

**Engine Record** General Information

Manufacturer LYCOMING Model O-360-A4A  
Serial L-13915-36A Type Certificate E-286  
Serial 7850N is currently installed in aircraft

Date: 1/3/2009  
Tach: 2008.3  
TSMOH: 0.0  
Total Time: 4117.7

Engine Make: Lycoming  
Engine Model: O-360-A4A  
Engine S/N: L-13915-36A

A/C Make: Piper  
A/C Model: PA-28-180  
A/C N Number: N7850N  
A/C S/N: 28-5306

This engine has been major overhauled to new-parts limits, in accordance with Avco Lycoming Overhaul Manual 60294-7 and Parts Catalog PC-306-1. The engine was removed from the aircraft, disassembled, cleaned & inspected.

The following work was performed by Rick Romans Inc. (CRS: BE2R713K, W/O 43415):  
Crankshaft : magnaflux, grind main journals M.006, rod journal M.003, renitride, plate flange, certify, remove dowel & install new STD-1065 dowel, repair seal area per Lycoming SI 1111, inspect per A.D. 2004-10-14. Camshaft: regrind, install new 76118 spacer. Connecting rods: magnaflux, rebush, recondition as necessary, check alignment. Rocker arms: magnaflux, rebush (one unit rejected and used servicable 69444 unit sold as replacement), recondition as necessary. Tappet bodies: recondition (two units rejected and used servicable 72877 unit sold as replacement). Idler gears: magnaflux, rebush. Other miscellaneous steel pieces (idler shafts, pushrods, tachometer shaft assembly, and vacuum pump drive shaft) cleaned and magnafluxed.

(Continued on following page.)

The following work was performed by Crankcase Services Inc. (CRS H1HR096O, W/O 13179):  
Crankcase cleaned, inspected, zygllo inspected, pre-heated, welded, stress relieved, mating surfaces machined, welded surfaces machined, deburred and torqued crankcase halves together, line-bored, checked/corrected gear lashes, final inspection. Surfaced oil-pump mounting pad on accessory housing. Cleaned & inspected other miscellaneous aluminum pieces (pushrod housings, oil pan, vacuum pump adapter, intake pipe flanges, oil drainback tubes, oil filter base, and governor drive adapter pad cover).

Both magnetos were replaced by OH units from Kelly Aerospace (CRS: UT2R226L): LH magneto and impulse coupling: P/N 10-51360-45R, S/N 1051350, OEM P/N 10-51360-45 S4LN-21, OEM S/N TCM/8140049 A, see W/O M880590. RH magneto: P/N 10-163045-3R, S/N 1092088, OEM P/N 10-163045-3 S4LN-204, OEM S/N TCM/912435, see W/O M008170.

Carburetor was replaced by OH unit (Model: MA-4-5, P/N 10-3878, S/N 75021004) from AVstar Aircraft Accessories (CRS: V1RR580Y, W/O 30823). The following items were complied with by AVstar during overhaul: Avco S/B 366 torque bowl screws (recurring 100 hrs.), Avco S/B 330B new style arm and shaft installed, Avco S/B 297A one piece venturi installed, MS SB A1-76, precautionary only, MS SB A1-69 inspection of drain plug, MSA-1 replacement of composite float, AD 63-22-3 one piece venturi installed, AD 69-24-3 inspection of drain plug, AD 72-6-5 new style arm and shaft installed, AD 89-4-2 inspected by serial number and replaced as required.

(Continued on following page.)

Engine driven fuel pump was replaced by OH unit from Aero Accessories Inc. Tempest, P/N LW15472.

The following items were installed new:

Superior SL13S19646 Crankshaft Gear, Lycoming STD-2246 Crankshaft Gear Bolt, Superior SL75439-1 Gasket Set, 8 Superior SL13521A M03 Rod Bearings, 2 Superior SL13884A M06 Front Main Bearings, 4 Superior SL11020 M06 Main Bearings, 8 Superior SL75061 Rod Bolts, 8 Superior SL12186 Rod Bolt Nuts, Superior SL61174A Oil Pump Shaft, Superior SL18109A Oil Pump Gear, Superior SL18110A Oil Pump Gear (these gears comply with AD 96-09-10), Superior SL78531 Oil Pump Body, Superior SL61544 Fuel Pump Plunger, Superior SL71596 Thrust Washer, 4 Superior SL13444-1 Piston Pins, 8 Superior SL74241A Compression Rings, 4 Superior SL73857A Oil Control Rings, 4 Superior SL75089A Pistons, 4 Superior SL36006W-A20P Millennium Cylinder assemblies (including new valves, springs, keepers, guides, bushings, etc.) Serial Numbers: 366W-G07-12449, 366W-G07-12445, 366W-G07-12440, & 366W-G07-12443 all manufactured 07/06/2007 (these cylinders are not affected by AD 2007-04-19 R1 by date of manufacture and serial number), 8 Superior SL12892 Rocker Shaft Thrust Buttons, 4 Superior SL14995 Shroud Tube Springs, 4 Superior MS13998-3 Exhaust Valve-Stem Cap, 4 Superior SL61247 Rocker Covers, 4 Superior SL13790A Rocker Shafts, 4 Superior SL77611 Exhaust Gaskets, Curtis CCA-1700 Oil Quick-Drain Valve, and all new hardware (bolts, nuts & washers) for rocker covers, cylinder bases, crankcase, accessory cover, accessories, oil pan, and oil pump.

