

N456AG #2

6-28-19



The Standard

ENGINE LOG

ASA-SF-2



Phone: 815.544.2300 800.397.8181

LIMITED AIRCRAFT ENGINE WARRANTY

FAX: 815.544.8900

Poplar Grove Airmotive, Inc. (PGA) limits its warranty on the listed engine overhauled by PGA to be free from defects in material and workmanship under normal use and service for a period of two years or 500 hours, whichever occurs first from the completion date of the overhaul. All accessories overhauled by PGA are warranted for 250 hours of operation or one year, whichever event shall occur first.

Any engine, cylinder or component Repair not associated with a major engine overhaul is warranted to be free from defects in material and workmanship for six months.

The obligation of the Company under this warranty is limited to the repair or replacement, at the option of PGA, of any part, component or engine, which, in the opinion of PGA is defective. PGA assumes no obligation for work accomplished at a facility other than PGA unless prior notification is given and the owner receives authority from PGA to proceed. PGA additionally reserves the right to furnish any parts and/or components required. If requested by PGA, owner must return all warranted parts, transportation prepaid, to PGA for examination.

Warranty is not applicable to routine maintenance, inspection or adjustments. Replacement or repair of an engine component or accessory will not be construed to extend the initial warranty period.

This warranty shall not apply to engines, their component parts or accessories which have been improperly installed, adjusted, stored, handled, repaired, altered or operated contrary to current manufacturer's recommendations of FAA Airworthiness Directives, or subjected to misuse, neglect, accident, pre-ignition, detonation, hydrostatic lock or corrosion.

PGA does not warrant accessories, such as factory-remanufactured magnetos, carburetors, starters, etc. supplied by a vendor other than PGA when that vendor has its own warranty.

No express warranties and no implied warranties, whether of merchantability or fitness for any particular use, or otherwise (except to title) other than that expressly set forth above, which is made expressly in lieu of all other warranties, shall apply to products sold by PGA.

This warranty and this PGA's obligation thereunder is in lieu of all other warranties, expressed or implied, including warranties of merchantability and fitness for a particular purpose, and all other obligations or liabilities, including consequential damages or contingent liabilities arising out of the failure of any engine or part to operate properly, and no person is authorized to give any other warranty or to assume any additional obligation on PGA's behalf unless made in writing and signed by an officer of PGA.

Date 21/Jan/2019 Model Lyc, L10-360-C1E6 S/N L-265-67A WO# 100070

POPLAR GROVE AIRMOTIVE, INC.
CRS YYBR664L
SUGGESTED BREAK-IN PROCEDURES

After starting the engine, ensure a normal warm up, but avoid prolonged ground running. Follow the airframe manufacturer's recommendations for takeoff power. When possible, reduce power to the climb power setting specified in the operator's manual. Establish a shallow climb angle to insure good air speed for proper cooling. Use more cowl flaps than normal or step climb to help in this process. Adjust mixture per aircraft operating handbook. Excessive heat is the primary cause of cylinder bore glazing. Make every effort to keep your operating temperature well into the green arc.

If the engine is normally aspirated (non-turbocharged) it will be necessary to cruise at a low altitude to obtain the required cruise power levels. We recommend a density altitude less than 5,000 feet to allow the engine to develop sufficient cruise power for a good break-in.

Do not run the engine above 75% power in a cruise setting or the probability of glazing cylinder bores is increased. Glazing cylinder bores requires cylinder removal, honing and installing new piston rings. ***Poplar Grove Airmotive does not warranty this condition.*** Your ability to keep the engine temperature well in the green arc and within a power range of 65% to 75% power will be the key to a successful break in.

Descend at low cruise power while closely monitoring the engine instruments. Avoid long descents at low manifold pressure and rapid descents, as this will cause the engine to cool too rapidly.

There is only one object to be accomplished during the break-in: the stabilization of oil consumption. Record all oil additions and flight hours in such a manner that quart per hour of flight is known. During this portion of the break-in, which could range 25 to 100 hours, mineral oil ***must be*** used in the engine. Change oil and inspect filter after approximately 10 hours – then 35 hours – then per your normal schedule, however, do not use AD (ashless dispersant) oil until consumption stabilizes.

