

AIRCRAFT TECHNICAL LOGS

Section 3. ENGINE

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

No. E 407314

Export Certificate of Airworthiness

This certifies that the product identified below and more particularly described in Specification (s)¹ of the Federal Aviation Administration, Numbered **1E10** has been examined and 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 these 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-33569-51E**
New Newly Overhauled
Used Aircraft
Country to which exported: **Canada**
Exceptions: **None**


F.H. Hill, Jr.

Signature of Authorized Representative

May 24, 2007

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.

RECORD of ACCESSORIES AND MAJOR PARTS SHIPPED with ENGINE

652 Oliver Street Williamsport, PA 17701 U.S.A.

Model No: **IO-360-M1A**

Serial No: **L-33569-51E**

Enpl: **ENPL-RT10051**

Order No **AB297913**

TC No: **1E10**

Date: **5/24/2007**

Part Name	Part Number	Manufacturer	Serial	Setting
CARBURETOR				
INJECTOR	61J22633	PAM	70BN3409	2576568-1
LT ALTERNATOR				
RT ALTERNATOR	32C19553	KELLY	H025733	
MAGNETO LEFT	66GR25SANN	SLICK	07030216	
MAGNETO RIGHT	66GP-0SANN	SLICK	05010003	
MAGNETO DUAL				
LASER IGN CONT				
STARTER	31B22105	SKY-TEC	F4L-040728	
FUEL PUMP	LW-15473	LYC	4506 D/C	
IGN HARNESS L	67P20429	SLICK		
IGN HARNESS R	67P20428	SLICK		
LASER IGN HARNESS				
SPARK PLUG	1182-E7	Champion		
LT TURBOCHARGER				
RT TURBOCHARGER				
BYPASS VALVE				
DENSITY CONTR.				
PRESS. CONTR.				
AB PRESS REL.				
#1 INTERCOOLER				
#2 INTERCOOLER				

CRANKCASE MATCH NO. **TPM47**

CRANKSHAFT SERIAL NO. **V537947709**

All accessories listed are 0 (zero) time since New or 0 (zero) time since Overhaul.
All accessories are new unless part number is succeeded by -85 or -70.

Released: Inspector

160

Date: **5/24/2007**

C of A Issued Date: **5-24-07**



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

ENGINE LOG

1. Make LYCOMING
2. Model IO-360-M1A
3. Specification 1E10
4. Manufacturer's Serial Number L-33569-S1E
5. Date of Manufacture _____
6. Aircraft Inspection Cycle _____

ENGINE SERVICE AND

DATE	TIME RUN		TIME SINCE OVERHAUL		INSTALLATIONS, INSPECTIONS, NOTE: USE BOTH PAGES AND AS MANY LINES AS REQUIRED FOR COMPLETE
	HRS.	MIN.	HRS.	MIN.	
	BROUGHT FORWARD →		Ø	Ø	ENGINE INSTALLED NEW ON DA 40 S/N 40.823
/					Engine installation inspected I.A.W. Diamond Aircraft Industries Inc. DA 40 W.I.S. Rev: N Form ME-01-A
/					Engine service with 8 qts. Of Phillips 20W50 Type "M" engine oil.
/					Engine break-in I.A.W. Lycoming Service Instruction 1427B, FLIGHT TEST COMPLETED
SEPT 17, 2007			4.	4	HOURS BROUGHT FORWARD
Sept 21 2007	TACH :		4	.6	
/					<p>Diamond 21 September, 2007 S/N: 40.823 Reg. : N569CA WO#: RO-07-226 Tach: 4.6 hrs.</p> <p>The following work has been carried out</p> <p>Oil pressure relief valve removed, cleaned & re installed. Ground run up of the engine performed and oil pressure readings recorded to be 48 PSI @ idle & 85 PSI @ full power. Engine inspected for leaks, none detected.</p> <p>The maintenance described above has been performed in accordance with the applicable standards of airworthiness.</p> <p>DIAMOND AIRCRAFT INDUSTRIES D.O.T. APPROVAL #161-93</p> <p>Signature <u><i>Paul Plunsel</i></u> Lic or Stamp DA RO6</p>

04/16/08 N569CA Mod#: IO-360-M1A Ser#: L-33569-51E TTE: 25.2 Tach: 25.2

1. Changed / inspect oil and filter added 8qts. Phillips 20w50 M & 1 can Av blend leak check good
2. C/W AD 08-06-51 Inspected per SB PRS-107 rev. 2 para. D,E & G plug was NOT loose. Inspected plug and threads. Installed new gasket 2577258 stamped Letter "G" on hex plug repetitive inspection no longer required

Scott Deane AP 9466634

SD Air Service Corp.

Rutland State Airport, North Clarendon VT 05701
802-775-0205

TOTAL THIS PAGE		
TOTAL FROM PREVIOUS SUMMARY		
TOTAL SINCE MFG.		

MAINTENANCE RECORD

REPAIRS, ADJUSTMENTS, MODIFICATIONS

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

SIGNATURE

LICENCE NUMBER

DA
Q 42

[Handwritten signature]

DA
Q 42

[Handwritten signature]

MAXIMUM HOURS BETWEEN OVERHAULS _____ HOURS.

ENGINE SERVICE AND

DATE	TIME RUN		TIME SINCE OVERHAUL		INSTALLATIONS, INSPECTIONS, <small>NOTE: USE BOTH PAGES AND AS MANY LINES AS REQUIRED FOR COMPLETE</small>
	HRS.	MIN.	HRS.	MIN.	
BROUGHT FORWARD →					

Hap's Aerial Enterprises, Inc. 7001 Airport Drive, Sellersburg, IN 47172
 Date: 07-01-08 N569CA Model: DA40 SN: 40.823
 Engine Model: IO-360-M1A SN: L33569-51E
 ENGINE LOG ENTRY Tach : 41.2 TSN: 41.2

1. Removed cowling and drained oil.
2. Installed new oil filter PN: CH48110-1.
3. Cleaned, gapped and rotated plugs.
4. Compression #1-76, #2-77, #3-79, #4-78.
5. Checked magneto timing.
6. Inspected overall engine and exhaust system.
7. Serviced engine with 7 quarts Aeroshell 100 oil.
8. Washed off engine. Test ran and leak checked.
9. Cowed up engine.

