



Airworthiness Directive

AD No.: 2018-0234R3

Issued: 22 January 2021

Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EU) 2018/1139 on behalf of the European Union, its Member States and of the European third countries that participate in the activities of EASA under Article 129 of that Regulation.

This AD is issued in accordance with Regulation (EU) 748/2012, Part 21.A.3B. In accordance with Regulation (EU) 1321/2014 Annex I, Part M.A.301, the continuing airworthiness of an aircraft shall be ensured by accomplishing any applicable ADs. Consequently, no person may operate an aircraft to which an AD applies, except in accordance with the requirements of that AD, unless otherwise specified by the Agency [Regulation (EU) 1321/2014 Annex I, Part M.A.303] or agreed with the Authority of the State of Registry [Regulation (EU) 2018/1139, Article 71 exemption].

Design Approval Holder's Name:

AIRBUS

Type/Model designation(s):

A350 aeroplanes

Effective Date: Revision 3: 05 February 2021
 Revision 2: 24 September 2019
 Original Issue and Revision 1: 13 November 2018

TCDS Number(s): EASA.A.151

Foreign AD: Not applicable

Revision: This AD revises EASA AD 2018-0234R2 dated 17 September 2019.

ATA 78 – Exhaust – Thrust Reverser Actuators – Greasing / Master Minimum Equipment List Restriction – Amendment

Manufacturer(s):

Airbus

Applicability:

Airbus A350-941 and A350-1041 aeroplanes, all manufacturer serial numbers.

Definitions:

For the purpose of this AD, the following definitions apply:

Affected TRA Batch 01: Thrust reverser actuators (TRA), having Part Number (P/N) 351D9908-657, P/N 351D9908-659 or P/N 351D9908-661.

Affected TRA Batch 02: TRA, having P/N 351D9908-689, P/N 351D9908-691 or P/N 351D9908-693.

Serviceable TRA: An affected TRA Batch 01 or Batch 02 that is new (never installed), or has been refurbished; or an affected TRA Batch 01 that has not exceeded the limits specified in Table 3 of this AD, as applicable, depending on the TRA condition.



Refurbished: Repaired in-shop by (or by a company authorized by) Goodrich, a process including replacement of the ball and re-setting the TRA's time in service to zero (0) FC.

The AOT: Airbus Alert Operators Transmission (AOT) A78P001-18.

The FOT: Flight Operators Transmission (FOT) Ref. 999.0083/18.

The MER: Airbus A350 Master Minimum Equipment List (MMEL), Major Event Revision (MER), dated 22 October 2018.

The Goodrich SB: Goodrich Service Bulletin (SB) RA35078-048.

Airbus date of manufacture: The date of transfer of title (ownership) of the aeroplane upon delivery by Airbus to the first operator.

Reason:

Operators of A350 aeroplanes have reported some occurrences of TRA jamming. Further investigation results indicated that the ball bearings inside the TRA are suffering from corrosion due to lack of grease and are degrading with time.

This condition, if not corrected, could lead to an inadvertent thrust reverser sleeve deployment, possibly resulting in reduced control or performance of the aeroplane.

To address this potential unsafe condition, Airbus issued the AOT to provide instructions for repetitive TRA greasing to prevent actuator ball bearings degradation, and the MER that incorporates temporary restrictions of the MMEL items related to thrust reverser actuation system. The AOT also provided instructions to replace certain affected TRA, depending on condition and previously applied greasing.

For the reasons described above, EASA issued AD 2018-0234 (later revised) to require implementation of certain dispatch restrictions. That AD also required repetitive greasing of each affected TRA and a one-time replacement of certain affected TRA, depending on condition.

Since EASA AD 2018-0234R2 was issued, the greasing task for certain affected TRA (Batch 02) was transferred into the Airbus A350 Airworthiness Limitations Section (ALS) Part 4 Revision 05 issue 2. Compliance with the tasks contained in that document is required by EASA AD 2020-0211. The AOT was amended to reflect the transfer of the greasing task.

This AD is revised accordingly, removing the repetitive greasing of affected TRA Batch 02 from this AD to avoid duplicated requirements.

Required Action(s) and Compliance Time(s):

Required as indicated, unless accomplished previously:



MMEL Changes / Dispatch Restrictions:

- (1) Within 30 days after 13 November 2018 [the effective date of the original issue of this AD], implement the MMEL changes, as specified in the FOT, in accordance with the instructions of the MER, inform all flight crews, and, thereafter, operate the aeroplane accordingly.

Concurrent Maintenance Requirement:

- (2) Concurrently with the MMEL update as required by paragraph (1) of this AD, implement or replace the related MP listed in Table 1 of this AD which have been temporarily revised, inform all maintenance staff, and, thereafter, accomplish maintenance on the aeroplane accordingly.

Table 1 – Updated MP related to MMEL Item 78-09-01A (see Note 1 of this AD)

MP Task No.	MP Task Description
A350-A-78-3X-XX-05001-560A-A	Confirmation of the T/R Tertiary Lock Monitoring System Functionality
A350-A-78-3X-XX-03001-560A-A	Deactivation of the T/R Locking System
A350-A-78-3X-XX-03001-760A-A	Reactivation of the T/R Locking System

Note 1: The tasks specified in Table 1 of this AD were available under Airbus AirNav as temporary revision since 19 October 2018, before EASA AD 2018-0234 original issue was published. These were subsequently integrated with the November 2018 revision.

