

LH

AIRCRAFT TECHNICAL RECORD

Section 3. ENGINE LOG

1. Approving Competent Authority / Country <p style="text-align: center;">Austro Control GmbH Austria</p>		2. AUTHORISED RELEASE CERTIFICATE EASA FORM 1				3. Form Tracking Number <p style="text-align: center;">AE048886</p>	
4. Organisation Name and Address		Austro Engine GmbH Rudolf Diesel Straße 11 2700 Wr. Neustadt, AUSTRIA				5. Work Order / Contract / Invoice <p style="text-align: center;">ES241456</p>	
6. Item	7. Description	8. Part No.	9. Quantity	10. Serial No.	11. Status / Work		
1	Engine Konfiguration B	E4B-00-000-BHY Iss. 014	1	E4-B-06166	New		
12. Remarks <div style="display: flex; margin-bottom: 5px;"> <div style="width: 10%;">General</div> <div>The engine conforms to the type design approved under the U.S. Type Certificate E00081EN.</div> </div> <div style="display: flex; margin-bottom: 5px;"> <div style="width: 10%;">General</div> <div>The engine has undergone a final operational check.</div> </div> <div style="display: flex; margin-bottom: 5px;"> <div style="width: 10%;">Item 1</div> <div>The engine conforms to EASA TCDS E.200 Issue 12; Damper assy P/N: D44-7306-30-00_1 (EASA Form1: AJ92387).</div> </div> <div style="display: flex; margin-bottom: 5px;"> <div style="width: 10%;">Item 1</div> <div>Fuel hose assy P/N: A24119-01 (EASA Form1: 249055). Cleaned and installed acc. AE APA_Pulsationsdämpfer-Aufbau_190618.</div> </div> <div style="display: flex; margin-bottom: 5px;"> <div style="width: 10%;">Item 1</div> <div>Pistons p/n E4A-72-400-000 Rev. AD3 are installed with a life time limitation to 900FH.</div> </div>							
13a. Certifies that the items identified above were manufactured in conformity to: <div style="display: flex; margin-top: 10px;"> <div style="width: 20px; text-align: center;"><input checked="" type="checkbox"/></div> <div>approved design data and are in condition for safe operation</div> </div> <div style="display: flex; margin-top: 10px;"> <div style="width: 20px; text-align: center;"><input type="checkbox"/></div> <div>non-approved design data specified in block 12</div> </div>			14a. <input type="checkbox"/> Part-145.A.50 Release to Service <input type="checkbox"/> 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 <p style="text-align: center;">AT.21G.0010</p>		14b. Authorised Signature <div style="border: 1px solid black; height: 40px; width: 100%;"></div>		14c. Certificate / Approval Reference Number <div style="border: 1px solid black; height: 40px; width: 100%;"></div>	
13d. Name <div style="text-align: center; margin-top: 20px;"> </div>		13e. Date (dd mmm yyyy) <p style="text-align: center; font-size: 1.2em;">24 APR 2024</p>		14d. Name <div style="border: 1px solid black; height: 40px; width: 100%;"></div>		14e. Date (dd mmm yyyy) <div style="border: 1px solid black; height: 40px; width: 100%;"></div>	
USER / INSTALLER RESPONSIBILITIES This certificate does not automatically constitute authority to install the item(s). Where the user/installer performs work in accordance with regulations of an airworthiness authority different than 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 aircraft maintenance records must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.							

LH ENG

ENGINE DATA

1. Make AUSTRO
2. Model E4-B
3. Specification
4. Manufacturer's Serial Number E4-B-06166
5. Date of Manufacture 24 APR 2024



Section 3A: Engine Service and Maintenance Log

DATE / /	TIME RUN		TIME SINCE OVERHAUL		CYCLES		DESCRIPTION OF WORK PERFORMED: (INSPECTION, REPAIRS, REPLACEMENT)
	HOURS	min	HOURS	min	Sub Total	TOTAL	
BROUGHT FORWARD							



3330 AIRPORT LOOP
SALISBURY, NC 28147
OFFICE: 704-431-6862
INFO@SOUTHTECAVIATION.COM

DATE: JUNE 29, 2024 | MAKE/MODEL: AUSTRO E4-B | ENGINE S/N: E4-B-06166 | REG: N594ER | ACFT SN: 42 AC064
TACH: 2074.0 HRS. TT INSTALLED ENGINE: 0 HRS. TT REMOVED ENGINE: 760.0

PERFORMED ENGINE AND ASSOCIATED COMPONENT CHANGE DUE TO SERVICE LIMITS. REMOVED ENGINE SN: E4-B-05001, INSTALLED NEW ENGINE SN: E4-B-06166. ALL CURRENT ENGINE ACCESSORY/COMPONENT SERIAL #'s ARE NOTED IN AUSTRO ENGINE LOGBOOK.

AD's/MSB's ASSOCIATED WITH THE NEW ENGINE INSTALL VERIFIED; AD 24-05-01/MSB-E4-042 DATED 31 JAN 2024 AND AD 23-20-03/MSB-E4-039/1 DATED 25 APR 2023 ARE N/A BY SERIAL NUMBER ON NEW INSTALLED ENGINE.

- INSTALLED NEW ENGINE MOUNT WITH CUSTOMER-PROVIDED HARDWARE AND TORQUED TO SPECS.
- SERVICED ENGINE WITH 7 LITERS OF AEROSHELL DIESEL ULTRA AND REPLACED ENGINE OIL FILTER WITH MANN, P/N: HU 615/3X.
- SERVICED GEARBOX WITH 2.5 LITERS SHELL SPIRAX S6 GXME 75W-80.
- SERVICED ENGINE COOLANT SYSTEM WITH 2.5 GAL 50/50 MIX XEREX VALVOLINE G05.
- INSTALLED NEW PROP GOVERNOR GASKET P/N: 10-01962
- REINSTALLED PROPELLOR TO CONDUCT GROUND OPERATIONAL CHECKS; INSTALLED NEW PROPELLOR RETAINING NUTS P/N: C-067.

NO LEAKS NOTED DURING LEAK CHECKS. DURING GROUND RUN OF ENGINE, COULD NOT VERIFY CORRECT OPERATION OF RH CRANKSHAFT SENSOR. NOTE: SENSOR INSTALLED ON ENGINE HAD DEFECTIVE WIRING CONNECTOR; PARTS/ASSETS WERE NOT AVAILABLE AT THIS TIME. ALL OTHER ENGINE PARAMETERS CHECKED OK.
NOTE: RS, FRONT SHOCK ABSORBER (P/N: D64-7126-14-71_01) ON ENGINE MOUNT LEAKING FLUID; RECOMMEND REPLACEMENT ASAP.

ALL MAINTENANCE PERFORMED IN ACCORDANCE WITH THE CURRENT DIAMOND DA42NG AND AUSTRO E4 SERIES MAINTENANCE MANUALS. DEFICIENCIES DISCOVERED NOTED ABOVE.

Scot Seamon
Scot Seamon

P 3581287

Registration: N594ER ESN: E4-B-06166
Engine TTSN: ~~42-150-177~~ 3.9
AC Serial Number: 42 AC064
Airframe TT: 2077.90
WO: 8212



LIFT MAINTENANCE

Maintenance performed:

Complied with 100 HR. inspection referencing the aircraft and engine MMs. Drained the engine and gearbox oil, replaced engine, fuel filters. Inspected the old filters, found ok found no metal. Serviced engine oil with 7 liters of Aeroshell Diesel Ultra. Serviced Gearbox oil with Spirax-56-GXME. Serviced the coolant with Glystatin Protect Plus G48 referencing the engine MM. Run up and leak check good. I certify that this engine has been inspected IAW 100HR. Inspections and was found to be airworthy. Next Due at AFTT: 2,177.90

Date: 8/7/2024

Signature: *Phillip Dickinson*
Phillip Dickinson 4474866 A&P



3330 AIRPORT LOOP
SALISBURY, NC 28147
OFFICE: 704-431-6862
INFO@SOUTHTECAVIATION.COM

DATE: DECEMBER 23, 2024 | LEFT ENGINE | MODEL: AUSTRO E4-B | ENGINE S/N: E4-B-06166 | REG: N594ER
TACH: 2129.8 HRS.

- DRAINED OIL AND REMOVED AND REPLACED TURBO OIL RETURN LINE WITH NEW P/N: [E4A-55-100-000_AC1].
- SERVICED ENGINE WITH 7 LITERS OF AEROSHELL DIESEL ULTRA.
- PERFORMED SATISFACTORY ENGINE RUN NO FAULTS OR LEAKS NOTED AT THIS TIME.

LUKE WALTERS
LUKE WALTERS

A&P 4778771

NAME/
SIGNATURELICENCE:
AME or
AMO/ACAModel: DA42
S/N. 42.AC064
Reg # N594ER**CRAFT**
FLIGHT TRAINING & SIMULATIONDate: 1/17/2025
Tach: 2147.5

1. Performed oil change
2. Cut oil filter, inspected for metal, no metal noted
3. Collected oil sample for analysis at blackstone laboratories
4. Refilled with AEROSHELL Diesel Ultra
5. Replaced oil filter P/N: HU615/3X
6. Checked gearbox magnetic plug for metal. No metal noted
7. Inspected and cleaned gearbox filter

Ground ran engine no leaks/faults noted. Engine approved for return to service at this time.

I certify that this engine was inspected IAW a 100hr inspection and was determined to be in airworthy condition at this time.


 Zachary Braddock 3310705 A&P

 3330 AIRPORT LOOP
 SALISBURY, NC 28147
INFO@SOUTHTTECAVIATION.COM
 OFFICE: 704-431-6862

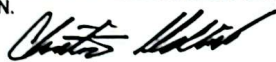
 DATE: NOVEMBER 3, 2025 | AUSTRO E4-B | LEFT ENGINE | S/N: E4-B-06166 | REG: N594ER
 TACH: 2250.4 HRS. TTE: 176.4 HRS. TSMOH: N/A

 ANNUAL INSPECTION COMPLETED THIS DATE IN ACCORDANCE WITH DIAMOND AIRCRAFT DA42 NG AMM AND AUSTRO ENGINE
 MAINTENANCE MANUAL. NO AD'S DUE AT THIS TIME. AD'S CHECKED THROUGH BIWEEKLY NUMBER 2025-22.

 PERFORMED ENGINE OIL CHANGE.
 CUT OIL FILTER, INSPECTED FOR METAL, NONE NOTED.
 COLLECTED OIL SAMPLE FOR ANALYSIS TO BE COMPLETED BY BLACKSTONE LABORATORIES.
 REFILLED WITH 7 LITERS AEROSHELL DIESEL ULTRA 5W-30.
 REPLACED OIL FILTER, P/N:(E4A-52-300-KIT).
 REPLACED FUEL FILTER, P/N:(WK724_3).
 DRAINED GEARBOX OIL. CHECKED GEARBOX MAGNETIC PLUG FOR METAL. NO METAL NOTED.
 CHECKED GEARBOX FILTER. NO FAULTS NOTED. REFILLED GEARBOX WITH OIL.
 INSTALLED FUEL LINE THERMOSTAT HOUSING BRACKET P/N:(D44-7306-00-13_2).
 GROUND RAN ENGINE AND TESTED FOR OPERATION AND LEAKS, NO FAULTS NOTED.

 I CERTIFY THAT THIS ENGINE HAS BEEN INSPECTED IN ACCORDANCE WITH AN ANNUAL INSPECTION AND WAS DETERMINED TO BE IN AN
 AIRWORTHY CONDITION.