I certify that this engine has been inspected In Accordance With FAR 43 appendix "D" annual inspection and was determined to be in an airworthy condition. ***

Signed: [Signature] AWP 30 05020
 Signed: [Signature] EA 14397

7/25/08
 Tach - 500
 1) Removed Cowling and Drained oil.
 2) Installed New oil Filter PN-CH48110-1.
 3) Serviced Engine w/ 7qt. Aeroshell 15W50.
 4) Cowed up Engine
 5) CW AD 2008-14-07 Fuel Injector Line Inspection
 Found OK. P. J. [Signature] AWP 402048414

April-02-2009 TACH: 103.2 ACTT: 103.2 Complied with Lycoming operators manual (100 HOUR inspection. Removed cowling and Drained oil, removed oil filter and cut old f. lter, no CONTAMINATES NOTED AT THIS TIME. Serviced engine with 7qt Aeroshell 15W50 oil and installed new CH48110-1 filter. Cleaned, gapped and rotated spark plugs.

Cont →

CARRIED FORWARD

TOTAL THIS PAGE	
TOTAL FROM PREVIOUS SUMMARY	
TOTAL SINCE MFG.	

MAINTENANCE RECORD

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

SIGNATURE

LICENCE
NUMBER

→ CONT.: Checked Compression: 1-⁷⁸/₈₀ 2-⁸⁰/₈₀ 3-⁸⁰/₈₀ 4-⁸⁰/₈₀
 Checked mag-to-engine timing, Inspected General Condition
 of engine, mounts, exhaust, and accessories. Test ran
 engine for leaks and defects, no leaks or defects noted
 At this time Cowled up engine. I certify that in
 respect to the work performed that this engine
 is approved for return to service.
K. W. Hylle AP3130580
 END

HONAKER AVIATION SELLSBURG INDIANA

MN:Diamond DA40 SN:40.823 ACTT: 135.2
 N3ZZ TACH:135.2 DATE:07/10/2009

ENGINE LOG

Compression checked 1-78/80, 2-78/80, 3-78/80, 4-80/80. Drained oil and removed oil filter, cut filter and no contaminants noted. Installed new Ch48110-1 filter and serviced engine with 7qts. aeroshell 15W50 oil. Cleaned gapped and rotated plugs, checked mag to engine timing, installed plugs with new M674 gaskets. Inspected exhaust and engine compartment, no defects noted. Washed down engine and test ran for leaks and defects, no leaks or defects noted at this time. I certify that this engine was inspection in accordance with Diamond DA40 maintenance manual and ANNUAL Inspection and was determined to be in a airworthiness condition.

SIGNED: *K. W. Hylle* AP3130580

SIGNED: *Stephen Will* AP 2824972 IA

HONAKER AVIATION SELLSBURG INDIANA

MN:Diamond DA-40 SN:40.823 ENGTT: 182.5
 N3ZZ TACH: 182.5 DATE:10/29/2009
ENGINE LOG HOBBS:233.0

Test ran engine and removed engine cowling, drained oil and removed oil filter, cut old oil filter, no contaminants noted at this time. Installed new AA48110 oil filter and serviced engine with 7qts. Aeroshell 15W50 oil. Test ran for leaks and no leaks noted at this time. Cowled up engine.

I certify that in respect to the work performed that this engine is **Approved** for return to service.

SIGNED: *Mike Hammon* AP403272331

ENGINE SERVICE AND

DATE

BROUGHT
FORWARD

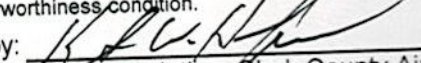
HONAKER

Date: 05-20-2010
 Make: Lycoming
 Model: IO-360-M1A
 ACTT: 228.7

Registration #: N3ZZ
 Tach Time: 228.7
 Hobbs Time: N/A
 Serial No.: L-33569-51E

CONDITIONS,
 REQUIRED FOR COMPLETE

Test ran engine and ops checked systems, no defects noted. Uncowled engine and drained oil and removed oil filter, cut filter and no contaminants noted, installed new Ch48110-1 filter and serviced engine with 7qts W100 oil. Cleaned gapped and rotated spark plugs, checked mag to engine timing. Inspected exhaust system and general condition of engine compartment. Inspected fuel injection screen, no contaminants noted. Removed fuel injectors and cleaned, reinstalled injectors and complied with AD2008-14-07 Fuel Injection lines, by inspection, found good, due anytime lines are loosened or moved for maintenance or annually whichever occurs first. AD 2009-02-03 Fuel injector servo was previously complied with. AD2009-26-12 ECI cylinders does not apply do to cylinders not installed. Test ran and cowled engine, no defects noted. I certify that this engine has been inspected in accordance with an 100 Hour inspection and was found to be in an airworthiness condition.

Signed by:  Kent W. Hartfield AP3130580
 Honaker Aviation, Clark County Airport (JVY) (812) 246-5491
 7001 Airport Rd, Sellersburg, IN 47172

Date: 17-May-2011
 Make: Lycoming
 Model: IO-360-M1A
 ACTT: 383.9

Registration #: N3ZZ
 TTSN: 383.9
 Hobbs Time: 383.9
 Serial No.: L-33569-51E

Removed cowling and drained oil and removed oil filter. Cut old oil filter, no contaminants noted at this time. Installed new Ch48110-1 and serviced with 7qts Aeroshell 100W oil. Compression test performed: 1-76/80, 2-76/80, 3-76/80, 4-77/80. Removed spark plugs and cleaned, gapped and rotated spark plugs. Checked mag to engine timing. Installed spark plugs. Inspected general condition of engine and accessories. Removed muffler shroud and inspected exhaust system, no defects noted. Installed muffler shroud. Inspected fuel servo screen, no contaminants noted, reinstalled screen and pressure checked, no leaks noted at this time. Complied with AD2008-14-07 Fuel Injection Lines, by visual inspection of lines, found good, due every 100hrs, or anytime lines or loosened for maintenance, do again by Actt:483.9 Engine was washed down and test ran, no leaks or defects noted at this time, installed cowling. I certify that this engine has been inspected in accordance with FAR 43 appendix D an 100 Hour inspection an was determined to be in an airworthiness condition at this time.

