


1. Approving National Aviation Authority/Country: FAA/UNITED STATES	2. AUTHORIZED RELEASE CERTIFICATE FAA Form 8130-3, AIRWORTHINESS APPROVAL TAG	3. Form Tracking Number: 4/29/2004 8:56:28 AM
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Organization Name and Address: Precision Airmotive LLC 14800 40 th Avenue N.E. Marysville, Washington 98271	FAA/PMA# PQ0111NM	5. Work Order/Contract/Invoice Number: JO#I6528-0000
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6. Item:	7. Description:	8. Part Number:	9. Eligibility: *	10. Quantity:	11. Serial/Batch Number:	12. Status/Work:
1	Carburetor, MA-4	10-5217	LYC O-320,360'	1 EACH	CK61108	NEWLY OVERHAULED

13. Remarks: OVERHAULED AND TESTED IAW PRECISION AIRMOTIVE SPECIFICATIONS. ALL APPLICABLE SERVICE BULLETINS AND A.D. NOTES COMPLIED WITH TO DATE. COMPLETE DETAILS HELD ON FILE IN JO# <u>I6528-0000</u> . PRESERVED FOR SHORT TERM STORAGE. FOR DOMESTIC SHIPMENTS ONLY.

14. Certifies the items identified above were manufactured in conformity to: <input type="checkbox"/> Approved design data and are in a condition for safe operation. <input type="checkbox"/> Non-approved design data specified in Block 13.	19. <input checked="" type="checkbox"/> 14 CFR 43.9 Return to Service <input type="checkbox"/> Other regulation specified in Block 13 Certifies that unless otherwise specified in Block 13, the work identified in Block 12 and described in Block 13 was accomplished in accordance with Title 14, Code of Federal Regulations, part 43 and in respect to that work, the items are approved for return to service.
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15. Authorized Signature:	16. Approval/Authorization No.:	20. Authorized Signature: 	21. Approval/Certificate No.: P32R748N
17. Name (Typed or Printed):	18. Date (m/d/y):	22. Name (Typed or Printed): David Middleton	23. Date (m/d/y): April 29, 2004

User/Installer Responsibilities

It is important to understand that the existence of this document alone does not automatically constitute authority to install the part/component/assembly.

Where the user/installer performs work in accordance with the national regulations of an airworthiness authority different than the airworthiness authority of the country specified in Block 1, it is essential that the user/installer ensures that his/her airworthiness authority accepts parts/components/assemblies from the airworthiness authority of the country specified in Block 1.

Statements in Blocks 14 and 19 do not constitute installation certification. In all cases, aircraft maintenance records must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.

1. Approving National Aviation Authority/Country FAA/UNITED STATES		2. AUTHORIZED RELEASE CERTIFICATE FAA Form 8130-3, AIRWORTHINESS APPROVAL TAG				3. Form Tracking Number: 040704/1204	
4. Organization Name and Address: LAMAR TECHNOLOGIES LLC 14900 40 TH AVE. N.E. MARYSVILLE, WASHINGTON 98271						5. Work Order/Contract/Invoice Number: W/O # 4783	
6. Item:	7. Description:	8. Part Number:	9. FAA/PMA PO2242NM ELIGIBILITY:	10. Quantity:	11. Serial/Batch Number:	12. Status/Work:	
1	12V STARTER	PM1201	LYCOMING-320,360,540 SERIES	1 ea.	80083613	"REBUILT"	
13. Remarks* ABOVE ITEM REBUILT AND TESTED PER LAMAR TECHNOLOGIES SPECIFICATIONS AND PER THE REQUIREMENTS OF 14 CFR 43.3 (J) ALL APPLICABLE SERVICE BULLETINS AND A.D. NOTES COMPLIED WITH TO DATE. COMPLETE DETAILS HELD ON FILE W/O # 4783 PRESERVED FOR SHORT TERM STORAGE.							
14. Certifies the item identified above were manufactured in conformity to: <input type="checkbox"/> Approved design data and are in condition for safe operation. <input type="checkbox"/> Non-approved design data specified in Block 13.			19. <input checked="" type="checkbox"/> 14 CFR 43.9 Return to Service <input type="checkbox"/> Other regulation specified in Block 13 Certifies that unless otherwise specified in block 13, the work identified in Block 12 and described in Block 13 was accomplished in accordance with Title 14, Code of Federal Regulations, part 43 and in respect to that work, the items are approved for return to service.				
15. Authorized Signature:		16. Approval/Authorization No.:		20. Authorized Signature: 		21. Approval/Certificate No: PO2242NM	
17. Name (Typed or Printed):		18. Date:		22. Name (Typed or Printed): ALBERT FRAZIER		23. Date: 04/07/04	
User/Installer Responsibilities It is important to understand that the existence of this document alone does not automatically constitute authority to install the part/component/assembly. Where the user/installer performs work in accordance with the national regulations of an airworthiness authority different than the authority of the country specified in Block 1, it is essential that the user/installer ensures that his/her airworthiness accepts parts/components/assemblies from the airworthiness authority of the country specified in Block 1. Statements in Block 14 and 19 do not constitute installation certification. In all cases, aircraft maintenance records must contain an installation certification issued in accordance with the National regulations by the user/installer before the aircraft may be flown.							

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.

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.

4370

Magneto Serial No.

03120203

Date of Installation

L-1543

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.

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.

4371

Magneto Serial No.

03101460

Date of Installation

L-1543

Unison Industries warrants all products manufactured by it to be at the time of delivery free from defects in material and workmanship. This warranty is only applicable if the product is operated, handled, maintained or repaired in accordance with Unison's then current recommendations. Unison's obligation under this warranty is limited to reimbursing, through a distributor, the replacement cost up to the suggested list price of any product or any part of said product which shall, within the warranty period in Table 1, after installation by the first end user, be returned to Unison for examination and found to Unison's satisfaction to have been defective.

THIS WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES WRITTEN, STATUTORY, ORAL OR IMPLIED (INCLUDING, WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR PURPOSE OR ANY IMPLIED WARRANTY ARISING FROM COURSE OF DEALING, COURSE OF PERFORMANCE, OR USAGE OF TRADE). Unison does not authorize any person to assume for it any other liability in connection with the sale of its products. This warranty shall not apply to any product or part that exhibits normal wear or any product or part which has been subjected to misuse, neglect or accident; nor does it apply to any product repaired or modified by any party other than Unison; nor does it apply to any product subjected to corrosives or other materials applied to the exterior or introduced to the interior of the product or part; nor does it apply to any product which malfunctions as a consequence of the condition of the engine or engine parts or engine accessories; nor does it apply to any products not installed and maintained in accordance with the latest revision level of Unison service literature, so as, in our sole judgment, to affect its stability or reliability. In addition, Unison shall not be liable for consequential or other types of damages resulting from the use of Unison products.

Table 1: Warranty Period

Product	Warranty Period
New Magnetos (S/N 7100001 and later)	12 Months from date of installation or 36 months from date of manufacture, whichever occurs first.
Ignition Harnesses	
SlickSTART™	
Parts	12 Months from date of shipment to the first end user, or 24 months from date of manufacture, whichever occurs first.
Autolite® Aviation Spark Plugs	

Request for warranty consideration must be made on Unison Warranty Form L-1042 (latest revision) within 30 days of the date the ignition component or assembly became inoperative. Products and the completed Form L-1042 (latest revision) must be returned to Unison through a Unison distributor with transportation charges prepaid.

Unison's liability, to any purchaser arising out of, connected with, or resulting from the manufacture, sale, delivery, possession, use or handling of any product, whether in design, contract, tort (including negligence), warranty, strict liability otherwise, shall not in any event exceed the purchase price of the product giving rise to the purchaser's claim. The foregoing shall constitute the sole remedy of purchaser and the sole liability of Unison. In no event shall Unison be liable for loss of use, loss of revenue, downtime, lost profits, or for any special, incidental, exemplary or consequential damages.

**THIS PART
MUST
BE CLEANED
BEFORE ENGINE
ASSEMBLY**

SERVICEABLE

61169
MFG. NAME: Lycoming

PART NAME: Crankcase

MODEL: 0-360

SERIAL #: 2101

THE PART IDENTIFIED ABOVE WAS
REPAIRED AND/OR INSPECTED
ACCORDING TO CURRENT F.A.R.'S AND
IS APPROVED FOR RETURN TO
SERVICE. REPAIR DETAILS ARE ON FILE
AT THIS REPAIR STATION.

CSI #: 7134

DATE: 4-29-04

SIGNED: [Signature]

CRANKCASE SERVICES, INC.
14700 W. SHELLCREEK ROAD
SAND SPRINGS, OK 74063
918-245-6767
1-866-276-6767

FAA Repair Station #H1HR0960

#011 REV 09/03

61169
SERVICEABLE

MFGR. NAME Lycan/ly
COMPONENT Tail Shaft
MODEL 76121
SERIAL NO. 5987

I CERTIFY THAT THE REPAIR IDENTIFIED
ON THIS TAG WAS PERFORMED AND
INSPECTED IN CONFORMANCE WITH
FEDERAL AVIATION REGULATIONS, AND IS
APPROVED FOR RETURN TO SERVICE.

