

AIRCRAFT SIN  
40.836

# AIRCRAFT TECHNICAL LOGS

Section 1. AIRFRAME

AIRCRAFT

1. Nationality and Registration N258 DS
2. Manufacturer's Designation DA 40
3. Manufacturer's Serial Number 40.836
4. Type Approval or Specification Number A-224/A47CE
5. Date of Manufacture 2007
6. Aircraft Inspection Cycle \_\_\_\_\_



# AIR TIME AND ENGINEERING RECORD

ENGINEERING RECORD

NOTE: USE BOTH PAGES AND AS MANY LINES AS REQUIRED

DATE	DAILY TOTAL		TOTAL AIR TIME SINCE MFG.	
	HRS.	MIN.	HRS.	MIN.
BROUGHT FORWARD			5	9



**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

OCT 11 2007

INSPECTOR

DA  
Q 42

# ENGINEERING RECORD

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

SIGNATURE

LICENCE  
NUMBER

DA  
Q 42



U.S. Standard Airworthiness Certificate, issued:

(Date) OCT 15 2007, has been installed in the aircraft on behalf of NE-MIDO-46 on:

(Date) OCT 15 2007

(Print) D. Salton (Signature)



YOUNGSTOWN-WARREN REGIONAL AIRPORT • VIENNA, OH 44473  
 PHONE: (330) 856-5000 • FAX: (330) 856-4582 • CRS W6NR985J

**AVIONICS**

**N258DS (N645WT) <> Diamond DA40XL <> S/N: 40.836**

1. C/W AD 2008-02-06 C, Garmin, per SB 0713 Rev. D. N/A per Servo P/N: 011-00894-07 Mod Level 1.
2. Reloaded TAWS Configuration Software I.A.W. Garmin 1000 M.M.

Above systems ground operational checked satisfactory I.A.W Diamond DA40 M.M.

**Date: 3-28-08 AFTT: 25.7 Hobbs: 38.7 W/O No: 42-03671 / 42-03672**

The maintenance operations described above were inspected I.A.W. current Federal Aviation Regulations, and with respect to the work performed the aircraft and or component is approved for return to service for discrepant items above. Details are on file at this agency under the above work order.

Signed: Jeffrey D. Williams for,  
 Winner Aviation Corporation Certified Repair Station W6NR985J



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**AIRFRAME**

**N258DS (N645WT) <> Diamond DA40XL <> S/N: 40.836**

1. C/W 25 Hour Inspection.
2. Installed New Registration Tail Numbers (N645WT). Registration Paper Work has been Placed in Aircraft.
3. Removed Nose Wheel, Nose Fork Assembly, Inspected, Cleaned, Installed. Set Steering Friction to 8.5 LBS.

Above systems ground operational and leak checked satisfactory I.A.W Diamond DA40XL M.M.

**Date: 3-28-08 AFTT: 25.7 Hobbs: 38.7 W/O No: 40-05625**

The maintenance operations described above were inspected I.A.W. current Federal Aviation Regulations, and with respect to the work performed the aircraft and or component is approved for return to service for discrepant items above. Details are on file at this agency under the above work order.

Signed: Jeffrey D. Williams for,  
 Winner Aviation Corporation Certified Repair Station W6NR985J

# ENGINEERING RECORD

INSPECTION, REPAIRS & REPLACEMENT

SIGNATURE

LICE  
NUM

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

TERRAIN DATABASE OBTR for TAWS has been  
 installed and tested according to GARMIN  
 Service Bulletin OB19 Revision A  
 Phil R. May ATP 294745261 6/11/08

## Airframe

**Aircraft: N645WT Model: DA-40 Serial 40.836 HM: 40.4 Date July-11-08**

Flat tire on taxiway. Jacked aircraft, removed wheel fairing, placed flat main on dolly and towed aircraft to hangar. Placed aircraft on jacks, removed right wheel assy and gave to owner. Owner returned with wheel assy with new tire installed by Winner Aviation CRS No. W6NR985J W.O. # 40-05768. Reinstalled wheel assy and fairing IAW DA 40 Series AMM Doc 06.02.01 Rev 4 Chapter 32-40-00 pg 201 & 202.

The aircraft/engine/component identified above was repaired and or inspected in accordance with current FAA Regulations and is approved for Return to Service. Pertinent details of the repair/Inspection are on file at this repair station under WO 08-5123 dated July 11, 2008.

MECHANIC: Ben Hutton DATE: 7-11-08 CERT: J5ZR345Y

INSPECTOR: D. Delle DATE: 7-11-08 CERT: J5ZR345Y

WILLIAMS AVIATION FBO, LLC  
 AKRON-FULTON AIRPORT  
 1535 EXETER ROAD  
 AKRON, OH 44306  
 (330) 733-4760 P (330) 733-4766 F



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### AIRFRAME

**N645WT <> Diamond DA40XL <> S/N: 40.836**

1. C/W 50 Hour Inspection.
2. Installed New Right Forward Nav Light Bulb, P/N: W1290-28.
3. AD 2008-06-51E, Superseded to AD 2008-08-14.
4. C/W AD 2008-08-14, Fuel Servo Plug. Per SB PRS-107. Found Satisfactory. Due Every 50 Hours or Oil Change.

Above systems ground operational and leak checked satisfactory I.A.W Diamond DA40XL M.M.

**Date: 7-29-08 AFTT: 49.5 Hobbs: 73.3 W/O No: 40-05782**

The maintenance operations described above were inspected I.A.W. current Federal Aviation Regulations, and with respect to the work performed the aircraft and or component is approved for return to service for discrepant items above. Details are on file at this agency under the above work order.

Signed: Jeffrey D. Williams

*Jeffrey D. Williams*

for,

Winner Aviation Corporation Certified Repair Station W6NR985J





ENGINEERING RECORD  
 YOUNGSTOWN-WARREN REGIONAL AIRPORT • VIENNA, OH 44473  
 PHONE: (330) 856-5000 • FAX: (330) 856-4582 • CRS W6NR985J

PER SCA  
 AIRCRAFT NO.  
 Conditions shown on this  
 certificate are based on the  
 information furnished. Only those sc  
 are valid for acceptance barom  
 determined by comparison or aft  
 altimeter will not be used. T  
 section card will be attached to the  
 called on the airplane.  
 WINNER AVIATION CORPORAT  
 W6NR985J  
 VIENNA, OHIO  
 330-856-5000

N 645WT S/N 40.836 TOTAL 191.2 DATE 8-6-09

Tested as required by FAR 91.411, IAW 43, Appx. "E" (Para noted)

1. Static System per Para (b) To 20,000 Ft.
  2. L-Airdata P/N 011-00882-00 S/N 47808057 L-ALT. P/N \_\_\_\_\_ S/N \_\_\_\_\_
  3. R-Airdata P/N \_\_\_\_\_ S/N \_\_\_\_\_ R-ALT. P/N \_\_\_\_\_ S/N \_\_\_\_\_
  4. Sby ALT. P/N 5934PD-3 S/N 462724
  5. Line items 2,3,4 certified per Para (b) to 20,000 FT.
  6. Intergrated System-per Para (c)
- Item No. 1,2,4,5,6 Tested by Ron Backo Date 8-6-09 WO. 42-03974  
 WINNER AVIATION W6NR985J

I certify that the ATC Transponder tests required by FAR 91.413 have been performed and found to comply with FAR 43 Appendix F

#1 make GARMIN Model GTX-33 S/N 89104579  
 #2 make N/A Model N/A S/N N/A  
 Tested by Ron Backo Date 8-6-09 WO. 42-03974  
 WINNER AVIATION W6NR985J



