

Engine Log Book

RH S/N: E4P-C-06064

Motor Logbuch



Austro Engine

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Baumuster: Type of Engine:	E4	Baureihe: Model:	E4P	Motor - Nr.: Engine serial no:	E4P-C-06064	1
Hersteller: Manufacturer:	Austro Engine GmbH A-2700 Wiener Neustadt, Rudolf-Diesel-Straße 11, Austria					
Kennblatt: Data sheet:	EASA.E.200			Baujahr: Year of manufacture:	2021	
Der oben bezeichnete Motor ist als betriebstüchtig 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 Luftfahrtgerät-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: Date:	23 AUG 2021			Unterschrift Signature:		

Baumuster:
Type of Engine:

E4

Baureihe:
Model:

E4P

Motor - Nr.:
Engine serial no:

E4P-C-06064

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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	4135	00:00
Engine Electronic Control Unit Software	E4PC-92-200-000	AD1	VC33_2P_06_24	00:00
Glühstift Kontroll BoxGlow Plug Control Unit	E4A-94-200-000	AB1	004119	00:00
Engine Harness	E4B-95-000-000	AG1	EW0211649	00:00
Generator	E4A-91-400-000	AB1	03503	00:00
Gearbox	E4A-70-000-000	AF1	4039	00:00
High Pressure Fuel Pump	E4A-30-000-BHY	AA1	20-10-19-02-00488	00:00
Common Rail	E4A-33-100-000	AB1	2113800388	00:00
System turbocharger and BPA	E4C-00-410-BHY	AC2	WJ5004456100058	00:00
Fly Wheel	E4A-73-300-000	AB1	05169	00:00
Fuel Inject. IMA-Code #1 #2 #3 #4	E4A-35-100-000.	AA1	#1: CBI1H1; #2: 72AM7S; #3: 8IAD6S; #4: AAZIFA	00:00

Datum:
Date:

23 AUG 2021

Unterschrift
Signature:



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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	RSB-E4-016/1	Oil dip stick	Only for information
MSB-E4-003/25	SW u. HW Versions of the E4 Engine	performed, no open action	RSB-E4-018	Inspection of engine harness	Only for information
MSB-E4-004/1	Long term conservation of E4 Engines	performed, no open action	RSB-E4-021	Fuel Pressure Sensor - Connector modification	Only for information
MSB-E4-006	Repair of sensor cable for camshaft sensor	N/A	RSB-E4-024	Waste Gate - Spring loaded circlip	Only for information
MSB-E4-007/6	Replacement of waste gate controller	N/A	OSB-E4-019/3	Gearbox Oil Cooler	performed, no open action
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 oscillations	performed, no open action			
MSB-E4-030/4	Oilpump replacement	N/A			
MSB-E4-031/2	Oilpump replacement	not performed, open action			
MSB-E4-034	High Pressure Pump driving gear replacement	performed, no open action			

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-E4-001/2	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	performed, no open action	SI-E4-009	Two-Mass Flywheel and Hub	Only for information
FAA AD 2011-18-19	Replacement of high pressure pump (MSB-E4-009/2)	N/A	SI-E4-010	Caution of foreign Object Ingestion during Maintenance	Only for information
FAA AD 2014-08-10	Replacement of waste gate controller (MSB-E4-007/6)	N/A	SI-E4-011	AMOC Waste gate con-rod	Only for information
FAA AD 2020-15-05	Reciprocating Engine Power Section (MSB-E4-017/2)	Considered, for next action see this MSB	SI-E4-013	Oil sampling	Only for information
FAA AD 2020-22-14	Reciprocating Engine Supercharger	performed, no open action	SI-E4-014	EECU Data Log	Only for information
FAA AD 2020-14-07	Fuel Control/Reciprocating Engines and Reciprocating Engine Power Section	Considered, for next action see this MSB	SI-E4-015	Handling and storage condition of spare parts	Only for information
FAA AD 2021-09-04	Reciprocating Engine Oil System	N/A	SI-E4-016	Cylinder head identification - Alternative methods	Only for information
FAA AD 2021-17-01	Reciprocating Engine Oil System	Considered, for next action see this MSB			
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-A001 Rev. 3

