

AIRCRAFT TECHNICAL LOGS

Section 3. ENGINE

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

No. E 391601

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 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-32131-51A**
New Newly Overhauled
Used Aircraft
Country to which exported: **Canada**
Exceptions: **None**



DMIR810325NE

District Office or Designee Number

Ted M. Dougherty

Signature of Authorized Representative

June 14, 2005

Date

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.

ENGINE LOG

1. Make LYCOMING
2. Model IO-360-M1A
3. Specification 1E10
4. Manufacturer's Serial Number L-32131-51A
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 →			0	0	<p style="font-size: 1.2em; margin: 0;"><i>ENGINE INSTALLED NEW ON DA 40 SW</i></p> <p>Engine installation inspected I.A.W. Diamond Aircraft Industries Inc. DA 40 W.I.S. Rev: E Form ME-01-A</p> <p>Engine service with 8 qts. Of Philips 20W50 Type "M" engine oil.</p> <p>Engine break-in I.A.W. Lycoming Service Instruction 1427B,</p> <p style="text-align: center;">FLIGHT TEST COMPLETED</p>
<i>AUG 29 2005</i>			<i>39</i>	<i>HOURS BROUGHT FORWARD</i>	



MODERN AERO, INC.
 14801 PIONEER TRAIL
 EDEN PRAIRIE, MN 55347
 952-941-2595

FAA APPROVED REPAIR STATION MZER198L

N102UV

DATE: 12/5/05

ACTT: 41.4

RAN ENGINE. DRAINED OIL. REMOVED AND CUT OPEN OIL FILTER. NO FAULTS FOUND. INSTALLED NEW CH48110-1 OIL FILTER. SERVICED WITH 8 QTS EXXON ELITE 20W50 OIL. RUN-UP, OPERATIONAL, AND LEAK CHECKS WERE FOUND SATISFACTORY. REFERENCE MODERN AERO W/O # 33789.

KEN FISCHBACH *Ken Fischbach*

A/C Tail #: N102UV	Eng Model: IO-360-M1A	Eng S/N: L-32131-51A	Cycles: N/A
A/C S/N: 40.549		Landings: N/A	
<p>ENGINE COMPLETED ANNUAL INSPECTION THIS DATE. DRAINED OIL AND TOOK OIL SAMPLE. REMOVED OIL SUCTION SCREEN. REMOVED AND CUT OPEN OIL FILTER. NO FAULTS FOUND. INSTALLED SUCTION SCREEN WITH NEW MS35769-21 GASKET. INSTALLED NEW CH48110-1 OI FILTER. SERVICED WITH 8 QTS. EXXON ELITE 20W50 COMPRESSION RECORD: 1) 75/80 2) 72/80 3) 72/80 4) 75/80. REMOVED, CLEANED, INSPECTED AND INSTALLED FUEL NOZZLES. COMPLIED WITH AD 2002-26-01 BY INSPECTING FUEL INJECTION LINES AND CLAMPS PER SB 342E. NO DEFECTS NOTED, AD DUE AGAIN AT NEXT ANNUAL, 100 HR INSP, OR FUEL LINE MAINTENANCE. CLEANED FUEL INLET SCREEN. REMOVED, CLEANED, GAPPED, INSPECTED AND INSTALLED SPARK PLUGS. TIGHTENED AND SECURED OIL FILLER TUBE. RUN-UP OPERATIONAL AND LEAK CHECK SATISFACTORY. I CERTIFY THIS ENGINE HAS BEEN INSPECTED IN ACCORDANCE WITH AN ANNUAL INSPECTION AND WAS DETERMINED TO BE IN AN AIRWORTHY CONDITION.</p>			
KEN FISCHBACH <i>Ken Fischbach</i>			
2/12/2007	Modern Aero, Inc. FAA CRS MZER198L	Work Order #: 34890	A/F TT: 115.5

TOTAL THIS PAGE	
TOTAL FROM PREVIOUS SUMMARY	
TOTAL SINCE MFG.	

ENGINE SERVICE AND

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

BROUGHT FORWARD - The Aircraft, Airframe, Engine, Propeller, Appliance, Radio or Instrument was repaired and inspected in accordance with current regulations of the Federal Aviation Administration and with respect to the work performed is approved for return to service by Modern Aero, Inc. FAA CRS #MZER198L

TANIS PREHEATER

Authorized By *[Signature]* Work Order 34933

Date: 8/29/07 N# 102UV Acft Hrs: 289.6

Diamond DA-40
S/N: 40.549

N102UV
08-29-07

Hobbs: 385.1
Tach: 289.6

Completed the following Maintenance:

1. Installed a new Tanis Pre-Heater System Kit (P/N: TAS100; S/N: 40358) per the Tanis instruction #100. Operational check found to be satisfactory. Updated the weight and balance.

