



AGÊNCIA NACIONAL DE AVIAÇÃO CIVIL – BRAZIL

BRAZILIAN AIRWORTHINESS DIRECTIVE

AD No.: 2006-07-03R1

Effective Date: 04 Jan. 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. 2006-07-03R1 - EMBRAER - Amendment 39-1163.

APPLICABILITY:

This Airworthiness Directive is applicable to Embraer EMB-135BJ aircraft model in operation.

CANCELLATION / REVISION:

This AD cancels and supersedes the AD No. 2006-07-03 – Amdt 39-1148, dated 23 Aug. 2006, and is being issued to correct the P/Ns of some bonding jumpers, support assemblies and transfer lines tubes.

REASON:

It has been found the possibility of occurrence of sparks due to chaffing between the harnesses of the forward and aft auxiliary fuel tanks, between some of these harnesses to the aircraft structure, or between some of these harnesses to some mechanical component, which may lead to a possible ignition source in the vicinity of these fuel tanks.

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:

Rework, modification and re-identification of the aft and forward auxiliary fuel tanks.

COMPLIANCE:

Required as indicated below, unless already accomplished.

- (a) Within the next 5000 flight hours after 23 Aug. 2006, the effective date of the original issue of this AD, carry out the modifications in the forward auxiliary fuel tank according to items (1) thru (9) below:
- (1) Protect the low level switch harness using the hose protector bearing P/N AE208-4, and reroute its harness and the fuel pumps A and B harnesses, as well;
 - (2) Install bonding jumper P/N PE88074-C004BB on pilot valve tubes assembly bearing P/N 135-02653-401 and 135-02654-401; reinstall bonding jumper P/N PE88074-C006BB; and install bonding jumper P/N PE88074-C005BB (1 position) and PE88074-C006BB (1 position) together on pilot lines tubes bearing P/N 135-05028-401 and 135-06425-401, on refuel/defuel tubes bearing P/N 135-05044-401 and 135-07980-401, and on existing holes of the forward auxiliary fuel tank rib 9;
 - (3) Install bonding jumper P/N PE88074-C006BB (1 position) on vent line tube bearing P/N 135-07982-401 and on support of probe-fuel indicator bearing P/N 028-065-002;
 - (4) Install bonding jumper P/N PE88074-C006BB (1 position) on vent line tube bearing P/N 135-07982-401 and on existing hole of the forward auxiliary fuel tank rib 8;
 - (5) Reinstall bonding jumper P/N PE88074-C006BB (3 positions) and install bonding jumper P/N PE88074-C004BB (2 positions) on pilot line tube bearing P/N 135-06425-401, on refuel/defuel tube bearing P/N 135-07980-401, and on existing holes of the forward auxiliary fuel tank rib 8;
 - (6) Install bonding jumper P/N PE88074-C006BB (2 positions) on transfer lines tubes bearing P/N 135-03513-402 and 135-03512-401, and on existing holes of the forward tank pump support;

- (7) Install bonding jumper P/N PE88074-C004BB (1 position) on transfer lines tubes bearing P/N 135-03513-402 and 135-03512-401;
 - (8) Reinstall bonding jumper P/N PE88074-C008BB and install bonding jumper P/N PE88074-C008BB (1 position) on refuel/defuel tube bearing P/N 135-05044-401, and on forward auxiliary fuel tank rib 10 support;
 - (9) Re-identify the forward auxiliary fuel tank installing a new placard bearing P/N PE16014-2.
- (b) Within the next 5000 flight hours after 23 Aug. 2006, the effective date of the original issue of this AD, carry out the modifications in the aft auxiliary fuel tanks (LH and RH sides), according to items (1) thru (6) below:
- (1) Install new support assemblies bearing P/N 135-13605-401, 135-12331-401 and 135-13621-401 (LH side), and 135-13605-402, 135-12331-403 and 135-13621-402 (RH side);
 - (2) Install the hose protection bearing P/N AE208-4 in the whole length of the low level sensor harness;
 - (3) Reroute the electrical harnesses in the support assemblies bearing P/N 135-13605-401 and 135-13621-401 (LH side), and 135-13605-402 and 135-13621-402 (RH side);
 - (4) Reroute the electrical harnesses in the support assembly bearing P/N 135-12331-401 (LH side) and 135-12331-403 (RH side), on support assembly bearing P/N 135-13605-401 (LH side) and 135-13605-402 (RH side), on support assembly bearing 135-13621-401 (LH side) and 135-13621-402 (RH side), and on tube assembly;
 - (5) Electrically bond the aft tank refuel solenoid valves and transfer solenoid valve support surfaces; and
 - (6) Re-identify the aft auxiliary fuel tanks (LH and RH sides) installing a new placard bearing P/N PE16014-2.

The detailed instructions and procedures to accomplish this AD are described in the Embraer Service Bulletin No. 145LEG-28-0022, original issue, or further revisions approved by the ANAC.

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

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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).