PERTINENT DETAILS OF THE REPAIR ARE
ON FILE AT THIS REPAIR STATION UNDER

WORK ORDER NO. 136266

DATE 1-19-04

SIGNED [Signature]



FAA CERTIFIED REPAIR
STATION NO. DD2R764K
918-836-6872

RECORD OF REPAIR

MAGNETIC PARTICLE INSPECT,
PREGRIND, CHROME PLATE
PER QQ-C-320B, FINISH GRIND
TO AC SPEC. DRAWING NO. 1035

AIRCRAFT SPECIALTIES SERVICES
2860 N. SHERIDAN
TULSA, OKLAHOMA 74115



G&N Aircraft, Inc.

Engine Log

**F.A.A. Certified Repair Station
MW2R020L**

1701 E. Main Street
Griffith, IN 46319
phone: 219.924.7110
toll free: 800.348.6504
fax: 219.924.1059

"Quality not Quantity"

G&N Aircraft, Inc. Engine Log Book

- Manufacturer
- Model
- Serial Number
- Engine Total Time
- Recommended TBO
- Minimum Octane Fuel

Important Notice to Installer

Even though this engine has been test run and set using our dynamometer it must be set in the correct manner and within the limitations as specified in the engine and airframe manufacturers service manuals when installed in the aircraft.

G & N AIRCRAFT, INC. / Limited Piston Engine Warranty

Effective 1/1/2000, G & N Aircraft, Inc., (hereinafter "G & N") makes the following warranty to its customer, subject to the limitations, conditions and exclusions set forth below.

WARRANTY COVERAGE - For a period of six (6) months after date of delivery to customer, or 240 hours of operation, whichever occurs first, G & N Aircraft, Inc. shall repair or replace, at its option, any aircraft engine, accessory, or part which is found to be defective, to G & N Aircraft, Inc.'s satisfaction, within said warranty period.

For engine warranty after six (6) months from the date of delivery to customer and prior to the expiration of the manufacturers recommended time between overhaul ("TBO"), the cost of repair or replacement (including the cost of parts and labor), at G & N Aircraft's option, shall be prorated in the following manner. The customer shall pay a prorated amount based upon the engine's TBO and the engine hours (which shall be deemed the greater of logbook hours, recorded tachometer hours, or a minimum of forty (40) hour per month from date of delivery). For instance, an engine with a TBO of 2000 hours and with 100 hours of usage in a 12 month period would have a prorated warranty coverage of 76% applied to cost of a replacement engine or to the cost of parts and labor for repair of this subject engine, either of which shall be at the option of G & N Aircraft, Inc. Reasonable labor costs associated with the repair of a warranted engine shall be prorated in the same manner on the basis of a flat rate schedule established by G & N Aircraft, Inc.

After the initial six (6) months from date of delivery or 240 hours of operation, G & N Aircraft, Inc. will not assume any responsibility for the repair or replacement of engine accessories, including but not limited to the following: magnetos, starter, alternator, ignition harness, turbocharger, carburetor, fuel injection, etc.

Replacement parts supplied for warranted engines still covered by manufacturer's warranty are supplied on an exchange basis prepaid by customer. G & N Aircraft, Inc. 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.

REQUIRED CONDITIONS AND PROCEDURES NECESSARY FOR OBTAINING WARRANTY WORK - The following conditions and procedures must be met before G & N Aircraft, Inc. is liable under the provisions of this written warranty. The foregoing warranty shall be effective only if the engine or component to be serviced is returned to G & N Aircraft, Inc.'s facility at customer's expense, together with a detailed description in writing of the nature of the defect. The customer or his representative should contact G & N Aircraft, Inc. for verification and authorization of warranty prior to return and/or repair. Written authorization

must be obtained from G & N Aircraft, Inc. before repairs covered by warranty can be performed other than by G & N Aircraft, Inc. In no event shall allowable repair costs exceed local published shop rates. This warranty shall apply if and only if the engine has been properly installed and maintained in accordance with current approved standards of the Federal Aviation Administration ("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 appropriate logbook entries which must accompany any engine returned for warranty work. Only defects which are reported to G & N Aircraft, Inc. within the warranty period are covered by this warranty and G & N Aircraft, Inc. must be given written notice, within ten (10) days after discovery.

LIMITATIONS, EXCLUSIONS, AND DISCLAIMERS - G & N Aircraft, Inc. shall not be liable for freight charges, transportation or delivery expenses, costs, or airframe repairs, all of which are excluded under this warranty. G & N Aircraft, Inc. does not warrant parts, materials or services supplied which are covered by manufacturer's warranty. This written 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 G & N Aircraft, Inc. has had an adverse effect on the engine or its parts. This warranty shall not apply to any engine which has been operated under conditions which exceed the manufacturer's recommendations. Unless prior approval is given in writing by G & N Aircraft, Inc., this warranty shall not apply to any engine which has been repaired or altered, in any manner other than by G & N Aircraft, Inc. or its authorized representative.

THE FOREGOING WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES OR REPRESENTATIONS, EXPRESS OR IMPLIED, ARISING BY OPERATION OF LAW OR OTHERWISE, INCLUDING WITHOUT LIMITATION THE WARRANTY OR MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE WHICH WARRANTIES ARE HEREBY EXCLUDED. G & N Aircraft, Inc.'s 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 G & N AIRCRAFT, INC. 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 G & N AIRCRAFT, INC. The laws of the State of Indiana will control the interpretation and application of this warranty. All disputes regarding this warranty and any related purchase or repair must be adjudicated in Lake County, Indiana.

Warranty No. 61169
Engine Serial No. L-7172-39A
Aircraft Registration No. _____



G & N AIRCRAFT, INC.

1701 East Main Street
Griffith, Indiana 46319
Tel: (219) 924-7110

G&N Aircraft Recommended oil after break in: Any approved straight weight AD oil of a viscosity respective of operating outside air temperature, i.e. Grade 65W through 100W.

Break-In Instructions For Fresh Overhauled Engines

1)Before start: Fill engine oil sump with correct amount of Straight Weight Mineral Oil corresponding to the outside air temperature the engine will be operating in. With th spark plugs removed, motor the engine over to verify positive oil pressure.

2)Initial Start: Re-install the spark plugs and start the engine. Run the engine long enough to check magneto RPM drop,propeller operation, fluid leaks, proper engine operation, and indications. Shut down the engine, inspect for leaks and other installation errors. Allow the engine to cool, then start again and run for approximately four (4) minutes. Again inspect the engine for leaks or other problems. If no problems are found the aircraft is ready to be flown.

3)Initial Flight: For the initial flight, it is recommended to get airborne as soon as possible. Use approximately 5-10 knots extra climb speed above normal. Remain close to the airport for safety and continually monitor the cockpit gauges for normal indications. Fly the aircraft for thirty (30) minutes, return to the airport, and perform another leak and installation inspection of the engine.

4)Second & Subsequent Flights: Cruise at a minimum 75% power for the first ten (10) hours of engine operation. DO NOT perform touch & go landings, with the aircraft until a minimum of ten (10) hours of flight has been conducted. If traveling on long, cross-country flights, at altitude, lean the engine to 100 degrees rich of peak EGT. This will keep the combustion temperatures at a reasonable level.

5)Oil Changes: At ten (10) and thirty-five (35) hours the oil and filter should be changed. Maintain the use of straight weight mineral oil during the first fifty (50) hours of engine operation if applicable to your model engine. After the first fifty (50) hours ashless dispersant oils can be used. G&N recommends STRAIGHT WEIGHT ashless dispersant oil that is appropriate for the outside air temperature that the aircraft will be operated in.

Note: If your engine is equipped with an oil screen instead of an oil filter, change the oil at ten (10), twenty-five (25), and fifty (50) hours. The normal oil change interval after that point should be twenty-five (25) hours thereafter.

This is to certify that the engine described hereafter has been overhauled to the manufacturer's new parts limits.

Engine disassembled, cleaned, inspected and reassembled in accordance with manufacturer's overhaul instructions. All steel parts magnafluxed. Engine test run in F.A.A. approved test cell. All applicable Airworthiness Directives and Manufacturer's Service Bulletins are in compliance as of date of overhaul.

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

JOB NO. 61169 DATE 05/25/2004
MFG. Lycoming MODEL O-320-D3G
SERIAL NO. L-7172-39A TIME IN SVC. 3759.6



G & N Aircraft, Inc.

