AIRCRAFT
TECHNICAL RECORD

Section 3. ENGINE LOG

1. Approving competent Authority / Country	2.	3. Form Tracking Number
Austro Control GmbH Austria	**AUTHORISED RELEASE CERTIFICATE** **EASA FORM 1**	AE034985

4. Organisation Name and Address	5. Work Order / Contract / Invoice
Austro Engine GmbH Rudolf Diesel Straße 11 2700 Wr. Neustadt, AUSTRIA	ES202397

6. Item	7. Description	8. Part No.	9. Quantity	10. Serial No.	11. Status / Work
1	Engine Configuration A	E4A-00-000-BHY Iss. 011	1	E4-A-06023 RC 2010103	New DA QA 6

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: 229236). Cleaned and installed acc. AE APA_Pulsationsdämpfer-Aufbau_190618.

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

- [X] 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 relese to service.

13b. Authorised Signature	13c. Approval /Authorisation Number	14b. Authorised Signature	14c. Certificate / Approva Reference Number
	AT.21G.0010		
13d. Name Austro Engine O. Bauer Certi. Staff AT.21G.0010	**13e. Date (dd mmm yyyy)** 23 NOV 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 differrent 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 Engines GmbH
2.	Model:	E4-A
3.	Specification:	E00081EN
4.	Manufacturer's Serial Number:	E4-A-06023
5.	Date of Manufacture:	NOV 23 2020
6.	Aircraft Inspection Cycle:	

Section 3A: Engine Service and Maintenance Log

DIAMOND AIRCRAFT INDUSTRIES INC.
D.O.T. APPROVED MANUFACTURER #161-93

Registration:	N123NG
AC Serial Number:	40.NC123
Engine Serial Number:	E4-A-06023
Prop Serial Number:	201471
Airframe Total Time:	3.4 HRS

- Total Time **Engine** Brought forward from Flight Test Journey Log (DAI - Form Q-157): 3.4 HRS
- Engine installed new on Aircraft DA 40 NG, S/N: 40.NC123
- **Bi-weekly AWD check carried out to current revision 2021-01 all applicable AD's complied with, see attached.**
- The work described above was carried out IAW the applicable Standard of Airworthiness.

DA Q 8
Inspector

JAN 11 2021
Date

(Intentionally left blank below this point)

ENGINE MODEL: E4-A
ENGINE S/N: E4-A-06023
REG. NO: 123NG
WORK ORDER: 9353-04-2021

Premier Aircraft Service

Premier Aircraft Service,. Inc.
5540 NW 23rd Avenue Hanger 14
Fort Lauderdale, FL 33309
Phone: (954) 334-2393

DATE: 5/11/2021
A/C TSN: 64.1
ENG TT: 64.1
TACH: 64.1

Engine Entries

(2) C/W AUSTRO MSB-E4-030/3 OIL PUMP REPLACEMENT. INSTALLED NEW OIL PUMP P/N E4A-50-000-000. CHANGED ENGINE OIL AND FILTER, SERVICED WITH 7 QTS OF DIESEL 5W30 OIL. WORK DONE IAW AUSTRO E4-08-04 MM CH 12-10, 79-10 & 79-20.PERFORMED ENGINE RUN .OPS CHECKED GOOD.

DATE: 5/11/2021 SIGNED:

SAMUEL TAVAREZ JR.
CRS# 9PRR402B

Work Order: 9353-04-2021
Printed by EBis 3 (datcomedia.com)

ENGINE MODEL: E4-A
ENGINE S/N: E4-A-06023
REG. NO: 123NG
WORK ORDER: 9373-05-2021

Premier Aircraft Service

Premier Aircraft Service,. Inc.
5540 NW 23rd Avenue Hanger 14
Fort Lauderdale, FL 33309
Phone: (954) 334-2393

DATE: 5/27/2021
A/C TSN: 68.5
ENG TT: 68.5
TACH: 68.5

Engine Entries

(2) REMOVED OIL PUMP P/N E4A-50-000-000, INSTALLED BASE O-RING PN DIN3771-7.8X3.2-ACM70 AND RE INSTALLED OIL PUMP. CHANGED ENGINE OIL AND FILTER, SERVICED WITH 7 QTS OF DIESEL 5W30 OIL. WORK DONE IAW AUSTRO E4-08-04 MM CH 12-10, 79-10 & 79-20. ENGINE RUN UP CHECKED GOOD.

