

LH

AIRCRAFT TECHNICAL RECORD

Section 3. ENGINE LOG

1. Approving Competent Authority / Country Austro Control GmbH Austria	2.	AUTHORISED RELEASE CERTIFICATE EASA FORM 1			3. Form Tracking Number AE048886
4. Organisation Name and Address		Austro Engine GmbH Rudolf Diesel Straße 11 2700 Wr. Neustadt, AUSTRIA			5. Work Order / Contract / Invoice ES241456
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 General The engine conforms to the type design approved under the U.S. Type Certificate E00081EN. General The engine has undergone a final operational check. Item 1 The engine conforms to EASA TCDS E.200 Issue 12; Damper assy P/N: D44-7306-30-00_1 (EASA Form1: AJ92387). Item 1 Fuel hose assy P/N: A24119-01 (EASA Form1: 249055). Cleaned and installed acc. AE APA_Pulsationsdämpfer-Aufbau_190618. Item 1 Pistons p/n E4A-72-400-000 Rev. AD3 are installed with a life time limitation to 900FH.					
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 Reference Number		
13d. Name 	13e. Date (dd mmm yyyy) 24 APR 2024	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.					

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	
1 / 1 /	1 / 1 /	1 / 1 /					
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 HARDARE 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.AC064 P/N: 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-S6-GXME. Serviced the coolant with Glysatin 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

Phillip Dickinson
Signature: 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 #: N594ERDate: 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/faulst 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@SOUTHTECAVIATION.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
Hersteller: Manufacturer:	Austro Engine GmbH A-2700 Wiener Neustadt, Rudolf-Diesel-Straße 11, Austria					
Kennblatt: Data sheet:	EASA.E.200		Baujahr: Year of manufacture: 2024			

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 Luftfahrtgeräte-Verordnung, latest legal issue and the pertinent operational and maintenance instructions.

Bemerkungen:

Remarks:

Jedes Wartungsereignis, als auch ein Komponenten Tausch muss im Engine Log dokumentiert werden.

Please note that every performed maintenance as well as component replacements have to be documented in the log book.

Prüflauf durchgeführt

Test run carried out

Datum:
Date: 24 APR 2024

Unterschrift
Signature:



Baumuster:	E4	Baureihe:	E4	Motor - Nr.:	E4-B-06166	2
Type of Engine:		Model:		Engine serial no:		

Motor Hauptkomponenten / Engine main components

Bezeichnung Designation	Teile Nummer Part number	Revision Revision	Seriенnummer 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:



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

Sign. No.:



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
MSB-E4-004/1	Long term conservation of E4 Engines	performed, no open action	RSB-E4-021/1	Fuel Pressure Sensor - Connector modification	N/A by part number
MSB-E4-006	Repair of sensor cable for camshaft sensor	N/A by serial number	RSB-E4-028/3	Installation of new sensors AEP-00284-901 for OPS and FPS	performed, no open action
MSB-E4-007/6	Replacement of waste gate controller	N/A by serial number	RSB-E4-032/1	Installation of new sensors AEP-00286-901 for BSP	performed, no open action
MSB-E4-008/2	Exchange of oil separator hose	N/A by serial number	RSB-E4-037/2	Loctite on flywheel hub mounting screws	N/A by serial number
MSB-E4-009/2	Replacement of high pressure pump	N/A by part number	RSB-E4-038/1	Flywheel Hub inspection for cracks	N/A by part 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
MSB-E4-025/3	Fuel injectors	Considered, for next action see this MSB	SI-E4-002	Gearbox oil check procedure update	Only for information
MSB-E4-026/1	Inspection of Engine Harness	N/A by serial number	SI-E4-003	Technical publication and reporting system of AE	Only for information
MSB-E4-028/3	Oil return line pipe	N/A by serial number	SI-E4-004	EECU venting element	Only for information
MSB-E4-029/2	Modification of pressure valve hose for damping pressure oscillation	N/A by serial number	SI-E4-006	New Revision - Index for part numbers	Only for information
MSB-E4-030/4	Oilpump replacement	N/A by serial number	SI-E4-007	Proper handling of Turbo Charger	Only for information
MSB-E4-031/2	Oilpump replacement	N/A by serial number	SI-E4-009	Two-Mass Flywheel and Hub	Only for information
MSB-E4-034/4	superseded by MSB-E4-036	N/A by serial number	SI-E4-010	Caution of foreign Object Ingestion during Maintenance	Only for information
MSB-E4-035/2	superseded by MSB-E4-036	N/A by revision	SI-E4-011	AMOC Waste gate con-rod	Only for information
MSB-E4-036/1	High Pressure Pump (HPP) Inspection and Replacement	N/A by revision	SI-E4-013/1	Oil sampling	Only for information
MSB-E4-039/3	Oil Analysis and Piston replacement	N/A by serial number	SI-E4-014	EECU Data Log	Only for information
MSB-E4-042/1	Crankshaft-bearing cap screws replacement	N/A by serial number	SI-E4-015	Handling and storage condition of spare parts	Only for information
			SI-E4-016/1	Cylinder head identification - Alternative methods	Only for information
			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
			SI-E4-022/1	Parts Shelf Life	Only for information
			SI-E4-023	FMU Adjustment	Only for information
			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

QLD

AIRCRAFT TECHNICAL LOGS

Section 3, ENGINE

W0/202002601 10-5-2020
ACTT 1240.8 LH "