(Continued on following page.)

The following service publications were complied with during re-assembly of engine:

Lycoming SB 240T: Replaced all mandatory parts

Lycoming SI 1125D: Sealed crankcase with silk thread and approved sealant.

Lycoming SB 475C: Inspections performed by Rick Romans. Installed new Superior SL13S19646 crankcase gear with new Lycoming STD-2246 bolt. The bolt was torqued to 204 in.-lbs. and the lockplate was properly bent against the bolt head.

Lycoming SI 1458E: Correctly installed new SL75061 connecting rod bolts and SL12186 nuts and torqued per spec.

Lycoming SI 1512: New Superior SL13884A-M06 and SL13521A-M03 bearings installed.

Lycoming SI 1509: Installed new Lycoming STD-2249 nuts, torqued per spec and safety-wired.

Lycoming SI 1324B: Installed new Superior one-piece oil seal with Pliobond 20 adhesive.

Lycoming SB 524 and Superior SL L86-03B: Installed new Superior SL18109A-S oil pump gear Kit (containing: SL18109A nitride hardened (N) driving impeller, and SL18110A carburized (C) driven impeller), SL78531 oil pump body, and SL61174A oil pump shaft.

Superior SL L03-03 B: Installed superior MP-15 gaskets clean and dry.

Lycoming SI 1484A: Torqued carburetor nuts to spec.

Lycoming SI 1437: Checked timing per spec.

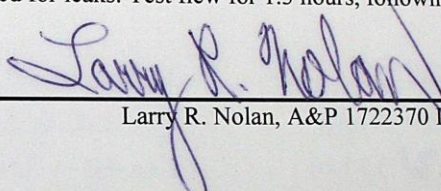
Lycoming SI 1241C: Pre-oiled engine prior to start by motoring with starter motor until oil pressure was achieved.

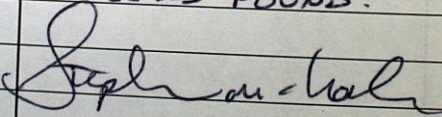
Lycoming SI 1427B and Superior L96-08 D: Followed correct break-in procedure.

(Continued on following page.)

Cleaned, gapped and re-installed spark plugs. Engine assembled, serviced with Phillips X/C engine oil and Kelly Aerospace ES48110-1 oil filter. Ground ran engine and checked for leaks. Test flew for 1.3 hours, following correct break in procedure.

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

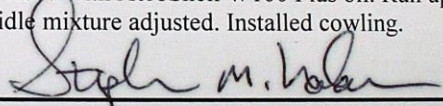
  
Larry R. Nolan, A&P 1722370 IA

DATE			Facility. (See back pages for other specific entries.)
4-20-2009			DRAINED OIL. REMOVED OIL FILTER. CUT OPEN OIL
	2057.6	TACH	FILTER + INSPECTED FOR METAL PARTICLES. NONE
	493	TSMOH	FOUND. INSTALLED NEW KELLY AEROSPACE
	4167.0	TOTAL	ES48110-1 OIL FILTER, TORQUED + SAFETY WIRED.
			SERVICED WITH AEROSHELL W100 PLUS OIL.
			RUN-UP PERFORMED. OIL PRESSURE GOOD.
			NO LEAKS FOUND.
			 P.P.# 3023028

Date: 09/26/2009      Engine Make: Lycoming      A/C Make: Piper  
Tach: 2108.3      Engine Model: O-360-A4A      A/C Model: PA-28-180  
TSMOH: 100.0      Engine S/N: L-13915-36A      A/C N Number: N7850N  
Total Time: 4217.7      A/C S/N: 28-5306

Removed cowlng. Drained oil. Removed oil filter. Cut open oil filter and inspected. No metal particles found. Installed new Kelly Aerospace ES48110-1 oil filter. Removed and cleaned oil suction screen. No metal particles found. Re-installed oil suction screen with new STD-111 annular gasket. Serviced with AeroShell W100 Plus oil. Run up performed. Oil pressure good. No oil leaks found. Idle speed and idle mixture adjusted. Installed cowlng.

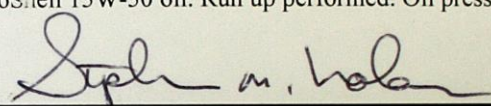
This engine is approved for return to service only for the work performed.

