



US Department
of Transportation
Federal Aviation
Administration

MAJOR REPAIR AND ALTERATION
(Airframe, Powerplant, Propeller, or Appliance)

Form Approved
OMB No. 2120-0020
2/28/2011

Electronic Tracking Number

For FAA Use Only

INSTRUCTIONS: Print or type all entries. See Title 14 CFR §43.9, Part 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form. This report is required by law (49 U.S.C. §44701). Failure to report can result in a civil penalty for each such violation. (49 U.S.C. §46301(a))

1. Aircraft	Nationality and Registration Mark USA N464TS	Serial No. 42.AC064	
	Make Diamond Aircraft Industries Inc.	Model DA42 NG	Series DA 42
2. Owner	Name (As shown on registration certificate) DIMOND AIRCRAFT SALES USA INC.	Address (As shown on registration certificate) 1560 Crumlin Sideroad	
		City London	State Ontario
		Zip N5V 1S2	Country Canada

3. For FAA Use Only

4. Type		5. Unit Identification			
Repair	Alteration	Unit	Make	Model	Serial No.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	AIRFRAME		(As described in Item 1 above)	
<input type="checkbox"/>	<input type="checkbox"/>	POWERPLANT			
<input type="checkbox"/>	<input type="checkbox"/>	PROPELLER			
<input type="checkbox"/>	<input type="checkbox"/>	APPLIANCE	Type Manufacturer		

6. Conformity Statement

A. Agency's Name and Address		B. Kind of Agency	
Name Diamond Aircraft Industries Inc. AMO 161-93		<input type="checkbox"/> U. S. Certificated Mechanic	<input type="checkbox"/> Manufacturer
Address 1560 Crumlin Sideroad		<input type="checkbox"/> Foreign Certificated Mechanic	C. Certificate No.
City London	State Ontario	<input type="checkbox"/> Certificated Repair Station	
Zip N5V 1S2	Country Canada	<input checked="" type="checkbox"/> Certificated Maintenance Organization	AMO # 161-93

D. I certify that the repair and/or alteration made to the unit(s) identified in item 5 above and described on the reverse or attachments hereto have been made in accordance with the requirements of Part 43 of the U.S. Federal Aviation Regulations and that the information furnished herein is true and correct to the best of my knowledge.

Extended range fuel
per 14 CFR Part 43
App. B ☐

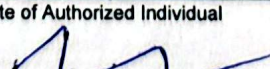
Signature/Date of Authorized Individual




APR 05 2019

7. Approval for Return to Service

Pursuant to the authority given persons specified below, the unit identified in item 5 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is ☒ Approved ☐ Rejected

BY	FAA Flt. Standards Inspector	Manufacturer	<input checked="" type="checkbox"/> Maintenance Organization	Persons Approved by Canadian Department of Transport
	FAA Designee	Repair Station	Inspection Authorization	
Certificate or Designation No. AMO # 161-93		Signature/Date of Authorized Individual  		APR 05 2019

NOTICE

Weight and balance or operating limitation changes shall be entered in the appropriate aircraft record. An alteration must be compatible with all previous alterations to assure continued conformity with the applicable airworthiness requirements.

8. Description of Work Accomplished
(If more space is required, attach additional sheets. Identify with aircraft nationality and registration mark and date work completed.)

USA N464TS

April 05, 2019

Nationality and Registration Mark

Date

Diamond Aircraft Industries Inc. AMO #161-93 Work Order # SO 072130

ADS-B Installation:

Garmin GTX 345R installed per STC: SA01714WL, AML Revision Dated Jan 31, 2019

Remote mounted, extended Squitter w/o Internal GPS

PN: 011-03303-00

SN: 3EH021939

GTX 345R approved integration with G1000, on DA42 NG, as per Table II, of AML. Installation carried out as per:

Garmin Master Drawing List (MDL) 005-00734-04, Rev. 12

Garmin GTX 3X5 ADS-B AML STC Equipment List 005-00734-05, Rev 15

Garmin GTX 3XX Part 23 Installation Manual 190-00734-10, Rev 11

Garmin GTX 3X5 Maintenance Manual 190-00734-11, Rev 6

AFM Section 9 updated with Supplement AFM – 190-00734-15 Rev 3

Instructions For Continued Airworthiness provided with Aircraft for Owner:

ICA: Chapter 4, GTX 3X5 ADS-B Maintenance Manual, DOC# 190-00734-11, rev 6

Electrical Load Analysis Provided

The installed ADS-B OUT system was shown to meet the equipment performance requirements of 14 CFR 91.227.

ATC Transponder & Altitude Reporting System(s) have been tested IAW with 14CFR 91.411: & 91.413:

ADC – Model, GDC 74A, SN: 47807779

TXPR programmed:

US Tail : N464TS

Aircraft Re Weighed W&B Amended as follows :

New Empty Weight = 1431.5 kg OR 3155.9 lbs

New E.W. C of G = 2.397 m OR 94.38 in.

New E.W. moments = 3431.5 kg m OR 297841.3 in lbs.

Max Ramp weight = 1900.0 kg. OR 4189.0 lbs.

Max useful load = 468.5 kg OR 1033.1 lbs

END

☐ Additional Sheets Are Attached

AIRCRAFT S/N
42.ACO64

AIRCRAFT TECHNICAL LOGS

Section 1. AIRFRAME



Position:

#1:

#2:

| AMO 1-77

Altimeter Calibration Test Record

Work Order #:

K45057

Altimeter S/N:

459575

Altitude (Feet)	Tol (+/- Ft)	Altimeter Reads
-1000	20	-20
0	20	-13
500	20	-5
1000	20	+0
1500	25	+8
2000	30	+9
2500	30	+13
3000	30	+15
4000	35	+14
6000	40	+4
8000	60	-9
10000	80	-16

Altitude (Feet)	Tol (+/- Ft)	Altimeter Reads
12000	90	-19
14000	100	-25
16000	110	-20
18000	120	-18
20000	130	-5
22000	140	-
25000	155	-
30000	180	-
35000	205	-
40000	225	-
45000	230	-
50000	280	-

Hysteresis

21

Case Leak

0

Date

12-Sep-11

Friction

35

After Effect

12

Completed By

AIRCRAFT

- | | |
|--|-----------------|
| 1. Nationality and Registration | <u>N464TS</u> |
| 2. Manufacturer's Designation | <u>DA 42</u> |
| 3. Manufacturer's Serial Number | <u>42.AC064</u> |
| 4. Type Approval or Specification Number | <u>A57CE</u> |
| 5. Date of Manufacture | <u>2007</u> |
| 6. Aircraft Inspection Cycle | <u></u> |

AIR TIME AND

DATE	DAILY TOTAL		TOTAL AIR TIME SINCE MFG.		ENGINEERING RECORD NOTE: USE BOTH PAGES AND AS MANY LINES AS REQUIRED FOR COMPLETE RECORD
	HRS.	MIN.	HRS.	MIN.	
BROUGHT FORWARD	0	0	0	0	AIRCRAFT NEW



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

17 MAY 2007 S/N 42.AC064
COMPASS DEVIATION, ALL ELECTRICS ON

SERIAL NUMBER

REGISTRATION MARK

42.AC064

N464TS

FOR	N	30	60	E	120	150
STEER	360	030	061	090	119	150
FOR	S	210	240	W	300	330
STEER	179	209	238	269	299	330



I certify that the ATC Transponder & Altitude Reporting System(s) have been tested in Accordance with Standard 571, Appendix F F.A.R. 91:217; & F.A.R. 91:413.

Diamond

INDEPENDENT CHECK OF FLIGHT AND POWERPLANT CONTROLS

DATE _____

INSPECTOR

DATE _____

INSPECTOR

17 May, 2007

James M. Rolland DA Q 23

17 May, 2007

DA
Q 20

[illegible]

AIR TIME AND

DATE	DAILY TOTAL		TOTAL AIR TIME SINCE MFG.		ENGINEERING RECORD NOTE: USE BOTH PAGES AND AS MANY LINES AS REQUIRED FOR COMPLETION
	HRS.	MIN.	HRS.	MIN.	
BROUGHT FORWARD			5.	0	



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

I HEREBY CERTIFY THAT THIS AIRCRAFT CONFORMS TO THE
APPROVED TYPE DESIGN DATA AND IS IN A FIT AND SAFE STATE
FOR FLIGHT.

DATE

MAY 31 2007

INSPECTOR

John M. Rella **DA 161-93**



Date: June 06, 2007, S/N: 42.AC064 Reg. #: N464TS
W/O RO-07-159 TACH: 5.5 HRS.

The following work carried out by Diamond Aircraft Industries Inc.

Service centre :
RH Auxiliary fuel transfer pump purged of airlock. Fuel transfer check carried out and found to function normal.

The maintenance described above has been performed in accordance with the applicable standards of airworthiness.

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

Signature *John M. Rella* Lic. Or Stamp



Date: June 28, 2007

WO#: RO-07-174 S/N: 42.AC042 Reg #: N464TS TAF: 17.1 Hrs TACH
The Following work has been carried out.

R/H Aux Fuel transfer system purged. System tested serviceable.

L/H wing removed I.A.W. DA42 AMM document number 7.02.01 rev 1 section 57-10-00 pages 201-205. Pilot/Static and TKS systems undisturbed. Fuel temperature probe replaced. Probe P/N: 5102511PFR45 RC0608595, seal P/N: 02-7250-03139R2 RC0601239 installed. L/H wing installed I.A.W. AMM section 57-10-00 pages 205-212. Fuel system leak checked, and L/H Aux Fuel transfer system tested serviceable. A/C ground ran and fuel temperature system tested for operation.

R/H control stick placard secured.

L/H and R/H nose baggage doors removed I.A.W. AMM 52-30-00 page 201. L/H and R/H nose baggage door seals replaced. P/N: 10.2508.8971 RC0706393 installed. L/H and R/H nose baggage doors re-installed I.A.W. AMM 52-30-00 page 202.

The maintenance described above has been performed in accordance with the applicable standards of airworthiness.

DIAMOND AIRCRAFT INDUSTRIES AMO 161-93

Signature: *John M. Rella* Lic or Stamp: *John M. Rella*
CARRIED FORWARD

June 06, 2007	TACH	5.5
June 28, 2007	TACH	17.1

ENGINEERING RECORD

INSPECTION, REPAIRS & REPLACEMENT
ENTRIES. DRAW A DIAGONAL LINE THROUGH ANY UNUSED LINES IN DATE AND TIME COLUMNS.

SIGNATURE

LICENCE
NUMBER

DA
Q 23



U.S. Standard Airworthiness Certificate, issued:

(Date) JUN 0 5 2007, has been installed in the
aircraft on behalf of NE-MIDO-46 on:

(Date) JUN 0 5 2007

(Print) R. S. L. S. L. S. L. (Signature)



WOW: RO-07-174 S/N: 42.AC042 Reg #: N464TS TTAf: 17.1 Hrs TACH
Date: June 28, 2007

I have carried out an independent inspection of the Flight/Powerplant
controls affected by the work accomplished.

1. L/H Flap controls at wing disconnect point.
2. L/H Aileron controls at wing disconnect point.

The maintenance described above has been performed in
accordance with the applicable standards of airworthiness.

DIAMOND AIRCRAFT INDUSTRIES AMO 161-93

Signature: [Signature]

Lic or Stamp: [Stamp]



AIR TIME AND

DATE	DAILY TOTAL		TOTAL AIR TIME SINCE MFG.		ENGINEERING RECORD <u>NOTE: USE BOTH PAGES AND AS MANY LINES AS REQUIRED FOR COMPLETION</u>
	HRS.	MIN.	HRS.	MIN.	
BROUGHT FORWARD					
7-19-07			25	8	

N464TS

Model: DA 42

S/N: 42.AC064

Date: 19 July 2007



Tach Time: 25.8
Total Time: 25.8

Work Order: S-07-00256

AD 2007-12-05, effective date 16 July 2007, not applicable by aircraft serial number.
AD 2007-12-24, effective date 19 July 2007, not applicable by aircraft serial number.
AD 2007-13-16, effective date 10 Aug 2007, not applicable, rough wing walk not installed.
Purged air from LH and RH auxiliary fuel transfer system, system checked satisfactory.

I certify that this repair has been inspected and determined to be in airworthy condition. Pertinent details are on file under the above work order.

Signed

A&P 2818490

Olathe KS 66062 (913) 782-0530

N464TS

Model: DA 42

S/N: 42.AC064

Date: 30 October 2007



Total Time: 43.1
Tach Time: 43.1
Hobbs Time: 43.1
Work Order: A-07-00070

Removed Garmin GTX 33 mode S transponder P/N 011-00779-10 S/N 89104161. Installed new Garmin GTX 33 mode S transponder P/N 011-00779-10 S/N 89105795. Performed transponder certification in accordance with FAR 43, Appendix F to comply with FAR 91.413 and 91.217.

I certify that this repair has been inspected and determined to be in airworthy condition. Pertinent details are on file under the above work order.

Signed

Olathe KS 66062 (913) 782-0530 FAA Repair Station #AMYR171C

N464TS

Model: DA 42

S/N: 42.AC064

Date: 06 February 2008



Total Time: 60.6
Tach Time: 60.6
Work Order: S-08-00012

AD 2007-23-14, Effective 26 December 2007, Installation of ECU backup batteries, complied with AD 2007-23-14 by installing additional engine control unit backup batteries following DAI WL-OSB-42-050, Revision 2, dated 10 September 2007, as referenced in DAI S/B OSB-42-0501, dated 15 October 2007. Installed kit P/n OSB-42-050-KIT S/N MP0705907-10000. Updated aircraft weight and balance. Inserted TR-OAM-42-129, Dated 11 July 2007, into aircraft flight manual.

I certify that this repair has been inspected and determined to be in airworthy condition. Pertinent details are on file under the above work order.

Signed

Olathe KS 66062 (913) 782-0530 FAA Repair Station #AMYR171C

CARRIED FORWARD

ENGINEERING RECORD

3

ENTRIES. DRAW A DIAGONAL LINE THROUGH ANY UNUSED LINES IN DATE AND TIME COLUMNS.

SIGNATURE

LICENCE
NUMBER

N464TS

Model: DA 42

S/N: 42.AC064

Date: 18 April 2008

Total Time: 67.8
Tach Time: 67.8

Work Order: S-08-00123

Replaced nose landing gear micro switch lever P/N JE-5 on forward gear up micro switch P/N 1SE-1. Accomplished all required adjustments and operational checks with satisfactory results.

I certify that this repair has been inspected and determined to be in airworthy condition. Pertinent details are on file under the above work order.

