

AIRCRAFT TECHNICAL RECORD

Section 3. ENGINE LOG

ENGINE LOG

- | | |
|----------------------------------|-------------|
| 1. Make: | Lycoming |
| 2. Model: | IO-360-M1A |
| 3. Specification: | 1E10 |
| 4. Manufacturer's Serial Number: | L-35926-51E |
| 5. Date of Manufacture: | Oct 2012 |
| 6. Aircraft Inspection Cycle: | |

Section 3A: Engine Service and Maintenance Log

A1

DATE / /	TIME RUN		TIME SINCE OVERHAUL		CYCLES	
	HOURS	min	HOURS	min	Sub Total	TOTAL
BROUGHT FORWARD						



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

Registration: N464DS
AC Serial Number: 40.1167
Engine Serial Number: L-35926-51E
Prop Serial Number: NS1095B
Engine Total Time: 4.0 hrs

- Total Time Engine Brought forward from Flight Test Journey Log (DAI - Form Q-157): 4.0 hrs
- Engine installed new on Aircraft DA 40, S/N: 40.1167
- OIL CHANGE DUE @ 25 hrs
- Bi-weekly AWD check carried out to current revision 2012-23, all applicable AD's complied with, see attached
- The work described above was carried out IAW the applicable Standard of Airworthiness.

Inspector

NOV 3 0 2012

date

(Intentionally left blank below this point)

Date: 7-17-13 Tach: 25.1
Changed oil and oil filter at this time. Cut open filter.
Cleaned engine.
Added 8 qts of oil Senter's aeroshell
Ran engine-no oil leaks from oil filter or Sumpdrain.
Signature: Paul Polhemus
ALP3572057

ENGINE MODEL: IO-360-M1A
ENGINE S/N: L-35926-51E
PEG NO: N464DS
WORK ORDER: 3461-07-2014



Advanced Lancaster LP
530 Airport Rd.
Litz, PA 17543
Phone: 717-735-5179

DATE: 7/28/2014
A/C TSN: 59.8
ENG TT: 59.8
HOBBS: 79.4

Engine Entries

Diamond DA40 Engine Annual Inspection IAW Diamond Aircraft DA 40 Series AMM 05-20-00, Section 4.A.(1), Items 1 - 39 for DA 40 with installed Lycoming engine. Compressions: 1/78, 2/78, 3/77, 4/78. Changed engine oil and filter using Aeroshell 15W50. Cut and inspected oil filter, found ok. Tensioned alternator belt. Cleaned, gapped and tested the spark plugs. Cleaned the fuel injector nozzles. Checked the mag timing. Final run up/leak check good. All AD's current thru 2014-14. AD 2012-19-01 Crankshafts, N/A by Engine Model. AD 2012-03-06 Avstar Diaphragms, PCW, N/A. CAV AD 2011-26-04 Fuel Injector Lines, no defects noted. Next due Fit Hobbs. Adjusted timing on both mags. Safetied the alternator belt tension adjustment bolt.

I certify that this ENGINE has been inspected IAW an Annual Inspection and was found to be in Airworthy condition.

DATE: 7/28/2014

SIGNED:

Richard A. Barnhart II, IA 342494A

Work Order: 3461-07-2014

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Cycle Aviation 1005 Sycolin Rd Leesburg Executive Arpt Leesburg, VA 20175 CRS# 6LVR604C
LOG ID# 2932 06-August-2015 WO# 3324/2 FORM M3 HOBBS 95.4
N464DS S/N 40.1167 DIAMOND AIRCRAFT INC DA40 TACH 71.7

Pg 1 / 1

LICENCE:

AME or
AMO/ACA

Model: IO-360-M1A Serial#: L-35926-51E

Performed 100hr inspection IAW DA40 MM Ch 05-28-00, Lycoming IO-360-M1A overhaul manual and Title 14 CFR appendix d. Performed engine run for warm oil drain. Drained oil and took sample. Removed, cut-open, and inspected oil filter for metal contamination, found satisfactory at this time. Installed new oil filter P/N CH48110-1 and serviced engine with 7 qts of Aeroshell 15W50 oil. Cleaned and gapped sparkplugs. Inspected oil suction screen for contamination, none found. Performed post maintenance leak and ops check, found satisfactory. No further action required.

Compressions: 1: 76/80, 2: 73/80, 3: 78/80, 4: 76/80

>Complied with AD2011-26-04 by visual inspection of the fuel injection lines for defects, no defects noted.
>AD2015-02-07 not applicable due to non aerobatic.

I certify that this Engine has been inspected IAW 100Hour/Annual Inspection and has been found to be in Airworthy condition. The article identified above was repaired and inspected in accordance with current federal aviation regulations and current manufacturers manuals and is approved for return to service. Pertinent details on file at this repair station under above referenced work order.

