



REPÚBLICA FEDERATIVA DO BRASIL  
AGÊNCIA NACIONAL DE AVIAÇÃO CIVIL – ANAC

**BRAZILIAN AIRWORTHINESS DIRECTIVE**

**AD No.: 2005-08-04R1**

**Effective Date: 27 July 2006**

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. 2005-08-04R1 - EMBRAER - Amendment 39-1144.**

**APPLICABILITY:**

This Airworthiness Directive is applicable to all Embraer EMB-145() and EMB-135() aircraft models in operation.

**CANCELLATION / REVISION:**

This AD cancels and supersedes the AD No. 2005-08-04 – Amdt 39-1088, dated 05 Sep. 2005, and is being issued to cancel the repetitive inspection of the K0057 relay, to include a new corrective action and to change the compliance time.

**REASON:**

It has been found the occurrence of smoke on the flight deck originated from the overheating of the Pitot 3 heating relay socket contact pins in contact with the direct-vision windowsill drain hoses, resulting in the burning of that hose.

Since this condition exists 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:**

Detailed visual inspection of the Pitot 3 relay K0057 and relay socket XK0057; modification of the relay socket XK0057; and, replacement of the direct-vision windowsill drain hoses by others made with an improved material.

**COMPLIANCE:**

Required as indicated below, unless already accomplished.

- (a) Within the next 600 flight hours or 6 calendar months after the effective date of this AD, whichever occurs first:
- (1) Perform a detailed inspection on the Pitot 3 heating relay K0057 and its socket XK0057, according to the Embraer Service Bulletins Nos. 145-30-A050, original issue, or 145LEG-30-A017, original issue, or further revisions approved by the ANAC;
  - (2) The relay socket XK0057, which have passed all steps of the inspection required by subitem (1) above, or a new relay socket, must have its contact pins A1 and C1 replaced by new contact pins P/N M39029/92-536, and be re-identified from XK0057 to XK1237, according to the Embraer Service Bulletins Nos. 145-30-A050, original issue, or 145LEG-30-A017, original issue, or further revisions approved by the ANAC; and
  - (3) Replace the RH direct-vision windowsill drain hoses according to the instructions of Part I of the Embraer Service Bulletins Nos. 145-30-0041 Rev. 01 or 145LEG-30-0011 Rev. 01, or further revisions approved by the ANAC.

(b) Within the next 1200 flight hours or 12 calendar months after the effective date of this AD, whichever occurs first, replace the LH direct-vision windowsill drain hoses, according to the instructions of Part II of the Embraer Service Bulletins Nos. 145-30-0041 Rev. 01 or 145LEG-30-0011 Rev. 01, or further revisions approved by the ANAC.

**NOTE:** For the purpose of this AD, 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 accomplish this AD are described in the Embraer Service Bulletins Nos. 145-30-0041 Rev. 01 and 145-30-A050, original issue, or 145LEG-30-0011 Rev. 01 and 145LEG-30-0017, original issue, or further revisions approved by the ANAC.

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

**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 Agency of Civil Aviation (ANAC).