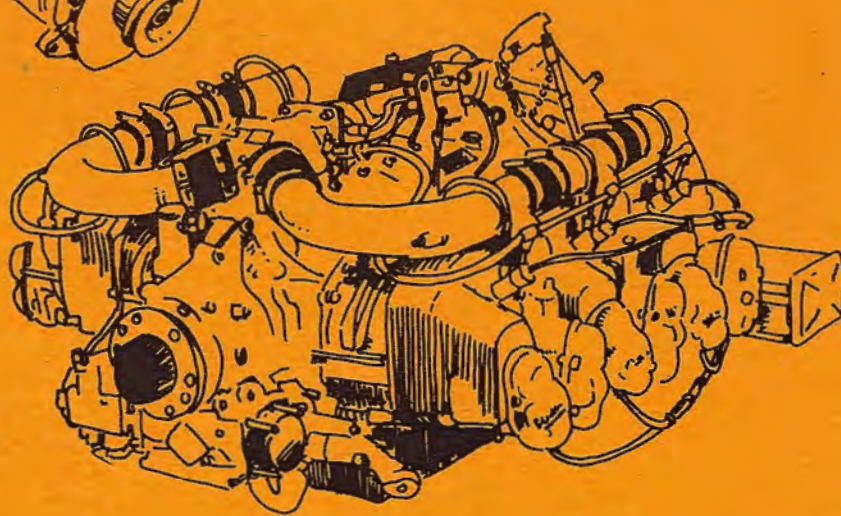
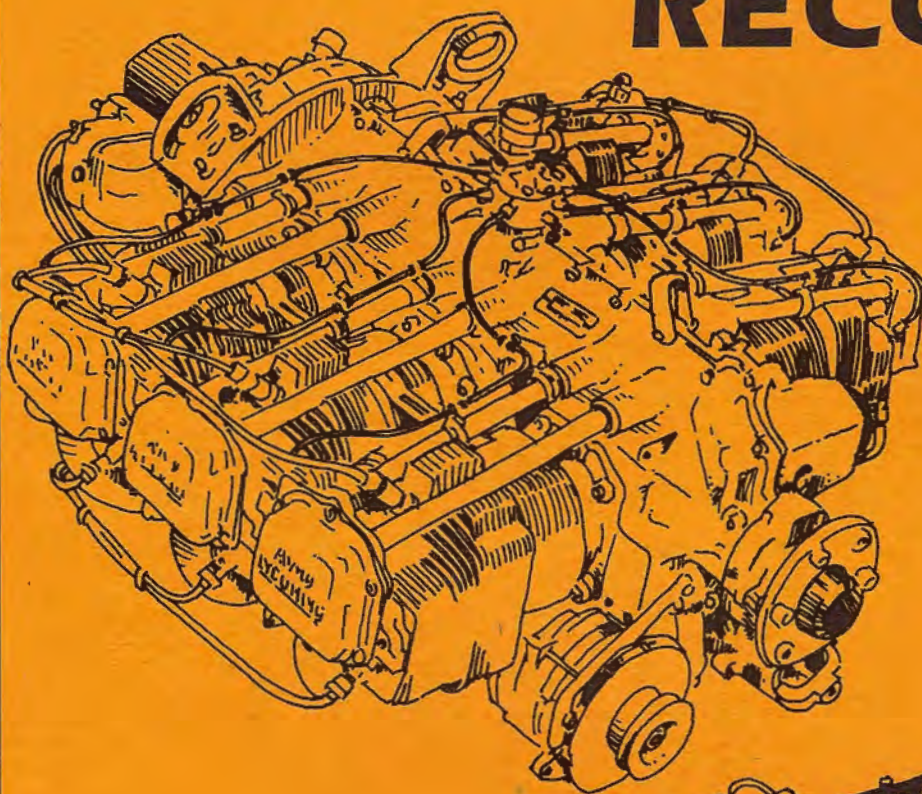


ENGINE MAINTENANCE RECORDS



1-800-624-6680

(IN NY 631-298-8330)

TELEDYNE MATTITUCK SERVICES, INC.

410 AIRWAY DRIVE, MATTITUCK, NY 11952

TELEDYNE MATTITUCK SERVICES, INC. / Limited Piston Engine Warranty

Effective 7-1-2010, Teledyne Mattituck Services, Inc. (hereinafter "TMS") makes the following warranty to its customer, subject to the limitations, conditions and exclusions set forth below.

LIMITED ENGINE WARRANTY - For a period of THREE (3) Years after date of delivery to customer, or 300 hours of operation, whichever occurs first, TMS shall repair or replace, at its option, any aircraft engine, which is found to be defective, to TMS's satisfaction, within said warranty period.

LIMITED ACCESSORY WARRANTY - Teledyne Mattituck Services, Inc. warrants the accessories for the engine (Fuel System, Magneto, Starter and Alternator) for ONE (1) YEAR from the date the engine is first placed in service.

The LIMITED WARRANTIES cover 100% parts and labor on engines and accessories subjected to normal use and operated in accordance with normal maintenance procedures. All maintenance required in the maintenance schedules must be noted in the engine logbook when maintenance is performed or the warranties are VOID.

Replacement parts supplied for warranted engines still covered by manufacturer's warranty are supplied on an exchange basis. TMS will pursue warranty claims with the manufacturer on the owner's behalf. Any allowance by the manufacturer will be credited to the operator's account.

The repair or replacement of any part under the foregoing warranty shall not extend the periods or warranty coverage set forth above. TMS reserves the right to change the price or specifications of any engine or part at any time.

CONDITIONS AND PROCEDURES FOR OBTAINING WARRANTY WORK - The foregoing warranty shall be effective only if the engine or component to be serviced is returned to TMS's facility at customer's expense, together with particulars in writing of the nature of the defect. The customer or his representative should contact TMS for verification and authorization of warranty prior to return and/or repair. Written authorization must be obtained from TMS before repairs covered by warranty can be performed other than by TMS. In no event shall allowable labor costs exceed local published shop rates. The foregoing warranty shall apply if and only if the engine has been properly installed and maintained in accordance with current approved standards of the FAA and current recommendations of the manufacturer as specified in applicable factory manuals and service bulletins.

The performance of recommended inspections and maintenance must be documented by logbook entries which must accompany any engine returned for warranty work. Defects must be discovered within the warranty period and TMS must be given prompt notice thereof in writing, within ten (10) days after discovery.

LIMITATIONS, EXCLUSIONS, AND DISCLOSURES - TMS shall not assume freight charges, transportation or delivery expenses, costs, or airframe repairs, all of which are excluded under this warranty. TMS does not warrant parts, materials or services supplied which are covered by manufacturer's warranty. This warranty shall not apply to any engine which has been subject to misuse, neglect, accident or damage from the elements, or which has been installed, repaired or maintained or altered in any manner which, in the judgment of TMS, has had an adverse effect on the engine or part. This warranty shall not apply to any engine which has been operated under conditions which exceed the manufacturer's recommendations. This warranty shall not apply to any engine which has been repaired or altered, in any manner other than by TMS, or its representative. The use of fuels and/or fluids not specifically approved by the engine's original manufacturer may void this warranty.

THE FOREGOING WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES OR REPRESENTATIONS, EXPRESS OR IMPLIED ARISING BY OPERATIONS OF LAW OR OTHERWISE, INCLUDING WITHOUT LIMITATION THE WARRANTY OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE WHICH WARRANTIES ARE HEREBY EXCLUDED. TMS liability hereunder shall be limited to the repair or replacement of any engine or part found to be defective within the applicable warranty period as set forth above. IN NO EVENT SHALL TMS BE LIABLE FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES OR ECONOMIC LOSS OF ANY NATURE WHETHER ARISING IN CONTRACT OR TORT, INCLUDING STRICT LIABILITY IN TORT OR NEGLIGENCE ON THE PART OF TMS. The foregoing limitations and exclusions with respect to implied warranties and the exclusion of incidental or consequential damages may not apply in those states which prohibit such limitation or exclusions. This warranty gives customer specific legal rights, and the customer may have other rights which vary from state to state.