YOUNGSTOWN-WARREN REGIONAL AIRPORT • VIENNA, OH 44473  
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**AIRFRAME**

**N645WT <> Diamond DA40XL <> S/N: 40.836**

**C/W Annual inspection in accordance with Diamond inspection guide and accomplished the following:**

1. Serviced Main Aircraft Battery.
2. C/W Weight Check of Hand Held Fire Extinguisher.
3. C/W 1 Year Magnetic Compass Swing Calibration.
4. C/W 1 Year / 1000 Hour Auto Pilot System Check.
5. C/W 2 Year Emergency Battery Replacement (G-1000). Installed New Battery, P/N: D60-2560-91-00, S/N: 09-128-0857.
6. C/W FAR 91.207 para (d) ELT Operation and Corrosion Annual Check.
7. Installed New ELT Battery, P/N: MN1300 (8 Each). Batteries Expire Aug. 2011.
8. Installed New Exhaust Muffler Leather Strap, P/N: 05-6000.
9. **C/W SB MSB-40-054/1, Prevent Pinching of Pitot Static Lines.**
10. AD 2007-17-06, Nose Landing Gear Inspection, Superseded to AD 2009-10-04.
11. AD 2008-08-14, Precision Fuel Servo Valve, Superseded to AD 2009-02-03.
12. AD 2008-19-05, ECI Engine Components, N/A, No ECI Cylinders or Parts Installed.
13. **C/W AD 2008-14-07, Fuel Injector Fuel Line Inspection, per SB 342E. Due Every 100 Hours.**
14. **C/W AD 2009-02-03, Precision Fuel Servo Valve, per SB PRS-107R4. Installed New Gasket, P/N: 2577258. Terminates Recurring AD.**
15. **C/W AD 2009-07-14, Upper Wing Skin and Spar Inspection, per SB MSB-40-060.**
16. **C/W AD 2009-10-04, Nose Landing Gear Inspection, per SB MSB40-046/3. Due Every 1 Year / 200 Hours.**
17. All ADS checked through 2009-15.

Above systems ground operational and leak checked satisfactory I.A.W Diamond DA40XL M.M.

**Date: 8-6-09 AFTT: 139.3 Hobbs: 191.2 W/O No: 40-06181**

I certify that this aircraft has been inspected in accordance with an Annual Inspection and was determined to be in Airworthy condition and is approved for return to service. Signed: Jeffrey D. Williams for  
 Winner Aviation Corporation, W6NR985J



# AIR TIME AND

YOUNGSTOWN-WARREN REGIONAL AIRPORT • VIENNA, OH 44473  
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## AVIONICS

**N645WT <> Diamond DA40XL <> S/N: 40.836**

1. Removed T.A.S. 600 Processor 9900BX, P/N: 70-2420-(8TAS600), S/N: 0705076. Sent Out for Repair. Installed Repaired Processor same P/N, and S/N. All Work Performed I.A.W. Ryan TCAD Installation Manual and Aircraft P.O.H.

Above systems ground operational and leak checked satisfactory I.A.W Diamond DA40XL M.M.

**Date: 11-6-09 AFTT: 195.9 Hobbs: 261.0 W/O No: 42-04026**

The maintenance operations described above were inspected I.A.W. current Federal Aviation Regulations, and with respect to the work performed the aircraft and or component is approved for return to service for discrepant items above. Details are on file at this agency under the above work order.

Signed: Jeffrey D. Williams

\_\_\_\_\_  
Winner Aviation Corporation Certified Repair Station W6NR985J



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## AIRFRAME

**N645WT <> Diamond DA40XL <> S/N: 40.836**

1. Installed New Nose Gear Assembly Bushing, P/N: PAF25215P11.
2. Installed New Nose Gear Fork Assembly, P/N: D41-3223-30-00.
3. Installed New Nose Wheel Assembly, P/N: 40-77.
4. Installed New Nose Tire Assembly, P/N: 505C61-8, S/N: 80127308 and Balanced as Required.
5. Installed New Nose Wheel Pant Assembly, P/N: DA4-3225-91-00X01.
6. Removed Propeller (MT) and Sent Out for Warranty Repair, P/N: MTV-12-B/183-59B, S/N: 070370.
7. Installed Loaner Serviceable Propeller (MT), P/N: MTV-12-B/183-59B, S/N: 070205.
8. Installed Overhauled Prop Spinner, P/N: B-045-1.

Above systems ground operational and leak checked satisfactory I.A.W Diamond DA40XL M.M.

**Date: 11-6-09 AFTT: 195.9 Hobbs: 261.0 W/O No: 40-06268 / 40-06273 / 40-06274**

The maintenance operations described above were inspected I.A.W. current Federal Aviation Regulations, and with respect to the work performed the aircraft and or component is approved for return to service for discrepant items above. Details are on file at this agency under the above work order.

Signed: Jeffrey D. Williams

\_\_\_\_\_  
Winner Aviation Corporation Certified Repair Station W6NR985J



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## AIRFRAME

**N645WT <> Diamond DA40XL <> S/N: 40.836**

1. Installed New Left Wheel Pant, P/N: DA4-3215-91-00X01.
2. Installed New Right Wheel Pant, P/N: DA4-3215-92-00X01.
3. C/W AD 2009-10-04, Nose Landing Gear Inspection I.A.W. SB MSB40-046/3. Found New Style Nose Strut Previously Installed. Terminates Recurring AD Inspections.

Above systems ground operational and leak checked satisfactory I.A.W Diamond DA40XL M.M.

**Date: 11-10-09 AFTT: 195.9 Hobbs: 261.0 W/O No: 40-06283**

The maintenance operations described above were inspected I.A.W. current Federal Aviation Regulations, and with respect to the work performed the aircraft and or component is approved for return to service for discrepant items above. Details are on file at this agency under the above work order.

Signed: Jeffrey D. Williams

\_\_\_\_\_  
Winner Aviation Corporation Certified Repair Station W6NR985J

This certificate does not constitute an approval of the work performed by the repair station. It is the responsibility of the repair station to ensure that all work is performed in accordance with applicable regulations and standards. Form 24-0078, 2008/10/28

# ENGINEERING RECORD



YOUNGSTOWN-WARREN REGIONAL AIRPORT • VIENNA, OH 44473  
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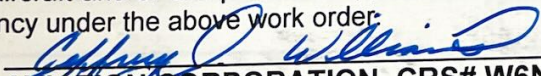
**AIRFRAME**  
**N645WT <> Diamond DA40XL <> S/N: 40.836**

1. Installed New (Customer Supplied) Left Main Tire, P/N: 156E66-4, S/N: 92740174 and New (Customer Supplied) Tube, P/N: 302-246-401.
2. Installed New (Customer Supplied) Right Main Tire, P/N: 156E66-4, S/N: 92710160 and New (Customer Supplied) Tube, P/N: 302-246-401.

Above systems ground operational and leak checked satisfactory I.A.W Diamond DA40XL M.M.

**Date: 1-11-10 AFTT: 208.1 Hobbs: 276.8 W/O No: 40-06344**

The maintenance operations described above were inspected I.A.W. current Federal Aviation Regulations, and with respect to the work performed the aircraft and or component is approved for return to service for discrepant items above. Details are on file at this agency under the above work order.