Build Manual: E4.08.02 Rev. 22

Design changes:

ADC-E4-001d; MDC-E4-379; MDC-E4-391a; MDC-E4-401; MDC-E4-407b; MDC-E4-412a; MDC-E4-414; MDC-E4-418a; MDC-E4-429; MDC-E4-446; MDC-E4-447; MDC-E4-448a; MDC-E4-452; MDC-E4-473; MDC-E4-500c; MDC-E4-515c; MDC-E4-520c; MDC-E4-524; MDC-E4-533a; MDC-E4-545b; MDC-E4-547; MDC-E4-554; MDC-E4-555c; MDC-E4-556; MDC-E4-559; MDC-E4-566b; MDC-E4-570; MDC-E4-588; MDC-E4-594b; MDC-E4-618c; MDC-E4-642; MDC-E4-648;

BM-TR:

BM-TR-MDC-E4-618; BM-TR-MDC-E4-648; BM-TR-MDC-E4-665;

Signature of Certifying Staff

Date:

23 AUG 2021

Signature:



SN: E4P-C-06064

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-E4-028/3	Oil return line pipe	N/A by SN
MSB-E4-003/25	SW and HW versions of the E4 engine series	performed, no open action	MSB-E4-029/1	Modification of pressure valve hose	performed, no open action
MSB-E4-004/1	Long term conservation of E4 engine	performed, no open action	MSB-E4-030/4	Oil pump replacement	N/A by SN
MSB-E4-006	Repair of sensor cable for camshaft sensor	N/A by SN	MSB-E4-031/2	Oil pump replacement	performed, no open action
MSB-E4-007/6	Replacement of waste gate controller	N/A by SN	MSB-E4-034	High pressure pump driving gear replacement	Performed
MSB-E4-008/2	Exchange of oil separator hose	N/A by SN	RSB-E4-016/1	Oil dip stick	only for information
MSB-E4-009/2	High pressure pump exchange	N/A	RSB-E4-018	Inspection of engine harness	only for information
MSB-E4-013/1	Gearbox oil inspection	N/A by GB SN	RSB-E4-021/1	Fuel Pressure Sensor - Connector modification	only for information
MSB-E4-014/2	Replacement of the fuel return line and banjo fitting	N/A by SN	RSB-E4-028	New OPS / FPS AEP-00284-901	only for information
MSB-E4-017/2	Check/Replacement of timing chain	considered, for next action see this MSB	RSB-E4-032/1	New BPS AEP-00286-901	only for information
MSB-E4-020	Inspection of gearbox housing	N/A by GB rev	OSB-E4-019/3	Gearbox oil cooler	performed
MSB-E4-022/5	Waste Gate Control Rod	performed, no open action	OSB-E4-033/1	Oil pump inspection to check serviceability	performed
MSB-E4-024/1	Waste gate - Spring loaded circlip	performed, no open action			
MSB-E4-025/3	Injectors	considered, for next action see this MSB			
MSB-E4-026/1	Inspection of engine harness	N/A by SN			
AD-No	Title	Status	SI-No	Title	Status
2010-0206-E	Superseded by EASA AD 2011-0039	-----	SI-E4-001/2	Life time and TBO extension	only for information
2011-0039	Engine Fuel&Control -HPP- Inspection / Replacement	N/A	SI-E4-002	Gearbox oil check procedure update	only for information
2013-0025R1	Superseded by EASA AD 2013-0213	-----	SI-E4-003	Technical publication and reporting system of AE	only for information
2013-0213R1	Engine - Waste Gate Controller - Replacement	N/A	SI-E4-004	EECU-Venting Element	only for information
2016-0203	Turbocharging - V-band Clamps - Insp./Replacement	N/A	SI-E4-006	New revision index for part numbers	only for information
2017-0250	Superseded by EASA AD 2018-0125	-----	SI-E4-007	Proper handling of turbo charger	only for information
2018-0125	Engine-Turbocharger Waste Gate Controller and Control Rod Circlip - Life Limit / Modification	performed	SI-E4-009	Two-mass Flywheel and Hub	only for information
2017-0103R1	Engine - Timing Chain - Replacement / Aircraft Flight - Manual - Limitations Section - Amendment (MSB-E4-017/2)	considered, for next action see this MSB	SI-E4-010	Caution of foreign object ingestion during maintenance	only for information
2019-0041	Time Limits / Maintenance Checks - Airworthiness Limitations Section - Amendment	considered, for next action see this MSB	SI-E4-011	AMOC Waste gate con-rod	only for information
2021-0055R1	Superseded by EASA AD 2021-0094	-----	SI-E4-013	Oil sampling	only for information
2021-0094	Engine - Oil Pump - Replacement	N/A	SI-E4-014	EECU Data Log	only for information
2021-0143-E	Superseded by EASA Emergency AD 2021-0191-E	-----	SI-E4-015	Handling and storage condition of spare parts	only for information
2021-0191-E	Engine - Oil Pump - Replacement	performed	SI-E4-016	Cylinder head identification - Alternative methods	only for information

