

Engine Log Book

Motor Logbuch



Austro Engine

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Baumuster:	E4	Baureihe:	E4	Motor - Nr.:	E4-A-06229	1
Type of Engine:		Model:		Engine serial no:		
Hersteller:	Austro Engine GmbH					
Manufacturer:	A-2700 Wiener Neustadt, Rudolf-Diesel-Straße 11, Austria					
Kennblatt:	EASA.E.200			Baujahr:	2022	
Data sheet:				Year of manufacture:		
Der oben bezeichnete Motor ist als betriebsstüchtig anzusehen, wenn er gem. der Zivilluftfahrt- und Luftfahrtgeräte-Verordnung, letztgültige Ausgabe und den Betriebs- und Wartungsanweisungen entsprechend betrieben und gewartet wird. The above mentioned engine is considered to be operationally reliable if operated and maintained in accordance with the Zivilluftfahrt- und Luftfahrtgeräte-Verordnung, latest legal issue and the pertinent operational and maintenance instructions.						
Bemerkungen:						
Remarks:						
Jedes Wartungsereignis, als auch ein Komponenten Tausch muss im Engine Log dokumentiert werden. Please note that every performed maintenance as well as component replacements have to be documented in the log book.						
Prüflauf durchgeführt Test run carried out						
Datum:	29 MAR 2022			Unterschrift		
Date:				Signature:		
						

Baumuster:
Type of Engine:

E4

Baureihe:
Model:

E4

Motor - Nr.:
Engine serial no:

E4-A-06229

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Motor Hauptkomponenten / Engine main components

Bezeichnung Designation	Teile Nummer Part number	Revision Revision	Seriennummer Serial number	TSN
Engine Electronic Control Unit Hardware	E4A-92-100-000	AC1	4377	00:00
Engine Electronic Control Unit Software	E4A-92-200-000	AD1	VC33_1_06_24	00:00
Glow Plug Control Unit	E4A-94-200-000	AB1	004279	00:00
Engine Harness	E4A-95-000-000	AH1	EWO213234	00:00
Generator	E4A-91-400-000	AB1	03955	00:00
Gearbox	E4A-70-000-000-AP	AG3	4477	00:00
High Pressure Fuel Pump	E4A-30-000-BHY	AA3	21-09-06-02-02361	00:00
Common Rail	E4A-33-100-000	AB1	2118100176	00:00
System turbocharger and BPA	E4A-00-410-BHY	AC2	XG5005022400003	00:00
Fly Wheel	E4A-73-300-000	AB1	05658	00:00
Fuel Inject. IMA-Code #1 #2 #3 #4	E4A-35-100-000.	AA1	#1: 4WRK41; #2: 77ZF5S; #3: 6Z8T8N; #4: 788F8I	00:00

Datum:
Date:

29 MAR 2022

Unterschrift
Signature:



N/A due to Mod. see page 7

MSB-E4-003/3	Configuration				
MSB-E4-003/2	SW u. HW V				
MSB-E4-004/1	Long term cc				
MSB-E4-006	Repair of sensor cable for camshaft sensor	N/A	MSB-E4-021	Fuel Pressure Sensor - Connector modification	
MSB-E4-007/6	Replacement of waste gate controller	N/A	RSB-E4-024	Waste Gate - Spring loaded circlip	
MSB-E4-008/2	Exchange of oil separator hose	N/A			
MSB-E4-009/2	Replacement of high pressure pump	N/A			
MSB-E4-013/1	Gearbox oil inspection	N/A			
MSB-E4-014/2	Replacement of the fuel return line	N/A			
MSB-E4-017/2	Check/Exchange of timing chain	Considered for next action see this MSB			
MSB-E4-020	Inspection of Gearbox Housing	N/A			
MSB-E4-022/5	Waste Gate Control Rod	performed, no open action			
MSB-E4-024/1	Waste gate - Spring loaded circlip	performed, no open action			
MSB-E4-025/3	Fuel injectors	Considered for next action see this MSB			
MSB-E4-026/1	Inspection of Engine Harness	N/A			
MSB-E4-028/3	Oil return line pipe	N/A			
MSB-E4-029/1	Modification of pressure valve hose for damping pressure oscillation	performed, no open action			
MSB-E4-030/4	Oilpump replacement	N/A			
MSB-E4-031/2	Oilpump replacement	N/A			
MSB-E4-034/4	superseded by MSB-E4-036	N/A by SN			
MSB-E4-035/2	superseded by MSB-E4-036	N/A by revision			
MSB-E4-036/1	High Pressure Pump (HPP) Inspection and Replacement	N/A by revision			

