



AGÊNCIA NACIONAL DE AVIAÇÃO CIVIL – BRAZIL

BRAZILIAN EMERGENCY AIRWORTHINESS DIRECTIVE

EAD No.: 2013-09-01

Effective Date: 26 Sep. 2013

The following Brazilian Emergency Airworthiness Directive (EAD), 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.

EAD No. 2013-09-01 - EMBRAER / 39-1373.

APPLICABILITY: This Emergency Airworthiness Directive (EAD) applies to Embraer S.A. Model EMB-505 airplanes, all serial numbers.

CANCELLATION / REVISION: Not applicable.

REASON: It has been found the occurrence of cracks in the stator pressure plate of the brake assembly of the airplane, which may lead to loss of brake parts in the runway, and to a reduced airplane brake capability with a possible runway excursion event. Since this condition may occur in other airplanes of the same type and affects flight safety, an immediate corrective action is required. Thus, sufficient reason exists to request compliance with this EAD in the indicated time limit without prior notice.

REQUIRED ACTION: Inspection and rework, if necessary, of the stator pressure plate of the Left Hand (LH) and Right Hand (RH) brake assemblies.

COMPLIANCE: Required as indicated below, unless already accomplished.

Before the next flight after the effective date of this EAD, inspect the airplane to determine if the affected brake assembly Part Number (P/N) P/N DAP00097-01 or DAP00097-02 is installed. If the affected P/N is installed do the actions required by paragraphs (a), (b) and (c) of this EAD, otherwise no action is required.

- (a) For brake assemblies which have logged up to 149 Cycles Since New (CSN) or Cycles Since Overhaul (CSO) or Cycles Since Repair (CSR), no action is required until the brake assembly reaches 150 FC.
- (b) For brake assemblies which have logged between 150 and 300 CSN or CSO or CSR, perform a General Visual Inspection (GVI) for cracks in the stator pressure plate on both LH and RH brake assemblies, within the next 30 FC.
 - (1) If any crack was found in the stator pressure plate, remove the wheel and perform a Detailed Inspection (DET) on it.
 - (i) In case any crack beyond the acceptable limits is detected, as described in the Figure 3 (sheet 02 of 02) of Embraer Alert Service Bulletin No. 505-32-A011, before further flight, repair the brake assembly according to the detailed instructions and procedures described in Embraer Alert Service Bulletin No. 505-32-A011; or replace the non-airworthy brake assembly with an airworthy brake assembly.
 - (ii) In case no crack beyond the acceptable limits is detected, as described in the Figure 3 (sheet 02 of 02) of the Embraer Alert Service Bulletin No. 505-32-A011, repeat the GVI required by paragraphs (b) of this EAD at intervals that do not exceed 60 FC or the next tire change, whichever occurs first.

- (2) If no cracks were found, repeat the GVI required by paragraphs (b) of this EAD at intervals that do not exceed 60 FC or the next tire change, whichever occurs first.
- (c) For brake assemblies which have logged more than 300 CSN or CSO or CSR, perform a General Visual Inspection (GVI) for cracks in the stator pressure plate on both LH and RH brake assemblies, within the next 10 FC.
- (1) If any crack was found in the stator pressure plate, remove the wheel and perform a Detailed Inspection (DET) on it.
- (i) In case any crack beyond the acceptable limits is detected, as described in the Figure 3 (sheet 02 of 02) of Embraer Alert Service Bulletin No. 505-32-A011, before further flight, repair the brake assembly according to the detailed instructions and procedures described in Embraer Alert Service Bulletin No. 505-32-A011; or replace the non-airworthy brake assembly with an airworthy brake assembly.
- (ii) In case no crack beyond the acceptable limits is detected, as described in the Figure 3 (sheet 02 of 02) of the Embraer Alert Service Bulletin No. 505-32-A011, repeat the GVI required by paragraphs (b) of this EAD at intervals that do not exceed 60 FC or the next tire change, whichever occurs first.
- (2) If no cracks were found, repeat the GVI required by paragraphs (b) of this EAD at intervals that do not exceed 60 FC or the next tire change, whichever occurs first.
- (d) After the effective date of this EAD, no person may install a brake assembly, P/N DAP00097-01 or DAP00097-02, having cracks beyond the limit defined in the Figure 3 (sheet 02 of 02) of the Embraer Alert Service Bulletin No. 505-32-A011.

NOTE 1: For the purpose of this EAD, a general visual inspection (GVI) is: "A visual examination of an interior or exterior area, installation or assembly to detect obvious damage, failure or irregularity. This level of inspection is made from within touching distance, unless otherwise specified. A mirror may be necessary to enhance visual access to all exposed surfaces in the inspection area. This level of inspection is made under normally available lighting conditions such as daylight, hangar lighting, flashlight or drop-light, and may require removal or opening of access panels or doors. Stands, ladders or platforms may be required to gain proximity to the area being checked."

NOTE 2: For the purpose of this EAD, a detailed inspection (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."

The detailed instructions and procedures to do the actions required by this EAD are described in Embraer Alert Service Bulletin No. 505-32-A011, or further revisions approved by the ANAC. Record compliance with this EAD in the applicable maintenance log book.

CONTACT: For additional information, please contact the ANAC-GGCP, 12246-870 - São José dos Campos - SP, Brazil, telephone: 55 (12) 3797-2521, Fax: 55 (12) 3797-2330, E-mail: pac@anac.gov.br.

APPROVAL: Original in Portuguese language available in the files of the Aeronautical Products Certification Branch (GGCP) of the National Civil Aviation Agency (ANAC). Signed by:

HÉLIO TARQUINIO JÚNIOR
General Manager
GGCP

DINO ISHIKURA
Airworthiness Superintendent
ANAC