Signed CRS# 6LVR604C Adam Snyder

8-6-2015

Date

Cycle Aviation 1005 Sycolin Rd SE Leesburg Executive Arpt Leesburg, VA 20175 CRS# 6LVR604C
LOG ID# 4180 11-July-2016 WO# 4420 FORM M3 AC TT 114.7 HOBBS 159.2
N464DS S/N 40.1167 DIAMOND AIRCRAFT INC DA40 TACH 114.7 TSNEW 114.7

Pg 1 / 1

Engine: Lycoming IO-360-M1A, S/N L-35926-51

> Performed 100 Hr. inspection using Diamond DA 40 MM 05-28-00, 05-28-50 Maintenance checks as a guide. Applicable AD's have been reviewed thru 7/11/2016. See engine AD listing for details.

> Cylinder comps: #1-79/80, #2-72/80, #3-77/80, #4-78/80.

> Drained engine oil. Took sample. Filter inspection satisfactory. Installed CH48110-1 filter. Serviced with 7 qts. Aeroshell 15W-50. Ground run and leak check ok.

> Complied with AD 2015-15-07 Fuel Injector lines per SB 342G. No defects noted. Next due 214.7 or next injector maintenance, whichever occurs first.

> Tightened all rocker cover screws.

> Removed exhaust system complied with power flow systems ICA inspection. Reinstalled exhaust with new gaskets. IAW ICA report number PFS-15250-00 no defects noted at this time.

> Installed P/N P5000 oil quick drain. No leak noted.

The work identified above was performed in accordance with current Federal Aviation Regulations and current manufacturers manuals and is approved for return to service. Pertinent details on file at this repair station under above referenced work order.

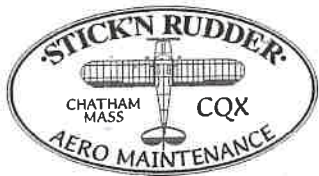
I certify that this Engine has been inspected IAW a 100 Hour Inspection and has been found to be in Airworthy condition.

Signed: CRS# 6LVR604C Charlie Schoenduby

Section 3A: Engine Service and Maintenance Log

DATE / /	TIME RUN		TIME SINCE OVERHAUL		CYCLES		INSTALLATIONS, INSPECTIONS	LICENCE: AME or AMO/ACA
	HOURS	min	HOURS	min	Sub Total	TOTAL		
<div><div><div>JOHNSON AVIATION 353 Airport Tyler, Texas 75704</div><div><div>1. Installed SAFE-HEET engine pre-heater on the oil pan. PN. 700.</div><div>Rex Johnson A&P 3129314 IA</div></div></div><div><div>Date: 7/26/2016 HM: 173.2</div></div></div>								<div><div>STICK'N RUDDER CHATHAM MASS CQX AERO MAINTENANCE 508-945-5747</div><div>Sept 27, 2017 N464DS Diamond DA-40XLT Tach / HM: 0209.7</div><div>1) Engine oil drained & sample taken and sent to Blackstone Labs for analysis 2) Oil filter removed and cut-open, contents show normal wear 3) Replaced broken Power Flow Exhaust system rubber support hangar w/new 4) New Tempest AA48110 oil filter installed, torqued and safety wired 5) Engine serviced with 7qts Aeroshell 15W50 oil 6) Engine test run and leak checked - all normal</div><div>Aircraft approved for return to service Timothy P. Howard A&P/IA 2854191</div></div> <div>Engine Entry</div> <div>Chatham Municipal Airport. 240 George Ryder Rd. Chatham, MA 02633 Tel (508) 945-5747, Fax (508) 945-9599. sticknrudderaero@comcast.net Visit us on the web at www.chathamairport.com</div>
<div><div><div>JOHNSON AVIATION 353 Airport Dr. Tyler, Texas 75704</div><div><div>1) Change oil and filter. Serviced with Aeroshel W100l and an AA48110-2 filter.</div><div>Rex Johnson A&P3129314IA</div></div></div><div><div>Date: 10/03/2016 Tach: 195.0</div></div></div>								<div><div>N464DS ENGINE LYCOMING IO-360-M1A Dec. 28, 2017 Tach 254.3 TT ENG Changed oil and filter, P/N AA48110-2. Took oil sample and sent to AOA for analysis. Installed 6.5 quarts of Phillips 20w50 and 1 pint CamGuard. Hector Brown AP2731870IA</div></div>
<div><div><div>JOHNSON AVIATION 353 Airport Rd. Tyler Texas 75704</div><div><div>N464DS Eng. Log Performed an annual inspection IAW Diamond Acft. AMM 05-20-00section 4. A (1) 1-39. and accomplished the following: 1. Compression Ck.1) 76 2. 75 3. 78 4. 75/80. 2. Changed oil and filter. Serviced engine with 8qts Shell 15W50 and a CH48110-1 filter. 3. C/W AD 2015-19-07 by inspection of fuel lines and clamps. Found okay. 4. Removed cleaned and gapped spark plugs. Reinstalled plugs. 5. Removed exhaust system to C/W MM PFS-15250-00. Reinstalled exhaust with new gaskets. 6. Removed and cleaned fuel injector nozzles. 7. Checked timing on magnetos. Complete AD list is in the Log Folder. All applicable Ads complied with. I certify this engine has been inspected in accordance with an annual inspection and was found to be in airworthy condition.</div><div>Rex Johnson A&P3129314IA</div></div></div><div><div>Date: 7/12/2017 Hour Meter: 242.4 Engine TTSN: 185.8</div></div></div>								<div><div>N464DS ENGINE LYCOMING IO-360-M1A June 14, 2018 Tach 304.1 TT ENG Changed oil and filter, P/N AA48110-2. Took oil sample and sent to AOA for analysis. Installed 6 quarts of Phillips 20w50 and 1 pint CamGuard. Hector Brown AP2731870IA</div></div>
<div><div>THIS PAGE TOTALS</div><div>PREVIOUS TOTALS</div><div>TOTALS SINCE NEW</div></div> <div>CARRY FORWARD to Top of Next Page</div>								