1701 E. Main St.
Griffith, IN 46319
(219) 924-7110

Authorized Signature C.R.S. #MW 2R020L

The Accessories Listed Below Were Overhauled and Supplied With This Engine

ENGINE	<u>O-320-D3G</u>	<u>SN</u>	<u>L-7172-39A</u>	DATE	<u>05/25/04</u>
	P/N	S/N	P/N	S/N	
MAG.	<u>4370</u>	<u>03120203</u>	PROPELLER	<u>NONE</u>	
MAG.	<u>4371</u>	<u>03101460</u>	PROP. GOV.	<u>NONE</u>	
ALT./GEN.	<u>NONE</u>		TACH. GEN.	<u>NONE</u>	
INJ./CARB.	<u>10-5217</u>	<u>CK61108</u>	TURBO CHARGER	<u>NONE</u>	
FUEL PUMP	<u>LW15471</u>	<u>154724603</u>	WASTE GATE	<u>NONE</u>	
STARTER	<u>PM1201</u>	<u>80083613</u>	CONTROLLER	<u>NONE</u>	
VAC. PUMP	<u>NONE</u>		CONTROLLER	<u>NONE</u>	
DIS. VALVE	<u>NONE</u>		REL. VALVE	<u>NONE</u>	



G & N Aircraft, Inc.

1701 E. Main St.
Griffith, IN 46319
(219) 924-7110

W.O. # 61169

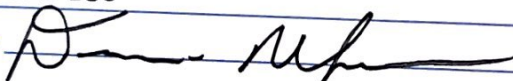
Authorized Signature C.R.S. #MW 2R020L

AIRWORTHINESS DIRECTIVE

At date of engine overhaul 05/25/2004

Engine model 0-320-D3G

Authorized Signature



AD & REV #	REV DATE	APPLIC. SB #	ONE TIME	RECURRING
87-10-06 R1	09/01/89	477A	X	
91-14-22		475		
92-12-05		501		X
96-09-10		524	X	
97-15-11		527C	X	
98-02-08		505B 530	X	
98-17-11			X	
END			X	

COMPLIANCE RECORD

S/N L-7172-39A W/O 61169

C/W complied with, P/C/W previously complied with, N/A not applicable.

CRS MW2R020L

NEXT COMPLIANCE HRS. & DATE

METHOD OF COMPLIANCE

next overhaul	N/A by P/N
sudden stoppage insp.	C/W by insp.
prop strike or gear train repair	N/A by P/N
	P/C/W
	N/A by P/N
	C/W "P.I.D."
	C/W by insp.
END	

AIRCRAFT: N1660H HOBBS/TACH: 3768.82 AFTT: 3768.82

ANNUAL INSPECTION. INSPECTED IN ACCORDANCE WITH FAR'S AND AIRCRAFT MANUFACTURERS MAINTENANCE MANUAL. ALL COMPONENTS AND CONTROLS INSPECTED. RIGGING CHECKED AND LUBED AS NEEDED. CHECKED ALL WHEEL BEARINGS AND TIRES, CHECKED BATTERY AND FLUIDS SERVICED AS NEEDED. C/W AD 95-26-13, ALL NEW HOSES INSTALLED. REPLACED MAG SWITCH WITH NEW SWITCH. REPLACED BOTH ROD ENDS ON LEFT AILERON. RERIGGED RUDDER SYSTEM REPLACED STEERING BUNGEE RIGHT SIDE. CLEANED ENGINE, AIRCRAFT & BATTERY GROUND POINTS. INSTALLED ALTERNATOR NOISE FILTER. INSTALLED WHEEL PANTS. REMOVED ENGINE MOUNT. SENT OUT TO BE REPAIRED. INSTALLED OH ENGINE MOUNT AND INSTALLED NEW ENGINE MOUNT BOLT. REMOVED CABIN HEAT BOX, REPAIRED AND REINSTALLED. REMOVED LOWER ANGLE AND INSIDE LOWER CHANNEL. REPLACED WITH NEW FACTORY LOWER ANGLE AND CHANNEL. CLEANED INSIDE FLOOR BOARDS. REPLACED CENTRAL VACUUM FILTER. REPLACED VACUUM REGULATOR FILTER. INSTALLED NEW MIXTURE CABLE AND RIGGED. REPLACED NOSE GEAR STRUT INNER TUBE AND RESEALED STRUT. REPLACED NOSE GEAR SCISSOR LINK BLOCK WITH NEW. INSTALLED WINGS, RIGGED FLAPS & AILERON. INSTALLED NEW BOLTS. REMOVED PITCH & ROLL SERVOS AND SECURED WIRES. INSTALLED STABILIZER AND RIGGED. REMOVED PILOTS SIDE WINDOW AND AFT WINDOW RESEALED. REPLACED SCAT TUBE ON DEFROST SYSTEM. REPLACED WING/FUSELAGE SEALS WITH NEW. REPAIRED CABIN HEAT AIRBOX PAINTED AND INSTALLED ON AIRCRAFT. REPLACED AIR FILTER ELEMENT. REPLACED ELEVATOR TRIM INDICATOR. REPLACED DOME LIGHT SWITCH. REPLACED PILOTS & COPILOTS UPPER AIR VENTS. REPLACED STALL HORN MOUNT. INSTALLED NEW PLASTIC INSTRUMENT COVER AND ALL PLACARDS. REPLACED COPILOTS HEATER VENT KNOB. REMOVED RIGHT WING MIDDLE LEADING EDGE SKIN. INSTALLED FACTORY NEW SKIN, FITTED AND RIVETED IN PLACE. REPLACED RIGHT WING TIP WITH NEW ASSY RIVETED IN FLANGE AND PAINTED. REMOVED LEFT WING MIDDLE SKIN BOTTOM. REPLACED WITH FACTORY NEW SKIN. REMOVED LEFT TOP AFT SKIN. INSTALLED NEW SKIN. REMOVED LEFT OUTBOARD LEADING EDGE SKIN. REPLACED WITH FACTORY SKIN. INSTALLED G&N OVERHAULED ENGINE 0320, S/N: L-7172-39A. ALL NEW HOSES, VACUUM PUMP AND ALTERNATOR REPLACED. REPAIRED ENGINE BAFFLE AS NEEDED. INSTALLED OVERHAULED SENSENICH PROP. MODEL 74DM-0-60, S/N: 29098. REMOVED OIL COOLER LEAKING, INSTALLED OH OIL COOLER. REPLACED EGT PROBE WITH SERVICEABLE UNIT.

AIRFRAME, POWERPLANT OR APPLIANCE IDENTIFIED ABOVE WAS REPAIRED AND INSPECTED IN ACCORDANCE WITH CURRENT REGULATIONS OF THE F.A.A. AND IS APPROVED FOR RETURN TO SERVICE. PERTINENT DETAILS OF THE REPAIRS ARE ON FILE AT THIS REPAIR STATION UNDER WORK ORDER NO 30371 DATED: 10/01/2004

SIGNATURE: 

EAOR432D

Telephone
(FVX) 434-392-9016
(MTV) 276-957-6110HEART OF VIRGINIA AVIATION
Blue Ridge Regional Airport
Farmville Regional Airport
130 Wedgewood Drive
Farmville, Virginia 23901FAX
(FVX) 434-392-9046
MTV 276-957-2292**N1660H****PA28-161****DEC. 06, 2004**

Aircraft Tach Time: 3780.0

I certify this engine has been serviced and inspected in accordance with an 100 HOUR INSPECTION per Lycoming O-320 Maint. Manual and was determined to be in airworthy condition.

1. Drained oil and changed filter, no contamination found.
2. Serviced with 6qts of W100 oil Mineral oil
3. Engine cylinder compressions: 1/74, 2/73, 3/72, 4/72.
4. Removed cleaned and gapped plugs.

All operation and leak checks satisfactory and engine is approved for return for service.

HEART OF VA AVIATION, INC.
TOMMY L. GRIMES
A & P # 466063807SIGNED: 

G&N Aircraft Recommended oil after break in: Any approved straight weight AD oil of a viscosity respective of operating outside air temperature, i.e. Grade 65W through 100W.

Date	TACH	TTSN	Performed Work: Must include signature, certificate number, and repair station number if applicable
	Hobbs	SMOH	
1-26-05	3831.7		Drain oil Change & Insp Oil Filter P/N ES 48110-1 Service with 8QT Aeroshell 80W. Run up for leak check checks good. <i>Eddie L. Smart</i> 422846372

Heart of Virginia Aviation

11152 Airpark Road Ashland, Virginia 23005

REG N1660H
S/N 28-7716037
HOBBS
TACH 3878.1
TTENG #1
TTENG #2
TTPROP #1
TTPROP #2

Date: 3-3-2005
MFG Piper
MODEL PA-28-161
TTAF: 3878.1
TSMOH #1 109.3
TSMOH #2
TSMOH PROP #1 109.3
TSMOH PROP #2

AIRFRAME __

ENGINE X

PROPELLER X

Drain oil removed and insp filter. No metal noted. Installed new filter P/N ES 48110. Service with 8 qts of Aeroshell 80 W. Removed, clean, insp, rotated spark plugs. Insp and lubed all engine controls. Performed compression check. #1 74/80 #2 75/80 #3 76/80 #4 78/80. Dress out leading edge's of prop. I certify this engine and prop have been insp IAW a 100 hour insp and was found to be in airworthy condition. And is approved for return to service this date.

Eddie L. Smart
Eddie L. Smart

A&P 422 846372
A&P 422846372 IA

DATE	Tach Time	DESCRIPTION OF WORK PERFORMED
03/15/05	3888.0	Removed drain valve from right main tank, cleaned, resealed and reinstalled. Leak and OPS checks good. I certify that this Aircraft has been Repaired in accordance with all current regulations of the FAA and is in an airworthy condition.

