

ENGINE S/N
L-34378-51E

AIRCRAFT TECHNICAL LOGS

Section 3. ENGINE



Federal Aviation Administration

No. E 419499

The United States of America
Department of Transportation
Federal Aviation Administration
Washington D.C.

Export Certificate of Airworthiness

This certifies that the product identified below and particularly described in Specification(s)¹ of the Federal Aviation Administration, Numbered **1E10** has been examined as of the date of this certificate, is considered airworthy in accordance with a comprehensive and detailed airworthiness code of the United States Government, and is in compliance with those special requirements of the importing country filed with the United States Government except as noted below. This certificate in no way attests to compliance with any agreements or contracts between the vendor and purchaser, nor does it constitute authority to operate an aircraft.

Product: **Aircraft Engine**

Manufacturer: **Lycoming Engines**

Model: **IO-360-M1A**

Serial No: **L-34378-51E**

New: Newly overhauled:

Used aircraft:

Country to which exported: **Canada**

Exceptions: None

F.H. Hill, Jr.

Signature of Authorized Representative

July 07, 2008

Date

ODARF830878NE

District Office or Designee Number



¹ For complete aircraft, list applicable specification or type certificate data sheet numbers for the aircraft, engine, and propeller. Applicable specifications or type certificate data sheet, if not attached to this export certificate, will have been forwarded to the appropriate governmental office of the importing country.

NOTE: Form to be used on all New, Overhauled, Rebuilt Engine Models.

ENGINE LOG

1. Make LYCOMING
2. Model IO-360-M1A
3. Specification IE10
4. Manufacturer's Serial Number L-34378-SIE
5. Date of Manufacture _____
6. Aircraft Inspection Cycle _____

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

DATE	TIME RUN		TIME SINCE OVERHAUL	
	HRS.	MIN.	HRS.	MIN.
			0	0
SEPT 19 2008			8	0

ENGINE INSTALLED NEW ON DA 40 S/N 40

Engine installation inspected I.A.W. Diamond Aircraft Industries Inc.
 DA 40 - XLS W.I.S. Rev: Y Form ME-01-A

Engine service with 8 qts. Of Philips 20W50 Type "M" engine oil.

Engine break-in I.A.W. Lycoming Service Instruction 1427B

FLIGHT TEST COMPLETED

HOURS BROUGHT FORWARD

N891KC Engine
 Model: IO-360-M1A
 S/N: L-34378-51E
 Date: 24 February 2009



Hobbs Time: 20.0
 Tach Time: 14.8
 Total Time: 14.8
 Work Order: QA

AD 2009-02-03 effective date 9 February 2009, Precision Airmotive fuel servo. Found AD is not applicable by part number of gasket installed. Previous compliance with AD 2008-08-14 documented in log book entry dated 9/19/08 TT 8.0 hours. Fuel servo (P/N 61J22633 S/N 70D01503) plug P/N 383493 is stamped with the letter 'G' on face indicating new hex plug gasket P/N 2577258 is installed. No further action required.

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 *James Swartz* Olathe KS 66062 (913) 782-0530 FAA Repair Station #AMR171C

N891KC Engine
 Model: IO-360-M1A
 S/N: L-34378-51E
 Date: 4 June 2009



Hobbs Time: 30.7
 Total Time: 23.6
 Tach Time: 23.6
 Work Order: S-09-00175

Complied with 25 hour inspection in accordance with DA 40 AMM 05-10-00. Drained oil and replaced filter, installed new filter P/N CH48110-1 and added 8 quarts of Aeroshell 100 Mineral oil. Cut open old filter, no abnormal indications noted. Accomplished satisfactory operational checks. Ground run good, no leaks noted.

I certify that this Engine has been repaired/inspected and is determined to be in airworthy condition. Pertinent details are on file under the above work order.
 Signed *James Swartz* Olathe KS 66062 (913) 782-0530 FAA Repair Station #AMR171C

CROSSVILLE AERO LLC, 2409 Sparta Highway, Crossville TN 38572
 N891KC Date 07-07-09 HOBBS 63.9
 Drained oil and filled with 7 Qts Aeroshell 15W-50. Replace oil filter with new CH48110-1. Cut open old filter with normal findings. Run up and check for leakage was okay. Returned to service.
 Chris A. Haerr AP343403475IA *Chris A Haerr*

TOTAL THIS PAGE		
TOTAL FROM PREVIOUS SUMMARY		
TOTAL SINCE MFG.		