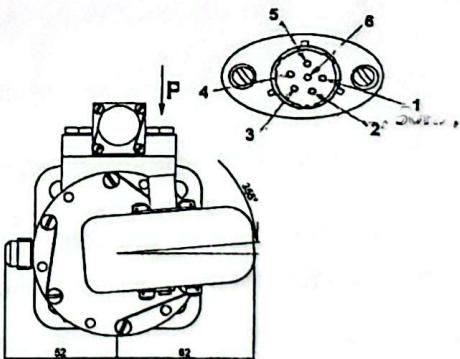
2758120

mt-propeller - Regler-Prüfbericht No. 7070078408-1

MT-Propeller Entwicklung GmbH
Flugplatzstr. 1, 94348 Atting

EASA DE.21G.0008

wegen Änderung Reparatur Überholung Neu

Hersteller: Avia/MT	Testöl: Aeroshell W80 ✓ Öltemperatur: $75^{\circ}\pm3^{\circ}\text{C}$ ✓		
Propeller: MTV-6-() Flugzeug: DA42-NG Motor: Austro Engine E4	Drehzahl max. 2680 + 20 Widerstand zwischen Pin 5 - 6 bei max. RPM 230+20 OHM Widerstand zwischen Pin 5 - 6 bei 2400 RPM 390+20 OHM Drehzahl min. 1980 RPM \pm 10 Widerstand zwischen Pin 5 - 6 bei min. RPM 123+20 OHM Segelstellung Solenoid 24VDC max. 1 Amp.	2690 230 390 1975 124 1.0 1.0A	UV Druck bei 2400 rpm 340+10 psi Äußere Leckage Innere Leckage 2400 rpm max. 0,66qt/min Einstellhebel Pos. 355
Regler - Type /E: P-877-16 /A: P-877-76 ✓ Regler - S/No /E: 095532-H/5 /A: 095532-H/6 ✓			340 No 0,3
Öldruck für: Drehrichtung: Untersetzung: Pumpe: Electr. Power (Amps) Bei 1750 rpm	Steigungsverminderung ✓ CCW facing ✓ engine mounting pad 0.69:1 16 mm 1.0. max. 1 Amp.		
Grund/Bemerkung: Soll durchführen	Vordruck 50 \pm 5 psi Regelverhalten Pumpenleistung at 2300 RPM 150 psi / 5 qt/min	50 1.0 514	Rissprüfung : Flux/Penetr Dimensionskontrolle: ✓ verplompt: ja: nein: konserviert: ✓
Baujahr: 2009 TSN, Std.: unbek. TSO, Std.: 4:00 Letzte OH am: 21/78 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: SB: Manual:	SL: SI: E-1049 ✓	
Teile-Nr. MS914401	Bezeichnung M. Gasket	Stck. 1	Ges.-Preis
			

Erstellt: 07.11.07 je/fh	Eingangsprüfung:	Endmontage:	Ausgangsprüfung: 22.03.2020
Geändert: 11.12.19 fh/ma	R. Bilmuir	R. Bilmuir	

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 <i>/ max. Rev.:</i>	2690 RPM	min. Drehzahl <i>/ min. Rev.:</i>	1985 RPM	Spannung <i>/ Voltage</i>	24 VDC
Stromaufnahme <i>/ Power cons.:</i>	150 mA	Stromaufnahme <i>/ Power cons.:</i>	150 mA	Ölsorte: <i>Type of Oil:</i>	-
Pumpenleistung/ <i>Pumpcapacity:</i>	5,42 qts./min@150 psi@2300 RPM			90,6 mA, 24 VDC	
Stromverbrauch / <i>Power consumption to low rpm</i>	82,6 mA, 24 VDC	Stromverbrauch / <i>Power consumption to high rpm</i>	90,6 mA, 24 VDC		
ÜV Druck / <i>Relief Valve Pressure low:</i>	340 psi @ 2400RPM				
Hebelposition / <i>Control Arm position:</i>	355°				
Lageerkennung, Widerstand Pin 5-6: <i>Position Sensing, Resistance Pin 5-6:</i>	230 Ω bei max RPM 389 Ω bei 2400 RPM 123 Ω bei min RPM				
Öldruck zur Steigungsverminderung <i>Oil pressure to decrease</i>				Drehrichtung / Rotation: CCW	
Überholung alle: <i>Overhaul every (TBO):</i>	2000 Std / Hrs	or	72 Monate <i>Months</i>	Datum / Date: <i>Prüfer / Inspector:</i>	27 March 2020

Prüf- und Einbauvermerke / Inspection and Installation Notes

Nr.:	Art der Prüfung und Anlaß / Reason of Inspection <i>Installation or Removal:</i>	Betriebsstd. seit / Operating Time since					
		Datum <i>Date</i>	Neu <i>New</i>	Überh. <i>Overh.</i>	Rep. <i>Rep.</i>	Ort: <i>Locat.:</i>	Firma: <i>Company:</i>
1	Overh. acc. to work order 1010018408-1	27.03.2020	unk.	00:00		Atting	MT PROPELLER STRASBURG DE.T45.0115
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 2	Engine Konfiguration B Engine Konfiguration B	E4B-00-000-AHY Iss. 011 E4B-00-000-AHY Iss. 011	1 1	E4-B-05001 E4-B-05002	New New
<p>12. Remarks</p> <p>General The engine conforms to the type design approved by Canadian Department of Transport Type Certificate IE-68.</p> <p>General The engine complies with the applicable airworthiness directives.</p> <p>Item 1 The engine conforms to EASA TCDS E.200 Issue 12; Damper assy P/N: D44-7306-30-00_1 (EASA Form1: AJ54025)</p> <p>Item 1 Fuel hose assy P/N: A24119-01 (EASA Form1: 227708). Cleaned and Installed acc. AE APA_Pulsationsdämpfer-Aufbau_190618.</p> <p>Item 2 The engine conforms to EASA TCDS E.200 Issue 12; Damper assy P/N: D44-7306-30-00_1 (EASA Form1: AJ54025)</p>					
REFER TO AE033800-1					
13a. Certifies that the items identified above were manufactured in conformity to:			<p>14a. <input checked="" type="checkbox"/> Part-145.A.50 Release to Service <input type="checkbox"/> Other regulation specified in block 12</p> <p>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.</p>		
13b. Authorised Signature 	13c. Approval /Authorisation Number AT.21G.0010	13d. Name 	13e. Date (dd mmm yyyy) 19 AUG 2020	14b. Authorised Signature	14c. Certificate / Approval Reference Number
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>					

