine the AD docket at *regulations.gov* by searching for and locating Docket No. FAA-2024-2017; 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, any comments received, and other information. The street address for Docket Operations is listed above.

#### *Material Incorporated by Reference:*

- For Ipeco material identified in this AD, contact Ipeco Holdings Limited, Aviation Way, Southend on Sea, SS2 6UN, United Kingdom; phone: +44 1702 545118; email: [technicalsupport@ipeco.com](mailto:technicalsupport@ipeco.com).
- You may view this material at the FAA, Airworthiness Products Section, Operational Safety 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 at *regulations.gov* under Docket No. FAA-2024-2017.

#### **FOR FURTHER INFORMATION CONTACT:**

Brandon Lucero, Aviation Safety Engineer, FAA, 2200 South 216th St., Des Moines, WA 98198; phone: 206-231-3569; email: [Brandon.Lucero@faa.gov](mailto:Brandon.Lucero@faa.gov).

#### **SUPPLEMENTARY INFORMATION:**

##### **Comments Invited**

The FAA invites you to send any written data, views, or arguments about this final rule. Send your comments to an address listed under **ADDRESSES**. Include Docket No. FAA-2024-2017 and Project Identifier AD-2024-00204-T at the beginning of your comments. The most helpful comments reference a specific portion of the final rule, explain the reason for any recommended change, and include supporting data. The FAA will consider all comments received by the closing date and may amend this final rule because of those comments.

Except for Confidential Business Information (CBI) as described in the following paragraph, and other information as described in [14 CFR 11.35](#), the FAA will post all comments received, without change, to *regulations.gov*, including any personal information you provide. The agency will also post a report summarizing each substantive verbal contact received about this final rule.

##### **Confidential Business Information**

CBI is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA) ([5 U.S.C. 552](#)), CBI is exempt from public disclosure. If your comments responsive to this AD contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to this AD, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission containing CBI as “PROPIN.” The FAA will treat such marked submissions as confidential under the FOIA, and they will not be placed in the public

docket of this AD. Submissions containing CBI should be sent to Brandon Lucero, Aviation Safety Engineer, FAA, 2200 South 216th St., Des Moines, WA 98198; phone: 206-231-3569; email: [Brandon.Lucero@faa.gov](mailto:Brandon.Lucero@faa.gov). Any commentary that the FAA receives that is not specifically designated as CBI will be placed in the public docket for this rulemaking.

## Background

The FAA has received reports of uncommanded horizontal movement of the Captain's and First Officer's seats installed in Boeing Model 787 airplanes. The FAA received the first report in March 2024 indicating that uncommanded movement of the Captain's seat caused the control column input to disconnect the auto-pilot, resulting in a rapid descent until the First Officer took control of the flight. This incident further resulted in multiple passenger injuries, some of which were serious. Following that incident, the FAA received four additional reports from Boeing of uncommanded horizontal movement of the Captain's and First Officer's seats; the most recent occurred in June 2024. Three of the incidents were due to loose forward/aft rocker switch caps located under the spring-loaded rocker switch cover guard on the back of the Captain's and First Officer's seats; the loose forward/aft rocker switch caps were the result of cracking or un-bonded or de-bonded caps. The other two incidents are under investigation. A rocker switch with a dislodged rocker switch cap, if depressed by the rocker switch cover guard, can cause unintended and sustained movement of the seat. Uncommanded horizontal movement of an occupied seat can cause in-flight upset from unintended and abrupt flight control inputs, which could result in a rapid descent of the airplane and serious injury to passengers and crew. The FAA is issuing this AD to address the unsafe condition on these products.

## FAA's Determination

The FAA is issuing this AD because the agency has determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

## Material Incorporated by Reference Under [1 CFR Part 51](#)

The FAA reviewed Ipeco Service Bulletin 380-25-06, Issue 03, dated July 17, 2024. This material specifies the following procedures:

- A general visual inspection for cracked or missing rocker switch caps of the Captain's and First Officer's seats, and replacement and bonding of any switch that has a cracked or missing switch cap.
- A general visual inspection for cracks of the switch cover assemblies and local areas, a functional test of the switch cover, and replacement of cracked or nonfunctional parts.
- A rocker switch cap pull test for the switch caps (except those that have been replaced).
- Bonding of any unbonded or debonded switch caps (that fail the pull test) or any replaced rocker switches, including making sure cracked rocker switches are replaced with switches having bonded caps.
- Marking of the seats.

This material 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.

## AD Requirements

This AD requires accomplishing the actions specified in the material already described, except for any differences identified as exceptions in the regulatory text of this AD. This AD also limits the installation of affected seats.

### **Clarification of Required Actions**

Where Ipeco Service Bulletin 380-25-06, Issue 03, dated July 17, 2024, specifies bonding the rocker switch cap for an un-bonded cap, this AD also allows replacing the switch and bonding the switch cap.

