ANAC
AGÊNCIA NACIONAL
DE AVIAÇÃO CIVIL

AGÊNCIA NACIONAL DE AVIAÇÃO CIVIL – BRAZIL

BRAZILIAN AIRWORTHINESS DIRECTIVE

AD No.: 2012-03-04 **Effective Date: 13 Apr. 2012**

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. 2012-03-04 - EMBRAER / 39-1354.

APPLICABILITY:

This Airworthiness Directive applies to Embraer S.A. model ERJ 170-100 LR, ERJ 170-100 SE, ERJ 170-100 STD, ERJ 170-100 SU, ERJ 170-200 LR, ERJ 170-200 STD and ERJ 170-200 SU airplanes; as identified in the Embraer Service Bulletin No. 170-53-0093, Revision 1, dated March 16, 2012 or further revisions approved by the ANAC.

CANCELLATION / REVISION:

Not applicable.

REASON:

It has been found the occurrences of chafing between the Auxiliary Power Unit (APU) Electronic Starter Controller (ESC) power cables (harness W205) and the airplane tail cone firewall due to the grommet installed at the tail cone firewall moves out of its place. This condition, if not corrected, may result in reduced structural integrity of the fuselage and empennage in an event of fire penetration through the firewall.

Since this condition may occur in other airplanes of the same type 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:

Installation of a new grommet support in the airplane tail cone firewall and, inspection and replacement, if applicable, of harness W205.

COMPLIANCE:

Required as indicated below, unless already accomplished.

(a) Within 3000 flight hours (FH) after the effective date of this AD, perform a Detailed Inspection (DI) on the APU ESC power cables (harness W205) for damage to the insulation and inner conductors, in accordance with the Accomplishment Instructions of Embraer Service Bulletin No. 170-53-0093, Revision 1, dated March 16, 2012 or further revisions approved by the ANAC.

(b) Prior to further flight after accomplishment of the requirements in paragraph (a) of this AD, do the actions specified in paragraphs (b)(1), (b)(2) and (b)(3), as applicable, in accordance with the Accomplishment Instructions of Embraer Service Bulletin No. 170-53-0093 Revision 1, dated March 16, 2012 or further revisions approved by the ANAC.

(1) If there is no damage to the APU ESC power cable, install the new grommet support having part number (P/N) 191-21716-003 in the tail cone firewall.

(2) If the damage affects only the harness insulation, repair the insulation and install the new grommet support having P/N 191-21716-003 in the tail cone firewall.

(3) If the damage affects the harness insulation and the inner conductors, replace the harness and install the new grommet support having P/N 191-21716-003 in the tail cone firewall.

(c) You must use Embraer Service Bulletin No. 170-53-0093 Revision 1, dated March 16, 2012 or further revisions approved by the ANAC to do the actions required by this AD, unless this AD specifies otherwise.

(d) 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).

NOTE: For the purpose of this AD, a Detailed Inspection (DI) is: "An intensive examination of a specific item, installation or assembly to detect damage, failure or irregularity. Available lighting is normally supplemented with a direct source of good lighting at an intensity deemed appropriate. Inspection aids such as mirrors, magnifying lenses, etc, may be necessary. Surface cleaning and elaborate access procedures may be required."

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).