Signed by:  Kent W. Hartfield AP3130580

CARRIED FORWARD

TOTAL THIS PAGE

TOTAL FROM
PREVIOUS SUMMARY

TOTAL
SINCE MFG.

MAINTENANCE RECORD

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

SIGNATURE

LICENCE
NUMBER

H
HONAKER
 Honaker Aviation, JVY
 (812) 246-5491

A/C REG: N3ZZ **DATE:** 7/21/11
MAKE: Diamond **HOBBS/TACH:** 392.7
MODEL: DA40 **TAT:** 392.7
SERIAL #: 40.823 **TAC:** N/A

- Removed starter, sent starter to get overhauled. Reinstalled overhauled starter P/N 149-24LS S/N F4L-040809 Ran aircraft ops checks good.
- Installed two new door locks P/N 3802-22.

I certify, in respect to the work accomplished, this aircraft has been released from maintenance and approved for return to service.

MECHANIC: Nicholas Arnold **CERT #** A&P 3281184

SIGNATURE: *Nicholas Arnold*

H
HONAKER
 Honaker Aviation, JVY
 (812) 246-5491

A/C REG: N3ZZ **HOBBS/TACH:** 392.7
ENG MAKE: Lycoming **TAT:** 392.7
ENG MODEL: IO-360-M1A **TAC:** N/A
ENG S/N: L-33569-S1E **TET:** 392.7
POSITION: N/A **TEC:** N/A
DATE: 7/21/11 **SMOH:** N/A

- Drained oil and serviced with 7 qts 15W50

I certify, in respect to the work accomplished, this aircraft has been released from maintenance and approved for return to service.

MECHANIC: Nicholas Arnold **CERT #** A&P 3281184

SIGNATURE: *Nicholas Arnold*

H
HONAKER
 Honaker Aviation, JVY
 (812) 246-5491


A/C REG: N3ZZ **METER:** 420.0
ENG MAKE: Lycoming **TAT:** 420.0
ENG MODEL: IO-360-M1A **TAC:** N/A
ENG S/N: L-33569-51E **TET:** 420.0
POSITION: Only **TEC:** N/A
DATE: 9/1/2011 **SMOH:** N/A

- AD 2011-15-10 dated 8/16/2011, AvStar fuel servo diaphragm, found to be not applicable due to no fuel servo repair work being performed from 5/20/2010 to this log date. No further action required.

I certify, in respect to the work accomplished, this aircraft has been released from maintenance and approved for return to service.

MECHANIC: Kenneth LPeters **CERT #** A&P 3402746

SIGNATURE: *Kenneth LPeters*

1. Approving National Aviation Authority/Country: FAA/United States		AUTHORIZED RELEASE CERTIFICATE FAA Form 8130-3 AIRWORTHINESS APPROVAL TAG				3. Form Tracking Number: 11071816
4. Organization Name and Address: <p style="text-align: center;">Sky-Tec Partners, Ltd 350 Howard Clemmons Rd. Granbury, Texas 76048 (PQ0852SW)</p>						5. Work Order/Contract/ Invoice Number: 11071816
6. Item:	7. Description:	8. Part Number:	9. Eligibility*:	10. Quantity:	11. Serial/ Batch Number:	12. Status/Work:
1	STARTER	149-24LS	N/A	1	F4L-040809	See Block 13.
13. Remarks: REBUILT TO ORIGINAL PAH'S CURRENT SPECIFICATIONS IN ACCORDANCE WITH 14 CFR § 43.3(j).						
14. Certifies the items above were manufactured in conformity to: <input type="checkbox"/> Approved design data and are in a condition for safe operation <input type="checkbox"/> Non-approved design and specified in Block 13.				19. <input type="checkbox"/> 14 CFR 43.9 Return to Service <input checked="" type="checkbox"/> Other regulation specified in Block 13. Certifies that unless otherwise specified in Block 13, the work identified in Block 12 and described in Block 13 was accomplished in accordance with Title 14, Code of Federal Regulations, part 43 and in respect to that work, the items are approved for return to service.		
15. Authorized Signature:		16. Approval/Authorization No.:		20. Authorized Signature: 		21. Approval/Certificate No.:
				Ken McDonald		PQ0852SW
17. Name (Typed or Printed):		18. Date (m/d/y):		22. Name (Typed or Printed):		23. Date (m/d/y):
				Ken McDonald		JUL 20 2011
User/Installer Responsibilities:						
It is important to understand that the existence of this document alone does not automatically constitute authority to install the part/assembly. Where the user/installer performs work in accordance with the national regulations of an airworthiness authority different than the Airworthiness Authority of the country specified in Block 1, it is essential that the user/installer ensures that his/her airworthiness authority accepts part/components/assemblies from the airworthiness authority of the country specified in Block 1. Statements in Blocks 14 and 19 do not constitute installation certification. In all cases, aircraft maintenance records must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.						