Engine Oil Recommendation For Piston Ring Seating

Aero Shell 100	SAE 50	Above 60 degrees F
Aero Shell 80	SAE 40	30 degrees – 90 degrees F
Aero Shell 65	SAE 30	0 degrees – 70 degrees F
Phillips 20W-50	Type M	All Season
Phillips 20W-50	XC	Nickel Cylinders

Use mineral based AD oils only after break-in – NO synthetics

Engine Record General Information

Manufacturer Lycoming

Model L10-360-C1E6

Serial L-265-67A

Type Certificate _____

This engine is currently installed in aircraft: _____

Minimum Octane Fuel _____

Oil Grade Summer _____

Winter _____

Magneto Time _____

Point Setting _____

Firing Order _____

Spark Plug Gap _____

Manufacturer's Recommended Overhaul at _____ hours

6/20/2019

3:02PM

Poplar Grove Airmotive, Inc**Shop Orders — Inventory Summary**

For Shop Order 100070 Only

Notes

Shop Order #	Close Date	Dsc #	Part Number	Description	Action	Quantity	Units
					Date Wmty?		
100070	//	2,000	SL75441-1	Gasket Set	6/06/2019	1.00	Each
100070	//	2,000	149NLR	Starter	6/06/2019	1.00	Each
100070	//	2,000	UREM38E	Spark Plugs	6/06/2019	8.00	Each
100070	//	2,000	15B26262	Lifter (Hyperbolic)	6/06/2019	8.00	Each
100070	//	2,000	73772	Nozzle	6/06/2019	4.00	Each
100070	//	2,000	SL1028-B	Ball	6/06/2019	1.00	Each
100070	//	2,000	AEL61084	Oil Spring	6/06/2019	1.00	Each
100070	//	2,000	SL-STD1211	Plugs	6/06/2019	1.00	EACH
100070	//	2,000	SL73810	Bushing	6/06/2019	4.00	Each
100070	//	2,000	72801RW	Counterweight	6/06/2019	1.00	Each
100070	//	2,000	SL14W21696	Roller	6/06/2019	2.00	Each
100070	//	2,000	AEL72797	Roller	6/06/2019	2.00	Each
100070	//	2,000	SL14820 [MS16625-309:	Ring	6/06/2019	2.00	Each
100070	//	2,000	SL14820 [MS16625-309:	Ring	6/06/2019	6.00	Each
100070	//	2,000	AEL71907	Washer	6/06/2019	8.00	Each
100070	//	2,000	SL-STD2213	Screw	6/06/2019	1.00	Each
100070	//	2,000	AA48110-2	Oil Filter, Tempest	6/06/2019	1.00	Each
100070	//	2,000	AF15473	Fuel Pump	6/06/2019	1.00	Each
100070	//	2,000	AN565B1032H5	Screw Set	6/06/2019	1.00	Each
100070	//	2,000	AEL13923	Rod Bushing	6/06/2019	4.00	Each
100070	//	2,000	SL75060	Bolt	6/06/2019	8.00	Each
100070	//	2,000	SL12186	Nut	6/06/2019	8.00	Each
100070	//	2,000	SL13212A	Bearing	6/06/2019	8.00	Each
100070	//	2,000	SL74389	Bushing	6/06/2019	8.00	Each
100070	//	2,000	AEL72626	Rocker Shaft	6/06/2019	8.00	Each
100070	//	2,000	STD670 [07-17698]	Nuts	6/06/2019	6.00	Each
100070	//	2,000	SL-STD860	Screw	6/06/2019	6.00	Each
100070	//	2,000	STD2180 [SL-STD2180	Hose	6/06/2019	4.00	Each
100070	//	2,000	MS21333-75	Clamp	6/06/2019	2.00	Each
100070	//	2,000	MS21333-75	Clamp	6/20/2019	2.00	Each
100070	//	2,000	MS21333-65	Clamp	6/06/2019	4.00	Each
100070	//	2,000	76220	Thru Bolt	6/06/2019	2.00	Each
100070	//	2,000	76220	Thru Bolt	6/06/2019	2.00	Each
100070	//	2,000	61155RW	Crank Gear	6/06/2019	1.00	Each
100070	//	2,000	AEL72970	Gear	6/06/2019	1.00	Each
100070	//	2,000	AEL19600	Vernatherm	6/06/2019	1.00	Each
100070	//	2,000	CCB37000	Oil Drain	6/06/2019	1.00	Each
100070	//	2,000	STD1925	Screw Superior Product	6/06/2019	8.00	Each
100070	//	2,000	STD1227	Washer	6/06/2019	2.00	Each
100070	//	2,000	MS90725-9	Bolt	6/06/2019	1.00	Each
100070	//	2,000	204418-156D	Oil Filter Adapter	6/06/2019	1.00	Each
100070	//	2,000	AEL72702	Drain Tube	6/06/2019	1.00	Each
100070	//	2,000	SL72703	Drain Tube	6/06/2019	1.00	Each
100070	//	2,000	AEL74808	Drain Tube	6/06/2019	1.00	Each
100070	//	2,000	AEL73027	Drain Tube	6/06/2019	1.00	Each
100070	//	2,000	AEL75338	Baffle	6/06/2019	1.00	Each
100070	//	2,000	AEL75338	Baffle	6/06/2019	1.00	Each
100070	//	2,000 M	73457RW	Push Rod	6/06/2019	1.00	Each