DATE: 5/27/2021 SIGNED:

EMMANUEL VICIOSO
CRS 9PRR402B

Work Order: 9373-05-2021
Printed by EBis 3 (datcomedia.com)

THIS PAGE TOTALS						
PREVIOUS TOTALS						
TOTALS SINCE NEW						

CARRY FORWARD to Top of Next Page

	NAME/ SIGNATURE	LICENCE: AME or AMO/ACA

ENGINE MODEL: E4-A
ENGINE S/N: E4-A-06023
REG. NO: 123NG
WORK ORDER:
9511-09-2021

Premier Aircraft Service

Premier Aircraft Service,. Inc.
5540 NW 23rd Avenue Hanger 14
Fort Lauderdale, FL 33309
Phone: (954) 334-2393

DATE: 9/22/2021
A/C TSN: 141.1
ENG TT: 141.1
TACH: 141.1

Engine Entries

(2) C/W MSB-E4-034 HP FUEL PUMP DRIVE GEAR INSP. INSTALLED NEW SPUR GEAR P/N E4A-30-000-201 S/N 2479 IAW AUSTRO E4.08.04 MM CH 73-00. ENG RUN UP CHECKED GOOD.
(3) C/W MSB-E4-035 CYLINDER HEAD ASSY AND HP FUEL PUMP DRIVE GEAR. INSPECTED DRIVE GEAR, NO DEFECTS AT THIS TIME. NO FURTHER ACTION REQUIRED.
(9) REPLACED ENGINE VALVE COVER OIL RETURN LINE SEAL WITH NEW PN DIN7603-A10X13.5-AL IAW AUSTRO E4.08.04 MM CH 79-20.

DATE: 9/22/2021 SIGNED: Work Order: 9511-09-2021

EMMANUEL VICIOSO
CRS 9PRR402B

Printed by EBis 3 (datcomedia.com)

ENGINE MODEL: E4-A
ENGINE S/N: E4-A-06023
REG. NO: 123NG
WORK ORDER:
9582-11-2021

Premier Aircraft Service

Premier Aircraft Service,. Inc.
5540 NW 23rd Avenue Hanger 14
Fort Lauderdale, FL 33309
Phone: (954) 334-2393

DATE: 11/9/2021
A/C TSN: 180.4
ENG TT: 180.4
TACH: 180.4

Engine Entries

(2) C/W 100 HR INSPECTION ON THIS ENGINE IAW 14 CFR PART 43, APPENDIX "D" USING AUSTRO E4-04-08 MM INSPECTION CHECKLIST AS A GUIDE. CHANGED OIL AND SERVICED WITH 7 QTS OF AEROSHELL DIESEL 5W30 OIL. REPLACED FUEL FILTER WITH NEW WK724-3 AND CLEANED FUEL STRAINER.PERFORMED ENGINE RUN.OPS CHECK GOOD.NO LEAKS DETECTED AT THIS TIME. ALL ADs CHECKED THROUGH CURRENT.
(8) C/W MSB-E4-028/3 OIL RETURN LINE PIPE-- PCW DURING MFG.
(9) C/W MSB-E4-029 TURBO WASTEGATE HOSE RESTRICTOR. ENGINE RUN UP CHECKED GOOD.

I CERTIFY THIS AIRFRAME, ENGINE, OR PROPELLER HAS BEEN INSPECTED IAW 14 CFR PART 43 APPENDIX-D 100 HR INSPECTION AND WAS DETERMINED TO BE IN AIRWORTHY CONDITION.

