



SERVIÇO PÚBLICO FEDERAL
DEPARTAMENTO DE AVIAÇÃO CIVIL

BRAZILIAN AIRWORTHINESS DIRECTIVE

EFFECTIVE DATE

03 Sep. 2004

AD No.:

2004-08-02

The following Airworthiness Directive (AD), issued by the Departamento de Aviação Civil (DAC) 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. 2004-08-02 - EMBRAER - Amendment 39-1039.

APPLICABILITY:

This Airworthiness Directive is applicable to all Embraer EMB-145() and EMB-135() aircraft models in operation, equipped with main landing gear P/N 2309-2002-001, -002, -003, -004, -005, -006, -009, -010, -501, -502, -503, -504, -505, -506, -507, -508, -509, -510, -511, or -512, or P/N 2309-3002-501, -502, -503, -504, -505, -506, -507, -508, -509, or -510, with a cardan assembly P/N 2309-2041-003 installed on it.

CANCELLATION / REVISION:

Not applicable.

REASON:

It has been found the occurrence of a fracture of the main landing gear trailing arm axle due to internal corrosion on the axle, which can result in an accident during landing or take-off run due to the disconnection between the shock absorber and the trailing arm.

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:

Inspection of the main landing gear trailing arm and replacement of the cardan.

COMPLIANCE:

Required as indicated below, unless already accomplished.

Within the next 600 flight hours or 180 calendar days after the effective date of this AD, whichever occurs first, perform a detailed visual inspection of the main landing gear trailing arm for the integrity of the sealant and bruising at the trailing arm surface.

- (a) If any sign of sealant failure or bruising at the trailing arm surface is found, replace the cardan P/N 2309-2041-003 with another one bearing P/N 2309-2041-401, perform a detailed visual inspection of the internal surface of the pivot axle of the trailing arm for corrosion, and repair the bruising of the trailing arm surface, as necessary, according to the CMM, before next flight. If any sign of corrosion is found, replace pin P/N 2309-2050-003 with a new one bearing the same P/N and apply corrosion protection on the pin before returning the aircraft to flight.

- (b) If no sign of sealant failure or bruising is found, repeat the detailed visual inspection of the main landing gear trailing arm in intervals no longer than 5500 flight hours or 24 calendar months, whichever occurs first, until the replacement of the cardan P/N 2309-2041-003 with another one bearing P/N 2309-2041-401 and the detailed visual inspection of the internal surface of the pivot axle of the trailing arm for corrosion, according to item (a) above, are done.

The detailed instructions and procedures to accomplish this AD are described in the Embraer Service Bulletin No. 145-32-0091, original issue, or further revisions approved by the CTA.

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

CONTACT:

For additional technical information, contact:

Centro Técnico Aeroespacial - CTA
Instituto de Fomento e Coordenação Industrial - IFI
Divisão de Homologação Aeronáutica - FDH
Praça Mal. Eduardo Gomes, 50 - Vila das Acácias
Caixa Postal 6001
Fax: 55 (12) 3941-4766
12231-970 - São José dos Campos - SP, BRAZIL.
e-mail: pds@ifi.cta.br

For acquisition, contact:

Departamento de Aviação Civil - DAC
Seção de Publicações do DAC (4GAB-4)
R. Santa Luzia, 651, 2º Mezanino, Centro
Fax: 55 (21) 3814-6929
20030-040 - Rio de Janeiro - RJ, BRAZIL.
e-mail: publicacoes@dac.gov.br

APPROVAL:

CLÁUDIO PASSOS SIMÃO - Ten.-Cel.-Eng.
Chief of the Aeronautical Certification Division
IFI/CTA

VENÂNCIO ALVARENGA GOMES - Cel.-Eng.
Director of the Industrial Coordination and Fostering Institute
CTA

NOTE: Original in Portuguese language signed and available in the files of the Registro Geral de Aeronavegabilidade (RGA/TE-1/STE) of the Departamento de Aviação Civil.