Section 3A: Engine Service and Maintenance Log



508-945-5747

September 05-2018
N464DS
Diamond DA40 S/N 40.1167
Hobbs: 424.8
TTE: 326.3

Lycoming IO-360-M1A S/N L-35926-51E

Engine Entry

Chatham Municipal Airport. 240 George Ryder Rd. Chatham, MA 02633
Tel (508) 945-5747, Fax (508) 945-9599. sticknrudderaero@comcast.net
Visit us on the web at www.chathamairport.com

ANNUAL INSPECTION: c/w Diamond DA40 Series MM Scheduled Maintenance Checks, Section 05-28 & FAR 43 Appendix D.
All scheduled servicing & lubrication performed per service manual instructions. In addition the following items were accomplished:

- 1) Cylinder compression test - #1 60/80, #2 74/80, #3 74/80, #4 74/80- all within limits.
- 2) Oil drained; filter removed and cut-open, contents show normal wear.
- 3) Oil sample taken & sent to Blackstone Labs for analysis. Copy of report placed in ship records.
- 4) New AA48110-2 Oil filter installed, torqued, and safety wired.
- 5) Engine serviced w/7qts Phillips 20W50 oil and appropriate ratio of Camguard.
- 6) R&R Spark Plugs P/N REM38E (x8) & new gaskets P/N M674
- 7) Ignition wire terminal end insulators & springs cleaned before re-install.
- 8) Fuel injectors removed, cleaned in Hoppes #9, reinstalled and torqued.
- 9) Magneto to engine timing verified correct.
- 10) Cleaned, dried, and oiled induction air filter
- 11) R&R Cylinder #1, #2, & #3 Valve cover gaskets w/ new P/N SL12032-SC
- 12) Removed, Inspected, and reinstalled exhaust PFS. Installed new Exhaust gaskets P/N 77611 (x4)
- 13) Repaired oil leak at Cylinder Drain back Lines as needed. All hose clamps properly secured.
- 14) All ADs thru issue 2018-15 checked and complied with. New current complete AD compliance list printed out and placed in ship records.
- 15) AD 2015-19-07 Fuel injector lines - C/W By visual inspection TSMOH 326.3. Next due at 100 HR or any maintenance where any clamp on a fuel injector is disconnected. Next Due TSMOH 426.3
- 16) Engine cleaned/degreased, dried and controls re-lubricated.
- 17) Engine test run & all systems ops & leak checked - all normal.

I certify that this ENGINE has been inspected in accordance with an ANNUAL INSPECTION & was determined to be in an airworthy condition at this time. Engine is approved for return to service

Timothy P. Howard A&P/IA 2854191

N464DS ENGINE LYCOMING IO-360-M1A
April 4, 2019 Tach 375.5 TT ENG
Changed oil and filter, P/N AA48110-2. Installed 7 quarts of Phillips 20w50 and 11.6oz of CamGuard.
Hector Brown AP2731870IA

N464DS ENGINE LYCOMING IO-360-M1A
June 5, 2019 Tach 406.0 TT ENG
Changed oil and filter, P/N AA48110-2. Installed 7 quarts of Phillips 20w50 and 11.6oz of CamGuard.
CW AD15-19-07 by inspection of fuel injector lines Per AD, next due 100 hrs.
Hector Brown AP2731870IA



