

# AIRCRAFT TECHNICAL RECORD

## Section 3. ENGINE LOG

## ENGINE LOG

- |                                  |          |
|----------------------------------|----------|
| 1. Make:                         | TCM      |
| 2. Model:                        | IO-240-B |
| 3. Specification:                | E7SO     |
| 4. Manufacturer's Serial Number: | 1006616  |
| 5. Date of Manufacture:          | May 2012 |
| 6. Aircraft Inspection Cycle:    |          |

1. Approving National Aviation Authority/Country: FAA/United States

# AUTHORIZED RELEASE CERTIFICATE

FAA FORM 8130-3, AIRWORTHINESS APPROVAL TAG

3. Form Tracking Number: 204203

4. Organization Name and Address: Continental Motors, 2039 Broad Street, Mobile, Alabama 36615

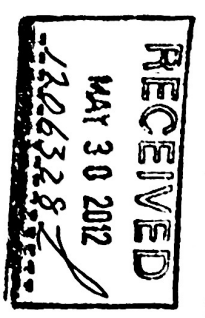
PC #508

5. Work Order/Contract/Invoice Number: 282703  
Form 0000090836

6. Item	7. Description:	8. Part Number:	9. Eligibility: *	10. Quantity:	11. Serial/Batch Number:	12. Status/Work:
1	ENGINE - NEW	IO240B32	N/A	1	See Block 13	New

13. Remarks: Export Airworthiness Approval: CANADA This Product meets the special requirements (if applicable) of the importing country.  
 Total Time: 0  
 Preservation: This Engine was treated 05/23/12 for one hundred eighty days corrosion protection.

Serial/Batch Number(s):  
 Serial: 1006616  
 Description: ENGINE - NEW



14. Certifies the items identified above were manufactured in conformity to:  
 Approved design data and are in condition for safe operation  
 Non-approved design data specified in Block 13.

15. Authorized Signature: *Daniel L. Nicholas*  
 16. Approval/Authorization No.: DMIR-511010-CE  
 17. Name (Typed or Printed): Daniel L. Nicholas  
 18. Date (m/d/y): May/24/2012  
 19.  14 CFR 43.9 return to Service  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 Regulation 5, part 43 and in respect to that work, the items are approved for return to service.  
 20. Authorized Signature:  
 21. Approval/Certificate No.:  
 22. Name (Typed or Printed):  
 23. Date (m/d/y):

### User/Installer Responsibilities

It is important to understand that the existence of this document alone does not automatically constitute authority to install the part/component/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 parts/components/assemblies from the airworthiness authority of the country specified in Block 1.  
 Statements in Block 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 user/installer before aircraft may be flown.  
 FAA Form 8130-3 (6-01) \* Installer must cross check eligibility with applicable technical data.

1. Approving Civil Aviation Authority/Country: FAA/United States

2. Form Tracking Number: 1282015

**AUTHORIZED RELEASE CERTIFICATE**

FAA Form 8130-3, AIRWORTHINESS APPROVAL TAG

4. Organization Name and Address: AIRCRAFT ACCESSORIES OF OKLAHOMA  
2740 North Sheridan Rd  
Tulsa, OK 74115

5. Work Order/Contract/Invoice Number: CRS# RV3R829L  
SO15-151

6. Item:	7. Description:	8. Part Number:	9. Quantity:	10. Serial Number:	11. Status/Work:
1	FUEL PUMP	653351-3A5	1	M5253R	OVERHAULLED

12. Remarks: THE PART IDENTIFIED ABOVE WAS OVERHAULLED IN ACCORDANCE WITH FAA APPROVED DATA. THERE ARE NO APPLICABLE AIRWORTHINESS DIRECTIVES. SALES ORDER SO15-151 SHOWING THE ACTUAL WORK PERFORMED IS ON FILE AT THIS FACILITY

13a. Certifies the items identified above were manufactured in conformity to:

Approved design data and are in a condition for safe operation.

Non-approved design data specified in Block 12.

14a.  14 CFR 43.9 Return to Service  Other regulation specified in Block 12

Certifies that unless otherwise specified in Block 12, the work identified in Block 11 and described in Block 12 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.

13b. Authorized Signature: \_\_\_\_\_

13c. Approval/Authorization No.: \_\_\_\_\_

14b. Authorized Signature: *Alan Brothers*

14c. Approval/Certificate No.: RV3R829L

13d. Name (Typed or Printed): \_\_\_\_\_

13e. Date (dd/mm/yyyy): \_\_\_\_\_

14d. Name (Typed or Printed): Alan Brothers

14e. Date (dd/mm/yyyy): 28-Jan-2015

**User/Installer Responsibilities**

It is important to understand that the existence of this document alone does not automatically constitute authority to install the aircraft engine/propeller/article.

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 aircraft engine(s)/propeller(s)/article(s) from the airworthiness authority of the country specified in Block 1.

Statements in Blocks 13a and 14a 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.

Form 8130-3 (02-14) NSN: 0052-00-012-9005





Continental Motors, Inc.

Engine Component Information Sheet

Printed : 5/23/2012

Serial: 1006616  
 Spec: I0240B32B  
 New/Rebuilt: NEW

Assembled: 5/17/2012  
 Shipped:  
 Packed: 5/23/2012

Customer Name:

Shipping Address:

Component	Serial Number	Component	Serial Number
CAMSHAFT	123952	L. TURBO	N/A
CRANKSHAFT	N11LA015	R. TURBO	N/A
CRANKCASE	S12AA022	OVERBOOST	N/A
CONNROD	AE12CA279	CONTROLLER	N/A
CONNROD	AE12CA327	WASTEGATE	N/A
CONNROD	AE12CA277	CYLINDER - 1	AC12BB475
CONNROD	AE12CA276	CYLINDER - 2	AC12BB447
CONNROD	N/A	CYLINDER - 3	AC12BB421
CONNROD	N/A	CYLINDER - 4	AC12BB484
L MAGNETO	11121139	CYLINDER - 5	N/A
R MAGNETO	12011702	CYLINDER - 6	N/A
CARBURETOR	N/A	CYL FLOW CODE	N/A
FUEL PUMP	B12DA174	NOZZLE - 1	1173
MANIFOLD VALVE	C12DA148	NOZZLE - 2	2173
METERING UNIT	A12EA055	NOZZLE - 3	3173
STARTER	01125120S	NOZZLE - 4	4173
ALTERNATOR	N/A	NOZZLE - 5	N/A
ALTERNATOR 2	N/A	NOZZLE - 6	N/A
DRIVE GEAR	N/A	OIL COOLER	N/A
DRIVE GEAR	N/A	PISTON WEIGHT	N/A

Form QA-85A (MAR 2012)



Pack Inspection Stamp

All of the information provided herein is subject to verification by the user. Continental Motors, Inc. makes no representation or warranty concerning the accuracy or completeness of the information and assumes no responsibility with respect thereto.









ENCE:  
Eor  
/ACA

Engine Tail Number: N139DA Aircraft Make/ Model: Diamond DA20-C1  
Engine Make: Continental Engine Model: IO-240-B Engine S/N: 1006616

Engine TT: 51.2 Date: 10/25/2012 2 of 2  
Tach: 51.2

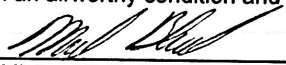
I certify this engine has been serviced and inspected I/AW a 50 Hour inspection I/AW FAR 43 appendix D and I/AW FAR 43.11. This engine was found to be in an airworthy condition and is approved for return to service.

  
Michael B Smith A&P409570064IA

Engine Tail Number: N139DA Aircraft Make/ Model: Diamond DA20-C1  
Engine Make: Continental Engine Model: IO-240-B Engine S/N: 1006616

Engine TT: 98.2 Date: 12/17/2012 2 of 2  
Tach: 98.2

I certify this engine has been serviced and inspected I/AW a 100 Hour inspection I/AW FAR 43 appendix D and I/AW FAR 43.11. This engine was found to be in an airworthy condition and is approved for return to service.

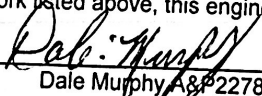
  
Michael B Smith A&P409570064IA

Blue Ridge Airport Authority 525 Airport Rd, Martinsville, VA 24112 (276) 957-1109 Fax (276) 957-2292 1 of 2

Engine Date: 05/23/2013 Tail Number: N139DA Aircraft Make/Model: Diamond DA20-C1  
Engine Make: Continental Engine Model: IO-240-B Engine S/N: 1006616 Tach: 195.8

**Service performed:** Replaced oil with 6 quarts of Aeroshell 15W-50. Replaced oil filter with one new AA48108-2, torqued and safetied. Cut open old filter and no contaminants were found. Checked magneto to engine timing and found to be within limits per engine data plate. Differential compression check performed I/AW TCM SB03-3, #1: 72/80 #2: 72/80 #3: 72/80 #4: 71/80. Cleaned, inspected, tested installed and torqued all spark plugs using new M-674 gaskets. Performed ground run and leak check and no leaks or defects were noted at this time.

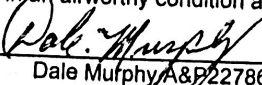
All work listed above was done I/AW Teledyne Continental IO-240 A&B Operation and Installation Manual and I/AW FAR 43.9. In reference to the work listed above, this engine was found to be in an airworthy condition and is approved for return to service.

  
Dale Murphy A&P227863044IA

Engine Tail Number: N139DA Aircraft Make/ Model: Diamond DA20-C1  
Engine Make: Continental Engine Model: IO-240-B Engine S/N: 1006616

Engine TT: 195.8 Date: 05/23/2013 2 of 2  
Tach: 195.8

I certify this engine has been serviced and inspected I/AW a 100 Hour inspection I/AW FAR 43 appendix D and I/AW FAR 43.11. This engine was found to be in an airworthy condition and is approved for return to service.

  
Dale Murphy A&P227863044IA

# Section 3A: Engine Service and Maintenance Log

DATE / /	TIME RUN		TIME SINCE OVERHAUL		CYCLES		INSTALLATIONS, INSPECTIONS
	HOURS	min	HOURS	min	Sub Total	TOTAL	
BROUGHT FORWARD	▶						

1 of 2

**Engine** Date: 08/23/2013 Tail Number: N139DA Aircraft Make/Model: Diamond DA20-C1  
 Engine Make: Continental Engine Model: IO-240-B Engine S/N: 1006616 Tach: 293.0

**Service performed:** Replaced oil with 6 quarts of Aeroshell W-100. Replaced oil filter with one new AA48108-2, torqued and safetied. Cut open old filter and no contaminants were found. Checked magneto to engine timing and found to be within limits per engine data plate. Differential compression check performed I/A/W TCM SB03-3, #1: 78/80 #2: 78/80 #3: 77/80 #4: 78/80. Cleaned, inspected, tested installed and torqued all spark plugs using new M-674 gaskets. Performed ground run and leak check and no leaks or defects were noted at this time.

All work listed above was done I/A/W Teledyne Continental IO-240 A&B Operation and Installation Manual and I/A/W FAR 43.9. In reference to the work listed above, this engine was found to be in an airworthy condition and is approved for return to service.

*Dale Murphy*  
 Dale Murphy A&P 2278630441A

**Engine** Tail Number: N139DA Aircraft Make/ Model: Diamond DA20-C1 Engine TT: 293.0 Date: 05/23/2013 2 of 2  
 Engine Make: Continental Engine Model: IO-240-B Engine S/N: 1006616 Tach: 293.0

I certify this engine has been serviced and inspected I/A/W a 100 Hour inspection I/A/W FAR 43 appendix D and I/A/W FAR 43.11. This engine was found to be in an airworthy condition and is approved for return to service.

*Dale Murphy*  
 Dale Murphy A&P 2278630441A

5/31/14

Kane Aviation LLC. 22 Waypoint Dr. Roanoke, VA 24018  
 Aircraft : Da20 Reg: 139DA Hobbs:721.4 Tach:485.1 S/N: CO619  
 Service Performed: Removed and cleaned oil pressure relief valve, cleaned off scoring from the surface of the plug, removed metal shards, and ran engine. Oil pressure much better, within the acceptable ranges at cruise and at idle, no lower than 25 PSI.

Kendall Young 3448439 A&P  
*Kendall Young*

THIS PAGE TOTALS	▶					
PREVIOUS TOTALS						
TOTALS SINCE NEW						

CARRY FORWARD to Top of Next Page ▶

NAME/  
SIGNATURE

LICENCE:  
AME or  
AMO/ACA

Kane Aviation LLC. 22 Waypoint Rd.  
Roanoke, VA 24012

Type: DA20 Number: 139DA S/N: CO619  
Tach: 485.2 Hobbs: 721.7

Service Performed: Removed IO240-B engine  
due to metal found in oil filter. Student  
engaged starter accidentally during runup  
sequence. Engine has been removed for  
further inspection.

Kendall Young

*Kendall Young* ATP  
3448434

**MANUFACTURER:** Continental **ENGINE MODEL:** IO-240-B **S/N:** 1006616 **WO#** 6409

**AD #** DESCRIPTION **COMPLIANCE STATUS**

09-24-52 TCM lifters N/A by P/N lifters

12-03-06C AFS servo diaphragm N/A by TCM factory fuel system installed

**Poplar Grove Airmotive, Inc.**  
FAA-Certified Repair Station YYBR664L **David Mason** *D.M.* **Date:** 7/30/2014

**MAKE** CONTINENTAL **MODEL**

**Total Time** 485.2

The aircraft engine identified above was repaired and approved for return to service for file at this repair station under:  
**Work Order #** 6409

Disassembled, inspected, and repaired engine due to magnetos. Installed magnetos left P/N 4310, S/N 1006616 performed by Poplar Grove Airmotive. Installed and test run in an FAA approved test for further details.