FAA Form 8130-3 (6-01) Computer Generated

* Installer must cross check eligibility with applicable technical data

NSN: 0052-00-012-9005

-----CUT HERE-----

WEIGHT AND BALANCE/EQUIPMENT LIST REVISION					
NAME:		DATE:			
AIRCRAFT MAKE/TYPE:		MODEL #:			
REGISTRATION #:		SERIAL #:			
PREVIOUS DATE:	WEIGHT:	ARM:	MOMENT:		
EQUIPMENT LIST	IN	OUT	WEIGHT	ARM	MOMENT
1 (P/N) (S/N) (Desc.) SKY-TEC STARTER	X				
2					
3					
4					
AIRCRAFT EMPTY WEIGHT: _____ ARM: _____ MOMENT: _____ GROSS WEIGHT: _____ USEFUL LOAD: _____ SIGNATURE: _____ AUTHORIZATION: _____					
NOTE: Weight and balance must be completed and attached to pilot's operating handbook.					

Sky-Tec Serial Numbers Beginning w/

Lycoming Starters
 CN - 9.4 lbs.
 FN - 9.4 lbs.
 CNE - 9.4 lbs.
 FNE - 9.4 lbs.
 FNR - 9.4 lbs.
 FNER - 9.4 lbs.
 C(x)H - 10.2 lbs.
 F(x)H - 10.2 lbs.
 C(x)M - 8.5 lbs.
 F(x)M - 8.5 lbs.
 C4E - 8.5 lbs.
 F4E - 8.5 lbs.
 H(x)M - 8.5 lbs.
 H4E - 8.5 lbs.
 C(x)C - 8.9 lbs.
 F(x)C - 8.9 lbs.
 H(x)G - 8.9 lbs.
 C(x)L - 8.2 lbs.
 F(x)L - 8.2 lbs.
 C(x)P - 8.2 lbs.
 F(x)P - 8.2 lbs.

Continental Starters

2C - 9.2 lbs.
 2CR - 9.2 lbs.
 (x)C3 - 6.5 lbs.
 (x)C5 - 9.4 lbs.

ENGINE SERVICE AND

DATE	TIME RUN		TIME SINCE OVERHAUL		INSTALLATIONS, INSPECTIONS, <small>NOTE: USE BOTH PAGES AND AS MANY LINES AS REQUIRED FOR COMPLETE</small>
	HRS.	MIN.	HRS.	MIN.	

BROUGHT FORWARD

HONAKER

Honaker Aviation, JVY
(812) 246-5491

A/C REG:	N3ZZ	METER:	444.3
ENG MAKE:	Lycoming	TAT:	444.3
ENG MODEL:	IO-360-M1A	TAC:	N/A
ENG S/N:	L-333569-51E	TET:	444.3
POSITION:	N/A	TEC:	N/A
DATE:	12/28/11	SMOH:	N/A

- Removed engine cowlings and drained oil., cut filter and examined. No defects noted at this time. Performed differential compression test, 1)78 2)76 3)75 4)74. Cleaned gapped and rotated spark plugs. Installed new CH48110-1 oil filter and serviced engine with 7 QTS Aeroshell 15W50. Ran aircraft and performed leak check, no defects noted at this time.

I certify, in respect to the work accomplished, this aircraft has been released from maintenance and approved for return to service.

MECHANIC: Nicholas Arnold

CERT # 3281184 A&P

SIGNATURE:

HONAKER

Honaker Aviation, JVY
(812) 246-5491

A/C REG:	N3ZZ	METER:	471.1
ENG MAKE:	Lycoming	TAT:	471.1
ENG MODEL:	IO-360-M1A	TAC:	N/A
ENG S/N:	L-333569-51E	TET:	471.1
POSITION:	N/A	TEC:	N/A
DATE:	5/18/2012	SMOH:	N/A

- Removed engine cowlings, drained oil and removed filter, cut filter and examined, no contaminants noted at this time. Installed new CH48110-1 filter and serviced with 7 QTS Aeroshell 15W50. Performed differential compression test: 1)79 2)78 3)78 4)79. Cleaned gapped and rotated spark plugs, installed using new M674 spark plug gaskets. Checked mag to engine timing, no defects noted. Inspected general condition of engine and accessories. Removed muffler shroud and inspected exhaust system, no defects noted. Inspected fuel servo screen, no contaminants noted.
- Complied with AD 2008-14-07 fuel injection lines, by visual inspection of lines and clamps. Due every 100 hrs, next due at hobbs: 571.1.

I certify, this engine has been inspected in accordance with FAR 43 appendix D, an ANNUAL inspection, and has been found to be in an airworthiness condition at this time, and is approved for return to service.

MECHANIC: Nicholas Arnold

CERT # 3281184 IA

SIGNATURE:

CARRIED FORWARD

TOTAL THIS PAGE

TOTAL FROM PREVIOUS SUMMARY

TOTAL SINCE MFG.

MAINTENANCE RECORD

REPAIRS, ADJUSTMENTS, MODIFICATIONS

ENTRIES. DRAW A DIAGONAL LINE THROUGH

H
HONAKER
Honaker Aviation, JVY
(812) 246-5491

A/C REG:	N3ZZ	METER:	535.5
ENG MAKE:	Lycoming	TAT:	535.5
ENG MODEL:	IO-360-M1A	TAC:	N/A
ENG S/N:	L-33569-51E	TET:	535.5
POSITION:	N/A	TEC:	N/A
DATE:	11-01-2012	SMOH:	N/A

SIGNATURE

LICENCE
NUMBER

- Removed cowling, drained engine oil. Cut and inspected oil filter, no defects noted. Installed new oil filter P/N CH48110-1 and serviced engine with 7qts aero shell 15w50 oil.
- Removed L/H magneto and internally timed, reinstalled mag and timed to engine. Ran engine Ops check/ Leak check good. Work performed IAW MM

I certify, in respect to the work accomplished, this aircraft has been released from maintenance and approved for return to service.