508-945-5747

October 4, 2019
N464DS
Diamond DA40 S/N 40.1167
TTE: 0426.8

Lycoming IO-360-M1A S/N L-35926-51E

Engine Entry

Chatham Municipal Airport
Tel (508) 945-5747, Fax (508) 945-9599. sticknrudderaero@comcast.net
Visit us on the web at www.chathamairport.com

ANNUAL INSPECTION: c/w Diamond DA40 Series MM Scheduled Maintenance Checks, Section 05-28 & FAR 43 Appendix D.
Scheduled servicing & lubrication performed per maintenance manual instructions. The following items were also accomplished:

- 1) Cylinder compression test - #1 12/80, #2 74/80, #3 77/80, #4 73/80
 - a. Removed #1 Cylinder for repair to Pine Mountain Aviation, Danbury CT.
 - b. Reinstalled repaired Cylinder with same SN: PMA2660 cylinder. See yellow tag dated 9/17/2019. Attached
- 2) Oil drained; filter removed and cut-open, contents show normal wear.
- 3) Oil sample taken & sent to Blackstone Labs for analysis. Copy of report placed in ship records.
- 4) New AA48110-2 Oil filter installed, torqued, and safety wired.
- 5) Oil suction screen removed, inspected and reinstalled. No contaminants. New AN900-16 crush gasket. Safety wired.
- 6) Engine serviced w/7qts Phillips 20W50 MINERAL oil and appropriate ratio of Camguard.
- 7) Spark plugs cleaned, inspected, tested and reinstalled with new M674 copper gaskets.
- 8) Ignition wire terminal end insulators & springs cleaned before re-install.
- 9) Fuel injectors removed, cleaned in Hoppes #9, reinstalled and torqued.
- 10) Magneto to engine timing verified correct per Lycoming specification.
- 11) Cleaned, dried, and oiled induction air filter.
- 12) R&R Cylinder #1, #3 Valve cover gaskets w/ new SL75906 cork gaskets.
- 13) Removed, Inspected, and reinstalled PowerFlow exhaust per PFS 15250-00 Rev. E
 - a. Installed new Exhaust gaskets P/N 77611 (x4)
 - b. Slip joints lubed with copper anti-seize.
 - c. No defects found with exhaust system. OK for continued service.
- 14) Tightened all oil return drain back line hose clamps as needed, Cylinders 1-4.
- 15) C/W Lycoming MSB342G with M1A Supplement 1 (fuel injector lines). No defects noted.
- 16) Replaced Alternate Air Valve body with new D41-7166-20-30. Connected and adjusted for proper operation.
 - a. Ops check of alternate air valve shows expected RPM change. OK for service.
- 17) Trimmed ends/refit cooling scat hoses for alternator and battery at cowl plenum. OK for continued service.
- 18) All ADs thru issue 2019-18 checked and complied with. New AD compliance list printed out and placed in ship records.
- 19) AD 2015-19-07 Fuel injector lines C/W By visual inspection at reassembly of #1 cylinder. Next due 0526.8 OR maintenance of any fuel injector line clamps/fuel injector line removal.
- 20) Engine cleaned/degreased and blown dry.
- 21) Engine test run & all systems ops & leak checked - all normal.

I certify that this ENGINE has been inspected in accordance with an ANNUAL INSPECTION & was determined to be in an airworthy condition at this time. Engine is approved for return to service,

Seth E. Dietrich A&P/IA 3212640

January 20, 2020 N464DS Hobbs: 426.8
1. Changed oil and filter, filter inspection normal, installed new CH48110-1 filter, serviced sump with 7qts. Aeroshell 15W50 oil.
2. Compression test: #1-79/80, #2-75/80, #3-79/80, #4-78/80.
3. Removed and replaced #2, #3, and #4 induction gaskets and o-rings with new P/N 71973, 77569.
My signature constitutes approval for return to service of this aircraft ONLY FOR THE WORK I HAVE PERFORMED. I have not performed nor been authorized to perform any inspection of this aircraft nor have I reviewed or been authorized to review the maintenance records, including Part 39 compliance.