Signed: Jeffrey D. Williams  \_\_\_\_\_ for,

**WINNER AVIATION CORPORATION, CRS# W6NR985J**  
**"Authorized Diamond Service Center"**



YOUNGSTOWN-WARREN REGIONAL AIRPORT • VIENNA, OH 44473  
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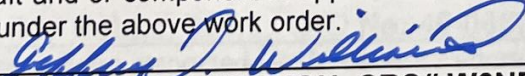
**AIRFRAME**  
**N645WT <> Diamond DA40XL <> S/N: 40.836**

1. Serviced Main Aircraft Battery.
2. Installed New Starter (Sky Tec), P/N: 148-24LS, S/N: F4L-390902. Removed P/N: 148-24LS, S/N: F4L-180701

Above systems ground operational and leak checked satisfactory I.A.W Diamond DA40XL M.M.

**Date: 2-18-10 AFTT: 211.2 Tach: 211.1 Hobbs: 281.5 W/O No: 40-06377**

The maintenance operations described above were inspected I.A.W. current Federal Aviation Regulations, and with respect to the work performed the aircraft and or component is approved for return to service for discrepant items above. Details are on file at this agency under the above work order.

Signed: Jeffrey D. Williams  \_\_\_\_\_ for,

**WINNER AVIATION CORPORATION, CRS# W6NR985J**  
**"Authorized Diamond Service Center"**



YOUNGSTOWN-WARREN REGIONAL AIRPORT • VIENNA, OH 44473  
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**AIRFRAME**  
**N645WT <> Diamond DA40XL <> S/N: 40.836**

1. Inspected Aircraft Cockpit for Smoke. Applied Power to Aircraft, Avionics System All Found Satisfactory. Removed Glare Shield, Inspected Wiring and Components, All Found Satisfactory. Removed Access Panels Under Seats, Inspected Auto Pilot Servos and Wiring, All Found Satisfactory. Removed Access Panels to Inspect Components in Tail, All Found Satisfactory. Reinstalled All Removed Items. Aircraft Found Satisfactory. Ground Ran Aircraft All Found Satisfactory. Flew Aircraft and Tested All Systems, All Found Satisfactory.

Above systems ground operational and leak checked satisfactory I.A.W Diamond DA40XL M.M.

**Date: 8-27-10 Hobbs: 334.6 W/O No: 40-06570**

The maintenance operations described above were inspected I.A.W. current Federal Aviation Regulations, and with respect to the work performed the aircraft and or component is approved for return to service for discrepant items above. Details are on file at this agency under the above work order.

Signed: Jeffrey D. Williams

*Jeffrey D. Williams*  
**WINNER AVIATION CORPORATION, CRS# W6NR985J**  
**"Authorized Diamond Service Center"**

for,



YOUNGSTOWN-WARREN REGIONAL AIRPORT • VIENNA, OH 44473  
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**AIRFRAME**  
**N645WT <> Diamond DA40XL <> S/N: 40.836**

**C/W Annual inspection in accordance with Diamond inspection guide and accomplished the following:**

1. Serviced Main Aircraft Battery.
2. C/W Weight Check of Hand Held Fire Extinguisher.
3. C/W 1 Year Magnetic Compass Swing Calibration.
4. C/W 1000 Hour / 1 Year Auto Pilot System Check.
5. C/W 100 / 200 Hour Inspection Items.
6. C/W FAR 91.207 para (d) ELT Operation and Corrosion Annual Check.
7. C/W Power Flow Exhaust System Instructions for Continued Airworthiness I.A.W. Report # PFS-15250-00. Due Every Annual Inspection.
8. Installed New Left Aft Nav Bulb, P/N: 34-0428070-64.
9. Installed All New Brake Linings, P/N: 066-14100 (4 Each) I.A.W. Cleveland Wheel and Brake M.M.
10. AD 2009-13-10, Ontic Prop Governor. N/A, Ontic Governor Not Installed.
11. AD 2009-26-12, ECI Engine Components. N/A, No Cylinders Replaced Since New.
12. C/W AD 2008-14-07, Fuel Injector Fuel Line Inspection, per SB 342E. Due Every 100 Hours.
13. C/W AD 2009-10-04, Nose Landing Gear Inspection, per SB MSB40-046/3. Found New Style Nose Gear Installed. Terminates Recurring Inspection of AD.
14. All ADS checked through 2010-17.

All work performed I.A.W. Diamond DA40XL M.M. Operational and leak checks satisfactory.

**Date: 9-9-10 AFTT: 259.2 Tach: 259.2 Hobbs: 340.0 W/O No: 40-06577**

I certify that this aircraft has been inspected in accordance with an Annual Inspection and was determined to be in Airworthy condition and is approved for return to service.

Signed: Jeffrey D. Williams

*Jeffrey D. Williams*  
**WINNER AVIATION CORPORATION, CRS # W6NR985J**  
**"Authorized Diamond Service Center"**

for,



ENGINEERING RECORD

YOUNGSTOWN-WARREN REGIONAL AIRPORT • VIENNA, OH 44473  
PHONE: (330) 856-5000 • FAX: (330) 856-4582 • CRSW6NR985J

AIRFRAME

N645WT <> Diamond DA40XL <> S/N: 40.836

- 1. C/W AD 2010-25-01, AFM Revision. C/W AD by Installing Revision as Needed. Service Bulletin MSB 40-070 is N/A per S/N.

Date: Aug. 16, 2011 AFTT: 348.8 Tach: 348.8 W/O No: 40-06924

The maintenance operations described above were inspected I.A.W. current Federal Aviation Regulations, and with respect to the work performed the aircraft and or component is approved for return to service for discrepant items above. Details are on file at this agency under the above work-order.

Signed: Jeffrey D. Williams

for,

WINNER AVIATION CORPORATION, CRS # W6NR985J



YOUNGSTOWN-WARREN REGIONAL AIRPORT • VIENNA, OH 44473  
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N 645 WT S/N: 40.836 TOTAL: 359.8 DATE: 9-1-11

Tested as required by FAR 91.411, IAW 43, Appx. "E" (Para noted)

- 1. Static System per Para (b) To 20,000 Ft.
- 2. L-Airdata P/N 011-00882-00 S/N 47808057 L-ALT. P/N N/A S/N N/A
- 3. R-Airdata P/N N/A S/N N/A R-ALT. P/N N/A S/N N/A
- 4. Sby ALT. P/N 5934 PD-3 S/N 462724

5. Line items 2,3,4 certified per Para (b) to 20,000 FT.

6. Intergrated System-per Para (c)

Item No. 1,2,4,5,6 Tested by K Back Date 9-1-11 WO. 42-04392

WINNER AVIATION, CRS # W6NR985J

I certify that the ATC Transponder tests required by FAR 91.413 have been performed and found to comply with FAR 43 Appendix F

- #1 make GARMIN Model GTX-33 S/N 89104579
  - #2 make N/A Model N/A S/N N/A
- Tested by Kon Back Date 9-1-11 WO. 42-04392

WINNER AVIATION, CRS # W6NR985J

# AIR TIME AND



YOUNGSTOWN-WARREN REGIONAL AIRPORT • VIENNA, OH 44473  
PHONE (330) 856-5000 • FAX: (330) 856-4582 • CRS W6NR985J

## AIRFRAME

N645WT <> Diamond DA40XL <> S/N: 40.836

C/W Annual inspection in accordance with Diamond inspection guide and accomplished the following:

1. Serviced Main Aircraft Battery.
2. C/W Weight Check of Hand Held Fire Extinguisher.
3. C/W 100 / 200 Hour Inspection Items.
4. C/W 1 Year Magnetic Compass Swing Calibration.
5. C/W 1000 Hour / 1 Year Auto Pilot System Check.
6. C/W 2 Year Emergency Battery Replacement. Installed New Battery, P/N: D60-2560-91-00, S/N: 11-153-1196.
7. C/W 2 Year ELT Battery Replacement. Installed New ELT Batteries, P/N: MN 1300 (6 Each).
8. C/W FAR 91.207 para (d) ELT Annual Inspection. Battery Expires: Sept. 2013.
9. C/W Power Flow Exhaust System Instructions for Continued Airworthiness I.A.W. Report # PFS-15250-00. Due Every Annual Inspection.
10. Installed New Right Wing Aft Nav Light Bulb, P/N: 34-0428070-64.
11. C/W AD 2008-14-07, Fuel Injector Lines Inspection per Lycoming SB 342E. Due Every 100 Hours.
12. AD 2011-15-10, Superior & Lycoming Fuel Servo. N/A, Fuel Servo was Never O/H, Serviced or Diaphragm Replaced Since New.