DATE: 11/9/2021 SIGNED: Work Order: 9582-11-2021

EMMANUEL VICIOSO
CRS 9PRR402B

Printed by EBis 3 (datcomedia.com)

Make: Diamond
Model: DA40NG
S/N: 40.NC123
REG NO: N123NG

Diamond FLEET & AVIATION SERVICES

Diamond Fleet & Aviation services LLC
5070 S. Collins suite 205,
Arlington, TX 76018
Phone: 817-575-7828

Date: 12/13/2021
Hobbs: 244.6
A/C TSN: 195.0
ENG TT: 195.0

Engine Entry

- Performed 100 hour inspection using DA40NG AMM as a guide
- Changed oil (serviced with aeroshell Diesel Ultra) and changed oil filter
- Inspected gearbox chip collector. No metal particles found
- Changed gearbox oil (serviced with shell Spirax S6 GXME 75W-80)
- Replaced two copper gaskets P/N: DIN7603-14x18x2.0 for the turbo charger banjo due to leaking
- Tighten all coolant hose clamps to correct torque specs
- Removed and replaced assy wastegate controller with new one P/N: E4A-41-120-000 and Ear clamp P/N: E4A-41-300-803
- All AD's complied with current BI-week

I certify this engine has been inspected IAW a 100 hour inspection and was determined to be in an airworthy condition.
Date: 12/13/2021

SIGNED:
Austin Paden, A&P:4494928

Section 3A: Engine Service and Maintenance Log

wo: WO_17

Diamond Fleet & Aviation Service · 5070 S. Collins S. Suite 205 · Arlington, TX 76018 · 910-644-4919

(PERFORMED:
ACEMENT)

N123NG **S/N: 40.NC123** **December 16, 2021**
TACH: 195.1

Remove and replaced BPA Installed P/N E4A-41-300-801, Installed (3) P/N E4A-41-300-803 - 1-ohr-kemme 10.3 -12.3mm hose clamp.

Austin Paden A&P 4494928

ENGINE MODEL: AE300
ENGINE S/N: E4-A-06023
REG. NO: N123NG
WORK ORDER: 0498

Premier Aircraft Service

Premier Aircraft Service, Inc.
3804 Falcon Way W
Hangar 18S
Fort Worth, TX 76106
Phone: 562.881.5345

DATE: 12/21/2021
A/C TSN: 195.3
ENG TT: 195.3
HOBBS: 246.1

Engine Entries

- Adjusted WGA rigging. Replaced spring clip and bridge lock washers
- Replaced BPA filter
- Replaced turbo oil supply line gaskets
- Replaced charge tube hose clamps
- AD 2021-22-20 Replaced HPP gear with new E4A-30-000-201 Rev. AE.1 S/N 4552 IAW MSB-E4-036/0

DATE: 12/21/2021 SIGNED:

David Seastead, License: AP3492477 IA

Work Order: 0498

Printed by EBis 3 (datcomedia.com)

wo: N123NG 2022.04.01 Scheduled

Diamond Fleet & Aviation Service · 5070 S. Collins S. Suite 205 · Arlington, TX 76018 · 9012474808

N123NG **Austro Engine, AE300 E-4A, S/N: E4-A-06023** **April 04, 2022**
TACH: 288.6 TTSN: 288.6 SMOH: 288.6

AE300 E-4A AE300 4cyl Diesel Engine PN: AE300 E-4A, SN: E4-A-06023, TT TACH: 288.6

1. **100 Hour Inspection - Engine** – 100 Hour Inspection Completed IAW FAR 43 Appendix D, AE-E4A EMM (CH4 Airworthiness Limitations CH5 Maintenance Intervals) as a guide. Engine serviced with Aeroshell Diesel Ultra. Replaced gearbox oil with Shell Spirax 75w-90. Inspected magnetic drain plug for particles - none found.
2. **300 Hour Engine Inspection Due** – 300 Hour Engine Inspection completed IAW AE-E4A-EMM. No Discrepancies noted.

With respect to the work performed, this engine has been found to be in an airworthy condition and is approved for return to service. Details of work performed are on file with Diamond Fleet & Aviation Service under work order: N123NG 2022.04.01 Scheduled.