Modern Aero, Inc.
14801 Pioneer Trail
Eden Prairie, MN 55347
WO# 34933 Date: 08-29-07 CRS MZER198L

End

The Aircraft, Airframe, Engine, Propeller, Appliance, Radio or Instrument was repaired and inspected in accordance with current regulations of the Federal Aviation Administration and with respect to the work performed is approved for return to service by Modern Aero, Inc. FAA CRS #MZER198L

Authorized By *[Signature]* Work Order 35395

Date: 9/05/07 N# 102UV Acft Hrs: 293.4

CARRIED FORWARD

TOTAL THIS PAGE	
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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

Diamond DA-40
S/N: 40.549

N102UV
09-05-07
S/N: L-32131-61A

Hobbs: 391.2
Tach: 293.6

Engine M/N: IO-360-MIA

Completed the following Maintenance:

1. Drained the oil and obtained a sample. Removed, cut open and inspected the oil filter for particles, no metal found. Installed a new oil filter (P/N: CH48110-1), torqued and safetied. Service the engine with 8 quarts of Exxon Elite 20W50 oil. Ground ran the engine and checked for oil leaks, found satisfactory, no leaks detected. Installed new Placard stating when the next oil change is due.

Modern Aero, Inc.
14801 Pioneer Trail
Eden Prairie, MN 55347
WO# 35395 Date: 09-05-07 CRS MZER198L

----- End -----

I certify that this engine has been inspected in accordance with an Annual/100 Hour Inspection and was determined to be in airworthy condition and is approved for return to service. Pertinent details of this inspection are on file at this Repair Station under the work order listed.

Date: 3/13/08 Work Order # 35797
Tach or Hobbs Time: 333.9 Aircraft Total Time: 333.9
Engine Total Time Since New or Overhaul 333.9
Signature [Signature]

Modern Aero, Inc
FAA Certified Repair Station #MZER198L

Diamond DA-40
S/N: 40.549

N102UV
03-13-08
S/N: L-32131-61A

Hobbs: 442.6
Tach: 333.9
Eng T.T.: 333.9

Engine M/N: IO-360-MIA

Completed the following Maintenance:

1. Performed an Annual/ 100 Hour Inspection referencing the Diamond DA-40 Maintenance Manual.
2. Researched AD's through the bi-weekly issue 2008-03F.
3. Differential Compressions: #1 75/ 80, #2 75/80, #3 76/80, #4 76/80.
4. Drained the oil and obtained an oil sample. Removed, cut open, and inspected the oil filter, no defects. Installed a new oil filter (P/N: CH48110-1) and serviced the engine with 8 quarts of Exxon 20W50 Elite oil.
5. Removed, cleaned, and reinstalled the fuel injection nozzles, no leaks detected.
6. Complied with AD 2002-26-01 by inspecting the metal fuel injection lines and clamps, no defects noted. Next due March 2009.
7. Removed, cleaned, and reinstalled the fuel servo inlet filter. Leak check found satisfactory.
8. Removed, gapped, cleaned, inspected, rotated, and reinstalled the spark plugs using new gaskets, no defects found.
9. Removed, cleaned, inspected, and reinstalled the induction air filter, no defects noted.
10. Removed the #4 Cylinder Oil Return Line, repaired, and reinstalled.
11. Removed and installed a new Muffler "T" Bracket (P/N: D41-7806-20-01).
12. Removed the L/H and R/H Magnetos, disassembled, and installed new points and condensers in both Magnetos. Internally timed both Magnetos and reinstalled using new gaskets. Timed the Magnetos to the engine at 25° referencing the Slick M.M.
13. Installed spiral wrap on the #4 Cylinder CHT Probe wire as needed.
14. Removed and installed new Scat Tubing between the muffler heat shroud and the cabin heat box.
15. Retorqued all the Rocker Cover hardware as needed.
16. Removed the Oil Dipstick Tube, replaced the Gasket, and reinstalled.

