

AGÊNCIA NACIONAL DE AVIAÇÃO CIVIL - BRAZIL

BRAZILIAN AIRWORTHINESS DIRECTIVE

AD No.: 2017-04-01 Effective Date: 25 Apr. 2017

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. 2017-04-01 - EMBRAER / 39-14134

APPLICABILITY:

- (a) This Airworthiness Directive (AD) applies to Embraer S.A. airplanes, as specified in paragraphs (a)(1) and (a)(2) of this AD.
- (1) Model ERJ 190-100STD, ERJ 190-100 LR, ERJ 190-100 IGW, ERJ 190-100 SR, ERJ 190-200STD, ERJ 190-200 LR, and ERJ 190-200 IGW airplanes, as identified in Embraer Service Bulletin 190-54-0016, Revision 2, dated September 12, 2016,
- (2) Model ERJ 190-100 ECJ airplanes, as identified in Embraer Service Bulletin 190LIN-54-0008, dated October 2, 2015.

AFFECTED ADS:

Certain requirements of this AD terminate certain requirements of AD 2014-07-01 Embraer S.A. / 39-1384.

REASON:

This AD was prompted by reports of bushing migration and loss of nut torque on the engine pylon lower inboard and outboard link fittings. We are issuing this AD to prevent loss of integrity of the engine pylon lower link fittings, which could result in separation of the engine from the wing.

REQUIRED ACTION:

This AD requires modifications of the attaching parts of the left handle (LH) and right handle (RH) pylon lower link fittings, inboard and outboard positions.

COMPLIANCE:

Do the actions required by this AD within the compliance times specified, unless the actions have already been done.

(b) LH pylon lower link fitting attaching parts modification

- (1) For airplanes identified in Group I of Embraer Service Bulletin 190-54-0016, Revision 2, dated September 12, 2016: Within 15000 flight hours or 48 months, whichever occurs later, after the effective date of this AD, replace the plain bushings of the lower inboard and outboard link fittings, install the lock washers with the L-profile on the fuse pin's head side, and replace the internal shear pin of the fuse pins with new ones having larger head diameter, in accordance with PART I of the Accomplishment Instructions of Embraer Service Bulletin 190-54-0016, Revision 2, dated September 12, 2016.
- (2) For airplanes identified in Group II of Embraer Service Bulletin 190-54-0016, Revision 2, dated September 12, 2016: Within 15000 flight hours or 48 months, whichever occurs later, after the effective date of this AD, replace the internal shear pin of the fuse pins with new ones having larger head diameter, in accordance with PART I of the Accomplishment Instructions of Embraer Service Bulletin 190-54-0016, Revision 2, dated September 12, 2016.
- (3) For airplanes identified in Group I of Embraer Service Bulletin 190LIN-54-0008, dated October 2, 2015: Within 48 months after the effective date of this AD, replace the plain bushings of the lower inboard and outboard link fittings, install the lock washers with the L-profile on the fuse pin's head side, and replace the internal shear pin of the fuse pins with new ones having larger head diameter, in accordance with PART I of the Accomplishment Instructions of Embraer Service Bulletin 190LIN-54-0008, dated October 2, 2015.
- (4) For airplanes identified in Group II of Embraer Service Bulletin 190LIN-54-0008, dated October 2, 2015: Within 48 months after the effective date of this AD, replace the internal shear pin of the fuse pins with new ones having larger head diameter, in accordance with PART I of the Accomplishment Instructions of Embraer Service Bulletin 190LIN-54-0008, dated October 2, 2015.