AD-No	Title	Status	SI-No	Title	Status
EASA AD 2013-0213 R1	Replacement of waste gate controller (MSB-E4-007/6)	N/A	SI-E4-007/2	Life time and TBO extension	Only for information
EASA AD 2011-0039	Replacement of high pressure pump (MSB-E4-009/2)	N/A	SI-E4-002	Gearbox oil check procedure update	Only for information
EASA AD 2017-0103R1	Engine Timing Chain Replacement (MSB-E4-017/2)	Considered, for next action see this MSB	SI-E4-003	Technical publication and reporting system of AE	Only for information
EASA AD 2018-0125	Turbocharger Waste Gate Controller and Control Rod Circlip	performed, no open action	SI-E4-004	EECU venting element	Only for information
EASA AD 2019-0041	Time Limits / Maintenance Checks-Airwor. Lim. Sec.-Amendm.	Considered, for next action see this MSB	SI-E4-006	New Revision - Index for part numbers	Only for information
EASA AD 2021-0094	Engine - Oil Pump - Replacement	N/A	SI-E4-007	Proper handling of Turbo Charger	Only for information
EASA AD 2021-0191-E	Engine - Oil Pump - Replacement	N/A	SI-E4-009	Two-Mass Flywheel and Hub	Only for information
EASA AD 2021-0203R1	superseded by EASA AD 2021-0274-E	N/A	SI-E4-010	Caution of foreign Object Ingestion during Maintenance	Only for information
EASA AD 2021-0274-E	Engine- High Pressure Pump Driving Gear-Inspection / Replacement	N/A	SI-E4-011	AMOC Waste gate con-rod	Only for information
FAA AD 2011-18-19	Replacement of high pressure pump (MSB-E4-009/2)	N/A	SI-E4-013	Oil sampling	Only for information
FAA AD 2014-08-10	Replacement of waste gate controller (MSB-E4-007/6)	N/A	SI-E4-014	EECU Data Log	Only for information
FAA AD 2020-15-05	Reciprocating Engine Power Section (MSB-E4-017/2)	Considered, for next action see this MSB	SI-E4-015	Handling and storage condition of spare parts	Only for information
FAA AD 2020-22-14	Reciprocating Engine Supercharger	performed, no open action	SI-E4-016	Cylinder head identification - Alternative methods	Only for information
FAA AD 2020-14-07	Fuel Control/Reciprocating Engines and Reciprocating Engine Power Section	Considered, for next action see this MSB			
FAA AD 2021-24-10	Reciprocating Engine Oil System	N/A			
FAA AD 2021-17-01	Reciprocating Engine Oil System	N/A			
FAA AD 2022-03-03	Reciprocating Engine Power Section	N/A			
CAAC CAD2013-DA42-01R1	Replacement of waste gate controller (MSB-E4-007/6)	N/A			
CAD2017-MULT-36 Amnd No. 39-9090	Engine Timing Chain Replacement	Considered for next action see this MSB			

The engine modification status consists of the applicable revision of the Type Design Definition, the Build Manual and additional installed approved design changes:

Type Design Definition: E4.08.01 Rev. 12

Build Manual: E4.08.02 Rev. 22

Design changes:	MDC-E4-390b; MDC-E4-379; MDC-E4-391a; MDC-E4-407b; MDC-E4-412a; MDC-E4-429; MDC-E4-446; MDC-E4-448a; MDC-E4-452; MDC-E4-473; MDC-E4-500c; MDC-E4-501; MDC-E4-515c; MDC-E4-520c; MDC-E4-524; MDC-E4-530; MDC-E4-533a; MDC-E4-545b; MDC-E4-547; MDC-E4-555d; MDC-E4-556; MDC-E4-560a; MDC-E4-566b; MDC-E4-570; MDC-E4-571; MDC-E4-588; MDC-E4-594b; MDC-E4-596; MDC-E4-609; MDC-E4-642; MDC-E4-648; MDC-E4-670; MDC-E4-689; MDC-E4-701e; MDC-E4-728; MDC-E4-735a;
BM-TR	BM-TR-MDC-E4-555b; BM-TR-MDC-E4-618a; BM-TR-MDC-E4-648; BM-TR-MDC-E4-665; BM-TR-MDC-E4-693; BM-TR-MDC-E4-701c; BM-TR-MDC-E4-708a; BM-TR-MDC-E4-735; BM-TR-MDC-E4-736a;

Date:

29 MAR 2022

Signature:



SN: E4-A-06229

Status Service Bulletin (SB), Airworthiness Directives (AD) & Service Informations (SI) / Record of engine modification status