**Poplar Grove Airmotive, Inc.**  
Poplar Grove Airport, Poplar Grove, IL  
FAA Approved Repair Station #YYBR664L

7/31/2014 8:12AM

**Poplar Grove Airmotive, Inc.**  
**Shop Orders - Inventory Summary**  
For Shop Order 6409 Only

Shop Order #	Close Date	Dec #	Part Number	Description	Action	Date Why?	Quantity	Units
6409	///	2,000	SA430917	Seal		7/17/2014	1.00	Each
6409	///	2,000	837082A3	Main Bearing Set		7/17/2014	1.00	Each
6409	///	2,000	UR1HM30E	Spark Plugs		7/17/2014	2.00	Each
6409	///	2,000	501867	Lock Tab		7/17/2014	16.00	Each
6409	///	2,000	SA22534	Camshaft Gear Bolt		7/17/2014	4.00	Each
6409	///	2,000	36025	Crank Gear Bolt		7/17/2014	4.00	Each
6409	///	2,000	855958	Washer		7/17/2014	4.00	Each
6409	///	2,000	853900	Rod Bolt		7/17/2014	8.00	Each
6409	///	2,000	SA632310-S	Gasket		7/17/2014	1.00	Each
6409	///	2,000	1874	Gasket, Silicone		7/17/2014	8.00	Each
6409	///	2,000	854848	Spark Plug Gasket		7/17/2014	8.00	Each
6409	///	2,000	853747	Gasket		7/17/2014	1.00	Each
6409	///	2,000	853487	Gasket Fuel Pump Adp		7/17/2014	1.00	Each
6409	///	2,000	649987	Gasket Cam Cover		7/17/2014	1.00	Each
6409	///	2,000	SA3577	Gasket		7/17/2014	1.00	Each
6409	///	2,000	M 64680 A1	Gasket Set		7/17/2014	1.00	Each
6409	///	2,000	842714	Seal		7/17/2014	4.00	Each
6409	///	2,000	SA25102	Seal		7/17/2014	1.00	Each
6409	///	2,000	M 533768-11	Gasket		7/17/2014	2.00	Each
6409	///	2,000	M 533768-18	Gasket		7/17/2014	2.00	Each
6409	///	2,000	AS3578-020	O-Ring (MS9021-020)		7/17/2014	1.00	Each
6409	///	2,000	858106	Lifter		7/18/2014	1.00	Each
6409	///	3,000	AK-3215	Brush And Spring		7/22/2014	2.00	Each
6409	///	3,000	M2556-10	Cotter Pin		7/22/2014	2.00	Each
6409	///	2,000	SA24784	Contact		7/22/2014	1.00	Each
6409	///	2,000	AA48108	Screw		7/22/2014	6.00	Each
6409	///	2,000	SA827498	Oil Filter		7/22/2014	1.00	Each
6409	///	2,000	M 528778-10	Gasket		7/22/2014	1.00	Each
6409	///	4,000	846678	O-RING		7/22/2014	2.00	Each
6409	///	2,000	833958-2	Seal		7/28/2014	4.00	Each
6409	///	3,000	M3637	Contact		7/29/2014	4.00	Each
6409	///	2,000	853830	Gasket		7/23/2014	1.00	Each
6409	///	2,000	858108	Seal		7/24/2014	2.00	Each
6409	///	2,000	832345	Lifter		7/21/2014	2.00	Each
6409	///	2,000	838600	Oil Filter Hose		7/21/2014	1.00	Each
6409	///	2,000	401801	Washer		7/21/2014	3.00	Each
6409	///	2,000	854487	Nut		7/21/2014	1.00	Each
6409	///	2,000	854487	Nut		7/21/2014	8.00	Each

**OURS**  
Kane Aviation  
are on  
from Continental  
our inspection  
Quality Products.  
and Parts List



NAME/  
SIGNATURE

LICENCE:  
AME or  
AMO/ACA

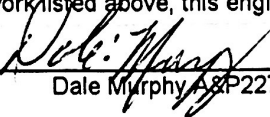
Kane Aviation LLC. 22 Waypoint Dr. Roanoke, VA. 24018

1 of 2

**Engine** Date: 12/26/2014 Tail Number: N139DA Aircraft Make/Model: Diamond DA20-C1  
Engine Make: Continental Engine Model: IO-240-B Engine S/N: 1006616 Tach: 582.3

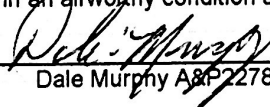
**Service performed:** Installed 5 quarts of Aeroshell W-100 and Avblend. Installed new oil filter AA48108-2, torqued, safetied. Cked magneto timing, Adjusted Rt mag to mfg specs. Compression check performed I/AW TCM SB03-3: 78, 78, 77, 77. Cleaned, inspected, tested installed and torqued all spark plugs using new M-674 gaskets. Performed ground run and leak check and no leaks or defects.

All work listed above was done I/AW Teledyne Continental IO-240 A&B Operation and Installation Manual and I/AW FAR 43.9. In reference to the work listed above, this engine was found to be in an airworthy condition and is approved for return to service.

  
Dale Murphy A&P2278630441A

**Engine** Tail Number: N139DA Aircraft Make/ Model: Diamond DA20-C1 Engine TT: 582.3 Date: 12/26/2014 2 of 2  
Engine Make: Continental Engine Model: IO-240-B Engine S/N: 1006616 Tach: 582.3

I certify this engine has been serviced and inspected I/AW a 100 Hour inspection I/AW FAR 43 appendix D and I/AW FAR 43.11. This engine was found to be in an airworthy condition and is approved for return to service.

  
Dale Murphy A&P2278630441A

Kane Aviation LLC. 22 Waypoint Dr. Roanoke, VA. 24018

1 of 1

**Engine** Date: 2/19/2015 Tail Number: N139DA Aircraft Make/Model: Diamond DA20-C1  
Engine Make: Continental Engine Model: IO-240-B Engine S/N: 1006616 Tach: 631.5

**Service performed:** Drained oil and safetied drain, installed 5 quarts of Aeroshell W-100 and 1 Avblend. Installed new oil filter AA48108-2, torqued, safetied. Installed new 655704 Rocker Cover gaskets on all cylinders. Performed ground run and leak check and no leaks or defects.

All work listed above was done I/AW Teledyne Continental IO-240 A&B Operation and Installation Manual and I/AW FAR 43.9. In reference to the work listed above, this engine was found to be in an airworthy condition and is approved for return to service.

  
Dale Murphy A&P2278630441A

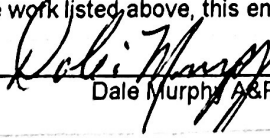
Kane Aviation LLC. 22 Waypoint Dr. Roanoke, VA. 24018

1 of 1

**Engine** Date: 3/23/2015 Tail Number: N139DA Aircraft Make/Model: Diamond DA20-C1  
Make: Continental Model: IO-240-B S/N: 1006616 Tach: 664.2

**Service performed:** Replaced all spark plugs for right magneto with URHM-38E. Operational run-up satisfactory.

All work listed above was done I/AW Teledyne Continental IO-240 A&B Operation and Installation Manual and I/AW FAR 43.9. In reference to the work listed above, this engine was found to be in an airworthy condition and is approved for return to service.

  
Dale Murphy A&P2278630441A

# Section 3A: Engine Service and Maintenance Log

D/

/ Kane Aviation LLC. 22 Waypoint Dr. Roanoke, VA. 24018

1 of 2

BROU  
FORV

**Engine** Date: 4/8/2015 Tail Number: N139DA Aircraft Make/Model: Diamond DA20-C1  
 Engine Make: Continental Engine Model: IO-240-B Engine S/N: 1006616 Tach: 682.4

**Service performed:** Installed 5 quarts of Aeroshell 15W50 and 12 oz. Avblend. Removed oil filter, inspected, Installed new oil filter AA48108-2, torqued and safetied. Checked Mag timing and Differential compression check performed REF: TCM SB03-3, 74, 75, 74, 76. Cleaned, inspected, tested installed and torqued all spark plugs with new M-674 gaskets. Performed operational run, no leaks or defects.

All work listed above performed REF: Teledyne Continental IO-240 A&B Operation and Installation Manual and REF: FAR 43.9. In reference to the work listed above, this engine was found to be in an airworthy condition and is approved for return to service.

*Dale Murphy*  
 Dale Murphy A&P 2278630441A

**Engine** Tail Number: N139DA Aircraft Make/ Model: Diamond DA20-C1 Engine TT: 682.4 Date: 04/8/2015 2 of 2  
 Engine Make: Continental Engine Model: IO-240-B Engine S/N: 1006616 Tach: 682.4

I certify this engine has been serviced and inspected I/AM a 100 Hour Inspection I/AM FAR 43 appendix D and REF: FAR 43.11. This engine was found to be in an airworthy condition and is approved for return to service.

*Dale Murphy*  
 Dale Murphy A&P 2278630441A

Kane Aviation LLC. 22 Waypoint Dr. Roanoke, VA. 24018

1 of 1

**Engine** Date: 4/27/2015 Tail Number: N139DA Aircraft Make/Model: Diamond DA20-C1  
 Engine Make: Continental Engine Model: IO-240-B Engine S/N: 1006616 Tach: 698.5

**Service performed:** Removed Starter for inspection of Bendix gear to engine gear, no defects found. Drained Oil sump and installed 5 quarts of Aeroshell W100 Plus and 12 oz. Avblend. Removed oil filter, inspected, Installed new oil filter AA48108-2, torqued and safetied. Checked Fuel system operation and adjustment, no defects Per REF; IO-240-A,B Maintenance and Overhaul manual section 6-3.7.3.3.1 Performed operational run, no leaks or defects.

All work listed above performed REF: Teledyne Continental IO-240 A&B Operation and Installation Manual and REF: FAR 43.9. In reference to the work listed above, this engine was found to be in an airworthy condition and is approved for return to service.

*Dale Murphy*  
 Dale Murphy A&P 2278630441A

SouthTecAviation  
 Mobile (334) 728-68006  
 Date: Aug. 21, 2015 TCM IO-240-B S/N 1006616  
 Tach: 721.0 TTE: 721.Ohrs.

Reinstalled engine returned from Poplar Grove Airmotive. Adjusted magneto setting and set fuel in accordance Continental Aircraft Engines Maintenance Manual M-6. Filled sump with 6qts Phillips 66 20w50 XC motor oil. Ran engine to check for operation and leaks, all normal at this time.

I certify all work completed in accordance with Diamond DA20-C1 Maintenance Manual and Continental Manual M-6. All applicable FAR's complied with. Engine returned to service.

*Glenn M. Lawler*  
 Glenn M. Lawler AP 2151829 IA

THIS PAGE TOTALS				
PREVIOUS TOTALS				
TOTALS SINCE NEW				

CARRY FORWARD to Top of Next Page

**MANUFACTURER:** Continental **ENGINE MODEL:** IO-240-B **S/N:** 1006616 **WO#** 7091

**AD #** DESCRIPTION **COMPLIANCE STATUS**

09-24-52 TCM lifters N/A by P/N lifters

12-03-06C AFS servo diaphragm N/A by engine model

**Poplar Grove Airmotive, Inc.**

**FAA-Certified Repair Station YYBR664L** David Mason *[Signature]* **Date:** 30/Jul/2015

CE: A

**MAKE** CONTINENTAL **MODEL** IO-240-B **S/N** 1006616

**Total Time** 721.0 **Since New** **Time Since Major Overhaul** N/A **Hours**

The aircraft engine identified above was repaired and inspected in accordance with current regulations of the Federal Aviation Administration and is approved for return to service for the work performed. (As detailed below) Pertinent details of repair are on file at this repair station under:

**Work Order #** 7091 **Date** 30/Jul/2015

Disassembled, cleaned and inspected engine due to propeller strike, in accordance with Continental Motors SB96-11B. Inspected and repaired cylinders as required. Fit and installed new rings. See maintenance release tag for further details. Installed magnetos left, P/N 4309, S/N 15030067, and right, P/N 4309, S/N 15030615 new from Champion. This engine was test run in an FAA approved test cell and meets specifications. See A.D. Compliance Record and Parts List for more details. -----END-----

**Poplar Grove Airmotive, Inc.**  
 Poplar Grove Airport, Poplar Grove, IL  
 FAA Approved Repair Station #YYBR664L

David Mason *[Signature]*  
 Signed for Poplar Grove Airmotive, Inc.

**SERVICEABLE**  
**(COMPONENTS)**

*STO STL*

*4* **Cyl Valve Assn** **CMI**  
 COMPONENT NAME MFG. NAME

**IO240B** **PGA 7091-1-4**  
 MODEL or TYPE SERIAL NO.

REPAIRED  CHANGED  TESTED  INSPECTED

The aircraft component identified above was repaired and inspected in accordance with current regulations of the Federal Aviation Administration and is approved for return to service.

Pertinent details of the repair are on file at this repair station under:

**OWNER:** Kane Aviation LLC

**WORK ORDER No.** 7091 **DATE** 7/17/15

*[Signature]*  
**SIGNED FOR:**

**POPLAR GROVE AIRMOTIVE, INC.**  
 11619 U. S. ROUTE 76  
 POPLAR GROVE, IL 61065  
 FAA Approved Repair Station #YYBR664L

7/30/2015  
 4:01PM

**Poplar Grove Airmotive, Inc.**  
**Shop Orders - Inventory Summary**  
 For Shop Order 7091 Only

Shop Order #	Close Date	Disc #	Part Number	Description	Date Wkly?	Quantity	Units
7091	///	2,000	SA330817	Seal	8/19/2015	1.00	Each
7091	///	2,000	901867	Lock Tab	8/19/2015	16.00	Each
7091	///	2,000	SA22534	Camshaft Gear Bolt	8/19/2015	4.00	Each
7091	///	2,000	AA48108	Bolt	8/19/2015	1.00	Each
7091	///	2,000	SA21532	Crank Gear Bolt	8/19/2015	4.00	Each
7091	///	2,000	855859	Rod Bolt	8/19/2015	8.00	Each
7091	///	2,000	854487	Nut	8/19/2015	8.00	Each
7091	///	2,000	38025	Washer	8/19/2015	4.00	Each
7091	///	2,000	AA48108	Oil Filter	8/19/2015	1.00	Each
7091	///	2,000	SA432310-S	Gasket, Silicone	8/19/2015	5.00	Each
7091	///	2,000	SA432310-S	Gasket, Silicone	8/19/2015	8.00	Each
7091	///	2,000	24784	Roller	8/19/2015	8.00	Each
7091	///	2,000	U874	Spark Plug Gasket	7/22/2015	8.00	Each
7091	///	2,000	853900	Gasket	7/14/2015	1.00	Each
7091	///	4,000	638282P005	Ext. Guide	7/15/2015	4.00	Each
7091	///	4,000	656523P005	In. Guide	7/15/2015	4.00	Each
7091	///	4,000	648678	Seal	7/15/2015	4.00	Each
7091	///	4,000	SA3618 SC	Ring Set	7/15/2015	76.00	Each
7091	///	2,000	848353-82	Screw	7/17/2015	8.00	Each
7091	///	2,000	SA827488	Gasket	7/27/2015	1.00	Each
7091	///	2,000	SA533355	Gasket	7/27/2015	1.00	Each
7091	///	2,000	869438-16	Hex	7/28/2015	1.00	Each
7091	///	2,000	849854	Gasket	7/28/2015	1.00	Each
7091	///	2,000	539800	Washer	7/28/2015	1.00	Each
7091	///	2,000	4308	Mag	8/28/2015	2.00	Each
7091	///	2,000	837080A2	Gasket Set	8/30/2015	1.00	Each
7091	///	2,000	832346	Oil Fill Hose	8/30/2015	1.00	Each



# Section 3A: Engine Service and Maintenance Log

DATE / /	TIME RUN		TIME SINCE OVERHAUL		CYCLES		INSTALLATIONS, INSPECTIONS
	HOURS	min	HOURS	min	Sub Total	TOTAL	
BROUGHT FORWARD	▶						

Kane Aviation LLC. 22 Waypoint Dr. Roanoke, VA. 24018

1 of 1

**Engine** Date: 8/25/2015 Tail Number: N139DA Aircraft Make/Model: Diamond DA20-C1  
 Engine Make: Continental Engine Model: IO-240-B Engine S/N: 1006616 Tach: 721.5

**Service performed:** Drained oil and safetied drain, installed 6 quarts of Aeroshell W100 Mineral. Performed ground run and leak check and no leaks or defects.