All work performed I.A.W. Diamond DA40XL M.M. Operational and leak checks satisfactory.

**Date: Sept. 16, 2011 AFTT: 361.1 Tach: 361.1 Hobbs: 461.9 W/O No: 40-06946**

I certify that this aircraft has been inspected in accordance with an Annual Inspection and was determined to be in Airworthy condition and is approved for return to service.

Signed: Jeffrey D. Williams Jeffrey D. Williams for,

**WINNER AVIATION CORPORATION, CRS # W6NR985J  
"Authorized Diamond Service Center"**

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## AVIONICS

N645WT <> Diamond DA40XL <> S/N: 40.836

1. Installed Overhauled Flight Control System GSA81 Servo, P/N: 011-00878-00, S/N: 66409141. All Work Performed and Tested Satisfactory I.A.W. Diamond DA 40 M.M. and Garmin G1000 System M.M.

**Date: June 15, 2012 Hobbs: 507.3 W/O No: 42-04551**

The maintenance operations described above were inspected I.A.W. current Federal Aviation Regulations, and with respect to the work performed the aircraft and or component is approved for return to service for discrepant items above. Details are on file at this agency under the above work order.

Signed: Jeffrey D. Williams Jeffrey D. Williams for,

**WINNER AVIATION CORPORATION, CRS # W6NR985J  
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**AIRFRAME**

**N645WT <> Diamond DA40XL <> S/N: 40.836**

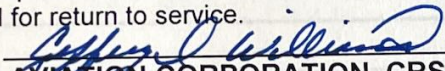
**C/W Annual inspection in accordance with Diamond inspection guide and accomplished the following:**

1. Serviced Main Aircraft Battery.
2. C/W Weight Check and Visual Inspection of Hand Held Fire Extinguisher.
3. C/W 100 / 200 Hour Inspection Items.
4. C/W 1 Year Magnetic Compass Swing Calibration.
5. C/W 1000 Hour / 1 Year Auto Pilot System Check.
6. C/W 3000 Hour / 5 Year Rudder Cables Replacement. Installed New Rudder Cables Kit, P/N: CSKit-07, S/N: CS0704361-1000. Rigged and Adjusted Tension as Required.
7. C/W FAR 91.207 para (d) ELT Annual Inspection. Battery Expires: Sept. 2013.
8. C/W Power Flow Exhaust System Instructions for Continued Airworthiness I.A.W. Report # PFS-15250-00. Due Every Annual Inspection.
9. Installed New Left and Right Wing Stub Seals, P/N: 1110762 (2 Each).
10. Installed New Alternate Air Valve Body, P/N: D41-7166-20-30.
11. C/W AD 2011-26-04, Fuel Injector Lines Inspection per Lycoming SB 342F. Due Every 100 Hours.
12. AD 2011-21-10, VCS STC Air Condition System. N/A, Air Condition STC Not Installed.
13. AD 2012-19-01, Lycoming Crankshaft. N/A, Engine Model and S/N Not Listed in SB MSB569A.
14. AD 2012-03-06C, AVSTAR Fuel Servo. N/A, Fuel Servo was Not Repaired, Overhauled or Replaced in Time Specified in SB AFS-SB6 R2.

All work performed I.A.W. Diamond DA40XL M.M. Operational and leak checks satisfactory.

**Date: Oct. 15, 2012      AFTT: 431.9      Tach: 431.9      Hobbs: 549.6      W/O No: 40-07402**

I certify that this aircraft has been inspected in accordance with an Annual Inspection and was determined to be in Airworthy condition and is approved for return to service.

Signed: Jeffrey D. Williams  for,

**WINNER AVIATION CORPORATION, CRS # W6NR985J**  
**"Authorized Diamond Service Center"**



YOUNGSTOWN-WARREN REGIONAL AIRPORT • VIENNA, OH 44473  
PHONE (330) 856-5000 • FAX: (330) 856-4582 • CRS W6NR985J

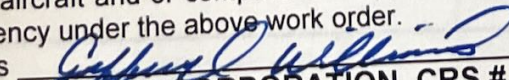
**AIRFRAME**

**N645WT <> Diamond DA40XL <> S/N: 40.836**

1. Installed Rebuilt Starter, P/N: 149-24LS, S/N: F4L-060504. All Work Performed I.A.W. Sky Tec Installation Instructions and Diamond DA40XL M.M.

**Date: April 15, 2013      Hobbs: 603.6      Tach: 476.4      AFTT: 476.4      W/O No: 40-07629**

The maintenance operations described above were inspected I.A.W. current Federal Aviation Regulations, and with respect to the work performed the aircraft and or component is approved for return to service for discrepant items above. Details are on file at this agency under the above work order.

Signed: Jeffrey D. Williams  for,

**WINNER AVIATION CORPORATION, CRS # W6NR985J**  
**"Authorized Diamond Service Center"**



YOUNGSTOWN-WARREN REGIONAL AIRPORT • VIENNA, OH 44473  
 PHONE (330) 856-5000 • FAX: (330) 856-4582 • CRS W6NR985J

N 645WT S/N: 40,836 <sup>Hobbs</sup> TOTAL: 661.0 DATE: 10-15-13  
 AFTT: 523.8

Tested as required by FAR 91.411, IAW 43, Appx. "E" (Para noted)

1. Static System per Para (b) To 20,000 Ft.  
 2. L-Airdata P/N 011-00882-00 S/N 47808057 L-ALT. P/N N/A S/N N/A  
 3. R-Airdata P/N N/A S/N N/A R-ALT. P/N N/A S/N N/A  
 4. Sby ALT. P/N 5934PD-3 S/N 462724  
 5. Line items 2,3,4 certified per Para (b) to 20,000 FT  
 6. Intergrated System-per Para (c) Tested by R. Bocho Date 10-15-13 WO. 42-04838  
 Item No. 1,2,4,5,6

WINNER AVIATION, CRS # W6NR985J

I certify that the ATC Transponder tests required by FAR 91.413 have been performed and found to comply with FAR 43 Appendix F

#1 make GARMIN Model GTX-33 S/N 89104579  
 #2 make N/A Model N/A S/N N/A  
 Tested by R. Bocho Date 10-15-13 WO. 42-04838

WINNER AVIATION, CRS # W6NR985J



YOUNGSTOWN-WARREN REGIONAL AIRPORT • VIENNA, OH 44473  
 PHONE (330) 856-5000 • FAX: (330) 856-4582 • CRS W6NR985J

**AIRFRAME**

**N645WT <> Diamond DA40XL <> S/N: 40.836**

C/W Annual inspection in accordance with Diamond inspection guide and accomplished the following:

1. Service Main Aircraft Battery.
2. C/W Weight Check and Visual Inspection of Hand Held Fire Extinguisher.
3. C/W 100 / 200 Hour Inspection Items.
4. C/W 1000 Hour / 1 Year Auto Pilot System Check.
5. C/W 1000 Hour / 2 Year Altimeter Indicator for Correct Indication with FAR 91-411 and -413.
6. C/W 1000 Hour / 2 Year Vertical Speed Indicator for Correct Indication with FAR 91-411 and -413.
7. C/W 1000 Hour / 2 Year Airspeed Indicator for Correct Indication with FAR 91-411 and -413.
8. C/W 2 Year Emergency Battery Replacement. Installed New Battery Pack, P/N D60-2560-91-00, S/N: 13-227-8. Battery Expires: Oct. 2015.
9. C/W 2 Year ELT Batteries Replacement. Installed New ELT Batteries, P/N: MN1300 (8 Each).
10. C/W FAR 91.207 para (d) ELT Annual Inspection.
11. C/W Power Flow Exhaust System Instructions for Continued Airworthiness I.A.W. Report # PFS-15250-00. Due Every Annual Inspection.
12. C/W AD 2011-26-04, Fuel Injector Lines Inspection per Lycoming SB 342F. Due Every 100 Hours.

