#3





The Standard

The Standard

The Standard



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 18 Feb 2016 Model Lyc. IO-540-KIGSD S/NRL-15930-48A WO# 7530

Revised 6/24/14

POPLAR GROVE AIRMOTIVE, INC. <u>CRS YYBR664L</u> 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 required 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

ingine on Recommendation for Pi	ston King Seating
Aero Shell 100	SAE 50
Aero Shell 80	SAE 40
Aero Shell 65	SAE 30
Phillips 20W-50	Type M

Above 60 degrees F 30 degrees – 90 degrees F 0 degrees – 70 degrees F All Season

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

The Standard Engine Log SE-2

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SBN 978-1-56027-326-4	
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Engine	Record	General	Information

Manufacturer Lycoming Serial RE 15930-48A		
This engine is currently installe	ed in aircraft:	
Minimum Octane Fuel	Oil Grade Summer	Winter
Magneto Time	Point Setting	Firing Order
Spark Plug Gap Manufacturer's Recommended		

YEAR RECORDING TACH TIME	TODAY'S FLIGHT	TOTAL TIME IN SERVICE	Technician or Repair Facility. (See back pages for other spe	Alterations e Number of ecific entries.)	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.)
AD# - 63-14-03 oil - 66-20-04 oil - 75-08-09 R3 oil - 75-09-15 fue - 78-23-10 fue - 79-04-05 fue - 83-22-04 fue - 92-12-05 pis - 95-07-01 coil - 96-09-10 C oil - 96-23-03 fue - 97-15-11 pis - 98-17-11 cra - 02-12-07 oil	poump drive silter adapter pump flow divider servo injector diagon pin P/N Lenecting rod froper fuel pump pump pump pump pump pump pump fickshaft shaft motive, Incommonive, Incomposite shaft motive, Incommonive shaft pump pump pump pump pump pump pump pum	escription shaft gasket phragm W-14077 polit P/N 7506	N/A by engine S/N N/A by gasket P/N N/A by engine S/N N/A by engine S/N N/A by P/N N/A by servo P/N N/A by servo P/N N/A by servo P/N N/A by pin P/N N/A by new bolts installed N/A by registration number N/A by engine model N/A by manufacturer N/A by pin P/N C/W by inspection of crankshaft IAW para (b)(1) C/W by crankshaft S/N		AD# 03-14-03 04-05-24C 04-10-14 C 05-19-11 09-02-03 12-03-06 C 12-03-07 12-19-01 15-02-07 Poplar Gr	geared f crank ge cranksh cranksh Precisio AFS ser HA-6 ca cranksh Prop Go Fuel line	fuel pump ear bolt aft gear aft failure on fuel sen vo diaphra rburetor aft failure ov Shaft S es tive, Inc.	vo agm	MODEL: IO-540-K1G5D S/N: RL-15930-48A WO # 7530 COMPLIANCE STATUS N/A by diaphram style pump N/A by new bolt installed C/W IAW Lycoming SB 475C N/A by crankshaft S/N P/C/W by "G" stamp on plug N/A by no AFS parts installed N/A by engine model N/A by crankshaft S/N C/W IAW SI 1343B C/W by inspection I/A/W SB342G L David Mason Date: 17/Feb/2016

YEAR 20 Date	RECORDING TACH TIME	TODAY'S FLIGHT	TOTAL TIME IN SERVICE	Entries must be	of Inspections, 1 endorsed with Name epair Facility. (See b	and Certificate N	lumber of	
as per the m parts list is o Assemble by Aircra 05K21120 Grove Air SE094453 149-NL, S	was disassembled anufacturer's current file at this agence ded engine with the Specialties onew from Lymotive. Installed S/N FN-37157	ent overhaul cy. The follow th crankca Services ycoming. liled fuel p flow divice 1 new from	spected and remanual ving accessorie ase repaire. Installed Installed neump P/N // ler P/N 252m Sky-Tec.	es were overhauled or es ed by DIVCO, WDO lifters P/N 15B262 nagneto P/N 10-38 AF15473 new from 4232-2, S/N L642 . Supplied servo F	IO-540-K1G5D Time Since Major Cary new parts in accordant New tolerances and clarchanged. See maintenance 116069. Installe 1262 new from Lycological Tempest. Installe 1264 new from Lycological New York 12540-13, S/N CO2 no Tempest. Installe 1264 new from Lycological New York 12540-13, S/N CO2 no Tempest. Installe 1264 new from Lycological New York 12540-13, S/N CO2 no Tempest. Installe 1264 new from York 12540-13, S/N List for more definition of the Installe 1264 new from York 12540-13, S/N CO2 no Tempest. Installe 1264 new from York 1264	nce with a mearances we nce releases of camshoming. In: 0317 ove ed GAMIjinG Supply N 72GG5	re maintained. A de in this logbook. aft P/N 76148 restalled cylinder rhauled by Popectors IAW STO. Supplied star	epaired r kits P/N plar C rter P/N d by
book. This e and inspecte work perform	ngine was test rur d in accordance w	n in an FAA a with current realls of repair	approved test of egulations of the are on file at the	cell and meets specificat	thecked for compliance a ions. The aircraft engine inistration and is approve 7530 David Mason	identified at	oove was repaired	
	ved Repair Sta					plar Grove	Airmotive, Inc.	