Signed

Olathe KS 66062 (913) 782-0530

FAA Repair Station #AMYR171C

N464TS

Model: DA 42

S/N: 42.AC064

Date: 5 January 2009

Hobbs Time: 67.8
Tach Time: 67.8
Total Time: 67.8
Work Order: S-08-00283

Complied with an Annual inspection using Diamond DA42 inspection checklist chapter 05-20-00 as a guide.
Complied with 12 month FAR 91.207(d) inspection of the ELT for proper installation, battery corrosion, operation of controls and sufficient radiated signal.

Complied with 100 hour/12 month replacement of left and right hand engine fuel filters, installed new filters P/N 02-7310-04740.

Complied with 48 month magnetic compass calibration check.

Complied with 12 month replacement of left and right hand engine ECU backup batteries, installed 4 each new batteries P/N LC-R127R2P.
AD 2008-16-20 Effective date September 17 2008. Aileron bell crank replacement. Complied with MSB-42-043/1, installed new bellcranks using kit P/N MSB-42-043-KIT and new rod ends P/N DA1-9027-00-01. No further action required.

Diamond MSB 42-055. Water Circulation inspection. Complied with service bulletin in accordance with WL-MSB-42-055 on left and right hand engines.

Complied with 12 month replacement of alternator excitation batteries, installed 2 each new batteries P/N LC-R121R3P.
AD 2008-23-08 Effective date December 22 2008. Engine mounting bolts. Found not applicable by engine serial numbers #1 S/N 02-01-1249

#2 02-01-1250 not listed in Diamond MSB-42-058. No further action required.

Replaced left hand engine fuel filter assembly, installed new filter assembly P/N 02-7310-04009R2.

Replaced rudder upper hinge bearing, installed new bearing P/N SCP8.

Replaced nose wheel, installed new nose wheel P/N 40-77.

Replaced roll servo cable guard, installed new cable guard P/N 073-00288-0002.

Replaced hinge on left hand nose baggage door, installed hinge P/N HM-2000L.

Accomplished fuel system bleeding and all required operational and functional checks with satisfactory results. Ground performance run good, no leaks noted.

I certify that this Aircraft has been inspected in accordance with an Annual Inspection and is determined to be in airworthy condition. Pertinent details are on file under the above work order.

Signed

Olathe KS 66062

(913) 782-0530

FAA Repair Station #AMYR171C

N464TS

Model: DA 42

S/N: 42.AC064

Date: 28 April 2009

Hobbs Time: 69.6
Total Time: 69.6

Work Order: S-09-00017

Diamond RSB 42-066. Replacement of Auxiliary Fuel Check Valve, incorporated. Installed solenoid kit P/N RSB-42-066-KIT in accordance with WL-RSB-42-066 on left and right hand sides. Removed check valve S/N 0378 (Left) and S/N 0342 (Right).
Diamond MSB 42-070. Inspection of the Nose Landing Gear (NLG) Tubular Pivot Assembly. Accomplished inspection in accordance with WL-MSB-42-070 Par. III, 1, found no gap at this time. Inspection due again at Total Time of 169.6 hours.

I certify that this repair has been inspected and determined to be in airworthy condition. Pertinent details are on file under the above work order.

Signed

Olathe KS 66062

(913) 782-0530

FAA Repair Station #AMYR171C

N464TS

Model: DA 42

S/N: 42.AC064

Date: 2 October 2009

Hobbs Time: 69.6
Total Time: 69.6

Work Order: S-09-00299

Polished out scratches on inner surface of the canopy co-pilot side.

I certify that this repair has been inspected and determined to be in airworthy condition. Pertinent details are on file under the above work order.

Signed

Olathe KS 66062

(913) 782-0530

FAA Repair Station #AMYR171C

104645



ALT # PED

Correction Card

CRS #AMMYR171C

Model: D7 Altimeter P/N:

GDC 74

W/O #: 409.024

S/N: 42 Altimeter S/N:

42807779

Date: 9/20/09

Hobbs Time: 69.9
Total Time: 69.9

Work Order: S-09-00347

A-09-00024
A-09-00026

-5783 and installed

Test	Altitude Reads	Altitude Reads
Completed w new pack P	-1000	12000
Completed w	0	14000
Completed w	500	16000
Tested and	1000	18000
Tested and	1500	20000
Tested and	2000	22000
Tested and	3000	25000
Tested and	4000	30000
F of FAR 4:	6000	35000
Removed a	8000	40000
Removed P	10000	45000
DA42 AMM		
Accomplish		

Des E and F of FAR 43.
411(a)(1) and was
411(a)(1) and was
comply with appendix
2) S/N 114602 per

File on file under the

I certify that the work order

Signed

7570

Olathe KS 66062 (913) 782-0530 FAA Repair Station #AMMYR171C

Airframe

Model: DA42

S/N: 42AC064

Date: 1 June 2010



Hobbs Time: 69.9
Total Time: 69.9
Work Order: S-10-00018

Complied with an Annual Inspection using Diamond DA42 AMM 05-20-20 Annual Inspection form as a guide to comply with the inspection requirements of FAR 43 Appendix D.
Complied with 12 month replacement of the alternator excitation battery by installing 2 new batteries P/N LC-R121R3P per Diamond DA42 AMM 24-30-00.
Complied with 24 month hydraulic system fluid replacement and installed new filter P/N X11-0004-HC0465FDS3Z.
Complied with 2000hr / 24 month landing gear damper hydraulic fluid replacement per Diamond DA42 AMM 32-10-00 and 32-20-00.
Complied with 12 month 14 CFR 91.207(d) inspection of the ELT for proper installation, corrosion and operation of controls and sufficient radiated signal.
Complied with 12 month compass calibration swing.
Complied with 50hr / 12 month fuel filter replacement for left and right engines by installing new filters P/N 02-6120-16150R1 per Diamond DA42 AMM 28-20-00.
Complied with Diamond MSB 42-062/1, dated 13 Nov 08, by installing kit P/N MSB-42-602-KIT per WI-MSB-42-062 instructions.
Complied with Diamond MSB 42-074/3, dated 29 Jan 2010, by installing kit P/N MSB-42-074-KIT per WI-MSB-42-074/2 instructions.
Installed new bolt P/N LN9037-M6X75 in the left MLG down lock hook assembly.
Accomplished all required operational and functional checks with satisfactory results. Ground performance run good, no leaks noted.

I certify that this Aircraft has been inspected in accordance with an Annual Inspection and is determined to be in an airworthy condition. Pertinent details are on file under the above work order.

Signed

7570

Olathe KS 66062 (913) 782-0530 FAA Repair Station #AMMYR171C

Airframe

Model: DA42

S/N: 42AC064

Date: 26 October 2010



Tach Time: 89.6
Total Time: 89.6
Work Order: S-10-00312

Installed cabin door lock kit P/N 3802-0022 in forward and aft doors and replaced door lock cam P/N 623-062-454 in the forward cabin door per Diamond DA42 AMM 52-10-00.

The Aircraft identified above was repaired and inspected in accordance with current Regulations of the Federal Aviation Administration and is approved for return to service. Pertinent details are on file under the above work order.

Signed

7570

Olathe KS 66062 (913) 782-0530 FAA Repair Station #AMMYR171C

CARRIED FORWARD

ENGINEERING RECORD

4

INSPECTION, REPAIRS & REPLACEMENT INDUSTRIES, DRAW A DIAGONAL LINE THROUGH ANY UNUSED LINES IN DATE AND TIME COLUMNS.

SIGNATURE

LICENCE NUMBER

Diamond

Date: August 20, 2011

WO#: RO-11-092 S/N: 42.AC064 Reg #: N464TS TACH: 100.9 Hrs.
LH Propeller MTV-6-A-C-F/CF187-129 S/N:061180 TSN: 100.9 Hrs.

The Following work has been carried out.

Date of Manufacture Dec. 19, 2006 TSN: 100.9 Hrs. removed this date for Overhaul and conversion of mounting flange from "A" to "R" version I.A.W MT-propeller issued SI No. 48 to be eligible for reinstallation on DA 42NG Austro Engine equipped Aircraft.

The maintenance described above has been performed in accordance with the applicable standards of airworthiness.

DIAMOND AIRCRAFT INDUSTRIES AMO 161-93

Signature *Shankar* Lic or Stamp DA RO6

Diamond

Date: August 20, 2011

WO#: RO-11-092 S/N: 42.AC064 Reg #: N464TS TACH: 100.9 Hrs.
RH Propeller MTV-6-A-C-F/CF187-129 S/N:061181 TSN: 100.9 Hrs.

The Following work has been carried out.

Date of Manufacture Dec. 20, 2007 TSN: 100.9 Hrs. removed this date for Overhaul and conversion of mounting flange from "A" to "R" version I.A.W MT-propeller issued SI No. 48 to be eligible for reinstallation on DA 42NG Austro Engine equipped Aircraft.

The maintenance described above has been performed in accordance with the applicable standards of airworthiness.

DIAMOND AIRCRAFT INDUSTRIES AMO 161-93

Signature *Shankar* Lic or Stamp DA RO6

Diamond

Date: August 29, 2011 S/N: 42.AC064 Reg. #: N464TS
W/O RO-11-092 TACH: 100.9 HRS.

RH Eng. TAE 125-01 S/N: 02-01-1250 TSN: 100.9 Hrs.

The following work carried out:

RH Thielert Engine TAE 125-01 S/N: 02-01-1250 TSN: 100.9 Hrs. removed of DA42.AC064 in serviceable condition this date to facilitate installation of Austro engine I.A.W. OSB-42-068/1.

Engine cylinder compression readings taken are as follows.
#1cyl 80/80, #2cyl 80/80, #3cyl 68/80, #4cyl 80/80.

The maintenance described above has been performed in accordance with the applicable standards of airworthiness.

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

Signature *Shankar* Lic. Or Stamp DA RO6

Diamond

Date: august 29, 2011 S/N: 42.AC064 Reg. #: N464TS
W/O RO-11-092 TACH: 100.9 HRS.

LH Eng. TAE 125-01 S/N: 02-01-1249 TSN: 100.9 Hrs.

The following work carried out:

LH Thielert Engine TAE 125-01 S/N: 02-01-1249 TSN: 100.9Hrs. removed of DA42.AC064 in serviceable condition this date to facilitate installation of Austro engine I.A.W. OSB-42-068/1.

Engine cylinder compression readings taken are as follows.
#1cyl 78/80, #2cyl 61/80, #3cyl 50/80, #4cyl 73/80.

The maintenance described above has been performed in accordance with the applicable standards of airworthiness.

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

Signature *Shankar* Lic. Or Stamp DA RO6

WO # RO-11-092 A/C DA 42 NG S/N: 42.AC064 Reg: N464TS TACH: 100.9 Hrs.
LHE Austro E4-B S/N: E4-B-00217 TSN: 0.0 Hrs.
RHE Austro E4-B S/N: E4-B-00216 TSN: 0.0 Hrs.
LH Prop. Mt-Propeller MTV-6-R-C-F/CF187-129 S/N: 071243 TSN: 0.0 HRS.
RH Prop. Mt-Propeller MTV-6-R-C-F/CF187-129 S/N: 070579 TSN: 0.0 HRS.

The Following work has been carried out:

Diamond Aircraft Industries GmbH issued Optional Service Bulletin 42-068/1, conversion to variant DA42NG W/-OSB42-068 Rev 9 complied with using Materials kit Appendix. A, Rev. 8 and Appendix B Rev. 5.

New Propeller MTV-6-R-C-F/CF187-129, S/N 071243 TSN: 0.00 Hrs. Installed on LHE I.A.W. chapter 61 of DA 42 NG AMM Doc. # 7.02.15 Rev. 1. After embodiment of Mt-Propeller issued SI No. 48C carried out by Hope Aero Propeller per their W/O # T90908 dated April 20, 2011.
New Propeller MTV-6-R-C-F/CF187-129, S/N 070579 TSN: 0.00 Hrs. Installed on RHE I.A.W. Chapter 61 of DA 42 NG AMM Doc. # 7.02.15 Rev. 1. After embodiment of Mt-Propeller issued SI No. 48C carried out by Hope Aero Propeller per their W/O # T90906 dated April 20, 2011.

LH prop Accumulator P-893-1 S/N 06A458 & RH prop Accumulator P-893-1 S/N 06A464 TSN: 100.9 Hrs. removed for overhaul. Overhauled prop Accumulator P-893-1C S/N 07A306 TSOH: 0.00 Hrs. installed on LH. Overhaul of the unit carried out by Mt-Propeller USA Inc. per their W/O # 11-337MT dated September 07, 2011 & Overhauled Prop Accumulator P-893-1C S/N: 08A006 TSOH: 0.00Hrs. installed on RH. Overhaul of the unit carried out by Mt-Propeller USA Inc. per their W/O # 11-338MT dated September 07, 2011.

LH Thielert Engine TAE 125-01, S/N 02-01-1249 TSN: 100.9 hrs removed and replaced with new "0" time Austro Engine model E4-B, S/N E4-B-00217 I.A.W. W/-OSB42-068 Rev. 9 Appendix 2 Rev. 3.
RH Thielert Engine TAE 125-01, S/N 02-01-1250 TSN: 100.9 hrs removed and replaced with new "0" time Austro Engine model E4-B, S/N E4-B-00216 I.A.W. W/-OSB42-068 Rev. 9 Appendix 2 Rev. 3.

Both LH & RH newly installed Engines serviced with 7 litres each with Shell Helix 5W30 oil.
LH & RH gearbox serviced with 2 litres each with Shell Spirax GSX 75W80 gearbox oil.
LH & RH cooling systems serviced with a 50/50 mixture of distilled water and Glyscanin G48 antifreeze.
LH & RH High Pressure fuel pumps checked and found new fuel pumps P/N E4A-30-200-000 issue 000.
previously installed by the Engine Manufacturer Austro Engine. Terminating the 50 Hr. repetitive fuel oscillation inspections.

Nacelle Fuel System installation carried out I.A.W. W/-OSB42-068 Rev.9 Appendix1 Rev.2.
Ground Run up of the engines and fluid leak check performed, found to be satisfactory.

Honeywell KAP140 autopilot system removed. Garmin GFC700 with Yaw Damper installed
I.A.W. W/-OSB42-068 Rev. 9 Appendix 3, Rev. 1.

Function check of the system carried out and found satisfactory.
SVT card unlocked and activated.

Landing gear installation carried out I.A.W. W/-OSB42-068 Rev. 9 Appendix 4, Rev.2.
New nose Landing gear Hydraulic actuator P/N D60-9029-03-01_1S/N 0912 installed.

Landing Gear retraction check carried out I.A.W. DA 42NG current issue of AMM chapter 32.