  
Stephen M. Nolan, A&P 3023028

Date: 12/13/2009      Engine Make: Lycoming      A/C Make: Piper  
Tach: 2151.6      Engine Model: O-360-A4A      A/C Model: PA-28-180  
TSMOH: 143.3      Engine S/N: L-13915-36A      A/C N Number: N7850N  
Total Time: 4261.0      A/C S/N: 28-5306

Removed cowlng. Drained oil. Removed oil filter. Cut open oil filter and inspected. No metal particles found. Installed new Kelly Aerospace ES48110-1 oil filter. Serviced with AeroShell 15W-50 oil. Run up performed. Oil pressure good. No oil leaks found. Installed cowlng.

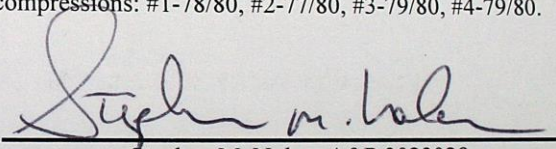
This engine is approved for return to service only for the work performed.

  
Stephen M. Nolan, A&P 3023028

Date: 01/01/2010      Engine Make: Lycoming      A/C Make: Piper  
Tach: 2161.0      Engine Model: O-360-A4A      A/C Model: PA-28-180  
TSMOH: 152.7      Engine S/N: L-13915-36A      A/C N Number: N7850N  
Total Time: 4270.4      A/C S/N: 28-5306

Inspected engine in accordance with Piper 100 hour inspection report and FAR Part 43 Appendix D. Washed engine compartment. Test ran engine with no leaks found. Cylinder compressions: #1-78/80, #2-77/80, #3-79/80, #4-79/80. Cleaned, gapped and re-installed spark plugs.

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

  
Stephen M. Nolan, A&P 3023028

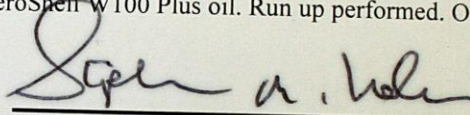
Date: 05/26/2010  
Tach: 2185.9  
TSMOH: 177.6  
Total Time: 4295.3

Engine Make: Lycoming  
Engine Model: O-360-A4A  
Engine S/N: L-13915-36A

A/C Make: Piper  
A/C Model: PA-28-180  
A/C N Number: N7850N  
A/C S/N: 28-5306

Removed cowling. Drained oil. Removed oil filter. Cut open oil filter and inspected. No metal particles found. Installed new Kelly Aerospace ES48110-1 oil filter. Serviced with AeroShell W100 Plus oil. Run up performed. Oil pressure good. No oil leaks found. Installed cowling.

This engine is approved for return to service only for the work performed.



Stephen M. Nolan, A&P 3023028

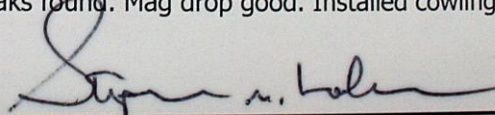
Date: 09/11/2010  
Tach: 2230.8  
TSMOH: 222.5  
Total Time: 4340.2

Engine Make: Lycoming  
Engine Model: O-360-A4A  
Engine S/N: L-13915-36A

A/C Make: Piper  
A/C Model: PA-28-180  
A/C N Number: N7850N  
A/C S/N: 28-5306

Removed cowling. Drained oil. Removed oil filter. Cut open oil filter and inspected. Removed and cleaned oil suction screen. No metal particles found. Installed new Kelly Aerospace ES48110-1 oil filter. Re-installed oil suction screen with new STD-111 annular gasket. Serviced with AeroShell 100W Plus oil. Cleaned, gapped and re-installed spark plugs. Replaced two 73245 Aero-Lite Bendix eyelets on right-side ignition harness. Replaced one 8-32 screw on carburetor heat muff. Removed and replaced fuel pump with unit overhauled by Aero Accessories, Inc. (Tempest), P/N LW15472, S/N I2758-13. See AAI work order 2826 for details. Installed using new LW15473 gasket and two new MS29512-06 O-rings. Run up performed. Fuel pressure good. No fuel leaks found. Oil pressure good. No oil leaks found. Mag drop good. Installed cowling.

This engine is approved for return to service only for the work performed.



Stephen M. Nolan, A&P 3023028

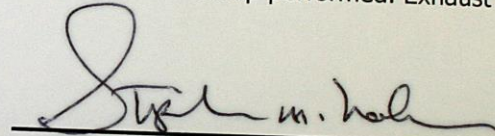
Date: 09/23/2010  
Tach: 2256.9  
TSMOH: 248.6  
Total Time: 4366.3

Engine Make: Lycoming  
Engine Model: O-360-A4A  
Engine S/N: L-13915-36A

A/C Make: Piper  
A/C Model: PA-28-180  
A/C N Number: N7850N  
A/C S/N: 28-5306

Replaced top spark plug in #1 cylinder with new Tempest URHM40E. Run up performed. Exhaust gas temperatures good. Mag drop good. Installed cowling.

This engine is approved for return to service only for the work performed.



