



## AGÊNCIA NACIONAL DE AVIAÇÃO CIVIL – BRAZIL

### BRAZILIAN AIRWORTHINESS DIRECTIVE

**AD No.: 2006-11-01R2**

**Effective Date: 25 Feb. 2008**

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. 2006-11-01R2 - EMBRAER - Amendment 39-1209.**

#### **APPLICABILITY:**

This Airworthiness Directive is applicable to all Embraer ERJ-190 aircraft models in operation and equipped with low pressure check valves (LPCV) Hamilton Sundstrand part number (P/N) 1001447-3.

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

This AD cancels and supersedes the AD No. 2006-11-01R1 – Amdt 39-1175, dated 21 Mar. 2007, and is being issued to change its required action, the compliance time and to include a terminating action.

#### **REASON:**

It has been found the occurrence of an engine in-flight shutdown caused by the LPCV failing to close due to excessive wear, which leads to the concern that such fault may be present in both engines of a given aircraft.

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 right hand (RH) and left hand (LH) LPCVs; and revision of the approved maintenance plan.

#### **COMPLIANCE:**

Required as indicated below, unless already accomplished.

- (a) Within the next 100 flight hours (FH) after 22 Nov. 2006, the effective date of the original issue of this AD, on aircraft logging 1500 FH or above, replace the RH LPCV of P/N 1001447-3 by a new one of same P/N. Repeat this replacement at intervals that do not exceed 1500 FH.
- (b) Within the next 600 FH after 21 Mar. 2007, the effective date of this revision 1 of AD, on aircraft logging 1500 FH or above, replace the LH LPCV P/N 1001447-3 by a new one of same P/N. Repeat this replacement at intervals that do not exceed 1500 FH.
- (c) Replacement of LPCV P/N 1001447-3 by a new one bearing P/N 1001447-4 is considered a terminating action for the repetitive replacements required by items (a) and (b) above.
- (d) Within the next 180 days after the accomplishment of item (c) above, or before any LPCV P/N 1001447-4 installed reaches 1500 FH, whichever occurs first, revise the approved maintenance plan to include the maintenance task No. 36-11-02-002 (Functional Check - Low Stage Bleed Check Valve, Category 8), according to the Maintenance Review Board Report (MRBR) Revision 4 dated 31 May 2007, with the intervals established in that document, or its further revisions approved by ANAC.

(e) After the effective date of this revision 2 of AD, any LPCV P/N 1001447-3 that have accumulated more than 1500 FH on models ERJ-190, or that have accumulated a total of FH equivalent to 1500 FH considering its utilization on models ERJ-170 and ERJ-190, cannot be re-installed.

**NOTE:** To calculate the equivalent number of FH for a LPCV P/N 1001447-3 to be installed on aircraft models ERJ-190, the FH accumulated in operation on aircraft models ERJ-170 must be multiplied by a factor of 0,5 (50%).

The detailed instructions and procedures to accomplish this AD are described in the Embraer Service Bulletins Nos. 190-36-0004 original issue, or 190-36-0006 original issue, as applicable, or respective 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).