G&N Aircraft Recommended oil after break in of a viscosity respective of operating outside air temperature

Signed:

Thomas E. Kurtz III
Thomas E. Kurtz III A/P# 141525863

Date

TACH

TTSN

Hobbs

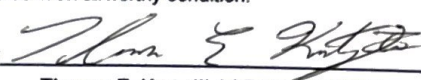
SMOH

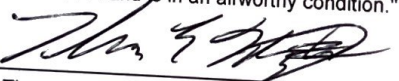
05/04/05

3975.1

3975.1

Performed Work: Must include signature, certificate number, and repair station number if applicable

DATE	Total Time	Time SMOH	Tach Time	DESCRIPTION OF WORK PERFORMED
05/10/05	3975.1	206.3	3975.1	Inspected engine IAW Piper service manual and check lists. Cleaned, checked and lubed all controls. Changed oil with 7Qts Aeroshell 100 and new filter. Comp. Check: 1;73/80,2;74/80, 3;77/80,4;76/80. Cleaned, gapped and checked all plugs. Repaired baffling on left rear side. Burnished and painted rear face of prop. All ADs checked to biweekly update 2005-09, see AD lists in logs. Run up and leak checks good.
<p>"I certify that this Engine has been inspected in accordance with a 100Hr inspection and was found to be in an airworthy condition."</p> <p>Signed:  Thomas E. Kurtz III A&P#141525863IA Heart of Virginia Aviation Ashland VA</p>				

DATE	Tach Time	WORK PERFORMED
06/06/05	4025.5	Performed 50Hr inspection IAW Lycoming service manual chapter 4. Cleaned, gapped and checked all plugs. Changed oil with 7Qts 100 Aeroshell and new filter. Run up, leak and OPS checks good.
<p>"I certify that all work was done in accordance with the current rules of the FAA and is in an airworthy condition."</p> <p>Signed:  Thomas E. Kurtz III A&P#141525863IA Heart of Virginia Aviation Ashland VA</p>		

G&N Aircraft Recommended oil after break in: Any approved straight weight AD oil of a viscosity respective of operating outside air temperature, i.e. Grade 65W through 100W.

Date

Telephone
(FVX) 434-392-9016
(MTV) 276-957-6110

HEART OF VIRGINIA AVIATION
Blue Ridge Regional Airport
Farmville Regional Airport
130 Wedgewood Drive
Farmville, Virginia 23901

FAX
(FVX) 434-392-9046
MTV 276-957-2292

plicable

N166OH

PA28-161

June 29, 2005

Aircraft Tach Time 4078.1 TSOH 309.3

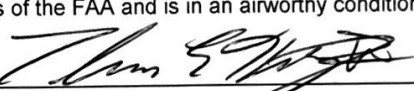
I certify this engine has been serviced and inspected in accordance with an 100 HOUR INSPECTION per Lycoming O-320 Maint. Manual and was determined to be in airworthy condition.

1. Drained oil and removed filter, no contamination found.
2. Serviced with 7qts of Aeroshell W100 oil.
3. Engine cylinder compressions: 1/80, 2/80, 3/80, 4/80.
4. Removed cleaned and gapped plugs.

All operation and leak checks satisfactory and engine is approved for return for service.

HEART OF VA AVIATION, INC.
TOMMY L. GRIMES
A & P # 466063807

SIGNED: 

DATE	Tach Time	WORK PERFORMED
08/22/05	4128.2	Performed 50Hr inspection IAW Lycoming service manual chapter 4. Cleaned, gapped and checked all plugs. Changed oil with 7Qts 100 Aeroshell and new filter. Run up, leak and OPS checks good.
<p>"I certify that all work was done in accordance with the current rules of the FAA and is in an airworthy condition."</p> <p>Signed: </p> <p>Thomas E. Kurtz III A&P #141525863IA Heart of Virginia Aviation Ashland VA</p>		

Telephone
(FVX) 434-392-9016
(MTV) 276-957-6110

HEART OF VIRGINIA AVIATION
Blue Ridge Regional Airport
Farmville Regional Airport
130 Wedgewood Drive
Farmville, Virginia 23901

FAX
(FVX) 434-392-9046
MTV 276-957-2292

N166OH

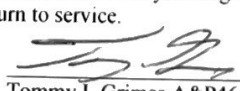
Piper PA-28-161 October 19, 2005

Aircraft Tach Time: 4178.00
TSMOH: 409.2

I certify that this engine and prop have been serviced and inspected in accordance with a 100 HOUR INSPECTION and was determined to be in an airworthy condition.

- 1) Compressions 76/80 77/80 77/80 76/80
- 2) Cleaned, gapped and tested spark plugs reinstalled with new M-674 gaskets.
- 3) Drained oil and removed filter, no contamination found, installed 7 qts Aeroshell W100 oil and new CH48110 filter.
- 4) All Ad's Complied with at this time.

All work done in accordance with Lycoming O-320 Maint Manual and Aircraft is approved for return to service.


Tommy L. Grimes A&P466093807IA

DOW.

Date

TACH

TTSN

Hobbs

SMOH

Performed Work: Must include signature,
certificate number, and repair station number if applicable

Telephone
(FVX) 434-392-9016
(MTV) 276-957-6110

HEART OF VIRGINIA AVIATION
Blue Ridge Regional Airport
Farmville Regional Airport
130 Wedgewood Drive
Farmville, Virginia 23901

FAX
(FVX) 434-392-9046
MTV 276-957-2292

N1660H

Piper PA-28-161

DEC. 14, 2005

Aircraft Tach Time: 4268.9

TSMOH: 500.1

I certify this Engine has been serviced and inspected in accordance
with a 100 HOUR INSPECTION per Lycoming O-320 Maint. Manual and
was determined to be in airworthy condition.

1. Drained oil and removed filter, no contamination found.

2. Serviced with 7 qts of Aeroshell W80 oil.

3. Engine cylinder compressions: 1/78, 2/79, 3/78, 4/79.

Operation and leak checks satisfactory and engine is approved for return to service

Heart of Virginia Aviation

Daniel T. Mcsherry

Pending, A&P

Signed



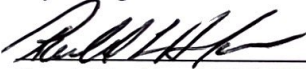
N1660H

Piper PA-28-161

November 25, 2005

Aircraft Tach Time: 4237.2

Changed oil and filter, no contamination found. Installed ES48110 filter
and added 7 quarts of W80 oil. Operational and leak test was satisfactory
and aircraft is approved for return to service. All work was done in
accordance with Lycoming O320 maintenance manual.


Ronnie Hawkins A&P2705318

Heart of Virginia Aviation
Hanover County Airport
11152 Airpark Road
Ashland, VA 23005

KOFP - KMTV -
KFVX

N1660H

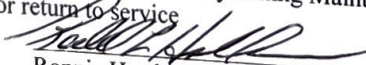
PIPER PA28-161

January 3, 2006

Tach Time: 4294.9

TSMOH: 526.0

Drained old oil, no contamination found. Serviced with 7 quarts of Aeroshell 80w oil.
Operational and leak test was good. Magneto check good, light check good.
All work done in accordance with Lycoming Maintenance Manual and the Aircraft
is approved for return to service


Ronnie Hawkins A&P2705318

G&N Aircraft Recommended oil after break in: Any approved straight weight AD oil
of a viscosity respective of operating outside air temperature, i.e. Grade 65W through 100W.

G&N Aircraft Recommended oil after break in: Any approved straight weight AD oil of a viscosity respective of operating outside air temperature, i.e. Grade 65W through 100W.

N1660H

June 23, 2006

Aircraft Tach Time: 4469.4
 Engine Total Time: 4469.4
 Engine Time SMOH: 700.6

Work Order 06-0806

Performed a 100-hour inspection in accordance with FAR 43 Appendix D Compression test as follows #1 74/80 #2 71/80 #3 73/80 #4 76/80. Drained oil, removed and inspected filter, no defects noted. Installed CH48110-1 filter and added 8 quarts of Aeroshell 100w. Checked magneto timing. Cleaned, gapped and rotated sparkplugs. Washed engine. Run up and leak check OK. Replace Pushrod tube on #1 cylinder. All work done in accordance with Lycoming 0360 Maintenance Manual. I certify that this engine has been inspected in accordance with a 100-hour inspection and is found to be in an airworthy condition and is approved for return to service.