Modern Aero, Inc.
14801 Pioneer Trail
Eden Prairie, MN 55347
WO# 35797 FAA CRS # MZER198L

----- End -----

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 →					
05 May 2008	379	5	379	5	R+R oil + filter 8 quarts Phillips 20W50
27 Aug 2008	431	3			R+R oil + filter 8 quarts AS15W50

Bombardier
Cessna
Diamond
Honeywell
Hawker/Beech



GALVIN FLYING
World-Class People, First-Class Service
FAA Repair Station
IIUNR846E

N102UV Diamond DA-40 s/n 40.549 Tach=ACTT: 465.6 Hobbs: 611.5 March 10, 2009
 Engine: Lycoming IO-360-M1A s/n L-32131-51A ETT: 465.6

ENGINE

INSPECTIONS, S.B.'s, A.D.'s:

- Performed Annual Inspection IAW FAR 91.409(a) and FAR43 Appendix (D) using Galvin Flying Services checklist.
- Compression check: #1=78/80 #2=74/80 #3=75/80 #4=78/80.
- Complied with Airworthiness Directive AD 2008-14-07, Amendment 39-15602, paragraph (j), recurring inspection of Lycoming engine fuel injector lines and clamps, in accordance with Lycoming Service Bulletin 342E. Recurring inspection due each 100 hours, each 12 months, or each maintenance action, see A.D. text.

OTHER MAINTENANCE:

- Changed engine oil filter P/N: CH48110-1. Cut open filter and inspected for contaminants. Drained engine oil, took sample for analysis. Serviced engine with Aeroshell 15w50 oil. Performed ground run/leak check, No defects.
- Reinstalled magnetos, left magneto, Slick 4347 s/n 05042254, and right, Slick 4370, s/n 04092243, after Slick 500-hour inspections and compliances with Slick SB2-08A and SB3-08A by Orcutt, A&P 1862854, on March 6, 2009. Inspected magnetos-satisfactory. Installed new base gaskets. Timed to 25BTC IAW engine data plate. Secured all wiring as removed. Both magnetos TTSN= ETT= 465.6 hrs.
- Replaced all spark plugs with new P/N: REM38E.
- Repositioned electric leads for engine Tanis pre-heat system. Retorqued and saftied loose oil dipstick tube. Performed leak check, No defects at this time.

I certify that the items identified above were repaired and/or inspected in accordance with current Federal Aviation Regulations, and are approved for return to service with respect to work performed. Pertinent details of this work are on file at the Repair Station under Work Order No. 21007.

Galvin Flying Services, Inc.
7001 Perimeter Road, Ste 106
Seattle, WA 98108.
Repair Station HUNR846E

Signature *[Signature]* 005 Date MARCH 10, 2009

05 Aug 2009	515	5	R+R oil + filter 8 quarts AS15W50	Run up leak check OK <i>[Signature]</i> 3160734 AP
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CARRIED FORWARD

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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
OH48110-1 filter Run up leak check ok.	<i>[Signature]</i>	3160734
Run up leak check ok	<i>[Signature]</i>	3160731

03/26/2010 N102UV Lyc. IO-360-M1A S/N L-32131-51A 574.8 Tach & TTEngine
 Performed **Annual** inspection in accordance with FAR 91.409(a) and FAR 43 Appendix D.
 Ran engine. Drained oil, took oil sample and sent oil sample for analysis. Cut open and inspected oil filter, no contaminants found. Installed a new Champion CH48110-1 filter and safe tied.
 Serviced engine with 8 quarts of Aeroshell 15w50 oil.
 Compressions: #1: 76/80 #2: 74/80 #3: 76/80 #4: 76/80.
 Removed, cleaned, inspected and installed fuel injectors referencing Lycoming Service Instruction No. 1275C.
 Complied with **AD 2008-14-07**, Amendment 39-15602, paragraph (j), recurring inspection of Lycoming engine fuel injector lines and clamps, in accordance with Lycoming Service Bulletin 342E, no defects noted at this time.
 AD's checked through this date. No other new or recurring due at this time.
 Run up, all operational checks satisfactory at this time.

I certify that this engine has been inspected in accordance with an **Annual** inspection and was determined to be in an airworthy condition.

Signature *[Signature]* A&P/IA 538989858

08-13-2010 Tach 629.0 R+R oil + filter Tempest AA48110-2
 8 Quarts AS 15W50 Run up leak check ok No other discrepancy noted *[Signature]* AP3160734

04/14/2011 N102UV Lyc. IO-360-M1A S/N L-32131-51A 680.8 Tach & TTEngine
 Performed **Annual** inspection in accordance with FAR 91.409(a) and FAR 43 Appendix D.
 Ran engine. Drained oil, took oil sample and sent oil sample for analysis. Cut open and inspected oil filter, no contaminants found. Installed a new Champion CH48110-1 filter and safe tied.
 Serviced engine with 8 quarts of Aeroshell 15w50 oil.
 Compressions: #1: 76/80 #2: 74/80 #3: 76/80 #4: 72/80.
 Complied with **AD 2008-14-07**, Amendment 39-15602, paragraph (j), recurring inspection of Lycoming engine fuel injector lines and clamps, in accordance with Lycoming Service Bulletin 342E, no defects noted at this time.
 AD's checked through this date. No other new or recurring due at this time.
 Run up, all operational checks satisfactory at this time

I certify that this engine has been inspected in accordance with an **Annual** inspection and was determined to be in an airworthy condition.