MECHANIC: Joshua P Hall

CERT # A&P 3540744

SIGNATURE: *J.P. Hall*

H
HONAKER
Honaker Aviation, JVY
(812) 246-5491

A/C REG:	N3ZZ	METER:	566.3
ENG MAKE:	Lycoming	TAT:	566.3
ENG MODEL:	IO-360-M1A	TAC:	N/A
ENG S/N:	L-33569-51E	TET:	566.3
POSITION:	N/A	TEC:	N/A
DATE:	6/11/2013	SMOH:	N/A

- Removed engine cowlings, drained oil and removed filter, cut filter and examined, no contaminants noted at this time. Installed new CH48110-1 filter and serviced with 7 QTS Aeroshell 15W50. Performed differential compression test: 1)77 2)76 3)78 4)78. Cleaned gapped and rotated spark plugs, installed using new M674 spark plug gaskets. Checked mag to engine timing, no defects noted. Inspected general condition of engine and accessories. Removed muffler shroud and inspected exhaust system, no defects noted. Inspected fuel servo screen, no contaminants noted.
- Complied with AD 2008-14-07 fuel injection lines, by visual inspection of lines and clamps. Due every 100 hrs, next due at hobbs: 666.3.

I certify, this engine has been inspected in accordance with FAR 43 appendix D, an ANNUAL inspection, and has been found to be in an airworthiness condition at this time, and is approved for return to service.

MECHANIC: Nicholas Arnold

CERT # A&P 3281184 IA

SIGNATURE: *Nicholas Arnold*

MAXIMUM HOURS BETWEEN OVERHAULS _____ HOURS.

ENGINE SERVICE AND

COMPLETE

11/13/13 N3ZZ Diamond DA40, S/N 40.823
TACH 515.9 TOTAL ACFT 515.9
IO-360-M1A, S/N L-33569-51E TSN 515.9

Changed oil with 7 quarts of Aeroshell 15w50 and installed new oil filter CH48110-1. Inspected removed oil filter, no contamination found. Obtained oil sample and sent to Aviation Oil Analysis Inc. for examination. Removed left magneto Slick, M/N 4347, S/N 07030216 and completed 500 hour inspection, installed new cam, P/N M3611 and Distributor block assembly, P/N K3822. Installed magneto and timed to 25° BTDC. Removed right magneto Slick, M/N 4370, S/N 05010003 and completed 500 hour inspection, installed new cam, P/N M3611 and Distributor block assembly, P/N K3822. Installed magneto and timed to 25° BTDC. Completed ground run and operational check and found magneto drop to be approximately 150-190 RPM with full rich mixture. Verified magneto drop to be approximately 100 RPM with mixture leaned in accordance with Lycoming Service Instruction 1132B. I certify that, with respect to the work performed, this engine is airworthy and is approved for return to service. Records are on file at this agency under WO# 70367.

Signed Douglas J Bramer for, RS PZ4R458M

Aircraft Specialists, Inc.
Sellersburg, Indiana



(800) 356-3723
(812) 246-4696

Date: 6/02/2014; Aircraft: N3ZZ; Type: DA40; S/N: 40.823
Tach: 536.4; Total Time: 536.4
Engine - Type: IO-360-M1A, S/N: L-33569-51E, Time: 536.4

Cleaned spark plugs, cleaned oil screen, installed new CH48110-1 oil filter, timed magnetos, cleaned fuel inlet screen, serviced propeller, changed oil with 7 quarts of Aeroshell 15W50, obtained oil sample and sent to Aviation Oil Analysis Inc. for examination, and completed Differential Pressure Test on all cylinders: #1 79/80, #2 79/80, #3 79/80, #4 78/80. Inspected Aircraft and engine in accordance with an Annual Inspection. Complied with AD 2011-26-04, "Inspection of fuel lines and support clamps in accordance with Lycoming Service Bulletin 342F, next due at Tach = 636 or whenever fuel line maintenance is performed. I certify that this engine has been inspected and serviced in accordance with an Annual/100 HR inspection and has been determined to be in airworthy condition. Records are on file at this agency under WO# SVC14-04052.

Signed Douglas J Bramer for CRS# PZ4R458M
Douglas J Bramer

Clark Regional Airport (KJVY)
Sellersburg, Indiana



800-356-3723

Date: 2/06/2015; Aircraft: N3ZZ; Type: DA40; S/N: 40.823
Tach: 589.1; Engine - Type: IO-360-M1A, S/N: L-33569-51E

Changed oil with 7 quarts of Aeroshell 15W50 and installed new oil filter CH48110-1. Inspected removed oil filter, no contamination found. Obtained oil sample and sent to Aviation Oil Analysis Inc. for examination. Degreased engine, ground ran and leak checked. I certify that, with respect to the work performed this engine is airworthy and is approved for return to service. Records are on file at this agency under WO# SVC15-04349

Signed Douglas J Bramer for CRS# PZ4R458M
Douglas J Bramer

Clark Regional Airport (KJVY)
Sellersburg, Indiana



800-356-3723

MAINTENANCE RECORD

INCENCE
UMBER

Date: 6/18/2015; Aircraft: N3ZZ; Type: DA40; S/N: 40.823

Tach: 605.9; Total Time: 605.9

Engine - Type: IO-360-M1A, S/N: L-33569-51E, Time: 605.9

Installed all new spark plugs, P/N REM38E, installed new CH48110-1 oil filter, timed magnetos, installed new induction air filter, P/N FR-08504, cleaned fuel inlet screen, serviced propeller, changed oil with 7 quarts Aeroshell 15W50, and completed Differential Pressure Test on all cylinders: #1 79/80, #2 78/80, #3 76/80 #4 74/80. Complied with AD 2011-26-04, "Inspection of fuel injection lines and support clamps in accordance with Lycoming Service Bulletin 342F, next due at Tach = 705.9 or whenever fuel line maintenance is performed. I certify that this engine has been inspected and serviced in accordance with an Annual/100 HR inspection and has been determined to be in airworthy condition. Records are on file at this agency under WO# SVC15-04459.