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SB-No	Title	Status	SB-No	Title	Status
MSB-E4-002/3	Configuration specification of the E4 engine	performed, no open action	MSB-E4-029/1	Modification of pressure valve hose	performed, no open action
MSB-E4-003/26	SV and HW versions of the E4 engine series	performed, no open action	MSB-E4-030/4	Oil pump replacement	N/A
MSB-E4-004/1	Long term conservation of E4 engine	performed, no open action	MSB-E4-031/2	Oil pump replacement	performed
MSB-E4-006	Repair of sensor cable for camshaft sensor	N/A	MSB-E4-034/4	High pressure pump driving gear replacement	N/A
MSB-E4-007/6	Replacement of waste gate controller	N/A	MSB-E4-035/2	High pressure pump driving gear inspection	N/A
MSB-E4-008/2	Exchange of oil separator hose	N/A	MSB-E4-036/1	High Pressure Pump (HPP) Inspection and Replacement	N/A
MSB-E4-009/2	High pressure pump exchange	N/A	RSB-E4-016/1	Oil dip stick	only for information
MSB-E4-013/1	Gearbox oil inspection	N/A	RSB-E4-018	Inspection of engine harness	only for information
MSB-E4-014/2	Replacement of the fuel return line and banyo fitting	N/A	RSB-E4-021/1	Fuel Pressure Sensor - Connector modification	only for information
MSB-E4-017/2	Check/Replacement of timing chain	considered, for next action see the MSB	RSB-E4-028/2	New OPS / FPS AEP-00284-901	only for information
MSB-E4-020	Inspection of gearbox housing	N/A	RSB-E4-032/1	New BPS AEP-00286-901	only for information
MSB-E4-022/5	Waste Gate Control Rod	performed, no open action	RSB-E4-037/2	Loctite on flywheel hub mounting screws	only for information
MSB-E4-024/1	Waste gate - Spring loaded circlip	performed, no open action	RSB-E4-038	Flywheel Hub dye penetrant inspection	only for information
MSB-E4-025/3	Injectors	considered, for next action see the MSB	OSB-E4-019/3	Gearbox oil cooler	only for information
MSB-E4-026/1	Inspection of engine harness	N/A	OSB-E4-033/2	Oil pump inspection to check serviceability	N/A, no oil cooler inst
MSB-E4-028/3	Oil return line pipe	N/A			performed

AD-No	Title	Status	SI-No	Title	Status
EASA AD 2010-0206-E	Superseded by EASA AD 2011-0039	-----	SI-E4-001/2	Life time and TBO extension	only for information
EASA AD 2011-0039	Engine Fuel&Control -HPP- Insp. / Replacement (MSB-E4-009/2)	N/A	SI-E4-002	Gearbox oil check procedure update	only for information
EASA AD 2013-0025R1	Superseded by EASA AD 2013-0213	-----	SI-E4-003	Technical publication and reporting system of AE	only for information
EASA AD 2013-0213R1	Engine - Waste Gate Controller - Replacement (MSB-E4-007/6)	N/A	SI-E4-004	EECU-Venting Element	only for information
EASA AD 2016-0203	Turbocharging - V-band Clamps - Insp./Replacement	N/A	SI-E4-006	New revision index for part numbers	only for information
EASA AD 2017-0250	Superseded by EASA AD 2018-0125	-----	SI-E4-007	Proper handling of turbo charger	only for information
EASA AD 2018-0125	Turbocharger Waste Gate Contr. and Control Rod Circlip	performed, no open action	SI-E4-009	Two-mass Flywheel and Hub	only for information
EASA AD 2017-0103R1	Engine Timing chain replacement (MSB-E4-017/2)	considered, for next action see MSB	SI-E4-010	Caution of foreign object ingestion during maintenance	only for information
EASA AD 2019-0041	Time Limits / Maintenance Checks-Airwor. Lim. Sec.-Amendm.	considered, for next action see the MSB	SI-E4-011	AMOC Waste gate con-rod	only for information
EASA AD 2021-0055R1	Superseded by EASA AD 2021-0094	-----	SI-E4-013	Oil sampling	only for information
EASA AD 2021-0094	Engine - Oil Pump - Replacement	N/A	SI-E4-014	EECU Data Log	only for information
EASA AD 2021-0143-E	Superseded by EASA Emergency AD 2021-0191-E	-----	SI-E4-015	Handling and storage condition of spare parts	only for information
EASA AD 2021-0191-E	Engine - Oil Pump - Replacement	performed	SI-E4-016/1	Cylinder head identification - Alternative methods	only for information
EASA AD 2021-0203R1	Superseded by EASA AD 2021-0274-E	-----	SI-E4-018	High Pressure Pump (HPP) driving gear identification	only for information
EASA AD 2021-0274-E	Engine-High Pressure Pump Driving Gear-Inspection/Replacement	N/A			
FAA AD 2022-03-03	Reciprocating Engine Power Section	N/A			
FAA AD 2021-24-10	Reciprocating Engine Oil System	N/A			
FAA AD 2021-17-01	Reciprocating Engine Oil System	N/A			
FAA AD 2020-22-14	Reciprocating Engine Supercharger	performed, no open action			
FAA AD 2020-15-05	Reciprocating Engine Power Section (MSB-E4-017/2)	considered, for next action see MSB			
FAA AD 2020-14-07	Fuel Control/Reciprocating Engines and Reciprocating Engine Power Section	considered, for next action see MSB			
FAA AD 2014-08-10	Replacement of waste gate controller (MSB-E4-007/6)	N/A			
FAA AD 2011-18-19	Replacement of high pressure pump (MSB-E4-009/2)	N/A			
FAA AD 2010-23-08	High-pressure (HP) fuel pumps	N/A			
CAAC CAD2013-DA42-01R1	Replacement of waste gate controller (MSB-E4-007/6)	N/A			
CAD2017-MULT-36	Engine Timing Chain Replacement	considered, for next action see MSB			
Amnd No 39-9090					