CHRISTIAN HEDRICK



A&P/IA 3740465

Engine Log Book

Motor Logbuch



Austro Engine

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Baumuster: Type of Engine:	E4	Baureihe: Model:	E4	Motor - Nr.: Engine serial no:	E4-B-06166	1
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Hersteller: Manufacturer:	Austro Engine GmbH A-2700 Wiener Neustadt, Rudolf-Diesel-Straße 11, Austria					
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Kennblatt: Data sheet:	EASA.E.200	Baujahr: Year of manufacture:	2024
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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: **24 APR 2024**
Date:

Unterschrift
Signature:



Baumuster: Type of Engine:	E4	Baureihe: Model:	E4	Motor - Nr.: Engine serial no:	E4-B-06166	2
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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	AD1	6392	00:00
Engine Electronic Control Unit Software	E4B-92-20A-000	AA1	VC33_0_07_26-01	00:00
Glühstift Kontroll BoxGlow Plug Control Unit	E4A-94-200-000	AC1	006209	00:00
Engine Harness	E4B-95-000-000	AH5	EWO240770	00:00
Generator	E4A-91-400-000	AB2	05884	00:00
Gearbox	E4A-70-000-000-AP	AH4	6378	00:00
High Pressure Fuel Pump	E4A-30-000-BHY	AA4	23-03-01-02-02241	00:00
Common Rail	E4A-33-100-000	AB1	2402900011	00:00
System turbocharger and BPA	E4B-00-410-BHY	AC3	YD5005595500048	00:00
Fly Wheel	E4A-73-300-000	AB1	08441	00:00
Fuel Inject. IMA-Code #1 #2 #3 #4	E4A-35-100-000.	AA1	#1: 66RK6S; #2: 768PDE; #3: 6YRO7N; #4: AYZUC1	00:00
Core Engine	E4A-00-M01-BHY_AE	AD2	03712	00:00
Assy Pistons #1 #2 #3 #4	E4A-72-400-000	AD3	#1: 008337; #2: 008339; #3: 007955; #4: 008225	00:00

Datum: **24 APR 2024**
Date:

Unterschrift
Signature:



Airworthiness Directives (AD) / Record of engine modification status

EASA AD-No	Title	Status	FAA AD-No	Title	Status
EASA AD 2011-0039	Replacement of high pressure pump (MSB-E4-009/2)	N/A by part number	FAA AD 2011-18-19	Replacement of high pressure pump (MSB-E4-009/2)	N/A by part number
EASA AD 2013-0213R1	Replacement of waste gate controller (MSB-E4-007/6)	N/A by revision	FAA AD 2014-08-10	Replacement of waste gate controller (MSB-E4-007/6)	N/A by revision
EASA AD 2017-0103R1	Engine Timing Chain Replacement (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 this MSB
EASA AD 2018-0125	Turbocharger Waste Gate Controller and Control Rod Circlip	performed, no open action	FAA AD 2020-22-14	Reciprocating Engine Supercharger	performed, no open action
EASA AD 2019-0041	Time Limits / Maintenance Checks-Airwor. Lim. Sec.-Amendm.	Considered, for next action see MSB	FAA AD 2020-15-05	Reciprocating Engine Power Section (MSB-E4-017/2)	Considered, for next action see MSB
EASA AD 2021-0094	Engine – Oil Pump – Replacement	N/A by part number	FAA AD 2021-17-01	Reciprocating Engine Oil System	N/A by part number
EASA AD 2021-0191-E	Engine – Oil Pump – Replacement	N/A by part number	FAA AD 2021-24-10	Reciprocating Engine Oil System	N/A by part number
EASA AD 2021-0274-E	Engine- High Pressure Pump Driving Gear- Inspection/ Replacement	N/A by revision	FAA AD 2022-03-03	Reciprocating Engine Power Section	N/A by revision
EASA AD 2023-0163	Engine – Pistons – Oil Analysis / Replacement	N/A by serial number	FAA AD 2023-20-03	Reciprocating Engine Cylinder Section, Reciprocating Engine Oil System	N/A by serial number
EASA AD 2024-0037R1	Engine - Main Bearing / Studs Replacement	N/A by serial number	FAA AD 2024-05-01	Reciprocating Engine Power Section	N/A by serial number

CAAC CAD-No	Title	Status			
CAAC CAD2013-DA42-01R1	更换发动机废气门控制器 (ref. EASA_2013-0025R1) (SUPERSEDED BY EASA AD 2013-0213R1)	N/A by part number			
CAAC CAD2014-DA42-01	更换发动机废气门控制器 (ref. EASA_2013-0213R1)	N/A by revision			
CAAC CAD2017-MULT-36R1	发动机-定时链-更换/飞机飞行手册-限制章节-修订 (ref. EASA_2017-0103R1)	Considered, for next action see MSB			
CAAC CAD2018-MULT-34	发动机-涡轮增压器废气门控制器和控制杆弹性挡圈-寿命限制/改装 (ref. EASA_2018-0125)	performed, no open action			
CAAC CAD2019-MULT-13R1	限时/维修检查-适航限制章节-修订 (ref. EASA_2019-0041)	Considered, for next action see this MSB			
CAAC CAD2021-MULT-19	发动机-滑油泵-更换 (ref. EASA_AD_2021_0094)	N/A by part number			
CAAC CAD2021-MULT-62R1	发动机-滑油泵-更换 (ref. EASA_AD_2021_0191_E_C1)	N/A by part number			
CAAC CAD2021-MULT-84	发动机-高压泵驱动齿轮及相关部件-检查/更换 (ref. EASA_AD_2021_0274_E)	N/A by revision			
CAAC CAD2023-MULT-45	发动机-活塞-滑油分析/更换 (ref. EASA AD 2023-0163)	N/A by serial number			
CAAC CAD2024-MULT-07	发动机-主轴承/螺栓-更换 (ref. EASA AD 2024-0037-R1)	N/A by serial number			

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. 15

Build Manual: E4.08.02 Rev. 23

Design changes:	MDC-E4-609; MDC-E4-648c; MDC-E4-679; MDC-E4-680a; MDC-E4-689; MDC-E4-701g; MDC-E4-709; MDC-E4-710; MDC-E4-719c; MDC-E4-728; MDC-E4-740a; MDC-E4-741; MDC-E4-743; MDC-E4-767a; MDC-E4-779b; MDC-E4-804; MDC-E4-807; MDC-E4-813; MDC-E4-819; MDC-E4-822a; MDC-E4-839; MDC-E4-844a; MDC-E4-858; MDC-E4-871; MDC-E4-873a;
BM-TR:	BM-TR-MDC-E4-740; BM-TR-MDC-E4-819;

Date:

24 APR 2024

Signature:



Status Service Bulletin (SB), & Service Informations (SI)


MSB-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	N/A by revision
MSB-E4-003/30	Software and hardware versions of the E4 engine series	Considered, for next action see this MSB	RSB-E4-018	Inspection of engine harness	considered, for next action see RSB-E4-018
			RSB-E4-021/1	Fuel Pressure Sensor - Connector modification	N/A by part number
MSB-E4-004/1	Long term conservation of E4 Engines	performed, no open action	RSB-E4-028/3	Installation of new sensors AEP-00284-901 for OPS and FPS	performed, no open action
MSB-E4-006	Repair of sensor cable for camshaft sensor	N/A by serial number	RSB-E4-032/1	Installation of new sensors AEP-00286-901 for BSP	performed, no open action
MSB-E4-007/6	Replacement of waste gate controller	N/A by serial number		Loctite on flywheel hub mounting screws	N/A by serial number
MSB-E4-008/2	Exchange of oil separator hose	N/A by serial number	RSB-E4-037/2	Flywheel Hub inspection for cracks	N/A by part number
MSB-E4-009/2	Replacement of high pressure pump	N/A by part number	RSB-E4-038/1	HPP oil leakage	N/A by serial number
MSB-E4-013/1	Gearbox oil inspection	N/A by serial number	RSB-E4-040	HPP oil leakage	N/A by serial number
MSB-E4-014/2	Replacement of the fuel return line	N/A by serial number	OSB-E4-019/3	Gearbox Oil Cooler	Only for information
MSB-E4-017/2	Check/Exchange of timing chain	Considered, for next action see this MSB	OSB-E4-033/3	Oil pump inspection to check serviceability	N/A by part number
MSB-E4-020	Inspection of Gearbox Housing	N/A by revision			
MSB-E4-022/5	Waste Gate Control Rod	performed, no open action	SI-No	Title	Status
MSB-E4-024/1	Waste gate - Spring loaded circlip	performed, no open action	SI-E4-001/2	Life time and TBO extension	Only for information
			SI-E4-002	Gearbox oil check procedure update	Only for information
MSB-E4-025/3	Fuel injectors	Considered, for next action see this MSB	SI-E4-003	Technical publication and reporting system of AE	Only for information
			SI-E4-004	EECU venting element	Only for information
MSB-E4-026/1	Inspection of Engine Harness	N/A by serial number	SI-E4-006	New Revision - Index for part numbers	Only for information
MSB-E4-028/3	Oil return line pipe	N/A by serial number	SI-E4-007	Proper handling of Turbo Charger	Only for information
MSB-E4-029/2	Modification of pressure valve hose for damping pressure oscillation	N/A by serial number	SI-E4-009	Two-Mass Flywheel and Hub	Only for information
			SI-E4-010	Caution of foreign Object Ingestion during Maintenance	Only for information
MSB-E4-030/4	Oilpump replacement	N/A by serial number	SI-E4-011	AMOC Waste gate con-rod	Only for information
MSB-E4-031/2	Oilpump replacement	N/A by serial number	SI-E4-013/1	Oil sampling	Only for information
MSB-E4-034/4	superseded by MSB-E4-036	N/A by serial number	SI-E4-014	EECU Data Log	Only for information
			SI-E4-015	Handling and storage condition of spare parts	Only for information
MSB-E4-035/2	superseded by MSB-E4-036	N/A by revision	SI-E4-016/1	Cylinder head identification - Alternative methods	Only for information
MSB-E4-036/1	High Pressure Pump (HPP) Inspection and Replacement	N/A by revision	SI-E4-018	High Pressure Pump (HPP) driving gear identification	Only for information
			SI-E4-020	Engine Shock Loads Definitions and Service Instructions	Only for information
MSB-E4-039/3	Oil Analysis and Piston replacement	N/A by serial number	SI-E4-022/1	Parts Shelf Life	Only for information
			SI-E4-023	FMU Adjustment	Only for information
MSB-E4-042/1	Crankshaft-bearing cap screws replacement	N/A by serial number	SI-E4-024	Side cover thread rework	Only for information
			SI-E4-025	Engine oil replacement and analysis	Only for information
			SI-E4-026	Engine/Parts Return Shipping Information	Only for information
			SI-E4-027	Engine Operation, Maintenance and Preservation	Only for information

Date:

24 APR 2024

Signature:



51	Sonstige Eintragungen / Other entries	
Datum: Date:	Bemerkung: Remark:	Unterschrift: Signature:
24 APR 2024	Engine SN# E4-B-06166 Conservation of the engine for 36 months, in accordance to AE BM E4.08.02 Rev. 23 Shipment includes E4A-74-000-801 belt and E4A-52-300-KIT Oil filter as individual component. Wr. Neustadt on the 24.04.2024	