Stephen M. Nolan, A&P 3023028

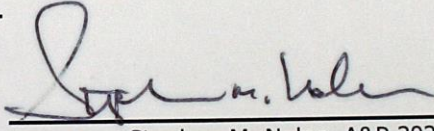
Date: 10/17/2010  
Tach: 2271.4  
TSMOH: 263.1  
Total Time: 4380.8

Engine Make: Lycoming  
Engine Model: O-360-A4A  
Engine S/N: L-13915-36A

A/C Make: Piper  
A/C Model: PA-28-180  
A/C N Number: N7850N  
A/C S/N: 28-5306

Removed cowling. Drained oil. Removed oil filter. Cut open oil filter and inspected. No metal particles found. Installed new Kelly Aerospace ES48110-1 oil filter. Serviced with AeroShell 100W Plus oil. Run up performed. Oil pressure good. No oil leaks found. Installed cowling.

This engine is approved for return to service only for the work performed.



Stephen M. Nolan, A&P 3023028

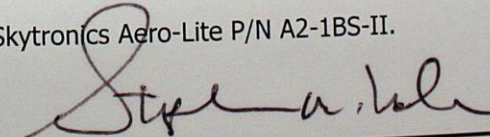
Date: 11/21/2010  
Tach: 2276.5  
TSMOH: 268.2  
Total Time: 4385.9

Engine Make: Lycoming  
Engine Model: O-360-A4A  
Engine S/N: L-13915-36A

A/C Make: Piper  
A/C Model: PA-28-180  
A/C N Number: N7850N  
A/C S/N: 28-5306

Replaced ignition harness on both magnetos with new Skytronics Aero-Lite P/N A2-1BS-II.

This engine is approved for return to service only for the work performed.



Stephen M. Nolan, A&P 3023028

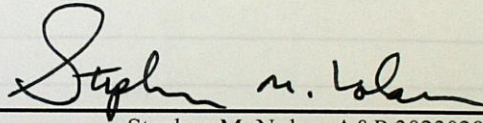
Date: 01/01/2011  
Tach: 2287.7  
TSMOH: 279.4  
Total Time: 4397.1

Engine Make: Lycoming  
Engine Model: O-360-A4A  
Engine S/N: L-13915-36A

A/C Make: Piper  
A/C Model: PA-28-180  
A/C N Number: N7850N  
A/C S/N: 28-5306

Inspected engine in accordance with Piper 100 hour inspection report and FAR Part 43 Appendix D. Washed engine compartment. Test ran engine with no leaks found. Cylinder compressions: #1-78/80, #2-78/80, #3-79/80, #4-79/80. Cleaned, gapped and re-installed spark plugs.

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



Stephen M. Nolan, A&P 3023028

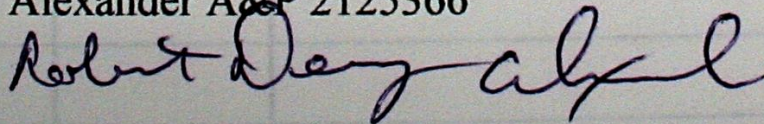
N7850N Lycoming O-360-A4A S/N L-13915-36A  
01-11-12 TACH 2314.6 Engine TT 4424.0 TSMOH 306.3

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

Inspection and all work performed in accordance with PIPER Inspection Check list and PIPER Maintenance Manual and Lycoming Overhaul Manual, Parts Manual and Table of Limits and Tightening Torques Manual. Replaced oil with 7 Qts. Aero Shell 100 Detergent Oil and replaced oil filter (CH48110). Cut open old filter for inspection, no contamination found. Cleaned spark plugs and adjusted timing. Engine test ran and checked for leaks. AD Notes checked for compliance.

COMPRESSION #1 77/80 #2 69/80 #3 70/80 #4 74/80

Robert Denny Alexander A&P 2125366



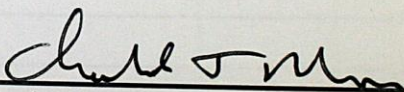
Date: 07/04/2012  
Tach: 2348.2  
TSMOH: 339.9  
Total Time: 4457.6

Engine Make: Lycoming  
Engine Model: O-360-A4A  
Engine S/N: L-13915-36A

A/C Make: Piper  
A/C Model: PA-28-180  
A/C N Number: N7850N  
A/C S/N: 28-5306

Removed cowling. Drained oil. Serviced with Aeroshell 100W. Run up performed. Oil pressure good. No oil leaks found. Installed cowling.

This engine is approved for return to service only for work performed.

  
Charles T Moon, SP GG -1279778

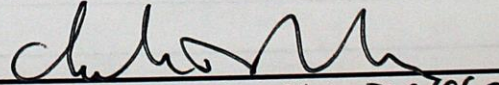
Date: 09/30/2012  
Tach: 2372.8  
TSMOH: 364.5  
Total Time: 4482.2

Engine Make: Lycoming  
Engine Model: O-360-A4A  
Engine S/N: L-13915-36A

A/C Make: Piper  
A/C Model: PA-28-180  
A/C N Number: N7850N  
A/C S/N: 28-5306

Removed cowling. Drained oil. Removed oil filter. Cut open filter and inspected. No metal particles found. Installed new Champion CH48110-1 oil filter. Serviced with Aeroshell 15W-50 oil. Replaced air filter with new Brackett filter P/N BA-3. Cleaned, gapped, and re-installed spark plugs. Engine test ran. Oil pressure good, no leaks found. Cowling installed.