The engine modification status consists of the applicable revision of the Overhaul Manual and additional installed approved design changes:

For detailed information see W/O ESO220096

Maintenance Manual E4.08.04 rev.30, AR-PO01

Design changes: None

Signature of Certifying Staff

Date:

31 MAR 2022

Signature:



Änderungsstand / Modification record

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Lufttüchtigkeitsanweisung bzw. Änderung:
Airworthiness directive or modification:

Ges. Std.:
TSN:

Datum:
Date:

Unterschrift & Lizenz Nr.:
Signature & License no.:

Installed inspected oil pump according to MSB-E4-031/2.
Part PN: E4A-50-000-000X, Part SN: 12016300372,
Part TSN: 1270:00

For further information regarding the remaining flight duration, please refer to OSB-E4-033 latest revision.

00:00

31 MAR 2022

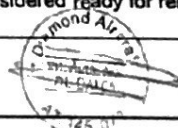


1. Approving Competent Authority /Country Austro Control GmbH Austria		2. AUTHORISED RELEASE CERTIFICATE EASA FORM 1			3. Form Tracking Number AE-1092	
4. Organisation Name and Address:  Diamond AIRCRAFT		Diamond Aircraft Industries GmbH N. A. Otto-Straße 5 A-2700 Wiener Neustadt, AUSTRIA			5. Work Order / Contract / Invoice ESO220096	
6. Item	7. Description	8. Part No.	9. Qty.	10. Serial No.	11. Status / Work	
1	E4 Engine Configuration A	E4A-00-000-BHY	1	E4-A-06229	modified	

12. Remarks

Engine Modified acc. to AR-PO01, MM E4.08.04 rev. 30 ; TSN: 00:00 ; SB's and AD's checked/performed see Engine Log page 7.
Installed inspected oil pump, PN: E4A-50-000-000X, SN: 12016300372, TSN: 1270:00. For further information regarding the remaining flight duration, please refer to OSB-E4-033, latest revision.

delivered to:

13a. Certifies that the items identified above were manufactured in conformity to: ☐ approved design data and are in condition for safe operation ☐ non-approved design data specified in block 12		14a. ☒ Part-145.A.50 Release to Service ☐ Other regulation specified in block 12 Certifies that unless otherwise specified in block 12 the work identified in block 11 and described in block 12, was accomplished in accordance with Part 145 and in respect to that work the items are considered ready for release to service.	
13b. Authorised Signature	13c. Approval / Authorisation Number	14b. Authorised Signature 	14c. Certificate/ Approval Ref. No AT.145.073
13d. Name	13e. Date (dd mmm yyyy)	14d. Name T. Zadracil	14d. Date (dd mmm yyyy) 31.Mär.2022

USER / INSTALLER RESPONSIBILITIES

This certificate does not automatically constitute authority to install the item(s).

Where the user/installer performs work in accordance with the national regulations of an airworthiness authority different from the airworthiness authority specified in block 1, it is essential that the user/installer ensures that his/her airworthiness authority accepts items from the airworthiness authority specified in block 1.

Statements in blocks 13a and 14a do not constitute installation certification. In all cases the aircraft maintenance record must contain an installation certification issued in accordance with the national regulation by the user/installer before the aircraft may be flown.

EASA Form 1-MF/145 Issue 2