AGÊNCIA NACIONAL DE AVIAÇÃO CIVIL – BRAZIL

BRAZILIAN AIRWORTHINESS DIRECTIVE

AD No.: 2010-08-02 **Effective Date: 20 sep. 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. 2010-08-02 – EMBRAER – Amendment 39-1313.

APPLICABILITY:

This Airworthiness Directive is applicable to EMBRAER model ERJ 190-100 ECJ, ERJ 190-100 IGW, ERJ 190-100 LR, ERJ 190-100 STD, ERJ 190-100 SR, ERJ 190-200 IGW, ERJ 190-200LR and ERJ 190-200 STD, all airplanes.

CANCELLATION / REVISION:

Not applicable.

REASON:

This AD results from reports that the pylon internal shear pin was found cracked during a regular check. Further investigation revealed that the failure occurred due to hydrogen embrittlement. The ANAC is issuing this AD to prevent insufficient strength of the pylon to wing attachment, which in combination with an engine imbalance caused by a fan blade out could cause pylon to wing attachment failure and consequent engine separation.

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 the pylon shear pins part numbers (P/N) 190-15178-003 and P/N 190-15181-003.

COMPLIANCE:

Required as indicated below, unless already accomplished.

(a) Except for the ERJ-190-100 ECJ airplane model, within the next 3000 Flight Hours after the effective date of this AD, replace the internal shear pins P/N 190-15178-003 and P/N 190-15181-003 of the Rear Outboard and Rear Inboard Shear Pin Assembly in the right hand and left hand pylons by another ones bearing P/N 190-15178-005 and P/N 190-15181-005 respectively.

(b) For the ERJ-190-100 ECJ airplane model, within the next 3000 flight hours or 12 months after the effective date of this AD, whichever occurs first, replace the internal shear pins P/N 190-15178-003 and P/N 190-15181-003 of the Rear Outboard and Rear Inboard Shear Pin Assembly in the right hand and left hand pylons by another ones bearing P/N 190-15178-005 and P/N 190-15181-005 respectively.

(c) Actions accomplished before the effective date of this AD: the installation of internal shear pins P/N 190-15178-005 and P/N 190-15181-005 of the Rear Outboard and Rear Inboard Shear Pin Assembly in the right hand and left hand pylons respectively, as per Aircraft Maintenance Manual (AMM) TASK 54-50 -00-400 revision 19, dated

July 15, 2010 is considered acceptable for compliance with the corresponding actions specified in this AD.

The detailed instructions and procedures to accomplish this AD are described in the Embraer Service Bulletin (SB) No.190-54-0010, original issue, or in the SB No. 190LIN-54-0001, original issue, as applicable, or further revisions approved by the ANAC.

Record compliance with 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).