

N311SD

Date: 08/09/2015

S/N: L-11173-51A

Tach : 553.98

Engine: Lycoming IO-360-A1A

Time Since New: 553.98

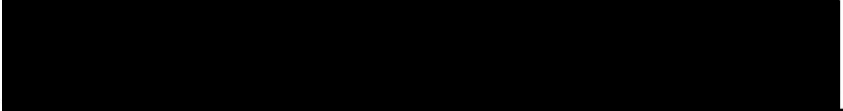
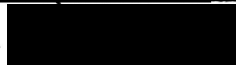
Performed condition inspection of this engine. Corrected engine "in service" time from 21 hours to 553.98 hours. Questioned the 21 hours in service entry. No record of engine overhaul. Was unable to determine status from the log books. A phone call to Lycoming verified engine was factory new and shipped to the BD factory on 06/25/1973. This coincides with the first log entry of the engine log and validates total time since new. No recorded overhauls or tach change found. Time in Service / Time Since New adjusted to 553.98 hours.

Performed AD search. AD's listed on FAA website as of 08/09/2015 for this engine and propeller are either complied with or not applicable. Recurring AD's are as follows:

AD 2004-10-14 Crankshaft Gear - Due after any prop strike

AD 2009-22-03 Propeller Hub - Due in 50 hours tach

I certify this Engine has been inspected on 08/09/2015 in accordance with the scope and detail of 14 CFR part 43, Appendix D, and was found to be in a condition for safe operation.


Anthony Royal A&P/IA 

8/9/2015
Date

Reinstalled accessories and cylinders and performed dry tappet valve clearance check. Replaced 4 pushrods with serviceable Lycoming p/n 73458 pushrods to obtain rocker arm to valve clearance limits between 0.020"- 0.080" as referenced by Lycoming Service /Overhaul Manual. Removed eroded exhaust studs on all cylinders and replaced with ECI p/n AEL31C13 studs. All engine and accessory gaskets replaced during engine assembly.

C/W Lycoming SB 240W, paragraph **"AT OVERHAUL OR UPON REMOVAL"** as applicable for mandatory parts replacement during repair or maintenance.

C/W Lycoming SB524 Oil Pump Gears

C/W Lycoming SB342G Fuel Line Support Clamp Installation

C/W Lycoming SB475C Crankshaft Gear Modification and Assembly Procedures

Lycoming Service Instructions referenced during and after assembly: SI1059D, SI1324C, SI1509, SI1011L, SI1125D, SI1458F, SI1060K, SI1014M, SI1241C, SI1427C, SI1037P, SI1164B (78527/78528/SI18109A/SL18110A/61174 installed), SI1267D, SI1340A, SI1512, SI1047B, SI1029D, Superior L03-05B

C/W AD 2011-26-04 Fuel Injection Lines

C/W AD 2015-19-07 Fuel Injection Lines

C/W AD 2004-10-14 Crankshaft Gear - Due after any prop strike

All work was performed with reference to 60294-7-9 Lycoming Direct Drive Engine Overhaul Manual, Revisions through June 2002, PC-406-1 Lycoming Aircraft Engine Parts Catalog IO,AIO-360-A, -B Series, Revisions through December 1996, SSP-295 Supplement to PC-406-1

(continued next page)

Anthony Royal A&P / IA

Date _____

4/9/16

Date _____

[illegible]

YEAR: DATE	RECORDING TACH TIME	TODAY'S FLIGHT	TOTAL TIME IN SERVICE	Description of Inspections, Tests, Repairs and Alterations Entries must be endorsed with Name, Rating and Certificate Number of Technician or Repair Facility. (See back pages for other specific entries.)
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N311SD

S.N:

Engine:

L-11173-51A

Lycoming IO-360-A1A

Date: 4/9/2016

Tach:

5545

TTSN:

5545

Disassembled, inspected and replaced as necessary internal engine parts, reassembled engine as per A&P/IA signoff dated 4/9/2016. Replaced fuel line from mechanical fuel pump to fuel servo with serviceable firesleeved -6 hose fabricated in 2010. Replaced original Prestolite starter with new Skytech 149-12XLT. Replaced oil sump drain plug with Curtis CCB-37000 quick-drain. Cleaned and re-plumbed sniffle valve on bottom of intake air plenum. Loosened seized exhaust slip joints, cleaned and lubricated with nickel-based anti-seize for reassembly. Straightened and re-surface exhaust flanges to remove warping from previous over-tightening. Replaced rubber oil crankcase breather tube with fabricated aluminum tubing (including whistle slot). Performed initial engine ground run-in as per SI1427C. Removed, cut open, and inspected oil filter element. Only normal amount of tiny break-in metallic flakes observed.

Owner/Pilot

Date

4/9/2016

YEAR: _____ DATE	RECORDING TACH TIME	TODAY'S FLIGHT	TOTAL TIME IN SERVICE	Description of Inspections, Tests, Repairs and Alterations Entries must be endorsed with Name, Rating and Certificate Number of Technician or Repair Facility. (See back pages for other specific entries.)
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N311SD

Date: 9/1/2016

Tach: 586.44

S/N: L-11173-51A

TTSN: 586.44

Engine: Lycoming IO-360-A1A

Performed condition inspection of this engine. Drained break-in mineral oil and serviced with Philips 66 X/C 20W-50 oil. Removed and inspected oil sump screen and found no abnormal material. Removed, cut open oil filter and examined filter media to find no abnormal engine wear indications. Replaced oil filter with Tempest AA48109. Serviced spark plugs, checked magneto timing (25 deg BTDC), and performed differential compression test (77/72/75/78)/80 psi. Fabricated replacement fuel line between fuel injection servo and spider, with Aeroquip 303-4 hose, pressure-tested to 4500psi, and installed firesleeve. Adjusted turbocharger waste-gate linkage for full closure. Re-torqued exhaust flange nuts and lubricated exhaust slip joints with Mouse Milk lubricant. Replaced mechanical fuel pump with overhauled unit, P/N LW-15473, (S/N 0B3013) and modified referencing Rajay DWG-R00253, dated 12/14/1977. Modification included sealing vent port to crankcase with Permatex 82180 oil-resistant RTV and tapping and bonding 1/8" NPT threaded port above diaphragm for turbocharger deck pressure reference to provide functionality similar to Rajay fuel pump P/N R00253-501.

9/1/16

Date

N311SD

Date: 09/01/2016

Tach : 586.44

S/N: L-11173-51A

Time Since New: 586.44

Engine: Lycoming IO-360-A1A

Performed AD search. AD's listed on FAA website as of 08/29/2016 for this engine and propeller are either complied with or not applicable. Recurring AD's are as follows:

AD 2004-10-14 Crankshaft Gear - Due after any prop strike

AD 2015-19-07 Fuel Injector Lines – Due after maintenance, within every 110 hrs. TIS, or at OH

Next inspection due 696.44 tach

I certify this Engine has been inspected on 09/01/2016 in accordance with the scope and detail of 14 CFR part 43, Appendix D, and was found to be in an airworthy condition.

Anthony Royal A&P / IA

9/1/2016
Date