Work Order No.

33589

Engine Serial No.

L-11422-61A



Airway Drive
Mattituck, N.Y.
Tel: (631)-298-8330

FORM WAR-04 REV.(JULY 2010)

WORK ORDER

Work Order No. 33589 Customer Columbia A/S.
Part No. 910-540-AH1A Serial No. L-11422-61A
Nomenclature LYCOMING AIRCRAFT ENGINE.
Description of work performed New Lycoming cylinder assembly installed.
Ch AD 97-15-11, 2004-05-24, 2004-10-14 **ENGINE OVERHAULED**
Ch AD 2008-14-07, 2009-02-03. **TO MEET NEW PARTS**
LIMITS AND TEST RUN

All work performed in accordance with applicable manufacturer's maintenance and parts manuals.

Date 10-7-2010 Signed Michael P. Russell

TELEDYNE MATTITUCK SERVICES, INC.

FAA Repair Station T10R507Y

WARNING

- When installing drive gear or driver onto magneto, torque nut provided to 120 to 320 inch lbs.
- Use only the installation hardware provided.
- Secure nut with appropriate cotter pin.

R/H

FAA-PMA Approved

This magneto was manufactured from all new components in accordance with 14 CFR Part 21.303h and is airworthy. This magneto is FAA-PMA approved for applications listed in Unison Industries' L-1318 Document in the F-1100 Master Service Manual. For LASAR® Magnetos, see L-1500 Manual.

Enter magneto model, serial number, and date of installation, and attach this tag to engine logbook.

Magneto Model No. 6360

Magneto Serial No. 08121933

Date of Installation _____

L-1543-A

ENGINE MAINTENANCE RECORDS

Log No. _____

Aircraft Registration No. N5369S

Engine Manufacturer Lycoming

Model T10-540-A1HA

Serial No. L-11422-61A

Date installed on aircraft 11-1-2010

Time Between Overhauls (TBO) 2000 Hours

If used on multi-engine aircraft:

<input type="checkbox"/> Right	<input type="checkbox"/> Left
<input checked="" type="checkbox"/> Front	<input type="checkbox"/> Rear

This is to certify that the engine described hereafter has been overhauled to manufacturer's new part limits by Teledyne Mattituck Services, Inc. Tested per FAA approved Process Specification 1012C. Engine disassembled, cleaned, and inspected in accordance with manufacturer's instructions. All steel parts magnafluxed. All Applicable Airworthiness Directives are in compliance. The engine, with respect to the work performed is airworthy and approved for return to service.

A description of these repairs is on file at this agency under:

JOB NO. 33589 DATED 7- OCT- 10
 MFG. LYCOMING MODEL T10 540 AH1A
 Serial No. 1-11422-61A Time in svc. 1857.7 HRS
 Cylinder Type NEW LYCO NITRIDE



TELEDYNE MATTITUCK SERVICES, INC.

FAA REPAIR STATION #T10R507Y
 AIRWAY DRIVE, MATTITUCK NY 11952

Authorized Signature

FORM RS-37 REV.(MAY 2008)

The accessories listed below were overhauled by Teledyne Mattituck Services, Inc. in accordance with applicable manufacturer's service and parts manuals and installed on the engine:

Item	Part No.	Serial No.
F10-div.	2524232-2	0307424

The accessories listed below were New or Overhauled as indicated in the status column and installed on the engine. Overhaul records for these overhauled accessories are in an envelope in the back of this logbook.

Item	Part No.	Serial No.	Status
RT MAG	6360	08121933	N
LT MAG	6361	09080529	N
STARTER	149-24PM	F4P-341002	N
Fuel pump	200F5002	NFN034FP/REV	N
Turbocharger	466011-9002	GLR00150	O
Controller	481058-0007	GDN00247	O
WASTE GATE	470954-9009	BFN22080	O
relief valve	470944-9040	J10136	O
SERVO	2576554-2	70276607	O
ALT.	E3FF10300AA	K080868	O

Authorized Signature



TELEDYNE MATTITUCK SERVICES, INC.
 FAA REPAIR STATION T10R507Y

W.O. NO. 33589 DATE 7 OCT 10

FORM RS-38 REV.(NOV. 2005)

Engine

Columbia Air Services, Inc.
LOG BOOK ENTRY

Page 1 of 2

DATE

A/C REG: N5369SA/C S/N: 3257329DATE: 11/1/10A/C TOTAL TIME: 1857.7HOUR METER: 1857.7W/O NO: MWO-10-3322ENGINE TOTAL TIME 1857.7

S.M.O.H.

1. Reinstalled this engine, Textron Lycoming Model TIO-540-AH1A S/N: L-11422-61A, after overhaul. Ref. Teledyne Mattituck Services, Inc. (Mattituck, NY) W/O# 33589. Removed and replaced engine lord mounts, P/N: J9613-12 (Qty 2) and J9613-19 (Qty 2), alternator and air conditioning compressor drive belts, P/N: 37B19774-472 (Qty 1), 37D22355 (Qty 1), with new. Work performed in accordance with Piper Aircraft, Inc. PA32R-301/301T M.M. chapter 71-00-00. (Note: Correct alternator P/N: 32C22491 S/N: HK100822 installed)
2. Complied with a 100 Hour/Annual Inspection in accordance with Piper Aircraft, Inc. PA32R-301/301T Maintenance Manual chapter 5-20-00.
3. Complied with 500 hour oil radiator flush special inspection. Removed and reinstalled oil coolers, P/N: 10901A (557-903) S/N's: 479 & 507, after overhaul. Ref. Pacific Oil Cooler Services, Inc. (La Verne, CA) W/O# 78539 & 78540.
4. Complied with AD 84-26-02 amend. 39-4966 dated 1/29/85, Inspection of paper induction air filters for continued airworthiness. Removed and replaced paper induction air filter with new, P/N: 561-020. Inspection next due: 1957.7 ACTT. Mandatory replacement next due: 2357.7 ACTT.
5. Removed and replaced starter with new, P/N: 149-24PM S/N: F4P-361004. (S/N removed: F4P-341002)
6. Repositioned #4 cylinder EGT probe as required.
7. Adjusted engine idle and mixture in accordance with Piper Aircraft, Inc. PA32R-301/301T M.M. chapter 73-20-00.

-----CONTINUED-----

Engine Cont'd

LOG BOOK ENTRY (CONT.)

Page 2 of 2

8. Performed engine pre-oil and engine leak in procedure, aircraft test flight and post inspection ground runs per Piper PA32R-301/301T M.M. and Lycoming SI 1427B, operational and leak checks satisfactory.

-----END-----

WO NO.