Legacy Air, Inc
11905 Corporate Way
Broomfield, CO 80021
303-404-0277

Curt Lee Power
A&P 2882132

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Avflight Rochester Corporation
1205 Scottsville Rd.
Rochester, NY 14624 CRS J22R845J

Reg. #	S/N	Hobbs	Type	Date	W/O#
N464DS	40.1167	918.1	DA 40	05/20/2021	21-01032

Lycoming IO-360- M1A S/N L35926-51E

- 100 Hour inspection due. C/A Performed 100 hr. inspection IAW Diamond DA 40 AMM 05-28-00, and 05-28-50. I certify that the aircraft has been inspected IAW a 100 hr. inspection and was determined to be in airworthy condition.
- AD research due. C/A Performed AD research through 2021-10.
- Engine oil and filter change due. C/A Drained oil hot. Removed, inspected and replaced oil filter with new P/N 48110-2filter. Sample taken. Serviced engine with 8 qts Phillips XC 20W50 oil. Ran engine with no leaks noted.
- Engine compression test due. Performed engine compression test as required. Values as follows: #1 79/80 #2 76/80 #3 74/80 #4 75/80.
- AD 2015-19-07 fuel injector line inspection due. C/A C/W AS 2015-19-07 visual inspection of fuel injector lines and clamps IAW Lycoming MSB 342G. No defects noted. Next due 1028.1 ACTT.
- Battery and Alternator SCAT tubing torn and worn. C/A Removed and replaced SCAT tubing for battery and alternator cooling as required.

All work performed IAW current FAA regulations and current manufacturers technical data. The article is airworthy with respect to the work above. For details of work performed see WO# 21-01032 on file with this repair station.

Signed Hadrian Dailey Hadrian Dailey CRS J22R845J

Reg #:	Make:	Model:	Engine
N464DS	Diamond	DA40	
AC S/N: 40.1167	ACTT: 976.3	Hobbs:	Tach:
M/N:	S/N:	TSO:	TSN:
1. Drained engine oil, removed oil filter, and cut open with no defects noted. Installed new oil filter P/N AA48110-2 and added 8 qts of Phillips XC 20W-50 oil. Ran engine with no leaks noted.			
All work performed IAW current FAA regulations and current manufacturers technical data. The article is airworthy with respect to the work above.			
Signature: <u>David McBride</u> Date: 06/14/2021 Work Order: 21-01064			
For: Avflight Rochester Corporation CRS J22R845J 1205 Scottsville Rd Rochester, NY 14624			

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Reg #:	Make:	Model:	Engine
N464DS	Diamond	DA40	
AC S/N: 40.1167	ACTT: 1012.6	Hobbs:	Tach:
M/N: IO-360-M1A	S/N: L-35926-51E	TSO:	TSN:
1. Performed 100hr inspection IAW Diamond DA40 AMM 05-28-00 and 05-28-50. AD research has been completed up to and including bi-weekly 2021-14.			
2. Drained engine oil, removed oil filter/screen, and inspected with no debris noted. Installed new oil filter P/N AA48110-2 and 8qts of Phillips XC 20W-50 oil. Ran engine with no leaks noted.			
3. Performed engine compression check with results as follows #1-74/80 #2-74/80 #3-78/80 #4-75/80			
4. C/W AD 2015-19-07 visually inspected fuel injector lines and clamps IAW Lycoming MSB 342G. No defects noted. Next due at 1122.6hrs.			
I certify that this aircraft has been inspected IAW a 100hr inspection and was found to be in airworthy condition.			
All work performed IAW current FAA regulations and current manufacturers technical data. The work performed above is approved for return to service.			
Signature: <u>David McBride</u> Date: 07/08/2021 Work Order: 21-01078			
For: Avflight Rochester Corporation CRS J22R845J 1205 Scottsville Rd Rochester, NY 14624			



Avflight Rochester Corporation
1205 Scottsville Rd.
Rochester, NY 14624 CRS J22R845J

Reg. #	S/N	Hobbs	Tach	Type	Date	W/O#
N464DS	40.1167	1465.1	1056.5	DA 40	07/30/2021	21-01121

Lycoming IO-360- M1A S/N L35926-51E

1. Oil and filter change due. C/A Drained oil hot. Removed, inspected, and replaced oil filter with new AA48110 filter. Serviced engine with 8 qts. Phillips XC 20W50 oil. Leak and ops check satisfactory.

All work performed IAW current FAA regulations and current manufacturers technical data. The article is airworthy with respect to the work above. For details of work performed see WO# 21-01121 on file with this repair station.