This engine is approved for return to service only for work performed.

  
Charles T Moon, Private Pilot 3667060

### Lakeland Aviation Ardmore OK

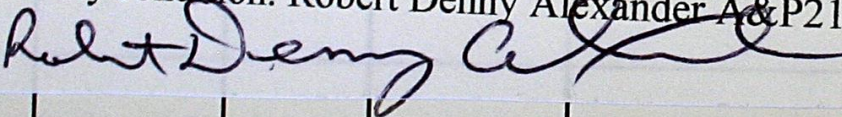
03-01-13 N7850N Lycoming O-360 A4A s/n L-13915-36A

Tach 2387.4: Engine TT 4469.8: TSMOH 379.1

Installed 8 new Champion Spark Plugs RHM40E. Cleaned fuel screens. Compression #1:77/80 #2:70/80 #3:76/80 #4:75/80

Washed engine compartment, inspected, lubed controls, inspected and dressed propeller and test ran engine in accordance with Piper and Lycoming Service manuals.

I certify that this ENGINE/PROPELLER has been inspected in accordance with a 100 HOUR inspection and was determined to be in airworthy condition. Robert Denny Alexander A&P2125366



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Lakeland Aviation Ardmore OK

04-04-14 N7850N Lycoming O-360 A4A s/n L-13915-36A

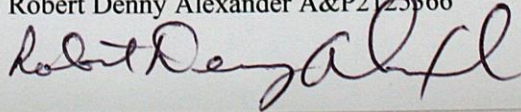
Tach 2392.6: Engine TT 4502.0: TSMOH 384.3

Cleaned, gapped and tested spark plugs. Cleaned fuel screens. Changed oil and oil filter. Inspected oil filter media no contamination found. Cleaned suction oil screen. Replaced throttle rod end p/n 89307-000 and checked travel. Starter s/n F2L-320554 overhauled by SkyTech. Installed heli-coil in aft bolt hole of alternator mount pad. Reinstalled alternator using new mount bolts and new Piper strut p/n 78483-00.

Compression #1:78/80 #2:76/80 #3:75/80 #4:77/80

Washed engine compartment, inspected, lubed controls, inspected and dressed propeller and test ran engine in accordance with Piper and Lycoming Service manuals.

I certify that this ENGINE/PROPELLER has been inspected in accordance with a 100 HOUR inspection and was determined to be in airworthy condition. Robert Denny Alexander A&P2125366



Lakeland Aviation Ardmore OK

10-20-16 N7850N Lycoming O-360 A4A s/n L-13915-36A

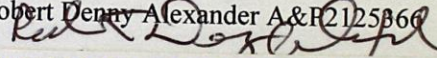
Tach 2400.7: Engine TT 4510.1: TSMOH 392.4



Changed oil 20w50 and oil filter Tempest 48110, no contamination in old filter.

Cleaned, gapped and tested spark plugs. Cleaned fuel screens. Compression #1:74/80 #2:66/80 #3:70/80 #4:76/80

Washed engine compartment, inspected, lubed controls, inspected and dressed propeller and test ran engine in accordance with Piper and Lycoming Service manuals.

I certify that this ENGINE/PROPELLER has been inspected in accordance with a 100 HOUR inspection and was determined to be in airworthy condition. Robert Denny Alexander A&P2125366



 **LAKELAND AVIATION, INC. ARDMORE MUNICIPAL AIRPORT** 

FBO Services, Aircraft Service- Sales- Rental-Pilot Shop  
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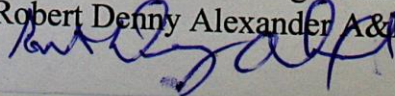
N7850N PA-28-180

08-23-17 Tach 2452.2

Changed oil 8 quarts Aeroshell 100 detergent and changed oil filter CH48110. Cut open old filter, no contamination found. Checked suction screen, no contamination found.

Washed engine compartment and relubed all controls. Ran engine and checked for leaks.

Aircraft approved for return to service. Robert Denny Alexander A&P2125366



Lakeland Aviation Ardmore OK

11-03-17 N7850N Lycoming O-360 A4A s/n L-13915-36A

Tach 2479.1: Engine TT 4588.5: TSMOH 470.8

Changed oil 20w50 and oil filter Tempest 48110, no contamination in old filter. Added CamGuard

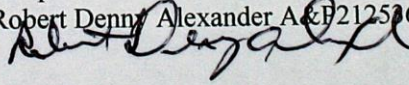
Cleaned, gapped and tested spark plugs. Installed 1 new spark plug RHM40E in top position #3 cylinder.

Cleaned fuel screens. Lubed controls. Repaired carb heat shroud.

Compression #1:77/80 #2:72/80 #3:74/80 #4:78/80. Bore scoped cylinders.