Where paragraph 3. of Part A of Ipeco Service Bulletin 380-25-06, Issue 03, dated July 17, 2024, specifies a rocker switch cap pull test of all switch caps, this AD does not require the pull test for any switch that was replaced with a switch having a bonded cap.

### **Justification for Immediate Adoption and Determination of the Effective Date**

Section 553(b) of the Administrative Procedure Act (APA) ([5 U.S.C. 551](#) *et seq.*) authorizes agencies to dispense with notice and comment procedures for rules when the agency, for “good cause,” finds that those procedures are “impracticable, unnecessary, or contrary to the public interest.” Under this section, an agency, upon finding good cause, may issue a final rule without providing notice and seeking comment prior to issuance. Further, section 553(d) of the APA authorizes agencies to make rules effective in less than thirty days, upon a finding of good cause.

An unsafe condition exists that requires the immediate adoption of this AD without providing an opportunity for public comments prior to adoption. The FAA has found that the risk to the flying public justifies forgoing notice and comment prior to adoption of this rule because the FAA has received, with increasing frequency since March 2024, reports of uncommanded horizontal movement of the Captain's or First Officer's seat, when occupied. Uncommanded horizontal seat movement can cause in-flight upset from unintended and abrupt flight control inputs, which could result in a rapid descent of the airplane and serious injury to passengers and crew. Furthermore, the compliance time in this AD is shorter than the time necessary for the public to comment and for publication of the final rule. Accordingly, notice and opportunity for prior public comment are impracticable and contrary to the public interest pursuant to [5 U.S.C. 553\(b\)](#).

In addition, the FAA finds that good cause exists pursuant to [5 U.S.C. 553\(d\)](#) for making this amendment effective in less than 30 days, for the same reasons the FAA found good cause to forgo notice and comment.

### **Regulatory Flexibility Act**

The requirements of the Regulatory Flexibility Act (RFA) do not apply when an agency finds good cause pursuant to [5 U.S.C. 553](#) to adopt a rule without prior notice and comment. Because the FAA has determined that it has good cause to adopt this rule without notice and comment, RFA analysis is not required.

### **Costs of Compliance**

The FAA estimates that this AD affects 158 airplanes of U.S. registry. The FAA estimates the following costs to comply with this AD:

### Estimated Costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Inspections, cap pull test, part marking	1 work-hour × \$85 per hour = \$85	\$0	\$85	\$13,430

The FAA estimates the following costs to do any on-condition actions that would be required based on the results of an inspection or cap pull test. The FAA has no way of determining the number of aircraft that might need these on-condition actions:

### On-Condition Costs

Action	Labor cost	Parts cost	Cost per seat
Replacement	Up to 3 work-hours × \$85 per hour = \$255	Up to \$4,600	Up to \$4,855.
Cap bonding	Up to 3 work-hours × \$85 per hour = \$255	\$37	Up to \$292.

### 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.

### Regulatory Findings

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](#), and
- (2) Will not affect intrastate aviation in Alaska.

### List of Subjects in [14 CFR Part 39](#)

- Air transportation
- Aircraft
- Aviation safety



- Incorporation by reference
- Safety

## 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 adding the following new airworthiness directive:

**2024-16-14 The Boeing Company:** Amendment 39-22820; Docket No. FAA-2024-2017; Project Identifier AD-2024-00204-T.

#### (a) Effective Date

This airworthiness directive (AD) is effective August 21, 2024.

#### (b) Affected ADs

None.

#### (c) Applicability

This AD applies to The Boeing Company Model 787-8, 787-9, and 787-10 airplanes, certificated in any category, identified in paragraphs (c)(1) and (2) of this AD.

(1) Airplanes with a Captain's seat having Ipeco part number P/N 3A380-0007-XX-X or First Officer's seat having Ipeco P/N 3A380-0008-XX-X.

(2) Airplanes that do not have a seat identified in paragraph (c)(1) of this AD.

#### (d) Subject

Air Transport Association (ATA) of America Code 25, Equipment/furnishings.

#### (e) Unsafe Condition

This AD was prompted by reports of uncommanded horizontal movement of the Captain's and First Officer's seats. The FAA is issuing this AD to address a dislodged rocker switch cap under the spring-loaded rocker switch cover guard, which can cause unintended and sustained movement of the seat. Uncommanded horizontal movement of a Captain's or First Officer's seat, when occupied, can cause in-flight upset from unintended and abrupt flight control inputs, which could result in a rapid descent of the airplane and serious injury to passengers and crew.

#### (f) Compliance



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

#### **(g) Switch Cap Inspection**

For airplanes identified in paragraph (c)(1) of this AD: Within 30 days after the effective date of this AD, do a general visual inspection for cracked or missing rocker switch caps of the Captain's and First Officer's seats, in accordance with the Accomplishment Instructions of Ipeco Service Bulletin 380-25-06, Issue 03, dated July 17, 2024. For any switch that has a cracked or missing switch cap, replace the switch and bond the switch cap within 30 days after the effective date of this AD, in accordance with the Accomplishment Instructions of Ipeco Service Bulletin 380-25-06, Issue 03, dated July 17, 2024. Replacement may be delayed provided the airplane is operated under the provisions of Master Minimum Equipment List item 25-11-01-0, but no later than 120 days after the effective date of this AD.