Signature *[Signature]* A&P/IA 3155315

ENGINE SERVICE AND

MA

DATE	TIME RUN		TIME SINCE OVERHAUL		INSTALLATIONS, INSPECTIONS, NOTE: USE BOTH PAGES AND AS MANY LINES AS REQUIRED FOR COMPLETE
	HRS.	MIN.	HRS.	MIN.	
6/25/2011	Hobbs	1025.8	703.7	ACT	<p style="text-align: center; background-color: yellow;">L+L inoperative fuel Boost pump</p> <p>Q/W 5100-00-9 S/N 9898 A (overhaul required in 10 years by Manufacturer) all fuel connections tight and torque Stripped white pump flushed by flow and operation prior to connecting engine feed line. all grounds reconnected. owner/operator Ryan Kolber advised that return to service is required in logbook entry. ops check showed no visible leaks and a positive indication of pressure in green range of indicator. <i>John F. Hartzel AP 3160734</i></p>
BROUGHT FORWARD →					

ENTRIES. DRAW A D

Hillsboro Aviation Inc.
N102UV
 Date: 06/18/2012
 Drained oil, removed filter and inspected for debris. None found at this time. Installed new filter and serviced engine with 8 qts. Aeroshell 15W50 oil. Ground run and leak checked ok. The aircraft and/or components identified above was repaired and/or inspected in accordance with current Federal Aviation Regulations and is approved for return to service for the work performed. 14CFR43.11CRS#LJER093G
 Signed: *[Signature]*

HILLSBORO AVIATION
 Hillsboro Aviation Inc. FAA Approved Repair Station # LJER093G 3565 NE Cornell Road, Hillsboro, OR 97124 Phone (503)648-2831

Engine Log

N102UV **Make: Lycoming** **Model: IO-360-M1A** **S/N: L-32131-51A**
 Date: 09/14/2011 Tach: 740.8 EngTT: 740.8 WOW M11-0289

Drained oil, removed filter and inspected for debris. None found at this time. Installed new filter and serviced engine with 8 qts. Aeroshell 15W50 oil. Ground run and leak checked ok. The aircraft and/or components(s) identified above was repaired and/or inspected in accordance with current Federal Aviation Regulations and is approved for return to service for the work performed. 14CFR43.9CRS#LJER093G
 Signed: *[Signature]* Designated Repair Station Inspector

END

Hillsboro Aviation Inc.
N102UV
 Date: May 1, 2013
 Completed Annual inspection Serviced engine with 8 qts. Aeroshell 15W50 oil. Ground run and leak checked ok. The aircraft and/or components identified above was repaired and/or inspected in accordance with current Federal Aviation Regulations and is approved for return to service for the work performed. 14CFR43.11CRS#LJER093G
 Signed: Keith Loose

HILLSBORO AVIATION
 Hillsboro Aviation Inc. FAA Approved Repair Station # LJER093G 3565 NE Cornell Road, Hillsboro, OR 97124 Phone (503)648-2831

Engine Log

N102UV **Make: Lycoming** **Model: IO-360-M1A** **S/N: L-32131-51A**
 Date: April 12th, 2012 Tach: 790.8 EngTT: 790.8 WOW M12-0348

Completed 100 hr. inspection per Diamond DA40 inspection checklist. Drained engine oil and removed filter. Filter inspected for metal, none found. Sent oil sample out for analysis. Serviced engine with 8 qts. Aeroshell 15W50. Installed new CH48110-1 filter. Compression check: 1)77/80, 2)78/80, 3)76/80, 4)74/80. Replaced 4 valve cover gaskets with new p/n SL75906. Complied with AD 2011-26-04 by inspecting fuel injection lines and clamping per Lye. SB 342F, no defects noted. Next due by 890.8 or after any fuel line maintenance. Replaced cooling air SCAT hose to battery and alternator with new. I certify this Engine has been inspected in accordance with a 100 hr. inspection per and was determined to be in airworthy condition at this time. 14CFR43.11CRS#LJER093G
 Signed: *[Signature]* Designated Repair Station Inspector

END

Hillsboro Aviation Inc.
N102UV
 Date: 11/22/13
 Drained oil, removed filter and inspected for debris. None found at this time. Installed new filter and serviced engine with 8 qts. Aeroshell 15W50 oil. Ground run and leak checked ok. The aircraft and/or components identified above was repaired and/or inspected in accordance with current Federal Aviation Regulations and is approved for return to service for the work performed. 14CFR43.11CRS#LJER093G
 Signed: *[Signature]*

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TOTAL FROM PREVIOUS SUMMARY	
TOTAL SINCE MFG.	