Signed Hadrian Dailey Hadrian Dailey CRS J22R845J

Reg #:	Make:	Model:	Engine
N464DS	Diamond	DA40	
AC S/N: 40.1167	ACTT: 1113.4	Hobbs:	Tach:
M/N: IO-360-M1A	S/N: L-35926-51E	TSO:	TSN:
1. Performed 100hr inspection IAW Diamond DA40 AMM 05-28-00 and 05-28-50. AD research has been completed up to and including Bi-weekly 2021-18.			
2. Performed engine compression check with results as follows #1-65/80 #2- 77/80 #3-77/80 #4-74/80.			
3. Drained oil removed oil filter and cut open with no defects noted. Installed new oil filter P/N AA48110-2 and added 8qts of Phillips XC20W-50 oil. Ran engine with no leaks noted.			
4. C/W AD 2015-19-07 Visually inspected fuel injector lines and clamps IAW Lycoming MSB No.342G. No defects noted. Next due at 1223.4 Hrs.			
5. Removed and replaced worn magneto gaskets with new P/N LW-12681 as required.			
6. Retimed magnetos after replacing gaskets IAW Lycoming Service instruction No. 1437. Ran engine with no defects noted.			
I certify that this aircraft has been inspected IAW a 100hr inspection and was found to be in airworthy condition.			
All work performed IAW current FAA regulations and current manufacturers technical data. The work performed above is approved for return to service.			
Signature: <u>David McBride</u> Date: 09/01/2021 Work Order: 21-01155			
For: Avflight Rochester Corporation CRS J22R845J 1205 Scottsville Rd Rochester, NY 14624			



Section 3A: Engine Service and Maintenance Log

Reg #: N464DS
AC S/N: 40.1167
Make: Diamond
ACTT: 1156.3
Model: DA40
Hobbs:
Airframe

- Removed and replaced manifold pressure transducer with serviceable P/N APT-151B-1000-20A for troubleshooting. Test flight required for in flight manifold pressure values.

All work performed IAW current FAA regulations and current manufacturers technical data. The article is airworthy with respect to the work above.
For details of work performed, see workorder on file with this Repair Station.

Signature: *[Signature]* David McBride Date: 09/28/2021 Work Order: 21-01188
For: Avflight Rochester Corporation CRS J22R845J
1205 Scottsville Rd
Rochester, NY 14624

AVFLIGHT

Engine

Reg #: N464DS
AC S/N: 40.1167
M/N: IO-360-M1A
Make: Diamond
ACTT: 1210.3
S/N: L-35926-51E
Model: DA40
Hobbs:
TSO:
Tach:
TSN:

- Performed Annual inspection IAW Diamond DA40 AMM 05-28-50 and 05-28-00. AD reseach completed up to and including bi-weekly 2022-02.
- Performed engine compression check with reults as follows. #1-72/80 #2-76/80 #3-77/80 #4-76/80
- Drained oil, removed oil filter, and cut open with no defects noted. Add 8 qts of Phillips XC 20W-50 oil. Installed new oil filter P/N AA4810-2 and ran engine with no leaks noted.
- C/W AD2015-1907 visual inspection of fuel injector lines and clamps with no defects noted. Next due 1320.3
- Timed LH magneto to 25 degree IAW Lycoming Service instruction SI 1437.
- Tightened and secured oil fill tube with safety wire.
- Tightened oil return drain lines. Ran engine with no leaks noted.

I certify that this aircraft has been inspected IAW an Annual inspection and was found to be in airworthy condition.

All work performed IAW current FAA regulations and current manufacturers technical data. The work performed above is approved for return to service.
For details of work performed, see workorder on file with repair station.

Signature: *[Signature]* David McBride Date: 01/25/2022 Work Order: 22-01215
For: Avflight Rochester Corporation CRS J22R845J
1205 Scottsville Rd
Rochester, NY 14624

AVFLIGHT

ENGINE MODEL:
IO-360-M1A
ENGINE S/N: L-35926-51E
REG. NO: 464DS
WORK ORDER:
9701-02-2022

Premier
Aircraft Service

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

DATE: 2/14/2022
A/C TSN: 1218.7
ENG TT: 1218.7
TACH: 1218.7

Engine Entries

(2) PERFORMED PRE BUY EVALUATION AND PROVIDED CUSTOMER WITH LIST OF DISCREPANCIES. ENG CYLINDER COMPRESSIONS: 65-70-75-75/80 IAW IO-360 MM.
(16) C/W LYCOMING SB 612 OIL LEVEL DIPSTICK. REPLACED WITH NEW P/N LW14760.
(20) REMOVED LH MAG PN 4347 SN 12090625 & INSTALLED OVERHAULED MAG PN 4347R SN J-11063. REMOVED RH MAG PN 4370, SN 20120239 & INSTALLED OVERHAULED MAG PN 4370R SN K-01389 IAW IO-360 OM.

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DATE: 2/14/2022

SIGNED: *[Signature]*

Work Order: 9701-02-2022

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CRS 9PRR402B

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

DATE: JANUARY 4, 2023 | LYCOMING IO-360-M1A | S/N: L-35926-51A | REG: N464DS

TACH: 1040.3 HRS. TTE: 1040.3 HRS. TSMOH: N/A
1305.0 1305.0

ANNUAL INSPECTION COMPLETED THIS DATE IN ACCORDANCE WITH DIAMOND AIRCRAFT DA40 AMM, INSPECTION CHECKLIST, AND LYCOMING ENGINE REPAIR MANUAL.

