

AIRCRAFT TECHNICAL RECORD

Section 3. ENGINE LOG

ENGINE DATA

1. Make LYCOMING
 2. Model IO-360-M1A
 3. Specification _____
 4. Manufacturer's Serial Number RL-3841-51E
 5. Date of Manufacture 11-11-13
- _____
- _____
- _____



Section 3A: Engine Service and Maintenance Log

A1

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

DESCRIPTION OF WORK PERFORMED:
(INSPECTION, REPAIRS, REPLACEMENT)

NAME/
SIGNATURE

LICENCE:
AME or
AMO/ACA



EPIX AVIATION
2802 Airport Drive, Suite 1
Chesapeake, Virginia 23323
757-421-4973
EPIXAviation.com

N654MS ENG
wo 68865
Date: 23 Feb 2022

Tach reads: 3147.1 ETT: 1405.8

Complied with a 100 HOUR inspection in accordance with 14 CFR 43 Appendix D. Opened all cowls, fairings, and other components as required to facilitate inspection. Drained oil, inspected oil filter, no defects noted. Installed oil filter P/N: AA48110-2 and serviced with 7qts of Phillips 20W50 oil. Compressions are as follows: #1: 75/80 #2: 79/80 #3 71/80 #4 60/80. Checked magneto timing. Cleaned, gapped, and rotated spark plugs. Installed overhauled magneto P/N: 4370 S/N: K-01287 on R/H side. Run up and leak checked engine after inspection and service, no discrepancies noted. Reinstalled all cowls, fairings, and other components previously removed to facilitate inspection.

I certify that this engine has been inspected in accordance with a 100 HOUR inspection and was determined to be in airworthy condition.

Dirk van den Brink, Jr. A&P IA 3637044



EPIX AVIATION
2802 Airport Drive, Suite 1
Chesapeake, Virginia 23323
757-421-4973
EPIXAviation.com

N654MS
wo 71445
Date: 04/26/2021

Tach reads: 3208.8

Drained oil, removed and inspected filter. No discrepancies noted. Installed new AA48110-2 oil filter and serviced with 7qt Phillips XC 20W50 oil. Ran up and leak checked, no discrepancies noted.

Work performed by Sean Ennis, supervised and inspected by the undersigned.

James Parkman AP 3270184 IA

James E. Parkman



EPIX AVIATION
2802 Airport Drive, Suite 1
Chesapeake, Virginia 23323
757-421-4973
EPIXAviation.com

N654MS ENG
wo 73219
Date: 7/27/2022

Tach reads: 3253.4 ETT: 3253.4

Complied with a 100 HOUR inspection in accordance with 14 CFR 43 Appendix D. Opened all cowls, fairings, and other components as required to facilitate inspection. Drained oil, inspected oil filter, no defects noted. Installed new AA48110-2 oil filter and serviced with 7qts Phillips X/C Aviation 20W50 oil. Compressions with 80psi input pressure are as follows: 78/78/78/64. Checked magneto timing. Cleaned, gapped, and rotated spark plugs. Replaced one spark plug. Complied with AD 2015-19-07 "Fuel injector fuel lines" In accordance with Lycoming Service Bulletin SB342G. No discrepancies noted. Next due at 3353.4 tach time. Removed cylinder #1 and #3 rocker covers and replaced gaskets P/N SL75906. Run up and leak checked engine after inspection and service, no discrepancies noted. Reinstalled all cowls, fairings, and other components previously removed to facilitate inspection.

I certify that this engine has been inspected in accordance with a 100 HOUR inspection and was determined to be in airworthy condition.

Zachary T. Parkman A&P (Pending)

Make: LyComing	Model: IO-360-M1A	N#: N654MS
Ser#: RL3841-51E	Engine Total Time: 3258.5	Tach: 3258.5
Eng TSMOH: 1490.2		Aircraft Total Time: 3258.5
Inspected engine IAW aircraft Manufacturers Checklist. Cleaned, checked and lubed all controls. Cleaned and checked all ign. plugs, no defects found. Changed oil with 7Qts Phillips 20-50 and new CH48110 oil filter. Changed air filter with new. Comp. checks; 1:78,2:76,3:75,4:72 over 80Psi taken cold. Tightend #4Cyl. oil return hose as needed. Tightend and safetied oil dipstick tube as needed. Resecured oil cooler hose. Resecured oil cooler face plate seal. Replaced 2 Spark plugs W/ UREM-37E. C/W AD 2008-08-14 Servo plug, no defects found, next due 3308.5. C/w AD 2015-19-07, no defects found, next due 3358.5. AD's checked to biweekly update 2023-12, none new found. See AD listing in logs. Run up, leak and OPS checks good.		
"I certify that this Engine has been inspected IAW an annual inspection and found to be in an airworthy condition."		
<i>Thomas E. Kurtz III</i>		Date: 06/16/23
Thomas E. Kurtz III A&P#141525863IA		
TEK Aircraft service 942 Union Branch Road, Corapeake NC 27926		

11/6/23 performed 50 Hr oil change.
Replaced oil with 7Qts of
Phillips 20W-50 and new CH48110
oil Filter. A/c is approved for
return to service.