James E. Parkman
 James E. Parkman AP230135852


 Heart of Virginia Aviation
 11152 Airpark Road
 Ashland, VA 23005

Heart of Virginia Aviation	
N1660H	PA28-161
S/N: 28-7716037	28-Jul-06
Total Time 4519.5	Work Order#06-0834
	Tach Time: 4519.5
<p>Drained oil, removed filter for inspection - no contamination found. Installed new CH48110-1 oil filter. Serviced aircraft with 8 quarts of Aeroshell 100 regular oil. Completed 50 hour inspection checklist. Run up, Ops and leak check good. All work done in accordance with Lycoming O-320 maintenance manual.</p>	
<p><i>James E. Parkman</i> James E. Parkman A&P230135852</p>	
<p>Hanover County Airport 11152 Airpark Road Ashland, VA 23005 (804)798-6500</p>	
<p>KOFP - 11152 Airpark Road - Ashland - VA - 23005 (804)798-6500</p>	

Heart of Virginia Aviation	
N1660H	PA28-161
S/N: 28-7716037	28-Aug-06
Engine Time 4579.3	Work Order#06-0855
SMOH 810.5	Tach Time: 4579.3
<p>Complied with a 100 hour inspection in accordance with FAR 43 app. D and the PA28-161 maintenance manual.</p> <ol style="list-style-type: none"> 1 Compressions 1 78/80, 2 78/80, 3 78/80, 4 76/80; 2 Cleaned, tested and gapped spark plugs 3 Checked mag timing and ignition harness. 4 Drained oil, removed and inspected filter. Replaced filter with new and serviced engine with 8 quarts of Aeroshell W100 oil. 5 Inspected and serviced prop in accordance with a 100 hour inspection. 6 All AD's are complied with at this time. 	
<p>All work done in accordance with Lycoming O-320 maintenance manual. I certify that this engine and prop have been serviced and inspected in accordance with a 100 HOUR INSPECTION and was determined to be in an airworthy condition.</p>	
<p><i>James E. Parkman</i> James E. Parkman A&P230135852</p>	
<p>Hanover County Airport 11152 Airpark Road Ashland, VA 23005 (804)798-6500</p>	
<p>KOFP - 11152 Airpark Road - Ashland - VA - 23005 (804)798-6500</p>	

ed Work: Must include signature,
 er, and repair station number if applicable

Heart of Virginia Aviation	
N1660H	11/27/2006
	Work Order # 06-0963
<p>Removed exhaust system for repair and overhaul by Dawley. Installed exhaust system with new gaskets. Run up OK.</p>	
<p><i>Andrew M. Jones</i> Andrew M. Jones P2776135</p>	
<p>KOFP - 11152 Airpark Road - Ashland - VA - 23005 (804)798-6500</p>	

Heart of Virginia Aviation	
N1660H	11-30-06
Total time 4466.9	Work order: 06-973
TSMOH 898.1	
<p>Complied with a 100 hour inspection in accordance with FAR 43 Appendix D. Compressions as follow: #1 73/80 #2 72/80 #3 67/80 #4 73/80. Drained oil. Removed and inspected filter. No defects noted. Installed a new CH48110-1 filter. Serviced engine with 8 qts. of Aeroshell 80W. Cleaned, gapped, tested, and rotated sparkplugs. Checked magneto timing and ignition harness. Installed a new induction air filter. Adjusted idle speed and idle mixture. I certify that this engine has been inspected in accordance with a 100 hour inspection and was determined to be</p>	
<p><i>James E. Parkman</i> James E. Parkman A&P230135852</p>	
<p>KOFP - 11152 Airpark Road - Ashland - VA - 23005 (804)798-6500</p>	

ak in: Any approved straight weight AD oil
 air temperature, i.e. Grade 65W through 100W.


D.

N1660H

Tach Time 4721.50

2/9/2007
Work Order 07-1067

Drained oil. Removed filter for inspection. No contamination found. Installed new CH48110-1 oil filter. Serviced aircraft with 8 quarts of Aeroshell 80 Reg. oil. Troubleshoot and inspected ignition system. Cleaned, gapped and rotated spark plugs. Replaced top spark plug on #1 cylinder. Ops and leak check ok. All work done in accordance with the Piper PA-28-161 maintenance manual.



James E. Parkman AP 230135852

<http://www.flyhova.com>

KOPF - 11152 Airpark Road - Ashland - VA - 23005 (804)798

Work: Must include signature,
and repair station number if applicable

Heart of Virginia Aviation

N1660H

Engine TT 4767.31

TSMOH 998 51

3/30/2007

Work order 07-1122

Complied with a 100 hour inspection in accordance with FAR 43 Appendix D. Compressions as follow: #1 76/80 #2 70/80 #3 79/80 #4 70/80. Drained oil. Removed and inspected filter. No defects noted. Installed a new CH48110-1 filter. Serviced engine with 8 qts. of Aeroshel 100W oil. Cleaned, gapped, tested, and rotated sparkplugs. Replaced #1 and #2 cylinder induction gaskets. Replaced #2 cylinder primer line. Checked Magneto timing and ignition harness. Installed a new induction air filter. I certify that this engine has been inspected in accordance with a 100 hour inspection and has been determined to be in an airworthy condition.



Carl C. Clarke AP3163115

<http://www.flyhova.com/hanover>

P - 11152 Airpark Road - Ashland - VA - 23005 (804)798-6500

Heart of Virginia Aviation

N1660H

Tach time 4866.9

TSMOH 994.2

15-Jun-07

Engine TT 4763.0

Drained oil and removed filter, no contamination found. Serviced with 8 quarts of Aeroshell W100. Engine cylinder compressions: 1/78, 2/74, 3/76 4/74. Removed cleaned and gapped plugs. Engine is approved for return to service. Replaced vacuum pump base gasket. I certify this engine has been serviced and inspected in accordance with a 100 hour inspection. It was determined to be in airworthy condition.



Tommy L. Grimes AP4660938071A

<http://www.flyhova.com/hanover>

KOPF - 11152 Airpark Road - Ashland - VA - 23005 (804)798-6500

Heart of Virginia Aviation

N1660H

Tach time 4866.9

15-Jun-07

Painted face dressed blades. Checked track. I certify that this propellor has been inspected in accordance with a 100 hour inspection and was determined to be in an airworthy condition.



Tommy L. Grimes AP4660938071A

<http://www.flyhova.com/hanover>

KOPF - 11152 Airpark Road - Ashland - VA - 23005 (804)798-6500

G&N Aircraft Recommended oil after
of a viscosity respective of operating on

Heart of Virginia Aviation
Tach Time 4966.10
TSMOH 1197.3
9/21/2007
Work order 07-1356

Complied with a 100 hour inspection in accordance with FAR 43 Appendix D.
Compressions as follow #1 75/80 #2 76/80 #3 76/80 #4 75/80 Drained oil
Removed and inspected filter. No defects noted. Installed a new AA48110 oil filter.
Serviced engine with 8 qts of Aeroshell 15W50 oil. Cleaned, gapped, tested, and
Installed sparkplugs. Replaced #1 and #2 bottom sparkplugs. Checked magneto
Timing and ignition harness. Installed new #1 rocker box gasket. Washed engine.
Ground run and leak check Ok. I certify that this engine has been inspected in
accordance with a 100 hour inspection and has been determined to be in an
airworthy condition

[Signature]
Kevin Spurrell AP3162951



http://www.flyhova.com/hanover
KOFP - 11152 Airpark Road - Ashland - VA - 23005 (804)798-6500

Heart of Virginia Aviation
Tach Time 5030.33
Work Order 07-1447
N1660H

Drained oil. Removed oil filter for inspection. No defects noted. Installed new
AA48110 oil filter. Serviced engine with 8 qts Aeroshell 15W50 Oil. Washed
engine. Leak check and ops check ok.

[Signature]
Carl C Clarke AP3163115

http://www.flyhova.co

KOFP - 11152 Airpark Road - Ashland - VA - 23005 (804)798-6

Work: Must include signature,
number, and repair station number if applicable

Heart of Virginia Aviation
N1660H
Prop Tsmoh 1197.28 Tach Time 4966.10
9/21/2007
Work order 07-1356

Painted face and dressed blades. Checked track. I certify that this propellor has
been inspected in accordance with a 100 hour inspection and was determined to
be in an airworthy condition.

[Signature]
Kevin Spurrell AP3162951



http://www.flyhova.com/hanover
KOFP - 11152 Airpark Road - Ashland - VA - 23005 (804)798-6500

Heart of Virginia Aviation
N1660H
Tach Time 5043.69
3/1/2008
Work order 07-1488

Installed new starter, p/n 149-12LS, s/n F2L-410738. Installed overhauled
carburetor, p/n 10-5217, s/n DC42850. Drained oil. Removed oil filter for
inspection. No defects noted. Installed new AA48110 oil filter. Serviced engine
with 8 qts Aeroshell 15W50 oil. Washed engine. Installed new # 3 top and bottom
and # 4 bottom sparkplugs, p/n REM38E. Reinstalled engine after fire inspection.
Engine installed with new vibration dampners, p/n J9613-40 and J9613-53.
Ground run and leak check ok.

[Signature]
Kevin M. Grey AP2783199



http://www.flyhova.com/hanover
KOFP - 11152 Airpark Road - Ashland - VA - 23005 (804)798-6500

Heart of Virginia Aviation
N1660H
Tach Time
Cleaned, gapped, rotated and re
p/n 688-178. Ops check ok all p

[Signature]
Carl C. Clarke AP3163115

KOFP - 11152 Airpark

Heart of Virginia Aviation

130 Wedgewood Drive
Farmville, VA 23901
N1660H PA28-1
Aircraft Tach : 5064.41
Aircraft total time: 5064.41
I certify this propeller has been
and was determined to be in a
Daniel Mcsherry
A&P3140300

G&N Aircraft Recommended oil after break in: Any approved straight weight AD oil
of a viscosity respective of operating outside air temperature, i.e. Grade 65W through 100W.