All work performed I.A.W. Diamond DA40XL M.M. Operational and leak checks satisfactory.

Date: Oct. 18, 2013 AFTT: 523.8 Tach: 523.8 Hobbs: 661.0 W/O No: 40-07862

I certify that this aircraft has been inspected in accordance with an Annual Inspection and was determined to be in Airworthy condition and is approved for return to service.

Signed: Jeffrey D. Williams

*Jeffrey D. Williams*

WINNER AVIATION CORPORATION, CRS # W6NR985J

for,

"Authorized Diamond Service Center"



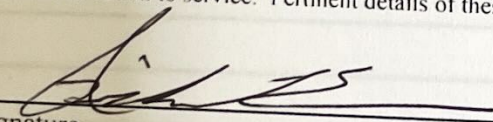
Registration #: N645WT	Total AC Time: 632.1	Total AC Cycles:
Manufacturer: Diamond Aircraft		
Part/Model number: DA40XL	Aircraft Serial Number: 40.836	
Work Order No: PST5410	Date: 11/10/2014	

Squawk

- 1.1 CW ANNUAL INSPECTION USING INSPECTION FORM OUTLINED IN DA40-180 MM, CH 5 AS A GUIDELINE.
- 1.2 CW 100 HOUR INSPECTION ITEMS USING INSPECTION FORM OUTLINED IN DA40-180 MM, CH 5 AS A GUIDELINE.
- 1.3 CW 200 HOUR INSPECTION ITEMS USING INSPECTION FORM OUTLINED IN DA40-180 MM, CH 5 AS A GUIDELINE.
- 1.4 CW MAIN AIRCRAFT BATTERY REMOVAL, SERVICE AND REINSTALLATION
- 1.5 CW F.A.R. 91.207, PARA (D) OPERATIONAL AND CORROSION CHECK
- 1.6 CW ONE YEAR MAGNETIC COMPASS CALIBRATION
- 1.7 CW WEIGHT CHECK OF HAND-HELD FIRE EXTINGUISHER WITH SATISFACTORY RESULTS
- 1.8 CW 1000 HOUR / ONE YEAR AUTOPILOT SYSTEM CHECK
- 1.9 CW POWER FLOW EXHAUST SYSTEM ICA IAW INSTRUCTIONS FOR KIT #PFS-15102.
- 1.10 CW AD2011-26-04 - INSPECTION OF FUEL INJECTOR LINES PER SB342F. DUE IN 100 HOURS
- 1.11 REMOVED #3 EXHAUST AND SENT OUT FOR REPAIR, REINSTALLED SERVICEABLE EXHAUST
- 1.12 POSSIBLE CRACK LH WING I/B TRAILING EDGE - FOUND TO BE COSMETIC PAINT, PREPPED, FILLED, PRIMED AND PAINTED TO MATCH EXISTING EXTERIOR PAINT IAW AC43.13-1B/2B.
- 1.13 RESECURED LH AND RH WING ANTI-SKID WALK AREA LEADING EDGES AS NEEDED
- 1.14 AD2014-13-08 IS DUE AT OR BEFORE 2000 HOURS OR 02-27-24, THIS SUPERCEDES AD2013-24-14. AD'S CHECKED THROUGH 2014-22

All Work Performed I.A.W. Diamond Aircraft DA40XL Appropriate Data.

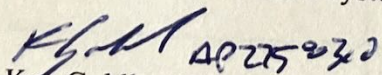
These items identified above were repaired and/or inspected in accordance with current Federal Aviation Regulations and the repairs are approved for return to service. Pertinent details of these repairs are on file at the repair station under Work Order Number PST5410.

  
 \_\_\_\_\_  
 Signature

North Coast Air Care Inc. 1600 Triplett Blvd Akron, Ohio 44306 (330) 734 0282

02-17-2015 686.0 Hobbs (airframe) N645WT

Complied with the following this date; Auto pilot system is getting a uncommand auto pilot disconnect. Trouble shot system and found pitch servo to be inop. Removed and replaced pitch servo with overhauled unit p/n 011-00878-00 s/n 66409334 as required. Updated G1000 system software with current version 0321.22 per SI-40-113. Ground checked system for operation; no defects noted at this time.END----

  
 Ken Gohlke AP 2758310  
 For North Coast Air Care Inc.



- 1.9 INSTALLED NEW SEAT RESTRAINT ELECTRONIC MODULE P/N 508358-421 IAW AMSAFE ICA INSTRUCTIONS. NEXT DUE 12-2022
- 1.10 INSTALLED FOUR NEW BRAKE LININGS P/N 066-14100 IAW CLEVELAND WHEEL AND BRAKES OVERHAUL MANUAL.
- 1.11 ADJUSTED ELEVATOR TRIM SERVO CHAIN TENSION AS NEEDED IAW DA40-180 MM, CH 22.
- 2.12 CW F.A.R. 91.207, PARA (D) ELT ANNUAL CHECK IAW DA40-180 MM, CH 25 - NO DEFECTS FOUND
- 2.13 INSTALLED EIGHT NEW ELT BATTERIES P/N MN1300, ALL WORK IAW DA40-180 MM, CH 25. BATTERY REPLACEMENT DUE DECEMBER 2017.
- 2.14 CW AUTOPILOT SYSTEM CHECK IAW DA40-180 MM, CH 5 & 22.
- 2.15 CW EMERGENCY BATTERY REPLACEMENT INSTALLED NEW BATTERY P/N D41-2560-93-00 IAW DA40-180 MM, CH 24.

**All Work Performed I.A.W.** Diamond Aircraft DA40XL Appropriate Data.

These items identified above were repaired and/or inspected in accordance with current Federal Aviation Regulations and the repairs are approved for return to service. Pertinent details of these repairs are on file at the repair station under Work Order Number PST6060.