Signed  for CRS# PZ4R458M
Douglas J Bramer

Clark Regional Airport (KJVY)
Sellersburg, Indiana




800-356-3723

Date: 2/29/2016; Aircraft: N3ZZ; Type: DA40; S/N: 40.823

Tach: 654.4; Total Time: 654.4

Engine - Type: IO-360-M1A, S/N: L-33569-51E, Time: 654.4

Changed oil with 8 quarts of Aeroshell 15W50 and installed new oil filter CH48110-1. Inspected removed oil filter, no contamination found. Obtained oil sample and sent to Aviation Oil Analysis Inc. for examination. Accomplished compression check as follows: #1-74/80, #2- 78/80, #3- 78/80, #4- 76/80. Degreased engine, ground ran and leak checked. I certify that, with respect to the work performed this engine is airworthy and is approved for return to service. Records are on file at this agency under WO# SVC16-04772.

Signed  for CRS# PZ4R458M
Douglas J Bramer

Clark Regional Airport (KJVY)
Sellersburg, Indiana
800-356-3723

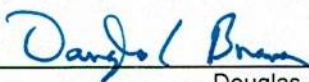


Date: 7/08/2016; Aircraft: N3ZZ; Type: DA40; S/N: 40.823

Tach: 673.1; Total Time: 673.1

Engine - Type: IO-360-M1A, S/N: L-33569-51E, Time: 673.1

Cleaned spark plugs, cleaned oil screen, installed new CH48110-1 oil filter, installed new FR-08504 induction air filter, cleaned fuel inlet screen, serviced propeller, timed left magneto, P/N 4347, S/N 07030216 and right magneto, P/N 4370, S/N 05010003 to 25°BTDC. Changed oil with Aeroshell Multiweight 15W50, and completed Differential Pressure Test on all cylinders: #1 70/80, #2 72/80, #3 70/80, #4 76/80. Removed all fuel nozzles, cleaned, inspected and installed. Complied with AD 2015-19-07, "Inspection of fuel injection lines and support clamps in accordance with Lycoming Service Bulletin SB342G, next due at Tach = 783., or after any maintenance is done on engine where any clamp on a fuel injector fuel line is disconnected, moved, or loosened, and after each engine overhaul. I certify that this engine has been inspected and serviced in accordance with an Annual/100 HR inspection and has been determined to be in airworthy condition. Records are on file at this agency under WO# SVC16-04888.

Signed  for CRS# PZ4R458M
Douglas J Bramer

Clark Regional Airport (KJVY)
Sellersburg, Indiana
800-356-3723



ENGINE SERVICE AND

Date: 7/27/2017, Aircraft: N3ZZ, Type: DA40, S/N: 40.823, Tach: 863.0, TT: 863.0

Engine: IO-360-m1A, SN: L-33569-51E

Drained engine oil and replenished with 8qrts of Aeroshell 15w-50. Replaced engine oil filter with PN CH48110-1. Cleaned air filter. Cleaned, gapped and rotated spark plugs. Completed compression test, #1 74/80 #2 74/80 #3 72/80 #4 72/80. Removed fuel nozzles, cleaned, inspected and reinstalled. Complied with AD 2015-19-07 inspection of the fuel lines. I certify that this engine has been inspected and serviced IAW an annual/100hr inspection and has been determined to be in airworthy condition. Records are on file at this agency under WO# WO# SVC17-05138.

Signed  CRS #PZ4R458M

Michael W. Nation



Clark Regional Airport (KJVY)
Sellersburg, Indiana
800-356-3723

DATE: 24 JULY 2018, N3ZZ, TYPE: DA40, S/N: 40.823

TACH: 772.2 HOBBS: 924.1

100 HOUR ENGINE INSPECTION DUE; COMPLIED WITH 100 HOUR INSPECTION REQUIREMENTS IN ACCORDANCE WITH DIAMOND MAINTENANCE MANUAL CHAP 5. DRAINED ENGINE OIL, REMOVED AND REPLACED ENGINE OIL FILTER P/N CH48110-0, SERVICED ENGINE OIL SYSTEM WITH EIGHT (8) QUARTS OF 15W50 OIL. CLEANED, INSPECTED AND GAPPED SPARK PLUGS. PERFORMED GROUND RUN WITH NO DEFECTS NOTED.

THIS AIRCRAFT IS APPROVED RETURN TO SERVICE AND FOUND TO BE IN AN AIRWORTHY CONDITION.

RECORDS ARE ON FILE AT THIS AGENCY UNDER W.O.# SVC18-05424.

Signed  for CRS# PZ4R458M
DANIEL K. BARTON



Clark Regional Airport KJVY Sellersburg IN

CARRIED FORWARD

TOTAL THIS PAGE		
TOTAL FROM PREVIOUS SUMMARY		
TOTAL SINCE MFG.		

MAINTENANCE RECORD

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

SIGNATURE

LICENCE
NUMBER

DATE: 8/1/2019, N3ZZ, TYPE: DA40, S/N: 40.823, MODEL IO-360-M1A, S/N L-33569-51E, TACH: 806.9, HOBBS: 965.0, ETT: 806.9

ENGINE ANNUAL INSPECTION: PERFORMED ANNUAL INSPECTION OF ENGINE IAW DIAMOND DA40.180 MAINTENANCE MANUAL CH. 5, AND SERVICED PER LYCOMING SB 480F. CHANGED ENGINE OIL AND FILTER. INSTALLED NEW FILTER P/N CH48110-1 AND SERVICED WITH 6QTS AEROSHELL 15W50. TOOK OIL SAMPLE AND SENT FOR ANALYSIS. INSPECTED OLD OIL FILTER WITH NO DISCREPANCIES NOTED. MAGNETO TIMING CHECK SATISFACTORY. TIGHTENED VALVE COVER GASKETS. REMOVED, CLEANED, INSPECTED AND REINSTALLED SPARK PLUGS WITH NEW GASKETS P/N M674. COMPRESSIONS WERE AS FOLLOWS OVER 80 PSI: 1) 78, 2) 78, 3) 78, 4) 76. GROUND RUN AND LEAK CHECK SATISFACTORY. AD'S ARE CURRENT AND UP TO DATE THROUGH CURRENT DATE.