LEFT

OLD

AIRCRAFT TECHNICAL LOGS

Section 3, ENGINE

1. Approving Competent Authority/Country Zuständige Genehmigungsbehörde / Staat Luftfahrt-Bundesamt / Germany		2. AUTHORISED RELEASE CERTIFICATE EASA FORM 1 Freigabebescheinigung EASA Formblatt 1			3. Item Tracking Number (if known) 215076	
4. Organisation Name and Address Name und Anschrift des Unternehmens MT-Propeller Gerd Mühlbauer GmbH Flugplatzstraße 1 84348 Atting - Germany					5. Make / Model / Identification Hersteller / Modell / Identifizierung 1618V/3482-1	
6. Item No. Num.	7. Description Beschreibung	8. Part No. Teil-Nr.	9. Qty. Menge	10. Serial No. Serien-Nr.	11. Identification Identifizierung	
1	Governor	P-877-18	1	004552416	"Campdenport"	
12. Remarks Bemerkungen		Questioned in accordance with JAR-25 26.43 Para 21 and SRM 31.13.02 Para 15. Full details of work carried out per work order 1618V/3482-1. Year of construction: 2005. TSOA unknown. TSOA 05/05 hrs.				
The work identified in Block 11 and associated herein has been accomplished in accordance with the EASA Part 145 and in respect is that work, this form is approved for return to Satisfactory under Part 145 certificate No. DE-145.5115.						
13a. Certifies that this item identified above was manufactured in conformity with the applicable design data and is in a condition for safe operation. (signed by the person responsible for the release of the item) 13b. Approves design data and is in a condition for safe operation. (signed by the person responsible for the release of the item) 13c. Approves design data specified in Block 12. (signed by the person responsible for the release of the item)				14a. <input checked="" type="checkbox"/> Part 145 & 56 Release to Service Teil 145 & 56 Freigabe 14b. <input checked="" type="checkbox"/> Other Regulatory approvals in Block 12 andere in Block 12 angegebene Freigaben Certifies that unless otherwise specified in Block 12, this work identified in Block 11 and associated herein has been accomplished in accordance with Part 145 and in respect is that work, this form is approved for return to Satisfactory under Part 145 certificate No. DE-145.5115.		
13a. Authorised Signature Unterschrift: [Signature]		13b. Approval/Authorisation Number Nr. der Freigabe: [Signature]		14a. Authorised Signature Unterschrift: [Signature]		14b. Certificate/Approval Ref. No. Nr. der Freigabe/Approbation: DE-145.5115
13c. Name Name:		13d. Date (dd/mm/yyyy) (Datum (TT/MM/JJJJ))		14c. Name Name: Andreas Kögel		14d. Date (dd/mm/yyyy) (Datum (TT/MM/JJJJ)) 27 Nov 2020

[illegible]

2758/20

mt-propeller - Regler-Prüfbericht No. 7070078408-7MT-Propeller Entwicklung GmbH
Flugplatzstr. 1, 94348 Atting

EASA DE.21G.0008

wegen Änderung ☐ Reparatur ☐ Überholung ☒ Neu ☐

Hersteller: Avia/MT		Testöl: Aeroshell W80 ✓ Öltemperatur: 75°±3°C ✓											
Propeller: MTV-6() Flugzeug: DA42-NG Motor: Austro Engine E4		Drehzahl max. 2680 + 20	2690	UV Druck bei 2400 rpm 340±10 psi	340								
Regler - Type /E: P-877-16 IA: P-877-76 ✓		Widerstand zwischen Pin 5 - 6 bei max. RPM 230±20 OHM	230	Äußere Leckage	No								
Regler - S/No /E: 095532-H15 IA: 095532-H16 ✓		Widerstand zwischen Pin 5 - 6 bei 2400 RPM 390±20 OHM	390	Innere Leckage 2400 rpm max. 0,66qt/min	0,3								
Öldruck für: Steigungsverminderung ✓ Drehrichtung: CCW facing ✓ engine mounting pad		Drehzahl min. 1980 RPM ± 10	1975	Einstellhebel Pos. 355 ✓									
Untersetzung: 0.69:1		Widerstand zwischen Pin 5 - 6 bei min. RPM 123±20 OHM	124										
Pumpe: 16 mm		Segelstellung	1.0.										
Electr. Power (Amps) Bei 1750 rpm		Solenoid 24VDC max. 1 Amp.	1.0A										
Grund/Bemerkung: gü durchführen		Vordruck 50±5 psi	50	Rissprüfung	: Flux/Penetr ✓								
		Regelverhalten	1.0	Dimensionskontrolle: ✓	ja: nein: ✓								
		Pumpenleistung at 2300 RPM 150 psi / 5 qt/min	514	verplumpt: ✓ konserviert: ✓									
Baujahr: 2009 TSN, Std.: ungek. TSO, Std.: 4:00 Letzte OH am: 21.11.18 TSR, Std.: -		Power Consumption to low RPM to high RPM Max. 0,15 Amp at 24 VDC	85 mA 92 mA	Oberfläche: ✓ Sicherung: ✓ Siebdichtung: ✓ Zubehör: ✓									
Kunde: Warner Propeller USA		LTA:		SL:									
		SB:		SI:									
		Manual:	E-1049 ✓										
<div style="display: flex; justify-content: space-between;"> <div> <p>ERSATZTEILE</p> <table border="1"> <thead> <tr> <th>Teile-Nr.</th> <th>Bezeichnung</th> <th>Stck.</th> <th>Ges.-Preis</th> </tr> </thead> <tbody> <tr> <td>MS914401</td> <td>M. Gasket</td> <td>1</td> <td></td> </tr> </tbody> </table> </div> <div> </div> </div>						Teile-Nr.	Bezeichnung	Stck.	Ges.-Preis	MS914401	M. Gasket	1	
Teile-Nr.	Bezeichnung	Stck.	Ges.-Preis										
MS914401	M. Gasket	1											
Erstellt: 07.11.07 je/fh Geändert: 11.12.19 fh/ma		Eingangsprüfung: <i>R. Bismuth</i>		Endmontage: <i>R. Bismuth</i>									
				Ausgangsprüfung: 22.03.2020 Ausweis-Nr. 6561 Klasse 4									

Termin: 24.03.2020

Form 009-A

Geräte-Laufkarte / Equipment Log-Sheet

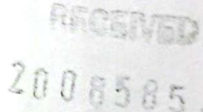
Geräte Art: <i>Type of Equipment:</i>	Propeller-Regler <i>Propeller Governor</i>	Baumuster: <i>Partnumber:</i>	P-877-16	Werk-Nr.: <i>Serial No.:</i>	09G532-H/G
Hersteller: <i>Manufacturer:</i>	MT Propeller Entwicklung GmbH Flugplatzstraße 1 D-94348 Atting Germany		Prüfbericht Nr.: <i>Check-off Record No.:</i> 1010018408-1		
Bestimmt für Flugzeug: <i>Specific Installation:</i> DA42-NG			Bestimmt für Triebwerk: <i>Specific Engine:</i> Austro Engine E4		
Gerätedaten, Meßbereiche / Technical and Inspection Data: max. Drehzahl 2690 min. Drehzahl 1985 Spannung 24 Stromaufnahme 150 <i>/ max. Rev.: RPM / min. Rev.: RPM / Voltage Solenoid: VDC / Power cons.: mA</i> Pumpenleistung/ 5,42 qts./min@150 psi@2300 RPM Ölsorte: - <i>Pumpcapacity: Type of Oil:</i> Stromverbrauch / 82,6 mA, 24 VDC Stromverbrauch/ 90,6 mA, 24 VDC <i>Power consumption to low rpm Power consumption to high rpm</i> ÜV Druck / <i>Relief Valve Pressure low 1:</i> 340 psi @ 2400RPM Hebelposition / <i>Control Arm position:</i> 355° Lageerkennung, Widerstand Pin 5-6: 230 Ω bei max RPM <i>Position Sensing, Resistance Pin 5-6:</i> 389 Ω bei 2400 RPM 123 Ω bei min RPM Öldruck zur Steigungsverminderung / <i>Oil pressure to decrease</i> Drehrichtung / <i>Rotation:</i> CCW Überholung alle: 2000 or 72 Monate Datum / <i>Date:</i> 27 March 2020 <i>Overhaul every (TBO): Std / Hrs Months Prüfer / Inspector:</i>					

Prüf- und Einbauvermerke / Inspection and Installation Notes

Nr.:	Art der Prüfung und Anlaß / <i>Reason of Inspection</i>		Betriebsstd. seit / <i>Operating Time since</i>			Ort: <i>Locat.:</i>	Firma: <i>Company:</i>
	Ein bzw. Ausbau: <i>Installation or Removal:</i>	Datum <i>Date</i>	Neu <i>New</i>	Überh <i>Overh</i>	Rep. <i>Rep.</i>		
1	Overh. acc. to work order 1010018408-1	27.03.2020	unk.	00:00		Atting	MT PROPELLER STRAUBING DE.145.0115
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
Übertrag:							

1. Approving Competent Authority / Country Austro Control GmbH Austria		2. AUTHORISED RELEASE CERTIFICATE EASA FORM 1				3. Form Tracking Number AE033800	
4. Organisation Name and Address		Austro Engine GmbH Rudolf Diesel Straße 11 2700 Wr. Neustadt, AUSTRIA				5. Work Order / Contract / Invoice ES201615	

6. Item	7. Description	8. Part No.	9. Quantity	10. Serial No.	11. Status / Work
1	Engine Konfiguration B	E4B-00-000-AHY Iss. 011	1	E4-B-05001	New
2	Engine Konfiguration B	E4B-00-000-AHY Iss. 011	1	E4-B-06002	New



12. Remarks REFER TO AE033800-1
General The engine conforms to the type design approved by Canadian Department of Transport Type Certificate IE-68.
General The engine complies with the applicable airworthiness directives.
Item 1 The engine conforms to EASA TCDS E.200 Issue 12; Damper assy P/N: D44-7306-30-00_1 (EASA Form 1: AJ54025)
Item 1 Fuel hose assy P/N: A24119-01 (EASA Form 1: 227708). Cleaned and Installed acc. AE APA_Pulsationsdämpfer-Aufbau_190618.
Item 2 The engine conforms to EASA TCDS E.200 Issue 12; Damper assy P/N: D44-7306-30-00_1 (EASA Form 1: AJ54025)



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

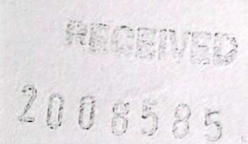
Certifies that unless otherwise specified in block 12 the work identified in block 11 and described in block 12 was accomplished in accordance with Part-145 and in respect to that work, the items are considered ready for release to service.

13b. Authorised Signature 	13c. Approval /Authorisation Number AT.21G.0010	14b. Authorised Signature	14c. Certificate / Approval Reference Number
13d. Name 	13e. Date (dd mmm yyyy) 19 AUG 2020	14d. Name	14e. Date (dd mmm yyyy)

USER / INSTALLER RESPONSIBILITIES
This certificate does not automatically constitute authority to install the item(s). Where the user/installer performs work in accordance with regulations of an airworthiness authority different than 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 aircraft maintenance records must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.

1. Approving Competent Authority / Country Austro Control GmbH Austria		AUTHORISED RELEASE CERTIFICATE EASA FORM 1				3. Form Tracking Number AE033800	
4. Organisation Name and Address		Austro Engine GmbH Rudolf Diesel Straße 11 2700 Wr. Neustadt, AUSTRIA				5. Work Order / Contract / Invoice ES201615	

6. Item	7. Description	8. Part No.	9. Quantity	10. Serial No.	11. Status / Work
1	Engine Konfiguration B	E4B-00-000-AHY Iss. 011	1	E4-B-05001 ✓	New
2	Engine Konfiguration B	E4B-00-000-AHY Iss. 011	1	E4-B-05002 ✓	New



12. Remarks

General The engine conforms to the type design approved by Canadian Department of Transport Type Certificate IE-68.

General The engine complies with the applicable airworthiness directives.

Item 1 The engine conforms to EASA TCDS E.200 Issue 12; Damper assy P/N: D44-7306-30-00_1 (EASA Form1: AJ54025)



Item 1 Fuel hose assy P/N: A24119-01 (EASA Form1: 227708). Cleaned and installed acc. AE APA_Pulsationsdämpfer-Aufbau_190618.