MWO-10-3322

COLUMBIA AIR SERVICES, INC.
GROTON-NEW LONDON AIRPORT
GROTON, CONNECTICUT 06340

FAA Repair Station #S05R204N. Work Order # MWO-10-3322.
I certify that this Engine has been inspected in accordance with
a 100 Hour/Annual inspection per Piper Aircraft, Inc.
PA32R-301/301T M.M. chapter 5-20-00 and has been found
airworthy for the work performed.
Date: 11/1/10 A/C Total Time: 1857.7
Signature: [Signature]
Title: Chief Inspector



MAINTENANCE RELEASE

THE AIRCRAFT AIRFRAME, 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 FOR THE WORK PERFORMED. PERMANENT RECORDS OF THE REPAIR ARE ON FILE AT THIS REPAIR STATION UNDER

W/O# MWO-10-3322 DATE: 11/1/10 SIGNED: [Signature]
FOR Columbia Air Services, Inc. FAA CERTIFIED REPAIR STATION # S05R204N GROTON, CT 06340

SUB-TOTALS this page

TOTALS—Carry forward to next page

DATE	TOTAL TIME IN SERVICE	TOTAL TIME SINCE OVERHAUL	TACH OR RECORDING METER TIME	DESCRIPTION OF WORK PERFORMED— SIGNATURE & CERTIFICATE NO. OF PERSON PERFORMING WORK
				TOTALS brought forward from previous page
				<p>BARTELT AVIATION, INC.</p>  <p>11/11/2010 N5369S Piper PA-32R-301T Aircraft Total Time: 1868.1</p> <p>Installed Reiff engine preheat system, Turbo XP system.</p> <p><i>Jeremy Hierholzer</i> Jeremy Hierholzer – IA 3114485 Bartelt Aviation, Inc. – Sturgis, Michigan (269)-651-5431</p>
				<p>BARTELT AVIATION, INC.</p>  <p>11/12/2010 N5369S Piper PA-32R-301T Aircraft Total Time: 1868.2</p> <p>Lycoming TIO-540-AH1A S/N: L-11422-61A TSOH: 10.5</p> <p>Complied per Lycoming Service Bulletin 480E, Oil and Filter Change, Suction Screen Inspection, No defects noted. Installed new CH48110-1 filter. Added 11qts Aeroshell 15W50. Run-up. No leaks noted.</p> <p><i>Jeremy Hierholzer</i> Jeremy Hierholzer – IA 3114485 Bartelt Aviation, Inc. – Sturgis, Michigan (269)-651-5431</p>
				<p>Signal AVIATION SERVICES, INC. (603) 298-6555</p> <p>Date: 2-4-11 Reg: N5369S Time: 1913.7 Hobbs W/O: 1014 Engine Entry</p> <p>Removed #4 exhaust stack riser and sent out for repair. Reinstalled riser following repair by Dawley Aviation, Inc. All operational and leak checks satisfactory. All work performed in accordance with applicable sections of manufacturer's maintenance manual. This aircraft is airworthy in reference to work performed and is approved for return to service.</p> <p><i>Jason A. Archambeault</i> Jason A. Archambeault, for Signal Aviation Services, Inc., CRS # SNAR711K</p>
				<p>Signal AVIATION SERVICES, INC. (603) 298-6555</p> <p>Date: 4-29-11 Reg: N5369S Time: 1924.5 Hobbs W/O: 1069/1079 Engine Entry</p> <p>Removed fuel injector servo for compliance with AvStar service bulletin AFS-SB6. Reinstalled AFS-SB6 compliant servo following repair by AvStar Fuel Systems, Inc., CRS # V1RR580Y, work order # 132961. Set idle and mixture as required. Tightened fuel flow sending unit to engine driven fuel pump to prevent fuel from leaking. Ran engine. Drained hot oil. Oil sample taken for analysis. Removed oil filter and cut open for inspection. No contaminants noted. Installed new filter P/N AA48110-2 and serviced with 12 quarts of Aeroshell 15W50 oil. All operational and leak checks satisfactory. All work performed in accordance with applicable sections of manufacturer's maintenance manual. This aircraft is airworthy in reference to work performed and is approved for return to service.</p>

DATE	TOTAL TIME IN SERVICE	TOTAL TIME SINCE OVERHAUL	TACH OR RECORDING METER TIME	DESCRIPTION OF WORK PERFORMED— SIGNATURE & CERTIFICATE NO. OF PERSON PERFORMING WORK
				TOTALS brought forward from previous page
7/19/2011	1977.1	119.4	1977.1	Ran engine & drained the oil & checked for sediment. Removed oil filter, opened & inspected. Installed new filter. Added 11 qts Phillips Newshell 15W50 oil. drained oil cooler & turbo pump. Cleaned & reinstalled the cowling. Ran & leak checked the engine. <i>Z PM</i> 22423077 ASP. Edmonds Aircraft Service, Newport, NH
9/2/2011	2008.0	150.3	2008.0	Replaced fuel injector nozzles w/ Turbochargers, per STC SE094455C. Ran & leak checked engine. See FAA Form 337 of this date. <i>Z PM</i> 22423072 ASP. Edmonds Aircraft Service, Newport NH
10/24/2011	2037.3	179.6	2037.3	Ran the engine, drained the oil & checked for sediment. Removed oil filter, opened & inspected it. Installed a new filter. Added 12 qts Newshell 15W50 oil. Drained oil cooler & turbo pump. Cleaned outer portion of starter drive & lubricated it w/ silicone spray. Ran engine & leak checked it. <i>Z PM</i> 22423092 ASP. Edmonds Aircraft Service, Newport NH.
01/06/2012	2044.6	186.9	2044.6	Performed an Annual Inspection including: Drained oil & checked for sediment. Drained the oil cooler. Drained the turbo pump. Removed suction screen, cleaned & inspected it. Reinstalled it with a new gasket. Removed the oil filter, opened & inspected it. Checked filter adapter. Applied lube to new filter per Tyco SI 183 & installed it. Replaced the oil suction hose from the turbo pump. Repositioned & secured the oil cooler hoses, turbo oil supply & return hoses, waste gate to controller & controller to engine hoses. Added 12 qts Newshell 15W50 oil. Oiled cylinder walls & spun engine w/ starter to raise oil pressure per Tyco SI 1241 C. Oil change schedule in accordance w/ Tyco SB 480E and Part I
				SUB-TOTALS this page
	2044.6	186.9	2044.6	TOTALS —Carry forward to next page

DATE	TOTAL TIME IN SERVICE	TOTAL TIME SINCE OVERHAUL	TACH OR RECORDING METER TIME	DESCRIPTION OF WORK PERFORMED— SIGNATURE & CERTIFICATE NO. OF PERSON PERFORMING WORK
	2044.6	186.9	2044.6	TOTALS brought forward from previous page
1/6/12 (continued)				of SI 11425 A.
				Checked compression per Zeco SI 1191A, #1- $\frac{76}{80}$, #2- $\frac{77}{80}$, #3- $\frac{75}{80}$, #4- $\frac{78}{80}$, #5- $\frac{77}{80}$, #6- $\frac{78}{80}$
				Visually checked the exterior of the cylinders. Removed & cleaned the rocker covers.
				Checked the rocker arms, thrust washers & towers, valve springs, caps & retainers. Checked valve train motion, side play & lifter motion. (Per Paper 400 hour Special Instruction).
				Reinstalled rocker covers w/ new gaskets & torqued the hardware. Checked interiors of cylinders w/ a bore scope.
				Visually checked the induction system. Removed the air filter Assy, removed the filter, cleaned & visually checked the box. Checked condition of the alternate air valve & box. Reinstalled the air filter box & installed a new air filter. Next compliance with AD 84-26-02 due by 2544.6 hours. The above complies w/ Zeco SI 1002
				Connected & rigged the alternate air supply control & checked its operation. Replaced the induction system drain hose. Visually checked the compressor wheel. Checked freedom of rotation of compressor wheel / turbocharger.
				Visually checked the fuel system. Removed the injector nozzles, cleaned (Zeco SI 1414A) and visually inspected them. Replaced the seals on the nozzles, reinstalled & torqued them per Zeco SI 1275C. Checked the injector lines per Zeco SB 342B and AD 08-14-07. Removed the fuel inlet screen from the series, cleaned & inspected it. Reinstalled the screen w/ a new seal. Replaced the fuel pump ^{seal} drain hose.
				Visually checked the exhaust system. Visually checked the "V-band" clamps & replaced the safety wiring per Paper & Zeco directions (SI 12388).
				Visually checked the turbochargers & installed a bolt in the lower portion of the turbo charger to support bracket. Visually checked the waste gate & controller. Replaced the waste gate seal drain hose. Removed the exhaust riser @ cylinders #1 & #3, cleaned & inspected them.
				Reformed the mounting flanges & reinstalled them w/ new gaskets @ the
				SUB-TOTALS this page
				TOTALS—Carry forward to next page
	2044.6	186.9	2044.6	