G&N Aircraft Recommended oil after break in: Any approved straight weight AD oil
of a viscosity respective of operating outside air temperature, i.e. Grade 65W through 100W.

D:

N1660H

Tach Time 5061.34

3/28/2008
Work Order 08-1642

Cleaned, gapped, rotated and reinstalled spark plugs. Installed new mag switch, p/n 688-178. Ops check ok all positions.


Carl C. Clarke AP3163115

<http://www.flyhova.com>

KOFP - 11152 Airpark Road - Ashland - VA - 23005 (804)798-6500

Work: Must include signature,
and repair station number if applicable

Heart of Virginia Aviation

Phone (434) 392-9009

130 Wedgewood Drive
Farmville, VA 23901

N1660H PA28-161

April 16, 2008

Aircraft Tach : 5064.41 Engine Total Time: 5064.41

TSMOH: 1295.61

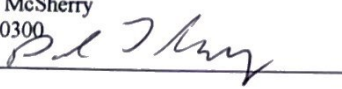
I certify this engine has been serviced and inspected in accordance with a 100 hour inspection. It was determined to be in airworthy condition.

Drained oil and removed filter and screen, no contamination found. Serviced with 8 quarts of Aeroshell 15W50. Engine cylinder compressions: 1/77, 2/78, 3/78, 4/75. Removed cleaned and gapped plugs, Replaced induction air filter with new BA-16. Checked magneto timing and ignition harness.

All operation and leak checks satisfactory and engine is approved for return to service.

Daniel T. McSherry

A&P 3110300



Heart of Virginia Aviation

Phone (434) 392-9009

130 Wedgewood Drive
Farmville, VA 23901

N1660H PA28-161

April 16, 2008

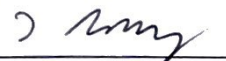
Aircraft Tach : 5064.41

Aircraft total time: 5064.41 Prop TSMO: 1295.59

I certify this propeller has been inspected in accordance with a 100 hour inspection and was determined to be in airworthy condition. Dressed blades and checked track.

Daniel Mcsherry

A&P3110300



Heart of Virginia Aviation

6/6/2008

N1660H

Tach Time 5109.37

Work Order 08-1753

Installed new starter, p/n 149-12LS, s/n F2L-110809. Installed new starter solenoid, p/n 487-169. Installed in accordance with PA28-161 maintenance manual. Ops check ok.


Carl C. Clarke AP3163115

<http://www.flyhova.com/hanover>

KOFP - 11152 Airpark Road - Ashland - VA - 23005 (804)798-6500

G&N Aircraft Recommended oil after break in: Any approved straight weight AD oil of a viscosity respective of operating outside air temperature, i.e. Grade 65W through 100W.

Heart of Virginia Aviation

N1650H Tach Time 5115.11 Work

Installed new starter solenoid, p/n 602-847. Removed starter p/n 1 F2L-110809 and installed new starter, p/n 149-12LS, s/n F2L-211 checks ok.

Carl Clarke

Carl C. Clarke AP3163115

<http://www.flynova.com/hanover>

KOFP - 11152 Airpark Road - Ashland - VA - 23005 (804)798-6500

1. Approving National Aviation Authority/Country: 2.

FAA/United States

3. AUTHORIZED RELEASE
FAA Form 8130-3 AIRWORTHINESS

4. Organization Name and Address:

Sky-Tec Partners, Ltd.
350 Howard Clemmons Rd.
Granbury, Texas 76048 (PQ0852S)

6. Item	7. Description	8. Part Number	9. Eligibility*
1	STARTER	149-12LS	N/A

13. Remarks:

Heart of Virginia Aviation

N1660H Tach Time 5154.37 Work Order 08-1812

Cleaned and tested all spark plugs. Installed new # 2 bottom spark plug, p/n REM38E. Ran up aircraft and performed mag check. Ops check good.

Kevin M. Grey

Kevin M. Grey AP2793199

<http://www.flynova.com/hanover>

KOFP - 11152 Airpark Road - Ashland - VA - 23005 (804)798-6500

Heart of Virginia Aviation

N1660H 8/11/2008
EngineTT 5162.14 TSMOH 1393.34 Work order 08-1832

Complied with a 100 hour inspection in accordance with FAR 43 Appendix D. Compressions as follow: #1 76/80 #2 78/80 #3 78/80 #4 78/80. Drained oil. Removed and inspected filter. No defects noted. Installed a new AA48110 oil filter. Serviced engine with 8 qts. of Aeroshell 15W50 oil. Cleaned, gapped, tested, and rotated sparkplugs. Checked magneto timing and ignition harness. Installed a new induction air filter. Installed new mesh over carb heat scat tubing. Installed new gaskets on all induction tubes, p/n 71973. Tightened clamps around all oil drainback tubes. I certify that this engine has been inspected in accordance with a 100 hour inspection and has been determined to be in an airworthy condition.

Carl Clarke

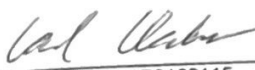

Carl C. Clarke AP3163115

<http://www.flynova.com/hanover>



KOFP - 11152 Airpark Road - Ashland - VA - 23005 (804)798-6500

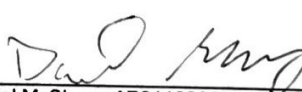

G&N Aircraft Recommended oil after break in: Any approved straight weight AD oil of a viscosity respective of operating outside air temperature, i.e. Grade 65W through 100W.

30.65

Heart of Virginia Aviation		8/11/2008
N1660H	PTSMOH 1393 34	Work order 08-1832
PropTT 5162.14		
<p>Painted face and dressed blades. Checked track. I certify that this propellor has been inspected in accordance with a 100 hour inspection and was determined to be in an airworthy condition.</p>		
		
Carl C. Clarke AP3163115		
		
http://www.flyhova.com/hanover		
KOPF - 11152 Airpark Road - Ashland - VA - 23005 (804)798-6500		

ed Work: Must include signature,
r, and repair station number if applicable

Heart of Virginia Aviation		1/6/2009
N1660H	Tach Time : 5263.2	Work order : 09-2046
<p>Complied with a 100 hour inspection in accordance with FAR 43 Appendix D. Compressions as follow: #1 71/80 #2 70/80 #3 70/80 #4 72/80. Drained oil. Removed and inspected filter. No defects noted. Installed a new CH48110-1 oil filter. Serviced engine with 8 qts. of Aeroshell 15W50 oil. Cleaned, gapped, tested, and rotated sparkplugs. Replaced eight spark plug gaskets. Checked magneto timing and ignition harness. Installed a new induction air filter. I certify that this engine has been inspected in accordance with a 100 hour inspection and has been determined to be in an airworthy condition.</p>		
		
Daniel McSherry AP3110300		
		
http://www.flyt		
KOPF - 11152 Airpark Road - Ashland - VA - 23005 (804)		

Heart of Virginia Aviation		1/6/2009
N1660H	Tach Time : 5263.2	Work order : 09-2046
<p>Painted face and dressed blades. Checked track. I certify that this propellor has been inspected in accordance with a 100 hour inspection and was determined to be in an airworthy condition.</p>		
		
Daniel McSherry AP3110300		
		
http://www.flyhova.com/hanover		
KOPF - 11152 Airpark Road - Ashland - VA - 23005 (804)798-6500		

G&N Aircraft Recommended oil after break in: Any approved straight weight AD oil of a viscosity respective of operating outside air temperature, i.e. Grade 65W through 100W.

Heart of Virginia Aviation		
N1660H	Tach : 5309.69	4/7/2009
EngineTT: 5309.69	TSMOH : 1540.89	Work Order : A09-2166
<p>Complied with an annual inspection in accordance with FAR 43 Appendix D. Compressions as follow: #1 75/80 #2 76/80 #3 78/80 #4 76/80. Drained oil. Removed and inspected filter. No defects noted. Installed a new CH48110-1 oil filter. Serviced engine with 8 qts. of Aeroshell 15W50 oil. Cleaned, gapped, tested, and rotated sparkplugs. Checked magneto timing and ignition harness. Installed a new induction air filter. Cleaned oil from accessory case. Tightened accessory case bolts & magneto bolts. I certify that this engine has been inspected in accordance with an annual inspection and has been determined to be in an airworthy condition.</p>		

[Signature]
 Ronald L. Hawkins AP2705318IA

http://www
 KOFP - 11152 Airpark Road - Ashland - VA - 23005 (804)798-6500

med Work: Must include signature, number, and repair station number if applicable

Heart of Virginia Aviation		
N1660H	Tach : 5309.69	4/7/2009
PropTT: 5309.69	TSMOH : 1540.89	Work Order : A09-2166

Checked track. I certify that this propellor has been inspected in accordance with an annual inspection and was determined to be in an airworthy condition.