CARRIED FORWARD

REPAIRS, ADJUSTMENTS, MODIFICATIONS
ENTRIES. DRAW A DIAGONAL LINE THROUGH ANY UNUSED LINES IN DATE AND TIME COLUMNS.

SIGNATURE

LICENCE
NUMBER

DA
Q 20

DA
Q 20

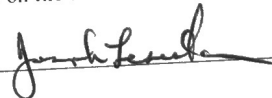
Model IO-360-M1A
S/N # L-34378-51E
Reg.# N891KC
TAT: 92.9

Atlanta Turbine Management
1951 Airport Rd, Suite 121
Atlanta, Georgia 30341

Date: 09/18/09
Tach 92.9
TSN 92.9
WO # 6088

- ◆ C/W Annual / 100 Hour Inspection IAW Diamond DA40 Series Inspection Program.
- ◆ Compression check as follows #1 78 #2 77 #3 78 & #4 77.
- ◆ Drained engine oil & inspected filter. Serviced with 8 quarts Aeroshell 15w50 & new Champion 48109-1 filter.
- ◆ Ground runs accomplished and leak checked satisfactory.

This aircraft and or component identified above was repaired and inspected in accordance with current federal air regulations and was found to be airworthy for return to service. Pertinent details are found on file under invoice number.



1A138745785

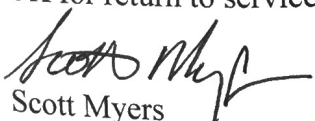
CROSSVILLE AERO LLC, 2409 Sparta Highway, Crossville, TN 38572 (931)484-5016
N891KC Date 12-08-09 Tach 0141.5
Changed oil and filled with 8 Qts Aeroshell 15 W 50. New oil filter CH48110-1 installed.
Old filter cut open with normal findings. No leaks noted on run up. Ok for return to service.



Scott Myers AP408889702IA

CROSSVILLE AERO LLC, 2409 Sparta Highway, Crossville TN 38572
N891KC Date 04-13-10 Tach: 189.4 Hobbs: 226.5

Drained oil and filled with 8 Qts Aeroshell 15W-50. Replace Champion CH48110-1 oil filter. Cut open old filter with normal findings. Run up and check for leakage was okay.
OK for return to service.



Scott Myers
AP3467514IA

BROUGHT FORWARD

HRS. MIN. HRS.

CROSSVILLE AERO LLC, 2409 Sparta Highway, Crossville TN 38572
N891KC Date 7-28-10 Tach: 235.5

Drained engine oil. Replaced Champion CH48110-1 oil filter. No metal noted when oil filter cut open. Added 8 qt Aeroshell 15W50 oil. No leaks noted. OK for return to service.

Scott Myers AP3467514IA *Scott Myers*

MODEL: DA-40
S/N: 40.991
REG. No: N891KC

CFM
CORPORATE FLIGHT MANAGEMENT

276 Doug Warpoole Road
Smyrna, TN 37167
615.534.4600

DATE: 10-01-2010
HOBBS: 347.2
TACH: 294.1

Engine L-34378-51E

Inspection:

- Complied with Annual inspection IAW AMM 5-00.
- Complied with cylinder compression check #1) 76/80, #2) 77/80, #3) 78/80, #4) 74/80

AD's:

- AD 2008-14-07 (To Prevent the Failure of the Fuel Injector Lines) CW by visual inspection of the fuel injector lines, IAW Lycoming SB 342E. **Next due: TACH 394.1**
- AD 2009-02-03 (To Prevent a Lean running engine) PCW at previous date.

Maintenance Accomplished:

- Performed Oil change IAW AMM 12-00. Drained oil and removed oil filter, cut open filter, no metal particles found. Serviced With 7 quarts of Aeroshell 15W50 and oil filter AA48108-2. Run up performed, no leak noted at this time.
- Removed, cleaned, inspected, and reinstalled all 8 spark plugs, IAW AMM 12-00.