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 ESO210155

Maintenance Manual E4.08.04 rev.29, AR-PO01, OSB-E4-033/1

Design changes: None

Date:

24 AUG 2021

Signature of Certifying Staff

Signature:



1. Approving Competent Authority
/Country
Austro Control GmbH
Austria

AUTHORISED RELEASE CERTIFICATE EASA FORM 1

3. Form Tracking Number

AE-516

4. Organisation
Name and Address:

**Diamond Aircraft Industries GmbH**

N. A. Otto-Straße 5

A-2700 Wiener Neustadt, AUSTRIA

5. Work Order / Contract / Invoice

ESO210155

6. Item

7. Description

8. Part No.

9. Qty.

10. Serial No.

11. Status / Work

1 E4 Engine Configuration PC

E4PC-00-030-000

1

E4P-C-06064

modified

12. Remarks

Engine Modified acc. to AR-PO01 & OSB-E4-033/1 ; TSN: 00:00 ; SB's and AD's checked/performed see Engine Log page 7.

Installed oil pump SN: 12016300134, TSN: 1800:00. 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)

14c. Name

14d. Date (dd mmm yyyy)

M. Jacob

24.Aug.2021

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

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Änderungsstand / Modification record**Lufttüchtigkeitsanweisung bzw. Änderung:***Airworthiness directive or modification:***Ges. Std.:***TSN:***Datum:***Date:***Unterschrift & Lizenz Nr.:***Signature & License no.:*

Installed oil pump according to MSB-E4-031/2.

Part SN: 12016300134, Part TSN: 1800:00.

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

00:00

24 AUG 2021

**MSB-E4-034/2 - High pressure pump driving gear replacement -
performed****MSB-E4-035 - High pressure pump driving gear inspection -
performed**

00:00

28 SEP 2021



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Datum: Date:	Betriebsstunden: Engine hours:		Durchgeführte Arbeiten Work performed:	Unterschrift & Lizenz Nr.: Signature & License no.:
	Gesamt: TSN:	Seit letzter GÜ.: TSO:		
			Diamond Aircraft Ind. GmbH (AT.21G.0001) certifies that the work specified in Work Order No.: <u>AWO 2103612-1</u> was carried out in accordance with Part 21A.163(d) and in respect to that work the aircraft is considered ready for release to service. Certifying Staff:  Date: <u>12. Okt. 2021</u>	
			Diamond Aircraft Ind. GmbH (AT.21G.0001) certifies that the work specified in Work Order No.: <u>AWO 2103612-2</u> was carried out in accordance with Part 21A.163(d) and in respect to that work the aircraft is considered ready for release to service. Certifying Staff:  Date: <u>01.11.21</u>	