



AGÊNCIA NACIONAL DE AVIAÇÃO CIVIL - BRAZIL

BRAZILIAN AIRWORTHINESS DIRECTIVE

AD No.: 2023-02-01R1

Effective Date: 14 Mar. 2023

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 da Aviação Civil (RBAC) 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. 2023-02-01R1- EMBRAER / 39-1515.

APPLICABILITY:

This Airworthiness Directive (AD) applies to Embraer S.A. airplanes model EMB-505, as specified in Embraer Service Bulletin (SB) N.505-22-0004, Revision 04, dated January 06, 2023.

CANCELLATION / REVISION:

This AD cancels and supersedes the AD No. 2023-02-01 / 39-1507, dated 06 Feb. 2023, and is being issued to include new associated service documents and fix its applicability.

REASON:

It has been found the occurrence of corrosion in the clutch retaining bolt of aileron autopilot servo mount of the airplane. A clutch retaining bolt failure can disengage the clutch from the drive pin and jam the aileron controls, which may affect the airplane controllability.

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 aileron autopilot servo mount clutch retaining bolt and washer.

COMPLIANCE:

Required as indicated below, unless already accomplished.

(a) Replacement of the aileron autopilot servo mount clutch retaining bolt and washer.

Within the applicable intervals established in the "Table 01 - Compliance intervals and limitations" of this AD, replace the aileron autopilot servo mount clutch retaining bolt with Part Number (P/N) 211-00090-03 by a new one bearing the same P/N 211-00090-03 or by a new one bearing a new P/N AN3-10A, and washer with P/N 212-00035-10 by a new one bearing a new P/N 212-00203-04 or a new P/N MS35338-43.

Table 01 - Compliance intervals and limitations.

Applicable airplane Flight Hours Since New (FHSN) and Time Since New (TSN), in months (MO), intervals.	Accomplishment interval.	Limitations (whichever occurs first).
(1) More than 144 TSN, or; More than 3,800 FHSN and more than 84 TSN, or; More than 5,500 FHSN.	(a) Within the next 3 MO or 50 FH, whichever occurs first, after 06 Feb. 2023, the effective date of the original revision of this AD.	(i) Not applicable.
(2) More than 3,800 FHSN up to 5,500 FHSN and less than 84 TSN.	(a) Within the next 6 MO or 200 FH, whichever occurs first, after 06 Feb. 2023, the effective date of the original revision of this AD.	(i) Limited to 87 TSN or 5,550 FHSN, whichever occurs first, or; (ii) Before accumulating 50 FH after 84 TSN, or; (iii) Before accumulating 3 MO after 5,500 FHSN.
(3) More than 1,200 FHSN up to 3,800 FHSN and more than 48 TSN up to 144 TSN.	(a) Within the next 6 MO or 200 FH, whichever occurs first, after 06 Feb. 2023, the effective date of the original revision of this AD.	(i) Limited to 147 TSN, or; (ii) Before accumulating 3,850 FHSN after 84 TSN, or; (iii) Before accumulating 3 MO after 3,800 FHSN and 84 TSN.

<p>(4) Less than 3,800 FHSN and more than 36 TSN up to 48 TSN.</p>	<p>(a) Within the next 9 MO or 600 FH, whichever occurs first, after 06 Feb. 2023, the effective date of the original revision of this AD.</p>	<p>(i) Limited to 54 TSN or 4,000 FHSN, whichever occurs first, or; (ii) Before accumulating 6 MO after 1,200 FHSN and 48 TSN, or; (iii) Before accumulating 200 FH after 1,200 FHSN and 48 TSN, or; (iv) Before accumulating 6 MO after 3,800 FHSN.</p>
<p>(5) Less than 1,200 FHSN and more than 48 TSN up to 144 TSN.</p>	<p>(a) Within the next 9 MO or 600 FH, whichever occurs first, after 06 Feb. 2023, the effective date of the original revision of this AD.</p>	<p>(i) Limited to 147 TSN or 1,400 FHSN, whichever occurs first, or; (ii) Before accumulating 50 FH after 144 TSN; or; (iii) Before accumulating 6 MO after 1,200 FHSN, or; (iv) Before accumulating 200 FH after 1,200 FHSN.</p>

NOTE: If the airplane operation age and/or the flight hours criteria change before the SB accomplishment, the most restrictive criteria must be obeyed.

(b) Repetitive replacement.

Replace the aileron autopilot servo mount clutch retaining bolt with P/N 211-00090-03 or with P/N AN3-10A by a new one with P/N 211-00090-03 or with P/N AN3-10A, and the washer with P/N 212-00203-04 or with P/N MS35338-43 by a new one with P/N 212-00203-04 or with P/N MS35338-43, at intervals that do not exceed 36 months after the first replacement according to the paragraph **(a)** of this AD.

(c) Credit for previous actions.

This paragraph provides credit for the actions specified in paragraph **(a)** of this AD, if those actions were performed before February 06, 2023, the effective date of the original issue of this AD, using Embraer Service Bulletin (SB) No. 505-22-0004, Original Revision, dated September 22, 2022, or Embraer Service Bulletin (SB) No. 505-22-0004, Revision 01, dated September 23, 2022, or Embraer Service Bulletin (SB) No. 505-22-0004, Revision 02, dated September 30, 2022, or Embraer Service Bulletin (SB) No. 505-22-0004, Revision 03, dated October 10, 2022.

(d) Alternative methods of compliance (AMOCs).

A different method or a different compliance time, with the requirements of this AD, may be used if approved by the Manager of the Continuing Airworthiness Technical Branch (GTAC) of ANAC.

(e) Material incorporated by reference.

You must use the Embraer SB N.505-22-0004, Revision 04, dated January 06, 2023, or further revisions approved by ANAC, to do the actions required by this AD, unless this AD specifies otherwise.

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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NOTA: Original in Portuguese language signed and available in the files of the Continuing Airworthiness Technical Branch (GTAC) of the National Civil Aviation Agency (ANAC).