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 2	Engine Konfiguration B Engine Konfiguration B	E4B-00-000-AHY Iss. 011 E4B-00-000-AHY Iss. 011	1 1	E4-B-05001 ✓ E4-B-05002 ✓	New New
<p>RECEIVED 2008585</p> <p>DA QA 6</p>					
<p>12. Remarks</p> <p>General The engine conforms to the type design approved by Canadian Department of Transport Type Certificate IE-68.</p> <p>General The engine complies with the applicable airworthiness directives.</p> <p>Item 1 The engine conforms to EASA TCDS E.200 Issue 12; Damper assy P/N: D44-7306-30-00_1 (EASA Form1: AJ54025)</p> <p>Item 1 Fuel hose assy P/N: A24119-01 (EASA Form1: 227708). Cleaned and installed acc. AE APA_Pulsationsdämpfer-Aufbau_190618.</p> <p>Item 2 The engine conforms to EASA TCDS E.200 Issue 12; Damper assy P/N: D44-7306-30-00_1 (EASA Form1: AJ54025)</p>					
<p>13a. Certifies that the items identified above were manufactured in conformity to:</p> <p><input checked="" type="checkbox"/> approved design data and are in condition for safe operation</p> <p><input type="checkbox"/> non-approved design data specified in block 12</p>			<p>14a. <input type="checkbox"/> Part-145.A.50 Release to Service <input type="checkbox"/> Other regulation specified in block 12</p> <p>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.</p>		
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)		
<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>					

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	
		 PRESCOTT, ARIZONA 3700 WILLOW CREEK ROAD MAINTENANCE (928) 777-4339	
		<p><u>N 594ER</u> S/N# <u>42.AC064</u> W/O # <u>202003449</u> <u>A/C TACH 1274.4</u> A/C TT: <u>1274.4</u> Removed Austro Engine P/N # <u>84-B</u> and <u>S/N #84-B-00217</u> Engine TTSN <u>1173.5</u> Engine SMOH <u>1173.5</u>. Installed Engine P/N # <u>84-B</u> <u>S/N #84-B-05001</u> Engine TTSN <u>0.0</u> Engine SMOH <u>0.0</u> on <u>LEFT</u> 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.</p> <p>DATE: <u>12-11-20</u> SIGN: <u>Acme Aircraft</u>  CRS #BF8R0320</p>	
		 PRESCOTT, ARIZONA 3700 WILLOW CREEK ROAD MAINTENANCE (928) 777-4339	
		<p><u>N 594ER</u> S/N# <u>42.AC064</u> W/O # <u>N/A</u> <u>A/C TACH 1292.9</u> A/C TT: <u>1292.9</u> <u>ENGINE TTSN 18.5</u> Engine SMOH <u>18.5</u> 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 <u>All: 2020</u> this constitutes terminating action for the Initial and repetitive replacement requirements of the AD.</p> <p>DATE: <u>1-13-21</u> SIGN: <u>Acme Aircraft</u>  14 CRS #BF8R0320</p>	
<u>4/15/21</u>	<u>1310.5</u>	<p><u>w/ott 202100544</u> <u>ENG. TTSN 44.1</u> C/W MSB - E4 - 030/4 Replaced affected oil pump in left engine per Austro Engine MM Ch. 79 and Diamond DA42NG AMM 71.</p> <p><u>Joe Lollar</u>  4 CRS# BF8R0320</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
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PRESCOTT, ARIZONA
3700 WILLOW CREEK ROAD
MAINTENANCE (928) 777-4339

N 594ER S/N# 40.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

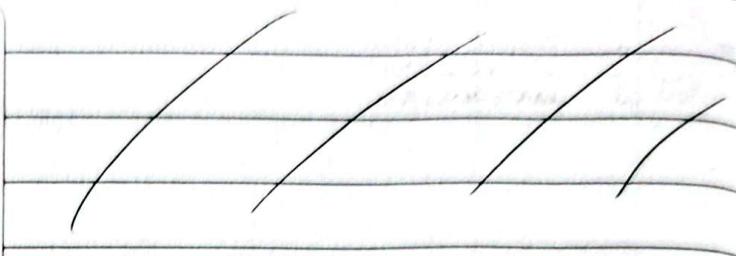
DATE: 4-28-21

SIGN: R. R. 14

CRS #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: Deon O. Bell, Jr.