MAX

MAINTENANCE RECORD

FOR COMPLETE

ENTRIES. DRAW A DIAGONAL LINE THROUGH THIS BOX IF THE ENGINE IS TO BE REPAIRED, ADJUSTED, OR MODIFIED.

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owed NO
in green

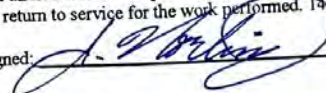
HILLSBORO AVIATION

Hillsboro Aviation Inc. FAA Approved Repair Station # LJER093G 3565 NE Cornell Road, Hillsboro, OR 97124 Phone (503)648-2831

Engine Log

N102UV **Make: Lycoming** **Model: IO-360-M1A** **S/N: L-32131-51A**
Date: 06/18/2012 **Tach: 851.8** **EngTT: 851.8** **WO# M12-0376**

Drained oil, removed filter and inspected for debris. None found at this time. Installed new filter and serviced engine with 8 qts. Aeroshell 15W50 oil. Ground run and leak checked ok.
 The aircraft and/or components(s) identified above was repaired and/or inspected in accordance with current Federal Aviation Regulations and is approved for return to service for the work performed. 14CFR43.9CRS#LJER093G

Signed:  Designated Repair Station Inspector

END

(503)648-2831
L-32131-51A

HILLSBORO AVIATION

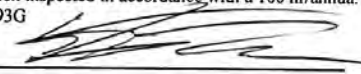
Hillsboro Aviation Inc. FAA Approved Repair Station # LJER093G 3565 NE Cornell Road, Hillsboro, OR 97124 Phone (503)648-2831

Engine Log

N102UV **Make: Lycoming** **Model: IO-360-M1A** **S/N: L-32131-51A**
Date: May 1, 2013 **Tach: 904.2** **EngTT: 904.2** **WO# M13-0484**

Completed Annual inspection per FAR 91.409(a) and FAR 43 appendix D. Drained engine oil and removed filter. Filter inspected for metal, none found. Serviced engine with 8 qts. Aeroshell 15W50. Installed new CH48110-1 filter. Compression check: 1)77/80, 2)76/80, 3)78/80, 4)76/80. Complied with AD 2011-26-04 by inspecting fuel injection lines and clamping per Lyc. SB 342F, no defects noted. Next due by 1004.2 or after any fuel line maintenance.

I certify this Engine has been inspected in accordance with a 100 hr/annua. inspection per and was determined to be in airworthy condition at this time. 14CFR43.11CRS#LJER093G

Signed: Keith Loose  Designated Repair Station Inspector

END

(503)648-2831

found. Sent
(80, 3)76/80,
g per Lyc. SB
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e.

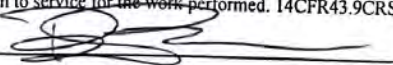
HILLSBORO AVIATION

Hillsboro Aviation Inc. FAA Approved Repair Station # LJER093G 3565 NE Cornell Road, Hillsboro, OR 97124 Phone (503)648-2831

Engine Log

N102UV **Make: Lycoming** **Model: IO-360-M1A** **S/N: L-32131-51A**
Date: 11/22/13 **Tach: 954.8** **EngTT: 954.8** **WO# M13-0607**

Drained oil, removed filter and inspected for debris. None found at this time. Installed new filter and serviced engine with 8 qts. Aeroshell 15W50 oil. Ground run and leak checked ok. Re-torqued and safetied oil dipstick tube.
 The aircraft and/or components(s) identified above was repaired and/or inspected in accordance with current Federal Aviation Regulations and is approved for return to service for the work performed. 14CFR43.9CRS#LJER093G

Signed:  Designated Repair Station Inspector

END

MAXIMUM HOURS BETWEEN OVERHAULS _____ HOURS.



HILLSBORO AVIATION

Hillsboro Aviation Inc. FAA Approved Repair Station # LJER093G 3950 NW 264th Ave., Hillsboro, OR 97124 Phone (503)648-2831

Engine Log

N102UV **Make: Diamond** **Model: DA-40** **S/N: 40.549**
 Date: 4/22/2015 Tach: 1020.5 ENG TT: 1020.5 WO# M15-0897

Eng Make: Lycoming Model: IO-360-MIA Serial: L-32131-51A

Performed the following inspections and/or Bulletins:

Performed Annual/100 hr. inspection per FAR 91.409(a) and FAR43 appendix D on engine assembly. Performed engine compression check, results are as follows: #1 77/80, #2 78/80, #3 78/80, #4 78/80.

