



**AGÊNCIA NACIONAL DE AVIAÇÃO CIVIL – BRAZIL**

## **BRAZILIAN AIRWORTHINESS DIRECTIVE**

**AD No.: 2009-05-02**

**Effective Date: 01 June 2009**

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. 2009-05-02 - EMBRAER - Amendment 39-1272.**

#### **APPLICABILITY:**

This Airworthiness Directive is applicable to Embraer model EMB-145, EMB-145ER, EMB-145 EU, EMB-145 EP, EMB-145MR, EMB-145MK, EMB-145MP, EMB-145LU, EMB-145LR, EMB-145XR, EMB-135ER, EMB-135LR, EMB-135KE and EMB-135KL airplanes in operation.

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

Not applicable.

#### **REASON:**

Reassessment of the damage tolerance analysis resulted in threshold reduction for some Structure Significant Items (SSI) of the Maintenance Review Board Report (MRBR) Airworthiness Limitations Items (ALI). Failure to inspect these structural components, according to the new threshold, could prevent a timely detection of fatigue cracking. These cracks, if not properly addressed, could adversely affect the structural integrity of the airplane.

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:**

Modification of the airplane approved maintenance program.

#### **COMPLIANCE:**

Required as indicated below, unless already accomplished.

Within the next 90 days after 01 June 2009, the effective date of this AD, modify the airplane approved maintenance program to include the SSI with the tasks presented in the table below, with the thresholds and intervals stated in the applicable MRBR revision observing, for each task, the accomplishment of the associated service bulletins (pre and pos-modification condition). If necessary, the grace period specified in the table below may be used.

Applicability	MRBR Revision	SSI Number	Grace Period
Embraer model EMB-145; EMB-145ER; EMB-145EU; EMB-145EP; EMB-145MR; EMB-145MK; EMB-145MP; EMB-145LU; EMB-145LR; EMB-135ER; EMB-135LR; EMB-135KE and EMB-135KL airplanes.	MRB-145/1150 Appendix 2 – Airworthiness Limitation Requirements, Revision 12, dated 20 June 2008, or further MRBR revisions approved by ANAC.	SSI 54-50-03 – Forward Engine Mounts (including bolts). (Task 54-50-00-230-802-A00).	Not allowed.
		SSI 54-50-07 – Aft engine mounts (including bolts). (Task 54-50-00-220-808-A01).	Not allowed.
Embraer model EMB-145ER; EMB-145EU; EMB-145EP; EMB-145MR; EMB-145MK; EMB-145MP; EMB-145LU and EMB-145LR airplanes.	MRB-145/1150 Appendix 2 – Airworthiness Limitation Requirements, Revision 12, dated 20 June 2008, or further MRBR revisions approved by ANAC.	SSI 57-26-95 – Aft Upper trunnion (Part Numbers – P/Ns: 145-67014-001; 145-67014-002; 145-67014-003; 145-67014-004; 145-67014-005; 145-67014-006; 145-67014-007; 145-67014-008; P/Ns 145-67014-011 and 145-67014-012). (Tasks 57-26-00-250-815-A00; 57-26-00-250-815-A01; 57-26-00-250-813-A00; and 57-26-00-250-813-A02).	Follow the implementation plan presented on MRB-145/1150, Appendix 2, A.2.3.2.3.1 “FATIGUE THRESHOLD REDUCED”.
Embraer model EMB-145; EMB-145ER; EMB-145EU; EMB-145EP; EMB-145MR; EMB-145MK; EMB-145MP; EMB-145LU; EMB-145LR; EMB-145XR; EMB-135ER; EMB-135LR; EMB-135KE and EMB-135KL airplanes.	MRB-145/1150 Appendix 2 – Airworthiness Limitation Requirements, Temporary Revision 12-1, dated 27 November 2008, or further MRBR revisions approved by ANAC.	SSI 57-10-11 – Rib 4 – Lower flange and web (Tasks 57-10-00-250-801-A00 and 57-10-00-250-801-A01, as applicable).	500 Flight Cycles (FC) since 01 June 2009, the effective date of this AD, for airplanes which have logged more than 23100 FC.

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

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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).