Total Time -
3305.1

4408699

11/7/23 3305.1
Inspected Servo for AD 2008-08-14, no Defects
found. next Due 3358.5 Tach

141525863

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TOTALS

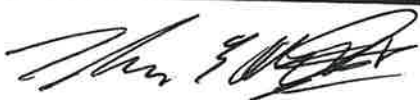
PREVIOUS
TOTALS

TOTALS
SINCE NEW

CARRY FORWARD to Top of Next Page

Section 3A: Engine Service and Maintenance Log

DATE / /	TIME RUN		TIME SINCE OVERHAUL		CYCLES		DESCRIPTION OF WORK PERFORMED: (INSPECTION, REPAIRS, REPLACEMENT)
	HOURS	min	HOURS	min	Sub Total	TOTAL	
BROUGHT FORWARD							

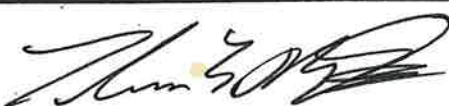
Make: LyComing	Model: IO-360-M1A	N#: N654MS
Ser#: RL3841-51E	Engine Total Time: 3358.0	Tach: 3358.0
Aircraft Total Time: 3358.0		
<p>Inspected engine IAW aircraft Manufacturers Checklist. Cleaned, checked and lubed all controls. Cleaned and checked all ign. plugs, no defects found. Changed oil with 7Qts Phillips 20-50 and new CH48110 oil filter. Changed air filter with new. Comp. checks; 1:72, 2:75, 3:77, 4:70 over 80Psi taken cold. C/W AD 2008-08-14 Servo plug, no defects found, next due 3408.0. C/w AD 2015-19-07, no defects found, next due 3458.0. AD's checked to biweekly update 2024-06, none new found. See AD listing in logs. Run up, leak and OPS checks good.</p>		
<p>"I certify that this Engine has been inspected IAW an annual inspection and found to be in an airworthy condition."</p>		
		Date: 03/29/24
<p>Thomas E. Kurtz III A&P#141525863IA</p>		
<p>TEK Aircraft service 942 Union Branch Road, Corapeake NC 27926</p>		

06/21/24

3409.3 Tach

Changed oil w/ 6 Qts 20-50 Phillips and C/W AD 2008-08-14 Servo plug, no defects found, next Due 3459.3 Tach.

 141525863

Make: LyComing	Model: IO-360-M1A	N#: N654MS
Ser#: RL3841-51E	Engine Total Time: 3456.9	Tach: 3456.9
Aircraft Total Time: 3456.9		
<p>Inspected engine IAW aircraft Manufacturers Checklist. Cleaned, checked and lubed all controls. Cleaned and checked all ign. plugs, no defects found. Changed oil with 7Qts Phillips 20-50 and new CH48110 oil filter. Changed air filter with new. Comp. checks; 1:76, 2:75, 3:65, 4:61 over 80Psi taken cold. Repaired chaffing of Ign lead on bottom plug of #2 Cyl. as needed. C/W AD 2008-08-14 Servo plug, no defects found, next due 3506.9. C/W AD 2015-19-07 IAW MSB 342G, no defects found, next due 3506.9. AD's checked to biweekly update 2024-20, none new found. See AD listing in logs. Run up, leak and OPS checks good.</p>		
<p>"I certify that this Engine has been inspected IAW an a 100 Hour inspection and found to be in an airworthy condition."</p>		
		Date: 10/15/24
<p>Thomas E. Kurtz III A&P#141525863</p>		
<p>TEK Aircraft service 942 Union Branch Road, Corapeake NC 27926</p>		


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Engine Logbook**Date: 10/14/2025**

Reg No: N654MS	Aircraft type: Diamond DA40	Aircraft S/N: 40.842
Tach: 3502.5	Hobbs: 4828.5	Aircraft Total Time: 3502.5
Engine Total Time: 1734.2	Engine SMOH: N/A	Engine S/N: RL3841-51E
Prop Total Time: 1634.7	Prop SMOH: N/A	Prop S/N: NS1647B

1. I certify that this Aircraft/Engine/Propeller has been inspected in accordance with an Annual Inspection and found to be in airworthy condition. Inspection performed in accordance with FAR 43 appendix D, using the Lycoming IO-360-M1A Maintenance and overhaul manual inspection guide as a reference.
2. AD's checked through this date, all applicable have been complied with.
3. Complied with AD 2024-21-02 by visual inspection of oil filter and screens at annual oil change in accordance with Lycoming MSB 480F, no bronze-colored metal or abnormalities noted. Effected parts are installed, NEXT DUE: at next oil change.
4. Complied with AD 15-19-07 – fuel injector - by visual inspection, next due after any maintenance is done involving fuel injector clamp is disconnected, moved, or loosened and within every 110 hours TIS, (TACH: 3612.50) and after each engine overhaul.
5. Engine compressions taken: 1: 70/80, 2: 78/80, 3: 76/80, 4: 65/80.
6. Checked magneto timing and adjusted timing on both mags to be within data plate timing degree.
7. Drained engine oil, inspected oil filter pleats, and suction screen, no discrepancies noted. Serviced engine with 8qts of Phillips XC 20W50, installed new AA48108-2 oil filter.
8. Removed, cleaned, and re-installed fuel injectors. Installed new fuel injector orifice insert in #2 fuel injector.
9. Installed 3 new spark plugs P/N: UREM38E.
10. Installed 4 new valve cover gaskets P/N: SL75906.
11. Installed two new rocker shaft plugs P/N: LW-12892 on cyl #1
12. Aircraft ground run performed, ops and leak checked OK.

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: 10/14/2025Signed: 

Robert Crawford AP/IA 3895252