I certify that this Engine has been inspected in accordance with an Annual Inspection, was found to be in airworthy conditions, and is approved to return to service.

Signed: *William R. Shaffer* ATP 3450302IA
William R. Shaffer A & P 3450302IA

CROSSVILLE AERO LLC, 2409 Sparta Highway, Crossville TN 38572
N891KC Date: 1-20-11 Tach: 336.9 Hobbs: 397.5

Change oil. Replace CH 48110-1 Champion oil filter. Added 8 Qt 15w50 Aeroshell. Completed 50 Hr maintenance check per Diamond service manual. Replaced heat damaged muffler insert. No leaks noted on run up. OK for return to service.

Scott Myers
Scott Myers
AP 3467514 IA

CROSSVILLE AERO LLC, 2409 Sparta Highway, Crossville TN 38572
N891KC 5-5-11 Tach: 386.6

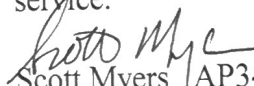
Change oil. Replaced CH48110-1 Champion oil filter. Cut filter open -no contaminants noted. Added 8 qt Aeroshell 15W50 oil. Perform Diamond 50 hr maintenance inspection. No leaks noted on run up. OK for return to service.

Scott Myers
Scott Myers AP3467514IA
SINCE MFG.


MAINTENANCE RECORD

REPAIRS, ADJUSTMENTS, MODIFICATIONS
 ENTRIES. DRAW A DIAGONAL LINE THROUGH ANY UNUSED LINES IN DATE AND TIME COLUMNS. SIGNATURE LICENCE NUMBER


CROSSVILLE AERO LLC, 2409 Sparta Highway, Crossville TN 38572
 N891KC Date: 6-23-11 Tach: 402.6 Hobbs: 474.2
 Annual inspection completed this date. Performed compression test: #1 78/80 #2 78/80 #3 78/80 #4 79/80. Inspected electrical, vacuum, induction and exhaust systems. Check magneto timing. Cleaned, gaped, tested and rotated spark plugs. Performed ICA on Power Flow Exhaust System per PFS-15250-00. I certify that this engine has been inspected IAW an annual inspection requirements and was found to be in airworthy condition. All A/D's complied with thru Aventext 2011-12. No leaks noted on run up. OK for return to service.


 Scott Myers AP3467514IA

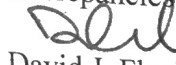
CROSSVILLE AERO LLC, 2409 Sparta Highway, Crossville TN 38572
 N891KC 9-9-11 Tach: 440.5
 Change engine oil. Replaced CH48110-1 Champion oil filter. Added 8 QT Aeroshell 15W50 oil. Wash aircraft. No leaks noted on run up. OK for return to service.


 Scott Myers AP3467514IA

CROSSVILLE AERO LLC, 2409 Sparta Highway, Crossville TN 38572
 N891KC 11/18/11 Hobbs: 576.3
 Performed 50 hour inspection per Diamond DA 40 Service Manual and Lycoming Service Instructions. Drained and replenished engine oil. Serviced with 8 qts. Aeroshell 15W50 and Champion CH48110-1 filter. Cut open old filter and inspected. No metal particles noted. Ground ran aircraft and leak checked with no discrepancies noted. Aircraft eligible for return to service.


 David J. Flockencier A&P 3125724

CROSSVILLE AERO LLC, 2409 Sparta Highway, Crossville TN 38572
 N891KC 03/31/12 Tach: 540.2
 Performed 50 hour inspection per Diamond DA 40 Service Manual and Lycoming Service Instructions. Drained and replenished engine oil with 7 qts. Aeroshell 15W50 and Champion AA48110-2 filter. Cut open old filter and inspected. No metal particles noted. Ground ran aircraft and leak checked with no discrepancies noted. Aircraft eligible for return to service.


 David J. Flockencier A&P 3125724

DATE	TIME RUN		TIME SINCE OVERHAUL		INSTALLATIONS, INSPECTIONS, NOTE: USE BOTH PAGES AND AS MANY LINES AS REQUIRED FOR COM
	HRS.	MIN.	HRS.	MIN.	