CHECKED AD'S THROUGH BI-WEEKLY 2023-01

AD 15-19-07 INSPECTION OF EXTERNAL FUEL INJECTOR LINES COMPLIED WITH FOLLOWING LYCOMING ENGINES MSB NO. 342G, DATED JULY 16, 2013. REINSPECT AFTER ANY MAINTENANCE IS DONE WHERE ANY CLAMP ON A FUEL INJECTOR FUEL LINE WAS DISCONNECTED, MOVED, OR LOOSENED AND WITHIN EVERY 110 HOURS TIS AND AFTER EACH ENGINE OVERHAUL. NO FAULTS NOTED.

COMPRESSIONS: 1). 78/80, 2). 74/80, 3). 79/80, 4). 71/80.

PERFORMED OIL CHANGE.
CUT OIL FILTER, NO METAL NOTED.
COLLECTED OIL SAMPLE FOR ANALYSIS TO BE COMPLETED BY BLACKSTONE LABORATORIES.
SERVICED ENGINE WITH EIGHT QUARTS PHILLIPS 66 X/C AVIATION OIL 20W-50.
REPLACED OIL FILTER, P/N:(AA48110-2).
REPLACED FLY WHEEL TEETH RING.

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

[Signature]
TIMOTHY D JORDAN

A&P/IA 3264477

Topflight Aircraft Maintenance
48162 F Street
Belleville Michigan 48111
517 320-0893

Make: Diamond (Austria)
Model: DA 40
Tail: N464DS
S/N: 40.1167

Hours: Tach: 1339.3

Reported 250 RPM mag drop. Troubleshoot. Removed spark plugs and found worn and Out of limits. Checked timing. L mag 20° R mag 22°. Adjusted to 25° per lycoming dataplate. Installed 8 new spark plugs P/N: REM38E. Installed new owner supplied CHT probe P/N: 1020061 S/N: RC2303827 in #4 cyl. OP CK Good. -----End-----

Signed: *[Signature]*
Name: Patrick Stewart

Cert: A&P 3103433 IA
Date: 07/07/2023



Air America Aviation Services
28331 Lemoyne Rd
Millbury OH 43447
800-942-4723 (419) 837-2602

Make: DIAMOND AIRCRAFT IND INC
Model: DA 40
Tail: N464DS
S/N: 40.1167

Hours: Hobbs:1888.9

Drained oil. Removed, and replace oil filter with new AA48110-2. Removed, inspected, cleaned, reinstalled, and safety suction oil screen. Serviced engine with 8 quarts of AeroShell W15W50. Removed, cleaned, gapped, tested, rotated, and reinstalled spark plugs. Remove and replace starter with new 149NL/EC SN#: H-X011228. Run up, leak check and operational check completed. I certify that this Engine has been determined to be in airworthy condition and returned to service on this date and total time.-----END-----

Signed:
Name: James Miller

Cert: A & P 3558606 IA
Date: 07/25/2023



Air America Aviation Services
28331 Lemoyne Rd
Millbury OH 43447
800-942-4723 (419) 837-2602

Make: DIAMOND AIRCRAFT IND INC
Model: DA 40
Tail: N464DS
S/N: 40-1167

Hours: Hobbs:1993.7

Drained oil. Removed, cleaned, installed and Safety reusable oil filter. Removed, inspected, cleaned, reinstalled, and safety suction oil screen. Serviced engine with 8 quarts of AeroShell 15W50. Removed, cleaned, gapped, tested, rotated, and reinstalled spark plugs. Run up, leak check and operational check completed. I certify that this engine has been determined to be in airworthy condition in regards to the work completed and returned to service on this date and total time.-----END-----

Signed:
Name: James Miller

Cert: A & P 3558606 IA
Date: 11/14/2023

GRIFFING
FLYING SERVICE

3255 E. State Rd. Port Clinton, OH 43452
Phone: 419-734-5400 Text: 419-210-1892
flygriffing.com

12/1/2023 N464DS HOBBS 1994.8 TACH N/A SMOH N/A
TTE N/A

RIGHT MAGNETO INOPERATIVE. INSTALLED RIGHT MAGNETO P/N 4370, S/N 18091176, OVERHAULED BY QUALITY AIRCRAFT ACCESSORIES, FAA CRS (QYIR334Y), UNDER WORK ORDER 090478. INSTALLED 2 NEW SCREWS ON LEFT MAGNETO HARNESS COVER. ENGINE TEST RUN AND LEAK CHECK PERFORMED, NO DEFECTS NOTED. ALL ABOVE WORK PERFORMED IN ACCORDANCE WITH THE LYCOMING IO-360 MAINTENANCE MANUAL, AIRCRAFT APPROVED FOR RETURN TO SERVICE.

