



AGÊNCIA NACIONAL DE AVIAÇÃO CIVIL - BRAZIL

BRAZILIAN AIRWORTHINESS DIRECTIVE

[CORRECTED on 8 Jul. 2022]

AD No.: 2022-06-01

Effective Date: 30 Jun. 2022

The following Brazilian Airworthiness Directive (AD), issued by the Agência Nacional de Aviação Civil (ANAC) in accordance with provisions of Chapter IV, Title III of Código Brasileiro de Aeronáutica - Law No. 7,565 dated 19 December 1986 - and Regulamento Brasileiro da Aviação Civil (RBAC) 39, applies to all aircraft registered in the Registro Aeronáutico Brasileiro. No person may operate an aircraft to which this AD applies, unless it has previously complied with the requirements established herein.

AD No. 2022-06-01 - EMBRAER / 39-1497.

APPLICABILITY:

This Airworthiness Directive (AD) applies to Embraer S.A. airplanes model ERJ 190-300 and ERJ 190-400 as identified in Embraer Service Bulletin N. 190E2-52-0001, original revision, dated May 10, 2019.

CANCELLATION / REVISION:

Not applicable.

REASON:

It has been identified a quality escape in the installation process of some fasteners of the lower beam (frame) splices of the Overwing Emergency Exit (OWE) doors due to the inappropriate tool used during these components installation. This deviation may lead to the detachment of the splices from the lower beam (frame) of the door, which is a Principal Structure Element (PSE), causing a deformation on the lower part of the door and consequently, a sudden loss of pressurization and an emergency descent of the airplane.

Since this condition may occur in other airplanes and affects flight safety, a corrective action is required. Thus, sufficient reason exists to request compliance with this AD in the indicated time limit.

REQUIRED ACTION:

Inspection, rework, if applicable, and replacement of the splice fasteners of the Right Hand (RH) and Left Hand (LH) OWE doors with new ones with the same Part Number (P/N).

COMPLIANCE:

Required as indicated below, unless already accomplished.

(a) Inspection, rework, if applicable, and replacement of the splice fasteners of the

RH and LH OWE doors.

(1) Within the next 500 Flight Cycles (FC) after the effective date of this AD, carry out a Detailed Inspection (DET) on the splices with P/N 196-29384-003, P/N 196-29384-004, P/N 196-29385-001, and P/N 196-29407-403 looking for signs of deformation and missing or loose fasteners.

(i) If there is any sign of deformation or if any fastener is loose or missing at the inspection area, contact the EMBRAER for a possible repair solution that must be approved according to the paragraph (b) of this AD.

(ii) If there is no sign of deformation and no missing or loose fasteners, replace the fasteners installation of splices P/N 196-29384-003, P/N 196-29384-004, P/N 196-29385-001, and P/N 196-29407-403 according to the detailed instructions and procedures described in Embraer Service Bulletin N. 190E2-52-0001, original revision, dated May 10, 2019; or further revisions approved by ANAC.

Note: for the purposes of this AD, a Detailed Inspection (DET) is defined as follows:

Detailed Inspection (DET): An intensive examination of a specific item, installation or assembly to detect damage, failure or irregularity. This could include tactile assessment in which a component or assembly can be checked for tightness/security. Available lighting is normally supplemented with a direct source of good lighting at an intensity deemed appropriate. Inspection aids such as mirrors and magnifying lenses may be necessary. Surface cleaning and elaborate access procedures may be required.

(b) Alternative methods of compliance (AMOCs).

(1) A different method or a different compliance time, with the requirements of this AD, may be used if approved by the Manager of the Continuing Airworthiness Technical Branch (GTAC) of ANAC.

(2) For service information that contains steps that are labeled as "Required for Compliance (RC)", the provisions of paragraphs **(b)(2)(i)** and **(b)(2)(ii)** of this AD apply.

(i) The steps labeled as RC, including substeps under a RC step and any figures identified in a 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.

(c) Material incorporated by reference.

You must use the Embraer Service Bulletin N. 190E2-52-0001, original revision, dated May 10, 2019; or further revisions approved by ANAC, to do the actions required by this AD, unless this AD specifies otherwise.

Record compliance with this AD in the applicable maintenance log book.

CONTACT:

For additional technical information, contact:

National Civil Aviation Agency (ANAC)
Continuing Airworthiness Technical Branch (GTAC)
Rua Doutor Orlando Feirabend Filho, nº 230
Centro Empresarial Aquáriu - Torre B - 14º ao 18º andares
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APPROVAL:

ROBERTO JOSÉ SILVEIRA HONORATO
Head of Department
Department of Airworthiness (SAR)
ANAC

NOTA: Original in Portuguese language signed and available in the files of the Continuing Airworthiness Technical Branch (GTAC) of the National Civil Aviation Agency (ANAC).

Referência: Processo nº 00066.006673/2022-22

SEI nº 7409711



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ERRATA

AD No: 2022-06-01

Effective Date: 30 Jun. 2022

AD No. 2022-06-01 - EMBRAER / 39-1497.

_This Errata is issued to correct a printing error in the original English version of this Airworthiness Directive. The paragraph (a)(1) of the AD COMPLIANCE was erroneously written; it shall read as follows:

COMPLIANCE:

(a) Inspection, rework, if applicable, and replacement of the splice fasteners of the RH and LH OWE doors.

(1) Within the next 500 Flight Cycles (FC) after the effective date of this AD, carry out a Detailed Inspection (DET) on the splices with P/N 196-29384-003, P/N 196-29384-004, P/N 196-29385-001, and P/N 196-29407-403 looking for signs of deformation and missing or loose fasteners.

(...)

Please modify the original AD text and attach this Errata to it.

APPROVAL:

ROBERTO JOSÉ SILVEIRA HONORATO
Head of Department
Department of Airworthiness (SAR)
ANAC

NOTE: Original in Portuguese language signed and available in the files of the Continuing Airworthiness Technical Branch (GTAC) of the National Civil Aviation Agency (ANAC).