All work listed above was done I/AAW Teledyne Continental IO-240 A&B Operation and Installation Manual and I/AAW FAR 43.9. In reference to the work listed above, this engine was found to be in an airworthy condition and is approved for return to service.

*Dale Murphy*  
 Dale Murphy A&P 2278630441A

Kane Aviation LLC. 22 Waypoint Dr. Roanoke, VA. 24018

1 of 1

**Engine** Date: 10/7/2015 Tail Number: N139DA Aircraft Make/Model: Diamond DA20-C1  
 Make: Continental Model: IO-240-B S/N: 1006616 Tach: 723.5

**Service performed:** Removed both Slick 4310 (left) and 4309 (right) magnetos for Slick 500 hour inspection Mags repaired by Poplar Grove Airmotive WO #7371 dated 1-OCT-2015. Installed and timed mags REF Continental Maintenance Manual M-6 REF Chapter 17-15.2.. Operational run-up was satisfactory.

REF Teledyne Continental IO-240 A&B Operation and Installation Manual and REF: FAR 43.9. In reference to the work listed above, this engine was found to be in an airworthy condition and is approved for return to service.

*Dale Murphy*  
 Dale Murphy A&P 2278630441A

Kane Aviation LLC. 22 Waypoint Dr. Roanoke, VA. 24018

1 of 1

**Airframe** Date: 3/8/2016<sup>DA</sup> Tail Number: N139DA Aircraft Make/Model: Diamond DA20-C1  
 Aircraft TT: 752.2 Aircraft S/N: CO619 Tach: 752.2

**Service performed:** Replaced Engine fuel pump with Overhauled by Aircraft Accessories of Oklahoma Inc. P/N: 653351-4A5, S/N: B03KA237. CW Post Maint Adjustment and Test. REF: Continental Motors IO-240 Series Maintenance Manual. Performed engine ground run and no leaks or defects.

All work listed above REF: Diamond Aircraft DA20-C1 Aircraft Maintenance Manual Chapter 28-20-00 and FAR 43.9. In reference to the work listed above, this aircraft was found to be in an airworthy condition and is approved for return to service.

*Dale Murphy*  
 Dale Murphy A&P 2278630441A

Kane Aviation LLC. 22 Waypoint Dr. Roanoke, VA. 24018

1 of 1

**Airframe** Date: 3/11/2016<sup>DA</sup> Tail Number: N139DA Aircraft Make/Model: Diamond DA20-C1  
 Aircraft TT: 753.2 Aircraft S/N: CO619 Tach: 753.2

**Service performed:** CW Post Maint Adjustment and Test. REF: Continental Motors IO-240 Series Maintenance Manual. Performed engine ground run and no leaks or defects.

All work listed above REF: Diamond Aircraft DA20-C1 Aircraft Maintenance Manual Chapter 28-20-00 and FAR 43.9. In reference to the work listed above, this aircraft was found to be in an airworthy condition and is approved for return to service.

*Dale Murphy*  
 Dale Murphy A&P 2278630441A

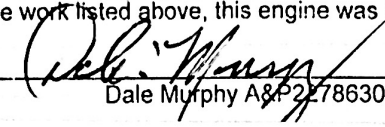
THIS P. TOTAL  
 PREVIOUS TOTAL  
 TOTAL SINCE NEW

**Engine** Date: 3/24/2016 Tail Number: N139DA Aircraft Make/Model: Diamond DA20-C1  
Make: Continental Model: IO-240-B S/N: 1006616 Tach: 756.6

**Service performed:** Removed all spark plugs, cleaned ckd gap and resistance, replaced #2B with serviceable  
Operational run-up satisfactory.

NCE:  
Eor  
/ACA

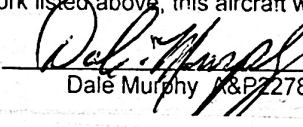
All work listed above was done I/AW Teledyne Continental IO-240 A&B Operation and Installation Manual and I/AW FAR 43.9. In reference to the work listed above, this engine was found to be in an airworthy condition and is approved for return to service.

  
Dale Murphy A&P2278630441A

**Airframe** Date: 3/11/2016 <sup>DM</sup> Tail Number: N139DA Aircraft Make/Model: Diamond DA20-C1  
Aircraft TT: 765.9 Aircraft S/N: CO619 Tach: 765.9

**Service performed:** C/W Post Maint Adjustment and Test. REF: Continental Motors IO-240 Series  
Maintenance Manual. Performed engine ground run and no leaks or defects.

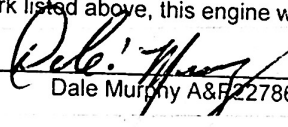
All work listed above REF: Diamond Aircraft DA20-C1 Aircraft Maintenance Manual Chapter 28-20-00 and FAR 43.9. In reference to the work listed above, this aircraft was found to be in an airworthy condition and is approved for return to service.

  
Dale Murphy A&P2278630441A

**Engine** Date: 4/18/2016 Tail Number: N139DA Aircraft Make/Model: Diamond DA20-C1  
Make: Continental Model: IO-240-B S/N: 1006616 Tach: 769.0

**Service performed:** Removed all spark plugs, cleaned ckd gap and resistance, replaced #1, 2, and 4 top plugs  
with New RHEM-38E. Adjusted Idle mixture Ref; Post Maint Adjustment and Test. REF: Continental Motors IO-240  
Series Maintenance Manual. Performed engine ground run and no leaks or defects. Operational run-up satisfactory.

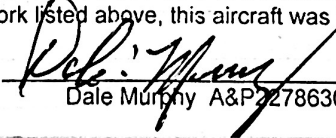
All work listed above was done I/AW Teledyne Continental IO-240 A&B Operation and Installation Manual and I/AW FAR 43.9. In reference to the work listed above, this engine was found to be in an airworthy condition and is approved for return to service.

  
Dale Murphy A&P2278630441A

**Engine** Date: 4/18/2016 <sup>DM</sup> Tail Number: N139DA Aircraft Make/Model: Diamond DA20-C1  
Aircraft TT: 771.8 Aircraft S/N: CO619 Tach: 771.8

**Service performed:** C/W Post Maint Adjustment and Test. REF: Continental Motors IO-240 Series  
Maintenance Manual. Performed engine ground run and no leaks or defects.

All work listed above REF: Diamond Aircraft DA20-C1 Aircraft Maintenance Manual Chapter 28-20-00 and FAR 43.9. In reference to the work listed above, this aircraft was found to be in an airworthy condition and is approved for return to service.

  
Dale Murphy A&P2278630441A

# Section 3A: Engine Service and Maintenance Log

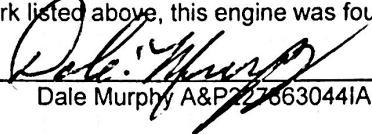
Kane Aviation LLC. 22 Waypoint Dr. Roanoke, VA. 24018

1 of 2

**Engine** Date: 4/27/2016 Tail Number: N139DA Aircraft Make/Model: Diamond DA20-C1  
 Engine Make: Continental Engine Model: IO-240-B Engine S/N: 1006616 Tach: 780.8

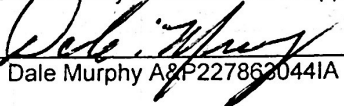
**Service performed:** Installed 5 quarts of Aeroshell 15W50 and 12 oz. Avblend. Removed oil filter, inspected, Installed new oil filter AA48108-2, torqued and safetyed. Checked Mag timing and Differential compression check performed REF: TCM SB03-3, 76, 77, 76, 77. Cleaned, inspected, tested installed and torqued all spark plugs with new M-674 gaskets. Performed operational run, no leaks or defects.

All work listed above performed REF: Teledyne Continental IO-240 A&B Operation and Installation Manual and REF: FAR 43.9. In reference to the work listed above, this engine was found to be in an airworthy condition and is approved for return to service.

  
 Dale Murphy A&P227863044IA

**Engine** Tail Number: N139DA Aircraft Make/ Model: Diamond DA20-C1 Engine TT: 780.8 Date: 04/27/2016 2 of 2  
 Engine Make: Continental Engine Model: IO-240-B Engine S/N: 1006616 Tach: 780.8

I certify this engine has been serviced and inspected I/A/W a 100 Hour inspection I/A/W FAR 43 appendix D and REF: FAR 43.11. This engine was found to be in an airworthy condition and is approved for return to service.

  
 Dale Murphy A&P227863044IA

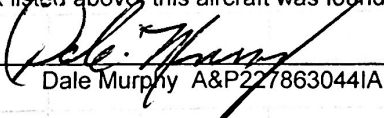
Kane Aviation LLC. 22 Waypoint Dr. Roanoke, VA. 24018

1 of 1

**Engine** Date: 5/25/2013 Tail Number: N139DA Aircraft Make/Model: Diamond DA20-C1  
 Aircraft TT: 805.6 Aircraft S/N: CO619 Tach: 805.6

**Service performed:** CW Post Maint Adjustment and Test. REF: Continental Motors IO-240 Series Maintenance Manual. Performed engine ground run and no leaks or defects.

All work listed above REF: Diamond Aircraft DA20-C1 Aircraft Maintenance Manual Chapter 28-20-00 and FAR 43.9. In reference to the work listed above, this aircraft was found to be in an airworthy condition and is approved for return to service.

  
 Dale Murphy A&P227863044IA

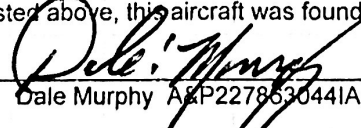
Kane Aviation LLC. 22 Waypoint Dr. Roanoke, VA. 24018

1 of 1

<sup>DM</sup>  
~~Continental~~ Date: 6/22/2016 Tail Number: N139DA Aircraft Make/Model: Diamond DA20-C1  
 Aircraft TT: 827.3 Aircraft S/N: CO619 Tach: 827.3

**Service performed:** Replaced Engine fuel pump with Overhauled by Aircraft Accessories of Oklahoma Inc. P/N: 653351-4, S/N: B003HA529. CW Post Maint Adjustment and Test. REF: Continental Motors IO-240 Series Maintenance Manual. CW Continental Motors Service Information Directive SID 97-3G. Removed and replaced Fuel Tank Sender assy P# 224-225; REF 28-40-00 Performed engine ground run and no leaks or defects.

All work listed above REF: Diamond Aircraft DA20-C1 Aircraft Maintenance Manual Chapter 28-20-00 and FAR 43.9. In reference to the work listed above, this aircraft was found to be in an airworthy condition and is approved for return to service.

  
 Dale Murphy A&P227863044IA

THIS PAGE TOTALS					
PREVIOUS TOTALS					
TOTALS SINCE NEW					

CARRY FORWARD to Top of Next Page

Kane Aviation LLC. 22 Waypoint Dr. Roanoke, VA. 24018

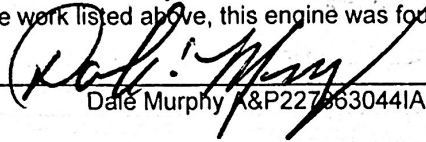
1 of 1

CENCE:  
ME or  
IO/ACA

**Engine** Date: 6/28/2016 Tail Number: N139DA Aircraft Make/Model: Diamond DA20-C1  
Engine Make: Continental Engine Model: IO-240-B Engine S/N: 1006616 Tach: 830.1

**Service performed:** Drained oil and safetied drain, installed 5 quarts of Aeroshell W-100 and 1 Avblend. Installed new oil filter AA48108-2, torqued, safetied. Performed ground run and leak check and no leaks or defects.

All work listed above was done I/AW Teledyne Continental IO-240 A&B Operation and Installation Manual and I/AW FAR 43.9. In reference to the work listed above, this engine was found to be in an airworthy condition and is approved for return to service.

  
Dale Murphy A&P227863044IA

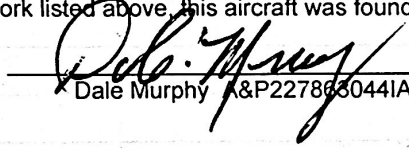
Kane Aviation LLC. 22 Waypoint Dr. Roanoke, VA. 24018

1 of 1

**Engine** Date: 7/1/2013 Tail Number: N139DA Aircraft Make/Model: Diamond DA20-C1  
Aircraft TT: 832.6 Aircraft S/N: CO619 Tach: 832.6

**Service performed:** CW Post Maint Adjustment and Test. REF: Continental Motors IO-240 Series Maintenance Manual. Performed engine ground run and no leaks or defects.

All work listed above REF: Diamond Aircraft DA20-C1 Aircraft Maintenance Manual Chapter 28-20-00 and FAR 43.9. In reference to the work listed above, this aircraft was found to be in an airworthy condition and is approved for return to service.

  
Dale Murphy A&P227863044IA

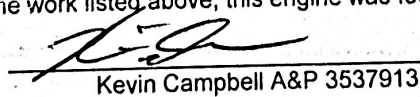
Kane Aviation LLC. 22 Waypoint Dr. Roanoke, VA. 24012

1 of 1

**Engine** Date: 7/22/2016 Tail Number: N139DA Aircraft Make/Model: Diamond DA20-C1  
Engine Make: Continental Engine Model: IO-240-B Engine S/N: 1006616 Tach: 836.4

**Service performed:** Re-installed repaired throttle body assembly from Aircraft Accessories under WO# 17603. Performed leak test and ground run, and all operations checked normal. No other defects were noted at this time.

All work listed above was done I/AW Teledyne Continental IO-240 A&B Operation and Installation Manual and I/AW FAR 43.9. In reference to the work listed above, this engine was found to be in an airworthy condition and is approved for return to service.