I certify that only the work performed has been inspected
and returned to service in an airworthy condition.

AP4891517 IA



Air America Aviation Services
28331 Lemoyne Rd
Millbury OH 43447
800-942-4723 (419) 837-2602

Make: DIAMOND AIRCRAFT IND INC
Model: DA 40
Tail: N464DS
S/N: 40.1167

Hours: Tach: 2042.6 ETT: 2042.6

Inspected Engine per Diamond Aircraft 100HR / Annual inspection check list and FAR 43 Appendix "D" in scope and detail. Compression check as follows #1: 69/80E #2: 70/80 #3: 72/80E #470/80. #3 exhaust flange leaking. Removed entire exhaust system. Exhaust pipe at muffler has cracks in the welds. Welded exhaust. Installed exhaust back on engine with new gaskets and mounting hardware. #2 cylinder hold down nuts on backwards. Removed nuts installed correctly and torque to spec. Both mags out of time. Reset timing to 25 degrees. Alternator belt loose. Threads gone on alternator. Drilled and installed 5/8 bolt with lock washer and lock nut with the belt tight. Replaced -12 sceet hose from muffler shroud to cabin heat valve. Throttle rod at servo has the wrong washer stack. Reworked the stack to be correct. Drained oil. Removed, cleaned, reinstalled and safety reusable oil filter. Removed, inspected, cleaned, reinstalled, and safety suction oil screen. Serviced engine with 8 quarts of AeroShell 15W50. Removed, cleaned, gapped, tested, rotated, and reinstalled spark plugs. Completed AD check and compliance thru 24-04. All AD's current as of this date and total time. I certify that this engine has been inspected in accordance with an 100 hr / annual inspection and was determined to be in airworthy condition and returned to service on this date and total time.-----End-----

Signed:
Name: Jonah T. Neary

Cert: A&P 3870576 IA
Date: 04/08/2024



Air America Aviation Services
28331 Lemoyne Rd
Millbury OH 43447
800-942-4723 (419) 837-2602

Make: DIAMOND AIRCRAFT IND INC
Model: DA 40
Tail: N464DS
S/N: 40-1167


Hours: Hobbs:2086.4

Drained oil. Removed, cleaned, installed and Safety reusable oil filter. Removed, inspected, cleaned, reinstalled, and safety suction oil screen. Serviced engine with 8 quarts of AeroShell 15W50. Run up, leak check and operational check completed. I certify that this engine has been determined to be in airworthy condition in regards to the work completed and returned to service on this date and total time.-----END-----

Signed:
Name: James Miller

Cert: A & P 3558606 IA
Date: 05/21/2024

Section 3B: Record of Engine Airworthiness Directives (A/D) and Service Bulletins

DATE	A/D, S/B, S/I, MODS	DETAILS OF REPAIRS, ADJUSTMENTS, MODIFICATIONS
/ /		
<div data-bbox="303 378 512 417" data-label="Image"> </div> <div data-bbox="173 436 663 489" data-label="Text"> <p>DIAMOND AIRCRAFT INDUSTRIES INC. D.O.T. APPROVED MANUFACTURER #161-93</p> </div> <div data-bbox="740 434 1118 560" data-label="Text"> <p>Registration: N464DS AC Serial Number: 40.1167 Engine Serial Number: L-35926-51E Prop Serial Number: NS1095B Engine Total Time: 4.0 hrs</p> </div> <div data-bbox="197 579 1272 833" data-label="List-Group"> <ul style="list-style-type: none"> ▪ Total Time Engine Brought forward from Flight Test Journey Log (DAI - Form Q-157): 4.0 hrs ▪ Engine installed new on Aircraft DA 40, S/N: 40.1167 ▪ The following STC's are incorporated: <ul style="list-style-type: none"> ○ SA02476CH-D -- Hartzell: HC-C2YR-1N/N7605 installation ○ SA03281AT - POWER FLOW EXHAUST: installation ▪ Bi-weekly AWD check carried out to current revision 2012-23, all applicable AD's complied with, see attached ▪ The work described above was carried out IAW the applicable Standard of Airworthiness. </div> <div data-bbox="204 892 660 982" data-label="Text"> <p>  Inspector </p> </div> <div data-bbox="528 976 912 1005" data-label="Text"> <p>(Intentionally left blank below this point)</p> </div> <div data-bbox="954 894 1123 936" data-label="Text"> <p>NOV 30 2012</p> </div> <div data-bbox="1000 951 1054 974" data-label="Text"> <p>date</p> </div>		