Performed the Following Maintenance and Repairs:

Completed engine oil service, drained oil, removed filter, installed new oil filter and serviced with 8 quarts of Aeroshell 15W50. Cut open oil filter, no debris noted. Referenced Lycoming SB# 480E.

Performed the Following Airworthiness Directives (AD):

Complied with AD 2011-26-04 fuel injection lines inspection reference Lycoming eng SB 342F, no defects noted. Next due in 100 hrs or after fuel line maintenance.

Approval for Return to Service: I certify this engine has been inspected in accordance with an Annual/100 hr. inspection per FAR 43 appendix D and was determined to be in airworthy condition at this time. 14CFR43.11

Signed: *J. P. Kelly* Designated Repair Station Inspector
 END



HILLSBORO AVIATION

Hillsboro Aviation Inc. FAA Approved Repair Station # LJER093G 3950 NW 264th Ave., Hillsboro, OR 97124 Phone (503) 648-2831

ENGINE LOG **N102UV** **Make: Diamond** **Model: DA40** **S/N: 40.549**
 Date: 01/11/2016 Tach: 1072.5 ACTT: 1072.5 WO# M16-003

Preliminary inspection performed. Drained engine oil. Removed filter, inspected for metal, none found. Installed new CH48110-1 filter and serviced engine with Aeroshell 15-W50 oil. Ground ran aircraft, leak checked good.

The aircraft and/or components identified above was repaired and/or inspected in accordance with current Federal Aviation Regulations and is approved for return to service at this time for the work performed. 14CFR43.9

Signed: *J. P. Kelly* Designated Repair Station Inspector
 END



HILLSBORO AVIATION

Hillsboro Aviation Inc. FAA Approved Repair Station # LJER093G 3950 NW 264th Ave., Hillsboro, OR 97124 Phone (503)648-2831

Engine Log

N102UV **Make: Diamond** **Model: DA-40** **S/N: 40.549**
 Date: 5/06/2016 Tach: 1082.6 ENG TT: 1082.6 WO# M16-039

Eng Make: Lycoming Model: IO-360-MIA Serial: L-32131-51A

Performed the following inspections and/or Bulletins:

Performed Annual/100 hr. inspection per FAR 91.409(a) and FAR43 appendix D on engine assembly. Performed engine compression check, results are as follows: #1 78/80, #2 75/80, #3 75/80, #4 76/80.

Performed the Following Maintenance and Repairs:

Completed engine oil service, drained oil, removed filter, installed new oil filter and serviced with 8 quarts of Aeroshell 15W50. Cut open oil filter, no debris noted. Referenced Lycoming SB# 480E. Replaced (4) valve cover gaskets with new, p/n 75906.

Performed the Following Airworthiness Directives (AD):

Complied with AD 2015-19-07 fuel injection lines inspection reference Lycoming eng SB 342F, no defects noted. Next due in 110 hrs. or after fuel line maintenance.

Approval for Return to Service: I certify this engine has been inspected in accordance with an Annual/100 hr. inspection per FAR 43 appendix D and was determined to be in airworthy condition at this time. 14CFR43.11

Signed: *J. P. Kelly* Designated Repair Station Inspector
 END

MAINTENANCE RECORD

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

SIGNATURE

LICENCE
NUMBER



Hillsboro Aviation Inc. FAA Approved Repair Station # LJER093G 3845 NE 30th Ave., Hillsboro, OR 97124 Phone (503)648-2831

Engine Log

N102UV **Make: Diamond** **Model: DA-40** **S/N: 40.549**
Date: 5/29/2018 **Tach: 1180.5** **ENG TT: 1180.5** **WO# M18247**

Eng Make: Lycoming **Model: IO-360-M1A** **Serial: L-32131-51A**

Performed the following inspections and/or Bulletins:
 Performed Annual/100 hr. inspection per FAR 91.409(a) and FAR43 appendix D on engine assembly. Performed engine compression check, results are as follows: #1) 76/80, #2) 78/80, #3) 77/80, #4) 76/80.

Performed the Following Maintenance and Repairs:
 Completed engine oil service, drained oil, removed filter, installed new oil filter and serviced with 8 quarts of Aeroshell 15W50. Cut open oil filter, no debris noted.