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RECORDING TODAY'S FLIGHT TOTAL TIME IN Description of Inspections, Tests, Repairs and Alterations Entries must be endorsed with Name, Rating and Certificate Number of 18600 Edison Ave.

AIR ASSOCIATES

18600 Edison Ave. Chesterfield, MO 63005 (636) 536-1341

Engine

Date: 3/3/2016 Reg: N7857F Tach: 2737.7

TTE: 5746.2 TSMO: 0.0

Model: IO-540-K1G5D

S/N: RL-15930-48A

- . Installed this engine model IO-540-K1GD s/n RL-15930-48A after major overhaul.
- Engine was installed using new engine Lord Mounts p/n J-3804-40 and new bolts p/n AN7-27A.
- 3. Replaced engine fluid carrying hoses with kit supplied by AERO Hose Shop Ref Invoice: H27943-1.
- Removed and reinstalled propeller governor p/n F-4-11B s/n B1407U after overhaul by Professional Aircraft Accessories Inc CRS# PO5R554Y. See FAA Form 8130-3 under WO# 58602 for details.
- Replaced L/H oil cooler with new p/n 8001201 s/n 3889189 and R/H oil cooler with new p/n 8001201 s/n 3889185 from Aero-Classic Heat Transfer Products Inc – PAH Approval # PQ2543NM.
- 6. Replaced L/H aft baffling assembly with new p/n 68029-009.
- Replaced baffling attach studs with new p/n 65103-002.
- . Replaced oil drain valve with new p/n P5000.
- 9. Installed existing exhaust system and baffling.
- 10. Serviced engine with Phillips 20W50M mineral oil.
- Complied with AD2015-19-07 amdt: 39-18269 dated 11/3/15 Prevent failure of the fuel injector lines by visual inspection per Lycoming MSB# 342G, next due 2847.7
- Complied with AD2005-12-06 amdt: 39-14122 dated 7/19/05 Magneto impulse coupling was complied with by Poplar Grove Airmotive and found to be less than .014, next due 3237.7
- 13. Pre oiled engine for oil pressure and leak checked fuel system.
- 14. Washed engine, ran for leaks, and operation. No defects at this time.

I certify that this Engine has been inspected in accordance with an Annual Inspection and has been determined to be in airworthy condition.

Jeremy McInturff A&P3684045IA

ENGINE LOG BOOK N7857F 25JUL2016 TACH 2766 TSMOH LYCOMING IO-540-KIG5D SN RL-15930-48A

- Removed Top Cowling. Drained 11 quarts, removed filter, cut open & inspected for contaminants, none found. Installed Champion CH48103-1 Filter & 10 quarts AeroShell 100 (1088459 C521 25APR16)
- Removed and cleaned Brackett BA-3 Intake Air Filter and re-installed.
- CW AD2015-19-07 amdt: 39-18269 dated 11/3/15. Prevent failure of the fuel injector lines by visual inspection per Lycoming MSB#342G, NEXT DUE 2866.0.
- Reinstalled Top Cowling.
- Engine run for leak check. All ok.

With respect to the work performed this engine is approved for return to service.

Jeffrey Peterson



18600 Edison Ave. Chesterfield, MO 63005 (636) 536-1341

Engine

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ass

Date: 11/8/2016

Tach: 2805.7

TTE: 5814.2 TSMO: 68.0

Reg: N7857F

S/N: RL-15930-48A

Model: IO-540-K1G5D Drained oil and inspect filter, no metal found. Installed, torqued and safetied new oil filter CH48103-1 Serviced engine with 9 qts Phillips 20W50 X/C. Ran for leak check and operation. Ops check good.

The aircraft identified was inspected and repaired in accordance with current regulations of the FAA and is approved for return to service for the work performed above.