YEAR 20____ DATE	RECORDING TACH TIME	TODAY'S FLIGHT	TOTAL TIME IN SERVICE

Description of Inspections, Tests, Repairs and Alterations

Entries must be endorsed with Name, Rating and Certificate Number of Technician or Repair Facility. (See back pages for other specific entries.)

MANUFACTURER: Lycoming **ENGINE MODEL:** LIO-360-C1E6 **S/N:** L-265-67A **WO #** 100070

AD #	DESCRIPTION	COMPLIANCE STATUS
73-23-01 R4	piston pin P/N 69650	N/A by pin P/N
75-08-09 R3	oil pump drive shaft with woodruff key	N/A-has drive shaft with flats
75-09-15	fuel flow divider	N/A by P/N
78-23-10	fuel servo	N/A by servo P/N
79-04-05	fuel servo	N/A by servo P/N
90-04-06 R1	external oil line	N/A- has front mounted governor
92-12-05	piston pin P/N LW-14077	N/A by pin P/N
95-07-01	Superior rod bolts	Complied with by installation of new bolts
96-09-10 C	oil pump	P/C/W gears have "C" and "N"
96-23-03	fuel pump	N/A by manufacturer
97-15-11	piston pin	N/A by pin P/N
98-02-08	crankshaft	N/A by constant speed prop
98-17-11 C	crankshaft	Complied with by inspection of crankshaft IAW para (b)

Poplar Grove Airmotive, Inc.

FAA Certified Repair Station YYBR664L Terry Aavang

Date: 21/Jun/2019

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tries.)

YEAR 20 DATE	RECORDING TACH TIME	TODAY'S FLIGHT	TOTAL TIME IN SERVICE	Description of Inspections, Tests, Repairs and Alterations Entries must be endorsed with Name, Rating and Certificate Number of Technician or Repair Facility. (See back pages for other specific entries.)

MANUFACTURER: Lycoming **ENGINE MODEL:** LIO-360-C1E6 **S/N:** L-265-67A **WO #** 100070

AD #	DESCRIPTION	COMPLIANCE STATUS
04-10-14C	crankshaft gear bolt	Complied with I/A/W SB 475C, due any prop strike
05-19-11	crankshaft failure	N/A by crankshaft S/N A74489
06-06-16	crankshaft failure	N/A by crankshaft S/N
09-02-03	Precision fuel servo	P/C/W by "G" stamp on plug
12-03-06C	AFS fuel servo diaphragm	N/A by D & G overhaul
12-19-01	crankshaft	N/A by crankshaft S/N
15-02-07	Prop Gov Shaft Set Screw	Complied with IAW SB1343B
15-19-07	Fuel Lines, due every 110 hrs	Complied with IAW SB342G Dia. 3, due every 110 hrs or line maintenance
17-16-11	rod bushings	N/A to new AEL13923 bushings installed

Poplar Grove Airmotive, Inc.