Item 2 The engine conforms to EASA TCDS E.200 Issue 12; Damper assy P/N: D44-7306-30-00_1 (EASA Form1: AJ54025)

REFER TO AE0338

DA
QA 6

13a. Certifies that the items identified above were manufactured in conformity to: <input checked="" type="checkbox"/> approved design data and are in condition for safe operation <input type="checkbox"/> non-approved design data specified in block 12		14a. <input type="checkbox"/> Part-145.A.50 Release to Service <input type="checkbox"/> 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.	
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13b. Authorised Signature 	13c. Approval /Authorisation Number AT.21G.0010	14b. Authorised Signature <div style="background-color: #cccccc; height: 40px;"></div>	14c. Certificate / Approval Reference Number <div style="background-color: #cccccc; height: 40px;"></div>
13d. Name 	13e. Date (dd mmm yyyy) 19 AUG 2020	14d. Name <div style="background-color: #cccccc; height: 40px;"></div>	14e. Date (dd mmm yyyy) <div style="background-color: #cccccc; height: 40px;"></div>



USER / INSTALLER RESPONSIBILITIES

This certificate does not automatically constitute authority to install the item(s). Where the user/installer performs work in accordance with regulations of an airworthiness authority different than 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 aircraft maintenance records must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.

ENGINE LOG

1. Make: **Austro Engine GmbH**
2. Model: **E4-B**
3. Specification: **E200 (EASA)
E00081EN (FAA)**
4. Manufacturer's Serial Number: **E4-B-05001**
5. Date of Manufacture: **Aug 2020**
6. Aircraft Inspection Cycle:

ENGINE MAINTENANCE LOG

DATE	TACH HOBBS METER TIME	DESCRIPTION OF WORK PERFORMED All data must be endorsed with the Repair Station Number or Signature and Certificate Number of the person performing the work
 <p>PRESCOTT, ARIZONA 3700 WILLOW CREEK ROAD MAINTENANCE (928) 777-4339</p>		
<p>N 594ER S/N# 42.AC064 W/O # 202003449 A/C TACH 1274.4 A/C TT: 1274.4 Removed Austro Engine P/N # E4-B and S/N # E4-B-00217 Engine TTSN 1173.5 Engine SMOH 1173.5. Installed Engine P/N # E4-B S/N # E4-B-05001 Engine TTSN 0.0 Engine SMOH 0.0 on LEFT position. All work completed per Diamond DA42NG Aircraft Maintenance Manual chapter 71-00-00 and Austro Engine AE300/E4 Installation Manual Document Number E4.02.01 all latest revisions. Run up and Leak check was good. DATE: 12-11-20 SIGN: <u>[Signature]</u> CRS #BF8R0320</p>		
 <p>PRESCOTT, ARIZONA 3700 WILLOW CREEK ROAD MAINTENANCE (928) 777-4339</p>		
<p>N 594ER S/N# 42.AC064 W/O # N/A A/C TACH 1292.9 A/C TT: 1292.9 ENGINE TTSN 18.5 Engine SMOH 18.5 Complied with AD 2020-22-14, verified LT. eng. waste gate control rod fail-safe bridge and spring loaded circlip were both installed at factory when engine was built on AUG. 2020 this constitutes terminating action for the Initial and repetitive replacement requirements of the AD. DATE: 1-13-21 SIGN: <u>[Signature]</u> 14 CRS #BF8R0320</p>		
4/15/21	1318.5	C/W MSB-E4-030/4 Replaced affected oil pump in w/o # 202100544 left engine per Austro Engine MM Ch. 79 and Diamond DA42NG AMM 7L ENG. TTSN 44.1 <u>[Signature]</u> 4 CRS# BF8R0320

ENGINE MAINTENANCE LOG

DATE	TACH HOBBS METER TIME	DESCRIPTION OF WORK PERFORMED All data must be endorsed with the Repair Station Number or Signature and Certificate Number of the person performing the work
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PRESCOTT, ARIZONA
3700 WILLOW CREEK ROAD
MAINTENANCE (928) 777-4339

N594ER S/N# 42.AC064 W/O# N/A
A/C TACH 1331.8 A/C TT: 1331.8
Complied with AD 2021-09-04, verified the LEFT
engine s/n E4-B-05001, oil pump has been previously
replaced in compliance with Austro Engine MSB-E4-030/4,
Revision 4 dated March 30, 2021.
Oil pump replaced at Engine TTSN: 44.1
Date: 4-15-21, W/O# 2020 202100544

DATE: 4-28-21
SIGN: [Signature] 14 CRS #BF8R0320

Complied with ~~(50 hr)~~ (100 hr) (Annual) Inspection
Date 03 June 2021 W/O 2010 2233
Tach 1370.4 A/C TT 1370.4
Eng TT Lt 96.0 Rt 434.8
Eng TSMO Lt 96.0 Rt 434.8
Prop TT Lt 5098.6 Rt 3177.5
Prop TSMO Lt 418.7 Rt 709.1
Inspector: JAYVIM 18

ERAU Maintenance Section
Repair Station No. BF8R0320

Complied with ~~(50 hr)~~ (100 hr) (Annual) Inspection
Date 9-16-21 W/O 202103581
Tach 1478.1 A/C TT 1478.1
Eng TT Lt 203.7 Rt 542.5
Eng TSMO Lt 203.7 Rt 542.5
Prop TT Lt 5206.3 Rt 3285.2
Prop TSMO Lt 526.4 Rt 816.8
Inspector: [Signature] 10

ERAU Maintenance Section
Repair Station No. BF8R0320

COMPLIED WITH MSB-E4-034/2 AND
MSB-E4-035 BY REPLACING AFFECTED
PN: E4A-30-000-000
HIGH PRESSURE FUEL PUMP SN: 20-02-31-02-0000
WITH SERVICEABLE HIGH PRESSURE FUEL PUMP
PN: E4A-30-000-BHV
SN: 17-08-19-02-01016, LEAK AND OPERATIONAL
CHECK GOOD. [Signature] 10

CRS# BF8R0320

11/23/2021	265.3 LH ENGINE	Complied with AD 2021-22-20 Inspection of the HPP drive gear.
ACTT	1539.7	No defects noted, replacement of drive gear is not applicable.
ALSN	42.AC064	Refer to W/O# 202105038. <u>[Signature]</u> 11

ENGINE MAINTENANCE LOG

DATE

TACH
HOBBS
METER
TIME

DESCRIPTION OF WORK PERFORMED

All data must be endorsed with the Repair Station Number or
Signature and Certificate Number of the person performing the work



PRESCOTT, ARIZONA
3700 WILLOW CREEK ROAD
MAINTENANCE (928) 777-4339

N 594ER S/N# 42.AC064 W/O# N/A
A/C TACH 1549.8 A/C TT: 1549.8
Engine TTSN 275.4 Engine SMOH 275.4
Complied with AD 2021-24-10, verified the LEFT
engine s/n E4-B-05001, oil pump has been previously
replaced in compliance with Austro Engine MSB-E4-030/4,
Revision 4 dated March 30, 2021.
Oil pump replaced at Engine TTSN: 44.1
Date: 4-15-21 W/O# 202100544

DATE: 1-6-22 14
SIGN: [Signature] CRS #BF8R0320



PRESCOTT, ARIZONA
3700 WILLOW CREEK ROAD
MAINTENANCE (928) 777-4339

N 594ER S/N# 42.AC064 W/O# N/A
A/C TACH 1567.5 A/C TT: 1567.5
Engine TTSN 293.1 Engine SMOH 293.1
Complied with AD 2022-03-03, verified the LEFT
Engine High Pressure Fuel pump s/n 19-08-19-02-01016
& drive gear are not affected per Austro Engine
MSB-E4-036/1, Revision 1 dated
December 14, 2021. No further action is required.

DATE: 2-24-22 14
SIGN: [Signature] CRS #BF8R0320


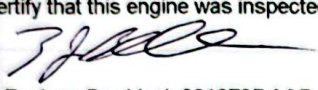

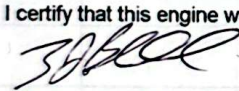

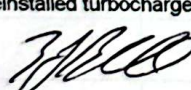
I certify that this aircraft, airframe, aircraft engine, propeller or appliance
has been inspected in accordance with an (50 Hour) (100 Hour) (Annual)
Inspection and was found to be in airworthy condition.

Complied with ~~(50 hr)~~ (100 hr) (Annual) Inspection

Date 4-19-22 W/O 202201372
Tach 1574.9 A/C TT 1574.9
Eng TT Lt 300.5 Rt 639.3
Eng TSMO Lt 300.5 Rt 639.3
Prop TT Lt 5558.5 Rt 5295.7
Prop TSMO Lt 10962 Rt 615.9
Inspector: [Signature] 28

ERAU Maintenance Section
Repair Station No. BF8R0320

ENGINE MAINT

DATE	TACH HOBBS METER TIME	DESCRIPTION All data must be endorsed by Repair Station Number or Signature and Certificate Number of the person performing the work
	Model: DA42 S/N. 42.AC064 Reg # N594ER	<div><div>CRAFT FLIGHT TRAINING & SIMULATION 890 Greyback Rd, Summerville, SC 29483</div><div>Date: 3/3/2023 Tach: 1675.1</div></div> <p>1. Performed oil change 2. Cut oil filter, inspected for metal, no metal noted 3. Collected oil sample for analysis at blackstone laboratories 4. Refilled with Liqui Moly LEICHTLAUF HIGH TECH 5W-40 5. Replaced oil filter P/N: HU615/3X 6. Checked gearbox magnetic plug for metal. No metal noted 7. Inspected and cleaned gearbox filter Ground ran engine no leaks/faults noted. Engine approved for return to service at this time. I certify that this engine was inspected IAW a 100hr inspection and was determined to be in airworthy condition at this time.</p> <p> Zachary Braddock 3310705 A&P</p>
	Model: DA42 S/N. 42.AC064 Reg # N594ER	<div><div>CRAFT FLIGHT TRAINING & SIMULATION 890 Greyback Rd, Summerville, SC 29483</div><div>Date: 5/5/2023 Tach: 1756.1</div></div> <p>ANNUAL inspection completed this date IAW Diamond Aircraft DA42 NG AMM and Diamond Aircraft Inspection Checklist that meets the scope and detail of 14 CFR Appendix D to Part 43</p> <p>1. Performed oil change 2. Cut oil filter, inspected for metal, no metal noted 3. Collected oil sample for analysis at blackstone laboratories 4. Refilled with Liqui Moly LEICHTLAUF HIGH TECH 5W-40 5. Replaced oil filter P/N: HU615/3X 6. Checked gearbox magnetic plug for metal. No metal noted 7. Inspected and cleaned gearbox filter Ground ran engine no leaks/faults noted. Engine approved for return to service at this time. I certify that this engine was inspected IAW a 100hr inspection and was determined to be in airworthy condition at this time.</p> <p> Zachary Braddock 3310705 A&P/IA</p>
	Model: DA42 S/N. 42.AC064 Reg # N594ER	<div><div>CRAFT FLIGHT TRAINING & SIMULATION 890 Greyback Rd, Summerville, SC 29483</div><div>Date: 6/19/2023 Tach: 1817.3</div></div> <p>Reinstalled turbocharger high pressure line. Aircraft approved for return to service at this time</p> <p> Zachary Braddock 3310705 A&P</p>

14001
LE

Date: 7/12/2023



A&P 2151929 IA

Registration: N5941R ES-N 14B-05001
Engine TSN 774.5 TSO N/A
AC Serial Number: 42 AC064
Airframe TT: 204890
WO: 6873

Maintenance performed

Complied with 200 HR inspection referencing the aircraft and engine V-Ms. Drained the engine and Gearbox oil, replaced engine oil and fuel filters. Inspected the oil fill area, found ok. Inspected Gearbox oil, found no metal. Serviced engine oil with 7 liter of Aeroshell Diesel Ultra. Serviced Gearbox oil with Spaxs Sx. OXMI. Serviced the constant v. th. Capstan Protect Plus G48 referencing the engine Mkt. Run up and leak check. Found 1cc/1h at this engine has been inspected JAW 100. Inspections and was found to be airworthy. Test D, at AIT 1 2148-9.

