



Airworthiness Directive

AD No.: 2018-0043

Issued: 14 February 2018

Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EC) 216/2008 on behalf of the European Union, its Member States and of the European third countries that participate in the activities of EASA under Article 66 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 (EC) 216/2008, Article 14(4) exemption].

Design Approval Holder's Name:

AIRBUS

Type/Model designation(s):

A380 aeroplanes

Effective Date: 28 February 2018

TCDS Number(s): EASA.A.110

Foreign AD: Not applicable

Supersedure: None

ATA 71 – Power Plant – Rear Engine Mount Assembly – Inspection

Manufacturer(s):

Airbus

Applicability:

Airbus A380-841 and A380-842 aeroplanes, all manufacturer serial numbers.

Definitions:

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

The SB: Airbus Service Bulletin (SB) A380-71-8013.

Affected part: Rear engine mount beams, Part Number (P/N) L7121076120000, except those with a serial number (s/n) as listed in Appendix 1 of this AD. For the location of the s/n of the beam, see Figure 1 of Appendix 2 of this AD.

Affected assembly: Rear engine mount assemblies, P/N L7121016002000, P/N L7121016200000, and P/N L7121016500000 (where the number of zeros at the end of the P/N can vary), having an affected part installed, except those assemblies with a s/n as listed in Appendix 1 of this AD. For the location of the s/n of the assembly, see Figure 2 of Appendix 2 of this AD.

Groups: Group 1 aeroplanes are those that have an affected part installed. Group 2 aeroplanes are those that do not have an affected part installed.



Reason:

During accomplishment of a scheduled Airworthiness Limitation Item (ALI) task 712200-R9005-01A, using a high-frequency eddy current (HFEC) inspection method, a crack was detected on the surface of a Rolls-Royce Trent 900 rear engine mount (located on the lug area). Subsequent investigations concluded that the surface crack was likely caused by a manufacturing process deficiency which occurred during the forging process that could leave metallurgical discontinuities on the raw blank parts.

This condition, if not detected and corrected, could adversely affect the fatigue life and static load carrying capability of the rear engine mounts, possibly resulting in reduced structural integrity.

To address this unsafe condition, Airbus issued the SB to provide inspection instructions.

For the reasons described above, this AD requires a one-time detailed inspection (DET) or HFEC inspection of each affected assembly and, depending on findings, replacement of the assembly.

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

Required as indicated, unless accomplished previously:

Inspection(s):

- (1) For Group 1 aeroplanes: Within 1 000 flight cycles (FC) accumulated by an affected part after the effective date of this AD, accomplish a DET or HFEC inspection of the affected assembly in accordance with the instructions of the SB.
- (2) If, during the DET as required by paragraph (1) of this AD, it is determined that the fail-safe load path is not activated, within 3 800 FC after the effective date of this AD, accomplish an HFEC inspection of the affected assembly in accordance with the instructions of the SB.

Corrective Action(s):

- (3) If, during the DET as required by paragraph (1) of this AD, it is determined that the fail-safe load path is activated, before next flight, replace the affected assembly in accordance with the instructions of the SB.
- (4) If, during the HFEC inspection, as required by paragraph (1) or (2) of this AD, as applicable, any crack is found, before next flight, replace the affected assembly in accordance with the instructions of the SB.

Credit:

- (5) Accomplishment of an HFEC inspection of an affected assembly, before the effective date of this AD, in accordance with the Airbus A380 Non-destructive Testing Manual (NTM), task 54-51-08, is an acceptable method to comply with the requirements of paragraph (1) or (2) of this AD, as applicable.

Parts Installation:

- (6) From the effective date of this AD, it is allowed to install an affected assembly on any aeroplane provided that, before installation, the assembly has passed an inspection (no defects or cracks found) in accordance with the instructions of the SB.



Ref. Publications:

Airbus SB A380-71-8013 original issue dated 08 June 2017.

Airbus A380 NTM Revision 35 dated 01 September 2013.

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. This AD was posted on 13 June 2017 as PAD 17-073, republished on 22 August 2017 as PAD 17-073R1 and republished on 14 December 2017 as PAD 17-073R2, for consultation until 28 December 2017. The Comment Response Document can be found in the EASA [Safety Publications Tool](#), in the compressed (zipped) file attached to the record for this AD.
3. Enquiries regarding this AD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: ADs@easa.europa.eu.
4. For any question concerning the technical content of the requirements in this AD, please contact: AIRBUS - EIANA (Airworthiness Office), Telephone: +33 562 110 253; Fax: +33 562 110 307, E-mail: account.airworth-A380@airbus.com.