  
Kevin Campbell A&P 3537913

# Section 3A: Engine Service and Maintenance Log

DATE / /	TIME RUN		TIME SINCE OVERHAUL		CYCLES		INSTALLATIONS, INSPECTIONS
	HOURS	min	HOURS	min	Sub Total	TOTAL	
BROUGHT FORWARD	▶						

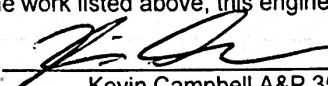
Kane Aviation LLC. 22 Waypoint Dr. Roanoke, VA. 24012

1 of 1

**Engine** Date: 7/28/2016 Tail Number: N139DA Aircraft Make/Model: Diamond DA20-C1  
 Engine Make: Continental Engine Model: IO-240-B Engine S/N: 1006616 Tach: 840.5

**Service performed:** Performed Fuel Injection Systems Adjustment test per Continental Motors Service Directive SID97-3G. Found unmetered pressure within limits and adjusted metered pressure to manufactures recommended specifications. Performed ground run, and all operations checked normal. No other damage or defects noted at this time.

All work listed above was done I/A/W Teledyne Continental IO-240 A&B Operation and Installation Manual and I/A/W FAR 43.9. In reference to the work listed above, this engine was found to be in an airworthy condition and is approved for return to service.

  
 Kevin Campbell A&P 3537913


Kane Aviation LLC. 22 Waypoint Dr. Roanoke, VA. 24012

1 of 1

**Engine** Date: 7/29/2016 Tail Number: N139DA Aircraft Make/Model: Diamond DA20-C1  
 Engine Make: Continental Engine Model: IO-240-B Engine S/N: 1006616 Tach: 841.1

**Service performed:** Performed fuel system adjust and test using procedures outlined in Continental Aircraft Engine Maintenance Manual Publication M-0 Change 1, dated May 2016.

All work listed above was done I/A/W Continental M-0 Maintenance Manual and I/A/W FAR 43.9. In reference to the work listed above, this engine was found to be in an airworthy condition and is approved for return to service.

  
 Kevin Campbell A&P 3537913

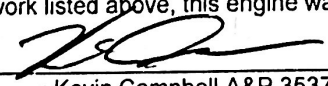
Kane Aviation LLC. 22 Waypoint Dr. Roanoke, VA. 24012

1 of 1

**Engine** Date: 08/26/2016 Tail Number: N139DA Aircraft Make/Model: Diamond DA20-C1  
 Engine Make: Continental Engine Model: IO-240-B Engine S/N: 1006616 Tach: 859.0

**Service performed:** Performed fuel system adjust and test using procedures outlined in Continental Aircraft Engine Maintenance Manual Publication M-0 Change 1, dated May 2016. Replaced 2 spark plugs with new P/N: URHM38E. Torqued to manufacture recommendations and gapped.

All work listed above was done I/A/W Continental M-0 Maintenance Manual and I/A/W FAR 43.9. In reference to the work listed above, this engine was found to be in an airworthy condition and is approved for return to service.

  
 Kevin Campbell A&P 3537913IA

THIS PAGE TOTALS	▶					
PREVIOUS TOTALS						
TOTALS SINCE NEW						

CARRY FORWARD to Top of Next Page ▶

LICENCE:  
AME or  
AMO/ACA

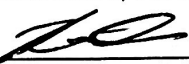
Kane Aviation LLC. 22 Waypoint Dr. Roanoke, VA. 24012

1 of 2

**Engine** Date: 9/28/2016 Tail Number: N139DA Aircraft Make/Model: Diamond DA20-C1  
Engine Make: Continental Engine Model: IO-240-B Engine S/N: 1006616 Tach: 879.5

**Service performed:** Installed 5 quarts of Aeroshell 15W50. Removed oil filter, inspected, installed new oil filter P/N: AA48108-2, torqued and safetied. Checked Mag timing and Differential compression check as follows per REF: TCM SB03-3, 76/80, 75/80, 77/80, 75/80. Cleaned, inspected, tested installed and torqued all spark plugs with new M-674 gaskets. Performed operational run, and no leaks or defects were noted at this time.

All work listed above performed REF: Teledyne Continental IO-240 A&B Operation and Installation Manual and REF: FAR 43.9. In reference to the work listed above, this engine was found to be in an airworthy condition and is approved for return to service.

  
Kevin Campbell A&P 35379131A

**Engine** Tail Number: N139DA Aircraft Make/ Model: Diamond DA20-C1 Engine TT: 879.5 Date: 9/28/2016 2 of 2  
Engine Make: Continental Engine Model: IO-240-B Engine S/N: 1006616 Tach: 879.5

I certify this engine has been serviced and inspected I/AW a 100 Hour inspection I/AW FAR 43 appendix D and REF: FAR 43.11. This engine was found to be in an airworthy condition and is approved for return to service.

  
Kevin Campbell A&P 35379131A


Kane Aviation LLC. 22 Waypoint Dr. Roanoke, VA. 24018

1 of 1

**Engine** Date: 12/5/2016 Tail Number: N139DA Aircraft Make/Model: Diamond DA20-C1  
Engine Make: Continental Engine Model: IO-240-B Engine S/N: 1006616 Tach: 930.5

**Service performed:** Drained oil and safetied drain, installed 5 quarts of Aeroshell 15W-50 and 1 Avblend. Installed new oil filter AA48108-2, torqued, safetied. Performed ground run and leak check with no leaks or defects.

All work listed above was done I/AW Teledyne Continental IO-240 A&B Operation and Installation Manual and I/AW FAR 43.9. In reference to the work listed above, this engine was found to be in an airworthy condition and is approved for return to service.

  
Gary Powers A&P3473787


Kane Aviation LLC. 22 Waypoint Dr. Roanoke, VA. 24012

1 of 2

**Engine** Date: 1/31/2017 Tail Number: N139DA Aircraft Make/Model: Diamond DA20-C1  
Engine Make: Continental Engine Model: IO-240-B Engine S/N: 1006616 Tach: 976.5


**Service performed:** Installed 5 quarts of Aeroshell 15W50 and 1 AVBlend. Removed oil filter, cut open and inspected and no contaminants found. Installed new filter P/N: AA48108-2, torqued and safetied. Checked mag timing and found to be within limits. Performed differential compression check per TCM SB03-3, 72/80, 77/80, 74/80, 76/80. Cleaned, inspected, tested installed and torqued all spark plugs w/ new M-674 gaskets. Inspected engine IAW with MFG's recommendations. Performed operational run, and no leaks or defects were noted at this time.

All work listed above performed REF: Teledyne Continental IO-240 A&B Operation and Installation Manual and REF: FAR 43.9. In reference to the work listed above, this engine was found to be in an airworthy condition and is approved for return to service.

  
Gary Powers A&P 3473787

**Engine** Tail Number: N139DA Aircraft Make/ Model: Diamond DA20-C1 Engine TT: 976.5 Date: 1/31/2017 2 of 2  
Engine Make: Continental Engine Model: IO-240-B Engine S/N: 1006616 Tach: 976.5

I certify this engine has been serviced and inspected I/AW a 100 Hour inspection I/AW FAR 43 appendix D and REF: FAR 43.11. This engine was found to be in an airworthy condition and is approved for return to service.

  
Gary Powers A&P 3473787

# Section 3A: Engine Service and Maintenance Log

DATE / /	TIME RUN		TIME SINCE OVERHAUL		CYCLES		INSTALLATIONS, INSPECTIONS
	HOURS	min	HOURS	min	Sub Total	TOTAL	
BROUGHT FORWARD	→						

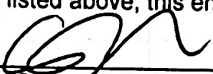
Kane Aviation LLC. 22 Waypoint Dr. Roanoke, VA. 24018

1 of 1

**Engine** Date: 3/17/2017 Tail Number: N139DA Aircraft Make/Model: Diamond DA20-C1  
 Engine Make: Continental Engine Model: IO-240-B Engine S/N: 1006616 Tach: 1030.7

**Service performed:** Drained oil and safetied drain, installed 5 quarts of Aeroshell 15W-50 and 1 Avblend .  
 Installed new oil filter AA48108-2, torqued, safetied. Performed ground run and leak check with no leaks or defects.

All work listed above was done I/AAW Teledyne Continental IO-240 A&B Operation and Installation Manual and I/AAW FAR 43.9. In reference to the work listed above, this engine was found to be in an airworthy condition and is approved for return to service.

  
 Casey McGuffee A&P 3957181

Kane Aviation LLC. 22 Waypoint Dr. Roanoke, VA. 24012

1 of 2

**Engine** Date: 4/27/2017 Tail Number: N139DA Aircraft Make/Model: Diamond DA20-C1  
 Engine Make: Continental Engine Model: IO-240-B Engine S/N: 1006616 Tach: 1072.6

**Service performed:** Installed 5 quarts of Aeroshell 15W50. Removed oil filter, cut open and inspected, no defects.  
 Installed new oil filter AA48108-2, torqued and safetied. Checked Mag timing and Differential compression check performed REF: TCM SB03-3, 74, 75, 76, 70. Cleaned, inspected, tested installed and torqued all spark plugs with new M-674 gaskets. Performed operational run, no leaks or defects.

All work listed above performed REF: Teledyne Continental IO-240 A&B Operation and Installation Manual and REF: FAR 43.9. In reference to the work listed above, this engine was found to be in an airworthy condition and is approved for return to service.

  
 Casey McGuffee A&P 3957181

**Engine** Tail Number: N139DA Aircraft Make/ Model: Diamond DA20-C1 Engine TT: 1072.6 Date: 04/27/2017 2 of 2  
 Engine Make: Continental Engine Model: IO-240-B Engine S/N: 1006616 Tach: 1072.6

I certify this engine has been serviced and inspected I/AAW a 100 Hour inspection I/AAW FAR 43 appendix D and REF: FAR 43.11. This engine was found to be in an airworthy condition and is approved for return to service.

  
 Kevin Campbell A&P 3537913IA

Kane Aviation LLC. 22 Waypoint Dr. Roanoke, VA. 24018

1 of 1

**Engine** Date: 6/8/2017 Tail Number: N139DA Aircraft Make/Model: Diamond DA20-C1  
 Engine Make: Continental Engine Model: IO-240-B Engine S/N: 1006616 Tach: 1121.0

**Service performed:** Drained oil and safetied drain, installed 5 quarts of Aeroshell 15W-50. Installed new oil filter AA48108-2, torqued, safetied. Cut open and inspected old filter, no contaminants found. Performed ground run and leak check with no leaks or defects noted at this time.

All work listed above was done I/AAW Teledyne Continental IO-240 A&B Operation and Installation Manual and I/AAW FAR 43.9. In reference to the work listed above, this engine was found to be in an airworthy condition and is approved for return to service.

  
 Casey McGuffee A&P 3957181

Kane Aviation LLC  
22 Waypoint Dr NW  
Roanoke, VA 24012

*Eng*  
~~Airframe~~ Date: 7/22/2017 Tail #: N139DA

A/C Make/Model: Diamond DA20 Engine model: Con IO-240-B

A/C S/N: C0619 Engine S/N 1006616

Tach Time: 1172.2 Total Time: 1172.1

**Work Performed**

Performed 100 hr inspection. Drained oil removed oil filter and inspected for metal. Installed new oil filter, torqued and safetied. Added 5 quarts of Aeroshell 15w50. Removed fuel injectors, cleaned, and reinstalled to torque. Removed spark plugs cleaned, gapped, ohm checked, and reinstalled to proper torque. Retimed both mags to 26 deg. Readjusted mixture and throttle to get spring back. Ran aircraft and performed leak check no leaks found. Aircraft is approved for return to service: I certify that this aircraft has been inspected I/R/T a Diamond DA20 100 Hour Inspection, Diamond DA20 Maintenance Manual, and Continental IO-240 B overhaul and MM.



William Painter 3170695 A&P IA

Kane Aviation LLC  
22 Waypoint Dr NW  
Roanoke, VA 24012

*Eng*  
~~Airframe~~ Date: 7/22/2017 Tail #: N139DA

A/C Make/Model: Diamond DA20

A/C S/N: C0619 Tach Time: 1172.2 Total Time: 1172.1

**Work Performed:** I certify that this engine has been inspected I/A/W a 100 Hour Inspection and determined to be in airworthy condition.



William Painter 3170695 A&P IA

Kane Aviation LLC  
22 Waypoint Dr NW  
Roanoke, VA 24012

Engine Date: 9/11/2017 Tail #: N139DA

A/C Make/Model: Diamond DA20

Engine Make: Continental Engine Model: IO-240-B

Engine S/N: 1006616 Tach Time: 1218.9

**Work Performed:** Drained oil and serviced with 5 quarts of Aeroshell 15W50. Removed old filter, cut open, and inspected. No contaminants found. Installed, torqued, and safetied AA48108-2 oil filter. Performed ground run and leak check. No leaks or defects noted at this time.

All work listed above was performed I/A/W Teledyne Continental IO-240 Series Maintenance Manual and FAR 43.9. In reference to the work listed above, this engine was found to be in an airworthy condition and is approved for return to service.



Casey McGuffee A&P 3957181

Kane Aviation LLC  
22 Waypoint Dr NW  
Roanoke, VA 24012

Engine Date: 12/29/2017 Tail #: N139DA

A/C Make/Model: Diamond DA20 Engine Make: Continental

Engine Model: IO-240-B Engine S/N: 1006616

Tach Time: 1269.2 Total Time: 1269.2

**Work Performed:** Drained oil and serviced with 6 quarts of 15W50. Removed, cut open, and inspected oil filter. No contaminant found. Installed new AA48108-2 oil filter, torqued to manufactures specifications and safetied. Differential compression test performed I/A/W TCM SB03-3, results as follows: #1: 78/80, #2: 72/80, #3: 77/80, #4: 76/80. Cleaned fuel injectors and reinstalled. Cleaned, gapped, and tested spark plugs. Installed 1 serviceable URHM38E spark plug. Torqued all spark plugs to manufactures specification. Installed and timed magnetos overhauled by Quality Aircraft Accessories Inc. under WO# 024238 and 024239 using new 649954 gaskets. Right magneto model 4309 S/N: 10120293, left magneto model 4310 S/N: 13080662.

Operational run-up and leak check performed with no leaks or defects noted at this time.

All work listed above was performed I/A/W Teledyne Continental IO-240 Series Maintenance Manual and FAR 43.9. In reference to the work listed above, this engine was found to be in an airworthy condition and is approved for return to service.



Casey McGuffee A&P 3957181




# Section 3A: Engine Service and Maintenance Log

**Kane Aviation LLC**  
**22 Waypoint Dr NW**  
**Roanoke, VA 24012**

Engine Date: 12/29/2017 Tail #: N139DA  
 A/C Make/Model: Diamond DA20 Engine Make: Continental  
 Engine Model: IO-240-B Engine S/N: 1006616  
 Tach Time: 1269.2 Total Time: 1269.2

**Work Performed:** I certify that this engine has been serviced and inspected I/A/W a 100 Hour Inspection and determined to be in airworthy condition.