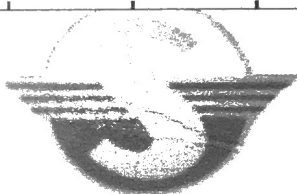
Sterling Flight Training

N891KC

6-04-12 ~~N756DS~~ DA-40 SN: 40.991
 TTE: 569.3 Hobbs: 668.5 TSMOH:N/A
 S/N: L-34378-51E Model: IO-360-M1A

Performed Annual inspection IAW DA40 checklist and FAR's. Checked AD's through this date. AD2011-26-04 CW by visual inspection, no defect noted. AD2012-03-06(C) is N/A by Servo P/N. Compressions: #1 80/80 #2 78/80 #3 80/80 #4 80/80. Drained oil, cut open and inspected filter, no defect noted. Installed new ES48110-1 filter and serviced with 8qts 15W50. Replaced left magneto with new P/N 4347, S/N 08122323. Replaced right magneto with new P/N 4370, S/N 11100601. Checked and adjusted mag timing as required. Replaced all 8 spark plugs P/N REM38E. Replaced dipstick tube gasket P/N AEL72059. Engine run-up, ops and leak check good. I certify this engine has been inspected IAW Annual inspection requirements, is airworthy and approved for return to service.

Hayden Malone
 Hayden Malone IA 3271524



Sterling Flight Training

7-03-13 N212JK DA-40 SN: 40.991
 TTE: 669.5 Hobbs: 801.1 TSMOH:N/A
 S/N: L-34378-51E Model: IO-360-M1A

Performed Annual inspection IAW DA40 checklist and FAR's. Checked AD's through this date. AD2011-26-04 C/W by visual inspection, no defect noted. AD2012-19-01 is N/A by Engine Model #. Compressions: #1 78/80 #2 79/80 #3 78/80 #4 78/80. Drained oil, cut open and inspected filter, no defect noted. Installed new ES48110-1 filter and serviced with 8qts W100+. Checked and adjusted mag timing as required. Cleaned, inspected and gapped spark plugs, Retorqued and safetied dipstick tube, Engine run-up, ops and leak check good. I certify this engine has been inspected IAW Annual inspection requirements, is airworthy and approved for return to service.

Robert D. Mullen
 Robert D. Mullen A&P/IA 2789626

MAINTENANCE RECORD

COMPLETE

REPAIRS, ADJUSTMENTS, MODIFICATIONS
 ENTRIES. DRAW A DIAGONAL LINE THROUGH ANY UNUSED LINES IN DATE AND TIME COLUMNS.

SIGNATURE



8701 Aviation Blvd Concord NC 28027 (704)795-1600

DATE: 08/25/14 REG: N212JK MAKE: DIAMOND MODEL: DA-40
SN: 40.991 TACH: 750.3 HOBBS: 905.7

Performed an annual inspection of this **ENGINE** I/A/W FAR Part 43 Appendix D in scope and detail. Compressions are as follows: 1)78 /80, 2) 78/80, 3) 78/80, 4) 79/80. Drained engine oil. Removed, cut open, and inspected spin on oil filter. Installed new oil filter PN: CH48110-2. Filled crankcase with (8) quarts of Aeroshell oil 15W50. Cleaned, gapped, rotated spark plugs. Ground ran engine and check for leaks and proper operation. I certify this **ENGINE** has been inspected in accordance with an annual inspection and may be returned to service at this time. -END-

Jeffrey M Goodman

Jeffrey M Goodman

3203077 IA



VICTORY LANE AVIATION

9200-B Aviation Blvd, Concord, NC 28027

DATE: 11/11/2015 REG: N212JK MAKE: DIAMOND MODEL: DA 40
SN: 40.991 TACH: 758.2 HOBBS: 917.6 ACTT: 758.2

Performed an Annual / 100 Hr. Inspection on this **ENGINE** I/A/W. Diamond Maintenance Checklist DA- 40. Compressions are as follows: 1)80 /80, 2) 80/80, 3) 80/80, 4) 79/80. Drained engine oil. Removed, cut open, and inspected spin on oil filter. Installed new Tempest oil filter PN: AA48110-2. Filled crankcase with (7) quarts Aeroshell 15W50 oil. Replaced all spark plugs with Tempest P/N: UREM38E. Checked mag timing as needed. AD search found AD's current to date. Ground run engine and check for leaks and proper operation. I certify this **ENGINE** has been inspected in accordance with an Annual inspection and returned to service at this time. -END-

Kevin Stolte

Kevin Stolte

A&P 261759629 IA

MAXIMUM HOURS BETWEEN OVERHAULS _____ HOURS.