#### **(h) Switch Cover Assembly Inspection**

For airplanes identified in paragraph (c)(1) of this AD: Within 30 days after the effective date of this AD, perform a general visual inspection for cracks of the switch cover assemblies and local areas and a functional test of the switch cover, in accordance with the Accomplishment Instructions of Ipeco Service Bulletin 380-25-06, Issue 03, dated July 17, 2024. Replace any cracked or nonfunctional parts within 30 days after the effective date of this AD, in accordance with the Accomplishment Instructions of Ipeco Service Bulletin 380-25-06, Issue 03, dated July 17, 2024. Replacement may be delayed provided the airplane is operated under the provisions of Master Minimum Equipment List item 25-11-01-0, but no later than 120 days after the effective date of this AD.

#### **(i) Rocker Switch Cap Pull Test**

For airplanes identified in paragraph (c)(1) of this AD: Within 30 days after the effective date of this AD, except as specified in paragraph (k) of this AD, perform a rocker switch cap pull test of all switch caps, in accordance with the Accomplishment Instructions of Ipeco Service Bulletin 380-25-06, Issue 03, dated July 17, 2024. For any rocker switch cap that is un-bonded or de-bonded ( *i.e.*, fails the test), bond the rocker switch cap, or replace the switch and bond the switch cap, within 30 days after the effective date of this AD, in accordance with the Accomplishment Instructions of Ipeco Service Bulletin 380-25-06, Issue 03, dated July 17, 2024. The bonding may be delayed provided the airplane is operated under the provisions of Master Minimum Equipment List item 25-11-01-0, but no later than 120 days after the effective date of this AD.

#### **(j) Seat Marking**

For airplanes identified in paragraph (c)(1) of this AD: Before further flight after accomplishment of the applicable actions required by paragraphs (g) through (i) of this AD, mark the seat in accordance with the Accomplishment Instructions of Ipeco Service Bulletin 380-25-06, Issue 03, dated July 17, 2024.

#### **(k) Exceptions to Service Bulletin**

(1) Where a note in paragraph 3.a. of Part A of the Accomplishment Instructions of Ipeco Service Bulletin 380-25-06, Issue 03, dated July 17, 2024, specifies to visually inspect the switch guard (3-270 or 3-270A) for cracks or modifications and “replace in accordance with the CMM,” this AD

requires replacing that text with “replace the switch guard before further flight in accordance with the CMM if any crack or modification is found.”

(2) For any switch that has been replaced with a switch having a bonded cap as required by paragraph (g) of this AD, the actions required by paragraph (i) of this AD are not required.

### **(l) Parts Installation Limitation**

At the applicable time specified in paragraph (l)(1) or (2) of this AD, no person may install, on any airplane, a seat identified in paragraph (c)(1) of this AD, unless the seat is marked as specified in paragraph (j) of this AD.

(1) For airplanes in paragraph (c)(1) of this AD: After accomplishment of all applicable actions required by this AD.

(2) For airplanes identified in paragraph (c)(2) of this AD: As of the effective date of this AD.

### **(m) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, AIR-520, Continued Operational Safety 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 responsible Flight Standards Office, as appropriate. If sending information directly to the manager of the certification office, send it to the attention of the person identified in paragraph (n) of this AD. Information may be emailed to: [AMOC@faa.gov](mailto:AMOC@faa.gov).

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the responsible Flight Standards 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, AIR-520, Continued Operational Safety Branch, 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.

### **(n) Related Information**

For more information about this AD, contact Brandon Lucero, Aviation Safety Engineer, FAA, 2200 South 216th St., Des Moines, WA 98198; phone: 206-231-3569; email: [Brandon.Lucero@faa.gov](mailto:Brandon.Lucero@faa.gov).

### **(o) Material Incorporated by Reference**

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

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

(i) Ipeco Service Bulletin 380-25-06, Issue 03, dated July 17, 2024.

(ii) [Reserved]

(3) For Ipeco material identified in this AD, contact Ipeco Holdings Limited, Aviation Way, Southend on Sea, SS2 6UN, United Kingdom; phone: +44 1702 545118; fax: +44 1702 540782; email: [technicalsupport@ipeco.com](mailto:technicalsupport@ipeco.com).

(4) You may view this material at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

(5) You may view this material at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, visit [www.archives.gov/federal-register/cfr/ibr-locations](http://www.archives.gov/federal-register/cfr/ibr-locations) or email [fr.inspection@nara.gov](mailto:fr.inspection@nara.gov).

Issued on August 2, 2024.

John P. Piccola, Jr.,

Director, Integrated Certificate Management Division, Aircraft Certification Service.

[[FR Doc. 2024-18843](#) Filed 8-19-24; 4:15 pm]

BILLING CODE 4910-13-P