  
 Casey McGuffee A&P 3957181

**Kane Aviation LLC**  
**22 Waypoint Dr NW**  
**Roanoke, VA 24012**

Engine Date: 2/27/2018 Tail #: N139DA  
 A/C Make/Model: Diamond DA20  
 Engine Make: Continental Engine Model: IO-240-B  
 Engine S/N: 1006616 Tach Time: 1317.8

**Work Performed:** Drained oil and serviced with 6 quarts of Aeroshell 15W50. Removed old filter, cut open, and inspected. No contaminants found. Installed, torqued, and safetied AA48108-2 oil filter. Performed ground run and leak check. No leaks or defects noted at this time.

All work listed above was performed I/A/W Teledyne Continental IO-240 Series Maintenance Manual and FAR 43.9. In reference to the work listed above, this engine was found to be in an airworthy condition and is approved for return to service.

  
 Casey McGuffee A&P 3957181

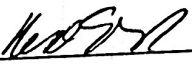
**Kane Aviation LLC**  
**22 Waypoint Dr NW**  
**Roanoke, VA 24012**

Engine Date: 5/16/2018 Tail #: N139DA  
 A/C Make/Model: Diamond DA20 Engine Make: Continental  
 Engine Model: IO-240-B Engine S/N: 1006616  
 Tach Time: 1368.4 Total Time: 1368.4

**Work Performed:** Drained oil and serviced with 6 quarts of 15W50. Removed, cut open, and inspected oil filter. No contaminants found. Installed new AA48108-2 oil filter, torqued to manufactures specifications and safetied. Differential compression test performed I/A/W TCM SB03-3, results as follows: #1: 77/80, #2: 74/80, #3: 77/80, #4: 76/80. Cleaned fuel injectors and reinstalled. Cleaned, gapped, and tested spark plugs. Torqued all spark plugs to manufactures specification. Installed new magneto gasket P/N: 649954 and timed magnetos to 26°. Installed new starter gasket P/N: 653673. Installed new push rod tube seals P/Ns: 641607 & 630286 and rocker box gaskets P/N: 655704.

Operational run-up and leak check performed with no leaks or defects noted at this time.

All work listed above was performed I/R/T Teledyne Continental IO-240 Series Maintenance Manual and FAR 43.9. In reference to the work listed above, this engine was found to be in an airworthy condition and is approved for return to service.

  
 William Painter A&P 31706951A

**Kane Aviation LLC**  
**22 Waypoint Dr NW**  
**Roanoke, VA 24012**

Engine Date: 5/16/2018 Tail #: N139DA  
 A/C Make/Model: Diamond DA20 Engine Make: Continental  
 Engine Model: IO-240-B Engine S/N: 1006616  
 Tach Time: 1368.4 Total Time: 1368.4

**Work Performed:** I certify that this engine has been serviced and inspected I/A/W a 100 Hour Inspection and determined to be in airworthy condition.

  
 William Painter A&P 31706951A

TOTALS						
PREVIOUS TOTALS						
TOTALS SINCE NEW						

Kane Aviation LLC  
22 Waypoint Dr NW  
Roanoke, VA 24012

Kane Aviation LLC  
22 Waypoint Dr NW  
Roanoke, VA 24012

Engine Date: 7/10/2018 Tail #: N139DA

A/C Make/Model: Diamond DA20

Engine Make: Continental Engine Model: IO-240-B

Engine S/N: 1006616 Tach Time: 1426.0

**Work Performed:** Drained oil and serviced with 6 quarts of Aeroshell 15W50. Removed old filter, cut open, and inspected. No contaminants found. Installed, torqued, and safetied AA48108-2 oil filter. Performed ground run and leak check. No leaks or defects noted at this time.

All work listed above was performed I/R/T Teledyne Continental IO-240 Series Maintenance Manual and FAR 43.9. In reference to the work listed above, this engine was found to be in an airworthy condition and is approved for return to service.



Casey McGuffee A&P 3957181

Engine Date: 8/9/2018

Tail #: N139DA

A/C Make/Model: Diamond DA20 Engine Make: Continental

Engine Model: IO-240-B

Engine S/N: 1006616

Tach Time: 1465.6

Total Time: 1465.6

**Work Performed:** Drained oil and serviced with 6 quarts of 15W50. Removed, cut open, and inspected oil filter. No contaminants found. Installed new AA48108-2 oil filter, torqued to manufactures specifications and safetied. Differential compression test performed I/A/W TCM SB03-3, results as follows: #1: 78/80, #2: 76/80, #3: 77/80, #4: 77/80. Cleaned fuel injectors and reinstalled. Installed 8 new URHM38E spark plugs and torqued to manufactures specification. Adjusted magnetos to proper timing.

Operational run-up and leak check performed with no leaks or defects noted at this time.

All work listed above was performed I/R/T Teledyne Continental IO-240 Series Maintenance Manual and AC 43.13. In reference to the work listed above, this engine was found to be in an airworthy condition and is approved for return to service.



Casey McGuffee A&P 3957181

Kane Aviation LLC  
22 Waypoint Dr NW  
Roanoke, VA 24012

Engine Date: 8/9/2018

Tail #: N139DA

A/C Make/Model: Diamond DA20

Engine Make: Continental

Engine Model: IO-240-B

Engine S/N: 1006616

Tach Time: 1465.6

Total Time: 1465.6

**Work Performed:** I certify that this engine has been serviced and inspected I/A/W a 100 Hour Inspection and determined to be in airworthy condition.



Casey McGuffee A&P 3957181

Kane Aviation LLC  
22 Waypoint Dr NW  
Roanoke, VA 24012

Engine Date: 9/11/2018 Tail #: N139DA

A/C Make/Model: Diamond DA20

Engine Make: Continental Engine Model: IO-240-B

Engine S/N: 1006616 Tach Time: 1515.1

**Work Performed:** Drained oil and serviced with 6 quarts of Aeroshell 15W50. Removed old filter, cut open, and inspected. No contaminants found. Installed, torqued, and safetied AA48108-2 oil filter. Performed ground run and leak check. No leaks or defects noted at this time.

All work listed above was performed I/R/T Teledyne Continental IO-240 Series Maintenance Manual and AC 43.13. In reference to the work listed above, this engine was found to be in an airworthy condition and is approved for return to service.



Casey McGuffee A&P 3957181


Kane Aviation LLC  
22 Waypoint Dr NW  
Roanoke, VA 24012

Engine Date: 10/18/2018 Tail #: N139DA  
A/C Make/Model: Diamond DA20 Engine Make: Continental  
Engine Model: IO-240-B Engine S/N: 1006616  
Tach Time: 1563.2 Total Time: 1563.2

**Work Performed:** Drained oil and serviced with 6 quarts of 15W50. Removed, cut open, and inspected oil filter. No contaminants found. Installed new AA48108-2 oil filter, torqued to manufactures specifications and safetied. Differential compression test performed I/A/W TCM SB03-3, results as follows: #1: 77/80, #2: 76/80, #3: 77/80, #4: 77/80. Cleaned fuel injectors and reinstalled. Adjusted magnetos to proper timing.

Operational run-up and leak check performed with no leaks or defects noted at this time.

All work listed above was performed I/R/T Teledyne Continental IO-240 Series Maintenance Manual and AC 43.13. In reference to the work listed above, this engine was found to be in an airworthy condition and is approved for return to service.

  
Casey McGuffee A&P 3957181

Kane Aviation LLC  
22 Waypoint Dr NW  
Roanoke, VA 24012

Engine Date: 10/18/2018 Tail #: N139DA  
A/C Make/Model: Diamond DA20 Engine Make: Continental  
Engine Model: IO-240-B Engine S/N: 1006616  
Tach Time: 1563.2 Total Time: 1563.2

**Work Performed:** I certify that this engine has been serviced and inspected I/A/W a 100 Hour Inspection and determined to be in airworthy condition.

  
Casey McGuffee A&P 3957181

Kane Aviation LLC  
22 Waypoint Dr NW  
Roanoke, VA 24012

Engine Date: 12/11/2018 Tail #: N139DA  
A/C Make/Model: Diamond DA20 Engine Make: Continental  
Engine Model: IO-240-B Engine S/N: 1006616  
Tach Time: 1661.6 Total Time: 1661.6

**Work Performed:** Drained oil and serviced with 6 quarts of 15W50. Removed, cut open, and inspected oil filter. No contaminants found. Installed new AA48108-2 oil filter, torqued to manufactures specifications and safetied. Differential compression test performed I/A/W TCM SB03-3, results as follows: #1: 75/80, #2: 78/80, #3: 77/80, #4: 77/80. Cleaned fuel injectors and reinstalled. Verified magnetos to proper timing.

Operational run-up and leak check performed with no leaks or defects noted at this time.

All work listed above was performed I/R/T Teledyne Continental IO-240 Series Maintenance Manual and AC 43.13. In reference to the work listed above, this engine was found to be in an airworthy condition and is approved for return to service.

  
Casey McGuffee A&P 3957181

Kane Aviation LLC  
22 Waypoint Dr NW  
Roanoke, VA 24012

Engine Date: 11/12/2018 Tail #: N139DA  
A/C Make/Model: Diamond DA20  
Engine Make: Continental Engine Model: IO-240-B  
Engine S/N: 1006616 Tach Time: 1611.8

**Work Performed:** Drained oil and serviced with 6 quarts of Aeroshell 15W50. Removed old filter, cut open, and inspected. No contaminants found. Installed, torqued, and safetied AA48108-2 oil filter. Performed ground run and leak check. No leaks or defects noted at this time.

All work listed above was performed I/R/T Teledyne Continental IO-240 Series Maintenance Manual and AC 43.13. In reference to the work listed above, this engine was found to be in an airworthy condition and is approved for return to service.


  
Casey McGuffee A&P 3957181

THIS PAGE TOTALS						
PREVIOUS TOTALS						
TOTALS SINCE NEW						

Kane Aviation LLC  
22 Waypoint Dr NW  
Roanoke, VA 24012

Engine Date: 12/11/2018 Tail #: N139DA  
A/C Make/Model: Diamond DA20 Engine Make: Continental  
Engine Model: IO-240-B Engine S/N: 1006616  
Tach Time: 1661.6 Total Time: 1661.6

**Work Performed:** I certify that this engine has been serviced and inspected I/A/W a 100 Hour Inspection and determined to be in airworthy condition.

  
Casey McGuffee A&P 3957181

Kane Aviation LLC  
22 Waypoint Dr NW  
Roanoke, VA 24012

Engine Date: 2/4/2019 Tail #: N139DA  
A/C Make/Model: Diamond DA20  
Engine Make: Continental Engine Model: IO-240-B  
Engine S/N: 1006616 Tach Time: 1715.4

**Work Performed:** Drained oil and serviced with 6 quarts of Aeroshell 15W50. Removed old filter, cut open, and inspected. No contaminants found. Installed, torqued, and safetied AA48108-2 oil filter. Performed ground run and leak check. No leaks or defects noted at this time.

All work listed above was performed I/R/T Teledyne Continental IO-240 Series Maintenance Manual and AC 43.13. In reference to the work listed above, this engine was found to be in an airworthy condition and is approved for return to service.


  
Casey McGuffee A&P 3957181

Kane Aviation LLC  
22 Waypoint Dr NW  
Roanoke, VA 24012

Engine Date: 3/12/2019 Tail #: N139DA  
A/C Make/Model: Diamond DA20  
Engine Make: Continental Engine Model: IO-240-B  
Engine S/N: 1006616 Tach Time: 1750.1

**Work Performed:** Installed new fuel manifold P/N: 656151-1A7 S/N: C17AA035. Performed ground run and leak check. No leaks or defects noted at this time.

All work listed above was performed I/R/T Teledyne Continental IO-240 Series Maintenance Manual and AC 43.13. In reference to the work listed above, this engine was found to be in an airworthy condition and is approved for return to service.

  
Casey McGuffee A&P 3957181

Kane Aviation LLC  
22 Waypoint Dr NW  
Roanoke, VA 24012

Engine Date: 3/20/2019 Tail #: N139DA  
A/C Make/Model: Diamond DA20 Engine Make: Continental  
Engine Model: IO-240-B Engine S/N: 1006616  
Tach Time: 1759.0 Total Time: 1759.0

**Work Performed:** Drained oil and serviced with 6 quarts of 15W50. Removed, cut open, and inspected oil filter. No contaminants found. Installed new AA48108-2 oil filter, torqued to manufactures specifications and safetied. Differential compression test performed I/A/W TCM SB03-3, results as follows: #1: 72/80, #2: 77/80, #3: 77/80, #4: 76/80. Cleaned fuel injectors and reinstalled. Installed serviceable magnetos, 4309 S/N: 08122298, 4310 S/N: 08091443. Timed magnetos to proper specifications.

Operational run-up and leak check performed with no leaks or defects noted at this time.

All work listed above was performed I/R/T Teledyne Continental IO-240 Series Maintenance Manual and AC 43.13. In reference to the work listed above, this engine was found to be in an airworthy condition and is approved for return to service.

  
Casey McGuffee A&P 3957181

Kane Aviation LLC  
22 Waypoint Dr NW  
Roanoke, VA 24012

Engine Date: 3/20/2019 Tail #: N139DA  
A/C Make/Model: Diamond DA20 Engine Make: Continental  
Engine Model: IO-240-B Engine S/N: 1006616  
Tach Time: 1759.0 Total Time: 1759.0

**Work Performed:** I certify that this engine has been serviced and inspected I/A/W a **100 Hour Inspection** and determined to be in airworthy condition.

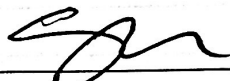
  
Casey McGuffee A&P 3957181

Kane Aviation LLC  
22 Waypoint Dr NW  
Roanoke, VA 24012

Engine Date: 4/2/2019 Tail #: N139DA  
A/C Make/Model: Diamond DA20  
Engine Make: Continental Engine Model: IO-240-B  
Engine S/N: 1006616 Tach Time: 1763.2

**Work Performed:** Set fuel pressures to manufactures specifications. Performed ground run and leak check. No leaks or defects noted at this time.

All work listed above was performed I/R/T Teledyne Continental IO-240 Series Maintenance and Overhaul Manual M-6 and AC 43.13. In reference to the work listed above, this engine was found to be in an airworthy condition and is approved for return to service.