Appendix 1 – Cross-reference of non-affected rear engine mount beams and assemblies

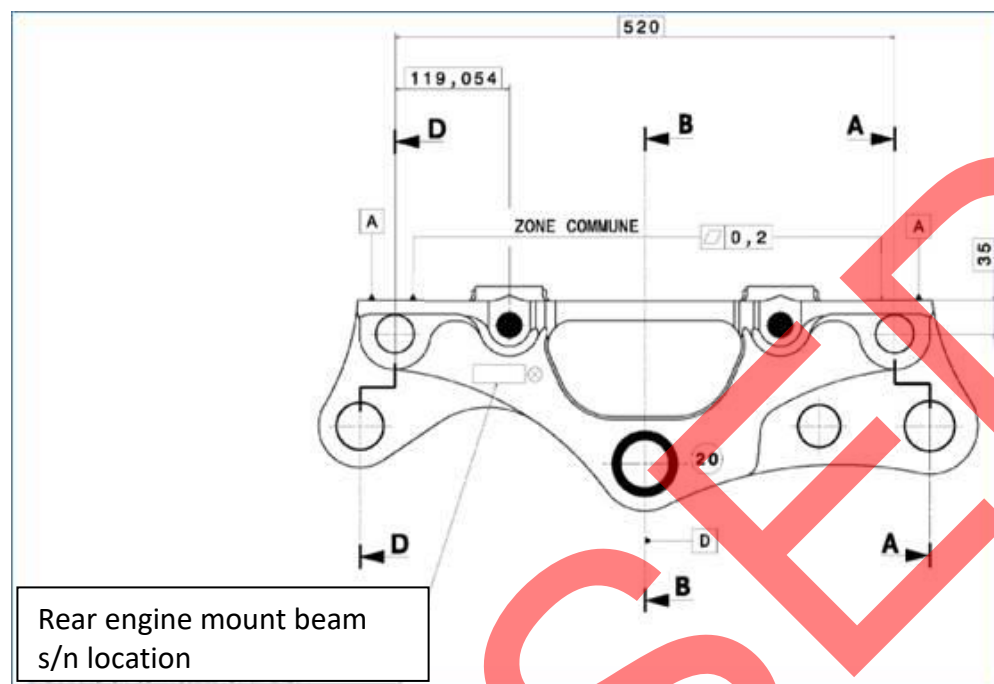
Rear Engine Mount Beam P/N L7121076120000	Rear Engine Mount Assembly P/N L7121016002000, P/N L7121016200000, or P/N L7121016500000
s/n	s/n
FP37	SE10033
FP54	SE10065
FP57	SE10066
FP410	SE10580
FP413	SE20775
FP414	SE20747
FP417	SE20607
FP419	SE20748
FP424	SE20608
FP427	SE20606
FP435	SE20605
FP436	SE20766
FP437	SE20772
FP438	SE20716
FP439	SE20768
FP440	SE20715
FP448	SE20749
FP449	SE20717
FP453	SE10577
FP455	SE20714
FP457	SE20762
FP459	SE20765
FP461	SE20746
FP463	SE20764
FP464	SE20763
All s/n from SE465 (inclusive)	For assembly s/n format SE10XXX: All s/n from SE10580 (inclusive)
	For assembly s/n format SE20XXX: All s/n from SE20767 (inclusive)

Note 1: The format of the rear engine mount beam s/n, listed in table above, can be amended by a prefix added by Airbus. For example "TOFP463".



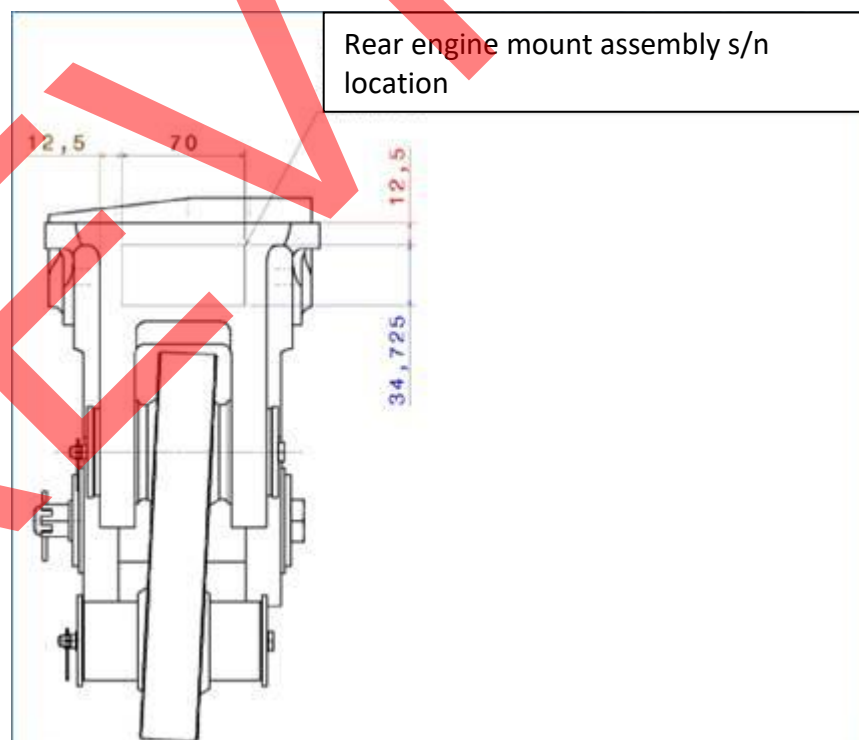
Appendix 2 – Location of the s/n

Figure 1 – Rear engine mount beam



Note 2: The s/n of the beam (in some cases with a prefix added by Airbus) is provided on the main body (back face) of the part, as shown in Figure 1 above.

Figure 2 – Rear engine mount assembly



Note 3: The s/n of the rear engine mount assembly is provided on the left side of the part, as shown in Figure 2 above.