

## AGÊNCIA NACIONAL DE AVIAÇÃO CIVIL - BRAZIL

# **BRAZILIAN AIRWORTHINESS DIRECTIVE**

AD No.: 2018-07-01R1 Effective Date: 05 Nov. 2025

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. 2018-07-01R1 - EMBRAER / 39-1593.

#### APPLICABILITY:

(a) This Airworthiness Directive (AD) applies to Embraer S.A. model ERJ 190-100 STD, ERJ 190-100 LR, ERJ 190-100 IGW, ERJ 190-100 SR, ERJ 190-200 STD, ERJ 190-200 LR, and ERJ 190-200 IGW airplanes, all serial numbers.

#### **CANCELLATION / REVISION:**

This AD cancels and supersedes the AD № 2018-07-01 / 39-1429, dated 24 Jul. 2018, and is being issued to revise a compliance interval with its requirements and update the associated service documents references.

#### **REASON:**

This AD was prompted by reports of corrosion and chromium layer chipping on the rearward and forward Pintle Pin of the Main Landing Gear (MLG) Shock Struts. We are issuing this AD to detect and correct Pintle Pin having corrosion or chromium layer chipping, which could cause the Pintle Pin to shear under normal load and lead to the collapse of the MLG during the take-off and landing operations.

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

## **REQUIRED ACTION:**

Inspection of the Pintle Pins of the MLG Shock Strut.

#### **COMPLIANCE**

Required as indicated below, unless already accomplished.

(b) Inspection of the MLG Pintle Pins.

Do a Detailed Inspection (DET) on the forward and afterward Pintle Pin of the left hand and right hand Main Landing Shock Strut for discrepancies, according to the detailed instructions and procedures described in the Embraer Service Bulletin № 190-32-0065, revision 05, dated October 21, 2025; at the latest of the times specified in paragraphs (b)(1), and (b)(2) of this AD. If any discrepancy is detected, before further flight, perform corrective actions, as applicable, according to Embraer Service Bulletin № 190-32-0065, revision 05, dated October 21, 2025. Repeat the DET of the Pintle Pins at intervals not to exceed 72 months after their installation on the airplane (Time Since Installation - TSI).

- (1) For airplanes equipped with any MLG Pintle Pin, with Part Number (P/N) 2821-0067 or P/N 2821-0025, that has accumulated less than 17,000 Flight Cycles Since New (FCSN), at Jul. 24, 2018, the effective date of the original issue of this AD, do the DET specified in paragraph (b) before the Pintle Pin has logged 17,750 FCSN.
- (2) For airplanes on which any MLG Pintle Pin, with P/N 2821-0067 or P/N 2821-0025, has accumulated more than 17,000 FCSN, at Jul. 24, 2018, the effective date of the original issue of this AD, do the DET specified in paragraph (b) within 750 Flight Cycles (FC) after at Jul. 24, 2018, the effective date of the original issue of this AD.

**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 acomponent 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.

## (c) Credit for previous actions.

This paragraph provides credit for the initial DET specified in paragraph **(b)** of this AD, if that inspection was performed before Jul. 24, 2018, the effective date of the original issue of this AD, using Task 57-50-007-1247 of MRBR 1928, Task 32-11-001-1034 of MRBR 1928, the Embraer Service Bulletin № 190-32-0002, original issue, dated Jul. 11, 2008, the Embraer Service Bulletin № 190-32-0002, revision 01, dated Nov. 08, 2012, the restoration of the MLG per Task 32-11-00-001 of MRBR 1928, the Embraer Service Bulletin № 190-32-0065, original issued, dated Aug. 31, 2016, the Embraer Service Bulletin № 190-32-0065, revision 01, dated Oct. 24, 2017, the Embraer Service Bulletin № 190-32-0065, revision 02, dated Nov. 01, 2017, the Embraer Service Bulletin № 190-32-0065, revision 03, dated Jun. 28, 2019, or the Embraer Service Bulletin № 190-32-0065, revision 04, dated Aug. 14, 2025.

## (d) Alternative methods of compliance (AMOCs).

- (1) For the purposes of this AD, performing MRBR 1928 task number 32-11-001-1034 is considered equivalent to performing the DET required by paragraph (b) of this AD, as long as it is done at intervals consistent with those required in paragraph (b) of this AD.
- (2) A different method or a different compliance time, with the requirements of this AD, maybe used if approved by the Manager of the Continuing Airworthiness Technical Branch (GTAC) of ANAC.

### (e) Material incorporated by reference.

You must use Embraer S.A. Service Bulletin  $N^{o}$  190-32-0065, revision 05, dated October 21, 2025, 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 Aquárius – Torre B – Floors 14 and 15 Parque Residencial Aquárius CEP 12246-190 - São José dos Campos - SP

E-mail: pac@anac.gov.br

## **APPROVAL:**

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

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

Referência: Processo nº 00066.527371/2017-26 SEI nº 12157750