  
Casey McGuffee A&P 3957181

Kane Aviation LLC  
22 Waypoint Dr NW  
Roanoke, VA 24012

Engine Date: 5/6/2019 Tail #: N139DA  
A/C Make/Model: Diamond DA20  
Engine Make: Continental Engine Model: IO-240-B  
Engine S/N: 1006616 Tach Time: 1792.3

**Work Performed:** Installed left magneto P/N: 4310 S/N: 05110406. Timed both magnetos. Performed ground run and leak check. No leaks or defects noted at this time.

All work listed above was performed I/R/T Teledyne Continental IO-240 Series Maintenance and Overhaul Manual M-6 and AC 43.13. In reference to the work listed above, this engine was found to be in an airworthy condition and is approved for return to service.

  
Casey McGuffee A&P 3957181

Kane Aviation LLC  
22 Waypoint Dr NW  
Roanoke, VA 24012

Engine Date: 5/24/2019 Tail #: N139DA  
A/C Make/Model: Diamond DA20  
Engine Make: Continental Engine Model: IO-240-B  
Engine S/N: 1006616 Tach Time: 1808.5

**Work Performed:** Installed 4 cylinder assemblies overhauled by Harrison Engine Service, Inc. under work orders 97523, 97524, 97525, & 97526. Removed oil filter, cut open, and inspected; no contaminants found. Installed, torqued, and safetied new AA48108-2 filter. Serviced engine with 6 quarts Aeroshell W100. Operational run up and leak check performed. No leaks or defects noted.

All work listed above was performed I/R/T Teledyne Continental IO-240 Series Maintenance Manual and AC 43.13. In reference to the work listed above, this engine was found to be in an airworthy condition and is approved for return to service.

  
Casey McGuffee A&P 3957181

PREVIOUS TOTALS									
TOTALS SINCE NEW									

Kane Aviation LLC  
22 Waypoint Dr NW  
Roanoke, VA 24012

Engine Date: 6/10/2019 Tail #: N139DA  
A/C Make/Model: Diamond DA20 Engine Make: Continental  
Engine Model: IO-240-B Engine S/N: 1006616  
Tach Time: 1809.8 Total Time: 1809.8

**Work Performed:** Differential compression test performed I/A/W TCM SB03-3, results as follows: #1: 71/80, #2: 70/80, #3: 71/80, #4: 71/80. Timed magnetos to proper specifications.

Operational run-up and leak check performed with no leaks or defects noted at this time.

All work listed above was performed I/R/T Teledyne Continental IO-240 Series Maintenance Manual and AC 43.13. In reference to the work listed above, this engine was found to be in an airworthy condition and is approved for return to service.



William Painter A&P 31706951A

Kane Aviation LLC  
22 Waypoint Dr NW  
Roanoke, VA 24012

Engine Date: 6/10/2019 Tail #: N139DA  
A/C Make/Model: Diamond DA20 Engine Make: Continental  
Engine Model: IO-240-B Engine S/N: 1006616  
Tach Time: 1809.8 Total Time: 1809.8

**Work Performed:** I certify that this engine has been serviced and inspected I/A/W a **100 Hour Inspection** and determined to be in airworthy condition.



William Painter A&P 31706951A

Kane Aviation LLC  
22 Waypoint Dr NW  
Roanoke, VA 24012

Engine Date: 7/5/2019 Tail #: N139DA  
A/C Make/Model: Diamond DA20  
Engine Make: Continental Engine Model: IO-240-B  
Engine S/N: 1006616 Tach Time: 1833.9

**Work Performed:** Drained oil and serviced with 6 quarts of Aeroshell 15W50. Removed old filter, cut open, and inspected. No contaminants found. Installed, torqued, and safetied AA48108-2 oil filter. Performed ground run and leak check. No leaks or defects noted at this time.

All work listed above was performed I/R/T Teledyne Continental IO-240 Series Maintenance Manual and AC 43.13. In reference to the work listed above, this engine was found to be in an airworthy condition and is approved for return to service.



Casey McGuffee A&P 3957181

Kane Aviation LLC  
22 Waypoint Dr NW  
Roanoke, VA 24012

Engine Date: 7/18/2019 Tail #: N139DA  
A/C Make/Model: Diamond DA20  
Engine Make: Continental Engine Model: IO-240-B  
Engine S/N: 1006616 Tach Time: 1859.8

**Work Performed:** Drained oil and serviced with 6 quarts of Aeroshell 15W50. Removed old filter, cut open, and inspected. No contaminants found. Installed, torqued, and safetied AA48108-2 oil filter. Installed serviceable ignition harness. Performed ground run and leak check. No leaks or defects noted at this time.

All work listed above was performed I/R/T Teledyne Continental IO-240 Series Maintenance Manual and AC 43.13. In reference to the work listed above, this engine was found to be in an airworthy condition and is approved for return to service.



Casey McGuffee A&P 3957181

Kane Aviation LLC  
22 Waypoint Dr NW  
Roanoke, VA 24012

Engine Date: 8/8/2019 Tail #: N139DA  
A/C Make/Model: Diamond DA20 Engine Make: Continental  
Engine Model: IO-240-B Engine S/N: 1006616  
Tach Time: 1906.0 Total Time: 1906.0

**Work Performed:** Drained oil and serviced with 6 quarts of Aeroshell 15W50. Removed old filter, cut open, and inspected. No contaminants found. Installed, torqued, and safetied AA48108-2 oil filter. Differential compression test performed I/A/W TCM SB03-3, results as follows: #1: 76/80, #2: 76/80, #3: 75/80, #4: 75/80. Timed magnetos to proper specifications.

Operational run-up and leak check performed with no leaks or defects noted at this time.

All work listed above was performed I/R/T Teledyne Continental IO-240 Series Maintenance Manual and AC 43.13. In reference to the work listed above, this engine was found to be in an airworthy condition and is approved for return to service.

  
Casey McGuffee A&P 3957181

Kane Aviation LLC  
22 Waypoint Dr NW  
Roanoke, VA 24012

Engine Date: 8/8/2019 Tail #: N139DA  
A/C Make/Model: Diamond DA20 Engine Make: Continental  
Engine Model: IO-240-B Engine S/N: 1006616  
Tach Time: 1906.0 Total Time: 1906.0

**Work Performed:** I certify that this engine has been serviced and inspected I/A/W a **100 Hour Inspection** and determined to be in airworthy condition.

  
Casey McGuffee A&P 3957181

Kane Aviation LLC  
22 Waypoint Dr NW  
Roanoke, VA 24012

Engine Date: 8/30/2019 Tail #: N139DA  
A/C Make/Model: Diamond DA20  
Engine Make: Continental Engine Model: IO-240-B  
Engine S/N: 1006616 Tach Time: 1964.4

**Work Performed:** Drained oil and serviced with 6 quarts of Aeroshell 15W50. Removed old filter, cut open, and inspected. No contaminants found. Installed, torqued, and safetied AA48108-2 oil filter. Performed ground run and leak check. No leaks or defects noted at this time.

All work listed above was performed I/R/T Teledyne Continental IO-240 Series Maintenance Manual and AC 43.13. In reference to the work listed above, this engine was found to be in an airworthy condition and is approved for return to service.

  
Casey McGuffee A&P 3957181

Kane Aviation LLC  
22 Waypoint Dr NW  
Roanoke, VA 24012

Engine Date: 9/20/2019 Tail #: N139DA  
A/C Make/Model: Diamond DA20 Engine Make: Continental  
Engine Model: IO-240-B Engine S/N: 1006616  
Tach Time: 2005.4 Total Time: 2005.4

**Work Performed:** Drained oil and serviced with 6 quarts of Aeroshell 15W50. Removed old filter, cut open, and inspected. No contaminants found. Installed, torqued, and safetied AA48108-2 oil filter. Differential compression test performed I/A/W TCM SB03-3, results as follows: #1: 74/80, #2: 73/80, #3: 72/80, #4: 72/80. Timed magnetos to proper specifications. Performed fuel pressure check, all pressures within limits

Operational run-up and leak check performed with no leaks or defects noted at this time.

All work listed above was performed I/R/T Teledyne Continental IO-240 Series Maintenance Manual and AC 43.13. In reference to the work listed above, this engine was found to be in an airworthy condition and is approved for return to service.

  
Casey McGuffee A&P 3957181

TOTALS  
SINCE NEW

CARRY FORWARD to Top of Next Page

**Kane Aviation LLC  
22 Waypoint Dr NW  
Roanoke, VA 24012**

Engine Date: 9/20/2019 Tail #: N139DA  
A/C Make/Model: Diamond DA20 Engine Make: Continental  
Engine Model: IO-240-B Engine S/N: 1006616  
Tach Time: 2005.4 Total Time: 2005.4

**Work Performed:** I certify that this engine has been serviced and inspected I/A/W a **100 Hour Inspection** and determined to be in airworthy condition.

  
Casey McGuffee A&P 3957181

**Kane Aviation LLC  
22 Waypoint Dr NW  
Roanoke, VA 24012**

Engine Date: 10/14/2019 Tail #: N139DA  
A/C Make/Model: Diamond DA20  
Engine Make: Continental Engine Model: IO-240-B  
Engine S/N: 1006616 Tach Time: 2056.1

**Work Performed:** Drained oil and serviced with 6 quarts of Aeroshell 15W50. Removed old filter, cut open, and inspected. No contaminants found. Installed, torqued, and safetied AA48108-2 oil filter. Performed ground run and leak check. No leaks or defects noted at this time.

All work listed above was performed I/R/T Teledyne Continental IO-240 Series Maintenance Manual and AC 43.13. In reference to the work listed above, this engine was found to be in an airworthy condition and is approved for return to service.

  
Casey McGuffee A&P 3957181

**Kane Aviation LLC  
22 Waypoint Dr NW  
Roanoke, VA 24012**

Engine Date: 11/6/2019  
A/C Make/Model: Diamond DA20 Engine Make: Continental  
Engine Model: IO-240-B Engine S/N: 1006616  
Tach Time: 2105.5 Total Time: 2105.5

**Work Performed:** Drained oil and serviced with 6 quarts of Aeroshell 15W50. Removed old filter, cut open, and inspected. No contaminants found. Installed, torqued, and safetied AA48108-2 oil filter. Installed new fuel pump gasket and crankshaft nose seal. Installed serviceable fuel nozzle in #1 cylinder. Differential compression test performed I/A/W TCM SB03-3, results as follows: #1: 76/80, #2: 72/80, #3: 73/80, #4: 72/80. Timed magnetos to proper specifications. Performed fuel pressure check, all pressures within limits

Operational run-up and leak check performed with no leaks or defects noted at this time.

All work listed above was performed I/R/T Teledyne Continental IO-240 Series Maintenance Manual and AC 43.13. In reference to the work listed above, this engine was found to be in an airworthy condition and is approved for return to service.

  
Casey McGuffee A&P 3957181

**Kane Aviation LLC  
22 Waypoint Dr NW  
Roanoke, VA 24012**

Engine Date: 11/6/2019  
A/C Make/Model: Diamond DA20 Engine Make: Continental  
Engine Model: IO-240-B Engine S/N: 1006616  
Tach Time: 2105.5 Total Time: 2105.5

**Work Performed:** I certify that this engine has been serviced and inspected I/A/W a **100 Hour Inspection** and determined to be in airworthy condition.

  
Casey McGuffee A&P 3957181



# Section 3A: Engine Service and Maintenance Log

2019 #1

Kane Aviation LLC  
22 Waypoint Dr NW  
Roanoke, VA 24012

Engine Date: 11/26/2019 Tail #: N139DA

A/C Make/Model: Diamond DA20

Engine Make: Continental Engine Model: IO-240-B

Engine S/N: 1006616 Tach Time: 2162.0

**Work Performed:** Drained oil and serviced with 6 quarts of Aeroshell 15W50. Removed old filter, cut open, and inspected. No contaminants found. Installed, torqued, and safetied AA48108-2 oil filter. Installed and timed 4309 magneto S/N: 06010830 & 4310 magneto S/N: 08091443 rebuilt by Quality Aircraft Accessories Inc under work orders 043174 & 051326 respectively. Performed ground run and leak check. No leaks or defects noted at this time.

All work listed above was performed I/R/T Teledyne Continental IO-240 Series Maintenance Manual and AC 43.13. In reference to the work listed above, this engine was found to be in an airworthy condition and is approved for return to service.

  
Casey McGuffee A&P 3957181

INSTALLATIONS, INSPECTIONS

Kane Aviation LLC  
22 Waypoint Dr NW  
Roanoke, VA 24012

Engine Date: 12/17/2019

A/C Make/Model: Diamond DA20 Engine Make: Continental

Engine Model: IO-240-B Engine S/N: 1006616

Tach Time: 2198.0 Total Time: 2198.0

**Work Performed:** Drained oil and serviced with 6 quarts of Aeroshell 15W50. Removed old filter, cut open, and inspected. No contaminants found. Installed, torqued, and safetied AA48108-2 oil filter. Differential compression test performed I/A/W TCM SB03-3, results as follows: #1: 74/80, #2: 74/80, #3: 74/80, #4: 75/80. Timed magnetos to proper specifications. Performed fuel pressure check, all pressures within limits

Operational run-up and leak check performed with no leaks or defects noted at this time.

All work listed above was performed I/R/T Teledyne Continental IO-240 Series Maintenance Manual and AC 43.13. In reference to the work listed above, this engine was found to be in an airworthy condition and is approved for return to service.

  
Casey McGuffee A&P 3957181

Kane Aviation LLC  
22 Waypoint Dr NW  
Roanoke, VA 24012

Engine Date: 12/17/2019

A/C Make/Model: Diamond DA20 Engine Make: Continental

Engine Model: IO-240-B Engine S/N: 1006616

Tach Time: 2198.0 Total Time: 2198.0

**Work Performed:** I certify that this engine has been serviced and inspected I/A/W a **100 Hour Inspection** and determined to be in airworthy condition.

  
Casey McGuffee A&P 3957181

Kane Aviation LLC  
22 Waypoint Dr NW  
Roanoke, VA 24012

Engine Date: 1/18/2020 Tail #: N139DA

A/C Make/Model: Diamond DA20

Engine Make: Continental Engine Model: IO-240-B

Engine S/N: 1006616 Tach Time: 2250.9

**Work Performed:** Drained oil and serviced with 6 quarts of Aeroshell 15W50. Removed old filter, cut open, and inspected. No contaminants found. Installed, torqued, and safetied AA48108-2 oil filter. Performed ground run and leak check. No leaks or defects noted at this time.

All work listed above was performed I/R/T Teledyne Continental IO-240 Series Maintenance Manual and AC 43.13. In reference to the work listed above, this engine was found to be in an airworthy condition and is approved for return to service.

