

N456AG

#1
6-18-19



 The Standard
ENGINE LOG

ASA-SE-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 three years or 700 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 28 Feb, 2019 Model LYC. 10-360-C1E6 S/N L-10780-51A WO# 9799

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 IO-360-C1E6
Serial K10780-51A 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

Poplar Grove Airmotive, Inc

Shop Orders --- Inventory Summary

For Shop Order 9799-1 Only

YEAR
20
DATE

RECO
TACH
TIME

2/27/2013
3:09PM

Shop Order #	Close Date	Dsc #	Part Number	Description	Action Date Wmty?	Quantity	Units
9799-1	//	2,000	SL75441-1	Gasket Set	1/16/2019	1.00	Each
9799-1	//	2,000	05K21120	Cylinders	1/16/2019	4.00	Each
9799-1	//	2,000	LW18843	Camshaft	1/16/2019	1.00	Each
9799-1	//	2,000	15B26262	Lifter (Hyperbolic)	1/16/2019	8.00	Each
9799-1	//	2,000	UREM38E	Spark Plugs	1/16/2019	8.00	Each
9799-1	//	2,000	73772	Nozzle	1/16/2019	4.00	Each
9799-1	//	2,000	SL1028-B	Ball	1/16/2019	1.00	Each
9799-1	//	2,000	AEL61084	Oil Spring	1/16/2019	1.00	Each
9799-1	//	2,000	SL-STD1211	Plugs	1/16/2019	1.00	EACH
9799-1	//	2,000	SL13884A M03	Bearing	1/16/2019	2.00	Each
9799-1	//	2,000	SL16711A M03	Main Bearing	1/16/2019	4.00	Each
9799-1	//	2,000	SL73810	Bushing	1/16/2019	4.00	Each
9799-1	//	2,000	72801RW	Counterweight	1/16/2019	1.00	Each
9799-1	//	2,000	AEL21696	Counterweight Roller(1	1/16/2019	2.00	Each
9799-1	//	2,000	AEL72797	Roller	1/16/2019	2.00	Each
9799-1	//	2,000	SL14820 [MS16625-309	Ring	1/16/2019	8.00	Each
9799-1	//	2,000	AEL71907	Washer	1/16/2019	8.00	Each
9799-1	//	2,000	AELSTD2213	Screw	1/16/2019	1.00	Each
9799-1	//	2,000	AA48110-2	Oil Filter, Tempest	1/16/2019	1.00	Each
9799-1	//	2,000	STD1221	Ring	1/16/2019	1.00	Each
9799-1	//	2,000	AN565B1032H5	Screw Set	1/16/2019	1.00	Each
9799-1	//	2,000	MS29512-06	O Ring	1/16/2019	2.00	Each
9799-1	//	2,000	AF15473	Fuel Pump	1/16/2019	1.00	Each
9799-1	//	2,000	AEL13923	Rod Bushing	1/16/2019	4.00	Each
9799-1	//	2,000	SL75060	Bolt	1/16/2019	8.00	Each
9799-1	//	2,000	SL12186	Nut	1/16/2019	8.00	Each
9799-1	//	2,000	SL13212A M03	Bearing	1/16/2019	4.00	Each
9799-1	//	2,000	SL13212A M03	Bearing	1/16/2019	4.00	Each
9799-1	//	2,000	SL74389	Bushing	1/16/2019	8.00	Each
9799-1	//	2,000	AEL72626	Rocker Shaft	1/16/2019	8.00	Each
9799-1	//	2,000	STD670 [07-17698]	Nuts	1/16/2019	4.00	Each
9799-1	//	2,000	STD670 [07-17698]	Nuts	1/16/2019	2.00	Each
9799-1	//	2,000	STD2180 [SL-STD2180	Hose	1/16/2019	4.00	Each
9799-1	//	2,000	AEL76121	Tach Shaft	1/16/2019	1.00	Each
9799-1	//	2,000	76220	Thru Bolt	1/16/2019	4.00	Each
9799-1	//	2,000	6506 [3506]	Hose Clamp	1/16/2019	1.00	Each
9799-1	//	2,000	77872	Bushing	1/16/2019	1.00	Each
9799-1	//	2,000	STD19	Dowel	1/16/2019	1.00	Each
9799-1	//	2,000	STD798	Dowel	1/16/2019	1.00	Each
9799-1	//	2,000	AEL72970	Gear	1/16/2019	1.00	Each
9799-1	//	2,000	STD1925	Screw Superior Product	1/16/2019	6.00	Each
9799-1	//	2,000	LW25-1.25	Bolt	1/16/2019	2.00	Each
9799-1	//	2,000	LW25-1.25	Bolt	1/16/2019	6.00	Each
9799-1	//	2,000	AEL75338	Baffle	1/16/2019	2.00	Each
9799-1	//	2,000	204418-156D	Oil Filter Adapter	1/16/2019	1.00	Each
9799-1	//	2,000	AEL74808	Drain Tube	1/16/2019	1.00	Each
9799-1	//	2,000	AEL72566	Ring Gear 149 Teeth	1/16/2019	1.00	Each
9799-1	//	2,000	MS21333-65	Clamp	1/16/2019	1.00	Each
						4.00	Each

MANUFACTL

AD #

66-20-04
71-05-02 R4
71-11-02
73-23-01 R4
75-08-09 R3
75-09-15
78-23-10
79-04-05
90-04-06 R1
92-12-05
95-07-01
95-26-02
96-09-10 C

Poplar Grove

FAA Certified

nd Alterations
icate Number of
specific entries.)