John Behrens A&P 3024389 / W MV2-



18600 Edison Ave. Chesterfield, MO 63005 (636) 536-1341

Engine

Date: 3/13/2017 Reg: N7857F

Tach: 2856.0

TTE: 5864.5 TSMO: 118.3 erations

entries.)

mber of

Model: IO-540-K1G5D

S/N: RL-15930-48A

- Complied with an Annual Inspection in accordance with FAR 43 appendix d
- Replaced induction filter with new bracket P/N BA-3.
- Cleaned and inspected all fuel injectors and reinstalled in original positions.
- Removed, cleaned, gapped and rotated spark plugs. Reinstalled with new gaskets P/N U674.
- Changed oil with 12 quarts 20w50x/c and filter with P/N AA48103-2. Cut open old filter and inspection for contamination was satisfactory. Sent oil sample to Aviation Laboratories for analysis.
- Complied with AD 2015-19-07 Effective Date 11/3/15. per Lycoming Engines Mandatory Service Bulletin (MSB) No. 342G. No defects or discrepancies noted at this time. Due again at 2956.0 hours tach.
- Washed engine, ran for leaks, and operation. No defects at this time.

Pertinent details are on file under WO# 17-2309

I certify that this Engine has been inspected in accordance with an Annual Inspection and is approved for return to service.

Daryl Hanus A&P3309146IA

YEAR 20	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.)	YEAR 20 DATE	RECORDING TACH TIME	TODAY'S FLIGHT	TOTAL TIME IN SERVICE	Description of Inspections, Tests, Repairs and Alteration Entries must be endorsed with Name, Rating and Certificate Number Technician or Repair Facility. (See back pages for other specific entries)
<u>En</u> N7	ngine 7857F ate: 6/5/2017 odel: IO-540-K10 1. Drained oi new oil filt	l and insp	ect oil filter	2915.6 L-15930-48A element. Serviced engine with 12 qts Phillips 20W50 X/C and installed		February 26, 2		7857F L	Aircraft Maintenance Specialties Intehance Opecialties, Inc. 636-248-5748 Lycoming, IO-540-K1G5D, S/N: RL-15930-48A ISN: 6022.8 SMOH: 276.6
	Washed e The aircraft abo	ngine, ran ve was rep for return	for leak che aired in accor to service for	rdance with current Regulations of the Federal Aviation Administration the work performed.		Changed oil and tested and rotate 74 4) 74 5) 71 6) filter P/N BA3. C inspection. Due a engine has been in an airworthy c	ed spark pl 72. Clear hecked all again at 30 inspected ondition. I	viced with 13 lugs. Check ned and insp ADs throug 064.3 or 2-2 I in accorda Details of we	2 qts Phillips 20w50 X/C and CH48103-1. Cleaned, gapped, ed magneto to engine timing. Compression test: 1) 62 2) 72 3) pected fuel screens and injector nozzles. Replaced induction air ph 2018-04. C/W AD 2015-19-07 fuel injection lines by visual 2019. Washed engine and ran for leak check. I certify that this noce with a 100hr / Annual inspection and was determined to be ork performed are on file with Aircraft Maintenance Specialties,
Date	857F e: <u>6/5/2017</u> del: IO-S40-K1G5		100	242.2 -15930-48A		Inc. under work of Kent Lischer A&I			Lest D. hunha
	and installe 2. Washed engineering The aircraft above and is approved for	d new oil gine, ran f e was repai or return to	filter p/n AA or leak chec red in accord	inspect oil filter element. Serviced engine with 12 qts Phillips 20W50 X/C A48103-1. ck, and operation. Idance with current Regulations of the Federal Aviation Administration the work performed.					Engine wo: AMS3490
	Jeremy McInturff	A&P36840	945						

YEAR 20 DATE	RECORDING TACH TIME	TODAY'S FLIGHT	TOTAL TIME IN SERVICE	Entries must be endorsed wi	ions, Tests, Repairs and Alterati ith Name, Rating and Certificate Numbe . (See back pages for other specific entr	r of	EAR 0 ATE	RECORDING TACH TIME	TODAY'S FLIGHT	TOTAL TIME IN SERVICE	Description of Entries must be en Technician or Repa
	IO-54 ENGG RL-1: REG WOFF BA-0 Eng Per Filte Ser Spe C// C// Inst (80) rep 813 81- Insp clar Hos AD are Tigl cab Dav Vall 730	er change) P. viced engine introduced engine int	al/100hr Inspecticant II (Oil Filter Inserting with 11qts Philliphing, gapping, preneto to Engine timew RHM38E spywed and reinstalleur Inspection per A'6/19, Form Track V at this time). Tinspecting Fuel Lines #2, #4, #6, & #53/3/16 @2736.7 Tinspection of Continuity of	vette Street	ler. Installed new CH48103-1 Filter. een Inspection/Cleaning. C/W 100 let Screen inspection and cleaning. eem. Installed new Air Filter Element 78 #2 77 #3 77 #4 78 #5 78 #6 77 560-13, Serial No. C020317 after rgy Systems. See FAA Form AD's 80-17-14, 82-11-05, 5-19-07 Fuel Injector Lines pected Lines, Replaced defective AD 2017-14-04 Oil Cooler ger applicable to hose type C/W Lycoming MSB632B. Effected parts Re-installed Fuel Injector Nozzles d properly attached grounding m with new gaskets after repair by 8. RH Engine Induction Sniffle lider #5 Rigid Oil Drain Line p/n ler reinforcement. Installed New			Connector on Cylinder #6 Int PA-32R-300 M	eit Seal on Li Firewall Re ake Pipe p/n IM Replace d runs. Operati WITH AN ANN	d Oil Cooler Ir emoved Precise LW-12195. Wei ed Scat Tubing	01-4CR0230 Secured Aft (onstalled Terminal Boot Cover is Flight SVS V Stand-by Vacuinght Change Negl Tensione p/n SCAT-12 From Muffler Heactory. I CERTIFY THAT THIS ENINSPECTION AND WAS DETERN IA: 3531609