[Signature]
 Ronald L. Hawkins AP2705318IA

http://www.flyhova.com/hanover
 KOFP - 11152 Airpark Road - Ashland - VA - 23005 (804)798-6500

Heart of Virginia Aviation		
N1660H	Tach : 5324.53	4/20/2009
		Work Order : 09-2185
<p>Complied with a 50 hr inspection. Replaced eight spark plug gaskets, p/n M674. Drained oil. Removed and inspected filter. No defects noted. Replaced with new CH48110-1 oil filter. Serviced engine with 8 qts of Aeroshell 15W50 oil.</p>		
<p><i>[Signature]</i> Daniel McSherry AP3110300IA</p>		
<p>KOFP - 11152 Airpark Road - Ashland - VA - 23005 (804)798-6500</p>		

DRAINED OIL, INSPECTED FILTER - NO DEFECTS NOTED,
 REPLACED FILTER WITH NEW CH48110-1. SERVICED
 ENGINE W/ 8 QUARTS 15W50. TAC 5455.
[Signature]
 ABP 3004982

G&N Aircraft Recommended oil after break in: Any approved straight weight AD oil of a viscosity respective of operating outside air temperature, i.e. Grade 65W through 100W.

Heart of Virginia Aviation

Phone (804) 798-6500

Work: Must include signature,
and repair station number if applicable

Date

11152 Airpark rd
Ashland, VA 23005

N1660H

Tach: 5405.29

Aircraft Total Time: 5405.29

I certify this propeller has been inspected in accordance with an annual inspection
and was determined to be in airworthy condition.

Daniel T Mcsherry AP31103001A

Daniel T Mcsherry

Fax (804)-798-6544

WO # 09-2349

July 22, 2009

Heart of Virginia Aviation

Phone (804) 798-6500

11152 Airpark rd
Ashland, VA 23005

N1660H

Tach: 5405.29

Engine Total Time: 5405.29

TSO: 1636.49

I certify this engine has been inspected in accordance with a 100 hour inspection
and was determined to be in airworthy condition. Drained oil and removed filter, no
contamination found. Serviced with 7 quarts of Aeroshell 15W50 oil and added new
Ch48110-1 filter. Engine cylinder compressions: 1/72, 2/70, 3/70, 4/71. Removed
cleaned and gapped plugs. Installed new BA16 induction air filter.

Andrew Jones P2776135

Andrew Jones

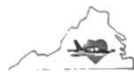
Fax (804)-798-6544

WO # 09-2349

July 22, 2009

Heart of Virginia Aviation

11152 Airpark Rd
Ashland, VA 23005



Phone: 804-798-6500

Fax: 804-798-6544

WO # F09-2452

N1660H

Tach: 5460.5

September 10, 2009

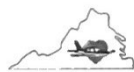
Drained oil and replaced filter with CH48110-1. No contamination found.
Serviced engine with 8 Qts of Aeroshell 15W50 oil. All operation and leak checks
satisfactory and engine is approved for return to service.

Arni E. Einarsson A&P 3004582

Arni E. Einarsson

Heart of Virginia Aviation

11152 Airpark Rd
Ashland, VA 23005



Phone: 804-798-6500

Fax: 804-798-6544

WO # AF10-0053

N1660H

Tach: 5505.9

January 13, 2010

Engine Total Time 5505.9 TSO: 1736.49

I certify this Engine has been inspected in accordance with an annual inspection
and was determined to be in airworthy condition. Drained oil and replaced filter
with CH48110-1. No contamination found. Engine cylinder compressions: 1/75,
2/77, 3/76, 4/75. Serviced engine with 8 Qts of Aeroshell 15W50 oil. All operation
and leak checks satisfactory and engine is approved for return to service.

Daniel Mcsherry A&P31103001A

Daniel Mcsherry

Heart of Virginia Aviation

11152 Airpark Rd
Ashland, VA 23005



Phone (804) 798-6500

Fax (804) 798-6544

WO # AF10-0053

N1660H

PTT: 5505.9 PTO: 1737.10 Tach: 5505.9

January 13, 2010

I certify this prop has been inspected in accordance with an annual inspection was
determined to be in airworthy condition.

Daniel Mcsherry A&P31103001A

Daniel Mcsherry

G&N Aircraft Recommended oil
of a viscosity respective of operatin

TACH	TTSN
Date	Hobbs
	SMOH

Performed Work: Must include signature, certificate number, and repair station number if applicable

Heart of Virginia Aviation
11152 Airpark Rd
Ashland, VA 23005



Phone: 804-798-6500
Fax: 804-798-6544
WO #F10-0240

N1660H
Tach Time: 5,554.2

April 30, 2010

Troubleshoot left mag., could not replicate. Left drop: 75 Right drop: 75. OPS check ok.

Eric T. Sanders AP3432993

Eric Sanders

Heart of Virginia Aviation
11152 Airpark Rd
Ashland, VA 23005



Phone: 804-798-6500
Fax: 804-798-6544
WO #F10-0240

N1660H
Tach Time: 5,554.2

April 30, 2010

Complied with 50 hour oil change. Checked oil filter and screen, serviced engine with 8 quarts of Aeroshell 15W50 and CH48110-1.

Eric T. Sanders AP3432993

Eric Sanders

Heart of Virginia Aviation
11152 Airpark Rd
Ashland, VA 23005



Phone: 804-798-6500
Fax: 804-798-6544
WO # F10-0315

N1660H Tach: 5585.03

June 21, 2010

Removed and replaced right magneto. Wired new P-leads, tested ignition switch, plugs, and wires. Installed points and condenser on left magneto. Retimed magnetos. Ops check ok.

Eric Sanders A&P3432993

Eric Sanders

Heart of Virginia Aviation
11152 Airpark Rd
Ashland, VA 23005



Phone: 804-798-6500
Fax: 804-798-6544
WO # F10-0385

N1660H
Aircraft Tach: 5605.15
Engine TT: 5605.15 TSO: 1836.46

July 30, 2010

Aircraft Total Time: 5605.15

I certify this engine has been inspected in accordance with a 100 hour inspection and was determined to be in airworthy condition. Drained oil and removed filter no contamination found. Serviced with 8 quarts of Aeroshell 15W50 oil and added new filter. Engine cylinder compressions: 1/70, 2/72, 3/71, 4/73. Cleaned, gapped, tested and rotated spark plugs. All operation and leak checks satisfactory and engine is approved for return to service.

Daniel Mcsherry AP31103001A

Daniel Mcsherry

Heart of Virginia Aviation
11152 Airpark Rd
Ashland, VA 23005



Phone: 804-798-6500
Fax: 804-798-6544
WO # F10-0385

N1660H
Aircraft Tach: 5605.15 Aircraft Total Time: 5605.15

July 30, 2010

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

Daniel Mcsherry AP31103001A

Daniel Mcsherry

Heart of Virginia Aviation
11152 Airpark Rd
Ashland, VA 23005



Phone 804-798-6500
Fax 804-798-6544
WO # F10-0445

Aug 27, 2010

Work: Must include signature,
r, and repair station number if applicable

N1660H
Aircraft Tach 5610.3

Removed oil filter, no contaminants found. Installed new oil filter.

Eric Sanders AP3432993 Eric Sanders

Heart of Virginia Aviation
11152 Airpark Rd
Ashland, VA 23005



Phone: 804-798-6500
Fax: 804-798-6544
WO # F10-0468

Sept 1, 2010

N1660H
Aircraft Tach: 5617.1

Checked oil for contaminants, some contaminants noted, recommend check oil filter
in 10hrs.

Eric Sanders A&P3432993 Eric Sanders

Heart of Virginia Aviation
11152 Airpark Rd
Ashland, VA 23005



Phone: 804-798-6500
Fax: 804-798-6544
WO # F10-0490

Sept 10, 2010

N1660H
Aircraft Tach: 5623.7

Removed and cut oil filter, removed and cleaned oil screen, serviced with 7 quarts of
15w50.

Eric Sanders A&P3432993 Eric Sanders

Heart of Virginia Aviation
11152 Airpark Rd
Ashland, VA 23005



Phone: 804-798-6500
Fax: 804-798-6544
WO #F10-0627

November 29, 2010

N1660H
Old Tach: 5636.23
Tach Time: 22.9

I certify this engine has been inspected in accordance with a 50 hour inspection and
was determined to be in airworthy condition. Removed filter. Cut filter open, no
contamination found. Installed new filter. Serviced engine with 7 quarts of Aeroshell
15w50 oil. Ops and leak check is ok. Engine is approved for return to service.

Eric Saunders A&P3432993 Eric Sanders

G&N Aircraft Recommended oil after break in: Any approved straight weight AD oil
of a viscosity respective of operating outside air temperature, i.e. Grade 65W through 100W.