ERAU Maintenance Section
Repair Station No. 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 709.1

Inspector: JAYMUN 18

ERAU Maintenance Section
Repair Station No. BF8R0320

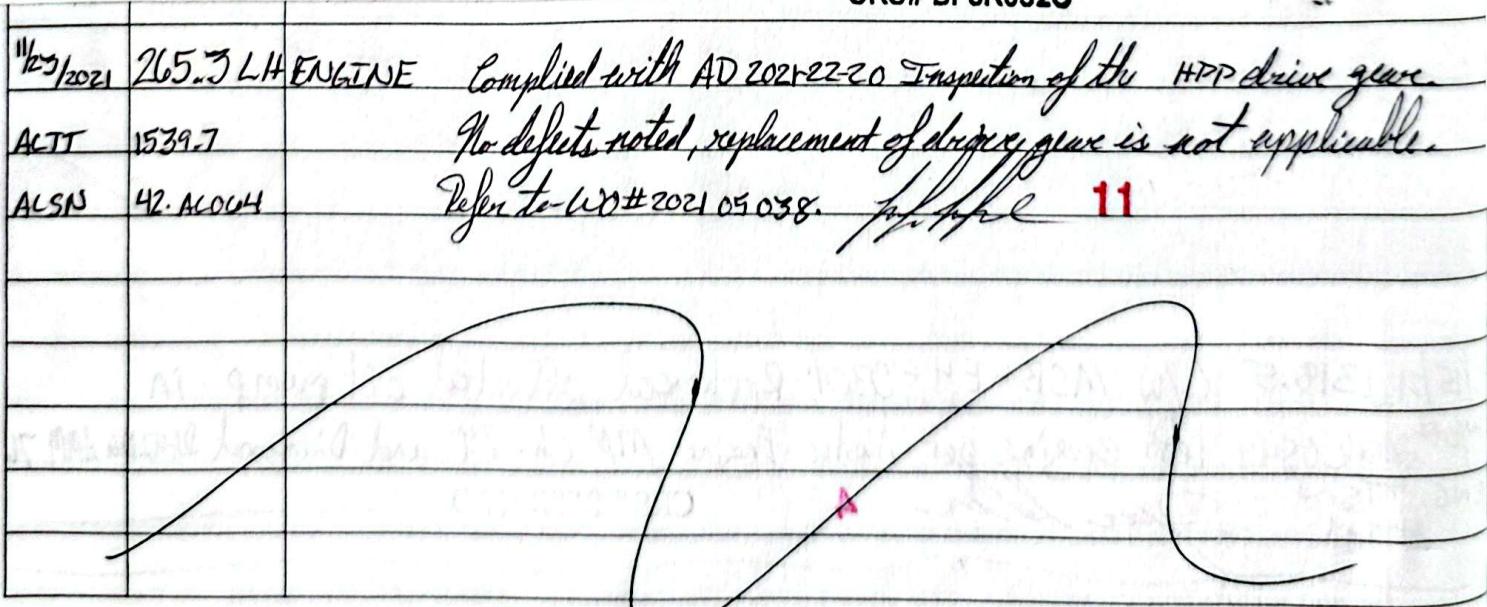
COMPLETED WITH MSB-E4-034/2 AND

MSB-E4-035 BY REPLACING AFFECTED
PN: E4A-30-000-000
HIGH PRESSURE FUEL PUMP SN: 20-02-31-02-0009

WITH SERVICEABLE HIGH PRESSURE FUEL PUMP
PN: E4A-30-000-BHN
SN: 17-08-19-02-01016, LEAK AND OPERATIONAL
CHECK GOOD. Allen Qualls

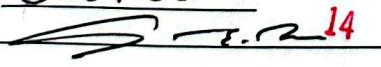
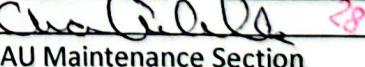
CRS# BF8R0320

11/29/2021 265.3 LH ENGINE Complied with AD 2021-22-20 Inspection of the HPP drive gear.
No defects noted, replacement of drive gear is not applicable.
Refer to WO# 202109038. J. Qualls **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
 <p>PRESCOTT, ARIZONA 3700 WILLOW CREEK ROAD MAINTENANCE (928) 777-4339</p> <p>N 594ER S/N# <u>42.AC064</u> W/O# <u>N/A</u> A/C TACH <u>1549.8</u> A/C TT: <u>1549.8</u> Engine TTSN <u>275.4</u> Engine SMOH <u>275.4</u> Complied with AD 2021-24-10, verified the <u>LEFT</u> engine s/n <u>E4-B3-05001</u>, 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: <u>44.1</u> Date: <u>4-15-21</u> W/O# <u>202100544</u></p> <p>DATE: <u>1-6-22</u> 14 SIGN:  CRS #BF8R032O</p>		

 <p>PRESCOTT, ARIZONA 3700 WILLOW CREEK ROAD MAINTENANCE (928) 777-4339</p> <p>N 594ER S/N# <u>42.AC064</u> W/O# <u>N/A</u> A/C TACH <u>1567.5</u> A/C TT: <u>1567.5</u> Engine TTSN <u>293.1</u> Engine SMOH <u>293.1</u> Complied with AD 2022-03-03, verified the <u>LEFT</u> Engine High Pressure Fuel pump s/n <u>19-08-19-02-01016</u> & drive gear are not affected per Austro Engine MSB-E4-036/1, Revision 1 dated December 14, 2021. No further action is required.</p> <p>DATE: <u>2-24-22</u> SIGN:  CRS #BF8R032O</p>		
<p>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.</p> <p>Complied with <u>(50 Hour) (100 Hour) (Annual)</u> 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>10962</u> Rt <u>615.9</u> Inspector: </p> <p style="text-align: right;">ERAU Maintenance Section Repair Station No. BF8R032O</p>		

ENGINE MAINT

X

DATE	TACH HOBBS METER TIME	DESCRIPTION All data must be endorsed by the Repair Station Number or Signature and Certificate Number of the person performing the work
------	--------------------------------	--