Repetitive Greasing:

- (3) Within the compliance time specified in Table 2 of this AD and, thereafter, at intervals not exceeding the values specified in Table 2 of this AD, accomplish greasing (see Note 2 of this AD) of each affected TRA Batch 01 in accordance with the instructions of the AOT and the instructions of the Goodrich SB.

Table 2 – Affected TRA Batch 01 Greasing

Compliance Time (whichever occurs later, A or B)	Inspection interval
A: Before exceeding 250 flight cycles (FC) since Airbus date of manufacture or since installation	4 months or 250 FC, whichever occurs first
B: Within 250 FC after 13 November 2018 [the effective date of original issue of this AD]	

Note 2: The initial and repetitive greasing of an affected TRA as required by paragraph (3) of this AD can also be accomplished in-shop in accordance with the instructions of the Goodrich SB.

Affected TRA Batch 01 Replacement:

- (4) Within the compliance time specified in Table 3 of this AD, as applicable, replace each affected TRA with a serviceable TRA, as defined in this AD. For replacement of an actuator, the Airbus A350 MP tasks as specified in Table 4 can be used.



Table 3 – One-time Replacement (see Note 3 of this AD) for Affected TRA Batch 01

Condition of Affected TRA Batch 01		Compliance Time
1	First greasing was performed before 500 FC, in accordance with instructions of Goodrich SB or the AOT, as applicable thereafter repeated at intervals not exceeding 250 FC	None (no replacement required)
2	First greasing was performed before 500 FC, in accordance with instructions of Goodrich SB or the AOT, as applicable thereafter repeated at intervals not exceeding 500 FC	Before exceeding 3 500 FC
3	Condition other than described in 1 or 2 above	Whichever occurs later, A or B :
		A : Before exceeding 2400 FC
		B : Within 250 FC or 4 months, whichever occurs first after 13 November 2018 [the effective date of the original issue of this AD]

Note 3: Unless specified otherwise, the FC indicated in Table 3 of this AD are those accumulated by an affected TRA since first installation of that TRA on an aeroplane.

Table 4 – Replacement of Thrust Reverser (T/R) Actuators MP tasks

Actuator	MP Task No.	Action
Locking actuator	A350-A-78-35-64-00001-520A-A	T/R Primary-Lock Actuator Removal
	A350-A-78-35-64-00001-720A-A	T/R Primary-Lock Actuator Installation
Non Locking actuator	A350-A-78-35-65-00001-520A-A	T/R and Manual Drive Actuator Removal
	A350-A-78-35-65-00001-720A-A	T/R and Manual Drive Actuator Installation
Locking Feedback actuator	A350-A-78-35-66-00001-520A-A	T/R Primary-Lock Actuator Removal
	A350-A-78-35-66-00001-720A-A	T/R Primary-Lock Actuator Installation

Terminating Action:

(5) None.

Ref. Publications:

Airbus AOT A78P001-18 Revision 01 dated 16 October 2018, or Revision 02 dated 29 April 2019, or Revision 03 dated 29 July 2019, or Revision 04 dated 17 December 2020.

Airbus A350 MMEL MER dated 22 October 2018.



Airbus FOT Ref. 999.0083/18 original issue dated 22 October 2018.

Goodrich SB RA35078-048 original issue dated 22 June 2018, or Revision 1 dated 26 October 2018, or Revision 2 dated 25 April 2019, or Revision 3 dated 29 July 2019.

MP Task No. A350-A-78-3X-XX-05001-560A-A issue date 02 November 2018.

MP Task No. A350-A-78-3X-XX-03001-560A-A issue date 02 November 2018.

MP Task No. A350-A-78-3X-XX-03001-760A-A issue date 02 November 2018.

Airbus A350 ALS Part 4 Revision 05 issue 2 dated 25 June 2020.

The use of later approved revisions of the above-mentioned documents is acceptable for compliance with the requirements of this AD.

Remarks:

1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.
2. Based on the required actions and the compliance time, EASA have decided to issue a Final AD with Request for Comments, postponing the public consultation process until after publication.
3. Enquiries regarding this AD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: ADs@easa.europa.eu.
4. Information about any failures, malfunctions, defects or other occurrences, which may be similar to the unsafe condition addressed by this AD, and which may occur, or have occurred on a product, part or appliance not affected by this AD, can be reported to the [EU aviation safety reporting system](#). This may include reporting on the same or similar components, other than those covered by the design to which this AD applies, if the same unsafe condition can exist or may develop on an aircraft with those components installed. Such components may be installed under an FAA Parts Manufacturer Approval (PMA), Supplemental Type Certificate (STC) or other modification.
5. For any question concerning the technical content of the requirements in this AD, please contact: AIRBUS A350 XWB, E-mail: continued-airworthiness.a350@airbus.com.