IMPROPER SAFETY WIRE ON ALTERNATOR: REMOVED IMPROPER SAFETY WIRE AND INSTALLED NEW SAFETY WIRE. INSTALLMENT OF SAFETY WIRE SATISFACTORY.

VALVE COVER GASKETS SEEPING OIL: TIGHTENED VALVE COVER SCREWS.

AD 2015-19-07 FUEL INJECTOR LINES DUE: COMPLIED WITH AD 2015-19-07 EFFECTIVE DATE NOVEMBER 03, 2015 BY INSPECTION OF FUEL INJECTOR FUEL LINES AND CLAMPS. NO DISCREPANCIES NOTED AT THIS TIME. INSPECTION NEXT DUE AT 916.9 TACH, OR AFTER MAINTENANCE PERFORMED.

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

RECORDS ARE ON FILE AT THIS AGENCY UNDER W.O.# SVC19-05761.

Signed _____


AARON J ANDREWS

for CRS# PZ4R458M



Clark Regional Airport KJVY Sellersburg IN

DATE: 11/24/2020, AIRCRAFT: N3ZZ, TYPE: DA40-180, S/N: 40.823, A/FTT: 1010.3, TACH: 845.5, ETT: 845.5, ENGINE MODEL: LYCOMING IO-360-M1A, S/N: L-33569-51E

ANNUAL INSPECTION OF ENGINE: PERFORMED ANNUAL INSPECTION OF ENGINE IAW DIAMOND DA40-180 MAINTENANCE MANUAL CH. 5. PERFORMED ENGINE RUN UP. DRAINED ENGINE OIL AND CHANGED OIL FILTER. INSTALLED NEW FILTER P/N CH 48110-1 FILTER AND SERVICED WITH AEROSHELL 15W50 OIL. TOOK OIL SAMPLE AND SENT OUT FOR ANALYSIS. INSPECTED OLD FILTER WITH NO DISCREPANCIES NOTED AT THIS TIME. SERVICED IAW LYCOMING SB 480F. CLEANED AND GAPPED SPARK PLUGS AND REINSTALLED. COMPRESSIONS AS FOLLOWS OVER 80 PSI: 1) 77, 2) 78, 3) 78, 4) 78. AD'S ARE CURRENT AND UP TO DATE THROUGH THIS DATE.

MAGNETO TIMING OFF, HIGH RPM DROPS: ADJUSTED MAG TIMING TO 25 DEGREES PER ENGINE DATA PLATE.

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

RECORDS ARE ON FILE AT THIS AGENCY UNDER W.O.# SVC20-06154 & 06155.

Signed _____


AARON J. ANDREWS

for CRS# PZ4R458M



Clark Regional Airport KJVY Sellersburg IN

MAXIMUM HOURS BETWEEN OVERHAULS _____ HOURS.

ENGINE SERVICE AND

DATE	TIME RUN		TIME SINCE OVERHAUL		INSTALLATIONS, INSPECTIONS, <u>NOTE:</u> USE BOTH PAGES AND AS MANY LINES AS REQUIRED FOR COMPLETE
	HRS.	MIN.	HRS.	MIN.	
BROUGHT FORWARD →					

DATE: 12/9/2021, AIRCRAFT: N3ZZ, TYPE: DA40-180, S/N: 40.823, A/FTT: 1065.3, TACH: 891.4, ETT: 891.4, ENGINE MODEL: LYCOMING IO-360-M1A, S/N: L-33569-51E

ANNUAL INSPECTION OF ENGINE: PERFORMED ANNUAL INSPECTION OF ENGINE IAW DIAMOND DA40-180 MAINTENANCE MANUAL CH. 5. PERFORMED ENGINE RUN UP. DRAINED ENGINE OIL AND CHANGED OIL FILTER. INSTALLED NEW FILTER P/N CH 48110-1 FILTER AND SERVICED WITH AEROSHELL 15W50 OIL. TOOK OIL SAMPLE AND SENT OUT FOR ANALYSIS. INSPECTED OLD FILTER WITH NO DISCREPACNIES NOTED AT THIS TIME. SERVICED IAW LYCOMING SB 480F. CLEANED AND GAPPED SPARK PLUGS AND REINSTALLED. COMPRESSIONS AS FOLLOWS OVER 80 PSI: 1) 78, 2) 75, 3) 77, 4) 74. AD'S ARE CURRENT AND UP TO DATE THROUGH THIS DATE.

CYL #3 SPARK PLUG INSULATOR BROKEN: REPLACED BROKEN SPARK PLUG WITH NEW PLUG P/N REM38E. GROUND OPS CHECK OF ENGINE SATISFACTORY.

AD 2015-19-07 FUEL INJECTOR LINE INSPECTION: COMPLIED WITH AD BY VISUAL INSPECTION WITH NO DISCREPANCIES NOTED.

THROTTLE ARM NOT SECURE: RESECURED THROTTLE ARM.

VALVE COVER GASKETS LEAKING: REMOVED AND REPLACED LEAKING VALVE COVER GASKETS WITH 4 NEW GASKETS P/N RG-75906. LEAK CHECK SATISFACTORY.

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

RECORDS ARE ON FILE AT THIS AGENCY UNDER W.O.# SVC21-06660 & 06661.

Signed *Aaron J. Andrews* for CRS# PZ4R458M

AARON J. ANDREWS



Clark Regional Airport KJVY Sellersburg IN

TOTAL THIS PAGE				
TOTAL FROM PREVIOUS SUMMARY				
TOTAL SINCE MFG.				