DATE	TOTAL TIME IN SERVICE	TOTAL TIME SINCE OVERHAUL	TACH OR RECORDING METER TIME	DESCRIPTION OF WORK PERFORMED— SIGNATURE & CERTIFICATE NO. OF PERSON PERFORMING WORK
	2014.6	186.9	2044.6	TOTALS brought forward from previous page
01/06/2012 (continued)				<p>cyllinders & turbo adapter pipe. Visually inspected, reinstalled, torqued & safetied the V-band clamp. (SI 1238B). Removed the right side exhaust support bracket, grit blasted & painted it. Reinstalled the bracket. Disconnected the crossover pipe support cable, removed the heat muff & visually checked the crossover/heater pipe. Reinstalled the muff & support cable.</p> <p>Removed the magnetos, opened & inspected the housings, coils, condensers, gears, distributor block & bearing. Checked points & cam wear (Slid SB2-08) Checked external timing & reassembled the mags w/ new housing seals. Cleaned the mounting surfaces of the magneto adapters & reinstalled them w/ new gaskets. Installed the magnetos w/ new gaskets & turned them to the engine (Zyco SB 183A). Checked retard timing of the left magneto. Installation torque was within limits of Slid SB3-80B. Checked the timing marks on the ring gear per Zyco SI 1437.</p> <p>Removed the magneto pressurization relief valve, tested & reinstalled it. Tested the magneto pressurization flow rates per Zyco SB568 and Slid SB1-88B. Flow rates were 25 CFPH right and 28 CFPH left. Rerouted, connected & secured the magneto pressurization hoses.</p> <p>Checked the operation & orientation of the magneto primary leads. Repositioned, supported & reconnected the P-leads to their respective magnetos.</p> <p>Cleaned & visually checked the ignition harness. Checked the leads for continuity of the shields & internal conductors as well as for shorts between them. Rerouted, & supported the ignition leads & trimmed the leads to lower #6 and upper #3. Rechecked these 2 for continuity & shorts.</p> <p>Fabricated & installed a bracket to support the harness between the mags. Replaced the cap seals, cleaned & lubricated the terminals & reconnected the magneto ends & spark plug ends (Zyco SI 1365).</p> <p>Removed the spark plugs, cleaned, inspected, gapped & tested them. Rotated position & installed the plugs w/ new gaskets. Plug gap and torque</p>
				SUB-TOTALS this page
	2044.6	186.9	2044.6	TOTALS—Carry forward to next page

DATE	TOTAL TIME IN SERVICE	TOTAL TIME SINCE OVERHAUL	TACH OR RECORDING METER TIME	DESCRIPTION OF WORK PERFORMED— SIGNATURE & CERTIFICATE NO. OF PERSON PERFORMING WORK
	2044.6	186.9	2044.6	TOTALS brought forward from previous page
01/06/2012 (continued)				per Licensing SI 10422
				Removed the alternator, disassembled, cleaned & inspected it. Checked field & stator winding, bearings, brushes and slip rings, rectifier & housing. Reassembled the alternator and reinstalled it. Checked and skinned the mounting bracket per Zycs SI 1270A. Tensioned the belt per Zycs SI 1129 B.
				Visually checked the baffles. Removed the top, center aft baffle & removed the support bracket from it. Fabricated a replacement support, etched, abraded, painted & installed it. Removed the baffle @ the top left engine mount & fabricated a new one. Etched, abraded & painted the new baffle. Installed the existing baffle seal on the replacement baffle. Installed both baffles. Reformed the top of the left baffle to clear the top cowl. Replaced the lower baffle tie rod on the right side. Installed hardware in the upper two mounting brackets of the left oil cooler baffle.
				Cleaned & visually checked the exterior of the engine.
				Checked the oil drain-back tube clearance per Zycs SI 1487. Removed the drain back tube from the right side. Fabricated a replacement for the cyl #3 drain back tube. Turned the worm screw clamps for the coupling hoses, installed the tube & coupling hoses & tightened the clamps. Tightened all clamps on left side coupling hoses.
				Visually checked the engine control cables & cable ends and lubricated the cable ends. Reworked the support clamp for the mixture control cable @ the upper engine mount cross tube and secured the control. Repositioned the clamp securing the governor control cable so it clears the air inlet duct to the heat muff. Checked operation and rigging of the controls.
				Cleaned & visually checked the engine wiring. Rerouted & secured the EGT, CHT, TIT & other engine wiring across firewall. Relocated EGT & CHT leads from under R side of engine to above heat duct. Reworked / trained CHT & EGT leads to remove chafed and damaged sections. Replaced the cyl #5 EGT Probe
	2044.6			SUB-TOTALS this page
	2044.6	186.9	2044.6	TOTALS—Carry forward to next page

DATE	TOTAL TIME IN SERVICE	TOTAL TIME SINCE OVERHAUL	TACH OR RECORDING METER TIME	DESCRIPTION OF WORK PERFORMED— SIGNATURE & CERTIFICATE NO. OF PERSON PERFORMING WORK
	2044.6	186.9	2044.6	TOTALS brought forward from previous page
01/06/2012 (continued)				Disconnected, rerouted, reconnected & secured the air temp, tachometer and air pressure wiring.
				Visually checked the engine heater system. Rerouted the power wiring to the air pump heater, turned it to length & reconnected it. Repositioned & clamped most cylinder heater wiring. Trimmed the power connector cord, connected it and secured the connector to the air fill tube.
				Removed the clamps securing the engine breather to the upper engine mount structure.
				Inspections of the induction system, air change, exhaust, magnetos & baffles were done in accordance w/ Zeev SE 1080C.
				Ran the engine & checked for leaks. Performed full run-up & checked operation of engine control, propeller/governor, full power RPM, fuel flow, MP, air temp & pressure, EGT, TIT & CHT. Checked magneto drop off per Zeev SE 1132B. Visually checked engine following the run-up.
				ZML 22423072 A&P. Edmonds Aircraft Service, Newport NH
1/20/12	2051.4	193.7	2051.4	Removed the starter & sent it to Skytec for repair.
				Reinstalled the repaired starter & checked operation. See Skytec repair document of 1/17/12 @ back of this manual.
				ZML 22423092 A&P. Edmonds Aircraft Service, Newport NH
8/25/12	2103.0	245.3	2103.0	Revised the ^{inlet} valve fitting on the fuel pump.
				ZML 22423092 A&P. Edmonds Aircraft Service, Newport, NH. 03773
9/13/12	2130.0	272.3	2130.0	Drained the oil & checked for sediment. Removal oil filter opened & inspected it. Added 11 qts. Amsoil 15W50. Inspected & installed a new oil filter.
				Removed Skytec starter M/N 149-24PM, S/N F4P-361004 and installed Skytec M/N 149-NL/c 5/N F4E-321228 per Skytec installation instructions. Removal accessory
				SUB-TOTALS this page
	2130.0	272.3	2130.0	TOTALS—Carry forward to next page