Airspeed indicator model code B864 removed and replaced with new unit model code B884 S/N 205815 due for recertification at 2100.9 hrs or Oct. 2015. VSI checked for correct indication.
Altimeter S/N 459575 removed & reinstalled after calibration check performed by Kitchener aero avionics dated Sep. 12, 2011 under their work order # K45057

Pilot static & Transponder Co relation check carried out.
Compass swing carried out.

Radios on: Liquid Compass

FOR	N	30	60	E	120	150
STEER	360	031	061	091	121	151
FOR	S	210	240	W	300	330
STEER	181	210	240	270	300	330

Radios On: HSI

FOR	N	30	60	E	120	150
STEER	360	031	060	090	121	151
FOR	S	210	240	W	300	330
STEER	181	212	240	269	299	330

Aircraft Re Weighed:

New Empty weight = 1442.4 kg or 3180.0 lbs

New E.W. C of G = 2.365m or 93.12 in.

New E. W. Moments = 3411.7 kg-m or 296126.2 in-lbs

Max all up Weight = 1900 kg or 4189 lbs

New useful Load = 457.6 kg or 1009.0 lbs

New weight and balance report and equipment list added to section 6 of the Current AFM Doc. # 7.01.15-E Rev. 2 dated November 2009. All Placards checked for conformance. All flight control surfaces checked for travels.

This DA42 is converted to a DA42NG as per OSB42-068/1 and is eligible for TCDS A57CE Rev. 12 as per note 10.
New Data Plate installed. All snags noted during the above described tasks have been rectified and all pertinent details of the work carried out are on file with this work order.

ENGINEERING RECORD

5

CONVERSION

The following DAI service bulletins CMW during OSB42-068/1:

Austro Engine RSB-E4-003/7 - Engine Software Version updated to VC33_0_05_13 CMW.
Austro Engine MSB-E4-006 - N/A due to Eng. S/N affectivity
Austro Engine MSB-E4-007 - N/A due to Eng. S/N affectivity
Austro Engine MSB-E4-008/1 - LH and RH Eng. Oil separator hoses N/A due to Eng. S/N affectivity.
Austro Engine MSB-E4-009/2 - N/A New High pressure fuel pumps installed by Austro Engine Terminates 50 Hr. Repetitive Insp.
Austro Engine MSB-E4-013/1 - Gearbox oil Insp. to be CMW within 10 flight hours but not later than Dec. 31, 2011.
MSB42NG002/7 - Software E4-B (AE300) engine CMW. Software version VC33_0_5_13
MSB42NG-003/8 - G1000 Software version update CMW. Version 010-00670-04. (NON WAAS)
MSB 42NG-005/1 - Charged Air tube between Turbo charger & Intercooler CMW.
MSB42NG-007 - Emergency Exit lever Insp. & map light sealant CMW.
OSB42NG-008 - Installation of coated safety walk CMW.
OSB42NG-010 - Installation of a protective mesh on coolant and charged air radiator CMW.
OSB42NG-013 - Cowling with improved cooling performance CMW.
MSB42NG-014 - Replacement of Passenger door retaining bracket P/N DAA-5200-00-69_1 per Action #1 CMW.
RSB42NG-016/1 - Rudder control System & NLG steering reinforcement CMW. NOTE: Repetitive inspection is now Terminated.
MSB42NG-017/1 - Replacement of seals in MLG Dampers CMW.
MSB42NG-018/1 - Replacement of turbo connector Assy. CMW
OSB42NG-019 - Installation of fuel Pressure Pulsation damper CMW as part of revision 9 of OSB 068/1
MSB42NG-022 - EASA AD 2011-0100 Repair of upper center wing skin to spar bond N/A due to A/C S/N affectivity.
OSB42-023 - Optional retrofit of the Oxygen system carried out I.A.W. WI OSB 42-023.
OSB42NG-025 - Installation of a heating inlet scoop. CMW as per Conversion OSB 42-068 Rev. 9.
MSB42-031/1 - LH & RH MLG Rib re enforcement N/A due to A/C S/N affectivity.
MSB42-032/1 - Aux fuel tank vent hole insp. N/A due to A/C S/N affectivity.
MSB42-063/1 - Inspection & mod of the NLG centering unit CMW as part of revision 9 of OSB 068/1
MSB42-068/1 - Conversion from Thielert engines to Austro Engines CMW.
MSB42-088/3 - MLG joint inspection and replacement N/A as P/N D64-3217-23-0x is installed as part of revision 9 of OSB 068/1
MSB42-091 - MLG Bearing housing inspection CMW. Repetitive Every 200Hrs. Install Replace parts By June 28, 2012.
RSB42-025 - Improved fuel probes installation PCW.
RSB42-029 - Additional position pins for canopy CMW as part of revision 9 of OSB 068/1
RSB42-066 - LH & RH aux tanks check valve and solenoid PCW.
RSB-42-072/2 - LH & RH Engines heat detectors P/N X2003-2 Sealed for water protection CMW as part of revision 9 of OSB 068/1
MT Propeller S148C - LH and RH propeller modification from "A" flange to "R" flange CMW.
Garmin MSB 0823 Rev.C - GDU CRS/BARO knob interference check CMW.
Garmin MSB 0533 Rev. B GRS77 IGRF Earth's Magnetic field CMW.
AD2005-01-19 - N/A as Garmin GTX33 software version is at 5.01.
AD 2008-16-20 - Replacement of aileron bell crank rod ends PCW.
AD 2010-11-09 - Proportional Pressure reducing Valve N/A to Austro Engines.
AD 2011-10-13 - Passenger door retaining bracket with improved version P/N DAA-5200-00-69_1 CMW. as per MSB42NG-014.
AD2011-11-07 - MLG joint inspection & replacement N/A as P/N D64-3217-23-0x is installed.
AD 2011-18-19- LH & RH High Pressure Pumps fuel oscillation check. N/A as New fuel pumps per MSB-E4-009/2 are installed.

AWDS checked through Bi-Weekly Supplement 2011- 22

The maintenance described above has been performed in accordance with the applicable standards of Airworthiness.

DIAMOND AIRCRAFT INDUSTRIES AMO 161-93

This aircraft is released subject to the completion of a satisfactory test flight for the evaluation of flight, engine and avionics performance.

Signature:

[Handwritten Signature]

Lic or Stamp:

DA
RO 7

WO # RO-11-092 A/C DA 42NG S/N: 42.AC064 Reg: N464TS TACH: 100.9 hrs.
LHE Austro E4-B S/N: E4-B-00217 TSN: 0.00 Hrs.
RHE Austro E4-B S/N: E4-B-00216 TSN: 0.00 Hrs.
LH Prop. Mt-Propeller MTV-6-R-C-F/187-129 S/N: 071243 TSN: 0.00 Hrs.
RH Prop. Mt-propeller MTV-6-R-C-F/187-129 S/N: 070579 TSN: 0.00 Hrs.

The Following work has been carried out:

1000 hr inspection carried out I.A.W. DA42NG AMM Doc. 7.02.15 Rev. 1 chapter 04-00-00, & chapter 05-00-00.
Annual performance check on ME406 ELT S/N 01863 carried out. Next performance check due October, 2012. ELT battery due for replacement: February 2018. Emergency battery pack replaced with new. Next replacement due October 2013.
New ECU backup batteries installed. Next batteries replacement due October 2012.
Autopilot mechanical check carried out. Next due October, 2012 or at TACH: 600.9 hrs.
Altimeter S/N 459575 removed and reinstalled after rectification carried out by Kitchener Aero WO # K45057. Next recertification due Sep. 12, 2013 or at TACH: 1100.9. Pitot static and transponder correlation checks carried out. Next check due October, 2013 or at 1100.9 Hrs. Electrical Bonding system and static discharging system check carried out. Next check due 1100.9 hrs or Oct. 2015.
Mid section Rudder cables replaced with new as per GFC 700 installation. Forward & aft rudder cables are original & will be due for replacement at TACH time of 3000hrs. OR June 2012.
LH and RH fuel filter elements replaced with new. Brake fluid drained and replenished with new Aeroshell fluid 4. Brake system bled. Next brake system fluid replacement due October 2014. Hydraulic fluid in landing gear dampers replaced. Next fluid change due Oct. 2013 or 2100.9 hrs. Hydraulic system fluid replaced. Next fluid change due Oct. 2013 or TACH TIME: 2100.9 Hrs. All wheel bearings cleaned, inspected and serviced with fresh grease Aeroshell 22. LH & RH MLG Brake discs & linings replaced with new. Landing Gear retraction check carried out including check of all audible warnings and determined to be satisfactory. Airspeed indicator & VSI checked for correct indication. Next check due Oct. 2015 or 2100.9 Hrs. Fuel hoses interconnecting the individual fuel tank chambers replaced with new. Next replacement due Oct. 2019. Both LH and RH newly installed engines serviced with 7 liters each Shell Helix 5W30 oil. LH and RH gearbox serviced with 2 liters each Shell Spirax GSX 75W80 oil. Engine cooling system serviced with a 50/50 mixture of distilled water and glycol Glyscantin G48. Next coolant change due Oct. 2013 or TACH: 700.9 Hrs. Wings inspected as per AMM chapter 05 inspection sheets and wings reinstalled. Rudder and stab removed inspected and reinstalled I.A.W. chapter 27 of the DA 42NG AMM. All flight control surfaces travel checks carried out I.A.W. chapter 6 of the DA42NG AMM. Independent check of the engine and flight controls affected by the described work carried out. Gill Battery G-243 removed and new Concorde RG24-15M Battery S/N: 40451140 installed.
TKS system windshield pump #1 P/N WP209A S/N AST06K577 removed and replaced with a new pump S/N AST08C751.
Operational check of the TKS system performed and determined to be satisfactory.
Hand held Fire Extinguisher Amerex A620 S/N XV-87196 Annual weight checked 2.264 lbs. and pressure check carried out.
Oxygen system installation carried out I.A.W. optional OSB 42-023 work instructions.
Oxygen Cylinder P/N 4110-120-2 Rev. E. S/N 10282 installed with regulator valve P/N 4110-1402 S/N 14218.
Oxygen system filled to required capacity I.A.W. the work instructions and checked for leaks & operation and found satisfactory.
Garmin G1000 database update carried out. Synthetic Vision SVT activated. All Limitation placards checked for conformance I.A.W. current issue of the AFM Section 2.15. G1000 data bases updated, Safe taxi, Obstacle, Expire November 17, 2011 Jeppesen Flight charts, Airport directory Expire November 17, 2011.
All snags noted during the above described tasks have been rectified and all pertinent details of the work carried out are on file with this work order.
Ground run up of the engines, & fluid leak checks performed and determined to be satisfactory.
Magnetic compass swing carried out.

Radio's on: Liquid Compass

FOR	N	30	60	E	120	150
STEER	360	031	061	091	121	161
FOR	S	210	240	W	300	330
STEER	181	210	240	270	300	330

Following AWD's and SB's checked and complied with as applicable:

Austro Engine RSB-E4-003/7 - Engine Software Version updated to VC33_0_05_13 C/W.
Austro Engine MSB-E4-006 - N/A due to Eng. S/N affectivity
Austro Engine MSB-E4-007 - N/A due to Eng. S/N affectivity
Austro Engine MSB-E4-008/1 - LH and RH Eng. Oil separator hoses N/A due to Eng. S/N affectivity.
Austro Engine MSB-E4-009/2 - N/A New High pressure fuel pumps installed by Austro Engine Terminates 50 Hr. Repetitive Insp.
Austro Engine MSB-E4-013/1 - Gearbox oil inspection to be C/W within 10 flight hours but not later than Dec. 31, 2011.
MSB42NG002/7 - Software E4-B (AE300) engine C/W. Software version VC33_0_5_13
MSB42NG-003/8 - G1000 Software version update C/W. Version 010-00670-04 (NON WAAS)
MSB 42NG-005/1 - Charged Air tube between Turbo charger & Intercooler C/W.
MSB42NG-007 - Emergency Exit lever Insp. & map light sealant C/W.
OSB42NG-008 - Installation of coated safety walk C/W.
MSB42NG-010 - Installation of a protective mesh on coolant and charged air radiator C/W.
OSB42NG-013 - Cowling with improved cooling performance C/W.
MSB42NG-014 - Replacement of Passenger door retaining bracket P/N DA4-5200-00-69_1 per Action #1 C/W.
MSB42NG-016/1 - Rudder control System & NLG steering reinforcement C/W. NOTE: Repetitive Inspection is now Terminated.
RSB42NG-017/1 - Replacement of seals in MLG Dampers C/W.
MSB42NG-018/1 - Replacement of turbo connector Assy. C/W
OSB42NG-019 - Installation of fuel Pressure Pulsation damper C/W as part of OSB42-068/1 rev 9
MSB42NG-022 - EASA AD 2011-0100 Repair of upper center wing skin to spar bond N/A due to S/N of Aircraft.
OSB42NG-025 - Installation of a heating inlet scoop C/W as per conversion OSB 42-068 Rev. 9.
MSB42-031/1 - LH & RH MLG Rib reinforcement N/A due to S/N of A/C.
MSB42-032/1 - Aux fuel tank vent hole insp. N/A due to A/C S/N affectivity.
MSB42-063/1 - Inspection & mod of the NLG centering unit C/W as part of OSB42-068/1 rev 9
OSB42-068/1 - Conversion from Thielert engines to Austro Engines C/W.

ENGINEERING RECORD

6

INSPECTION, REPAIRS & REPLACEMENT

ENTRIES. DRAW A DIAGONAL LINE THROUGH ANY UNUSED LINES IN DATE AND TIME COLUMNS.

SIGNATURE

LICENCE
NUMBER

MSB42-088/3 - MLG joint inspection and replacement N/A as P/N D64-3217-23-0x has been installed as part of OSB42-068/1 rev 9
MSB42-091 - MLG Bearing Housing inspection C/W. Repetitive every 200 Hrs. Install Replacement parts by June 28, 2012.
OSB42-023 - Installation of the Oxygen system C/W. I.A.W. work instructions WI MSB42-023.
RSB42-025 - Improved fuel probes installation PCW.
RSB42-029 - Additional position pins for canopy C/W as part of OSB42-068/1 rev 9
RSB42-066 - LH & RH aux tanks check valve and solenoid PCW.
RSB-42-072/2 - LH & RH Engines heat detectors P/N X2003-2 Sealed for water protection C/W as part of OSB42-068/1 rev 9
MT Propeller SI48C - LH and RH propeller modification from "A" flange to "R" flange C/W.
Garmin MSB 0823 Rev.C. - GDU CRS/BARO knob interference check C/W.
Garmin MSB 0533 Rev. B GRS77 IGRF Earth's Magnetic field C/W.
AD2005-01-19 - N/A as Garmin GTX33 software version is at 5.01.
AD 2008-16-20- Replacement of aileron bell crank rod ends PCW.
AD 2010-11-09 - Proportional Pressure reducing Valve N/A to Austro Engines.
AD 2011-10-13 - Passenger door retaining bracket with improved version P/N DA4-5200-00-69_1 C/W as per MSB42NG-014.
AD2011-11-07 - MLG joint inspection & replacement N/A as P/N D64-3217-23-0x is installed.
AD2011-18-19 - LH & RH High Pressure Pumps fuel oscillation check. N/A New fuel pumps as per MSB-E4-009/2 are installed.