CARRIED FORWARD

RECORD OF ENGINE
SPECIAL INSPECTIONS (S/I) AND MODIFICATIONS (MODS)

WORK OR INSPECTION PERFORMED

SIGNATURE

LICENCE NUMBER

on plug repetitive insp no longer required

A. Nguyen

AP 9466634

AD NO. / SB	RV	Description / Method of Compliance	Next Due	Once	Rec	Code	Sign
2002-26-01 342	E	FUEL LINE AND SUPPORT CLAMP INSPECTION & INSTALL. NEW LINES INST. WITH NEW CLAMP	100 HOURS		X	1	6
2004-10-14 475	C	CRANKSHAFT GEAR MODIFICATION AND ASSY PROCEDURES NEW P/N INSTALLED	N/A	X		1	6
2005-19-11 566		Crankshaft replacement Replace Crankshaft	N/A	X		1	6
75-09-15 382		BENDIX FUEL INJ RS-43 INSP OF MOD OF FLOW DIVIDERS NEW P/N GASKET INSTALLED	N/A	X		1	6
93-11-11 N/A		AC, TEXTRON LYC FUEL PUMP O/H BY AERO ACCESSORIES NEW AC F/P INST. WHEN APPLIC.	N/A	X		1	6
94-01-03 N/A	R2	DEFECTIVE IGN COILS AND ROTATING MAGNETS NEW CONFIGURATION PART INST.	N/A	X		1	6
94-06-09 517		INCOMPLETE INTERNAL GROUNDING ON MAG CAPACITORS NEW CONF. CAPACITORS INSTALLED	N/A	X		1	6
96-23-03 525	A	HIGH PRESSURE FUEL PUMP INSTALLED LW-15473 NEWLY MANUFACTURED PUMPS INST.	N/A	X		1	6
97-15-11 527	C	RECALL OF PISTON PIN P/N LW-14077 NEW CONFIGURATION P/N INST.	N/A	X		1	6
98-02-08 530	A	INSPECTION OF CRANKSHAFT ID FOR CORROSION MAG INSP./APPLY URETHABOND 104	N/A	X		1	6
2002-12-07 543	B	OIL FILTER CONVERTER PLATE GASKET REPLACEMENT NEW P/N CONVERTER PLATE INSTALLED	N/A	X		2	
2003-14-03 529	B	ROTARY FUEL PUMP TORQUE. NEW PUMP WITH "/M" SUFFIX INSTALLED	N/A		X	2	
2006-06-16 566 sup 1		Replace crankshaft Crankshaft replaced	N/A	X		2	
2006-10-21 N/A		ECl connecting rods P?N AEL11750 Used genuine Lycoming Parts	N/A	X		2	
2006-12-07 N/A		ECl Cylinder Assemblies P/N AEL65102 Used genuine Lycoming parts	N/A	X		2	
2006-20-09 569	A	CRANKSHAFT REPLACEMENT REPLACE CRANKSHAFT	N/A	X		2	
64-16-05 298	Inactive	AC FUEL PUMP OIL SEAL NEW CONF. FUEL PUMP INSTALLED	N/A	X		2	
66-06-03 302	A	REPLACEMENT OF CONNECTING ROD ASSY. NEW ROD CONFIGURATION	N/A	X		2	
66-20-04 307		OIL FILTER ADAPTER GASKET NEW CONF. GASKET INSTALLED	N/A	X		2	
67-22-06 305	4 B	REPLACEMENT OF BENDIX FUEL DIAPHRAGM ASSY NEW OR NEWLY O/H INSTALLED	N/A	X		2	

Codes:

- 1 AD Applicable to Engine
- 2 AD Not Applicable to Engine
- 3 Field Compliance where applicable



5/24/07

652 Oliver Street

Williamsport, PA 17701 U.S.A.

Engine Model No: **IO-360-M1A**Engine SN: **L-33569-51E**

Page 2 of 2

AD NO. / SB	RV	Description / Method of Compliance	Next Due	Once	Rec	Code	Sign
71-05-02 327	C	INSPECTION OF CENTER MAIN BEARING NEW INSTALLED	N/A	X		2	
71-11-02 328		REPLACEMENT OF EXH & INT HYD TAPPET PLUNGERS NEW P/N HYD TAPPETS INSTALLED	N/A	X		2	
73-23-01 367	F	INSP FOR CRACKS IN PISTON PINS INST NEW PARTS	N/A	X		2	
78-23-10 428		BENDIX FUEL INJ. BULLETIN RS-42 NEW P/N INSTALLED	N/A	X		2	
79-04-05 433	A	BENDIX FUEL INJ. BULLETIN RS-57 NEW P/N INSTALLED	N/A	X		2	
87-10-06 477	R1 A	INSPECTION AND REWORK OF LW-18790 ROCKER ARM ASSY NEW CONFIGURATION P/N INST.	N/A	X		2	
90-04-06 488	R1 A	PROPELLER GOVERNOR LINE SUPPORT NEW LINE W/STEEL CON. NUTS INS	N/A	X		2	
92-12-05 501	B	LW-14077 PISTON PIN NEW PARTS INSTALLED	N/A	X		2	
93-14-15 N/A		INST OF PLCKRD DENOTING OPER. NOT TO EXCEED 33.#HG FIELD COMPLIANCE AFTER STC	N/A	X		2	
95-07-01 N/A		CONNECTING ROD BOLT FAILURE LYCOMING PART INSTALLED	N/A	X		2	
95-26-02 398		ENGINES OPERATED WITH LOW OCTANE FUEL ENGINE IS NEW OR HAS BEEN REBUILT AT MANUFACTURER	N/A	X		2	
96-09-10 524		REPLACEMENT OF OIL PUMP IMPELLERS STEEL IMPELLERS INSTALLED	N/A	X		2	
98-17-11 N/A		CRANKSHAFT REPAIRED BY NELSON BALANCING SERVICE MAG/PARTICLE INSP OF C/SHAFT	N/A	X		2	

Codes:

- 1 AD Applicable to Engine
- 2 AD Not Applicable to Engine
- 3 Field Compliance where applicable

