



AGÊNCIA NACIONAL DE AVIAÇÃO CIVIL – BRAZIL

BRAZILIAN AIRWORTHINESS DIRECTIVE

AD No.: 2010-11-01

Effective Date: 20 Dec. 2010

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. 2010-11-01 - EMBRAER - Amendment 39-1325.

APPLICABILITY:

This Airworthiness Directive (AD) applies to Embraer Empresa Brasileira de Aeronáutica S.A. model EMB-500 airplanes of serial numbers 50000005 thru 50000175, 50000177 and, 50000178, that are equipped with Angle of Attack (AOA) sensors part number (P/N) C-100117-2 and cover plates P/N 500-01702-401 and/or P/N 500-01702-402.

CANCELLATION / REVISION:

Not applicable.

REASON:

It has been found that moisture may accumulate and freeze, under certain conditions, in the gap between the AOA vane base assembly and the stationary ring of the sensor's body. If freezing occurs both AOA sensors may get stuck and the Stall Warning Protection System (SWPS) will be no longer effective without alerting. This may result in inadvertent aerodynamic stall and loss of controllability of the airplane.

Since this condition may occur in other airplanes 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:

Replacement of both AOA sensors and its cover plate.

COMPLIANCE:

Required as indicated below, unless already done.

Within 12 month or 300 flight hours after the effective date of this AD, whichever occurs first, replace the left hand (LH) and the right hand (RH) AOA sensors P/N C-100117-2 by another ones bearing P/N C-100117-3 and; replace the LH cover plate P/N 500-01702-401 and the RH cover plate P/N 500-01702-402 by another ones bearing P/N 500-01702-403 and P/N 500-01702-404 respectively.

The detailed instructions and procedures to accomplish this AD are described in Embraer Service Bulletin No. 500-27-0006, original issuance, 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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APPROVAL:

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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).