DATE	TOTAL TIME IN SERVICE	TOTAL TIME SINCE OVERHAUL	TACH OR RECORDING METER TIME	DESCRIPTION OF WORK PERFORMED— SIGNATURE & CERTIFICATE NO. OF PERSON PERFORMING WORK
	2130.0	272.3	2130.0	TOTALS brought forward from previous page
7/9/13 (continued)				mounting leg "D" to clear air conditioning compressor bracket. Trimmied power & ground gables, surged on new terminal & connected them to starter. Checked starter to ring gear compatibility. Checked starter operation. Ran engine & checked for leaks.
<i>ZPH</i>				22423072 ABP. Edmonds Aircraft Service, Newport NH
11/28/12	2178.5	320.8	2178.5	Hour meter. Drained oil & checked for sediment. Drained turbo sump, and both oil coolers. Removed oil filter, opened & inspected. Visually checked a new oil filter & installed it. Added 11 quarts Pennsolt 15W50 and one bottle LW-16702. Ran & leak checked the engine.
<i>ZPH</i>				22423072 ABP. Edmonds Aircraft Service, Newport NH
3/22/2013	2192.0	334.3	2192.0	Performed an Annual Inspection. Drained oil & checked for sediment. Drained oil from oil coolers & turbo sump. Removed oil filter, opened & inspected it (SB490E). Lubricated base of new oil filter per SL153 & installed it. Removed drain valve, cleaned, inspected, replaced seal & reinstalled it. Removed oil suction screen, cleaned, and inspected it. Reinstalled the screen w/ new gasket. Removed the breather air/oil separator, disassembled, cleaned & inspected it. Reassembled & reinstalled the separator. Applied fiberglass sleeving over portions of the Turbocharger oil supply & oil return hoses to reduce chafing. Replaced the waste gate drain hose & applied fiberglass over it. Added 11 qts Pennsolt 15W50 oil. Checked compression per SE1191A. #1- $7\frac{1}{8}$, #2- $7\frac{7}{8}$, #3- $7\frac{1}{8}$, #4- $7\frac{9}{8}$, #5- $7\frac{7}{8}$, #6- $7\frac{5}{8}$. Visually checked the cylinders. Checked the interiors w/ a borescope. Removed the rocker covers & visually checked the valve caps, retainers, springs & rocker arms. Checked valve train motion (SB301B). Checked push rod shroud tube, then seal.
				SUB-TOTALS this page
	2192.0	334.3	2192.0	TOTALS—Carry forward to next page

DATE	TOTAL TIME IN SERVICE	TOTAL TIME SINCE OVERHAUL	TACH OR RECORDING METER TIME	DESCRIPTION OF WORK PERFORMED— SIGNATURE & CERTIFICATE NO. OF PERSON PERFORMING WORK
3/22/13 (Continued)				TOTALS brought forward from previous page
				and retainers. Tapped the screw flanges down on the rocker covers & reinstalled them w/ new gaskets. Torqued the rocker cover hardware.
				Visually checked the induction system. Removed the air filter & support bracket. Repositioned the heat shield on the #5 intake pipe. Visually checked the compressor wheel. Reinstalled the air filter bracket & installed a new air filter. The next filter change per AD 84-21-02 is due @ 2692.0. The filter replacement complies w/ portions of SI 1002.
				Visually checked the fuel system. Checked the injector distribution tube and then supports per AD 11-24-04 (08-14-07) and SB 342F (Paper 52578C). Removed the fuel inlet screen from the servo, cleaned & inspected it. Replaced the seals & reinstalled it. Removed the injector nozzles, cleaned & inspected them and reinstalled them per SI 1275C.
				Visually checked the exhaust system. Removed, cleaned & inspected the "V" band clamp from the junction between the pipe from cylinder #3 & the slip joint pipe to the turbocharger, cleaned & inspected it. Reinstalled the clamp w/ a new nut & torqued it per SI 1238B. Visually checked the turbine wheel & the waste gate. Loosened the clamps @ the waste gate, repositioned it & secured the clamps w/ new nuts & torqued per SI 1238B. Replaced the lock washers on the lower bolt that attaches the turbine housing to the support bracket & secured the hardware. Removed the shroud tube from the heat-exchanger/crossover pipe, and visually checked it. Reinstalled the heat shroud.
				Removed the magnets, opened & inspected them per our 100 hour inspection. Slip SB 2-80C and Slip SB 1-88B (Zooming SB 568). Checked the housings, coils, gear points & condensers. Checked & set point gap/E-gap, reassembled & internally timed the magnets. Removed the impulse coupling from the left magnet, disassembled, cleaned & inspected it. Checked flyweights per Slip SB 1-98A. Reassembled the coupling & reinstalled it on the left mag. Cleaned & visually checked the magnet mounting areas. Checked engine timing marks per
				SUB-TOTALS this page
				TOTALS—Carry forward to next page
	2192.0	334.3	2192.0	

DATE	TOTAL TIME IN SERVICE	TOTAL TIME SINCE OVERHAUL	TACH OR RECORDING METER TIME	DESCRIPTION OF WORK PERFORMED— SIGNATURE & CERTIFICATE NO. OF PERSON PERFORMING WORK
	2192.0	334.3	2192.0	TOTALS brought forward from previous page
3/22/13 (continued)				<p>Lycoming SI 1437. Installed the magnetos w/ new gaskets @ the adapter base and magneto base & timed the magnetos to the engine (intent of Lycoming SB183A)</p> <p>Checked retard timing of left magneto. Magneto mounting torque does not exceed recommendation of Slick SB3-80B. Removed magneto pressurization relief valve and tested it per Lycoming SI 1308E. Reinstalled the relief valve & connected the pressurization hoses to the magnetos.</p> <p>Checked operation & orientation of the magneto switches & primary leads & connected the leads to their respective mags.</p> <p>Cleaned & visually checked the ignition harness. Checked continuity of the shields & internal conductors as well as for shorts between them. Replaced the harness cap seals. Cleaned & lubricated the wire terminals (Lycoming SI 1365) & reconnected them.</p> <p>Removed the spark plugs, cleaned, inspected, gapped & tested them. Rotated position & reinstalled them w/ new gaskets. Torqued the plugs per SI 10427.</p> <p>Removed the starter, cleaned & visually checked it. Lubricated the drive per Lycoming SI 1278 & reinstalled it.</p> <p>Removed the alternator, disassembled, cleaned & inspected it. Greased the slip ring end bearing & reassembled it. Checked security of the mounting bracket per SI 1270A and reinstalled the alternator. Visually checked the drive belt & tensioned it per SI 1129B. Cut & installed a new blast duct.</p> <p>Visually checked the baffles & reformed the one @ the waste gate.</p> <p>Cleaned & visually checked the exterior of the engine. Checked the cylinder oil drain-back tube clearance per SI 1487.</p> <p>Checked the general condition and rigging of the engine controls.</p> <p>Replaced 2 cushioned clamps w/ steel clamps to secure the governor control.</p> <p>Lubricated the control rod ends.</p> <p>Cleaned & visually checked the engine wiring.</p>
				SUB-TOTALS this page
	2192.0	334.3	2192.0	TOTALS—Carry forward to next page