AWDS checked through BI-Weekly Supplement 2011- 22

The maintenance described above has been performed in accordance with the applicable standards of airworthiness.

Signature: [Signature] Lic or Stamp: DA RO6

I have carried out an independent inspection of the Flight controls/Powerplant controls affected by the work accomplished.

Signature: [Signature] Lic or Stamp: DA RO23

This aircraft is released subject to the completion of a satisfactory test flight for the evaluation of flight, engine and avionics performance.

Signature: [Signature] Lic or Stamp: DA RO6



Date: October 19, 2011

WO # RO-11-092 A/C DA 42NG S/N: 42.AC064 Reg: N464TS TACH: 100.9 Hrs.

"I certify that the Static Pressure system has been inspected and tested in accordance with Chapter 571.10, Appendix B Paragraph (a) 4(1) of the CARs, FAR 91.411, FAR 43 appendix E and Chapter 12 section 4 Paragraph 12-57 of the AC 43.13-1B.2A."

Transponder correlation requirements completed I.A.W. 571 appendix F, 571.10, Appendix B paragraph (a)4(1) of the CARs, FAR 91.411, FAR 91.413, FAR 43 appendix E & F, and chapter 12, section 4, paragraph 12-57 of the AC43.13-1B.

The maintenance described above has been performed in accordance with the applicable standards of airworthiness.

DIAMOND AIRCRAFT INDUSTRIES AMO 161-93

Signature: [Signature] Lic or Stamp: DA RO6

AIR TIME AND

DATE	DAILY TOTAL		TOTAL AIR TIME SINCE MFG.		ENGINEERING RECORD <small>NOTE: USE BOTH PAGES AND AS MANY LINES AS REQUIRED FOR COMPLETION</small>
	HRS.	MIN.	HRS.	MIN.	
BROUGHT FORWARD					<div style="text-align: right;"> Diamond AIRCRAFT </div> <p>Date: October 19, 2011 Aircraft Total Time: 100.9 hours</p> <p>I certify that this aircraft DA 42 NG Serial Number 42.AC064 has been inspected in accordance with an annual inspection and was determined to be in airworthy condition.</p> <p style="text-align: center;"> Jarred Curtis AP 2878024 IA </p>
OCT 19, 2011	1	.5	102	.4	
OCT 20, 2011	-	-	102	.4	
<p>Date: October 20, 2011 S/N: 42.AC064 Reg. #: N464TS W/O RO-11-092 TACH: 102.4 HRS.</p> <p>The following work carried out : Aft cabin door seal re positioned to rid of slight draft and wind noise. RH engine coolant sensor tested and found to function normal.</p> <p>The maintenance described above has been performed in accordance with the applicable standards of airworthiness.</p> <p>DIAMOND AIRCRAFT INDUSTRIES INC. D.O.T. APPROVAL # 161-93</p> <p>Signature Lic. Or Stamp DA R06</p>					
			102	.4	
OCT 20, 2011	.6		103	.0	<div style="text-align: right;"> <p>DA42.AC064 REG:#:N464TS Tach:103.0 Hrs.</p> <p>I have flown this aircraft in accordance with Diamond DA42 M.M. Doc. #7.02.15 Rev.1 1000hr Maintenance Check Flight Report and determined that the flight characteristics, engine performance, and avionics to be in conformance with the standards of the type.</p> <p>Date <u>OCT 20 2011</u></p> <p>Signature </p> <p>Licence DA Q 134</p> </div>
			103	.0	
CARRIED FORWARD					

AIR TIME AND

DATE	DAILY TOTAL		TOTAL AIR TIME SINCE MFG.		ENGINEERING RECORD NOTE: USE BOTH PAGES AND AS MANY LINES AS REQUIRED FOR COMPLETION
	HRS.	MIN.	HRS.	MIN.	
BROUGHT FORWARD	-	-	103	.0	Diamond Date: October 21, 2011 S/N: 42.AC064 TSN: 103.0HRS LHE Austro E4-B S/N: E4-B-00217 TSN: 2.1 Hrs. RHE Austro E4-B S/N: E4-B-00216 TSN: 2.1 Hrs. The following work carried out : Austro engine MSB-E4-013/1 Gearbox oil inspection carried out on LHE S/N E4-B-00217 gearbox S/N 283 and RHE S/N E4-B-00216 gearbox S/N282. Magnetic drain plug and gearbox oil inspection found to be within The acceptable limits as specified in Austro engine maintenance manual E4.08.04 Revision .9 The maintenance described above has been performed in accordance the applicable standards of airworthiness. DIAMOND AIRCRAFT INDUSTRIES INC. D.O.T. APPROVAL # 161-93 Signature <u>[Signature]</u> Lic. Or Stamp <u>DA RO6</u>
OCT 24 2011	0	.5	103	.5	Diamond Date: October 26, 2011 S/N: 42.AC064 Reg. #: N464TS W/O RO-11-092 TACH: 103.5 HRS. The following work carried out : G1000 chartview card P/N 010-00330-53 unlocked. NLG uplock microswitch adjusted and gearswing carried out to verify that all gear warning lights function normal during gear retraction. The maintenance described above has been performed in accordance with the applicable standards of airworthiness. This Aircraft is Released subject to the completion of a satisfactory Test flight for evaluation of the normal functionality of the gear lights. DIAMOND AIRCRAFT INDUSTRIES INC. D.O.T. APPROVAL # 161-93 Signature <u>[Signature]</u> Lic. Or Stamp <u>DA RO6</u>
OCT 26 2011	-	-	103	.5	
			103	.5	Diamond I have flown this aircraft in accordance with FAR 91.407, and determined that the landing gear warning lights functioned normal during this check flight Date <u>OCT 27 2011</u> Signature <u>[Signature]</u> Licence <u>DA Q 134</u>
OCT 27 2011	0	.3	103	.8	
			103	.8	

AIR TIME AND

[illegible]

9

LICENCE
NUMBER



OFFICE: 704-431-6862

GLENN LAWLER

A&P 2151929 IA

[illegible]

AIR TIME AND

[illegible]

ENGINEERING RECORD

10

INSPECTION, REPAIRS & REPLACEMENT

ENTRIES. DRAW A DIAGONAL LINE THROUGH ANY UNUSED LINES IN DATE AND TIME COLUMNS.

SIGNATURE

LICENCE
NUMBER

DIAMOND AIRCRAFT INDUSTRIES GmbH.
PART-145 APPROVED MAINTENANCE ORGANISATION
AT.145.073 WIENER NEUSTADT/AUSTRIA

200 (HOURS)

hours inspection according Part-145 manufacturer

Director's Joerg v. Stefenelli from 09.10.2013 performed



REG.No.: N464TS

Airframe: Diamond DA 42-NG

100 Hrs. & Annual Inspection

Workreport "Work Order No":

s/n.: 42.AC064

ASOEX130086

by:

Diamond Aircraft Industries GmbH

approved maintenance data in acc.:

AMM Doc.No.7.02.15 Rev.2, 31-Mar-2012

AD-compliance (see workreport)

ATP File:N464TS_17.10.2013 Rev. 15.10.2013

I certify that this Aircraft has been inspected scope and detail in acc. with 100

Hrs.&Annual insp. conf. FAR- Part 43 App.D and was determined to be in airworthy condition.

TT : 258,80

TSO : 258,80

Garmin Time : 258,80

www.stefenelli.com

Date: Oct - 17 - 2013

Ing. Joerg v. Stefenelli

A&P-IA 3050916

tel.: +43(676)615 9 677

AIR TIME AND

[illegible]

ENGINEERING RECORD

11

INSPECTION, REPAIRS & REPLACEMENT

ENTRIES. DRAW A DIAGONAL LINE THROUGH ANY UNUSED LINES IN DATE AND TIME COLUMNS.

SIGNATURE

LICENCE
NUMBER**Diamond**

AIRCRAFT

N.A. Otto-Strasse 5, A-2700 Wiener Neustadt, AUSTRIA

Reg: **N464TS** WR No.: **076/15SAs** Date: **23.10.15**
 Make: Diamond Inc. Model: DA42 NG S/N: 42.AC064
 Hobbs: 411.0 Flight time: 411.0
 Engine: A300 S/N: E4-B-00217 TSN: 311.0
 Engine: A300 S/N: E4-B-00216 TSN: 311.0
 Prop: MTV-6-A-C-F/C S/N: 80090 TSN/TSO: 1601.18 / 84.0
 Prop: MTV-6-A-C-F/C S/N: 3610 TSN/TSO: 487.09 / 84.0

Complied with:

Next Annual inspection: Oct.2016

- 200h/Annual inspection performed i.a.w. Diamond DA42NG AMM and FAR43 appx.D
- 300h inspection on both engine performed.
- Bonding and static discharging system test performed.
- Emergency battery package replaced. Next due Oct. 2017
- ECU backup batteries for both engine replaced. Next due Oct. 2016
- ELT annual function test performed.
- Mag. Compass swing performed.
- AD CONFORMETY CHECKED BEWEEKLY: 2015-21
- MSB E4-014/2 Replacement of fuel return line and banjo fitting performed.
- RSB E4-018 Inspection of engine harness performed.
- Additional work WR: 076/2015SAs

I CERTIFY THAT THIS AIRFRAME/ENGINE/PROPELLER HAS BEEN INSPECTED IN ACCORDANCE WITH SCOPE AND DETAIL OF FAR PART 43D FOR A 100H/ANNUAL INSPECTION AND WAS FOUND TO BE IN AIRWORTHY CONDITION. ALL THE WORK SPECIFIED EXCEPT AS OTHERWISE SPECIFIED WAS CARRIED OUT IN ACCORDANCE WITH PART 43 OF THE U.S.FEDERAL REGULATIONS, AND IN RESPECT TO THAT WORK THE AIRCRAFT/AIRCRAFT COMPONENTS IS CONSIDERED READY FOR RELEASE TO SERVICE

Place:

Swiss Aviationssupport, Hartbertstrasse 17, CH-7000Chur

Airport Wr-Neustadt (LOAN)

Martin Barth

A&P 2801493 I.A.



Martin A.
Barth
A&P 2801493 I.A.

A&P 2801493 I.A.

Diamond

AIRCRAFT

N.A. Otto-Strasse 5, A-2700 Wiener Neustadt, AUSTRIA

Reg: **N464TS** WR No.: **060/2016SAs** Date: **26.04.2016**
 Make: Diamond Inc. Model: DA42 NG S/N: 42.AC064
 Hobbs: Flight time: 436.2
 Engine: A300 S/N: E4-B-00217 TSN: 336.2
 Engine: A300 S/N: E4-B-00216 TSN: 336.2
 Prop: MTV-6-A-C-F/C S/N: 80090 TSN/TSO: 1711.2/109.2
 Prop: MTV-6-A-C-F/C S/N: 03610 TSN/TSO: 596.2/109.2

Complied with:

- Pitch trim servo GFC 700 p/n: 011-00878-00 replaced.
S/N: Removed 66413371 Installed **66407805**
- Additional work WR: 060/2016SAs and Diamond Aircraft ASOEX150319

I CERTIFY THAT THE WORK SPECIFIED EXCEPT AS OTHERWISE SPECIFIED WAS CARRIED OUT IN ACCORDANCE WITH PART 43 OF THE U.S.FEDERAL REGULATIONS, AND IN RESPECT TO THAT WORK THE AIRCRAFT/AIRCRAFT COMPONENTS IS CONSIDERED READY FOR RELEASE TO SERVICE

Swiss Aviationssupport, Hartbertstrasse 17, CH-7000Chur

Place:

Martin A. Barth

Airport Wiener-Neustadt (AT)

A&P 2801493 I.A.



Martin A.
Barth
A&P 2801493 I.A.

[illegible]

ENGINEERING RECORD

12

ENTRIES. DRAW A DIAGONAL LINE THROUGH ANY UNUSED LINES IN DATE AND TIME COLUMNS.

SIGNATURE

LICENCE
NUMBER**Diamond**

AIRCRAFT

H.A. Otto, Strasse 5, A-2700 Wiener Neustadt, AUSTRIA

Reg: **N464TS** WR No.: **111/2016SAe** Date: **21.07.16**

Make: Diamond Inc. Model: DA42 NG S/N: 42.AC064

Hobbs: Flight time: 465.5 S/N: EA-B-00217 TSN: 365.5

Engine: A300 S/N: EA-B-00216 TSN: 365.5

Prop: MTV-6-A-C-F/CI S/N: 80090 TSO: 138.5

Prop: MTV-6-A-C-F/CI S/N: 03610 TSO: 138.5

Complied with:

- On RH engine coolant tank assy P/N DG4-7521-00-00 2 replaced.
- OSB 42NG-049 i.a.w. WI-OSB 42NG-049 seip 283 performed.
- Additional work WR: Diamond Aircraft ASOEX160021

I CERTIFY THAT THE WORK SPECIFIED EXCEPT AS OTHERWISE SPECIFIED WAS CARRIED OUT IN ACCORDANCE WITH PART 43 OF THE U.S. FEDERAL REGULATIONS, AND IN RESPECT TO THAT WORK THE AIRCRAFT/AIRCRAFT COMPONENTS IS CONSIDERED READY FOR RELEASE TO SERVICE AIRWORTHY CONDITION.