(c) RH pylon lower link fitting attaching parts modification

- (1) For airplanes identified in Group I of Embraer Service Bulletin 190-54-0016, Revision 2, dated September 12, 2016: Within 15000 flight hours or 48 months, whichever occurs later, after the effective date of this AD, replace the plain bushings of the lower inboard and outboard link fittings, install the lock washers with the L-profile on the fuse pin's head side, and replace the internal shear pin of the fuse pins with new ones having larger head diameter, in accordance with PART II of the Accomplishment Instructions of Embraer Service Bulletin 190-54-0016, Revision 2, dated September 12, 2016.
- (2) For airplanes identified in Group II of Embraer Service Bulletin 190-54-0016, Revision 2, dated September 12, 2016: Within 15000 flight hours or 48 months, whichever occurs later, after the effective date of this AD, replace the internal shear pin of the fuse pins with new ones having larger head diameter, in accordance with PART II of the Accomplishment Instructions of Embraer Service Bulletin 190-54-0016, Revision 2, dated September 12, 2016.
- (3) For airplanes identified in Group I of Embraer Service Bulletin 190LIN-54-0008, dated October 2, 2015: Within 48 months after the effective date of this AD, replace the plain bushings of the lower inboard and outboard link fittings, install the lock washers with the L-profile on the fuse pin's head side, and replace the internal shear pin of the fuse pins with new ones having larger head diameter, in accordance with PART II of the Accomplishment Instructions of Embraer Service Bulletin 190LIN-54-0008, dated October 2, 2015.
- (4) For airplanes identified in Group II of Embraer Service Bulletin 190LIN-54-0008, dated October 2, 2015: Within 48 months after the effective date of this AD, replace the internal shear pin of the fuse pins with new ones having larger head diameter, in accordance with PART II of the Accomplishment Instructions of Embraer Service Bulletin 190LIN-54-0008, dated October 2, 2015.

(d) Terminating action for AD 2014-07-01

- (1) Accomplishing the actions required by paragraph (b)(1), or (b)(2) of this AD, as applicable, terminates the requirements of paragraphs (a), (e), and paragraph (g) of AD 2014-07-01.
- (2) Accomplishing the actions required by paragraph (b)(3), or (b)(4) of this AD, as applicable, terminates the requirements of paragraphs (c), (i), and paragraph (k) of AD 2014-07-01.
- (3) Accomplishing the actions required by paragraph (c)(1), or (c)(2) of this AD, as applicable, terminates the requirements of paragraphs (b), (f), and paragraph (h) of AD 2014-07-01.
- (4) Accomplishing the actions required by paragraph (c)(3), or (c)(4) of this AD, as applicable, terminates the requirements of paragraphs (d), (j), and paragraph (l) of AD 2014-07-01.

(e) Credit for previous actions

This paragraph provides credit for the actions specified in paragraphs (b)(1), (b)(2), (c)(1) and (c)(2) of this AD, if those actions were performed before the effective date of this AD using Embraer Service Bulletin 190-54-0016, dated September 22, 2015, or Embraer Service Bulletin 190-54-0016, Revision 1, dated January 11, 2016.

(f) 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 General Manager of the Aeronautical Product Certification Branch (Gerência-Geral de Certificação de Produtos Aeronáuticos GGCP).
- (2) For service information that contains steps that are labeled as Required for Compliance (RC), the provisions of paragraphs (f)(2)(i) and (f)(2)(ii) of this AD apply.
- (i) The steps labeled as RC, including sub steps under an RC step and any figures identified in an RC step, must be done to comply with this AD. An AMOC is required for any deviations to RC steps, including sub steps 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 sub steps and identified figures, can still be done as specified, and the airplane can be put back in an airworthy condition.

(g) Material incorporated by reference

You must use Embraer Service Bulletin 190-54-0016, revision 2, dated September 12, 2016; or Embraer Service Bulletin 190LIN-54-0008, original issue, dated October 2, 2015, as applicable, or further revisions approved by the ANAC, to do the actions required by this AD.

CONTACT:

For additional technical information, contact:

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NOTE: Original in Portuguese language signed and available in the files of the Aeronautical Products Certification Branch (GGCP) of the National Civil Aviation Agency (ANAC).



Documento assinado eletronicamente por **ROBERTO JOSÉ SILVEIRA HONORATO**, **Superintendente de Aeronavegabilidade**, em 07/04/2017, às 16:47, conforme horário oficial de Brasília, com fundamento no art. 6°, § 1°, do <u>Decreto n° 8.539, de 8 de outubro de 2015</u>.



Produtos Aeronáuticos, em 07/04/2017, às 18:04, conforme horário oficial de Brasília, com fundamento no art. 6°, § 1°, do <u>Decreto nº 8.539, de 8 de outubro de 2015</u>.



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Referência: Processo nº 00066.506906/2016-44