[Signature]  
Signature



YOUNGSTOWN-WARREN REGIONAL AIRPORT • VIENNA, OH 44473  
PHONE (330) 856-5000 • FAX: (330) 856-4582 • CRS W6NR985J

N G45WT S/N: 40.836 TOTAL: 777.6 DATE: 12-01-2015

- 1. Static System per Para (b) To 20,000 Ft.
- 2. L-Airdata P/N 011-0088200 S/N 47808057
- 3. R-Airdata P/N N/A S/N N/A L-ALT. P/N N/A S/N N/A
- 4. Sby ALT. P/N 5934PD-3 S/N 452724 R-ALT. P/N N/A S/N N/A
- 5. Line items 2,3,4 certified per Para (b) to 20,000 FT.
- 6. Intergrated System-per Para (c)

Item No. 1,2,4,6 Tested by Fawn Moore Date 12-01-2015 WO. 40-08941  
**WINNER AVIATION, CRS # W6NR985J**

I certify that the ATC Transponder tests required by FAR 91.413 have been performed and found to comply with FAR 43 Appendix F

#1 make Garmin Model GTX33 S/N 89104579  
#2 make N/A Model N/A S/N N/A  
Tested by Fawn Moore Date 12-01-2015 WO. 40-08941  
**WINNER AVIATION, CRS # W6NR985J**

North Coast Air Care Inc. 1600 Triplett Blvd Akron, Ohio 44306 (330) 734 0282

May 19, 2016 1200 HOBBS (airframe) N645WT

Complied with the following this date; Battery inop. Replaced battery with new P/N RG24-11M  
SN 40790797 as required. END

[Signature]  
John T. Hogarth AP3722212  
For North Coast Air Care Inc.



Repair Station #: W6NR985J

February 07, 2017

Registration #: N645WT  
Manufacturer: Diamond Aircraft  
Part/Model number: DA40XL  
Work Order No: PST6725

Total AC Time: 830.6  
Total AC Cycles:  
Aircraft Serial Number: 40.836  
Date: 02/07/2017

Squawk

- 1.1 CW ANNUAL INSPECTION USING INSPECTION FORM OUTLINED IN DA40-180 MM, CH 5 AS A GUIDELINE, CW COMPRESSION CHECK WITH SATISFACTORY RESULTS AS FOLLOWS: #1 - 76/80 #2 - 75/80 #3 - 77/80 #4 - 74/80 AD'S CHECKED THRU 2017-02.
- 1.2 CW 200 HOUR INSPECTION ITEMS USING DA40-180 INSPECTION FORM OUTLINED IN CHAPTER 5 AS A GUIDELINE.
- 1.3 REMOVED MAIN AIRCRAFT BATTERY, SERVICED AND REINSTALLED, ALL WORK ACCOMPLISHED IAW DA40-180 MM, CH 12.
- 1.4 CW F.A.R. 91.207, PARA (D), ELT OPERATIONAL AND CORROSION INSPECTION, NO DEFECTS FOUND AT THIS TIME.
- 1.5 CW WEIGHT CHECK OF HAND-HELD FIRE EXTINGUISHER IAW BOTTLE INSTRUCTIONS, BOTTLE SERVICEABLE AT THIS TIME.
- 1.6 CW AUTOPILOT SYSTEM CHECK IAW DA40-180 MM, CH 22. NO DEFECTS NOTED.
- 1.7 CW POWER FLOW SYSTEMS ICA PER INSTRUCTIONS, ALL FOUND TO BE IN SERVICEABLE CONDITION AT THIS TIME.
- 1.8 REMOVED PROP GOVERNOR AND SENT OUT FOR OVERHAUL, INSTALLED OVERHAUL PROP GOVERNOR P/N P-860-23 S/N 07G380-E, ALL WORK ACCOMPLISHED IAW DA40-180 MM, CH 61.
- 1.9 CW AD2015-19-07, FUEL INJECTION LINE INSPECTION, PER SB342G INSTRUCTIONS, NO DEFECTS NOTED AT THIS TIME.
- 1.10 REMOVED DEFECTIVE CO DETECTOR AND INSTALLED NEW DETECTOR P/N 452-201-010 S/N 96891, ALL WORK ACCOMPLISHED IAW DA40-180 MM, CH 31.
- 1.11 CW PROP BALANCE IAW CHADWICK-HELMUTH VIBREX RACK AND BALANCE SYSTEM INSTRUCTIONS, BALANCED TO .08 IPS.

All Work Performed I.A.W. Diamond Aircraft DA40XL Appropriate Data.

These items identified above were repaired and/or inspected in accordance with current Federal Aviation Regulations and the repairs are approved for return to service. Pertinent details of these repairs are on file at the repair station under Work Order Number PST6725.

*[Handwritten Signature]*

Signature

For Winner Aviation Repair Station #W6NR985J



YOUNGSTOWN-WARREN REGIONAL AIRPORT • VIENNA, OH 44473  
PHONE (330) 856-5000 • FAX: (330) 856-4582 • CRS W6NR985J

N 645WT S/N: 40.836 TOTAL: 858.7 DATE: 7MAR18

Tested as required by FAR 91.411, IAW 43, Appx. "E" (Para noted)

- 1. Static System per Para (b) To 20,000 Ft.
- 2. L-Airdata P/N 011-00882-00 S/N 47808057 L-ALT. P/N N/A S/N N/A
- 3. R-Airdata P/N N/A S/N N/A R-ALT. P/N N/A S/N N/A
- 4. Sby ALT. P/N 5934PD-3 S/N 402724
- 5. Line items 2,3,4 certified per Para (b) to 20,000 FT.
- 6. Intergrated System-per Para (c)  
Item No. 1,2,4 Tested by C. Holsley Date 7MAR18 WO. PST7300

WINNER AVIATION, CRS # W6NR985J

I certify that the ATC Transponder tests required by FAR 91.413 have been performed and found to comply with FAR 43 Appendix F

- #1 make GARMIN Model GTX33 S/N 89104579
- #2 make N/A Model N/A S/N N/A
- Tested by C. Holsley Date 7MAR18 WO. PST7300

WINNER AVIATION, CRS # W6NR985J



Repair Station #: W6NR985J

March 14, 2018

Registration #: N645WT  
Manufacturer: Diamond Aircraft  
Part/Model number: DA40XL  
Work Order No: PST7300

Total AC Time: 858.7

Total AC Cycles:

Aircraft Serial Number: 40.836

Date: 03/14/2018

Squawk  
1.1

CW ANNUAL INSPECTION USING FORM OUTLINED IN DA40-180 MM, CH 5 AS A GUIDELINE. AD'S CHECKED THRU 2018-05.

1.2

CW 200 HOUR INSPECTION ITEMS USING DA40-180 INSPECTION FORM, OUTLINED IN CH 5, AS A GUIDELINE.

1.3

REMOVED AIRCRAFT BATTERY, SERVICED AND REINSTALLED. IAW DA40-180 MM, CH 12.

1.4

CW F.A.R. 91.207, PARA (D) ELT ANNUAL CHECK IAW DA40-180 MM, CH 25. NO DEFECTS NOTED.

1.5

CW MAGNETIC COMPASS CALIBRATION IAW DIAMOND DA40-180 MM, CH 34-22.

1.6

REPLACED ELT BATTERIES WITH EIGHT NEW BATTERIES P/N MNI300 IAW ACK TECHNOLOGIES AND DA40-180 MM CH 25.  
BATTERT EXP - MARCH 2020

1.7

TESTED AUTOPILOT SYSTEM, NO FAILURES OR FAULTS FOUND, OPERATIONAL CHECKED GOOD ON ALL PARAMETERS PER DA40-180 MM, CH 5 & 22.

1.8

REMOVED FIRE EXTINGUISHER AND INSTALLED NEW FIRE EXTINGUISHER P/N A620 S/N E-68642713 WITH SATISFACTORY WEIGHT OF 2.6 LBS. IAW DA40-180 MM AND AMEREX MFG INSTRUCTIONS.

1.9

CW ANNUAL EXHAUST SYSTEM INSPECTION IAW POWER FLOW SYSTEMS ICA INSTRUCTIONS, NO DEFECTS NOTED.