Michael Smith A/P 3906663

wo: N123NG 2022.06.24 Unscheduled

Diamond Fleet & Aviation Services · 5070 S. Collins S. Suite 205 · Arlington, TX 76018 · 9012474808

N123NG **Austro Engine, AE300 E-4A, S/N: E4-A-06023** **June 24, 2022**
TACH: 391.0 TTSN: 391.0 SMOH: 391.0

AE300 E-4A AE300 4cyl Diesel Engine PN: AE300 E-4A, SN: E4-A-06023, TT TACH: 391.0

1. **Wastegate Controller Actuator Failure** – Removed Wastegate Actuator (p/n E4A-41-120-000) and installed new-serviceable actuator (p/n same), adjusted length and rigging IAW AE300 E4A EMM current revision. Ops Check OK.

With respect to the work performed, this engine has been found to be in an airworthy condition and is approved for return to service. Details of work performed are on file with Diamond Fleet & Aviation Services under work order: N123NG 2022.06.24 Unscheduled.

Michael Smith A/P 3906663

Diamond FLEET & AVIATION SERVICES

Diamond Fleet & Aviation Services · 5070 S. Collins S. Suite 205 · Arlington, TX 76018 · 9012474808

N123NG **Austro Engine, AE300 E-4A, S/N: E4-A-06023** **July 01, 2022**

TACH: 393.7 TTSN: 393.7 SMOH: 393.7

AE300 E-4A AE300 4cyl Diesel Engine PN: AE300 E-4A, SN: E4-A-06023, TT TACH: 393.7

1. **100 Hour Inspection** – Inspection completed using DA40NG AMM and AE300 EMM current revision as a guide. Drained and serviced 7 quarts Aeroshell Diesel Ultra engine oil; took engine oil sample for analysis; performed coolant pressure test; inspected gearbox oil for debris and reinstalled in gearbox; removed, inspected, and installed new-serviceable oil filter. All ADs complied with through current bi-week. Ops/Leak Check OK. Next due @ 493.3 TACH.
2. **Coolant Level Low** – Serviced coolant system with G48.

With respect to the work performed, this engine has been found to be in an airworthy condition and is approved for return to service. Details of work performed are on file with Diamond Fleet & Aviation Services under work order: N123NG 2022.06.28 Scheduled.

Caleb Rendon A/P 4231209 _____

ENGINE MODEL: AE300
ENGINE S/N: E4-A-06023
REG. NO: N123NG
WORK ORDER: 0726

Premier Aircraft Service

Premier Aircraft Service, Inc.

3804 Falcon Way W
Hangar 18S
Fort Worth, TX 76106
Phone: 562.881.5345

DATE: 12/12/2022
A/C TSN: 536
ENG TT: 536
HOBBS: 701.8

Engine Entries

- Performed 100 Hour Inspection using DA40NG AMM as a guide
- Changed oil and filter. Serviced engine with Aeroshell Diesel Ultra
- Inspected gearbox magnetic chip collector
- Performed 600hr flywheel inspection
- Performed 600hr coolant change
- Performed 300hr alternator inspection
- Performed 300hr injector cover zonal inspection
- Performed 300hr gearbox oil and filter change

I certify this engine has been inspected in accordance with an Annual Inspection and was determined to be in airworthy condition.

DATE: 12/12/2022 SIGNED: _____ Work Order: 0726

Chad Cox, License: AP3782800 IA

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N Number
N123NG

Date *TACH/HOBBS*
9/13/2022 **446.1**

Log Entry
ESNEW 446.1
Removed failed water pump bearing housing due to coolant leak. Replaced water pump bearing housing with new PN E4A-60-100-000. Replenished coolant and bled system. Ground ran and test flew, all ops checked ok. Refer to WO #G05164 on file at Dillon's Aviation, Inc.

William R. Renn For Dillon's Aviation, Inc.
AP3579353

Section 3A: Engine Service and Maintenance Log

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

ENGINE MODEL: AE300
ENGINE S/N: E4-A-06023
REG. NO: N123NG
WORK ORDER: 0857

Premier Aircraft Service, Inc.
3804 Falcon Way W
Hangar 18S
Fort Worth, TX 76106
Phone: 562.881.5345

DATE: 5/31/2023
A/C TSN: 585.1
ENG TT: 585.1
HOBBS: 765

Engine Entries

- MSB-E4-039 Performed 50hr oil sample with kit ID# AE018452

DATE: 5/31/2023 SIGNED:

David Seastead, License: AP3492477 IA

Work Order: 0857

ENGINE MODEL: AE300
ENGINE S/N: E4-A-06023
REG. NO: N123NG
WORK ORDER: 0869

Premier Aircraft Service, Inc.
3804 Falcon Way W
Hangar 18S
Fort Worth, TX 76106
Phone: 562.881.5345

DATE: 6/27/2023
A/C TSN: 597.1
ENG TT: 597.1
HOBBS: 779.8

Engine Entries

- Replaced HPP with new E4A-30-000-BHY S/N 22-02-15-02-00148
- Replaced WGA clip E4A-41-100-801

DATE: 6/27/2023 SIGNED:

Chad Cox, License: AP3782800 IA

Work Order: 0869

ENGINE MODEL: AE300
ENGINE S/N: E4-A-06023
REG. NO: N123NG
WORK ORDER: 0955

Premier Aircraft Service, Inc.
3804 Falcon Way W
Hangar 18S
Fort Worth, TX 76106
Phone: 562.881.5345

DATE: 10/11/2023
A/C TSN: 634.1
ENG TT: 634.1
HOBBS: 823.9

Engine Entries

- Replaced fuel filter
- Changed oil and filter. Serviced with Aeroshell Diesel Ultra
- Inspected gearbox chip collector. Serviced gearbox with SPIRAX-S6-GXME75W-80

DATE: 10/11/2023 SIGNED:

David Seastead, License: AP3492477 IA

Work Order: 0955

ENGINE MODEL: AE300
ENGINE S/N: E4-A-06023
REG. NO: N123NG
WORK ORDER: 1016

Premier Aircraft Service, Inc.
3804 Falcon Way W
Hangar 18S
Fort Worth, TX 76106
Phone: 562.881.5345

DATE: 1/2/2024
A/C TSN: 637.1
ENG TT: 637.1
HOBBS: 828.1

Engine Entries

- Performed 100 Hour Inspection using DA40NG AMM as a guide

I certify this engine has been inspected in accordance with an Annual Inspection and was determined to be in airworthy condition.

DATE: 1/2/2024 SIGNED:

David Seastead, License: AP3492477 IA

Work Order: 1016

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PREVIOUS TOTALS							
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MAKE: Diamond
MODEL: DA40NG
S/N: 40.NC123
REG. NO: N123NG
ENGINE MAKE: AUSTRO ENGINE
ENGINE MODEL: AE300
ENGINE S/N: E4-A-06023

Premier Aircraft Service, Inc.
3804 Falcon Way W
Hangar 18S
Fort Worth TX 76106

W/O #: 1293
DATE: 02-10-2025
ENG TT: 724.5
Tach: 724.5
Hobbs: 930.8

Engine Entries

- Performed 100 Hour Inspection using DA40NG AMM as a guide
  Changed oil and filter. Serviced engine with Aeroshell Diesel Ultra
  Inspected gearbox magnetic chip collector

I certify this engine has been inspected in accordance with an Annual Inspection and was determined to be in airworthy condition.

DATE: 02-10-2025 SIGNED:

David Seastead
License: AP3492477 IA

WORK ORDER: 1293

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MAKE: Diamond
MODEL: DA40NG
S/N: 40.NC123
REG. NO: N123NG
ENGINE MODEL: AE300
ENGINE S/N: E4-A-06023

3804 Falcon Way W
Hangar 18S
Fort Worth TX 76106

W/O #: 1706
DATE: 03-09-2026
ENG TT: 752.2
Tach: 752.2
Hobbs: 930.8

Engine Entries

Performed 100 Hour Inspection using DA40NG AMM as a guide
Changed oil and filter. Serviced engine with Aeroshell Diesel Ultra
Changed gearbox oil. Serviced with Shell Spirax S6 GXME
Inspected gearbox chip collector
Replaced turbo return pipe gasket and o-ring

I certify this engine has been inspected in accordance with an Annual Inspection and was determined to be in airworthy condition.

DATE: 03-09-2026 SIGNED:

Chad Cox
License: AP3782800 IA

WORK ORDER: 1706

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