

AGÊNCIA NACIONAL DE AVIAÇÃO CIVIL - BRAZIL

BRAZILIAN AIRWORTHINESS DIRECTIVE

AD No.: 2007-03-01R1 Effective Date: 09 June 2008

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 de Homologação Aeronáutica (RBHA) 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. 2007-03-01R1 - EMBRAER - Amendment 39-1234.

APPLICABILITY:

This Airworthiness Directive is applicable to Embraer ERJ 170-100 LR, ERJ 170-100 STD, ERJ 170-100 SE, ERJ 170-100 SU, ERJ 170-200 LR, ERJ 170-200 STD and ERJ 170-200 SU aircraft models in operation.

CANCELLATION / REVISION:

This AD cancels and supersedes the Emergency Airworthiness Directive (EAD) No. 2007-03-01 original issue - Amdt 39-1176, dated 16 Mar. 2007, and is being issued to present a terminating action for the repetitive inspections.

REASON:

It has been found the occurrence of two events of aircraft being dispatched and flown with the cargo door opened.

Since this condition 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:

Visual inspection of cargo doors prior to each departure; removal of the cover plate from the cargo doors surround trim lining; rework of cargo doors surround trim liner; and, inspection of fore and aft cargo doors lateral locking mechanism.

COMPLIANCE:

Required as indicated below, unless already accomplished.

- (a) Beginning 24 hours after 16 Mar. 2007, the effective date of the original issue of this AD, no aircraft may be dispatched for flight without a visual inspection before takeoff by a qualified person, to ensure that the fore and aft cargo doors are closed flush with fuselage skin, latched and locked, in accordance with approved Minimum Equipment List (MEL) procedures for cargo doors inoperative position indication, Chapter 52 "DOORS", item 70-00.
 - (1) <u>Definition</u>: For the purposes of this item, a qualified person is defined as an individual who has received special training on cargo door latching and, as listed below, shall be:
 - (i) A mechanic, or
 - (ii) A flight crew member.
- **(b)** Within 10 days after 16 Mar. 2007, the effective date of the original issue of this AD, perform the following actions on the fore and aft cargo doors:
 - (1) Remove and discard the cover plate from the door surround trim lining according to Embraer Alert Service Bulletin (ASB) No. 170-52-A036;

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- (2) Perform a detailed inspection (DET) for signs of interference of the door lock handle with the aft edge liner assembly:
 - (i) If any interference is found, rework the aft edge liner assembly according to Embraer Service Bulletin (SB) No. 170-50-0006 before further flight;
 - (ii) If no interference is found, rework the aft edge liner assembly according to Embraer SB No. 170-50-0006 within the next 150 flight cycles;
- (3) Remove the aft surround trim lining to perform a DET for signs of damage of the lateral roller fitting on the forward and aft cargo door frames at the fuselage according to Embraer ASB No. 170-52-A036:
 - (i) If any damage is found, replace the lateral roller fitting with another one bearing the same part number (P/N) before further flight;
 - (ii) If no damage is found, no immediate corrective action is required.
- (c) At intervals that do not exceed 150 flight cycles after 16 Mar. 2007, the effective date of the original issue of this AD, repeat the inspections required by item (b)(3) above.
- (d) After accomplishing the item (b) above, the visual inspection of item (a) above is no longer necessary.
- (e) Within the next 5000 flight cycles after the effective date of this revision 1 of AD, perform the following actions on the fore and aft cargo doors:
 - (1) Relocate the cargo door closed indication sensor according to Embraer SB No. 170-52-0041 original issue, or further revisions approved by the ANAC;
 - (2) Modify the cargo door lock handle mechanism and replace the fore and aft cargo door roller fittings P/N 170-92569-401 and 170-85452-401 by new ones bearing P/N 170-92569-403 and 170-85452-403, respectively, according to Embraer SB No. 170-52-0044 original issue, or further revisions approved by ANAC.
- (f) After accomplishment of the item (e) above, revise the Aircraft Maintenance Plan to include the operational (OPC) and functional (FNC) check of the fore and aft cargo doors in accordance with the Aircraft Maintenance Manual (AMM) tasks 52-31-20-720-801-A/500, 52-31-00-710-801-A/500, 52-32-20-720-801-A/500 and 52-32-00-710-801-A/500, dated 07 Dec. 2007, at intervals not to exceed 6000 flight hours.
- (g) The accomplishment of the items (e) and (f) above constitutes a terminating action to the repetitive inspections required by item (c) above.
- **NOTE 1:** For the purpose of this AD, a DET 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."
- **NOTE 2:** For the purpose of this AD, a FNC is: "A quantitative check to determine if one or more functions of an item performs within specified limits"
- **NOTE 3:** For the purpose of this AD, an OPC is: "A task to determine if an item is fulfilling its intended purpose. Since it is a failure finding task, it does not require quantitative tolerances."

The detailed instructions and procedures to accomplish this AD are described in the Embraer SB's Nos. 170-52-A036 original issue, 170-50-0006 original issue, 170-52-0041 original issue, and 170-52-0044 original issue, or in their respective further revisions approved by the ANAC.

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

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CONTACT:

For additional technical information, contact:

National Civil Aviation Agency (ANAC)

Aeronautical Products Certification Branch (GGCP)

Av. Cassiano Ricardo, 521, Bloco B, 2º andar, Parque Residencial Aquarius

Fax: 55 (12) 3797-2330

12246-870 – São José dos Campos - SP, BRAZIL.

E-mail: pac@anac.gov.br

For acquisition, contact:

National Civil Aviation Agency (ANAC)

Publications Branch

R. Santa Luzia, 651, 2º Mezanino, Centro

Fax: 55 (21) 3814-6929

20030-040 - Rio de Janeiro - RJ, BRAZIL.

E-mail: publicacoes@anac.gov.br

APPROVAL:

CLÁUDIO PASSOS SIMÃO General Manager GGCP

SOLANGE PAIVA VIEIRA Director-President ANAC

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).