Washed engine compartment, inspected, lubed controls, inspected and dressed propeller and test ran engine in accordance with Piper and Lycoming Service manuals.

I certify that this ENGINE/PROPELLER has been inspected in accordance with a 100 HOUR inspection and was determined to be in airworthy condition. Robert Denny Alexander A&P2125066



 LAKELAND AVIATION, INC. ARDMORE MUNICIPAL AIRPORT 

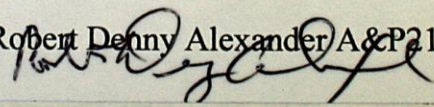
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N7850N PA-28-180

08-01-18 Tach 2529.9

Changed oil 8 quarts Phillips 20W50 detergent and changed oil filter CH48110 added Camguard. Cut open old filter, no contamination found. Checked suction screen, no contamination found. Washed engine compartment and relubed all controls. Ran engine and checked for leaks.

Aircraft approved for return to service. Robert Denny Alexander A&P2125366



Lakeland Aviation Ardmore OK

12-21-18 N7850N Lycoming O-360 A4A s/n L-13915-36A

Tach 2552.2: Engine TT 4661.6: TSMOH 543.9

Changed oil non detergent 20w50 Phillips and oil filter Tempest 48110, no contamination in old filter.

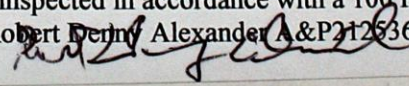
Cleaned, gapped and tested spark plugs. Cleaned fuel screens. Lubed controls.

Compression #1:78/80 #2:42/80 #3:76/80 #4:75/80. Bore scoped all cylinders.

Removed #2 cylinder due to burned exhaust valve, see Gibson Aviation work order #0818512 for work accomplished. Reinstalled using new gaskets, seals and rings supplied by Gibson Aviation.

Washed engine compartment, inspected, lubed controls, inspected and dressed propeller and test ran engine. All work accomplished iaw Lycoming Parts and Maintenance Manuals.

I certify that this ENGINE/PROPELLER has been inspected in accordance with a 100 HOUR inspection and was determined to be in airworthy condition. Robert Denny Alexander A&P2125366



ATE 01-18-19 N7850N Tach 2557.1  
Installed new alternator noise capacitor p/n CA63897-006  
Aircraft approved for return to service, Robert Denny Alexander A&P21125366  
*Robert Denny Alexander*

N7850N PA-28-180  
07-02-19 Tach 2576.5  
Changed oil 8 quarts Aeroshell 20W50 detergent and changed oil filter CH48110. Cut open old filter, no contamination found. Washed engine compartment and lubed all controls. Robert Denny Alexander A&P21125366  
*Robert Denny Alexander*

01-21-20 N7850N Lycoming O-360 A4A s/n L-13915-36A  
Tach 2599.0: Engine TT 4708.4: TSMOH 590.7 pair  
Changed oil detergent 15W50 Aeroshell and oil filter Tempest 48110, no contamination in old filter.  
Cleaned, gapped and tested spark plugs. Cleaned fuel screens. Lubed controls.  
Compression #1:75/80 #2:76/80 #3:74/80 #4:73/80. Bore scoped all cylinders. Installed new engine air filter Brackett BA-3.  
Washed engine compartment, inspected, lubed controls, inspected and dressed propeller and test ran engine. All work accomplished IAW Piper Maintenance Manual.  
I certify that this ENGINE/PROPELLER has been inspected in accordance with a 100 HOUR inspection and was determined to be in airworthy condition. Robert Denny Alexander A&P21125366  
*Robert Denny Alexander*


08-20-21 N7850N Lycoming O-360 A4A s/n L-13915-36A  
Tach 2629.0: Engine TT 4738.4: TSMOH 620.7  
Changed oil detergent 15W50 Aeroshell and oil filter Tempest 48110, no contamination in old filter.  
Cleaned, gapped and tested spark plugs. Cleaned fuel screens. Lubed controls.  
Compression #1:76/80 #2:75/80 #3:74/80 #4:74/80. Bore scoped all cylinders. Installed new engine air filter Brackett BA-3.  
**Both magnetos 500 hour inspection.** L/H mag 10-51360-45R s/n 1051350 and R/H mag 10-163045-3R s/n 1092088. See Aircraft Accessories Tulsa OK / L/H mag w/o 45890 and R/H mag w/o 45891 for details.  
Inspected, lubed controls, inspected and dressed propeller and test ran engine. All work accomplished IAW Piper and Lycoming Maintenance Manuals.  
I certify that this ENGINE/PROPELLER has been inspected in accordance with a 100 HOUR inspection and was determined to be in airworthy condition. Robert Denny Alexander A&P21125366  
*Robert Denny Alexander*