Performed the Following Airworthiness Directives (AD):
 Complied with AD 2015-19-07 fuel injection lines inspection reference Lycoming eng SB 342F, no defects noted. Next due in 110 hrs. or after fuel line maintenance. AD's checked thru BiWeekly 2018-10.

Approval for Return to Service: I certify this engine has been inspected in accordance with an Annual/100 hr. inspection per FAR 43 appendix D and was determined to be in airworthy condition at this time. 14CFR43.11

Signed:  Designated Repair Station Inspector

END



Hillsboro Aviation Inc. FAA Approved Repair Station # LJER093G 3845 NE 30th Ave., Hillsboro, OR 97124 Phone (503)648-2831

Engine Log

N102UV **Make: Diamond** **Model: DA-40** **S/N: 40.549**
Date: 6/06/2019 **Tach: 1233.5** **ENG TT: 1233.5** **WO# M19491**


Eng Make: Lycoming **Model: IO-360-M1A** **Serial: L-32131-51A**

Performed the following inspections and/or Bulletins:
 Performed Annual/100 hr. inspection per FAR 91.409(a) and FAR43 appendix D on engine assembly. Performed engine compression check, results are as follows: #1) 78/80, #2) 76/80, #3) 78/80, #4) 78/80.

Performed the Following Maintenance and Repairs:
 Completed engine oil service, drained oil, removed filter, installed new oil filter and serviced with 8 quarts of Aeroshell 15W50. Cut open oil filter, no debris noted. Sample sent for analysis. Removed, cleaned, gapped, inspected and reinstalled all spark plugs.

Performed the Following Airworthiness Directives (AD):
 Complied with AD 2015-19-07 fuel injection lines inspection reference Lycoming eng SB 342F, no defects noted. Next due in 110 hrs. or after fuel line maintenance. AD's checked thru BiWeekly 2019-11.

Approval for Return to Service: I certify this engine has been inspected in accordance with an Annual/100 hr. inspection per FAR 43 appendix D and was determined to be in airworthy condition at this time. CRS# LJER093G

Signed:  Designated Repair Station Inspector

END

MAXIMUM HOURS BETWEEN OVERHAULS _____ HOURS.

ENGINE SERVICE AND

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

Registration	N102UV		Date	July 24, 2020
Make	Lycoming		Hobbs	1748.8
Model	IO-360-M1A		Tach	1269.8
Serial No.	L-32131-51A	13310 Nevada City Ave.	SMOH	1269.8
Invoice No.	27716	Grass Valley, CA 95945	TT Engine	1269.8
	CRS# XGKR718T	(530) 477-7701		

Description of Inspections, Tests, Repairs, and Alterations.

- 1 Performed an Annual Inspection IAW Diamond DA40 100 Hour Maintenance Checklist.
- 2 Serviced engine IAW Diamond DA40 Maintenance Manual doc # 6.02.01 rev 7.
- 3 Performed cylinder compression test, #1-76/80, #2-685/80, #3-75/80, #4-74/80
- 4 Performed oil analysis and installed new oil filter p/n CH48110-1.
- 5 Serviced engine with 7 qts. Phillips X/C 20W50 engine oil.
- 6 C/W AD 2015-19-07 External Fuel Injection Line Inspection IAW SB 342G. Next due 1379.8 TIS.
- 7 C/W SB 480E Oil and Filter Change and Content Inspection. No contaminants found.
- 8 C/W SB 183A Magneto Timing Discrepancies, no adjustments needed. Next Due 1369.8 TIS.
- 9 C/W SB 301B Maintenance procedures and service limitations for valves, due 1669.8 TIS
- 10 Tighten cylinder oil drain back tubes.
- 11 Tighten dipstick tube and safety.
- 12 Removed damaged SkyTec starter pn 149-24LS, sn F4L-480622
- 13 Installed new SkyTec starter pn 149-24LS, sn H-U010970

I certify that this engine has been inspected in accordance with an Annual Inspection and found to be in airworthy condition.

Signature 

CRS# XGKR718T

July 8, 2021 **Tach: 1340.9** **Engine Total: 1340.9** **Hobbs 1837.7**

Complied with an ANNUAL inspection I/A/W 14 CRF 43 Appx D. Engine ground run, Static rpm checked. Differential compression check: 1) 78 2) 78 3) 77 4) 76 over 80 psi. Cleaned, Gapped, Tested and Rotated spark plugs. Oil and filter changed with 8qts 15W50 Aeroshell and CH48110-1 filter. Cut and Inspected oil filter. Inspected oil suction screen. Ground run and Leak checked.