Place:

A&P 2801493 I.A.
Airport Wiener-Neustadt (AT) Martin Barth

Martin A.
Barth
A&P 2801493 I.A.**Diamond**

AIRCRAFT

H.A. Otto, Strasse 5, A-2700 Wiener Neustadt, AUSTRIA

Reg: **N464TS** WR No.: **160/2016SAe** Date: **13.10.2016**

Make: Diamond Inc. Model: DA42 NG S/N: 42.AC064

Hobbs: 490.00 Flight time: 490.00 S/N: EA-B-00217 TSN: 390.00

Engine: A300 S/N: EA-B-00216 TSN: 390.00

Prop: MTV-6-A-C-F/CI S/N: 080090 TSN/TSO: 1765.00/163.00

Prop: MTV-6-A-C-F/CI S/N: 03610 TSN/TSO: 650.00/163.00

Complied with: Next Annual inspection: Oct. 2017

- 100h/Annual inspection performed i.a.w. Diamond DA42 AMM 7.02.15 rev.2,
- Austro Engine MM EA.08.04 rev. 26 and MT-Propeller manual E-124 rev. 57.
- IFR Avionic test i.a.w. FAR 91.411/91.413 performed.
- ELT annual inspection i.a.w. FAR 91.207 performed.
- Mag. Compass swing performed.
- ECU backup batteries replaced.
- On both engine V-ribbed belt replaced.
- AD's conformely checked biweekly: 2016-20
- Additional work WR: Diamond Aircraft ASOEX160131

I CERTIFY THAT THIS AIRFRAME/ENGINE/PROPELLER HAS BEEN INSPECTED IN ACCORDANCE WITH SCOPE AND DETAIL OF FAR PART 43D FOR A 100H/ANNUAL INSPECTION AND WAS FOUND TO BE IN AIRWORTHY CONDITION. ALL THE WORK SPECIFIED EXCEPT AS OTHERWISE SPECIFIED WAS CARRIED OUT IN ACCORDANCE WITH PART 43 OF THE U.S. FEDERAL REGULATIONS, AND IN RESPECT TO THAT WORK THE AIRCRAFT/AIRCRAFT COMPONENTS IS CONSIDERED READY FOR RELEASE TO SERVICE

Place:

Swiss Aviation Support, Hardtbergstrasse 17, CH-7000 Chur
Airport Wr.-Neustadt (LOAN) Martin Barth
A&P 2801493 I.A.


Martin A.
Barth
A&P 2801493 I.A.

10/10/88

ENGINEERING RECORD

13

INSPECTION, REPAIRS & REPLACEMENT

ENTRIES. DRAW A DIAGONAL LINE THROUGH ANY UNUSED LINES IN DATE AND TIME COLUMNS.

SIGNATURE

LICENCE
NUMBER**Diamond**

AIRCRAFT

N.A. Otto-Strasse 5, A-2700, Wiener Neustadt, AUSTRIA

Reg: **N464TS** WR No.: Swiss Aviation Support 186/2016SAs Date: **21.Nov.2016**
 Make: Diamond Aircraft Model: DA42NG S/N: 42.AC064
 Hobbs: 495.0 Flight time: 495.00
 Engine: AE300 S/N: E4-B-00217 TSN: 395.00
 Engine: AE300 S/N: E4-B-00216 TSN: 395.00
 Prop: MTV-6-A-C-F/CF S/N: 80090 TSO: 168.00
 Prop: MTV-6-A-C-F/CF S/N: 3610 TSN: 168.00

Complied with:

- Oxygen cylinder assy after O/H installed. S/N in: ALT279-19121
- LH Engine, glow box replaced. S/N in: 001648
- Additional work info see WR: 186/2016SAs and Diamond Aircraft ASOEX160199

I CERTIFY THAT ALL THE WORK SPECIFIED EXCEPT AS OTHERWISE SPECIFIED WAS CARRIED OUT IN ACCORDANCE WITH PART 43 OF THE U.S. FEDERAL REGULATIONS, AND IN RESPECT TO THAT WORK THE AIRCRAFT/AIRCRAFT COMPONENTS IS CONSIDERED READY FOR RELEASE TO SERVICE AND IN AIRWORTHY CONDITION.

Place: Swiss Aviation Support, Hartbertstrasse 17, CH-7000 Chur
 Airport Wr-Neustadt (LOAN) **Martin Barth**
 A&P 2801493 I.A. *M. Barth*

**Diamond**

AIRCRAFT

N.A. Otto-Strasse 5, A-2700, Wiener Neustadt, AUSTRIA

Reg: **N464TS** WR No.: Swiss Aviation Support 010/2017SAs Date: **19.Jan.2017**
 Make: Diamond Inc. Model: DA42 NG S/N: 42.AC064
 Hobbs: 504.00 Flight time: 504.00
 Engine: A300 S/N: E4-B-00217 TSN: 404.00
 Engine: A300 S/N: E4-B-00216 TSN: 404.00
 Prop: MTV-6-A-C-F/CI S/N: 080090 TSO: 177.00
 Prop: MTV-6-A-C-F/CI S/N: 03610 TSO: 177.00

Complied with:

- OAM 42-077/g "Exchangeable nose cone" performed.
- OAM 42-273/a "GWX70 weather radar installation" performed.
- OAM 42-094/I "Avidyne TAS 600 installation" performed.
- WAAS Equipment and unlock P-RNAV & SBAS installed with:
 - OAM 42-134/a "WAAS provisions"
 - OAM 42-179/d "P-RNAV and SBAS enable"
 - OAM 42-211/a GIA63W new P/N"
- Weight & balance performed, new empty weight: **1463,0** kg
- Additional work info see WR 010/2017SAs and Diamond Aircraft ASOEX160165

I CERTIFY THAT THE WORK SPECIFIED EXCEPT AS OTHERWISE SPECIFIED WAS CARRIED OUT IN ACCORDANCE WITH PART 43 OF THE U.S. FEDERAL REGULATIONS, AND IN RESPECT TO THAT WORK THE AIRCRAFT/AIRCRAFT COMPONENTS IS CONSIDERED READY FOR RELEASE TO SERVICE AND IN AIRWORTHY CONDITION.

Place: Swiss Aviation Support, Hartbertstrasse 17, CH-7000 Chur
 Airport Wr-Neustadt (LOAN) **Martin Barth**
 A&P 2801493 I.A. *M. Barth*



ENGINEERING RECORD

ENTRIES. DRAW A DIAGONAL LINE THROUGH ANY UNUSED LINES IN D

Diamond

AIRCRAFT

N.A. ORO Strasse 5, A-2700 Wiener Neustadt, AUSTRIA



Martin A. Barth
A&P 2801493 LA

SIGNATURE

LICENCE
NUMBER

Reg: **N464TS**

WR No.: **WR 095/2017SAs**

Date: **30. Jan. 2017**

Make: **Diamond Inc.**

Model: **DA42 NG**

SN: **42 AC064**

Hobbs: **545.0**

Flight time: **545.00**

Engine: **A300**

S/N: **E4-B-00217**

TSN: **445.00**

Prop: **MTV-6-A-C-F/C**

S/N: **080090**

TSN: **445.00**

TSO: **218.00**

Prop: **MTV-6-A-C-F/C**

S/N: **03610**

TSO: **218.00**

Complied with:

- LH wing removed/installed for T/S fuel leak.
- Fuel tank chambers replaced.
- RH Strobe light replaced.
- Additional work info see WR: 095/2017SAs, Diamond Aircraft ASOEX160506 & ASOEX16014

I CERTIFY THAT THE WORK SPECIFIED EXCEPT AS OTHERWISE SPECIFIED WAS CARRIED OUT IN ACCORDANCE WITH PART 43 OF THE U.S. FEDERAL REGULATIONS, AND IN RESPECT TO THAT WORK THE AIRCRAFT/AIRCRAFT COMPONENTS IS CONSIDERED READY FOR RELEASE TO SERVICE AND IN AIRWORTHY CONDITION.

Swiss Aviation Support, Hardtbergstrasse 17, CH-7000 Chur

A&P 2801493 LA.

Place: **Airport Wr-Neustadt (LOAN)**

Martin Barth

M. Barth



Martin A. Barth
A&P 2801493 LA

[illegible]

ENGINEERING RECORD

INSPECTION, REPAIRS & REPLACEMENT
ENTRIES. DRAW A DIAGONAL LINE THROUGH ANY UNUSED LINES IN DATE AND TIME COLUMNS.

Diamond

AIRCRAFT

N.A. Otto-Strasse 5, A-2700, Wiener Neustadt, AUSTRIA

Martin Barth
Martin Barth

Reg: N464TS	WR No.: 1782018SAs	Date: 06. Dec. 2018	SIGNATURE	LICENCE NUMBER
Make: Diamond Aircraft	Model: DA42 NG	SN: 42 AC064		
Hobbs: 688.2	Flight time: 688.2	TSN: 587.3		
Engine: A300	S/N: E4-B-00217	TSN: 587.3		
Engine: A300	S/N: E4-B-00216	TSO: 361.2		
Prop: MTV-6-A-C-FICF	S/N: 080090	TSO: 361.2		
Prop: MTV-6-A-C-FICF	S/N: 03610			
Complied with:	Next Annual inspection: Dec 2019			
200h inspection on Airframe, engines and propellers i.a.w. DA42 AMM 05-28-00 Maintenance - Checklist DA42 NG, engine MM and propeller OIM performed. - On LH & RH engine, alternators replaced. p/h E4A-91-400-000 s/n LH: 01539 s/n RH: 01755 - On LH & RH engine, "Two mass flywheel" inspection performed. Satis. - On LH & RH engine, air filter replaced - LH & RH fuel filter replaced - On LH & RH engine, oil and oil filter replaced. - On LH & RH engine, high pressure pump replaced. p/h E4A-30-000-000 - s/n LH: 18-01-22-02-01276 s/n RH: 18-01-22-02-01990 - Main battery capacity check performed. Satis. - ECU backup batteries replaced. - Annual ELT function check i.a.w. FAR 91.207 performed. - All safety belts replaced - IFR avionic check and altimeter test i.a.w. FAR 91.411 and FAR 91.413 performed. - Magnetic compass swing performed. - FAA AD 2018-07-16 "Turbocharger wast gate controller" on LH & RH engine performed. - FAA AD 2018-18-02 "Engine windmill restart" checked, no windmill start performed to this date. - AD's conformely checked biweekly 2018-24 and FAA AD lists Diamond Aircraft DA42NG, Austro engine E4 and MT-Propeller MTV-6. - Austro Engine MSB-E4-022 rev.4 "Turbocharger wast gate controller" on LH & RH engine terminating action item 40&41 performed. Fail safe bridge and bushings installed. - MSB 42NG-003/27 "Software Garmin G1000 update", new software already installed. - MSB 42NG-072 rev.0 "Inspection of upper rudder bearing" performed. Satis. - Additional repairs and work into see Diamond Aircraft WR: ASOEX-18-0148				
I CERTIFY THAT THIS AIRFRAME/ENGINE/PROPELLER HAS BEEN INSPECTED IN ACCORDANCE WITH SCOPE AND DETAIL OF FAR PART 43D FOR A ANNUAL INSPECTION AND WAS FOUND TO BE IN AIRWORTHY CONDITION. ALL THE WORK SPECIFIED EXCEPT AS OTHERWISE SPECIFIED WAS CARRIED OUT IN ACCORDANCE WITH PART 43 OF THE U.S.FEDERAL REGULATIONS, AND IN RESPECT TO THAT WORK THE AIRCRAFT/AIRCRAFT COMPONENTS IS CONSIDERED READY FOR RELEASE TO SERVICE				
Place:	Swiss Aviationssupport, Hartbergstrasse 17, CH-7000Chur			
Airport Wr-Neustadt (LOAN)	Martin Barth	<i>Martin Barth</i>	Martin A. Barth	Martin Barth
	A&P 2801493 I.A.			

AIR TIME AND

DATE	DAILY TOTAL		TOTAL AIR TIME SINCE MFG.	
	HRS.	MIN.	HRS.	MIN.
BROUGHT FORWARD				

ENGINEERING RECORD

NOTE: USE BOTH PAGES AND AS MANY LINES AS REQUIRED FOR COMPLETE



DIAMOND AIRCRAFT IND.
D.O.T. APPROVED
MAINTENANCE
ORGANIZATION161-93

Registration: N464TS
AC Serial Number: 42AC064
Airframe Total Time: 733.9 hrs
Diamond Aircraft Work Order: SO 072130

Maintenance Performed

- Garmin GTX 345 Installed IAW. STC SA01714Wi Ref FAA 337 form Dated April 05, 2019
- L3 communications Wx500 system removed, antenna coax removed, all other wiring capped and stowed
- Garmin GWX 68 removed, wiring between radar and MFD removed, radar nose cone with bonding strips left in place, FRP bulkhead fabricated and installed at fwd bulkhead in nose baggage compartment.
- Transponder correlation requirements completed in accordance with 571 appendix F, 571.10, Appendix B paragraph (a)(4)(1) of the CARs, FAR 91.411, FAR 91.413, FAR 43 appendix E & F. Next due: Sept 2019
 - Transponder GTX 345R, SN: 3EH021939
- TKS system disabled: The following system components removed: De-ice fluid tank, main pump panel, windshield pump panel (with filters), Nacelle proportional units L&R, tail proportional unit, timer box in nose and main control panel. I-panel circuit breaker replaced due to TKS removal. De-ice fluid lines to propellers NOT installed. Ice lights kept in place. All remaining wires & fluid lines capped and secured. All de-ice panels on wings and tail surfaces kept in place. De-ice equipment on propellers remained in place.
- Oxygen system removal: Aerox bottle removed. Oxygen bottle mounting brackets and nose baggage covers left in place. All lines capped and stowed. Cabin mask plug-ins removed, and holes plugged with grommets.

Continued on next page....



