



AGÊNCIA NACIONAL DE AVIAÇÃO CIVIL – BRAZIL

BRAZILIAN AIRWORTHINESS DIRECTIVE

AD No.: 2001-04-02R3

Effective Date: 13 July 2007

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. 2001-04-02R3 - EMBRAER - Amendment 39-1186.

APPLICABILITY:

This Airworthiness Directive is applicable to all Embraer EMB-145() and EMB-135() aircraft models, equipped with APU Hamilton Sundstrand model T-62T-40C14 (APU 500R) in conjunction with APU tail cone part numbers (P/N) 145-41400-401, -403, -601, -605 or -607; 145-41409-401, -403, -405, -407, -601, -603, -605 or -607; 145-47496-401, -403, -405 or -407; or 145-50480-401.

CANCELLATION / REVISION:

This AD cancels and supersedes the AD No. 2001-04-02R2 – Amdt. 39-908, dated 29 June 2001, and is being issued to include the affected APU tail cone part numbers in the Applicability Section.

REASON:

It has been found the occurrence of APU flames back flow into the APU compartment through the exhaust eductor during in flight APU starts.

Since this condition may occur in other aircraft 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:

PART I: Installation of a placard on the main instrument panel; and, inclusion of the corresponding limitation in the applicable AFM; or,

PART II: Installation of a flush type APU air inlet; installation of APU exhaust silencer; dimensional inspection of tail cone; installation of a new placard on the main instrument panel; and, inclusion of a new limitation on the Limitations Section of the AFM.

COMPLIANCE:

Required as indicated below, unless already accomplished.

PART I: Before further flight after 06 June 2001, the effective date of the Revision 01 of this AD:

(a) Install the following placard on the main instrument panel:

“CAUTION: IN-FLIGHT APU STARTS ARE PROHIBITED”

(b) Include this limitation in the Limitations Section of the applicable AFM, restricting APU starting to ground conditions only.

The detailed instructions and procedures to accomplish with Part I of this AD are described in the Embraer Service Bulletin No. 145-49-0017 original issue, or further revisions approved by the ANAC.

PART II: At any time:

- (a) Install a flush type APU air inlet; install an APU exhaust silencer; dimensionally inspect the tail cone; and, replace the placard previously installed on the main instrument panel by the following placard:

“IN FLIGHT APU STARTS ARE LIMITED TO FLIGHT ENVELOPE UP TO 15KFT/320KIAS (NORMAL APU STARTS) OR 15KFT/200KIAS (BATTERY SUPPORT ONLY)”

- (b) Remove the limitation incorporated in the AFM by the original version of this AD and insert the new limitation, reproducing the above placard, in the Limitations Section of the applicable AFM.

The detailed instructions and procedures to accomplish with Part II of this AD are described in the Embraer Service Bulletins Nos. 145-49-0009 Rev. 03 and 145-49-0017 original issue, or further revisions approved by the ANAC.

NOTE: Incorporation of Embraer Service Bulletin No. 145-49-0018 original issue, or further revisions approved by ANAC, along with Embraer Service Bulletin No. 149-49-0009 Rev. 03, or further revisions approved by ANAC, is considered the final solution for the APU compartment flames back flow problem. Therefore, all limitations imposed to the APU in-flight start envelope by this AD are not applicable anymore to aircraft incorporating the above mentioned Service Bulletins.

Record compliance with Part I, Part II or Terminal action of this AD in the applicable maintenance log book.

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).