Signature _____

COPY SCHLICK 3881095 ANP

Rel: NS94 ER	
IN6 TFSN: 803	
Ac SN: 42. Acob ¹¹	
Airframe H: 20477.4	
Repaired crank shaft sensor, selfried gearbox and coolant Per Diamond DALLANCE and Austro AE300 mm ops and year check	
good.	
Phillip Dickinson 447486 AFP	
Bluf for	
Date 7/24/2011	



South Atlantic

DATE: JUNE 20, 2024 | MAKE/MODEL: DIAMOND DA42NG | 8/N, 42AC004 | REG: N594ER
TACH: 2074.0 HRS | TT OLD ENGINE: 750.0 HRS | TT NEW ENGINE: 0 HRS

PERFORMED LH ENGINE AND ASSOCIATED COMPONENT CHANGE DUE TO SERVICE LIMITS. REMOVED ENGINE SN: E4-B-03601, INSTALLED NEW ENGINE SN: E4-B-08166. ALL CURRENT ENGINE ACCESSORY/COMPONENT SERIAL #'S ARE NOTED IN AUSTRALIAN ENGINE LOGBOOK.

AD 6MSB-8 ASSOCIATED WITH THE NEW ENGINE INSTALL VERIFIED. AD 24-05-01/MSB-E4-042 DATED 31 JAN 2024 AND AD 23-20-03/MSB-E4-039/1 DATED 25 APR 2023 ARE VIA BY SERIAL NUMBER ON NEW INSTALLED ENGINE.

THIS AIRCRAFT HAS BEEN SERVICED IN ACCORDANCE WITH THE CURRENT DIAMOND DA42NG AND AUSTRALIA F4 SERIES MAINTENANCE MANUALS. DEFICIENCIES FOUND DURING ENGINE INSTALL AND ANNOTATED ON ENGINE LOG ENTRY DATED: 20 JUN 2024.



Scott Seamon
Scott Seamon

AP 3581287


RIGHT

AIRCRAFT TECHNICAL LOGS

Section 3, ENGINE


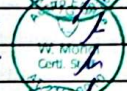

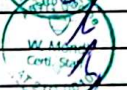

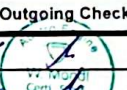
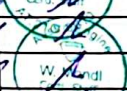

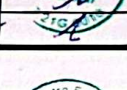
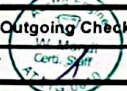
1. Approving competent Authority/Country <i>Autorité Compétente/Pays</i> DIRECTION GENERALE DE L'AVIATION CIVILE FRANCE		2. AUTHORISED RELEASE CERTIFICATE <i>Certificat Libératoire Autorisé</i> EASA FORM 1 <i>Formulaire 1 de l'EASA</i>			3. Form Tracking Number <i>N° de repère du Formulaire</i> 211510	
4. Approved Organisation Name and Address : <i>Nom et Adresse de l'organisation approuvée</i>		 22 avenue Maurice Chevalier Zone Industrielle BP73 77833 O. OIR-LA-FERRIERE cedex France Tel. (33) 0160186200 - Fax (33) 0164402337			5. Work Order / Contract / Invoice <i>Bon de commande / Contrat / Facture</i> 62852	
6. Item	7. Description	8. Part No	9. Qty / Qte	10. Serial No / N° série	11. Status / Work <i>Etat / Travaux</i>	
1	HOSE ASSY - TSO C53 a TYPE D QAC 135 TSO C75 TYPE III A SP/F QAC 148	A24119-01	80	N/A	NEW	
12. Remarks <i>Remarques</i> BATCH : 321889						
13a. Certifies that the items identified above were manufactured in conformity to : <i>Certifie que les éléments identifiés ci-dessus ont été fabriqués conformément aux :</i> <input checked="" type="checkbox"/> approved design data and are in a condition for safe operation <i>données de conception approuvées et sont en état de fonctionner en toute sécurité</i> <input type="checkbox"/> non-approved design data specified in block 12 <i>données de conception non approuvées spécifiées dans la case 12</i>			14a. <input type="checkbox"/> Part 145.A.50 Release to Service <i>Approbation pour remise en service</i> <i>Selon Partie 145.A.50</i> <input type="checkbox"/> Other regulation specified in block 12 <i>Autre réglementation précisée en case 12</i> 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. <i>Certifie que, sauf indication contraire spécifiée en case 12, les travaux identifiés en case 11 et décrits en case 12 ont été réalisés conformément à la partie 145 et qu'au vu de ces travaux, les pièces sont considérées prêtes à la remise en service.</i>			
13b. Authorised Signature <i>Signature autorisée</i> 		13c. Approval / Autorisation Number <i>Numéro d'Agrément / d'autorisation</i> FR.21G.0094		14b. Authorised Signature <i>Signature autorisée</i>		14c. Certificate / Approval Ref. No <i>Numéro de Certificat / d'agrément</i>
13d. Name / Nom CHAUVIN		13e. Date (dd/mm/yy) (jj/mm/aaaa) 14MAR2017		14d. Name / Nom		14e. Date (dd/mm/yy) (j/m/a)

Certified true Copy

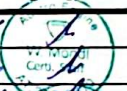

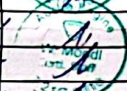
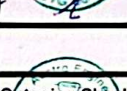
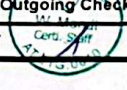
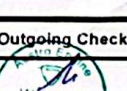


1. Approving Competent Authority /Country Austro Control GmbH Austria		2.			AUTHORISED RELEASE CERTIFICATE EASA FORM 1		3. Form Tracking Number AJ31198	
4. Organisation Name and Address: Diamond Aircraft Industries GmbH. N.A. Otto Str. 5 2700 Wiener Neustadt, AUSTRIA		5. Work Order / Contract / Invoice AS1608117						
6. Item	7. Description	8. Part No.	9. Quantity	10. Serial No.	11. Status / Work			
1	Damper assy	D44-7306-30-00_1	29	N/A	New			
12. Remarks NONE								
<p>Explanation of Part.No. extensions: -EXC...Exchange part, -NAD...Non approved data, -NPC...Not postcured, -NSP...Not surface protected, -NTD...Non trimmed or drilled, -LH...Left hand part, -RH... Right hand part, -P47... painted with colour code DB9147, -P35...painted with colour code RAL7035, -P16...painted with colour code RAL 9016. For the following Part.No. extensions see details on the delivery note referenced in Block 5: -ASY...Assembly level higher than drawing, -KIT...Parts kit, -MO*...Modified, -OPOS(x)...without position x, -POS(y)...only position y, -SET...created as set.</p>								
13a. Certifies that the items identified above were manufactured in conformity to:			14a.					
<input checked="" type="checkbox"/> approved design data and are in condition for safe operation <input type="checkbox"/> non-approved design data specified in block 12			<input type="checkbox"/> Part-145.A.50 Release to Service <input type="checkbox"/> 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 Reference Number		
 Name: Staff Parts A. BRUNNER AT21G.0001 Quality Assurance #13		AT.21G.0001						
13d. Name		13e. Date (dd mmm yyyy)		14d. Name		14e. Date (dd mmm yyyy)		
		09.May.2017						
USER / INSTALLER RESPONSIBILITIES This certificate does not automatically constitute authority to install the item(s). Where the user/installer works in accordance with regulations of an airworthiness authority different than 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 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.								

Motor Identification		
Description / Version	Part number:	
E4 Configuration B	E4-B-00-000-000	
Job number:	Serial No:	Date (TTMMJJ)
EWO170035	E4-B-00533	17.07.2017

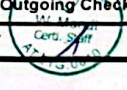
Parts installed on the core Engine

	Qty.	Description	Part number	Rev.	S/N or Batch No.	Outgoing Check	Customer Check
1	1	Wiring Harness	E4B-95-000-000	030	EWO161800		
2	1	Turbocharger	E4B-41-100-000	000	TD5028704700013		
3	1	Glow Plug Control Unit	E4A-94-200-000	043	002172		
4	1	Starter	E4A-93-000-000	011	80391222		
5	1	Generator	E4A-91-400-000	AB1	01165		
6	1	Gearbox	E4A-70-000-000	115	2437		
7	1	Common Rail	E4A-33-100-000	010	1208300046		
8	1	High Pressure Pump	E4A-30-200-000	010	12-03-23-03-00119		
9	1	Damper Assy	D44-7306-30-00_1	N/A	N/A		
10	1	Hose Assy	A24119-01	N/A	N/A		



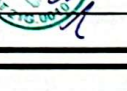
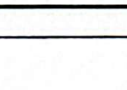
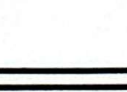
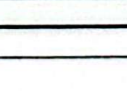
Parts not installed on the core Engine

	Qty.	Description	Part number	Rev.	S/N or Batch No.	Outgoing Check	Customer Check
11	4	Kaylock M8	LN9338-08	000	0008146388		
12	1	EECU	E4B-92-000-000	120	1914		
13	1	ZB Schirmung Kraftstoffdruck	E4A-95-100-000	010	EWO161617		
14	1	Voltage Regulator	E4A-91-200-000	011	1754777		
15	1	Keilrippenriemen	E4A-74-000-801	000	MBU145811		
16	1	Ölfiltersatz	E4A-52-100-802	N/A	MBU146232		
17	2	Power Lever Sensor	E4A-09-000-901	000	80662672		
18	1	Cu-Ring	DIN7603-A14x20CU	000	8020930826		




Optional Parts Supply

	Qty.	Description	Part number	Rev.	S/N or Batch No.	Outgoing Check	Customer Check
19	1	Propeller Governor	P877-16	000	16G631-H/G		

Documents



	Qty.	Description	Part number	Rev.	S/N or Batch No.	Outgoing Check	Customer Check
20	1	Engine Log	N/A	N/A	E4-B-00533		
21	1	Engine EASA Form 1	N/A	N/A	AE014481		
22	1	Shipping Documents	N/A	N/A	ES170144		
23	1	MT-EASA Form 1 & Log Sheet	N/A	N/A	2755/16		
24	1	DAI-A EASA Form 1	D44-7306-30-00_1	N/A	AJ31198		
25	1	TITEFLEX EASA Form 1	A24119-01	N/A	211510		

Delivery Check

Staff:	Date: (TTMMJJ)	Sign:	Stamp:
	17 JUL 2017		

Incoming Check

Staff:	Date: (TTMMJJ)	Sign:	Stamp:

1. Approving Competent Authority /Country Austro Control GmbH Austria		2. AUTHORISED RELEASE CERTIFICATE EASA FORM 1			3. Form Tracking Number AE014481	
4. Organisation Name and Address: Austro Engine GmbH Rudolf Diesel Straße 11 2700 Wiener Neustadt, AUSTRIA				5. Work Order / Contract / Invoice ES170144		
6. Item	7. Description	8. Part No.	9. Qty.	10. Serial No.	11. Status/Work	
1	E4 Configuration B	E4-B-00-000-000 Iss.: 011	1	E4-B-00533	New	
12. Remarks Item 1: The Engine conforms to EASA TCDS E.200 Issue 10; Damper assy P/N: D44-7306-30-00_1 (EASA Form1: AJ31198) and Item 1: Fuel hose assy P/N: A24119-01 (EASA Form1: 211510) acc. DAI-Drawing D44-7306-00-00 item #16 & #17 cleaned and installed acc AE APA 26.02.2014						
13a. Certifies that the items identified above were manufactured in conformity to: <input checked="" type="checkbox"/> approved design data and are in condition for safe operation <input type="checkbox"/> non-approved design data specified in block 12			14a. <input type="checkbox"/> Part-145.A.50 Release to Service <input type="checkbox"/> 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 AT.21G.0010		14b. Authorised Signature		
13d. Name 		13e. Date (dd mmm yyyy) 17 JUL 2017		14c. Certificate/ Approval Ref. Number		
				14d. Name		
				14e. Date (dd mmm yyyy)		
USER / INSTALLER RESPONSIBILITIES This certificate does not automatically constitute authority to install the item(s). Where the user/installer performs work in accordance with regulations of an airworthiness authority different than 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 aircraft maintenance records must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.						