Additional work performed: JR air filter serviced with new fluid. Adjusted Idle mixture. Adjusted mixture control rigging of cushion. Adjusted idle speed. Removed debris from in between cylinders. Sealed up baffle air gaps. Replaced throttle and mixture vibration seals. Installed missing hardware on oil cooler mount. Replaced alternator belt 37A19773-376. Reinstalled prop using new o-ring. Replaced #2 intake gasket. Replaced one spark plug UREM38E.

See AD list in aircraft records.

Complied with **AD2015-19-07** by inspection of injection lines. Due again at annual, 100 hour or at next fuel line movement.

AD2009-02-03 Installed P/N 2577258 gasket IAW par (I)(1-10) due to unknown condition. G stamp and safety wire per Precision Airmotive LLC Mandatory Service Bulletin (MSB) No. PRS-107 Revision 4, dated July 16, 2008. This is terminating action. No longer recurring

I certify this Engine has been inspected in accordance with an Annual inspection and has been found to be in Airworthy condition at this time.

Rian Keller AP2771007 IA
Northwest Aircraft Maintenance Inc. (503) 648-3670

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

July 19, 2021

Tach: 1345.1

Hobbs 1845.4

Replaced #1 lower spark plug REM38E.

Rian Keller AP2771007 IA
Northwest Aircraft Maintenance Inc. (503) 648-3670



August 3rd, 2022 Tach: 1386.3 Engine Total: 1386.3 Hobbs 1898.1

Complied with an ANNUAL inspection I/A/W 14 CRF 43 Apdx D. Engine ground run, Static rpm checked. Differential compression check: 1) 76 2) 76 3) 76 4) 78 over 80 psi. Cleaned, gapped, tested and rotated spark plugs. Mag timing adjusted to spec. Oil and filter changed with 8qts 15W50 Aeroshell and CH48110-1 filter. Cut and inspected oil filter. Oil sample saved and sent to Blackstone. Inspected oil suction screen. Ground run and Leak checked.

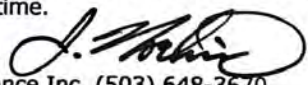
Additional work performed: JR air filter cleaned and serviced. Inspected exhaust system per MSB40-033. Next due in 50 hrs. Replaced all rocker box gaskets with new p/n 75906.

See AD list in aircraft records.

Complied with **AD2015-19-07** by inspection of injection lines. Due again at annual, 100 hour or at next fuel line movement.

I certify this Engine has been inspected in accordance with an **Annual** inspection and has been found to be in Airworthy condition at this time.

John Norling AP3046424 IA
Northwest Aircraft Maintenance Inc. (503) 648-3670



ENGINE MODEL: IO-360-M1A
ENGINE S/N: L-32131-51A
REG. NO: N102UV
WORK ORDER: 0740



Premier Aircraft Service, Inc.

3804 Falcon Way W
Hangar 18S
Fort Worth, TX 76106
Phone: 562.881.5345

DATE: 2/17/2023
A/C TSN: 1419
ENG TT: 1419
HOBBS: 1938

Engine Entries

- Performed 100 Hour Inspection using DA40 AMM as a guide
- Checked engine compression: #1 74/80 #2 70/80 #3 72/80 #4 74/80
- Changed oil and filter. Serviced engine with X/C 20W-50
- AD 2015-19-07 (Fuel Injector Lines) Inspected IAW MSB342G
- Replaced dipstick tube gasket RG-72059
- Replaced alternator with overhauled ALU-8521 S/N H-W112271
- Adjusted idle and mixture
- Adjusted magneto to engine timing

I certify this engine has been inspected in accordance with an Annual Inspection and was determined to be in airworthy condition.

DATE: 2/17/2023

SIGNED:



David Seastead, License: AP3492477 IA

Work Order: 0740

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MAXIMUM HOURS BETWEEN OVERHAULS _____ HOURS.

AD NO. / SE	RV	Description / Method of Compliance	Next Due	Once	Rec	Code	Sign
2002-26-01 342	D	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
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
96-12-07 425	C	Inspection of impulse couplings and stop pins New snap ring configured magneto installed	500 hours		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	
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	
71-05-02 327	C	INSPECTION OF CENTER MAIN BEARING NEW INSTALLED	N/A	X		2	
71-11-02 323		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	
78-23-10 423		BENDIX FUEL INJ. BULLETIN RS-42 NEW P/N INSTALLED	N/A	X		2	

Codes:

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



The following SB and SI have been carried out as applicable:
 DAI SI 40-002 / Lycoming Mandatory S/B 548 - Engine Driven -
 Replacement - N/A by S/N
 Engine S/N: L-32131-51A Eng TTSN: 3.9 HRS
 Q/W: 40,549 Rep: N102UV
 Capacitor VM1000