FAA Certified Repair Station YYBR664L Terry Aavang [REDACTED] Date: 21/Jun/2019

2019

YEAR 20 _____ DATE	RECORDING TACH TIME	TODAY'S FLIGHT	TOTAL TIME IN SERVICE	Description of Inspections, Tests, Repairs and Alterations Entries must be endorsed with Name, Rating and Certificate Number of Technician or Repair Facility. (See back pages for other specific entries.)
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MAKE	Lycoming	MODEL	LIO-360-C1E6	S/N	L-265-67A
Total Time	unknown	Hours		Time Since Major Overhaul	ZERO Hours

This engine was disassembled, cleaned, inspected and reassembled with necessary new parts in accordance with a major overhaul as per the manufacturer's current overhaul manual 60294-7 A detailed parts list is on file at this agency. The following accessories were overhauled or exchanged. See maintenance releases in this logbook.

Installed camshaft P/N LW12311 repaired by Aircraft Specialties Services. Installed new lifters from Lycoming, P/N 15B26262. Installed new cylinder kits from Lycoming, P/N 05K21120. Installed magnetos, left P/N BL-349365-10 S/N F17AA255R, and right, P/N BL-349305-3, S/N F17BA173R, rebuilt by Continental Motors. Installed flow divider P/N 2524397-2, S/N 448A, overhauled by D & G Supply. Supplied RSA-5AD1 fuel servo P/N 2524590-8, S/N 72HB0101, overhauled by D & G Supply. Supplied new starter P/N 149NLR, S/N H-S081092, from Hartzell Engine Technologies. See A.D. Compliance Record and Parts List for more details. -----END-----

All applicable airworthiness directives and related factory publications have been checked for compliance at this date. See list in this log book. This engine was test run in an FAA approved test cell and meets specifications. The aircraft engine 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. Pertinent details of repair are on file at this repair station under:

Poplar Grove Airmotive, Inc.

Poplar Grove Airport, Poplar Grove, IL
FAA Approved Repair Station #YYBR664L

Work Order # 100070 **Date** 21/Jun/2019

Terry Aavang

Signed for Poplar Grove Airmotive

YEAR

20

DATE

4850 Spartan Dr. • Denton, TX 76207



Office: (940) 387-2193 • Fax: (940) 383-2193

Page 2 of 2

WO#: INT19780	N #: N456AG	Date Completed: 7/3/2019			
ACTT: 3,321.0	TACH: 2,034.00	HOBBS: 2,034.00	ENGTT: N/A	TSMOH: N/A	PROPTT: N/A
Manufacturer:		Part/Model number:		S/N: N/A	

- 2.1 Installed Overhauled Lycoming Engine Model LIO-360- C1E6, S/N: L-256-67A on aircraft N456AG on #2 POSTION, TSN, UNK., TSO: 0.0 .
 Installed new oil cooler P/N: 8001956, S/N: 169. Installed overhauled prop governor P/N: F6-18AL S/N: 9955T
 Installed McFarlane safe heat oil sump heater P/N: 700 series Installed engine mounts (4) P/N: J9613-40 Replaced alternator belt P/N: 73965-003. Installed oil drain valve P/N: CCB37000 Installed Engine Hoses 111F417-4S0154, 111F417-4S0166, 111F417-4S0352, 111F417-8D0202, 111F417-8D0260, 111F502-6S0133, 124F001-3CR0290, 124F003-6CR0120 Service engine with 8 quarts of Phillips 20W50. Verified mag timing Performed ground break in run according to Lycoming service instruction 1427B. Adjusted idle speed and mixture. Engine installation satisfactory at this time. Break in flight required before aircraft can be returned to service

ENGINE BREAK IN FLIGHT REQUIRED BEFORE RETURN TO SERVICE

PILOT NAME FRANCIS NORRIS CERTIFICATE# [REDACTED]

MAINTENANCE RELEASE / RETURN TO SERVICE CRS# U9FR750K

The aircraft, component(s), or appliance identified above have been repaired, tested and inspected in accordance with current Regulations of the Federal Aviation Administration and is approved for return to service Pertinent details for the work accomplished can be obtained from the Work Order identified above and on file at this repair station.

Inspector / Authorized Signature

Printed Name

BRYAN COLLON

Certificate #U9FR750K

Date Completed

7-12-19ACTT - 3321.0TACH - 2034.0HOBBS - 2034.0AT ENGINE INSTALLATION7-12-19

Repairs and Alterations

and Certificate Number of
for other specific entries.)