EASA Form 1 - 21 Issue 2

Freigabe: 24.Aug. 2010 / M. Nemec

FOQ05_Form1_rev1

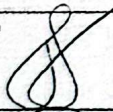

1. Approving Competent Authority /Country Austro Control GmbH Austria		2. AUTHORISED RELEASE CERTIFICATE EASA FORM 1				3. Form Tracking Number AE028873
4. Organisation Name and Address: Austro Engine GmbH Rudolf Diesel Straße 11 2700 Wiener Neustadt, AUSTRIA				5. Work Order / Contract / Invoice EUGWS1901006		
6. Item	7. Description	8. Part No.	9. Qty.	10. Serial No.	11. Status/Work	
1	EECU Software	E4B-92-200-000 Iss.: AC1	1	N/A	New	
12. Remarks Item 1: Balch No.: VC33_0_06_23						
13a. Certifies that the items identified above were manufactured in conformity to: <input checked="" type="checkbox"/> approved design data and are in condition for safe operation <input type="checkbox"/> non-approved design data specified in block 12				14a. <input type="checkbox"/> Part-145.A.50 Release to Service <input type="checkbox"/> 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 AT.21G.0010		14b. Authorised Signature		14c. Certificate/ Approval Ref. Number
13d. Name 		13e. Date (dd mmm yyyy) 30 JUL 2019		14d. Name		14e. Date (dd mmm yyyy)
USER / INSTALLER RESPONSIBILITIES This certificate does not automatically constitute authority to install the item(s). Where the user/installer performs work in accordance with regulations of an airworthiness authority different than 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 aircraft maintenance records must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.						

EASA Form 1 - 21 Issue 2

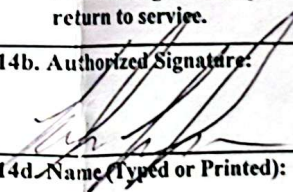
Freigabe: 24.Aug. 2010 / M. Nemec

FOQ05_Form1_rev1

Installed On (Reg #)	N 594ER
Date Installed	12/20/19
A/C Total Time	935.6
Technician	SEAN MOREAU
Position	(L) & (R) ECU
Engine	L R
Work Order #	201902788

1. Approving Competent Authority / Country Austro Control GmbH Austria		2. AUTHORISED RELEASE CERTIFICATE EASA FORM 1				3. Form Tracking Number AE032694	
4. Organisation Name and Address		Austro Engine GmbH Rudolf Diesel Straße 11 2700 Wr. Neustadt, AUSTRIA				5. Work Order / Contract / Invoice EUGWS2000737	
6. Item	7. Description	8. Part No.	9. Quantity	10. Serial No.	11. Status / Work		
1	EECU Software	E4B-92-200-000 Iss. AD1	1	N/A	New		
12. Remarks Item 1 Batch No.: VC33_0_06_24							
13a. Certifies that the items identified above were manufactured in conformity to: <input checked="" type="checkbox"/> approved design data and are in condition for safe operation <input type="checkbox"/> non-approved design data specified in block 12				14a. <input type="checkbox"/> Part-145, AEO Release to Service <input type="checkbox"/> 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 AT.21G.0010		14b. Authorised Signature		14c. Certificate / Approval Reference Number	
13d. Name 		13e. Date (dd mmm yyyy) 23 JUN 2020		14d. Name		14e. Date (dd mmm yyyy)	
<p>USER / INSTALLER RESPONSIBILITIES</p> <p>This certificate does not automatically constitute authority to install the item(s). Where the user/installer performs work in accordance with regulations of an airworthiness authority different than 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 aircraft maintenance records must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.</p>							

Installed On (Reg #)	N 594 ER	
Date Installed	8-20-20	
A/C Total Time	1176.9	
Technician	Ave Gills	
Position	L	R
Engine	L	R
Work Order #	202602051	

1. Approving National Aviation Authority/Country: FAA/UNITED STATES		2. AUTHORIZED RELEASE CERTIFICATE FAA Form 8130-3, AIRWORTHINESS APPROVAL TAG			3. Form Tracking Number: N/A	
4. Organization Name and Address: Embry-Riddle Aeronautical University – Aircraft Maintenance Section (R/S #BF8R0320) 6482 Corradi Way; Prescott, Arizona 86301					5. Work Order/Contract/Invoice Number: N/A	
6. Item:	7. Description:	8. Part Number:	9. Quantity:	10. Serial Number:	11. Status/Work:	
1	Propeller Governor	P-877-16	1	22G186-KG	NONE	
12. Remarks: Installed on AC 94 temporarily for troubleshooting the propeller feathering system. No maintenance performed to the component.						
13a. Certifies the items identified above were manufactured in conformity to: <input type="checkbox"/> Approved design data and are in a condition for safe operation. <input type="checkbox"/> Non-approved design data specified in Block 12.			14a. <input checked="" type="checkbox"/> 14 CFR 43.9 Return to Service <input type="checkbox"/> 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 Title 14, Code of Federal Regulations, part 43 and in respect to that work, the items are approved for return to service.			
13b. Authorized Signature: N/A		13c. Approval/Authorization No.: N/A		14b. Authorized Signature:  11		14c. Approval/Certificate No.: CRS# BF8R0320
13d. Name (Typed or Printed): N/A		13e. Date (dd/mm/yyyy): N/A		14d. Name (Typed or Printed): Michael Nelson		14e. Date (mm/dd/yyyy) 04/07/2022
User/Installer Responsibilities						
It is important to understand that the existence of this document alone does not automatically constitute authority to install the aircraft engine/propeller/article.						
Where the user/installer performs work in accordance with the national regulations of an airworthiness authority different than the airworthiness authority of the country specified in Block 1, it is essential that the user/installer ensures that his/her airworthiness authority accepts aircraft engine(s)/propeller(s)/article(s) from the airworthiness authority of the country specified in Block 1.						
Statements in Blocks 13a and 14a do not constitute installation certification. In all cases, aircraft maintenance records must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.						

1. Approving Civil Aviation Authority/Country <p style="text-align: center; font-weight: bold;">Transport Canada</p>		2. AUTHORIZED RELEASE CERTIFICATE FORM ONE			3. Form Tracking Number <p style="text-align: center; font-weight: bold;">SI201208</p>	
4. Organizations Name and Address: <p>Diamond Aircraft Industries Inc. 1560 Crumlin Sideroad London, Ontario N5V1S2</p>					5. Work Order/Contract/Invoice <p style="text-align: center; font-weight: bold;">N/A</p>	
6. Item:	7. Description:	8. Part Number:	9. Quantity:	10. Serial/Batch Number:	11. Status/Work:	
10	Inverter, Flood Lamp	APVL328-4-1-L-5QF	3	RC2200357 (3)	NEW	
11	Assy, GPC Austro Engine	E4A-94-200-000	6	RC2200299 (6)	NEW	
12	Voltage Regulator DA 40/42 NG	E4A-91-200-000	2	RC2107131 (2)	NEW	
13	SYSTEM: TURBOCHARGER W/ BPA	E4C-00-410-000-BHY	4	RC2200294 (4)	NEW	
14	Governor, Prop, DA42NG	P-877-16	2	22G186-KG, 22G189-KG	NEW	
12. Remarks: Customer Reference						
13a. Certifies that the items identified above were manufactured in conformity to: <input checked="" type="checkbox"/> Approved design data and are in condition for safe operation <input type="checkbox"/> Non-approved design data specified in Block 12.			14a. <input type="checkbox"/> CAR 571.10 Maintenance Release <input type="checkbox"/> Other regulations specified in block 12. Certifies that unless otherwise specified in Block 12, the work identified in Block 11 and described in block 12, has been performed in compliance with the Canadian Aviation Regulations.			
13b. Signature	13c. Approval Organization Number		14b. Signature	14c. Approved Organization Number		
	 /161-93					
13d. Name	13e. Date (dd/mm/yyyy):		14d. Name	14e. Date (dd/mm/yyyy)		
Derreck Leenders	01/Apr/2022					
30 Dec 2008 (Previously form 24-0078) Installer Responsibilities This certificate does not constitute authority to install. Installers working in accordance with the national regulations of a country other than the authority specified in Block 1, must ensure that their regulations recognize certifications from the country specified. Statements 13a or 14a do not constitute installation certification. In all cases, the aircraft technical record must contain an installation certification issued in accordance with the applicable national regulations before the aircraft may be flown.						

Installed on (Reg #) N 594ER

Date Installed 4-14-22

A/C Total Time 1574.9

Technician Chris O'Neil

Position LT. RT.

Engine LT. RT.

Work Order # 20220 1372

ENGINE LOG

1. Make: **Austro Engine GmbH**
2. Model: **E4-B**
3. Specification: **E200 (EASA)
E00081EN (FAA)**
4. Manufacturer's Serial Number: **E4-B-00533**
5. Date of Manufacture: **July 2017**
6. Aircraft Inspection Cycle:

ENGINE MAINTENANCE LOG

DATE	TACH HOBBS METER TIME	DESCRIPTION OF WORK PERFORMED All data must be endorsed with the Repair Station Number or Signature and Certificate Number of the person performing the work
12/19/19	- THIS	LOGBOOK OPENED FOR THIS NEW ENGINE ON (TTSN 0.0 HRS) THIS DATE! W/O # 201902788

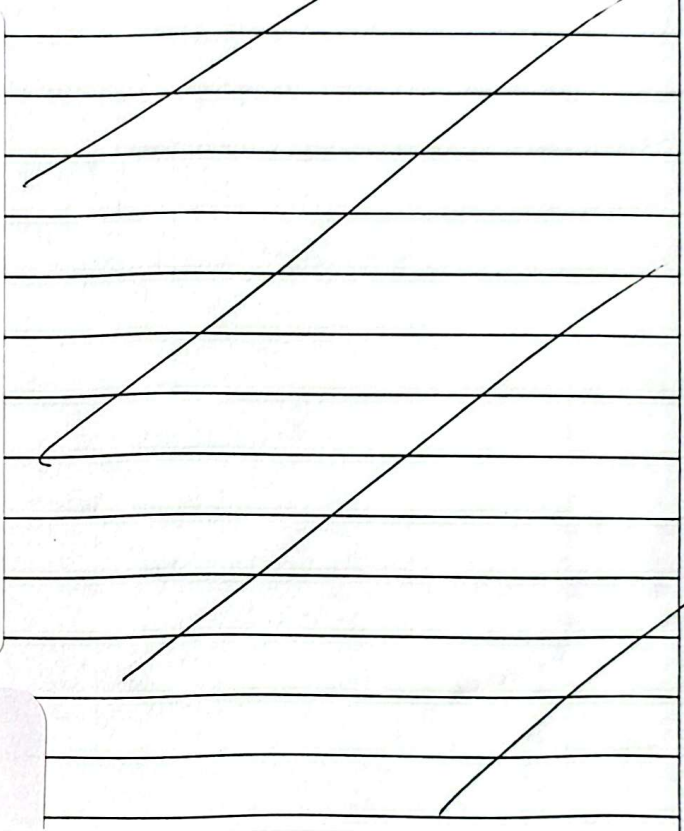


PRESCOTT, ARIZONA
3700 WILLOW CREEK ROAD
MAINTENANCE (928) 777-4339

N 594ER S/N# 42.AC064 W/O # 201902788
A/C TACH 935.6 A/C TT: 935.6
Removed Austro Engine P/N # E4-B and
S/N # E4-B-00216 Engine TTSN 834.7 Engine SMOH
834.7. Installed Engine P/N # E4-B
S/N # E4-B-00533 Engine TTSN 0.0 Engine SMOH
0.0 on Right position. All work completed per
Diamond DA42NG Aircraft Maintenance Manual chapter
71-00-00 and Austro Engine AE300/E4 Installation Manual
Document Number E4.02.01 all latest revisions. Run up and
Leak check was good.