DATE	TOTAL TIME IN SERVICE	TOTAL TIME SINCE OVERHAUL	TACH OR RECORDING METER TIME	DESCRIPTION OF WORK PERFORMED— SIGNATURE & CERTIFICATE NO. OF PERSON PERFORMING WORK
	2192.0	334.3	2192.0	TOTALS brought forward from previous page
3/22/13 (Continued)				Lubricated the cylinders & spun the engine w/ the starter per SF 1241C. The above inspections include the recommendations of Tyson's SF 1080C & part 1 of SF 1425.
				Ran the engine & checked for leaks. Ran it again & checked operation of the engine controls, magneto & prop/governor. Checked engine full throttle RPM, fuel flow, MP, oil pressure & temperature, & CHT. Checked accuracy of the tachometer. Checked idle RPM & mixture.
				ZPM 22423092 ASP. Edmonds Aircraft Service, Newport NH
9/5/13	2260.6	402.9	2260.6	Ran engine then drained oil & checked for sediment. Removed oil filter, opened & inspected it. Added 11 qts Newshell 15W50. Ran engine & leak checked it. Visually checked the fuel injection distribution tubes & clamps per AD 11-26-04. The next inspection due by 2360.6 hours, hour meter
				ZPM 22423092 ASP. Edmonds Aircraft Service, Newport NH
8/16/13				Replaced buffer tie rod under R hand cylinders. Adjusted idle mixture. ZPM 22423092 ASP Edmonds Aircraft Service
12/23/13	2323.9	466.2	2323.9	Drained oil & checked for sediment. Drained oil from both oil cooler & turbo pump. Removed oil filter, opened & inspected it. Installed a new filter. Added 11 quarts Newshell 15W50. Ran engine & checked for leaks. Drained the prop block.
				ZPM 22423092 ASP. Edmonds Aircraft Service, Newport NH
/				
				SUB-TOTALS this page
	2323.9	466.2	2323.9	TOTALS—Carry forward to next page

June 6, 2014 N5369S PA32R-301T 2357.3 hour meter and total time 499.6 SMOH

Removed engine due to engine mount repairs and reinstalled it following those repairs.

Drained the oil and checked for sediment. Drained the turbo sump. Drained the oil coolers, removed and flushed them out. Reinstalled the oil coolers, reconnected and secured the hoses. Removed the oil filter, cut it open and inspected it. Visually checked a new filter and installed it per Lycoming SL183. Removed the breather air/oil separator, disassembled, cleaned and inspected it. Reassembled the air/oil separator and reinstalled it. Removed the oil fill tube, cleaned, inspected the seating area in the crankcase and reinstalled it with a new gasket. Visually checked the oil drain back tubes including clearances per Lycoming SI1487. Added 11 quarts Aeroshell 15W50 oil.

Checked compression (Lycoming SI1191A), readings as follows: #1-77/80, #2-77/80, #3-77/80, #4-76/80, #5-77/80, #6-75/80.

Visually checked the cylinders. Checked the interiors of the cylinders with a borescope. Removed the rocker covers and removed gasketing from them. Checked the rocker arms, valve springs, caps and retainers per Piper 400 hour inspection. Checked valve train motion and rocker arm motion. Reinstalled the rocker covers with new gaskets.

Visually checked the induction system. Checked the alternate air valve. Removed the air filter, filter box, duct and heat shield. Visually inspected the induction air box, inlet panel and air duct that crosses the front of the engine. Disconnected the manifold pressure sense hose and removed the duct to the fuel servo. Checked the compressor wheel, visually and for freedom of rotation. Reinstalled the ducts, alternate air valve assembly and manifold pressure sense hose. Installed a new air filter (next change per AD 84-26-02 due in 500 hours) and reinstalled the air filter housing.

Visually checked the engine fuel system. Removed the injector nozzles, cleaned and visually inspected them. Cleaned and visually checked the fuel distribution lines and checked them per AD 11-26-04, Lycoming SB342G and Piper SL578B. Removed the fuel inlet screen from the servo, cleaned and inspected it. Reinstalled the screen with a new "O" ring. Removed the fuel servo as part of the engine mount repair and reinstalled it with new gaskets following reinstallation of the engine. Installed the injector nozzles per Lycoming SI1275C and reconnected the distribution tubes.

Visually checked the exhaust system. Checked the heater/crossover pipe and inspected the heater muff. Removed the turbocharger, waste gate and riser to cylinder #5 as part of the engine mount repair. Installed turbocharger support bracket after reinstalling the lower attach stud. Cleaned mating surfaces of the slip joint between the turbocharger inlet pipe and the riser pipe to cylinder #3 as well as the mating flange of the riser pipe to cylinder #5. Installed the riser pipe to cylinder #5 with a new gasket. Installed the turbocharger assembly and piping with a new gasket at the junction between it and the riser pipe to cylinder #3. Installed the "V" band clamp at that junction and torqued it. Installed the sway brace between the engine and the turbocharger assembly. Removed the turbo controller and reinstalled it following reinstallation of the engine.

Removed the magnetos, opened and inspected them in accordance with a 500 hour inspection (Slick SB2-80C). Checked the coils, points, gears, distributor blocks, condensers and housings. Baked/relubricated the distributor bearings. Checked items due for inspection of presurized mags per Slick SB1-88b and Lycoming SB568. Reassembled the magnetos, setting internal and point timing/gap and checked operation on a run-up bench. Removed the impulse coupling, disassembled, cleaned and inspected it in accordance with a 500 hour inspection (Slick SB1-86C and SB1-98A). Installed a new impulse coupling on the left magneto. Cleaned the mating surfaces and installed the magnetos and magneto adapter plates with new gaskets. Checked engine timing marks per Lycoming SI1437 and timed the magnetos to the engine (intent of Lycoming SB183A) and torqued the retaining hardware in accordance with Slick SB3-80B. Checked retard timing of the left magneto. Removed the magneto pressurization hoses, fabricated new ones using the existing ends. Pressure tested the new hoses and installed them.

Cleaned and visually checked the ignition wires. Checked for continuity of the shields and internal conductors as well as for shorts between them. Cleaned, lubricated (Lycoming SI1365/Bendix SB597) and reconnected the wire terminals. Repositioned and secured the wiring clear of the left oil cooler bypass valve.

Checked the function and orientation of the magnetos switches and primary leads and connected them to their respective magnetos.

Removed the spark plugs, cleaned, inspected, gapped and tested them in accordance with Lycoming SI1042Z. Rotated position and installed the plugs with new gaskets per the Lycoming Instruction.

Checked security and general condition of the starter and its wiring.

Removed the alternator, disassembled, cleaned and inspected it. Greased the slip ring end bearing and reassembled it. Checked security and shimming of the alternator mounting bracket per Lycoming SI1270A. Reinstalled the alternator. Visually checked the drive belt, installed and tensioned it per Lycoming SI1129B.

Visually checked the baffles. Tightened the tie rod between the front and rear cylinder wrap around baffles on the left side of the engine. Replaced the lower baffle tie rod on the right side. Checked clearance between the tie rods and the oil drain-back tubes per Lycoming SI1487.

Cleaned and visually checked the exterior of the engine.

Cleaned and visually checked inside the crankshaft bore. Cleaned and inspected the exterior of the exposed portion of the crankshaft.

Disconencted the controls, cleaned and inspected the cables and rod ends. Reconnected the controls and adjusted their rigging.


Disconnected the wiring to the engine, cleaned and visually checked it. Reconnected the wiring following the engine reinstallation.

Disconnected, cleaned and visually checked the plumbing between the engine and firewall due to engine removal. Reconnected and secured it following engine reinstallation. Cleaned and inspected the plumbing that remained on the engine. Removed or repositioned metal tags on manufactured hoses which could chafe on the mount structure in the future.

Oiled the cylinder walls and spun the engine over with the starter to raise oil pressure (Lycoming SI1241C) and check magneto operation.


The above checks comply with Lycoming SB480E (oil changes), SB301B and SI1425A, Part 1 (to prevent valve sticking) and SI1080C (routine maintenance list).

Ran the engine and checked it for leaks. Ran the engine again and checked operation of the engine, its controls, magnetos (Lycoming SII132B), propeller/governor, oil pressure and temperature, CHT and EGT. Checked accuracy of the tachometer per HC-SL-61-185R1. Visually checked the engine.