11-04-2022 Tach Time 2656.1 SMOH 647.8  
Compressions 1-68/80, 2-79/80, 3-79/80, 4-6/79 hot.  
Drained oil, cut filter. No contaminates found. Refilled  
with 6 qts Phillips 20W50 installed new AA 48110-2 oil  
filter. Removed rear accessory housing and accessories to  
inspect crank gear and replace attaching bolt and keeper,  
inspected as per MSB 475C and A.D. 2004-10-14  
Installed mags and set timing at 25 degrees, installed  
other rear accessories using new gaskets.. Torqued intake  
and exhaust hardware. Ran all ops ok. A.D. 2004-10-14  
complied with by changing bolt and keeper and  
inspecting gear. A.D. 2017-16-11 not installed. I certify  
that this engine has been inspected in accordance with a  
100 hr inspection and has been found to be airworthy.  
Charles G. Lucas A&P2822684IA. *C. G. Lucas*

01-08-2024 Tach Time 2666.1 SMOH 657.8  
Compressions #1-78/80, #2-76/80, #3-72/80, #4-78/80  
checked hot. Drained oil and removed oil filter. Cut  
filter, no contaminates found. Installed new AA48110-2  
oil filter and 7qts Aeroshell 15W50 oil. Torqued  
alternator mounting hardware. Checked mag timing.  
Test ran all opp ok. A.D. 2017-16-11 not installed. I  
certify that this engine has been inspected in accordance  
with a 100 hour inspection. ---END---Charles G. Lucas  
A&P 2822684IA *C. G. Lucas*

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wo: WO\_473 Engine · page 1 of 1



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**N7850N** **January 23, 2025**  
**LYCOMING, O-360-A4A, S/N: L-13915-36A**  
 Engine SMOH: 704.1 Engine TT: 4821.8 TACH: 2712.4

100 Hour Inspection completed this date in accordance with blank Maintenance Manual and 14CFR Part 43 Appendix D. Lubricated control cables. Checked magneto timing and engine compression 1) 68/80 2) 70/80 3) 65/80 4) 70/80.

Adjusted magneto timing to 25 degrees

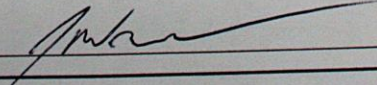
Changed oil and filter with 8 quarts of Phillips 20W50 engine oil and one AA48110-2 oil filter.

Performed 400 hour valve inspection IAW Lycoming Special Service Publication No. SSP 1776

Removed and replaced front muffler, and carb heat shroud with new.


Replaced Alternator belt and worn aft alternator mounting bolt with new.

I certify that this Engine was inspected in accordance with a 100 Hour Inspection and was determined to be in an airworthy condition.

James Wrenn A&P IA AP2724810 

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wo: WO\_511 Engine · page 1 of 1



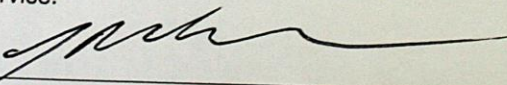
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**N7850N** **March 26, 2025**  
**LYCOMING, O&VO-360 SER, S/N: L-13915-36A**  
 TACH: 2761.9

Changed oil and filter with 8 quarts of Phillips X/C 20W50 engine oil and one AA48110-2 oil filter.

I certify that the maintenance recorded above was accomplished in accordance with Lycoming Service Manual and is approved for return to service.

James Wrenn A&P IA AP2724810 

wo: WO\_546

Engine - page 1 of 1

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**N7850N**  
TACH: 2812.5

**LYCOMING, O-360-A4A, S/N: L-13915-36A**

**July 01, 2025**

100 Hour Inspection completed this date in accordance with Lycoming Maintenance Manual and 14CFR Part 43 Appendix D. Lubricated control cables, cleaned and gapped spark plugs. Checked magneto timing and engine compression #1 78/80 #2 70/80 #3 70/80 #4 78/80 .

Changed oil and filter with 8 quarts of Aeroshell W100 Plus engine oil and one AA48110-2 oil filter.

I certify that this Engine was inspected in accordance with Lycoming Maintenance Manual and was determined to be in an airworthy condition.

James Wrenn A&P IA AP2724810

TAIL#: N7850N

Tach: 2867.5

Date: 08/08/2025

The oil was drained and replaced with 8qts of Aeroshell W100 and filter replaced with new P/N: AA48110-2, Torqued to 16in/lb and safty wired in place. Old filter was cut open and inspected with no metal particles noted. Engine ran with no leaks noted at the drain, filler, or filter. This mx was performed as preventative maintenance as approved by part 43 appendix A and is approved for return to service at this time as it relates to the oil change only.