DATE: 12-19-2019

SIGN: Russell Farrell Harris CRS #BF8R0320



Complied with (50 hr) (100 hr) (Annual) Inspection
Date Feb 09 2020 W/O 202000377
Tach 987.1 A/C TT 987.1
Eng TT Lt 986.2 Rt 51.5
Eng TSMO Lt 986.2 Rt 51.5
Prop TT Lt 4715.3 Rt 1147.1
Prop TSMO Lt 35.4 Rt 1060.1
Inspector: Farrell Harris

ERAU Maintenance Section
Repair Station No. BF8R0320





PRESCOTT, ARIZONA
3700 WILLOW CREEK ROAD
MAINTENANCE (928) 777-4339

N 594ER SN# 42.AC064 W/O # 202000939
A/C TACH 1078.4 A/C TT: 1078.4
LT ENG TTSN 977.5 RT ENG TTSN 142.8
LT ENG SMOH 977.5 RT ENG SMOH 142.8
LT PROP TTSN 4806.6 RT PROP TTSN 5196.7
LT PROP SMOH 126.7 RT PROP SMOH 1099.2
Inspected this Engine in accordance with Annual / 1000
Hour/ MSI Diamond DA42NG Maintenance checklist, AMM
chapter 05-28-00 latest revision. Reference work order and
discrepancy sheets for all details of this inspection.
DATE: 5-26-20
SIGN: Chris Adell 28 CRS #BF8R0320

END

ENGINE MAINTENANCE LOG

DATE	TACH HOBBS METER TIME	DESCRIPTION OF WORK PERFORMED All data must be endorsed with the Repair Station Number or Signature and Certificate Number of the person performing the work
 <p>PRESCOTT, ARIZONA 3700 WILLOW CREEK ROAD MAINTENANCE (928) 777-4339</p> <p>N 594ER S/N# <u>42AC064</u> W/O# <u>202001949</u> A/C TACH <u>1172.4</u> A/C TT: <u>1172.4</u> ENG. SMOH <u>236.8</u> ENG. TTSN <u>236.8</u> Wastegate controller and circlip replaced on Aug. 1, 2020 W/O #202001850 at A/C TT 1054.9. Austro Engine MSB-E4-022/5 provides terminating action for AD 2018-07-16 per FAA AMOC letter dated March 6, 2019.</p> <p>DATE: <u>8-11-20</u> SIGN: <u>[Signature]</u> CRS #BF8R0320</p>		

 <p>PRESCOTT, ARIZONA 3700 WILLOW CREEK ROAD MAINTENANCE (928) 777-4339</p> <p>N 594ER A/C SN # <u>42AC064</u> W/O# <u>202002051</u> TACH: <u>1176.9</u> A/C TT: <u>1176.9</u> ENGINE SMOH <u>241.3</u> ENGINE TTSN <u>241.3</u> Complied with Austro Engine MSB-E4-003/25, updated left and right engine ECU software to latest version VC33_0_06_24 per service bulletin instructions.</p> <p>Date <u>8-20-20</u> Sign <u>[Signature]</u> CRS #BF8R0320</p>	
--	--

Complied with ~~(50 hr)~~ (100 hr) ~~(Annual)~~ Inspection
Date 8-20-20 W/O 202002051
Tach 1176.9 A/C TT 1176.9
Eng TT Lt 1076.0 Rt 241.3
Eng TSMO Lt 1076.0 Rt 241.3
Prop TT Lt 4905.1 Rt 5295.2
Prop TSMO Lt 225.2 Rt 1197.7
Inspector: [Signature] ²⁸

ERAU Maintenance Section
Repair Station No. BF8R0320

Complied with ~~(50 hr)~~ (100 hr) (Annual) Inspection
Date 11-18-20 W/O 202003005
Tach 1274.4 A/C TT 1274.4
Eng TT Lt 1173.5 Rt 338.8
Eng TSMO Lt 1173.5 Rt 338.8
Prop TT Lt 5002.6 Rt 5392.7
Prop TSMO Lt 322.7 Rt 1295.2
Inspector: [Signature] ²⁸

ERAU Maintenance Section
Repair Station No. BF8R0320

ENGINE MAINTENANCE LOG

DATE

TACH
HOBBS
METER
TIME

DESCRIPTION OF WORK PERFORMED

All data must be endorsed with the Repair Station Number or
Signature and Certificate Number of the person performing the work



PRESCOTT, ARIZONA
3700 WILLOW CREEK ROAD
MAINTENANCE (928) 777-4339

N 594ER S/N# 42.AC064 W/O # N/A

A/C TACH 1292.9 A/C TT: 1292.9

ENGINE TTSN 358.5 Engine SMOH 358.5

Complied with AD 2020-22-14, verified RT. eng. waste gate
control rod fail-safe bridge and spring loaded circlip were
both installed when Turbo assembly was replaced on
8-1-20 / WO# 202001850, this constitutes
terminating action for the Initial and repetitive
replacement requirements of the AD and MSB-E4-022/5.

DATE: 1-13-21

SIGN: [Signature] ¹⁴ CRS #BF8R0320



PRESCOTT, ARIZONA
3700 WILLOW CREEK ROAD
MAINTENANCE (928) 777-4339

N 594ER S/N# 42.AC064 W/O # N/A

A/C TACH 1331.8 A/C TT: 1331.8

Engine TTSN 396.2 Engine SMOH N/A

Complied with AD 2021-09-04, verified the RIGHT
engine s/n E4-B-00533, oil pump is not affected per
Austro Engine MSB-E4-030/4, Revision 4 dated
March 30, 2021. No further action is required.

DATE: 4-28-21

SIGN: [Signature] ¹⁴ CRS #BF8R0320

Complied with (50 hr) (100 hr) (Annual) Inspection

Date 03 June 2021 W/O 202102233

Tach 1370.4 A/C TT 1370.4

Eng TT Lt 96.0 Rt 434.8

Eng TSMO Lt 96.0 Rt 434.8

Prop TT Lt 5098.6 Rt 3177.5

Prop TSMO Lt 418.7 Rt 729.1

Inspector: [Signature] ¹⁸

ERAU Maintenance Section

Repair Station No. BF8R0320

I certify that this aircraft, airframe, aircraft engine, propeller or appliance
has been inspected in accordance with an (50 Hour) (100 Hour) (Annual)
Inspection and was found to be in airworthy condition.

ENGINE MAINTENANCE LOG

DATE	TACH HOBBS METER TIME	DESCRIPTION OF WORK PERFORMED
All data must be endorsed with the Repair Station Number or Signature and Certificate Number of the person performing the work		
Complied with (50 hr) (100 hr) (Annual) Inspection		
Date <u>9-16-21</u>	W/O <u>202103581</u>	<p>COMPLETED WITH MSB-E4-034/2 AND MSB-E4-035</p> <p>BY REPLACING AFFECTED HIGH PRESSURE FUEL PUMP</p> <p>PN: E4A-30-000-000</p> <p>SN: 12-03-23-03-00119 WITH SERVICABLE HIGH</p> <p>PN: E4A-30-000-BHY</p> <p>PRESSURE FUEL PUMP SN: 19-05-14-02-00509.</p> <p>LEAK AND OPERATIONAL CHECK GOOD.</p> <p><i>[Signature]</i></p>
Tach <u>1478.1</u>	A/C TT <u>1478.1</u>	
Eng TT Lt <u>203.7</u>	Rt <u>542.5</u>	
Eng TSMO Lt <u>203.7</u>	Rt <u>542.5</u>	
Prop TT Lt <u>5206.3</u>	Rt <u>3285.2</u>	
Prop TSMO Lt <u>526.4</u>	Rt <u>816.8</u>	
Inspector: <i>[Signature]</i>		
ERAU Maintenance Section Repair Station No. BF8R0320		



PRESCOTT, ARIZONA
3700 WILLOW CREEK ROAD
MAINTENANCE (928) 777-4339

N 594ER S/N# 42.AC064 W/O # N/A
A/C TACH 1549.8 A/C TT: 1549.8
Engine TTSN 275.4 Engine SMOH 275.4
Complied with AD 2021-24-10, verified the RIGHT
engine s/n E4-B-00533 oil pump is not affected per
Austro Engine MSB-E4-030/4, Revision 4 dated
March 30, 2021. No further action is required.

DATE: 1-6-22
SIGN: *[Signature]* ¹⁴ CRS #BF8R0320

CRS# BF8R0320




PRESCOTT, ARIZONA
3700 WILLOW CREEK ROAD
MAINTENANCE (928) 777-4339

N 594ER S/N# 42.AC064 W/O # N/A
A/C TACH 1567.5 A/C TT: 1567.5
Engine TTSN 631.9 Engine SMOH 631.9
Complied with AD 2022-03-03, verified the RIGHT
Engine High Pressure Fuel pump s/n 19-05-14-02-00509
& drive gear are not affected per Austro Engine
MSB-E4-036/1, Revision 1 dated
December 14, 2021. No further action is required.

DATE: 2-24-22
SIGN: *[Signature]* ¹⁴ CRS #BF8R0320

ENGINE MAINTENANCE LOG

DATE	TACH HOBBS METER TIME	DESCRIPTION OF WORK PERFORMED All data must be endorsed with the Repair Station Number or Signature and Certificate Number of the person performing the work
 <p>PRESCOTT, ARIZONA 3700 WILLOW CREEK ROAD MAINTENANCE (928) 777-4339</p>		
<p>N <u>5948R</u> S/N# <u>42AC064</u> W/O # <u>202201372</u> A/C TACH: <u>1574.9</u> A/C TT: <u>1574.9</u> Engine TTSN <u>639.3</u> Engine SMOH <u>639.3</u> Removed MT propeller governor P/N # <u>P-877-16</u> and S/N # <u>126115-H/G</u> from the <u>RIGHT</u> position. Installed serviceable propeller governor P/N # <u>P-877-16</u> and S/N # <u>226186-KG</u> on this date. All work done in accordance with Diamond DA42NG Maintenance Manual chapter 61-20-00 latest revision.</p>		
<p>Complied with (50 hr) (Annual) Inspection Date <u>4-19-22</u> W/O <u>202201372</u> Tach <u>1574.9</u> A/C TT <u>1574.9</u> Eng TT Lt <u>300.5</u> Rt <u>639.3</u> Eng TSMO Lt <u>300.5</u> Rt <u>639.3</u> Prop TT Lt <u>5558.5</u> Rt <u>5295.7</u> Prop TSMO Lt <u>1096.2</u> Rt <u>615.9</u> Inspector: <u>Chris Braddock</u> 28</p>		
<p>DATE: <u>4-14-22</u> SIGN: <u>Chris Braddock</u> 28 CRS #BF8R0320</p>		<p>ERAU Maintenance Section Repair Station No. BF8R0320</p>

Model: DA42
S/N. 42AC064
Reg # N594ER

CRAFT
FLIGHT TRAINING & SIMULATION
890 Greyback Rd, Summerville, SC 29483

Date: 1/31/2023
Tach: 1627.8

Replaced defective RH engine wastegate controller P/N: E4A-41-120-000. Aircraft approved for return to service at this time.