 Louis R. W. Edmonds 22423072 A&P
Edmonds Aircraft Service, 18 Airport Road, Newport, NH 02772

August 12, 2014 PA32R-301T 2424.4 hour meter and total time 566.7 SMOH

Removed the cowl and the access panel from the firewall/baggage compartment. Drained the oil and checked for sediment. Drained oil from the turbo sump and both oil coolers. Removed the oil filter, cut it open and inspected it. Visually checked a new oil filter and installed it. Added 11 quarts Aeroshell 15W50 oil. Reinstalled the firewall/baggage compartment access plate and cowl. Ran the engine and checked for leaks.

 Louis R. W. Edmonds 22423072 A&P
Edmonds Aircraft Service, Newport, NH 02772

7/12/14	2498.3	Hour meter & IT	640.6	SMCH	Removed cooling and access panel on nose baggage compartment. Drained oil & checked for sediment. Removed oil filter, opened & inspected. Visually checked new oil filter & installed it. Added 11 qts Newshell 15W50. Visually checked fuel injector lines & clamps per AD 11-26-04 Rev & lead checked the engine. Learned the idle mixture
ZPH		2242802A	AOP Edmonds Aircraft Service Newport NRI		
					SUB-TOTALS this page
					TOTALS—Carry forward to next page

DATE	TOTAL TIME IN SERVICE	TOTAL TIME SINCE OVERHAUL	TACH OR RECORDING METER TIME	DESCRIPTION OF WORK PERFORMED— SIGNATURE & CERTIFICATE NO. OF PERSON PERFORMING WORK
	2498.3	640.6	2498.3	TOTALS brought forward from previous page
12/22/14	2534.0	676.3	2534.0	Replaced TIT probe and checked system operation <i>Z DM</i> 22423072 ASP. Edmonds Aircraft Service, Newport NH
2/6/15	2577.6	719.9	2577.6	Drained oil & checked for sediment. Drained oil from oil cooler & turbo sump. Removed oil filter, cut open & down checked it. Visually checked new oil filter & installed it. Added 11 quarts Aeroshell 15W50 Checked wiring to Paper TIT & JPI engine indicators. Ran engine, checked for leaks & checked TIT indication <i>Z DM</i> 22423072 ASP. Edmonds Aircraft Service, Newport NH
4/15/15	2632.7	775.0	2632.7	Drained oil & checked for sediment. Drained oil from oil cooler & turbo sump. Removed oil filter, cut it open & inspected it. Visually checked new oil filter & installed it. Added 11 quarts Aeroshell 15W50 oil. Wiped & visually checked the engine. Ran engine & checked for leaks. <i>Z DM</i> 22423072 ASP. Edmonds Aircraft Service, Newport NH

GRANITE AIR CENTER

603.298.6555

Date: 6-19-15

Time: 2673.6 Hobbs

W/O: 5064

Reg: N5369S

TSMOH: 815.9




Engine Entry


Ran engine, compression test was as follows: #1 76/80, #2 77/80, #3 77/80, #4 78/80, #5 75/80, #6 77/80. Drained hot oil. Oil sample taken for analysis. Removed oil filter and cut open for inspection. No contaminants noted. Installed new filter P/N AA48110-2 and serviced with 11 quarts of Aeroshell 15W50 oil. Installed four new spark plugs P/N RHB36S. Removed, cleaned, inspected, tested, gapped, rotated, and reinstalled all other spark plugs. Removed, cleaned, inspected, and reinstalled fuel inlet screen. Removed, cleaned, inspected, and reinstalled all fuel injectors. Removed, cleaned, and reinstalled main oil sump screen. Checked magneto timing, no adjustments needed. Lubricated all engine controls. Installed new screw P/N STD-1925 in #3 valve cover. Researched all applicable AD's, see compliance record included with logbooks. C/W AD2011-26-04, Fuel injector line inspection, no defects noted. Next inspection due by 2773.6 hobbs, or 6/2016. All operational and leak checks satisfactory. All work performed in accordance with applicable sections of manufacturer's maintenance manual. I certify that this engine has been inspected in accordance with an Annual inspection per the scope and detail of 14 CFR 43, Appendix "D", and was determined to be in an airworthy condition.

Jason A. Archambeault
Jason A. Archambeault, for
Granite Air Center, LLC, CRS # SNAR711K

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DATE	TOTAL TIME IN SERVICE	TOTAL TIME SINCE OVERHAUL	TACH OR RECORDING METER TIME	DESCRIPTION OF WORK PERFORMED— SIGNATURE & CERTIFICATE NO. OF PERSON PERFORMING WORK																				
				TOTALS brought forward from previous page																				
8/25/15	2731.1	873.4	2731.1	Removed this engine from PA32R-301T N53698																				
				<i>[Signature]</i> 22423072ASP Edmonds Aircraft Service. Newport NH																				
<table border="1"> <tr> <td>DATE: December 23, 2015</td> <td>ENGINE MODEL: TIO540AH1A</td> <td>ENGINE S/N: L-11422-61A</td> <td>ENGINE T.T. SMOH 2731.1</td> </tr> <tr> <td colspan="4" style="text-align: center;">  Continental Motors, Inc. </td> </tr> <tr> <td colspan="4"> This engine was delivered to Continental Motor Services, Inc. for inspection due to a propeller strike. Engine disassembled and inspected in accordance with LYC MSB 533B. Cylinders were disassembled, cleaned, and repaired as required for serviceable condition. Engine assembled in accordance with LYC overhaul manual 60294-7 Revision Date July, 2011 using new seals, gaskets and "O" rings. New connecting rod bolts, nuts, and bearings and crankshaft bolts and bearings installed. Applicable Service Bulletins and Airworthiness Directives have been complied with. This engine has been tested in accordance with procedures listed in overhaul manual 60294-7 and has been accepted. I certify that this engine has been inspected and repaired as indicated above and was determined to be airworthy with respect to the work performed. Details of this repair are on record at this facility. Work Order ES-6571 </td> </tr> <tr> <td colspan="4"> Complied with: 1011G, 1191, 1343B, 1446, 183A, 201F, 238, 240W, 271A, 301B, 342G, 348A, 388C, 439A, 466, 472, 475C, 480E, 518C, 533B, 558, & AD 2015-19-07. </td> </tr> <tr> <td colspan="2">MECHANIC: <i>Charles E. B. [Signature]</i></td> <td>FAA CERT # 9CER853B</td> <td>AUTHORIZATION: <i>[Signature]</i> FAA CERT # 9CER853B</td> </tr> </table>					DATE: December 23, 2015	ENGINE MODEL: TIO540AH1A	ENGINE S/N: L-11422-61A	ENGINE T.T. SMOH 2731.1	 Continental Motors, Inc.				This engine was delivered to Continental Motor Services, Inc. for inspection due to a propeller strike. Engine disassembled and inspected in accordance with LYC MSB 533B. Cylinders were disassembled, cleaned, and repaired as required for serviceable condition. Engine assembled in accordance with LYC overhaul manual 60294-7 Revision Date July, 2011 using new seals, gaskets and "O" rings. New connecting rod bolts, nuts, and bearings and crankshaft bolts and bearings installed. Applicable Service Bulletins and Airworthiness Directives have been complied with. This engine has been tested in accordance with procedures listed in overhaul manual 60294-7 and has been accepted. I certify that this engine has been inspected and repaired as indicated above and was determined to be airworthy with respect to the work performed. Details of this repair are on record at this facility. Work Order ES-6571				Complied with: 1011G, 1191, 1343B, 1446, 183A, 201F, 238, 240W, 271A, 301B, 342G, 348A, 388C, 439A, 466, 472, 475C, 480E, 518C, 533B, 558, & AD 2015-19-07.				MECHANIC: <i>Charles E. B. [Signature]</i>		FAA CERT # 9CER853B	AUTHORIZATION: <i>[Signature]</i> FAA CERT # 9CER853B
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MECHANIC: <i>Charles E. B. [Signature]</i>		FAA CERT # 9CER853B	AUTHORIZATION: <i>[Signature]</i> FAA CERT # 9CER853B																					
1/21/16	2731.1	873.4	2731.1	O.O. SIARAN. Reinstalled this engine on PA32R-301T N53698 w/ new shock mounts & washers & the existing nuts & bolts. Applied an anti-corrosion compound to the bolts prior to installation.																				
Cleaned & visually checked the baffles & reinstalled them.																								
Cleaned & visually checked the exhaust. Reinstalled the exhaust w/ new gaskets per ST 1204D. Reinstalled the waste gate & turbocharger w/ new gaskets and a new turbo support bracket.																								
Cleaned & visually checked the air filter box, duct & piping to the fuel servo. Removed the servo to install engine & reinstalled it w/ supplied gasket. Installed induction ducts w/ new gasket @ the servo end & existing coupling & clamps @ the cylinder ends.																								
Checked operation & orientation of magneto primary leads & connected them to their respective magnetos. Tied out & secured the ignition harness, lubricated																								
				SUB-TOTALS this page																				
2731.1 873.4 2731.1				TOTALS —Carry forward to next page																				