RECORD OF ENGINE DIRECTIVES (A/D), SERVICE BULLETINS (S/B),

I, MODS

DETAILS OF



Date: 19 September, 2008 S/N: 40.991 Reg: N891KC
 Engine S/N: L-34378-51E Eng TTSN: 8.0 HRS

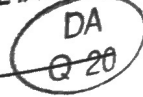
The following S/B and S/I have been carried out as applicable:
 DAI SI 40-005/Lycoming SB 342E/AWD 93-02-05 Fuel Line (stainless steel tube assy) and support clamp Inspection and Installation New – Due every 100 hours.
 SI 40-009(FAA AD 2002-26-01) – Externally mounted fuel injection lines – C/W
 DAI SI 40-010- Repair of certain injection servos – N/A due to S/N of unit.
 MSB 40-009 Improvement of ground-connection to Alternator – N/A by A/C S/N.
 MSB 40-012 Replacement of Mixture Control Cable-N/A as already Incorp.During mfg.
 Precision Airmotive Fuel Servo SB PRS-105 – N/A due to S/N of unit.
 Precision Airmotive LLC MSB-PRS-107 (FAA AD 2008-08-14) – Inspect RSA-5 Servo – Inspection C/W; N/A as Fuel Servo Stamped 'G'. Continued action N/A.
 Textron Lycoming MSB 565 – Replacement of Diaphragm-Type Fuel Pumps P/N LW-15473 with date code of 3201 – N/A as date code does not match installed on this A/C
 Textron Lycoming MSB 548A/DAI SI 40-023 – Diaphragm-Type Fuel Pump – with a date code of 0700 through 0401- N/A as date code does not match installed on A/C
 Textron Lycoming MSB 574A – Cylinder Stud Hole Cross-Threaded – N/A by eng S/N
 Textron Lycoming SB 583A – Verification of Magneto Serial Numbers - N/A by S/N.
Textron Lycoming SB 584A – To be Complied With at 25hrs.
 Textron Lycoming AD 2002-12-07-Prevent Complete loss of engine oil-N/A due to M/N
 FAA AD 2008-08-14/Precision Airmotive LLC MSB-PRS-107 – Inspect RSA-5 Servo – Inspection C/W; N/A as Fuel Servo Stamped 'G'. Continued action N/A.
 FAA AD2008-14-07 – Inspection of injector fuel lines – initial inspection performed by Lycoming I.A.W. SB342E. Next inspection due at 100 hours.

FAA AD2008-19-08 – Inspection of engine cylinder assemblies – N/A; new engine
 Unison Industries SB2-08 – Inspection of Slick 4300 magnetos – NCW; see Lycoming SB 584A.
 Unison Industries SB3-08 – Inspection of Slick 4300 magnetos – NCW; see Lycoming SB 584A.

Bi-weekly AWD check carried out to current revision 2008-20
 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 

Lic or Stamp 

Duplicate Entry - See Front of Log Book *JH* 9/18/09

Model IO-360-M1A
S/N # L-34378-51E
Reg.# N891KC
TAT: 92.9

Atlanta Turbine Management
1951 Airport Rd, Suite 121
Atlanta, Georgia 30341

Date: 09/18/09
Tach 92.9
TSN 92.9
WO # 6088

- ◆ CW Annual / 100 Hour Inspection IAW Diamond DA40 Series Inspection Program.
- ◆ Compression check as follows #1 78 #2 77 #3 78 & #4 77.
- ◆ Drained engine oil & inspected filter. Serviced with 8 quarts Aeroshell 15w50 & new Champion 48109-1 filter.
- ◆ Ground runs accomplished and leak checked satisfactory.

This aircraft and or component identified above was repaired and inspected in accordance with current federal air regulations and was found to be airworthy for return to service. Pertinent details are found on file under invoice number.

James H. ...

IA138745785