escription of Inspections, Tests, Repairs and Alterations atries must be endorsed with Name, Rating and Certificate Number of chnician or Repair Facility. (See back pages for other specific entries.) 1, Inc. DATE: 7/1/2018 AVC TSN: 7194.9 ENG TT: 6217.9 TSMOH: 471.7 TACH: 3209.4 Engine. Complied per Lycoming Service Bulletin 480E, Part I (Oil and on). No contamination noted in Filter. Installed new CH48103-1 Filter.	YEAR RO DATE	Secured LH Fe Connector on Cylinder #6 Int	elt Seal on Ll Firewall Re ake Pipe p/n	l Oil Cooler Ins	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. 4CR0230 Secured Aft (out) Vent Fitting on Vacuum Pump talled Terminal Boot Cover p/n MS252171-2S on Starter
reet A/C TSN: 7194.9 ENG TT: 6217.9 TSMOH: 471.7 TACH: 3209.4 Engine. Complied per Lycoming Service Bulletin 480E, Part I (Oil and on) No contamination noted in Filter. Installed new CH48103-1 Filter.		Secured LH Fe Connector on Cylinder #6 Int	elt Seal on Ll Firewall Re ake Pipe p/n	l Oil Cooler Ins	
reet A/C TSN: 7194.9 ENG TT: 6217.9 TSMOH: 471.7 TACH: 3209.4 Engine. Complied per Lycoming Service Bulletin 480E, Part I (Oil and on), No contamination noted in Filter. Installed new CH48103-1 Filter.	-	Secured LH Fe Connector on Cylinder #6 Int	elt Seal on Ll Firewall Re ake Pipe p/n	l Oil Cooler Ins	
on) No contamination noted in Filter. Installed new CH48103-1 Filter.			iwi Replace	LW-12195. Weigh	light SVS V Stand-by Vacuum System. Removed & Replaced ht Change Negl Tensioned Alternator Drive Belt Per n SCAT-12 From Muffler Heat Shroud to Cabin Heat Air Box.
w50XC. C/W 100hr Oil Suction Screen Inspection/Cleaning. C/W 100 e testing. C/W 100hr Fuel Servo Inlet Screen inspection and cleaning. nspection. Inspected Exhaust System. Installed new Air Filter Element lugs. Compression Test Results:#1 78 #2 77 #3 77 #4 78 #5 78 #6 77 agneto D-2000 Series, P/N 10-382560-13, Serial No. C020317 after 05-12-06) by Kelly Aerospace Energy Systems. See FAA Form lo. C020317, W.O. KES1902-71. (AD's 80-17-14, 82-11-05, o Engine mfg specs CW AD 2015-19-07 Fuel Injector Lines erTextron Lycoming MSB 342G. Inspected Lines, Replaced defective h rod tubes (4ea) p/n MS21333-75 AD 2017-14-04 Oil Cooler Type D Hoses installed. AD no longer applicable to hose type C/W ng Rods Small End Bushings per Lycoming MSB632B. Effected parts applicable Removed, Cleaned, Re-installed Fuel Injector Nozzles Flex Hose Clamps Rerouted and properly attached grounding loved and reinstalled exhaust system with new gaskets after repair by n WO 110428) Installed new LH & RH Engine Induction Sniffle //olf Air/Oil Separator. Installed Cylinder #5 Rigid Oil Drain Line p/n bunt at firewall and Installed a doubler reinforcement. Installed New lired the after market Fuel Flow Transducer and installed new hoses p/n		Performed grour ACCORDANCE CONDITION. DATE: 7/1/2019			Work Order: BA-00572-01-2019