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

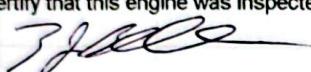


Date: 3/3/2023
Tach: 1675.1

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 3310705 A&P

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



Date: 5/5/2023
Tach: 1756.1

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

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 3310705 A&P/IA

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



Date: 6/19/2023
Tach: 1817.3

Reinstalled turbocharger high pressure line. Aircraft approved for return to service at this time



Zachary Braddock 3310705 A&P

14001
37

ENGINE MAINTENANCE

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>Registration: N594ER ESN: E4-B-05001 Engine TTSN 1855.0 TSO N/A AC Serial Number: 42.AC064 Airframe TT: 1855.0 WD: MYR5322</p> <p>LIFT MAINTENANCE 580.47 engine</p> <p>Maintenance performed: Compiled with 100 HR Inspections of LH engine 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-S6-GXME. Serviced the coolant with Glysantin Protect Plus G48 referencing the engine MM. Compiled 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:  PHILLIP DICKINSON 4474866 A&P</p>



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

DATE: OCTOBER 26, 2023 | AUSTRO E4-B | LEFT ENGINE | S/N: E4-B-05001 | REG: N594ER
TACH: 1954.3 HRS. **TTE: 679.9 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. NO AD'S DUE AT THIS TIME

-600 HOUR FLYWHEEL INSPECTION COMPLETED NO FAULTS NOTED. **NEXT DUE @ TACH:1618.7**
-600 HOUR CIRCLIP OF THE WASTEGATE CONTROLLER REPLACEMENT COMPLETED P/N: E4A-41-100-801.
-600 HOUR COOLANT REPLACEMENT COMPLETED.

-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

RIGHT

AIRCRAFT TECHNICAL LOGS

Section 3, ENGINE

1. Approving competent Authority/Country Autorité Compétente/Pays	2.
DIRECTION GENERALE DE L'AVIATION CIVILE FRANCE	AUTHORISED RELEASE CERTIFICATE <i>Certificat Littératoire Autorisé</i> EASA FORM 1 Formulaire 1 de l'EASA

4. Approved Organisation Name and Address :
Nom et Adresse de l'organisation approuvée



22 avenue Maurice Chevalier
Zone Industrielle BP73
77833 OIZIR-LA-FERRIERE cedex France
Tel. (33) 0160185200 - Fax (33) 0164402337

3. Form Tracking Number
N° de repère du Formulaire
211510

5. Work Order / Contract / Invoice
Bon de commande / Contrat / Facture
62852

6. Item	7. Description	8. Part No	9. Qty / Qté	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
Remarques
BATCH : 321889

Certified true COPY

13a. Certifies that the items identified above were manufactured in conformity to :

Certifie que les éléments identifiés ci-dessus ont été fabriqués conformément aux :

- approved design data and are in a condition for safe operation
données de conception approuvées et sont en état de fonctionner en toute sécurité
- non-approved design data specified in block 12
données de conception non approuvées spécifiées dans la case 12

Part 145.A.50 Release to Service
Approbation pour remise en service
Selon Partie 145.A.50

Other regulation specified in block 12
Autre réglementation précisée en case 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.

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.

13b. Authorised Signature
Signature autorisée

13c. Approval / Autorisation Number
Numéro d'Agrement / d'autorisation

FR.21G.0094

13d. Name / Nom

CHAUVIN

13e. Date (dd/mmm/yyyy) (j/mmm/aaaa)

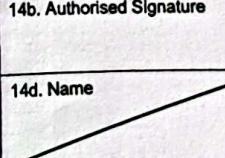
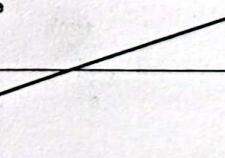
14MAR2017

14b. Authorised Signature
Signature autorisée

14c. Certificate / Approval Ref. No
Numéro de Certificat / d'agrément

14d. Name / Nom

14e. Date (dd/mmm/yyyy) (j/m/a)

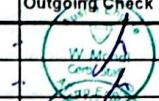
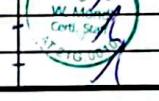
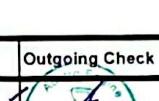
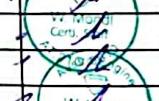
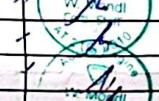
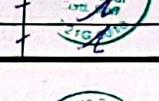
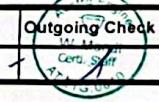
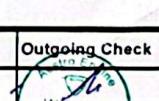
1. Approving Competent Authority /Country Austro Control GmbH Austria	2.	AUTHORISED RELEASE CERTIFICATE EASA FORM 1			3. Form Tracking Number AJ31198
4. Organisation Name and Address: Diamond Aircraft Industries GmbH. N.A. Otti Str. 5 2700 Wiener Neustadt, AUSTRIA			5. Work Order / Contract / Invoice 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 type="checkbox"/> Part-145.A.50 Release to Service <input type="checkbox"/> Other regulation specified in block 12 <p>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.</p>		
 13b. Authorised Signature  13d. Name Staff Paris A. BRUNNER AT.21G.0001 Quality Assurance A13		13c. Approval / Authorisation Number AT.21G.0001		14b. Authorised Signature  14d. Name Name	
13e. Date (dd mmm yyyy) 09.May.2017		14c. Certificate/ Approval Reference Number  14e. Date (dd mmm yyyy)			
USER / INSTALLER RESPONSIBILITIES <p>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.</p>					