Heart of Virginia Aviation
11152 Airport Rd
Ashland, VA 23005



Phone: 804-798-6500
Fax: 804-798-6544
WO # A11-0749

Worked Work: Must include signature,
number, and repair station number if applicable

Feb 7, 2011
N1660H
Aircraft Tach: 42.5 Aircraft Total Time: 5670.83
Engine Total Time: 5670.83 TSO: 1902.03 Prop 1902.03
I certify this engine has been inspected in accordance with a 100 Hour inspection
and was determined to be in airworthy condition. Drained oil and removed filter no
contamination found. Serviced with 7 quarts of Aeroshell 15W50 oil and added new
filter. Engine cylinder compressions: 1/72, 2/72, 3/71, 4/70. Cleaned, gapped, tested
and rotated spark plugs. All operation and leak checks satisfactory and engine is
approved for return to service.

Daniel Mcsherry AP31103001A

Heart of Virginia Aviation
11152 Airport Rd
Ashland, VA 23005



Phone: 804-798-6500
Fax: 804-798-6544
WO # A11-0749

Feb 7, 2011
N1660H
Aircraft Tach: 42.5 Aircraft Total Time: 5670.83
Engine Total Time: 5670.83 TSO: 1902.03 Prop 1902.03
I certify this Prop has been inspected in accordance with an Annual inspection and
was determined to be in airworthy condition.

Daniel Mcsherry AP31103001A

Heart of Virginia Aviation
11152 Airport Rd
Ashland, VA 23005



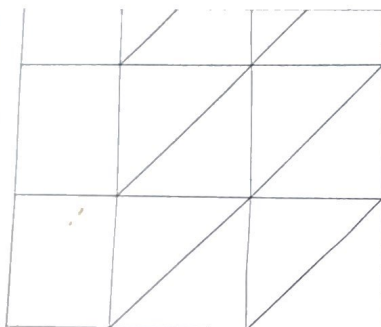
Phone: 804-798-6500
Fax: 804-798-6544
WO # F11-1136

N1660H
Aircraft Tach: 93.2

Aug 25, 2011

Drained oil. Removed and cut oil filter, removed and cleaned oil screen, serviced
with 8 quarts of Aeroshell 15W50 oil. Removed and replaced oil filter with new
(CH48110-1). Performed oil change in accordance with AVCO Lycoming, model O-
320 76 series operators manual, section 4.

Arni E. Einarsson AP30045821A



G&N Aircraft Recommended oil after break in: Any approved straight weight AD oil
of a viscosity respective of operating outside air temperature, i.e. Grade 65W through 100W

Heart of Virginia Aviation
11152 Airpark Rd
Ashland, VA 23005



Phone: 804-798-6500
Fax: 804-798-6544
WO # AF12-1783

Nov. 26, 2012

N1660H

Aircraft Tach: 115
Engine TT: 5743.33

Aircraft Total Time: 5743.33
TSO: 1974.53

I certify this engine has been inspected in accordance with a 100 hour inspection and was determined to be in airworthy condition. Changed oil filter, no contamination found. Engine cylinder compressions: 1/71, 2/70, 3/70, 4/71. Cleaned, gapped, tested and rotated spark plugs. All operation and leak checks satisfactory and engine is approved for return to service.

Daniel Mcsherry AP31103001A

Heart of Virginia Aviation
11152 Airpark Rd
Ashland, VA 23005
N1660H



Phone: 804-798-6500
Fax: 804-798-6544
WO # AF12-1783
Nov. 26, 2012

Aircraft Tach: 115
Prop TT: 5743.33

Aircraft Total Time: 5743.33
TSO: 1974.53

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

Daniel Mcsherry AP31103001A

Heart of Virginia Aviation
11152 Airpark Rd
Ashland, VA 23005



Phone: 804-798-6500
Fax: 804-798-6544
Dec 10, 2020

~~N1660H~~ N1660H
Aircraft Tach: 122.1

Aircraft Total Time: 5750.43
TSO: 1981.63 Prop 1981.63

I certify this engine has been inspected in accordance with an Annual inspection and was determined to be in airworthy condition. Drained oil and removed filter no contamination found. Serviced with 7 quarts of Aeroshell 15W50 oil and added new filter. Engine cylinder compressions: 1/75, 2/76, 3/78, 4/74. Cleaned, gapped, tested and rotated spark plugs. Removed and replaced engine air filter. Removed and replaced #2 cylinder top spark plug lead b-nut M1673, drive ferrule M1458, and ferrule M1671. All operation and leak check satisfactory and engine is approved for return to service. Stephen M Leo AP36780281A

Dec 10, 2020

N1660H
Aircraft Tach: 122.1
Aircraft Total Time: 5750.43

Engine Total Time: 5750.43 TSO: 1981.63 Prop 1981.63

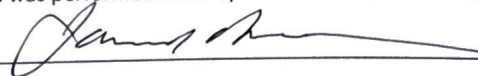
I certify this Prop has been inspected in accordance with an Annual inspection and was determined to be in airworthy condition.

Stephen M Leo AP36780281A

G&N Aircraft Recommended oil after break in: Any approved straight weight AD oil of a viscosity respective of operating outside air temperature, i.e. Grade 65W through 100W.

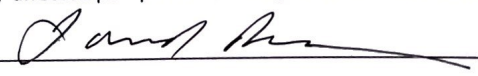
5/19/2021 Engine Overhaul Log Entry: Time Since New Limit Major Overhaul 00:00.

This O-320-D3G S/N L-7172-39A was disassembled, cleaned, inspected, repaired, overhauled and tested in accordance with factory recommended procedures outlined in the Lycoming overhaul manual 60294-7 using the parts listed and details outlined in this log entry and JBA Shop Order 21-4341. Parts List: 1ea Crankshaft STD/STD complied with SB505 75006 RI5565-1, 4ea 78030 320 series rods N/A AD 2017-16-11, 8ea SL78027 bolt, 8ea SL12186 nut, 8ea SL61662 bearing, 4ea SL11020 bearing, 2ea SL13884 bearing, 1ea AEL61084 spring, 1ea 1028B ball, 1ea SL53E19600 valve, 8ea SL72877 lifter, 8ea SL78290 hydraulic unit, 1ea SL18840 camshaft, 1ea AELSTD2213 bolt, 18109AS impellers, 1ea 76121 shaft, 4ea SLSTD2180 hoses, 4ea 69603 hoses, 1ea KA14001 harness, 8ea UREM40E spark plugs, 1ea 4371R slick magneto 1ea 4370R slick magneto, 1ea SL68C19622 gear mag drive, 1ea 10-3878-H MavScheb (see 8130-3), 1ea LW15472 fuel pump, 4ea New TIST04-1CA Cylinders (see 8130-3), 4ea AEL13790 shaft, 8ea AEL12892 button, 8ea SL74637 bushing, 4ea SL13444-1, 1ea 69371-1 kit gasket seal, 24ea STD-1925 screws, 8ea SL383B nuts, 1ea Dip Stick Assembly, 1ea STD-1211 plug installed after 505 compliance, CH48110-2 filter 1 test and 1 ship with engine, 8 qts, 100 mineral test runs then drained and discarded. The filter was cut and inspected with no contamination evident at this time. It is the responsibility of the installing mechanic to install all serviceable accessories & installation parts including all new fuel and oil hoses per Lycoming new or overhauled engine requirements and testing in accordance with SI1427 prior to flight. (Ground testing instructions were provided) The work listed was performed and inspected in accordance with current FAA regulations by,

James N Brod Jr. A&P 3016060 IA (JBA)  5/19/2021

5/19/2021 AD compliance O-320-D3G S/N L-7172-39A

2017-16-11 Lycoming rod bushing / affected bushings not installed, 2012-03-07 Carb / affected carb not installed, 2012-19-01 Crankshafts / N/A by SN# per MSB 569A, 2009-26-12 Cylinder assemblies / affected cylinders not installed, 2007-04-19R1 SAP cylinder assemblies / affected cylinders not installed, 2006-12-07 ECI cylinder assemblies / affected cylinders not installed, 2006-10-21 ECI connecting rods / affected rods not installed, 2004-10-14 Crankshaft gear / installed gear & screw IAW SB475-C (next due at next gear train repair), 98-17-11 Crankshaft / shaft not overhauled by Nelson, 98-02-08 Crankshaft / CW SB505 (next due at overhaul), 98-01-06 Carb / affected carb not installed, 97-15-11 Cylinder kits / affected cylinders not installed, 96-09-10 Oil pump / affected pump not installed, 92-12-05 Piston Pins / affected pins not installed. Compliance by:


James N Brod Jr. A&P 3016060 IA (JBA)  5/19/2021

TACH 131.45

08-03-2021 N1660H SN: 28-7716037 Prop Total Time: 5761.78 Prop TSOH: 00.00

Removed Sensenich Prop Model: 74DM-0-60, S/N: 29098 and sent out to Aircraft Propeller Works, Inc. for overhaul. Installed Overhauled Sensenich Prop Model: 74DM-0-60, S/N: 29098 and safety wired IAW Piper Service Manual P/N: 761-539 and Sensenich Service Manual.

END


Neal Butterworth B366-636-71-0555-0

Approved for return to service with respect to above work performed.


Tommy L. Grimes AP466093807IA

G&N Aircraft Recommended oil after break in: Any approved straight weight AD oil of a viscosity respective of operating outside air temperature, i.e. Grade 65W through 100W.