  
William Painter A&P 31706951A

Kane Aviation LLC  
22 Waypoint Dr NW  
Roanoke, VA 24012

Engine Date: 2/2/2020

A/C Make/Model: Diamond DA20 Engine Make: Continental

Engine Model: IO-240-B Engine S/N: 1006616

Tach Time: 2289.3 Total Time: 2289.3

**Work Performed:** Drained oil and serviced with 6 quarts of Aeroshell 15W50. Removed old filter, cut open, and inspected. No contaminants found. Installed, torqued, and safetied AA48108-2 oil filter. Differential compression test performed I/A/W TCM SB03-3, results as follows: #1: 76/80, #2: 75/80, #3: 74/80, #4: 72/80. Timed magnetos to proper specifications. Performed fuel pressure check, all pressures within limits

Operational run-up and leak check performed with no leaks or defects noted at this time.

All work listed above was performed I/R/T Teledyne Continental IO-240 Series Maintenance Manual and AC 43.13. In reference to the work listed above, this engine was found to be in an airworthy condition and is approved for return to service.

  
William Painter A&P 31706951A

15

E:

A

Kane Aviation LLC  
22 Waypoint Dr NW  
Roanoke, VA 24012

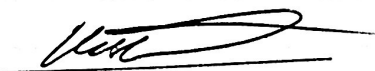
Engine Date: 2/2/2020

A/C Make/Model: Diamond DA20 Engine Make: Continental

Engine Model: IO-240-B Engine S/N: 1006616

Tach Time: 2289.3 Total Time: 2289.3

**Work Performed:** I certify that this engine has been serviced and inspected I/A/W a **100 Hour Inspection** and determined to be in airworthy condition.

  
William Painter A&P 31706951A

Kane Aviation LLC  
22 Waypoint Dr NW  
Roanoke, VA 24012

Engine Date: 2/8/2020 Tail #: N139DA

A/C Make/Model: Diamond DA20

Engine Make: Continental Engine Model: IO-240-B

Engine S/N: 1006616 Tach Time: 2299.8

**Work Performed:** Installed serviceable fuel pump P/N: 653351-4A5 S/N: B1BJA015 and throttle body P/N: 653898-1A19 S/N: A19AA137. Performed ground run and leak check. No leaks or defects noted at this time.

All work listed above was performed I/R/T Teledyne Continental IO-240 Series Maintenance Manual and AC 43.13. In reference to the work listed above, this engine was found to be in an airworthy condition and is approved for return to service.

  
William Painter A&P 31706951A

# Section 3A: Engine Service and Maintenance Log

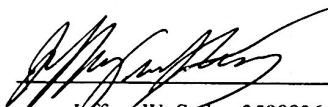
DATE / /	TIME RUN		TIME SINCE OVERHAUL		CYCLES	
	HOURS	min	HOURS	min	Sub Total	TOTAL
BROUGHT FORWARD	→					

INSTALLATIONS, INSPECTIONS

**Kane Aviation LLC**  
22 Waypoint Dr NW  
Roanoke, VA 24012

Engine Date: 2/8/2020 Tail #: N139DA  
A/C Make/Model: Diamond DA20  
Engine Make: Continental Engine Model: IO-240-B  
Engine S/N: 1006616 Tach Time: 2309.2

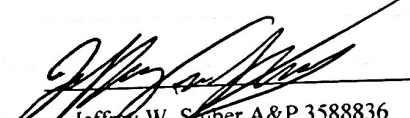
**Work Performed:** Installed serviceable Oil pressure sender kit. 22-7930-10-00 S/N 515 from A/C 356AF. Performed ground run and leak check. No leaks or defects noted at this time.  
All work listed above was performed I/R/T Teledyne Continental IO-240 Series Maintenance Manual and AC 43.13. In reference to the work listed above, this engine was found to be in an airworthy condition and is approved for return to service.

  
Jeffrey W. Stuber 3588836

**Kane Aviation LLC**  
22 Waypoint Dr NW  
Roanoke, VA 24012

Engine Date: 3/09/2020 Tail #: N139DA  
A/C Make/Model: Diamond DA20  
Engine Make: Continental Engine Model: IO-240-B  
Engine S/N: 1006616 Tach Time: 2354.9

**Work Performed:** Drained oil and serviced with 6 quarts of Aeroshell 15W50. Removed old filter, cut open, and inspected. No contaminants found. Installed, torqued, and safetied AA48108-2 oil filter. Performed ground run and leak check. No leaks or defects noted at this time.  
All work listed above was performed I/R/T Teledyne Continental IO-240 Series Maintenance Manual and AC 43.13. In reference to the work listed above, this engine was found to be in an airworthy condition and is approved for return to service.

  
Jeffrey W. Stuber A&P 3588836

**\* ENGINE INSTALLED**

**Kane Aviation LLC**  
22 Waypoint Dr NW  
Roanoke, VA 24012

Engine Date: 5/19/2020 Tail #: N356AF  
A/C Make/Model: Diamond DA20 Engine Make: Continental  
Engine Model: IO-240-B Engine S/N: 1006616  
Tach Time: 683.0 Total Time: ~~2372.6~~ 2165.850

**Work Performed:** Installed engine S/N 1006616 from N139DA. Engine total time is 2372.6 TSMO is 2372.6. No run up or leak check was performed because the throttle body needed overhauled.  
All work listed above was performed I/R/T Teledyne Continental IO-240 Series Maintenance Manual and AC 43.13. In reference to the work listed above, this engine was found to be in an airworthy condition and is approved for return to service.

  
William Painter A&P 31706951A

**Kane Aviation LLC**  
22 Waypoint Dr NW  
Roanoke, VA 24012

Engine Date: 4/12/2021 Tail #: N356AF  
A/C Make/Model: Diamond DA20 Engine Make: Continental  
Engine Model: IO-240-B Engine S/N: 1006616  
Tach Time: 683.5 Total Time: 2373.1

**Work Performed:** Drained oil. Removed, cut open, and inspected old oil filter. No contaminants found. Installed new AA48108-2 oil filter, torqued to manufactures specifications safety wired and serviced with 6 quarts of Shell 15W-50. Differential compression test performed, results as follows: #1: 74/80, #2: 73/80, #3: 72/80, #4: 74/80. Timed magnetos to proper specifications. Installed serviceable throttle body. Performed fuel pressure check, all pressures within limits  
Operational run-up and leak check performed with no leaks or defects noted at this time.  
All work listed above was performed I/R/T Teledyne Continental IO-240 Series Maintenance Manual and AC 43.13. In reference to the work listed above, this engine was found to be in an airworthy condition and is approved for return to service.

  
William Painter A&P 31706951A

T  
F  
1  
SII



# Section 3A: Engine Service and Maintenance Log

DATE / /	TIME RUN		TIME SINCE OVERHAUL		CYCLES		INSTALLATIONS, INSPECTIONS
	HOURS	min	HOURS	min	Sub Total	TOTAL	
BROUGHT FORWARD	→						

TRIAD AVIATION, Inc. certifies that this engine has been disassembled, inspected, and overhauled to manufacturer's overhaul manual new limits. Engine tested in accordance with recommended procedures and is approved for return to service. All applicable A.D. Notes are complied with at the time of overhaul. Pertinent details of this work are on file at this repair station under work order # 27201 DATE 06/08/2022

MAKE CONTINENTAL

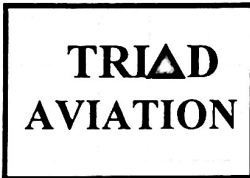
MODEL IO-240-B

S/N 1006616

ENGINE TOTAL TIME \_\_\_\_\_

TSMOH 0.0

TBO 2000



Triad Aviation, Inc.  
Burlington Municipal Airport  
3439 South Aviation Drive  
Burlington, NC 27215  
336-227-1467

*[Signature]*  
Authorized Signature

06/08/2022  
Date

Test Ran Continental IO-240-B Engine Serial Number 1006616 for 1 hr., RPM 2800, oil pressure 45 lbs, oil temperature 190 degrees, CHT 350. Magneto check at 1700 RPM, L 120 RPM, R 120 RPM. Compression test cylinder #1 79/80 #2 78/80 #3 79/80 #4 79/80. This engine and/or component is approved for return to service. All pertinent details on file this repair station: TRIAD AVIATION, INC. FAA REPAIR STATION # PP4R448M. WO# 27201

Signed: *[Signature]* Date: 06/08/2022

Engine Logbook  
Date: 06/17/2022



Reg No: N356AF	Aircraft Type: DA-20	Aircraft S/N: C0050
Flight: N/A	Hobbs: 3145.5	Aircraft Total Time: <del>3145.5</del> <u>2210.5</u>
TACH: 727.7	Engine SMOH: 0.0	Engine total time: 2417.3

- Removed propeller for engine overhaul. P/N: MT 175 R150 2CA S/N: 18018 Reinstalled prop IAW aircraft and prop maintenance manual. Needs to be retorqued after first flight.
- Removed engine for overhaul by Triad Aviation W/O # 27201 Model number IO-240-B S/N: 1006616, with new magnetos from Kelly Invoice number: 1925917, 1925918, LH MAG P/N: ES4310 S/N: J-K08072, RH MAG P/N: ES4309 S/N: J-K08064. Reinstalled engine IAW aircraft and engine maintenance manual.
- Performed engine fuel flow set up, leak and operational check good.
- Installed new fuel and oil hoses by Aero Aviation CO. Hose Shop. Invoice #: H45108-1.
- Installed new rod ends on throttle P/N: HF3M
- Installed new engine mounts, bolts, nuts, and bushings.
- Installed new oil pressure switch P/N: 020-308 IAW Aircraft maintenance manual
- Replaced vacuum hose.

THIS PAGE  
TOTALS

PREVIOUS  
TOTALS

TOTAL  
SINCE N

This aircraft, airframe, engine, propeller, or appliance identified was repaired and/or inspected in accordance with the current regulations of the Federal Aviation Administration and is approved for return to service for the work performed.

Date: 06/17/2022

Signed: *[Signature]*

Nathan Parton, A&P: 4368564

NAME/  
SIGNATURE

LICENCE:  
AME or  
AMO/ACA

**Thoroughbred Aviation Maintenance, Inc.**  
**Engine**

Date: 06/29/2022  
AC: N356AF  
Engine TT: 2419.1  
Engine SMOH: 1.8

Type: Diamond DA20-C1  
AC SN: C0050  
Engine: IO-240-B  
Hobbs: 3147.5

WO: 223262  
AFIT: 3147.5  
Eng S/N: 1006616  
Tach: 729.5

1. Ran aircraft to operating temperatures. Removed top spark plugs to check compressions. Compressions as followed: #1:72 #2: 70 #3:71 #4:74. MO: 46/80. Removed bottom plugs for gap check, testing and checking. No defects noted. Installed plugs with new gaskets P/N: M674. Torqued and secured leads.
2. No oil filter removal and inspection due to hours on oil.
3. Lubed all engine controls.
4. Cleaned around engine before post run. Post run leak check good. No leaks noted. No defects noted at this time.
5. I certify this engine has been inspected IAW an annual inspection per 14 CFR par 43 appendix D and found to be in airworthy condition. Diamond DA20-C1 annual checklist used as a guide.

-----End-----

**MAINTENANCE RELEASE**

The aircraft and/or component identified was repaired in accordance with current FAA regulations and was found airworthy for return to service for the work performed. "Pertinent" details of the repair are on file at this agency under

Work Order: 223262      Date: 06/29/2022  
Signed: *[Signature]*      CRS: R81R199Y

16 SEP 2022 R Engine w/ 5 quarts 100W mineral oil  
w/ new filter p/n AA49108-2. Leak check  
good. *[Signature]* AIP 262115  
TACH: 763.8      HOBBS: 3195.3

25 Nov 2022 - R4R ENGINE OIL WITH 6 QUARTS PHILLIPS 66  
SAE 20W-50 OIL AND NEW OIL FILTER AA49108-2  
IAW FAR 43. *[Signature]* AIP 1803598 (OWNER)  
TACH: 805.6      HOBBS: 3257.5

12-15-2022 Performed 100hr inspection IAW FAR 43 appendix D,  
Tach 817.3 and current FAR's. I certify this engine to be airworthy  
Hobbs 3275.9 and certify it for return to service.  
*[Signature]* AIP 262115

# Section 3A: Engine Service and Maintenance Log

DATE	TIME RUN		TIME SINCE OVERHAUL		CYCLES		INSTALLATIONS, INSPECTIONS
	HOURS	min	HOURS	min	Sub Total	TOTAL	
1 1							
BROUGHT FORWARD							
27 MAR 23	R4R		ENGINE	6/9TS	Phillips 66 20W50 OIL AND OIL FILTER		
					P/N AA48108-2 IAW FAR 43. COMPLETED		
					OPERATIONAL CHECK AND LEAK CHECK		
			126	5	3334.0 TACH 854.2		
May 3, 2023	865.0		137.3		checked and re-torque prop bolts		
					to 26 ft/lbs Scott Wilson 3142227 ATP.		