DIAMOND AIRCRAFT IND.
D.O.T. APPROVED
MAINTENANCE
ORGANIZATION161-93

Registration: N464TS
AC Serial Number: 42AC064
Airframe Total Time: 735.0 hrs
Diamond Aircraft Work Order: SO 072130

Maintenance Performed

- Canopy seal adjusted
- LH aileron short rod adjusted 1/2 turn longer

I have carried out an independent inspection of the Flight controls/power plant controls affected by the work accomplished

ACA Date: APR 08 2019

The Maintenance Description has been performed IAW the Applicable Standard of Airworthiness

ACA Date: APR 08 2019



DIAMOND AIRCRAFT IND.
D.O.T. APPROVED
MAINTENANCE
ORGANIZATION161-93

Registration: N464TS
AC Serial Number: 42AC064
Airframe Total Time: 733.9 hrs
Diamond Aircraft Work Order: SO 072130

Maintenance Performed (continued)

- Garmin G1000 software version 670.15 loaded IAW.
- Diamond MSB 42NG-003/27
- G1000 databases updated
 - Navigation / Flightcharts data expires April 25, 2019
 - Obstacle Apt Directory/ SafeTaxi expires April 25, 2019
- "Check Gear" light installed IAW. ERAU supplied work instructions. Option "C" used for light
- New aircraft AFM supplied and updated accordingly
- Aircraft W&B performed, AFM updated
- Aircraft Equipment list update completed, AFM updated
- Rudder and horizontal stabilizer removed and re-installed to facilitate Wx500 antenna & coax removal

I have carried out an independent inspection of the Flight controls/power plant controls affected by the work accomplished

ACA Date: APR 05 2019




The Maintenance Description has been performed IAW the Applicable Standard of Airworthiness

ACA Date: APR 05 2019

CARRIED FORWARD

ENGINEERING RECORD

16

INSPECTION, REPAIRS & REPLACEMENT		DATE AND TIME COLUMNS	SIGNATURE	LICENCE NUMBER
Diamond AIRCRAFT DIAMOND AIRCRAFT IND. D.O.T. APPROVED MAINTENANCE ORGANIZATION 161-93		Registration: N464TS AC Serial Number: 42 AC064 Airframe Total Time: 736.1 hrs Diamond Aircraft Work Order: SO 072130		
Maintenance Performed <ul style="list-style-type: none"> Adjusted Canopy seal as required. Standby AI ball adjusted to match PFD. Hobbs meter replaced. Installed PN: 85094-12 Adjusted LH/RH ECU test buttons to sit centered in panel. Sealed RH fire detector wires with APL and installed new ring terminal on ground wire. Adjusted LH/RH prop governor speed stops as required. Reloaded Flitecharts database. 				
I have carried out an independent inspection of the Flight controls/power plant controls affected by the work accomplished				
ACA  Date: <u>APR 11 2019</u>				
The Maintenance Described has been performed IAW the Applicable Standard of Airworthiness				
ACA  Date: <u>APR 11 2019</u>				
Diamond AIRCRAFT DIAMOND AIRCRAFT IND. D.O.T. APPROVED MAINTENANCE ORGANIZATION 161-93				
Maintenance Performed <ul style="list-style-type: none"> Replaced RH fire sensor PN: D60-9026-16-03, removed SN: 000229 installed SN: 318875. Replaced RH overhead map light. 				
The Maintenance Described has been performed IAW the Applicable Standard of Airworthiness				
ACA  Date: <u>APR 12 2019</u>				

AIR TIME AND

DATE	DAILY TOTAL		TOTAL AIR TIME SINCE MFG.	
	HRS.	MIN.	HRS.	MIN.

BROUGHT FORWARD

ENGINEERING RECORD

NOTE: USE BOTH PAGES AND AS MANY LINES AS REQUIRED FOR COMPLETION

RE-ROUTED Hobbs meter power from
ELECTRICAL MASTER to R/H ENGINE
MASTER SWITCH THROUGH A 1 AMP
IN LINE FUSE PER AC43.13-1B
STANDARDS - ~~11/1/19~~ CRS# BF8R0320
06 JUNE 2019 - TACH 788.1 - T.T. 788.1

Complied with ~~(50 hr)~~ (100 hr) Inspection
Date 07 June 2019 W/O 20190118d
Tach 788.1 A/C TT 788.1
Eng TT Lt 687.2 Rt 687.2
Eng TSMO Lt 687.2 Rt 687.2
Prop TT Lt 2063.2 Rt 948.1
Prop TSMO Lt 461.1 Rt 461.1
Inspector: YAWLM **18**

ERAU Maintenance Section
Repair Station No. BF8R0320

Complied with ~~(50 hr)~~ (100 hr) (Annual) Inspection
Date 01 NOV 2019 W/O 20190250d
Tach 888.2 A/C TT 888.2
Eng TT Lt 787.3 Rt 787.3
Eng TSMO Lt 787.3 Rt 787.3
Prop TT Lt 2163.3 Rt 1048.2
Prop TSMO Lt 561.2 Rt 561.2
Inspector: YAWLM **18**

ERAU Maintenance Section
Repair Station No. BF8R0320

Performed ELT Inspection in accordance
with FAK 91.207, Par. d.

05 DEC 2019
201902843
TT: 935.6

ERAU Maintenance Section BF8R0320



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

N 594EP S/N# 42.AC064 W/O # 201902788
A/C TACH 935.6 A/C TT: 935.6
Removed Austro Engine P/N # 84-B and
S/N # 84-B-00216 Engine TTSN 834.7 Engine SMOH
834.7. Installed Engine P/N # 84-B
S/N # 84-B-00533 Engine TTSN 0.0 Engine SMOH
6.0 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: YAWLM **28** CRS #BF8R0320


ENGINEERING RECORD

17

INSPECTION, REPAIRS & REPLACEMENT

ENTRIES. DRAW A DIAGONAL LINE THROUGH ANY UNUSED LINES IN DATE AND TIME COLUMNS.

SIGNATURE

LICENCE
NUMBER



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

N594ER S/N # 42.AC064 W/O # 202000149
A/C TACH: 951.7 A/C TT: 951.7
Removed MT Propeller P/N # MTV-6-R-C-F/CF187-129
and S/N # 080090 Propeller TTSN 2226.8
Propeller SMOH 624.7 from the Left position.
Installed serviceable Propeller P/N # MTV-6-R-C-F/CF187-129
and S/N # 05238 with Propeller TTSN 4679.9
and Propeller SMOH 0.0, all work done in
accordance with Diamond DA42NG Maintenance Manual
chapter 61-10-00 latest revision.

DATE: 1/17/2020
SIGN: [Signature] 4 CRS #BF8R0320

Complied with (50 hr) (100 hr) (Annual) Inspection
Date 2-09-2020 W/O 202000377
Tach 987.1 A/C TT 987.1
Eng TT Lt 886.2 Rt 51.5
Eng TSMO Lt 886.2 Rt 51.5
Prop TT Lt 4715.3 Rt 1147.1
Prop TSMO Lt 35.4 Rt 660.1
Inspector: Farrell Harris

ERAU Maintenance Section
Repair Station No. BF8R0320




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

N594ER S/N # 42.AC064 W/O # 202000777
A/C TACH: 1068.7 A/C TT: 1068.7
Removed MT Propeller P/N # MTV-6-R-C-F/CF187-129
and S/N # 03610 Propeller TTSN 1228.7
Propeller SMOH 741.7 from the RH position.
Installed serviceable Propeller P/N # MTV-6-R-C-F/CF187-129
and S/N # 061244 with Propeller TTSN 3118.1
and Propeller SMOH 649.7, all work done in
accordance with Diamond DA42NG Maintenance Manual
chapter 61-10-00 latest revision.

DATE: 3-20-2020
SIGN: Kimberly Porter 5 CRS #BF8R0320

END

AIR TIME AND

DATE	DAILY TOTAL		TOTAL AIR TIME SINCE MFG.		ENGINEERING RECORD <small>NOTE: USE BOTH PAGES AND AS MANY LINES AS REQUIRED FOR COMPLETE</small>
	HRS.	MIN.	HRS.	MIN.	
BROUGHT FORWARD	 <p>PRESCOTT, ARIZONA 3700 WILLOW CREEK ROAD MAINTENANCE (928) 777-4339</p>				
	<p>N594ER S/N# <u>42.ACO64</u> W/O# <u>202000839</u> A/C TACH: <u>1076.2</u> A/C TT: <u>1076.2</u> Removed MT Propeller P/N# <u>MTV-6-R-C-F/C 197-129</u> and S/N# <u>061244</u> Propeller TTSN <u>3125.6</u> Propeller SMOH <u>657.2</u> from the <u>RIGHT</u> position. Installed serviceable Propeller P/N# <u>MTV-6-R-C-F/C 197-129</u> and S/N# <u>070094</u> with Propeller TTSN <u>5194.5</u> and Propeller SMOH <u>1097.0</u>, all work done in accordance with Diamond DA42NG Maintenance Manual chapter 61-10-00 latest revision.</p>				
	<p>DATE: <u>3-26-20</u> SIGN: <u>[Signature]</u> 28 CRS #BF8R0320</p>				



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

N594ER A/C SN# 42.ACO64 A/C Tach 1078.4
A/C TT 1078.4 W/O# 202000939

Garmin Autopilot servo's GSA 8X output gear has been lubricated with AeroShell 33MS grease in reference to page 3-23, paragraph 3.6, Continued Airworthiness Instructions in Installation Manual p/n #190-00303-72 latest revision.

Date: 14 MAY 2020

Sign: [Signature] 21

CRS #BF8R0320



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

N594ER SN# 42.ACO64 W/O# 202000939

A/C TACH 1078.4 A/C TT: 1078.4

LT ENG TTSN 977.5 RT ENG TTSN 142.5

LT ENG SMOH 977.5 RT ENG SMOH 142.8

LT PROP TTSN 4366.6 RT PROP TTSN 5196.7

LT PROP SMOH 126.7 RT PROP SMOH 1099.2

Inspected this Airframe 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: [Signature] 28 CRS #BF8R0320

END

ENGINEERING RECORD

18

INSPECTION, REPAIRS & REPLACEMENT
ENTRIES. DRAW A DIAGONAL LINE THROUGH ANY UNUSED LINES IN DATE AND TIME COLUMNS.

SIGNATURE

LICENCE
NUMBERALPHA-ZULU
COMPOSITES

4510 FLIGHTLINE DRIVE KINGMAN, AZ 86401

REGISTRATION: N594ER	MAKE: DIAMOND	MODEL: DA 42 NG
SERIAL NO.: 42.AC064	TOTAL TIME (AIRFRAME): 1082.5	HOBBS: 549.0

Repaired Class 2 delamination of LH and RH nacelle sandwich structure inboard aft corner, near auxillary fuel tank pump(s).

Clean and replace sealant/adhesive at perimeter of center LH and center RH engine mount nut metal backing plates on RH engine, aft of firewall.

All repairs performed in accordance with Diamond Aircraft AMM, Chapter 51.

NAME: **PAUL A. GAINES**

SIGNATURE:

DATE:

CERTIFICATE: **A & P 2300425****06/16/2020**

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

N594ER A/C SN # **42.AC064** W/O# **202002051**
TACH: **1176.9** A/C TT: **1176.9**

Complied with Diamond Aircraft MSB 42NG-003/29, verified G1000 software, manifests and configurations are approved versions per included instructions.

Date **20 Aug 2020**Sign **[Signature]**

CRS #BF8R0320

N594ER S/N# **42-AC064** W/O# **202001949**
A/C TACH **1172.4** A/C TT: **1172.4**
ENGINE TTSN **236.8** Engine SMOH **236.8**
Waste gate 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. (Right Engine)
DATE: **8-11-20**
SIGN: **[Signature]** **1A** CRS #BF8R0320

Complied with ~~(50 hr)~~ (100 hr) ~~(Annual)~~ Inspection
Date **8-20-20** W/O **202002051**
Tach **1176.9** A/C TT **1176.9**
Eng TT Lt **1076.0** Rt **241.3**
Eng TSMO Lt **1076.0** Rt **241.3**
Prop TT Lt **4905.1** Rt **5295.2**
Prop TSMO Lt **225.2** Rt **1197.7**
Inspector: **[Signature]** **1A**

ERAU Maintenance Section
Repair Station No. BF8R0320

10-28-20 A/C TACH **1274.4** A/C TT **1274.4** - COMPLIED WITH AD **2020-15-05**,
W/O# **202003005** / UPDATED AFM WITH REQUIRED INFORMATION PER THE
AD INSTRUCTION (IN-FLIGHT RESTART PROCEDURES)

[Signature] **1A**
CRS# **BF8R0320**

AIR TIME AND

DATE	DAILY TOTAL		TOTAL AIR TIME SINCE MFG.		ENGINEERING RECORD NOTE: USE BOTH PAGES AND AS MANY LINES AS REQUIRED FOR COMPLETE
	HRS.	MIN.	HRS.	MIN.	



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

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

ERAU Maintenance Section
Repair Station No. BF8R0320

N 5942R S/N# 42.ACO64 W/O # 202003449
 A/C TACH 1274.4 A/C TT: 1274.4
 Removed Austro Engine P/N # E4-B and
 S/N # E4-B-00217 Engine TTSN 1173.5 Engine SMOH
1173.5. Installed Engine P/N # E4-B
 S/N # E4-B-05001 Engine TTSN 0.0 Engine SMOH
0.0 on LEFT position. All work completed per
 Diamond DA42NG Aircraft Maintenance Manual chapter
 71-00-00 and Austro Engine AE300/E4 Installation Manual
 Document Number E4.02.01 all latest revisions. Run up and
 Leak check was good.

DATE: 12-11-20
 SIGN: [Signature] 28 CRS #BF8R0320

Performed Transponder, Static System and
Altitude Reporting Integration Test required
by FAR 91.411 and 91.413, Max Alt. 20,000 ft.
AS PER PART 43, APPENDIX E AND F.

Date 11 DEC 2020 Signed [Signature] 12

ERAU Avionics
CRS# BF8R0320
Prescott, AZ

A/C TT 1274.4
W/O # 202003465



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

N 594ER S/N# 42.ACO64 W/O # N/A
 A/C TACH 1292.9 A/C TT: 1292.9
 ENGINE TTSN 18.5 Engine SMOH 18.5
 Complied with AD 2020-22-14, verified LT. eng. waste gate
 control rod fail-safe bridge and spring loaded circlip were
 both installed at factory when engine was built on
AUG. 2020 this constitutes terminating action for the
 Initial and repetitive replacement requirements of the AD.
 DATE: 1-13-21
 SIGN: [Signature] 14 CRS #BF8R0320



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

N 594ER S/N# 42.ACO64 W/O # N/A
 A/C TACH 1292.9 A/C TT: 1292.9
 ENGINE TTSN 358.5 Engine SMOH 358.5
 Complied with AD 2020-22-14, verified RT. eng. waste gate
 control rod fail-safe bridge and spring loaded circlip were
 both installed when Turbo assembly was replaced on
8-1-20 / W/O # 202001850, this constitutes
 terminating action for the Initial and repetitive
 replacement requirements of the AD and MSB-E4-022/5.
 DATE: 1-13-21
 SIGN: [Signature] 14 CRS #BF8R0320

CARRIED FORWARD

ENGINEERING RECORD

19

INSPECTION, REPAIRS & REPLACEMENT

ENTRIES. DRAW A DIAGONAL LINE THROUGH ANY UNUSED LINES IN DATE AND TIME COLUMNS.

SIGNATURE

LICENCE
NUMBER

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: JAW 18
 ERAU Maintenance Section
 Repair Station No. BF8R0320



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

N 594ER A/C SN # 42.AC064 A/C Tach 1370.4
 A/C TT 1370.4 W/O# 202102262
 Garmin Autopilot servo's GSA 80/81 output gear has been
 lubricated with AeroShell 33MS grease in reference to
 page 3-26, paragraph 3.7, Continued Airworthiness
 Instructions in Installation Manual Doc. #190-00303-72
 Revision W.