Scope of Supply

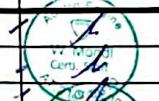
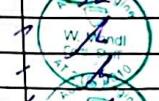
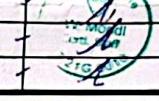
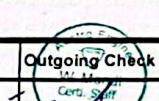
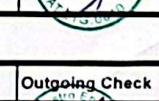
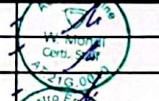
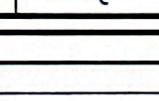
Motor Identification

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

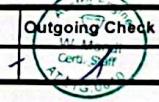
Parts installed on the core Engine

	Qty.	Description	Part number	Rev.	S/N or Batch No.	Outgoing Check	Customer Check
1	1	Wiring Hamess	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		

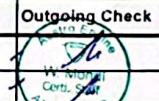
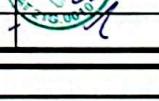
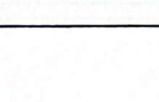
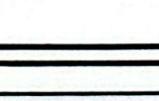
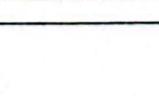
Parts not installed on the core Engine

	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	Keilrippenmnnen	E4A-74-000-801	000	MBU145811		
16	1	Ölfilterkreisatz	E4A-52-100-802	AA1	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 Certificates 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 / Autorisation Number AT.21G.0010	14b. Authorised Signature	14c. Certificate/ Approval Ref. Number	
13d. Name 		13e. Date (dd mmm yyyy) 17 JUL 2017	14d. Name	14e. Date (dd mmm yyyy)	
USER / INSTALLER RESPONSIBILITIES <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>					

EASA Form 1 - 21 Issue 2

Freigabe: 24.Aug. 2010 / M. Nemec

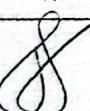
FOQ05_Form1_rev1

7

Änderungsstand / Modification record

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 1	7. Description EECU Software	8. Part No. E4B-92-200-000 Iss.: AC1	9. Qty. 1	10. Serial No. N/A	11. Status/Work New
12. Remarks Item 1: Batch 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 Certificates 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  C. Hamed	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.					

Installed On (Reg #)	N 594ER	
Date Installed	12/20/19	
A/C Total Time	935.6	
Technician	SEAN MOREAU	
Position	(L) <input checked="" type="radio"/> <input type="radio"/> (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.A.50 Release to Service <input type="checkbox"/> Other regulation specified in block 12 Certificates 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 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	One Qalls
Position	L R
Engine	L R
Work Order #	202002051

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: 1	7. Description: Propeller Governor	8. Part Number: P-877-16	9. Quantity: 1	10. Serial Number: 22G186-KG	11. Status/Work: 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. 11			
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/mmm/yyyy): N/A	14d. Name (Typed or Printed): Michael Nelson	14e. Date (mm/dd/yyyy): 04/07/2022		
User/Installer Responsibilities					
<p>It is important to understand that the existence of this document alone does not automatically constitute authority to install the aircraft engine/propeller/article.</p> <p>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.</p> <p>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>					

1. Approving Civil Aviation Authority/Country

Transport Canada

2.

AUTHORIZED RELEASE CERTIFICATE
FORM ONE

3. Form Tracking Number

SI201208

4. Organizations Name and Address:

Diamond Aircraft Industries Inc.
1560 Crumlin Sideroad
London, Ontario N5V1S2

5 Work Order/Contract/Invoice

N/A

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:

Approved design data and are in condition for safe operation
 Non-approved design data specified in Block 12.

14a. CAR 57/1.10 Maintenance Release Other regulations specified in block 12

Certificates that units 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

/161-93

14b. Signature

14c. Approved Organization Number

13d. Name

13e. Date (dd/mmm/yyyy):

14d. Name

14e. Date (dd/mmm/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 Gull
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 Russell Harris* CRS #BF8R0320

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

Date 12-29-2020 W/O 2020000377

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: *Tom D. 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 # 2020000939

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 1806.6 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: *Tom D. Harris 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 style="text-align: center;">PRESCOTT, ARIZONA 3700 WILLOW CREEK ROAD MAINTENANCE (928) 777-4339</p> <p>N 594E2 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>John G. Hall</u> CRS #BF8R0320</p>		

R.H.	
------	--



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

N 594E2 A/C SN # 42AC064 W/O# 202002051
TACH: 1176.9 A/C TT: 1176.9
ENGINE SMOH 241.3 ENGINE TTSN 241.3
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.

Date 8-20-20
Sign John G. Hall CRS #BF8R0320

Complied with 500 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: John G. Hall 28