Model: Diamond DA20-C1 S/N: C0050 Reg# N356AF	Eng M/N: IO-240-B Eng S/N: 1006616	Tach: 876.2 TTE: 2565.8 TSMOH: 148.5
C/W Annual/100 hr. inspection IAW Diamond DA20-C1 Maintenance Manual & Single Engine Inspection Guide. Performed Compression Test. 1)76/80, 2)74/80, 3)75/80, 4)75/80. Drained oil and removed filter. Cut filter and inspected filter for metal. There was no metal or contaminants found. Installed new filter P/N CH48108-2. Torqued filter to 18 ft/lb. Serviced engine with 5 quarts Phillips X/C 20W-50 oil. Cleaned and gapped spark plugs. Checked timing on magnetos. All AD's are current to 6-16-23. Performed routine maintenance and servicing. Run up, ops and leak checks good. I certify that this engine has been inspected in accordance with a 100 HR inspection and found to be airworthy this date.		
The aircraft, airframe, aircraft engine, propeller or appliance identified above was repaired and inspected in accordance with current Federal Aviation Regulations and is approved for return to service. Pertinent details of the repair(s) are on file at this Facility under the above referenced Work Order.		
Date: June 16, 2023	Inspector:	Scott Wilson A&P3142227

Model: Diamond DA20-C1 S/N: C0050 Reg# N356AF	Eng M/N: IO-240-B Eng S/N: 1006616	Tach: 924.5 TTE: 2614.1 TSMOH: 196.8
Drained oil and removed filter. Cut filter and inspected filter for metal. There was no metal or contaminants found. Installed new filter P/N CH48108-2. Torqued filter to 18 ft/lb. Serviced engine with 6 quarts Phillips X/C 20W-50 oil. Re-torqued Prop bolts to 25 ft/lbs.		
The aircraft, airframe, aircraft engine, propeller or appliance identified above was repaired and inspected in accordance with current Federal Aviation Regulations and is approved for return to service. Pertinent details of the repair(s) are on file at this Facility under the above referenced Work Order.		
Date: December 12, 2023	Inspector:	Scott Wilson A&P3142227

Model: Diamond DA20-C1 S/N: C0050 Reg# N356AF	Eng M/N: IO-240-B Eng S/N: 1006616	Tach: 967.7 TTE: 2657.3 TSMOH: 240.0
C/W 100 hr. inspection IAW Diamond DA20-C1 Maintenance Manual & Single Engine Inspection Guide. Performed Compression Test. 1)74/80, 2)74/80, 3)75/80, 4)76/80. Drained oil and removed filter. Cut filter and inspected filter for metal. There was no metal or contaminants found. Installed new filter P/N CH48108-2. Torqued filter to 18 ft/lb. Serviced engine with 5 quarts Phillips X/C 20W-50 oil. Cleaned and gapped spark plugs. Checked timing on magnetos. All AD's are current to 2-11-24. Performed routine maintenance and servicing. Run up, ops and leak checks good. I certify that this engine has been inspected in accordance with a 100 HR inspection and found to be airworthy this date.		
The aircraft, airframe, aircraft engine, propeller or appliance identified above was repaired and inspected in accordance with current Federal Aviation Regulations and is approved for return to service. Pertinent details of the repair(s) are on file at this Facility under the above referenced Work Order.		
Date: February 11, 2024	Inspector:	Scott Wilson A&P3142227

MARCH 19, 2024	1017.9							50 hour engine oil change, Drained oil + changed filter. 6 qts 20W50 Phillips X-C and new filter P/N CH48108-2 and crush washer - 11. Run up, no leaks.
THIS PAGE TOTALS								REC 4923045
PREVIOUS TOTALS								owner
TOTALS SINCE NEW								

NAME/  
SIGNATURE

LICENCE:  
AME or  
AMO/ACA

April 19, 2024 1006.8 tach 50-hour engine oil change. Drained oil & changed filter. 6 qts 20W50 Phillips X-C and new filter P/N CH48108-2 and crush washer -11. Run-up; no leaks. *[Signature]* PPC 4923045 (owner)

Airframe:	Diamond	mn: DA20-C1;	sn: C0050;	TTAF: 2549.5
Engine:	TCM:	mn: IO-240-B3B:	sn: 1006616	EngTT: 2754.3; TSO: 339.0
Propeller:	MT Propeller:	mn: MT175R-150-2Ca	sn: 18018	PropTT: 462.3; TSO: NA
Propeller:	Sensenich:	mn: 74DM55-5-0-54:	sn: A44543 ;	PropTT: unkn; TSO: 598.6

R&R oil w/6 qts, Phillips 20W50; R&R oil filter with new Tempest AA48108-2; Cut open & inspected oil filter element.

Safety wired oil filter with 0.032" S.S. wire.

Cleaned, inspected, Gapped & tested spark plugs. Annealed copper plug gaskets.

Re-installed spark plugs with anti-sieze and torqued to 30 ft/lbs.

Compression ck. #1-78/80, #2-78/80, #3-76/80, #4-78/80.

Mag Timing Ck. L&R mags at 26 degrees (+/-2 deg.). Tested Shower of Sparks system function. Ok.

Fabricated repair to front corner of L/H cylinder #4 baffle using 2.875" x 1.062" x 0.041" aluminum sheet of 2024-T3.

Performed fuel rigging test & adjustment I.A.W. TCM SID97-3.

I certify that this engine has been inspected I.A.W. a 100hr inspection with the scope & detail of 14 CFR Part 43

Appendix.D & is in airworthy condition.

Michael Tevik A&P28284651A

Tach Time 1006.7

*[Signature]* 4/28/2024

May 29, 2024 1113.1 tach 50-hour engine oil change. Drained oil & changed filter. 6 qts 20W50 Phillips X-C and new filter P/N CH48108-2 and crush washer -11. Run-up; no leaks. *[Signature]* PPC 4923045 (owner)



AIRCRAFT LOGBOOK ENTRY			Work Order: 36583	
Aircraft Registration: <b>N356AF</b>	Serial Number: <b>C0050</b>	Model: <b>DA20-C1</b>	Page 1 of 1	
Aircraft Total Time: <b>2640.8</b>	Aircraft Landings:	Date: <b>6/26/2024</b>		

1. REMOVED CLEANED AND INSPECTED FUEL INJECTION NOZZLES. NO DEFECTS NOTED. CHECKED AND ADJUSTED MIXTURE CONTROL RIGGING. GROUND RAN ENGINE AND FOUND NORMAL OPERATION. REF CONTINENTAL IO-240 MAINTENANCE MANUAL CHAPTER

TACH TIME : 1158.0 HOBBS TIME: 3752.0

The aircraft, airframe, aircraft engine, propeller, or appliance identified above was repaired and inspected in accordance with current Regulations of the Federal Aviation Administration and is approved for return to service. Pertinent details of the report are on file at this repair station under Order No. 36583

Sean McGregor  
CRS# 8BQR005D

Signature:

Date: 6/26/2024

EMPIRE Aviation USA, 3800 Southern Blvd #503, West Palm Beach, Florida

CRS# 8BQR005D







Checked	AD/ISS/ISS/REV	REV	Description	Start Date	Effectivity	Method of Compliance
			YC AIs			
X	2009-24-52		Rapid wear - hydraulic lifters	NA	See AD	NA by SN
X	2009-24-51		Cancelled - superseded by 2009-24-52	NA	NA	NA
X	CF-2009-40		Non-Conformance of Maintenance on Piston Engines	NA	see SB	NA new engine
X	CF-80-03R2		Engine overhaul by Provenchere Aero Maintenance - superseded F 2001-139R1	annual or 100 hrs	all	NA by TT - new engine
X	F-2005-023		FAA ADs	NA	see SB	NA new engine
X	2010-11-04		Rapid wear - hydraulic lifters	NA		NA by SN
X	2009-24-52		Rapid wear - hydraulic lifters superseded by 2009-24-58	NA	See AD	NA by Man. Date
X	2009-24-51		Cancelled - superseded by 2009-24-52	NA	NA	NA
X	2010-11-04		Rapid wear - hydraulic lifters	NA		NA by SN
X	2009-24-52		Rapid wear - hydraulic lifters superseded by 2009-24-52	NA	See AD	NA by Man. Date
X	2009-24-51		Cancelled - superseded by 2009-24-52	NA	NA	NA
X	DAC1-73-01		1 Engine Fuel System Improvements	NA	see SB	N/A by Eng. M/N
X	DAC1-73-03		Installation of an alternate fuel line	NA	see SB	N/A by A/C S/N
X	DAC1-73-04		4 Engine Fuel System Conversion B178 to R3B	NA	see SB	N/A by model
X	DAC1-73-05		1 Operating limits with alternate compensating fuel systems	NA	see SB	N/A
X	DAC1-73-01		1 Ignition Harness Routing	NA	see SB	Incorp. During Mfg
X	DAC1-73-02		Starting Vibrator Battery Installation	NA	see SB	N/A by A/C S/N
X	DAC1-76-01		Mixture Cable Routing	NA	see SB	C/W
X	DAC1-76-02		Mixture Cable routing	NA	Reversed panel only - with GTX 330	NA
X	DAC1-76-03		Installation of Mixture Cable for Altitude compensating Fuel Pump (for retro fit)	NA	see SB	NA
X	DAC1-76-04		Throttle Cable - Firewall Feed Thru	NA	Reversed panel only - with GTX 330	NA equivalent installation C/W during manu./acture
X	DAC1-79-01		Power Plant Cooling - Opt	NA	see SB	C/W during Mfg
X	DAC1-79-02		Oil Filter Bracket Installation	NA	see SB	N/A by A/C S/N
X	TCM SR03-03		Differential pressure test and bore scope inspection procedures for cylinders	100 hr	all	NA
X	TCM SR03-7		TCM IO-240 Series Engine Magneto Drive Gear - Recurring	see SB	see SB	C/W by TCM

Checked	AD/ISS/ISS/REV	REV	Description	Start Date	Effectivity	Method of Compliance
X	TCM SR04-4A		Replacement of Manifold Valve Spring P/N 820184		see SB	C/W by TCM
X	TCM SR04-7		IO-240 Series Crankshaft Cluster User Inspection and replacement - Recurring		see SB	C/W by TCM
X	TCM SR04-11		Valve Guide Application, Installation and Reaming Procedures		At overhaul or repair	NA
X	TCM SR05-2		Over-speed Limitations - Recurring		see SB	NA
X	TCM SR05-2		Wing Fuel Filter Reorientation - N/A		as required	see SB
X	TCM SR07-8				NA	NA by Eng. M/N SB contains instructions for continued airworthiness
X	TCM SR08-13		Installation of Induction hoses and clamps		as required	see SB
X	TCM SR09-11A		Propeller Strakes and Hydraulic Locks		as required	see SB
X	TCM SR09-7C		Torque Limits		as required	see SB
X	TCM SR05-7		Teledyne Continental Motors (TCM) Position Tuned Injection Nozzles		as required	see SB
X	TCM SR08-4		Teledyne Continental Motors (TCM) - Fuel Injection System Contamination		as required	see SB
X	TCM SR07-3A / SR07-10		Procedures and Specifications for Adjustment of TCM Continuous Flow Fuel Injection Systems		NA	see SB
X	TCM SR07-3E		Adjustment of TCM Continuous Flow Fuel Injection Systems		as required	see SB
X	TCM CSB01-1		Fuel Pump Inspection and Seal Leak Test		NA	see SB
X	TCM CSB654		Magneto capacitor P/N 10-400558 replacement		NA	see SB
X	TCM CSB02-4		TCM Ignition System CSB664		NA	see SB
X	TCM CSB665		Magneto Capacitor P/N 10-400615 inspection and replacement		NA	see SB
X	TCM CSB04-5A		TCM Ignition System CSB665		NA	see SB
X	Unison Industries SB2-08A		Inspection of Slick 4300 magneto		NA	see SB
X	Unison Industries SB3-08A		Inspection of Slick 4300 magneto		NA	see SB

Authorizing Signature

*[Signature]*  
Intentionally left blank below the plate

JUN 27 2012  
DATE

**MAINTENANCE RELEASE TAGS**  
**WORK ORDER 6409**

Right

1. Approving Civil Aviation Authority/Country

FAA/United States

### AUTHORIZED RELEASE CERTIFICATE

FAA Form 8130-3, AIRWORTHINESS APPROVAL TAG

3. Form Tracking Number:

WO: 6409

4. Organization Name and Address:

Poplar Grove Airmotive, Inc  
11619 Route 76

5. Work Order/Contract/Invoice Number

WO: 6409

Poplar Grove, IL 61065

CRS: YBR664L

6. Item: 7. Description:

1 Magneto

8. Part Number

4309

9. Quantity

1

10. Serial Number:

12011702

11. Status/Work:

Repaired

12. Remarks

Performed 500 hour inspection installing new cam, carbon brush, and contact point assembly.  
The work specified has been accomplished in accordance with manual #L-1363F Rev 1/11.

Poplar Grove Airmotive certifies that the work specified in block 11/12 was carried out in accordance with EASA Part - 145 and in respect to that work the Magneto is considered ready for release to service under EASA Part - 145 Approval Number: EASA,145.6472

13a. Certifies the items identified above were manufactured in conformity to:

Approved design data and are in a condition for safe operation:

Non-approved design data specified in Block 13

14a.  14 CFR 43.9 Return to Service

Other regulation specified in Block 12

Certifies that unless otherwise specified in Block 12, the work identified in Block 11 and described in Block 12 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.

13b. Authorized Signature:

13c. Approval Authorization Number:

14c. Approval/Certificate No.:  
YBR664L

13d. Name (Typed or Printed)

13e. Date (dd/mm/yy)

14b. Authorized Signature:  
  
Kyle Donley

14d. Name (Typed or Printed):  
Kyle Donley

14e. Date (dd/mm/yy):  
23-Jul-2014

#### User/Installer Responsibilities

It is important to understand that the existence of this document alone does not automatically constitute authority to install the aircraft engine/propeller/article. Where the user/installer performs work in accordance with the national regulations of and 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 aircraft engine(s)/propeller(s)/article(s) from the airworthiness authority of the country specified in Block 1. Statements in Blocks 13a and 14a do not constitute 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.

Left

1. Approving Civil Aviation Authority/Country  
2. **AUTHORIZED RELEASE CERTIFICATE**  
3. Form Tracking Number:

Authority/Country: **FAA/United States**  
FAA Form 8130-3, AIRWORTHINESS APPROVAL TAG  
W/O: 6409

4. Organization Name and Address:  
**Poplar Grove Airmotive, Inc**  
**11619 Route 76**  
**Poplar Grove, IL 61065**  
5. Work Order/Contract/Invoice Number  
**W/O: 6409**

6. Item:	7. Description:	8. Part Number	9. Quantity	10. Serial Number:	11. Status/Work:
1	Magneto	4310	1	11121139	Repaired

12. Remarks  
Performed 500 hour inspection installing new cam, carbon brush, and contact point assembly.  
The work specified has been accomplished in accordance with manual #L-1363F Rev 1/11.

Poplar Grove Airmotive certifies that the work specified in block 11/12 was carried out in accordance with EASA Part - 145 and in respect to that work the Magneto is considered ready for release to service under EASA Part - 145 Approval Number: EASA,145.6472


13a Certifies the items identified above were manufactured in conformity to:

14a  14 CFR 43.9 Return to Service  
 Certifies that unless otherwise specified in Block 12, the work identified in Block 11 and described in Block 12 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.

Approved design data and are in a condition for safe operation:  
 Non-approved design data specified in Block 13

13b. Authorized Signature: \_\_\_\_\_

13c. Approval Authorization Number: \_\_\_\_\_

14b. Authorized Signature: 

14c. Approval/Certificate No.: **YBR664L**

13d. Name (Typed or Printed) \_\_\_\_\_

13e. Date (dd/mm/yyyy) \_\_\_\_\_

14d. Name (Typed or Printed): **Kyle Donley**

14e. Date (dd/mm/yyyy): **23-Jul-2014**

**User/Installer Responsibilities**  
It is important to understand that the existence of this document alone does not automatically constitute authority to install the aircraft engine/propeller/article. Where the user/installer performs work in accordance with the national regulations of and 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 aircraft engine(s)/propeller(s)/article(s) from the airworthiness authority of the country specified in Block 1. Statements in Blocks 13a and 14a do not constitute 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.