9799

Feb/2019

YEAR
20
DATE

YEAR 20 DATE	RE TACH TIME	FLIGHT	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: IO-360-C1E6 S/N: L-10780-51A WO # 9799

AD #	DESCRIPTION	COMPLIANCE STATUS
66-20-04	oil filter adapter gasket	N/A by gasket P/N
71-05-02 R4	crankcase	N/A by engine S/N
71-11-02	tappet plunger	N/A by engine S/N
73-23-01 R4	piston pin P/N 69650	N/A by pin P/N
75-08-09 R3	oil pump drive shaft	N/A-has drive shaft with flats
75-09-15	fuel flow dividers	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
80-04-06 R1	external oil line	N/A by engine model
92-12-05	piston pin P/N LW-14077	N/A by pin P/N
95-07-01	rod bolt P/N 75060	N/A to new bolts installed
95-26-02	improper fuel	N/A by registration number
96-09-10 C	oil pump	P/C/W IAW SB524

Poplar Grove Airmotive, Inc.

FAA Certified Repair Station YYBR664L Terry Aavang

Date: 28/Feb/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.)

MANUFACTURER: Lycoming **ENGINE MODEL:** IO-360-C1E6 **S/N:** L-10780-51A **WO #** 9799

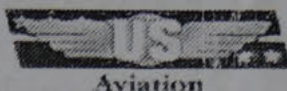
AD #	DESCRIPTION	COMPLIANCE STATUS
96-23-03	fuel pump	N/A by pump P/N
97-15-11	piston pin	N/A by P/N
98-02-08	crankshaft	N/A by constant speed prop
98-17-11 C	crankshaft	C/W by inspection of crankshaft IAW para (b)
03-14-03	rotary fuel pump	N/A has diaphragm-type pump
04-10-14C	crankshaft ger bolt	C/W IAW SB 475C, due any prop strike
05-19-11	crankshaft failure	N/A by crankshaft S/N
06-06-16	crankshaft failure	N/a by crankshaft S/N
09-02-03	Precision fuel servo	P/C/W by "G" stamp on hex plug
12-03-06C	AFS fuel servo	N/A by date of overhaul
12-19-01	crankshaft failure	N/A by crankshaft S/N
15-02-07	prop gov shaft set screw	C/W IAW SB 1343B
15-19-07	fuel lines	C/W IAW SB 342G dia. #3, due every 110 hrs
17-16-11	Lycoming con rod bushing	N/A to new AEL13923 bushings installed

Poplar Grove Airmotive, Inc.

FAA Certified Repair Station YYBR664L Terry Aavang _____ Date: 28/Feb/2019

YEAR
20
DATE

4850 Spartan Dr. * Denton, TX 76207



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

1/2

Page 1 of 2

WO#: INT19779	N#: N456AG	Date Completed: 6/18/2019			
ACTT: 3,321.0	TACH: 2,034.00	HOBBS: 2,034.00	ENGTT: 8,155.70	TSMOH: 0.00	PROPTT: N/A
Manufacturer: Lycoming Div Avco Corp Textron			Part/Model number: IO360C1E6		S/N: L-10780-51A

- 2.1 Installed Overhauled Lycoming Engine Model IO-360-C1E6, S/N: L-10780-51A on aircraft N456AG #1 position.
TSN 8155.7, TSO: 0.0.
Installed New oil cooler P/N 8001956, S/N: PA34-200.
Installed Overhauled prop governor P/N F6-18A S/N: A2073T 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, 111F417-8D0210,
111F417-8D0284, 111F502-6S0133, 124F001-3CR0290, 124F003-6CR0120. Serviced 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 AIRCRAFT RETURN TO SERVICE

PILOT
NAME FRANCECA
MORRIS

CERTIFICATE# [REDACTED]

2/2

Page 2 of 2

MAINTENANCE RELEASE / RETURN TO SERVICE CERT # 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 CARROLL

Certificate #U9FR750K

Date Completed

7-12-19

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

YEAR
20
DATE

RE
TA
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4850 Spartan Dr. • Denton, TX 76207



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Page 1 of 1

WO#: INT20252	N #: N456AG	Date Completed: 7/25/2019			
ACTT: 3,343.0	TACH: 2,056.00	HOBBS: 2,054.40	ENGTT: 8,177.70	TSMOH: 22.00	PROPTT: N/A
Manufacturer: Lycoming Div Avco Corp Textron			Part/Model number: IO360C1E6		S/N: L-10780-51A

1.1 Pilot Squawk: Engine Died On Landing. Performed L/H Engine Run Up. Idle of L/H Engine 700RPM. Mag Drop L/H Engine: L/H Mag: 50RPM R/H Mag: 50RPPM. Performed several checks of going from static to idle to attempt to replicate issue. Could not replicate. Checked idle/mixture rise. Idle/Mixture Rise is 75 RPM. Inspected fuel system. No leaks or defects noted. Inspected induction. No leaks or defects noted. Performed 2nd engine run. No defects noted.

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 John E. Tano

Certificate # U9FR750K

Date Completed

7-25-19