ERAU Maintenance Section
Repair Station No. BF8R0320

Complied with 500 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: John G. Hall 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
 <p>PRESCOTT, ARIZONA 3700 WILLOW CREEK ROAD MAINTENANCE (928) 777-4339</p> <p><u>N 594ER</u> S/N# <u>42.AC064</u> W/O# <u>N/A</u> A/C TACH <u>1292.9</u> A/C TT: <u>1292.9</u> ENGINE TTSN <u>358.5</u> Engine SMOH <u>358.5</u> 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 <u>8-1-20</u> / WO# <u>000001850</u>, this constitutes terminating action for the Initial and repetitive replacement requirements of the AD and MSB-E4-022/5.</p> <p>DATE: <u>1-13-21</u> SIGN: <u>S. E. 2</u> 14 CRS #BF8R0320</p>		
 <p>PRESCOTT, ARIZONA 3700 WILLOW CREEK ROAD MAINTENANCE (928) 777-4339</p> <p><u>N 594ER</u> S/N# <u>42.AC064</u> W/O# <u>N/A</u> A/C TACH <u>1331.8</u> A/C TT: <u>1331.8</u> Engine TTSN <u>396.2</u> Engine SMOH <u>N/A</u> Complied with AD 2021-09-04, verified the <u>R16 HT</u> engine s/n <u>E4-B-00533</u>, oil pump is not affected per Austro Engine MSB-E4-030/4, Revision 4 dated March 30, 2021. No further action is required.</p> <p>DATE: <u>4-28-21</u> SIGN: <u>S. E. 2</u> 14 CRS #BF8R0320</p>		
<p>Complied with (50 hr) (100 hr) (Annual) Inspection Date <u>03 June 2021</u> W/O <u>202102233</u> Tach <u>1370.4</u> A/C TT <u>1370.4</u> Eng TT Lt <u>96.0</u> Rt <u>434.8</u> Eng TSMO Lt <u>96.0</u> Rt <u>434.8</u> Prop TT Lt <u>5098.6</u> Rt <u>3177.5</u> Prop TSMO Lt <u>418.7</u> Rt <u>709.1</u> Inspector: <u>JR New</u> 18</p> <p>ERAU Maintenance Section Repair Station No. BF8R0320</p> <p>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.</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			
Complied with (50 hr) (100 hr) (Annual) Inspection			
9-16-21	W/O 202103581	COMPLETED W/234 MSB-E4-034/2 AND MSB-E4-035	
1478.1	A/CTT 1478.1	BY REPLACING DEFECTED HIGH PRESSURE FUEL PUMP	
203.7	Rt 542.5	PN: E4A-30-000-000	
203.7	Rt 542.5	SN: 12-03-23-03-00119 WITH SERVICABLE HIGH	
5206.3	Rt 3285.2	PD: E4A-30-000-B4Y	
526.4	Rt 816.8	PRESSURE FUEL PUMP SN: 19-05-14-02-00509,	
Inspector: <i>John D. Miller</i>	LEAK AND OPERATIONAL CHECK GOOD.		
ERAU Maintenance Section Repair Station No. BF8R0320	<i>John D. Miller</i>		



**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 14
SIGN: T. A. CRS #BF8R0320



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

N 594ER S/N# 42.AC004 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 14
SIGN: S-52 CRS #BF8R0320

COMPLETED WITH MSG-E4-03412 AND MSG-E4-035
BY REPLACING DEFECTED HIGH PRESSURE FUEL PUMP
PN: E4A-30-000-000
SN: 12-03-23-03-00119 WITH SERVICABLE HIGH
PRESSURE FUEL PUMP PN: E4A-30-000-BHY
SN: 19-05-14-02-00509,
LEAK AND OPERATIONAL CHECK GOOD.

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



PREScott, ARIZoNA
3700 WILLoW CREEK ROAD
MAINTENANCE (928) 777-4339

N 594ER S/N# 42.AC064 W/O # 202201372

A/C TACH: 1574.9 A/C TT: 1574.9

Engine TTSN 639.3 Engine SMOH 639.3

Removed MT propeller governor P/N # P-877-16
and S/N # 12B115-H/G from the RIGHT position.
Installed serviceable propeller governor
P/N # P-877-16 and S/N # 22G186-KG on this
date. All work done in accordance with Diamond DA42NG
Maintenance Manual chapter 61-20-00 latest revision.

DATE: 4-14-22

SIGN: Zach Braddock 28

CRS #BF8R0320

Complied with (50hr/100hr) (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 1096.2 Rt 615.9

Inspector: Zach Braddock 28

ERAU Maintenance Section
Repair Station No. BF8R0320

Model: DA42
S/N. 42.AC064
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 3310705 A&P

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

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

Date: 3/3/2023
Tach: 1675.1

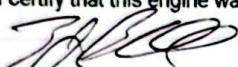
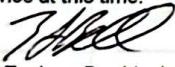
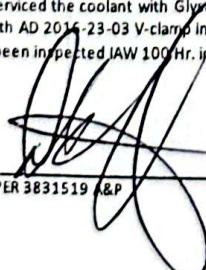
1. Performed oil change
2. Cut oil filter, inspected for metal, no metal noted
3. Collected oil sample for analysis at blackstone laboratories
4. Refilled with Liqui Moly LEICHTLAUF HIGH TECH 5W-40
5. Replaced oil filter P/N: HU615/3X
6. Checked gearbox magnetic plug for metal. No metal noted
7. Inspected 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 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	
	Model: DA42 S/N. 42.AC064 Reg # N594ER	 890 Greyback Rd, Summerville, SC 29483 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 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 an ANNUAL inspection and was determined to be in airworthy condition at this time.	Date: 5/5/2023 Tach: 1756.1
	Zachary Braddock 3310705 A&P/IA		
	Model: DA42 S/N. 42.AC064 Reg # N594ER	 890 Greyback Rd, Summerville, SC 29483 Reinstalled turbocharger high pressure line. Aircraft approved for return to service at this time	Date: 6/19/2023 Tach: 1817.3
	Zachary Braddock 3310705 A&P	 <i>Entry entered in incorrect logbook. See LH engine log</i>	
	Model: DA42 S/N. 42.AC064 Reg # N594ER	 890 Greyback Rd, Summerville, SC 29483 Replaced defective RH engine wastegate controller P/N: E4A-41-120-000 and circlip EA4-41-100-801. Aircraft approved for return to service at this time.	Date: 7/11/2023 Tach: 1849.8
	Zachary Braddock 3310705 A&P		
		<div style="border: 1px solid black; padding: 10px; display: inline-block;"> <p>Registration:N594ER ESN:E4-B-00533 Engine TTSN 1855.0 TSO N/A AC Serial Number: 42.AC064 Airframe TT: 1855.0 WO: MYR5322</p> <p style="text-align: center;"> LIFT MAINTENANCE <i>919.4 Engine TT</i></p> <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 Glycolith Protect Plus G48 referencing the engine MM. Complied with AD 2015-23-03 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> </div>	
			Date: 7/12/2023
		<p>Signature:</p> <p>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 Glysatin 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 All data must be endorsed with the Repair Station Number or Signature and Certificate Number of the person performing the work
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: <p>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-S6-GXME. Serviced the coolant with Glysatin 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</p>		
 Signature: Phillip Dickinson 4474866 A&P		Date: 8/7/2024
Model: DA42 S/N: 42.AC064 Reg #: N594ER		CRAFT FLIGHT TRAINING & SIMULATION
		Date: 1/17/2025 Tach: 2147.5
<ul style="list-style-type: none"> 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 <p>Ground ran engine no leaks/faulst noted. Engine approved for return to service at this time.</p> <p>Ground ran engine no leaks/faulst noted. Engine approved for return to service at this time.</p> <p>I certify that this engine was inspected IAW a 100hr inspection and was determined to be in airworthy condition at this time.</p>		
 Zachary Braddock 3310705 A&P		
Model: DA42 S/N: 42.AC064 Reg #: N594ER		Date: 4/18/2025 Tach: 3220.6
<p>Installed servicable oil pressure sender P/N: AEP-00284-901. Ran engine, no leaks noted.</p> <p><i>William Tankersley</i> William Tankersley 4741427 A&P</p>		