Zachary Braddock

Zachary Braddock 3310705 A&P

Model: DA42
S/N. 42AC064
Reg # N594ER

CRAFT
FLIGHT TRAINING & SIMULATION
890 Greyback Rd, Summerville, SC 29483

Date: 3/3/2023
Tach: 1675.1

1. Performed oil change
2. Cut oil filter, inspected for metal, no metal noted
3. Collected oil sample for analysis at blackstone laboratories
4. Refilled with Liqui Moly LEICHTLAUF HIGH TECH 5W-40
5. Replaced oil filter P/N: HU615/3X
6. Checked gearbox magnetic plug for metal. No metal noted
7. Inspected and cleaned gearbox filter

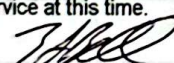

Ground ran engine no leaks/faults noted. Engine approved for return to service at this time.

I certify that this engine was inspected IAW a 100hr inspection and was determined to be in airworthy condition at this time.

Zachary Braddock

Zachary Braddock 3310705 A&P

ENGINE MAINTENANCE LOG

DATE	TACH HOBBS METER TIME	DESCRIPTION OF WORK PERFORMED All data must be endorsed with the Repair Station Number or Signature and Certificate Number of the person performing the work
		<div>Model: DA42 S/N. 42.AC064 Reg # N594ER</div> <div> FLIGHT TRAINING & SIMULATION 890 Greyback Rd, Summerville, SC 29483</div> <div>Date: 5/5/2023 Tach: 1756.1</div> <p>ANNUAL inspection completed this date IAW Diamond Aircraft DA42 NG AMM and Diamond Aircraft Inspection Checklist that meets the scope and detail of 14 CFR Appendix D to Part 43</p> <ol style="list-style-type: none">1. Performed oil change2. Cut oil filter, inspected for metal, no metal noted3. Collected oil sample for analysis at blackstone laboratories4. Refilled with Liqui Moly LEICHTLAUF HIGH TECH 5W-405. Replaced oil filter P/N: HU615/3X6. Checked gearbox magnetic plug for metal. No metal noted7. Inspected and cleaned gearbox filter <p>Ground ran engine no leaks/faults noted. Engine approved for return to service at this time.</p> <p>I certify that this engine was inspected IAW an ANNUAL inspection and was determined to be in airworthy condition at this time.</p> <p> Zachary Braddock 3310705 A&P/IA</p>
		<div>Model: DA42 S/N. 42.AC064 Reg # N594ER</div> <div> FLIGHT TRAINING & SIMULATION 890 Greyback Rd, Summerville, SC 29483</div> <div>Date: 6/19/2023 Tach: 1817.3</div> <p>Reinstalled turbocharger high pressure line. Aircraft approved for return to service at this time</p> <p> Zachary Braddock 3310705 A&P</p> <p><i>Entry entered in incorrect logbook see LH engine logs</i></p>
		<div>Model: DA42 S/N. 42.AC064 Reg # N594ER</div> <div> FLIGHT TRAINING & SIMULATION 890 Greyback Rd, Summerville, SC 29483</div> <div>Date: 7/11/2023 Tach: 1849.8</div> <p>Replaced defective RH engine wastegate controller P/N: E4A-41-120-000 and circlip E4A-41-100-801. Aircraft approved for return to service at this time.</p> <p> Zachary Braddock 3310705 A&P</p>
		<div>Registration: N594ER ESN: E4-B-00533 Engine TTSN 1855.0 TSO N/A AC Serial Number: 42.AC064 Airframe TT: 1855.0 WO: MYR5322</div> <div> LIFT MAINTENANCE <i>919.4 engine IT</i></div> <p>Maintenance performed: Complied with 100 HR inspections and referencing the aircraft and engine MMs. Drained the engine and gearbox oil, and replaced the engine oil, gearbox oil, and fuel filters. Inspected the old oil filter; found OK. Inspected Gearbox filter and found no metal. Serviced engine oil with 7 Liters of AeroShell Diesel Ultra. Serviced the gearbox oil with Spirax-SG-GXME. Serviced the coolant with Glywath Protect Plus G48 referencing the engine MM. Complied with AD 2016-23-03 V-clamp inspection. Run up and leak check good. I certify that this engine has been inspected IAW 100 Hr. inspections and was found to be airworthy.</p> <p> Date: 7/12/2023</p> <p>Signature: _____ DEREK HOPPER 3831519 A&P</p>

ENGINE MAINTENANCE LOG

DATE	TACH HOBBS METER TIME	<u>DESCRIPTION OF WORK PERFORMED</u> All data must be endorsed with the Repair Station Number or Signature and Certificate Number of the person performing the work



3330 AIRPORT LOOP
SALISBURY, NC 28147
INFO@SOUTHTECAVIATION.COM
OFFICE: 704-431-6862

DATE: OCTOBER 26, 2023 | AUSTRO E4-B | RIGHT ENGINE | S/N: E4-B-00533 | REG: N594ER
TACH: 1954.3 HRS. TTE: 1018.7 HRS. TSMOH: N/A

100 HOUR INSPECTION COMPLETED THIS DATE IN ACCORDANCE WITH DIAMOND AIRCRAFT DA42 NG AMM AND AUSTRO ENGINE MAINTENANCE MANUAL

AD'S CHECKED THROUGH BI-WEEKLY 2023-22.

AD 2020-14-07 900 HOUR REMOVE AND REPLACE FUEL INJECTORS

- 600 HOUR FLYWHEEL INSPECTION COMPLETED WITH NO FAULTS NOTED. NEXT DUE @ TACH:1618.7
- 900 HOUR WATER PUMP INSPECTION COMPLETED.
- 900 HOUR INJECTOR COVER INSPECTION COMPLETED.
- 900 HOUR REMOVE AND REPLACE FUEL INJECTORS COMPLETED P/N: E4A-00-900-KIT S/N/BATCH: EW0232992.
- 900 HOUR INSPECTION OF TIMING CHAIN COMPLETED.
- 600 HOUR COOLANT REPLACEMENT COMPLETED WITH BMW COOLANT.
- 600 HOUR CIRCLIP OF THE WASTEGATE CONTROLLER REPLACEMENT COMPLETED P/N: E4A-41-100-801.
- 5 YEAR V-RIBBED BELT REPLACEMENT COMPLETED P/N: E4A-74-100-801 S/N/BATCH: RW2100404(1), RC2301173(4).

- COLLECTED OIL SAMPLE FOR ANALYSIS TO BE COMPLETED BY BLACKSTONE LABS.
- DRAINED AND SERVICED WITH 7 LITERS AEROSHELL DIESEL ULTRA 5W-30.
- REPLACED OIL FILTER, P/N: E4A-52-300-KIT.
- REPLACED FUEL FILTER P/N: WK724_3.
- DRAINED, FILTERED AND REFILLED GEARBOX OIL.
- REPOSITIONED COOLANT HOSES AS NEEDED.
- REMOVED AND CLEANED RADIATORS

GROUND RAN ENGINE AND TESTED FOR OPERATION AND LEAKS, NO FAULTS NOTED.

I CERTIFY THAT THIS ENGINE HAS BEEN INSPECTED IN ACCORDANCE WITH 100 HOUR INSPECTION AND WAS DETERMINED TO BE IN AN AIRWORTHY CONDITION.


GLENN LAWLER

A&P 2151929 IA

Registration: N594ER ESN: E4-B-00533
Engine TTSN 1113.3 TSO N/A
AC Serial Number: 42.AC064
Airframe TT: 2048.90
WO: 6873



LIFT MAINTENANCE

Maintenance performed:

Complied with 100 HR inspection referencing the aircraft and engine MMs. Drained the engine and gearbox oil, replaced engine oil and fuel filters. Inspected the old filters, found ok. Inspected Gearbox filter, found no metal. Serviced engine oil with 7 liters of Aeroshell Diesel Ultra. Serviced Gearbox oil with Spirax-S6-GXME. Serviced the coolant with Glystatin Protect Plus G48 referencing the engine MM. Run up and leak check good. I certify that this engine has been inspected IAW 100. Inspections and was found to be airworthy. Next Due at AFTT: 2148.9

Date:3/2/2024

Signature:

CODY SCHERER 3881095 A&P

ENGINE MAINTENANCE LOG

DATE	TACH HOBBS METER TIME	DESCRIPTION OF WORK PERFORMED
<p>All data must be endorsed with the Repair Station Number or Signature and Certificate Number of the person performing the work</p>		

Registration: N594ER ESN: E4-B-00533
 Engine TTSN 1,142.3 TSO N/A
 AC Serial Number: 42.AC064
 Airframe TT: 2077.90
 WO: 8212



LIFT MAINTENANCE

Maintenance performed:

Complied with 100 HR. Inspection referencing the aircraft and engine MMs. Drained the engine and gearbox oil, replaced engine, fuel filters. Inspected the old filters, found ok found no metal. Serviced engine oil with 7 liters of Aeroshell Diesel Ultra. Serviced Gearbox oil with Spirax-56-GXME. Serviced the coolant with Glystatin Protect Plus G48 referencing the engine MM. Run up and leak check good. I certify that this engine has been inspected IAW 100HR. Inspections and was found to be airworthy. Next Due at AFTT: 2,177.90

Date: 8/7/2024

Signature:

Phillip Dickinson 4474866 A&P

Model: DA42
 S/N: 42.AC064
 Reg # N594ER



Date: 1/17/2025
 Tach: 2147.5

1. Performed oil change
2. Cut oil filter, inspected for metal, no metal noted
3. Collected oil sample for analysis at blackstone laboratories
4. Refilled with AEROSHELL Diesel Ultra
5. Replaced oil filter P/N: HU615/3X
6. Checked gearbox magnetic plug for metal. No metal noted
7. Inspected and cleaned gearbox filter

Ground ran engine no leaks/faults noted. Engine approved for return to service at this time.

Ground ran engine no leaks/faults noted. Engine approved for return to service at this time.

I certify that this engine was inspected IAW a 100hr inspection and was determined to be in airworthy condition at this time.

Zachary Braddock 3310705 A&P

Model: DA42
 S/N: 42.AC064

Date: 2/18/2025
 Tach: 2220.6

Reg #: N594ER

Installed servicable oil pressure sender

P/N: AEP-00284-901. Ran engine, no leaks noted.

William Tankersley 4742427 A&P

REORDER FROM:
AVIATION BUSINESS SYSTEMS
715 North Memorial Parkway
HUNTSVILLE, ALABAMA 35801
1-800-633-2950

Maintenance Release

The aircraft, airframe, aircraft engine, propeller or appliance identified below was repaired and inspected in accordance with current regulations of the Federal Aviation Administration and is approved for return to service.

Pertinent details of the repairs under

Work Order # 59458 are herein attached

Dated 04/12/2025

Inspected by [Signature]

Cert. #

SERVICEABLE

Name Out Pressure Sndm

Unit Same

Part # AE9-00284-901 Ser. #

Aircraft A50A58 ID #

Disposition Removed from engine

Reason For Removal Engine Not in Service

Removed By [Signature] Date 04-17/2025

AD or Service

Bulletins

Work

Performed

FAA Certificate No.

AP 2151979-1A

ENGINE MAINTENANCE LOG

[illegible]