Date: 03 JUNE 2021

Sign: [Signature] 21

CRS #BF8R0320

PERFORMED ELECTRICAL BONDING SYSTEM
 CHECK PER DA42 AMM, DOC# 7.02.15, —
 CHAPTER 51-80-00.
 TT: 1370.4 W/O# 202102261 21 BF8R0320

Reg. #: N594ER
 A/C SN: 42.AC064

Make: DIAMOND
 A/C TT: 1429.1

Model: DA 42

Repaired multiple Class 2 outer laminate and foam areas on upper outer shell of PAX door in accordance with
 Diamond Aircraft Maintenance Manual, Ch. 51.

Signed: [Signature] A&P 2300425 Date: 08/23/2021

Complied with ~~(50 hr)~~ (100 hr) (Annual) Inspection
 Date 9-16-21 W/O 202102581
 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 3295.2
 Prop TSMO Lt 526.4 Rt 816.8
 Inspector: [Signature]
 ERAU Maintenance Section
 Repair Station No. BF8R0320



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


N 594ER S/N # 42.AC064 W/O # 202205728
 A/C TACH: 1567.5 A/C TT: 1567.5
 Removed MT Propeller P/N # MTV-6-R-CF/CF87-129
 and S/N # 05238 Propeller TTSN 5295.7
 Propeller SMOH 615.8 from the LEFT position.
 Installed serviceable Propeller P/N# MTV-6-R-CF/CF87-129
 and S/N# 05228 with Propeller TTSN 5551.1
 and Propeller SMOH 1088.8, all work done in
 accordance with Diamond DA42NG Maintenance Manual
 chapter 61-10-00 latest revision.

Performed ELT Inspection in
 accordance with FAR 91.207, Para. d
 W/O # 202200306 A/C TT 1560.3
 Date 1-27-22 Sign [Signature]
 ERAU Maintenance CRS #BF8R0320 14

DATE: 2-19-22 14
 SIGN: [Signature]

CRS #BF8R0320

AIR TIME AND

DATE	DAILY TOTAL		TOTAL AIR TIME SINCE MFG.		ENGINEERING RECORD NOTE: USE BOTH PAGES AND AS MANY LINES AS REQUIRED FOR COMPLETE
	HRS.	MIN.	HRS.	MIN.	
BROUGHT FORWARD					
<p><u>PERFORMED MAINTENANCE SERVICE BULLETIN</u></p> <p><u>MSB 42NG-003/30 BY COMPASSING</u></p> <p><u>INSTALLED SOFTWARE SYSTEM AND</u></p> <p><u>RELATED MANIFESTS WITH APPROVED</u></p> <p><u>ONES STATED IN THIS SERVICE BULLETIN</u></p> <p><u>TACH: 1574.9 TOTAL TIME: 1574.9</u></p> <p><u>07 APR 2028 w/o 202201372</u></p> <p><u>CRS: BF80320</u></p>					 <p>PRESCOTT, ARIZONA 3700 WILLOW CREEK ROAD MAINTENANCE (928) 777-4339</p> <p><u>N594ER S/N # 42.AC064 W/O # 202201372</u> <u>A/C TACH: 1574.9 A/CTT: 1574.9</u> Removed MT Propeller P/N # <u>MTV-6R-C-F/CF187-129</u> and S/N # <u>061244</u> Propeller TTSN <u>33820</u> Propeller SMOH <u>913.6</u> from the <u>RIGHT</u> position. Installed serviceable Propeller P/N # <u>MTV-6R-C-F/CF187-129</u> and S/N # <u>05238</u> with Propeller TTSN <u>5295.7</u> and Propeller SMOH <u>615.9</u>, all work done in accordance with Diamond DA42NG Maintenance Manual chapter 61-10-00 latest revision.</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.

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

Date 4-19-22 W/O 202201372

Tach 1574.9 A/CTT 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: Cecilia 28

ERAU Maintenance Section
Repair Station No. BF8R0320



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

N594ER S/N # 05228 W/O # 2022 03142

A/C TACH: 1575.8 A/CTT: 1575.8

Removed MT Propeller P/N # MTV-6R-C-F/CF187-129
and S/N # 05228 Propeller TTSN 5559.4

Propeller SMOH 1097.1 from the L/H position.

Installed serviceable Propeller P/N # MTV-6R-C-F/CF187-129

and S/N # 05228 with Propeller TTSN 5559.4

and Propeller SMOH 0.0, all work done in

accordance with Diamond DA42NG Maintenance Manual
chapter 61-10-00 latest revision.

DATE: 08/26/22

SIGN: Guth 17

CRS #BF8R0320

DATE: 4-14-22

SIGN: Cecilia 28

CRS #BF8R0320

COMPLIED WITH AD 2021-22-03, INSPECTED

NOSE GEAR ACTUATOR ATTACH LEVER PER

DIAMOND MSB 42NG-078 REV. 1.

COMPLIED WITH AD 2022-03-01, INSPECTED

FUEL TANK CONNECTION HOSES PER DIAMOND

MSB 42NG-080 PROPER HOSES INSTALLED

Cecilia 28

CRS# BF8R0320

CARRIED FORWARD

ENGINEERING RECORD

20

INSPECTION, REPAIRS & REPLACEMENT

ENTRIES. DRAW A DIAGONAL LINE THROUGH ANY UNUSED LINES IN DATE AND TIME COLUMNS.

SIGNATURE

LICENCE
NUMBER

I certify that the Altimeter & Static Sys test required by FAR 91.411 has been performed and complies with FAR 43, appendix E.

L-P/N APC1 S/N 47807779 Tested to 20000 ft.

R-P/N _____ S/N _____ Tested to _____ ft.

STBY STBY S/N 459575 Tested to 20000 ft.

Altitude reporting sys. tested to 20000 ft.

Signed [Signature]

Date 1/3/2023 WO# 29094

Interstate Turbine Management
6070 Perimeter Rd. Charleston, SC 29406
Class 3, Radio Class 1, 2 & 3, Limited ratings
CRS# 11BR578Y

I certify that the ATC Transponder test and Inspection required by FAR 91.413 has been performed and complies with FAR 43, appendix F.

#1 Make Garmin Model GTX345R S/N 3EHQ21934

#2 Make N/A Model N/A S/N N/A

Signed [Signature]

Date 1/3/2023 WO# 29094

Interstate Turbine Management
6070 Perimeter Rd. Charleston, SC 29406
Class 3, Radio Class 1, 2 & 3, Limited ratings
CRS# 11BR578Y

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

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

Date: 2/13/2023
Tach: 1642.9

Tested ELT IAW FAR 91.207(d) battery due replacement 4/2024

[Signature]

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

100hr inspection completed this date IAW Diamond Aircraft DA42 NG AMM and Diamond Aircraft Inspection Checklist

1. ELT tested IAW CFR 91.207(d) Battery replacement due 4/2024
2. ECU Backup battery inspected Expires 4/2023
3. Inspected and repacked wheel bearings
4. replaced fuel filters P/N: WK724_3
5. Removed, cleaned, inspected, and repacked wheel bearings and reinstalled
6. Wheels reinstalled and aircraft downjacked
7. Checked rudder cable tensions and adjusted to spec. Lubricated all flight controls
8. Interior reinstalled, access panels reinstalled
9. AD's researched biweekly thru this date
10. AD 2016-23-03 Inspection of V_Clamp completed IAW Diamond Aircraft Industries GMBH Work instruction WI-MSB 40NG-046, dated July 22, 2016. Next due in 100 flight hours TACH: 1775.1
11. Performed gear retraction and extension and emergency extension check

Aircraft is approved for return to service at this time.

Aircraft inspected IAW a 100hr inspection and was determined to be in airworthy condition at this time.

[Signature]
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

AD 22-06-08 complied with by visual inspection for deformation and cracks. Flap bellcrank P/N D60-2757-11-00_01 installed. Inspection required every 200hrs. Next insp due TACH: 1875.1

[Signature]

Zachary Braddock 3310705 A&P

Model DA42N6
S/N 42AC064
Reg # N594ER

Interstate Turbine Management
6070 Perimeter Rd.
North Charleston, SC 29406

Date 3/20/2023
Hobbs 784.6
WO# 29200

Replaced left main tire P/N 070-449-0. Cleaned and repacked bearings. Serviced tires with N2.

[Signature]

CRS# I1BR578Y

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

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

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. ELT tested IAW CFR 91.207(d) Battery replacement due 4/2024
2. ECU Backup batteries replaced with 4ea Yuasa NP7-12 Expires 5/3/2025
3. Inspected and repacked wheel bearings
4. replaced fuel filters P/N: WK724_3
5. Removed, cleaned, inspected, and repacked wheel bearings and reinstalled
6. Wheels reinstalled and aircraft downjacked
7. Checked rudder cable tensions and adjusted to spec. Lubricated all flight controls
8. Interior reinstalled, access panels reinstalled
9. AD's researched biweekly thru this date
10. AD 2016-23-03 Inspection of V_Clamp completed IAW Diamond Aircraft Industries GMBH Work instruction WI-MSB 40NG-046, dated July 22, 2016. Next due in 100 flight hours TACH: 1856.1
11. Performed gear retraction and extension and emergency extension check
12. Accomplished AD 22-21-15 by replacement of rudder T-Yoke bolt with P/N: D60-5320-00-32. Terminating action for this AD was accomplished IAW WI-RSB 42NG-081

Aircraft is approved for return to service at this time.

Aircraft inspected IAW an ANNUAL inspection and was determined to be in airworthy condition at this time.

[Signature]
Zachary Braddock 3310705 A&P/IA

Model DA42
S/N 42AC064
Reg # N594ER

Interstate Turbine Management
6070 Perimeter Rd.
North Charleston, SC 29406

Date 5/17/23
Hobbs 1625.8
WO# 29262

Installed new right main tire P/N 070-449-0 S/N 2229R00155 IAW AMM. Serviced all tires with Nitrogen.

[Signature]

CRS I1BR578Y

CARRIED FORWARD

ENGINEERING RECORD

21

INSPECTION, REPAIRS & REPLACEMENT
ENTRIES. DRAW A DIAGONAL LINE THROUGH ANY UNUSED LINES IN DATE AND TIME COLUMNS.

SIGNATURE

LICENCE
NUMBER

Registration: N594ER
AC Serial Number: 42 AC064
Airframe TT: 1855.0
WO: MYR5322



LIFT MAINTENANCE

Complied with 100hr inspection IAW FAR 43 appendix D and referencing the aircraft MM.
Complied with AD 2016-23-03 Dated November 29, 2016 visual inspection following the
instructions section in Diamond Aircraft Industries GMBH (DAI) work instructions WI-MSB
42NG-046 dated July 14, 2016 as specified in DAI mandatory service bulletin MSB 42NG-046/2
Dated August 4, 2020 Next due at 1955.0

I certify that this aircraft has been inspected IAW 100 INSPECTION and found to be airworthy.
The aircraft, or component(s) identified above was repaired, installed or inspected IAW
regulations of Federal Aviation Administration and was determined airworthy and approved for
return to service only for the work performed. Details of the work are on file at this repair station
under work order MYR5322. Date: 7/12/2023

Date: 07/12/2023

Signature

BRIAN DOUGLAS 3779058 A&P

Registration: N594ER
AC Serial Number: 42 AC064
Airframe TT: 1855.0
WO: MYR5322



LIFT MAINTENANCE

Maintenance performed:

Removed and replaced both RH ECU batteries ref Diamond MM. P/N on/off: NP7-12

Signature:

Date 07/12/2023

JOHN CAScone 4303473 A&P

Registration: N594ER
AC Serial Number: 42 AC064
Airframe TT: 1855.0
WO: MYR5322



LIFT MAINTENANCE

Maintenance performed:

Complied with AD 22-21-15. By replacement of rudder T-Yoke bolt with P/n D60-5320-00-32.
Terminating action for this AD was accomplished IAW WI-RSB 42NG-081. Rig and ops check
c/w. The aircraft, or component(s) identified above was repaired, installed or inspected IAW
regulations of Federal Aviation Administration and was determined airworthy and approved for
return to service only for the work performed. Details of the work are on file at this repair station
under work order MYR5322. Date: 7/12/2023

Signature:

John Cascone, A&P 4303473

Date: 7/18/23

Model: DA-42
S/N: 42 AC064
Reg # N594ER

ASTRAEUS

Date: 08/08/2023
Tach: 1891.6
TTAF: 1891.6
Hobbs: 1767.5

6060 S Aviation Ave Ste 106 N Charleston, SC 29406

Replaced L main tire and tube with Condor 15X6 D-6 Eply tire and associated tube. Replaced L and R brake linings with Cleveland Brake Linings 66-105 and Rapco Brake Linings RA66-105. Complied with Diamond advised AMM. I approve this aircraft for return to service.

Dane Hartley, A 4733103

Dane Hartley

E AND

ENGINEERING RECORD

USE BOTH PAGES AND AS MANY LINES AS REQUIRED FOR COMPLETE

Registration: N594ER
AC Serial Number: 42 AC064
Airframe TT: 1895.0
WO: MYR5545



LIFT MAINTENANCE

Maintenance performed:

R/R YAW SERVO GSM 85, SPIRAL, MED-TORQ UNIT ONLY IAW DIAMOND DA-42NG AMM (INSTALLED PN: 010-N0304-08 SN: 68707374 REMOVED PN: 011-00894-08 SN: 68706819) PERFORMED OPS CHECK AND FUNCTIONAL CHECK OF AUTOPILOT SYSTEMS, OPS CHECKED GOOD.

Signature:

Jared Hood

Date: 08/15/23

Jared Hood A&P 3740133

Registration: N594ER
AC Serial Number: 42 AC064
Airframe TT: 2048.90
WO: 6873



LIFT MAINTENANCE

Maintenance performed:

Complied with a 100 HR Inspection IAW FAR 43.13 Appendix D and referencing the aircraft MM. Complied with AD 2016-23-03 Dated November 29, 2016 by visual inspection following the instructions section in Diamond Aircraft Industries GmbH (DAI) work instructions WI-MSB 40 NG-046, Dated July 14, 2016 as specified in DAI mandatory SB MSB40NG-046/2, Dated August 4, 2020, next due at AFTT: 2148.9 Hrs. I certify that this aircraft has been inspected IAW a 100 HR. Inspection and was found to be airworthy. The aircraft, or component(s) identified above was repaired, installed or inspected IAW regulations of FAA and was determined airworthy and approved for return to service only for the work performed. Date 03/03/2024

Date: 3/3/2024

Signature:

Trapper Evans
TRAPPER EVANS 4087361A&P

Registration: N594ER
AC Serial Number: 42 AC064
Airframe TT: 2077.4
WO: 8085



LIFT MAINTENANCE

Maintenance performed:

R/R IGNITION SWITCH ASSY. IAW DIAMOND DA42 MM. PERFORMED FUNCTIONAL CHECK. OPS CHECKED GOOD

Date: 7/26/2024

Signature:

Jared Hood
JARED HOOD 3740133 A&P

REG: N594ER
AC SN: 42 AC064
Airframe #: 2077.4
w/o #8085

Removed starter switch and for Aircraft N42MV Per
Diamond DA42NG AMM.