1-800-623-2960
HUNTSVILLE, ALABAMA 35801
716 North University Parkway
AVIATION BUSINESS SYSTEMS
REORDER FORM:

47486

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.

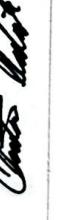
Pertinent details of the repairs under

Work Order # 59458 are herein attached
Dated 04/21/2525
Inspected by John
Cert. # 123456789

SERVICEABLE

Name <u>John Johnson</u>	Unit <u>Same</u>	Part # <u>AEP-00284-901</u>	Ser. # <u></u>
Aircraft <u>A54AE</u>	ID # <u></u>	Disposition <u>Removed From Service</u>	Reason For Removal <u>Long Term Storage</u>
Removed By <u>John</u>	Date <u>04-17-2025</u>	AD or Service Bulletins <u></u>	Work Performed <u>None</u>
FAA Certificate No <u>2151479-1A</u>		AP	

ENGINE MAINTENANCE LOG

DATE	DESCRIPTION OF WORK PERFORMED	
	TACH HOBBS METER TIME	All data must be endorsed with the Repair Station Number or Signature and Certificate Number of the person performing the work
	 An Aviation Center of Excellence	3330 AIRPORT LOOP SALISBURY, NC 28147 INFO@SOUTHTECAVIATION.COM OFFICE: 704-431-6862
DATE: NOVEMBER 3, 2025 AUSTRO E4-B RIGHT ENGINE SN: E4-B-00533 REG: N594ER		
TACH: 2250.4 HRS. TTE: 1314.8 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: (WKT24-3).		
DRAINED GEARBOX OIL, CHECKED GEARBOX MAGNETIC PLUG FOR METAL, NO METAL NOTED.		
CHECKED GEARBOX FILTER, NO FAULTS NOTED, REFILLED GEARBOX WITH OIL.		
INSTALLED NEW NUT FOR RIGHT ENGINE #1 CYLINDER EXHAUST MANIFOLD PIN (ISO7044-M8-8-CU).		
REMOVED AND REPLACED LEFT AND RIGHT EXHAUST SHOCK MOUNTS PART NUMBER 140SUE0410.		
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.		A&P/IA 3740465
	CHRISTIAN HEDRICK	

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An Aviation Center of Excellence

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Aviation
Aviation Center of Excellence

Page 4

30

3330 AIRPORT LOOP
SALISBURY, NC 28147
INFO@SOUTHEASTCAVATION.COM
OFFICE: 704.431.5852

DATE: NOVEMBER 3, 2025 | AUSTRO E4-B | RIGHT ENGINE | S/N: E4-B-00533 | REG: N594ER
TACH: 2250.4 HRS. TTE: 1314.4 HRS. TSMOH: N/A

ANNUAL INSPECTION COMPLETED THIS DATE IN ACCORDANCE WITH DIAMOND AIRCRAFT DA42 NG AIMM AND AUSTRO ENGINE MAINTENANCE MANUAL. NO ADS DUE AT THIS TIME. ADS CHECKED THROUGH 01/06/2024. NUMBER 2024-00002-20

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: (EA-52-300-KIT).
REPLACED FUEL FILTER, P/N: (MK724-3).
DRAINED GEARBOX OIL, CHECKED GEARBOX MAGNETIC PLUG FOR METAL, NO METAL NOTED.
CHECKED GEARBOX FILTER, NO FAULTS NOTED. REFILLED GEARBOX WITH OIL.
INSTALLED NEW NUT FOR RIGHT ENGINE #1 CYLINDER EXHAUST MANIFOLD PN: (ISO7044-M8-8)
REMOVED AND REPLACED LEFT AND RIGHT EXHAUST SHOCK MOUNTS PART NUMBER 1405UE
GROUND RAN ENGINE AND TESTED FOR OPERATION AND FAULTS. 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 HERRICK

A&P/A 37A0085