DATE	TOTAL TIME IN SERVICE	TOTAL TIME SINCE OVERHAUL	TACH OR RECORDING METER TIME	DESCRIPTION OF WORK PERFORMED— SIGNATURE & CERTIFICATE NO. OF PERSON PERFORMING WORK
TOTALS brought forward from previous page				
<p>April 1, 2016 PA32R-301T N5369S 2740.0 hour meter and total time</p> <p>Drained the oil and checked for sediment. Drained the turbo sump and oil coolers. Removed the oil filter, opened and inspected it. Visually checked and installed a new filter. Wiped the lower portion of the engine and visually checked it. Added 11 quarts Phillips 20W50 X/C oil. Ran the engine and checked for leaks.</p> <p>Ran the engine to warm it and adjusted the idle mixture and RPM settings.</p> <p><i>[Signature]</i> Louis R. W. Edmonds 22423072 A&P Edmonds Aircraft Service, Newport, NH 02772</p>				
6/3/16	2786.7	929.0	2786.7	55.6 SIRAN Drained oil & checked for sediment. Drained turbo sump & oil coolers. Removed filter, opened & inspected. Visually checked & installed a new oil filter. Removed suction screen, cleaned & inspected it. Reinstalled screen w/ new gasket. Added 11 quarts Phillips 20W50 X/C oil. Wiped down bottom of engine. Ran engine & checked for leaks. <i>[Signature]</i> 22423072 A&P Edmonds Aircraft Service
6/8/16	2788.6	930.9	2788.6	57.5 SIRAN Replaced the return spring on the waste gate & checked engine/turbo operation. <i>[Signature]</i> 22423072 A&P Edmonds Aircraft Service
<div style="display: flex; justify-content: space-between;"> <div>  <p>GRANITE AIR CENTER 603.298.6555</p> </div> <div> <p>Date: 7-1-16 Reg: N5369S Time: 2806.7 Hobbs TSMOH: 949.0 W/O: 6095 Engine Entry</p> </div> </div> <p>Ran engine, compression test was as follows: #1 72/80, #2 70/80, #3 768/80, #4 72/80, #5 72/80, #6 73/80. Drained hot oil. Oil sample taken for analysis. Removed oil filter and cut open for inspection. No contaminants noted. Installed new filter P/N AA48110-2 and serviced with 11 quarts of Phillips 20W50 X/C oil and Lycoming additive LW16702. Removed, cleaned, inspected, tested, gapped, rotated, and reinstalled all spark plugs. Removed, cleaned, inspected, and reinstalled fuel inlet screen. Removed, cleaned, inspected, and reinstalled all fuel injectors. Removed, cleaned, and reinstalled main oil sump screen. C/W Piper recommended 1000 hour turbo charger internal inspection, no defects noted. Lubricated turbocharger waste gate to obtain free movement. Researched all applicable ADs, see compliance record included with logbooks. C/W AD2015-19-07, Fuel injector line inspection, no defects noted. Next inspection due by 2906.7 hobbs. All operational and leak checks satisfactory. All work performed in accordance with applicable sections of manufacturer's maintenance manual. I certify that this engine has been inspected in accordance with an Annual inspection per the scope and detail of 14 CFR 43, Appendix "D", and was determined to be in an airworthy condition.</p> <p><i>[Signature]</i> Jason A. Archambeault, for Granite Air Center, LLC, CRS # SNAR711K</p>				

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DATE	TOTAL TIME IN SERVICE	TOTAL TIME SINCE OVERHAUL	TACH OR RECORDING METER TIME	DESCRIPTION OF WORK PERFORMED— SIGNATURE & CERTIFICATE NO. OF PERSON PERFORMING WORK
				TOTALS brought forward from previous page

North Coast Air 4645 west 12th street Erie PA

7-26-2016

tach 2814.1 Piper PA-32-301T S/N3257329

N5369S

Removed oil filter and drained oil. Sample taken. Installed new oil filter and 11 qts Philip's 20w-50 oil. Found turbo oil return adapter hardware missing. Installed customer supplied new hardware and gasket. Ground ran engine. No leaks noted at this time. Reinstalled cowling.

A&P 185586248



Date: 8-8-16

Reg: N5369S

Time: 2837.9 Hobbs

W/O: 6128

Engine Entry

Ran engine. Drained hot oil. Oil sample taken for analysis. Removed oil filter and cut open for inspection. No contaminants noted. Installed new filter P/N AA48110-2 and serviced with 9 quarts of Phillips 20W50 X/C oil and Lycoming additive LW16702. Tightened loose fitting on top of oil cooler to eliminate oil seep. All operational and leak checks satisfactory. All work performed in accordance with applicable sections of manufacturer's maintenance manual. This aircraft is airworthy in reference to work performed and is approved for return to service.

Jason A. Archambeault, for
Granite Air Center, LLC, CRS # SNAR711K



Date: 7-21-17

Reg: N5369S

Time: 2967.2 Hobbs

W/O: 7101

TSMOH: 1109.5

Engine Entry

Ran engine, compression test was as follows: #1 76/80, #2 76/80, #3 75/80, #4 74/80, #5 76/80, #6 77/80. Drained hot oil. Oil sample taken for analysis. Removed oil filter and cut open for inspection. No contaminants noted. Installed new filter P/N AA48110-2 and serviced with 9 quarts of Phillips 20W50 X/C oil and Lycoming additive LW16702. Removed, cleaned, inspected, tested, gapped, rotated, and reinstalled all spark plugs. Removed, cleaned, inspected, and reinstalled fuel inlet screen. Removed, cleaned, inspected, and reinstalled all fuel injectors. Removed, cleaned, and reinstalled main oil sump screen. Installed 5 new rocker cover screws P/N STD-1925 in various locations. Removed and reinstalled #6 cylinder CHT probe. Installed new oil sump quick drain P/N CCB-37000. Adjusted timing on both magnetos as required. Researched all applicable ADs, see compliance record included with logbooks. C/W AD2015-19-07, *Fuel injector line inspection*, no defects noted. Next inspection due by 3067.2 hobbs. All operational and leak checks satisfactory. All work performed in accordance with applicable sections of manufacturer's maintenance manual. I certify that this engine has been inspected in accordance with an Annual inspection per the scope and detail of 14 CFR 43, Appendix "D", and was determined to be in an airworthy condition.

Jason A. Archambeault, for
Granite Air Center, LLC, CRS # SNAR711K

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