1.10

REMOVED EMERGENCY BATTERY AND INSTALLED NEW BATTERY P/N D41-2560-93-00 IAW DA40-100 MM, CH 24

1.11

CW AD2015-19-07, FUEL INJECTOR LINES INSPECTION, PER SB342G INSTRUCTIONS, NO DEFECTS NOTED.

1.12

CHANGED REGISTRATION NUMBER IN G1000/DA40 SYSTEM MM TO MATCH REGISTRATION INFORMATION.

1.13

REPLACED RH POSITION BULB WITH NEW BULB P/N W1290-28, OPERATIONAL CHECKED SATISFACTORY.

**All Work Performed I.A.W.** Diamond Aircraft DA40XL Appropriate Data.

These items identified above were repaired and/or inspected in accordance with current Federal Aviation Regulations and the repairs are approved for return to service. Pertinent details of these repairs are on file at the repair station under Work Order Number PST7300.

Signature

For Winner Aviation Repair Station #W6NR985J

Conformity to:

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Repair Station #: W6NR985J

June 07, 2019

Registration #: N645WT

Total AC Time: 885.8

Total AC Cycles:

Manufacturer: Diamond Aircraft

Part/Model number: DA40XL

Aircraft Serial Number: 40.836

Work Order No: PST7811

Date: 06/07/2019

Squawk

- 1.1 CW ANNUAL INSPECTION USING INSPECTION FORM OUTLINED IN DIAMOND DA40-180 MM, CH 5 AS A GUIDELINE. CW COMPRESSION CHECKS WITH SATISFACTORY RESULTS AS FOLLOWS: #1 - 75/80 #2 - 76/80 #3 - 75/80 #4 - 74/80. AD'S CHECKED THRU 2019-11
- 1.2 COMPLIED WITH 100 HOUR INSPECTION ITEMS USING INSPECTION FORM OUTLINED IN DIAMOND DA40-180 MM, CH 5 AS A GUIDELINE.
- 1.3 COMPLIED WITH 200 HOUR INSPECTION ITEMS USING INSPECTION FORM OUTLINED IN DIAMOND DA40-180 MM, CH 5 AS A GUIDELINE.
- 1.4 SERVICED AND CHARGED MAIN AIRCRAFT BATTERY AS REQUIRED IAW DA40-180 MM, CH 12 AND 24.
- 1.5 COMPLIED WITH F.A.R. 91.207, PARA (D) ELT OPERATIONAL AND CORROSION INSPECTION WITH SATISFACTORY RESULTS IAW DIAMOND DA40-180 MM. ELT BATTERY DUE DATE - MARCH 2027
- 1.6 COMPLIED WITH WEIGHT CHECK OF HAND-HELD FIRE EXTINGUISHER WITH SATISFACTORY WEIGHT OF 2.4 LBS, ALL WORK ACCOMPLISHED IAW MFG INSTRUCTIONS
- 1.7 COMPLIED WITH AUTOPILOT SYSTEM CHECK IAW DA40-180 MM, CH 22.
- 1.8 REMOVED ELECTRICAL FUEL PUMP AND SENT OUT FOR OVERHAUL, INSTALLED NEW PUMP P/N 5100-00-9 S/N 211679 IAW DA40-180 MM, CH 28.
- 1.9 COMPLIED WITH ICA POWER FLOW EXHAUST SYSTEM INSPECTION IAW POWER FLOW ICA FOR KIT PFS-15102, NO FAULTS FOUND
- 1.10 REMOVED BROKEN/BURNT BULB FROM LEFT WING TIP AFT POSITION LIGHT AND INSTALLED NEW BULB P/N 34-0428070-64.
- 1.11 REMOVED BROKEN EGT PROBE FROM #1 CYLINDER AND INSTALLED A NEW PROBE P/N A002BG-WIP IAW DA40-180 MM, CH 77.
- 1.12 REMOVED FUEL PUMP SWITCH AND INSTALLED NEW SWITCH P/N K1ACAAAAA IAW DIAMOND DA40-180 MM, CH 28.

All Work Performed I.A.W. Diamond Aircraft DA40XL Appropriate Data.

These items identified above were repaired and/or inspected in accordance with current Federal Aviation Regulations and the repairs are approved for return to service. Pertinent details of these repairs are on file at the repair station under Work Order Number PST7811.

Signature

For Winner Aviation Repair Station #W6NR985J



MAINTENANCE ENTRY 17 January 2020  
DIAMOND AIRCRAFT IND INC, DA 40, N645WT, S/N 40.836

ITEMS REMOVED: Garmin GTX33 Transponder P/N 011-00779-10, EDO DM GPS Antenna P/N C63-1/A.

ITEMS INSTALLED: Garmin GTX345 Transponder P/N 011-03302-00, Comant COM GPS WAAS Antenna P/N CI-2580-200.

REPAIR: The PFD Direct To button is intermittent. Removed GDU1040 Display unit p/n 011-00972-03 s/n 88904516 from aircraft and sent to Garmin for repair. Received overhauled exchange replacement unit p/n 011-00972-03 s/n 88902403. See Garmin 8130-3 # SO15030223. Reinstalled display. Confirmed software levels and configuration settings. System ground checks good.

MAJOR ALTERATION: A Garmin GTX345R transponder was installed in the same location as the removed GTX33 Transponder and interfaced to the existing G1000 and Audio Panel. The existing transponder circuit breaker was removed. The newly installed GTX345R was connected to the avionics buss using a new 3 amp push pull type re-settable circuit breaker labeled Xpdr installed in the same location. Installed fuse holder next to battery with 3amp fuse, ran wire into behind panel and through aircraft harness for GPS keep alive. A new Comant CI-2580-200 COM/GPS antenna was installed in the same location as the removed COM GPS antenna using the existing Com antenna coax. A new RG142 GPS coax cable was fabricated and installed connecting the GTX345R to the new antenna. The Garmin GTX345R was installed under the guidelines and in reference to Garmin GTX3XX transponder Part 23 AML STC IM P/N: 190-00734-10 Rev13, September 2019 Ref: STC/AML SA01714W1. The CI-2580 antenna was installed under the guidelines and in reference to AC43.13-2B Chapter 3. The installed ADS-B OUT system was shown to meet the equipment performance requirements of 14 CFR section 91.227.

The newly installed transponder was evaluated and tested using IFR ATC6000 equipment and found to be within the parameters of the IM Operation/Performance Ground Check. Satisfactorily performed tests and inspections as required by FAR 91.413, Part 43 Appendix F and Altitude Reporting Correlation Test per FAR Part 43 Appendix E (c). Satisfactorily performed ADS-B Checks. Additionally Referenced AC43.13-1B Chapter 11 Sect. 1-3; Chapter 12 Sect. 1,2,3,12 and AC43.13-2B Chapter 11 for the work described above. See FAA Form 337 dated 17 January 2020.

The work described above has been inspected and found airworthy for return to service. Weight and balance/supplemental equipment list updated. Pertinent details on file at this repair station under Work Order #011779.