Cameron Thomas, CP 3854821



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N7850N  
TACH: 2910.4

LYCOMING, O&amp;VO-360 SER, S/N: ENGINE SN TBD

September 22, 2025

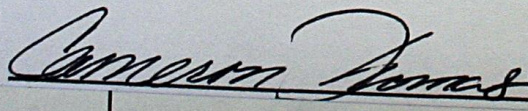
1. **100 Hour Inspection** – 100 hour Inspection completed this date in accordance with Lycoming Maintenance Manual and 14CFR Part 43 Appendix D. Lubricated control cables, cleaned and gapped spark plugs. Checked magneto timing L Mag 25 degrees R Mag 25 degrees. Compression Cylinder #1/76. #3 72. #2 70. #4. 70. clean and gap spark plugs/reinstall.
2. **AD 24-21-02 Connecting rod assembly and bushing** – Cut open filter and inspect for bronze particles. None noted. Next due 100 hours or next oil change.
3. **Idle mixture high. no RPM rise on cutoff and causes lower plugs to foul often.** – Reduced idle mixture IAW Lycoming MM.
4. **Top center engine case leaks oil** – Cleaned engine compartment, sealed case half with wicking sealant. No leaks noted on run up.
5. **Replace oil dipstick seal with new** – Replaced oil dipstick with new Installed P/N RG-72059 - DIPSTICK TUBE BASE GASKET.
6. **Rear alternator mount needs bushing** – Removed alternator and replaced with serviceable same part number. OPs check. OK.
7. **Oil return lines from cylinders leaking oil** – Removed oil return lines and replaced rubber lines Installed (4) P/N STD-1821 - HOSE, 3/8 I.D. x 2-1/2 long.

I certify that this Engine has been inspected IAW a 100 hour inspection and was determined to be in an airworthy condition.

James Wrenn A&amp;P IA AP2724810

TAIL#: N7850NTach: 2910.4Date: 9-22-25TO  
TIN  
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The oil was drained and replaced with 8qts of Aeroshell W100 and filter replaced with new P/N: AA48110-2, Torqued to 16in/lb and safty wired in place. Old filter was cut open and inspected with no metal particles noted. Engine ran with no leaks noted at the drain, filler, or filter. This mx was performed as preventative maintenance as approved by part 43 appendix A and is approved for return to service at this time as it relates to the oil change only.

 Cameron Thomas, CP 3854821

AR:

TAIL#: N7850N

Tach: 2958.6

Date: 10-17-25

TE

The oil was drained and replaced with 8qts of Aeroshell W100 and filter replaced with new P/N: AA48110-2, Torqued to 16in/lb and safty wired in place. Old filter was cut open and inspected with no metal particles noted. Engine ran with no leaks noted at the drain, filler, or filter. This mx was performed as preventative maintenance as approved by part 43 appendix A and is approved for return to service at this time as it relates to the oil change only.

*Cameron Thomas* Cameron Thomas, CP 3854821

R: TOTAL Manufacturers' Mandatory Service Bulletin

wo: WO\_639

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N7850N  
TACH: 3010.5

LYCOMING, 0-360-A4A, S/N: L-13915-36A

January 05, 2026

**100 Hour Inspection** – Inspection completed this date in accordance with Lycoming Maintenance Manual and 14CFR Part 43 Appendix D. Lubricated control cables, cleaned and gapped spark plugs. Checked magneto timing and engine compression cylinder **Cylinder 1: 70/80, Cylinder 2: 72/80, Cylinder 3: 72/80, Cylinder 4: 72/80** minimum cylinder leakage limit 45 psi per TCM SB03-3.

**Change oil and take oil sample** – Engine oil and filter changed; oil sample taken and sent for analysis. Engine operation checked and no leaks noted. Installed (8) P/N 08-05300 - Phillips 66 X/C Aviation Oil 20W50 Quart, Installed P/N AA48110-2 - Oil Filter.

**AD 24-21-02** – Complied with AD 2024-21-02 (Connecting Rod Assembly and Bushing). At oil change, inspected oil filter for bronze metal particulates per AD instructions. No bronze particles detected. Next inspection due at next oil change.

**Cylinder 2,3,& 4 exhaust gasket needs replaced** – Replaced cylinder #2, #3, & #4 exhaust gasket; hardware torqued and engine checked for leaks—OK. Installed (3) P/N SL77611 - Lycoming Exhaust Gasket.

**Cylinder 4 fuel primer broken at flare** – Repaired broken fuel primer line at cylinder #4 flare; primer operation checked—OK.

YEAP TOTAL  
wo: WO\_639

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**Replace all spark plugs** – Removed worn spark plugs found beyond recommended service limits and installed new spark plugs. Spark plugs gapped, installed, and torqued per manufacturer specifications. Engine run-up and ignition check performed—OK. Installed (8) P/N URHM40E - Spark Plug.

I certify that this Engine has been inspected IAW a 100 hour inspections and was determined to be in an airworthy condition.

James Wrenn A&P IA AP2724810

Addition of Optional Equipment  
 Removal of Optional Equipment

TIME IN SERVICE

TE TAIL#: N7850N

Tach: 3060.5

Date: 2-7-26

The oil was drained and replaced with 8qts of Aeroshell W100 and filter replaced with new P/N: AA48110-2, Torqued to 16in/lb and safty wired in place. Old filter was cut open and inspected with no metal particles noted. Engine ran with no leaks noted at the drain, filler, or filter. This mx was performed as preventative maintenance as approved by part 43 appendix A and is approved for return to service at this time as it relates to the oil change only.

Cameron Thomas, CP 3854821