Phillip Dickinson 4474866 ATP RHP Date 7/24/2024

CARRIED FORWARD

INSPECTION, REPAIRS & REPLACEMENT

ENTRIES. DRAW A DIAGONAL LINE THROUGH ANY UNUSED LINES IN DATE AND TIME COLUMNS.

SIGNATURE

LICENCE
NUMBER

I find that this aircraft meets the requirements for the certificate requested and have issued a Special Airworthiness Certificate, FAA Form 8130-7, in the category of Special Flight Permit for the purpose(s) of Repairs, Alterations, Maintenance, or Storage and Operating Limitations to a Diamond Aircraft Industries GmbH DA 42 NG, Serial Number 42.AC064, dated 02/AUG/2024.

DART: Paul J Slosar



285932891.



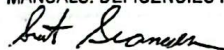
3330 AIRPORT LOOP
SALISBURY, NC 28147
OFFICE: 704-431-8862
INFO@SOUTHTECAVIATION.COM

DATE: JUNE 29, 2024 | MAKE/MODEL: DIAMOND DA42NG | S/N: 42.AC064 | REG: N594ER
TACH: 2074.0 HRS | TT OLD ENGINE: 750.0 HRS | TT NEW ENGINE: 0 HRS

PERFORMED LH ENGINE AND ASSOCIATED COMPONENT CHANGE DUE TO SERVICE LIMITS. REMOVED ENGINE SN: E4-B-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.

THIS AIRCRAFT HAS BEEN SERVICED IN ACCORDANCE WITH THE CURRENT DIAMOND DA42NG AND AUSTRO E4 SERIES MAINTENANCE MANUALS. DEFICIENCIES FOUND DURING ENGINE INSTALL AND ANNOTATED ON ENGINE LOG ENTRY DATED: 29 JUN 2024.


Scot Seamon

AP 3581287

Registration: N594ER
AC Serial Number: 42.AC064
Airframe TT: 2077.90
WO: 8212




LIFT MAINTENANCE

Maintenance performed:

Complied with Annual Inspection IAW 14 CFR Part 43 Appendix D and referencing Diamond DA42NG MM. Complied with 100hr Inspection IAW FAR 43.13 Appendix D and referencing DA42NG MM. Complied with AD 2024-06-13 by researching logbooks and verifying RSB42NG-081, MSB42NG-086/1 or MSB42NG-087 was complied with on date of 7/18/2023 ATT 1855.00. Complied with reinspection of Rudder T-yoke bolt head and self locking nut for proper alignment IAW paragraph J (1) of AD 2024-06-13 effective date of May 28, 2024. Next due ATT: 2277.90. Inspected and tested ELT IAW 14 CFR Part 91.207 (D) 1-4, next due 08/2025. Performed Compass swings IAW DA42NG MM, no defects noted. Replaced both LH and RH engine turbocharger V-clamps IAW DA42NG WI-RSB 42NG-061. Replaced NLG tire IAW DA42NG MM, ops and leak check good. Replaced ELT battery pack IAW DA42NG MM, expiration date September 2030. Replaced ECU backup batteries (4) IAW DA42NG MM, Next due 08/2025. Replaced both LH engine FWD safety cables IAW DA42NG MM. Replaced LH engine FWD INBD shock mount IAW DA42NG MM. Engine runs and leak checks good, I certify that this aircraft has been inspected IAW Annual and 100hr Inspections and found to be in airworthy condition and approved for return to service.

Date: 8/9/2024

Signature:



Derek Hopper 3831519 IA A&P

ACR ELECTRONICS, Inc.

Artex Products - CAGE Code 18560

Fort Lauderdale, FL 33312

LOG BOOK ENTRY

8/9/2024

E.L.T. BATTERY

REPLACEMENT DATE

SEPTEMBER 2030

AIR TIME AND

DATE	DAILY TOTAL		TOTAL AIR TIME SINCE MFG.		ENGINEERING RECORD NOTE: USE BOTH PAGES AND AS MANY LINES AS REQUIRED FOR COMPLETE
	HRS.	MIN.	HRS.	MIN.	
BROUGHT FORWARD					

Registration: N594ER
AC Serial Number: 42.AC064
Airframe TT: 2077.90
WO: 8295



LIFT MAINTENANCE

Maintenance performed:

During inspection found Roll servo not responding to garmin G1000, Removed Roll servo (P/N 011-00878-00, S/N 66414045) Installed overhauled Roll servo (P/N 010-N0303-00, S/N 66415565) per Diamond DA42NG and Garmin G1000 MM ops check good.

Date: 8/14/2024

Signature:

Phillip Dickinson 4474866 A&P



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

DATE: DECEMBER 23, 2024 | MODEL: DIAMOND DA42NG | S/N: 42.AC064 | REG: N594ER
TACH: 2129.8 HRS

REPLACED UPPER HINGE ON LH GEAR DOOR.

Luke Walters
LUKE WALTERS

A+P 4778771

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



Date: 1/17/2025
Tach: 2147.5

100hr inspection completed this date IAW Diamond Aircraft DA42 NG AMM and Diamond Aircraft Inspection Checklist

1. ELT tested IAW CFR 91.207(d) Battery replacement due 9/2030
 2. ECU Backup battery inspected Expires 8/2025
 3. Inspected and repacked wheel bearings
 4. replaced fuel filters P/N: WK724_3
 5. Removed, cleaned, inspected, and repacked wheel bearings and reinstalled
 6. Wheels reinstalled and aircraft downjacked
 7. Checked rudder cable tensions and adjusted to spec. Lubricated all flight controls
 8. Interior reinstalled, access panels reinstalled
 9. AD's researched biweekly thru this date
 10. AD 2016-23-03 Inspection of V_Clamp completed IAW Diamond Aircraft Industries GMBH Work instruction WI-MSB 40NG-046, dated July 22, 2016. Next due in 100 flight hours TACH: 2247.5
 11. Performed gear retraction and extension and emergency extension check
 12. Replaced LH and RH MLG tires and tubes
 13. Replaced LH brake pads with RAPCO 66-105 linings
- Aircraft is approved for return to service at this time.
Aircraft inspected IAW a 100hr inspection and was determined to be in airworthy condition at this time.

Zachary Braddock
Zachary Braddock 3310705 A&P

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



Date: 1/21/2025
Tach: 2151.7

Replaced LH and RH MLG tires with goodyear flight custom 2 ires and goodyear tubes. Aircraft jacked and gear swing check good
Aircraft approved for return to service at this time

Zachary Braddock

Zachary Braddock 3310705 A&P

INSPECTION, REPAIRS & REPLACEMENT

ENTRIES. DRAW A DIAGONAL LINE THROUGH ANY UNUSED LINES IN DATE AND TIME COLUMNS.

SIGNATURE

LICENCE
NUMBERTransponder Certification
Supplemental Logbook Entry

DATE: 31 Jan 25	REGISTRATION: N594ER	WORK ORDER: SFA 25-052
Transponder 1		Transponder 2
MODEL GTX 345	SERIAL 3EH021939	MODEL —
I certify that the Transponder(s) Certification and Encoder(s) correlation for this aircraft have been performed and found to comply with the requirements of FAR 91.413. The article(s) identified above was inspected and functionally tested in accordance with current Federal Aviation Regulations and was found airworthy for return to service. Transponder(s) certification tested IAW FAR Part 43 Appendix F. Details of this inspection are on file at this agency on Work Order noted above.		
Swamp Fox Aviation, LLC 373 Aviation Way, Walterboro, SC 29488 FAA CRS # 8FXR273D Telephone: (843) 782-4006 Date 31 Jan 25 Tested by <i>MMT</i>		

SFA Form XPLP-002

I certify that the Altimeter & Static Sys test required by FAR 91.411 has been performed and complies with FAR 43, Appendix E.

ADC #1 P/N GDC74A S/N 47807779 Tested to 20000 ft.

STBY-P/N 5934PD-3 S/N 459575 Tested to 20000 ft.

Altitude reporting sys. tested to 20000 ft.

Signed *[Signature]*

Date February 4, 2025 WO# 29930

Interstate Turbine Management
6070 Perimeter Rd. Charleston, SC 29406
Class 3, Radio Class 1, 2 & 3, Limited ratings
CRS# 11BR578Y

I certify that the ATC Transponder test and Inspection required by FAR 91.413 has been performed and complies with FAR 43, Appendix F.

#1 Make Garmin Model GTX345R S/N 3EH021939

#2 Make N/A Model N/A S/N N/A

Signed *[Signature]*

Date February 4, 2025 WO# 29930

Interstate Turbine Management
6070 Perimeter Rd. Charleston, SC 29406
Class 3, Radio Class 1, 2 & 3, Limited ratings
CRS# 11BR578Y

Model DAA2
S/N 42 AC06A
Reg # N594ER

CRAFT
FLIGHT TRAINING & SIMULATION
650 Greyback Rd, Sulligent, SC 29403

Date: 1/17/2025
Tach: 2147.5

AD 22-06-06 complied with by visual inspection for deformation and cracks. Flap bellcrank P/N D60-2757-11-00_01 installed. Inspection required every 200hrs. Next insp due TACH: 2347.5

[Signature]

Zachary Braddock 3310705 A&P

AIR TIME AND

DATE	DAILY TOTAL		TOTAL AIR TIME SINCE MFG.		ENGINEERING RECORD <small>NOTE: USE BOTH PAGES AND AS MANY LINES AS REQUIRED FOR COMPLETE</small>
	HRS.	MIN.	HRS.	MIN.	
BROUGHT FORWARD					

AC MAKE: Diamond **SPARKCHASERS** **TACH TIME:** 2238.0
AC MODEL: DA42 Aircraft Services, Inc. **HOBBS:** 2240.4
AC S/N: 42.064 **AIRFRAME LOGBOOK ENTRY** **A/C REG. #:** N594ER
Date: May 29, 2025
 Customer states traffic and weather will not display on Garmin G1000s from the GTX345. Reviewed configurations and system and found GDL90 configuration to be X out. Found configuration to be incorrect on rs232 post 8 on GIA #1.
 Corrected configuration and retested with traffic/weather working and GDL90 shows check mark. Work and troubleshooting was performed IAW Installation Manual STC Part 23 ADS-B, GTX 3XX 190-00734-10 rev. 17 and assistance from Garmin Tech support. All operational checks were good with no issues noted. Pertinent details related to the work performed are on file at Sparkchasers under work order 10-22613.
 Signed *[Signature]*
 Sparkchasers Aircraft Services
 #XSPR699K



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

DATE: NOVEMBER 3, 2025 | DIAMOND DA42 NG | S/N: 42.AC064 | REG: N594ER
 TACH: 2250.4 HRS. TTAF: 2250.4 HRS.

ANNUAL COMPLETED THIS DATE IN ACCORDANCE WITH DIAMOND AIRCRAFT DA42 NG AMM AND DIAMOND AIRCRAFT INSPECTION CHECKLIST. AD'S CHECKED THROUGH BIWEEKLY NUMBER 2025-22.

AD 21-22-03: NLG ACTUATOR ATTACHMENT LEVER. INSPECTED NLG ACTUATOR LEVER IAW WI-MSB 24NG-078. NO DEFECTS NOTED. NEXT DUE AT TACH: 2450.4.

AD 24-06-13: LOOSE RUDDER T-YOKE AXLE NUT. C/W AD 2024-06-13 IAW WI-RSB 42-139 AND WI-RSB 42NG-081, REVISION 1 BY VISUAL INSPECTION OF RUDDER T-YOKE AXLE NUT. NEXT DUE IN 200 HOURS AT TACH: 2450.4.

MSB42NG-094/1 COMPLIED WITH BY REPLACING RETAINING RINGS FOR MLG AND NLG, USING PART NUMBER, 4 EACH DIN471-20X1.2, 6 EACH DIN471-10X1.0, 2 EACH DIN471-18X1.2.

MSB42NG-078 COMPLIED WITH BY INSPECTION NO DEFECTS NOTED. NEXT DUE TACH: 2450.4.

COMPLIED WITH BONDING TEST, NEXT DUE TACH: 3250.4 OR 10/2029.

ELT TESTED IN ACCORDANCE WITH CFR 91.207(D). ELT BATTERY EXP: **SEPTEMBER 2030.**

REMOVED AND REPLACED EMERGENCY BATTERY PACK PART NUMBER DA4-2560-91-00.

INSPECTED AND REPACKED WHEEL BEARINGS.

REPLACED LEFT AND RIGHT FUEL FILTERS, P/N(WK724_3).

REMOVED AND REPLACED ECU BACKUP BATTERIES PART NUMBER NP7-12.

CLEANED AND ADJUSTED ELEVATOR TRIM BLOCK.

REPLACED FIRE PAINT FOR ALL COWLINGS.

REPLACED SEALANT FOR TKS PANELS.

TOUCHED UP PAINT FOR LEFT AND RIGHT SPINNERS.

REPLACED CENTER SECTION TO FUSELAGE SEALANT.

REPLACED LEFT AND RIGHT WING T-SEALS.

REPLACED CANOPY LEADING EDGE SEAL.

ADJUSTED LEFT PROPELLER ACCUMULATOR TO STOP CHAFFING INTERCOOLER.

REPLACED CRUSH WASHERS ON RIGHT FORWARD AND AFT FUEL PUMP BANJO BOLTS PART NUMBER DIN-7603-A14X20

REMOVED AND REPLACED RIGHT AND LEFT BRAKE PADS PART NUMBER 66-105

REMOVED AND REPLACED RIGHT BRAKE PUCK O-RING PART NUMBER MS28775-222

REPLACED LEFT AND RIGHT BRAKE ROTORS P/N:(164-15A).

REPLACED LEFT AND RIGHT INDUCTION AIR FILTERS P/N:(RU-1620).

REPLACED LEFT AND RIGHT PROTECTIVE WING STUB SHIELDS.

REPLACED RIGHT OUTBOARD FLAP BONDING STRAP.

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

CHRISTIAN HEDRICK

[Signature]

A&P/IA 3740465

CARRIED FORWARD