*[Handwritten Signature]* 2347493  
Signed for Carpenter Avionics, Inc. Repair Station RH4R492M

N 645WT S/N: 40,836 TOTAL: 1363.3 DATE: 03 JUNE 2020

Tested as required by FAR 91.411, IAW 43, Appx. "E" (Para noted)

1. Static System per Para (b) To 20,000 Ft.

2. L-Airdata P/N 011-00562-00 S/N 47608057

L-ALT. P/N 011-00972-03

3. R-Airdata P/N N/A S/N N/A

R-ALT. P/N 5934P0-3 S/N 66902463

4. Sby ALT. P/N N/A S/N N/A

S/N 462724

5. Line items 2,3,4 certified per Para (b) to 20,000 FT.

6. Intergrated System-per Para (c)  
Item No. 1, 2, 3, 5, 6 Tested by [Signature]

Date 03 JUNE 2020 WO. PST 8228

WINNER AVIATION, CRS # W6NR985J

certify that the ATC Transponder tests required by FAR 91.413 have been performed and found to comply with FAR 43 Appendix F

1 make Garmin Model GTX345R

S/N 3EH421917

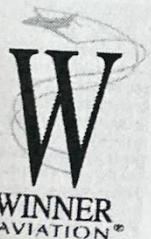
2 make N/A Model N/A

S/N N/A

Tested by [Signature] Date 03 JUNE 2020

WO. PST 8228

WINNER AVIATION, CRS # W6NR985J



Repair Station #: W6NR985J

June 08, 2020

Registration #: N645WT

Manufacturer: Diamond Aircraft

Total AC Time: 919.4

Total AC Cycles:

Part/Model number: DA40XL

Aircraft Serial Number: 40.836

Work Order No: PST8228

Date: 06/08/2020

Squawk

- 1.1 CW ANNUAL / 100 HR INSPECTION USING INSPECTION FORM OUTLINED IN DA40-180 MM, CH 5 AS A GUIDELINE.
  - 1.2 CW COMPRESSION CHECK WITH SATISFACTORY RESULTS AS FOLLOWS -#1 - 75/80 #2 - 74/80 #3 - 75/80 #4 - 75/80
  - 1.3 REMOVED MAIN AIRCRAFT BATTERY, SERVICED AND REINSTALLED, ALL WORK ACCOMPLISHED IAW DA40-180 MM, CH 12 AND 24.
  - 1.4 COMPLIED WITH F. A. R. 91.207, PARA (D) ELT OPERATIONAL AND CORROSION INSPECTION IAW DA40-180 MM, CH 25.
  - 1.5 COMPLIED WITH REPLACEMENT OF ELT BATTERY IAW DA40-180 MM, CH 25.
  - 1.6 COMPLIED WITH CHECK OF AUTOPILOT SYSTEM IAW DA40-180 MM, CH 22.
  - 1.7 COMPLIED WITH ICA OF POWER FLOW EXHAUST SYSTEM IAW ICA INSTRUCTIONS.
  - 1.8 COMPLIED WITH REPLACEMENT OF EMERGENCY BATTERY IAW DA40-180 MM, CH 24, NEW BATTERY P/N D41-2560-9300 S/N 19-205-00248.
  - 1.9 COMPLIED WITH AD2015-19-07 PER LYCOMING SB342G INSTRUCTIONS.
- TROUBLESHOT STATIC LEAK, FOUND STATIC CONNECTION INTO ADC WAS NOT PROPERLY TIGHTENED, TIGHTENED CONNECTION AND TESTED, STATIC LEAK IS WITHIN TOLERANCE, ALL WORK ACCOMPLISHED IAW DIAMOND DA40 SERIES AMM, DOCUMENT NUMBER 6.02.01.

All Work Performed I.A.W. Diamond Aircraft DA40XL Appropriate Data.

These items identified above were repaired and/or inspected in accordance with current Federal Aviation Regulations and the repairs are approved for return to service. Pertinent details of these repairs are on file at the repair station under Work Order Number PST8228.

Signature

For Winner Aviation Repair Station #W6NR985J

ENGINEERING RECORD  
NOVEMBER 14, 2020 HOBBS: 1366(AIF) N645WT

Complied with the following. BATTERY inop. REPLACED  
BATTERY WITH NEW!



RICHARD E. MAY OWNER - #3295405

November 18, 2020 HOBBS - 1366 N645WT  
INSTALLED MAIN WHEEL ASSY TO REPLACE S/N 40-836  
ALL WORK ACCOMPLISHED IAW DA-40-180 AMM, CH. 32. TUBE P/N G2-5208  
Richard May OWNER - #3295405



Repair Station #: W6NR985J

July 20, 2021

Registration #: N645WT  
Manufacturer: Diamond Aircraft  
Part/Model number: DA40XL  
Work Order No: PST8685

Total AC Time: 929.7

Total AC Cycles:

Aircraft Serial Number: 40836

Date: 07/20/2021

- Squawk
- 1.1 COMPLIED WITH ANNUAL INSPECTION USING INSPECTION FORM OUTLINED IN DA40-180 MM, CH 5, AS A GUIDELINE
  - 1.2 REMOVED MAIN AIRCRAFT BATTERY, SERVICED AS REQUIRED IAW DA40-180 MM, CH 12 AND 24.
  - 1.3 COMPLIED WITH F.A.R. 91.207, PARA (D) OPERATIONAL AND CORROSION CHECK IAW DA40-180 MM, CH 25, BATTERY EXP DATE - JUNE 2022
  - 1.4 COMPLIED WITH HAND-HELD FIRE EXTINGUISHER WEIGH CHECK IAW BOTTLE INSTRUCTIONS. BOTTLE DATE - 2018
  - 1.5 COMPLIED WITH AUTOPILOT SYSTEM CHECK
  - 1.6 COMPLIED WITH ICA POWER FLOW EXHAUST SYSTEM INSPECTION IAW POWER FLOW INSTALLATION MANUAL PFS-15250-00, REV E
  - 1.7 COMPLIED WITH AD93-05-06 IGNITION SWITCH INSP PER SB 92-01-ACS, NO DEFECTS FOUND AT THIS TIME.
  - 1.8 COMPLIED WITH AD2015-19-07, INSPECT FUEL INJECTOR LINES PER LYCOMING SB342G INSTRUCTIONS, NO DEFECTS FOUND AT THIS TIME
  - 1.9 REMOVED EXISTING MUFFLER INSERT AND INSTALLED NEW WRAPPED MUFFLER INSERT P/N 8016 IAW DA40-XL MM 78-00
  - 1.10 COMPLIED WITH RSB 40-083 IAW RSB INSTRUCTIONS AND DA40-XL MM 52-10.

All Work Performed I.A.W. Diamond Aircraft DA40XL Appropriate Data.

These items identified above were repaired and/or inspected in accordance with current Federal Aviation Regulations and the repairs are approved for return to service. Pertinent details of these repairs are on file at the repair station under Work Order Number PST8685.

Signature

For Winner Aviation Repair Station #W6NR985J

# AIR TIME AND

MFG: Diamond Aircraft

Model: DA 40

A/C S/N: 40.836

A/C N #: N645WT

Steiner Aviation International  
5430 Lauby Rd, Hangar 17  
North Canton, OH 44720  
**CRS V4NR896Y**

Date: 12-3-2021

WO #: 14011

T.T.: 1380.9 Hobbs

T.L.: N/A

GIA 63 #2

Removed failed #2 GIA 63 P/N-011-00781-01, S/N-48106476 and sent to Garmin for repair.  
Installed repaired #2 GIA 63 P/N, S/N-SAME.  
Updated G1000 system software and options.  
Reconfigured GTX-345 Transponder as req'd.  
Ramp tested G1000 system normal in all modes.

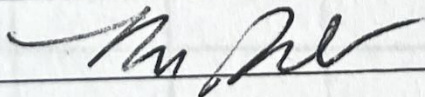
### Maintenance Release

The aircraft or appliance identified above was repaired and inspected in accordance with current regulations of the Federal Aviation Agency and is approved for return to service. Pertinent details of the repair are on file at this repair station under

Work Order Number : 14011

Date: 12-3-2021 Time: 1380.9

Signed



Steiner Aviation International, Inc V4NR896Y