

**ENGINE LOG**  
**EP5-1**

# ENGINE DESCRIPTION

MANUFACTURER **LYCOMING**

MODEL **IO-360-EXP(M1B)**

SERIAL NUMBER **L-54528-14E**

DATE OF MANUFACTURE

RATED BHP

RPM

MANIFOLD PRESSURE

FUEL REQUIRED OCTANE/PERFORMANCE

REGISTERED OWNER

STREET NO.

CITY, STATE, ZIP

REGISTERED OWNER

STREET NO.

CITY, STATE, ZIP



# AD COMPLIANCE LIST AT ENGINE OVERHAUL

LYCOMING IO-360-EXP, S/N L-54528-14E ENGINE OVERHAUL W.O. 54528

2012-19-01	N/A BY CRANKSHAFT MANUFACTURER IAW LYCOMING SB 569A.
2012-03-06	N/A BY DIAPHRAGM MANUFACTURER IAW AVSTAR MSB AFS-SB6 REV 2.
2011-26-04	COMPLIANCE IAW MSB 342F, DIAGRAM #3.
2009-26-12	N/A BY CYLINDER MANUFACTURER IAW THIS AD.
2009-02-03	COMPLIANCE IAW PRS-107 R4
2007-04-19 R1	N/A BY CYLINDER MANUFACTURER IAW THIS AD
2006-12-07	N/A BY CYLINDER MANUFACTURER IAW THIS AD.
2006-06-16	N/A BY ENGINE CONFIGURATION IAW SB 566, SUPP.1
2005-19-11	N/A BY ENGINE CONFIGURATION IAW SB 566
2004-10-14	COMPLIANCE BY CRANKSHAFT GEAR AND BOLT P/N'S IAW LYCOMING MSB 475C.
2003-14-03	N/A BY FUEL PUMP TYPE IAW THIS AD
98-17-11	ENGINE TEARDOWN AND INSPECTION CONSTITUTES COMPLIANCE IAW THIS AD
98-02-08	N/A BY ENGINE CONFIGURATION IAW THIS AD.
97-15-11	N/A BY PISTON PIN P/N IAW LYCOMING MSB 527C.
96-23-03	N/A BY MANUFACTURERS DATE CODE IAW THIS AD.
96-09-10	COMPLIANCE BY OIL PUMP IMPELLER MANUFACTURER AND P/N'S IAW LYCOMING MSB 524.
92-12-05	N/A BY PISTON PIN P/N IAW LYCOMING SB 501B.
90-04-06 R1	COMPLIANCE IAW THIS AD
79-04-05	N/A BY PARTS LIST IAW THIS AD

# AD COMPLIANCE LIST AT ENGINE OVERHAUL

LYCOMING IO-360-EXP, S/N L-54528-14E ENGINE OVERHAUL W.O. 54528

78-23-10	N/A BY FUEL INJECTOR PARTS LIST IAW THIS AD
75-09-15	N/A BY FLOW DIVIDER P/N IAW THIS AD
75-08-09	COMPLIANCE IAW MSB 385C
73-23-01	N/A BY PISTON PIN P/N IAW LYCOMING SB 367F.
66-20-04	N/A BY OIL FILTER MANUFACTURER IAW THIS AD
2012-03-06	N/A BY DIAPHRAGM MFG
2009-02-03	COMPLIANCE IAW PRS-107 R4
79-26-03	N/A BY P/N
79-21-08	N/A BY DASH NUMBER
73-10-02	N/A BY DIAPHRAGM P/N
2005-12-06	N/A BY P/N
94-01-03 R2	N/A BY MFG
94-06-09	N/A BY CAPACITOR P/N
82-20-01	N/A BY P/N
74-26-09	N/A BY MODEL NUMBER

*Ly-Con*

# PARTS INSTALLED AT ENGINE OVERHAUL

IO-360-EXP, S/N L-54528-14E ENGINE OVERHAUL WITH THE FOLLOWING PARTS INSTALLED:

QTY	DESCRIPTION	MANUFACTURER	MODEL	PART NO.	SERIAL NO.	CONDITION
1	SEAL & GASKET SET	LYCOMING	N/A	75439-1	N/A	NEW
1	CRANKCASE (SE01954SE)	LYCOMING	IO-360	C11B20061-L C11B20061-R	I.D. = TPD275PT	OVERHAULED
1	CRANKSHAFT	ECI	N/A	AEL36002-1	100147-01	NEW
1	GEAR, CRANKSHAFT	LYCOMING	N/A	13S19646	N/A	INSPECTED
1	BOLT, CRANKSHAFT GEAR	LYCOMING	N/A	STD-2246	N/A	NEW
2	BEARING, CRANKSHAFT NOSE	LYCOMING	N/A	18A26093	N/A	NEW
4	BEARING, CRANKSHAFT MAIN	LYCOMING	N/A	18D26098	N/A	NEW
4	CONNECTING ROD	ECI	N/A	AEL11750-S	N/A	NEW
8	BEARING, CONNECTING ROD	LYCOMING	N/A	18M26105	N/A	NEW
8	BOLT, CONNECTING ROD	SUPERIOR	N/A	SL75061	N/A	NEW
8	NUT, CONNECTING ROD BOLT	ECI	N/A	AEL12186	N/A	NEW
1	CAMSHAFT (ROLLER)	LYCOMING	N/A	LYC-4CYL-280	24383	REGRIND
8	TAPPET BODY (ROLLER)	NFS	N/A	NFS23381FR	N/A	NEW
8	PLUNGER ASSEMBLY	LYCOMING	N/A	15B26066	N/A	NEW
3	PUSH RODS	LYCOMING	N/A	15F19957-36	N/A	NEW

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QTY	DESCRIPTION	MANUFACTURER	MODEL	PART NO.	SERIAL NO.	CONDITION
5	PUSH RODS	LYCOMING	N/A	15F19957-31	N/A	NEW
8	SHROUD TUBES	LYCOMING	N/A	15G23461	N/A	NEW
8	SOCKET	LYCOMING	N/A	15B21319	N/A	NEW
1	HARDWARE KIT	LYCOMING	N/A	LYC4CYL	N/A	NEW
1	SEAL ASSEMBLY, NOSE	LYCOMING	N/A	LW-13792	N/A	NEW
1	VERNATHERM	SUPERIOR	N/A	SL53E19600	N/A	NEW
1	BALL, 11/16 DIA.	LYCOMING	N/A	1028-B	N/A	NEW
1	SHAFT, CRANK IDLER GEAR	SUPERIOR	N/A	SL13796	N/A	NEW
1	GEAR ASSY, CRANK IDLER	SUPERIOR	N/A	SL75072	N/A	NEW
1	IDLER GEAR	SUPERIOR	N/A	SL74996	N/A	NEW
1	GEAR, VACUUM PUMP DRIVEN	SUPERIOR	N/A	SL72970	N/A	NEW
1	SPRING, OIL BYPASS RELIEF	LYCOMING	N/A	61084	N/A	NEW
1	TACH SHAFT	SUPERIOR	N/A	SL76121	N/A	NEW
1	RETAINING RING	LYCOMING	N/A	STD-2231	N/A	NEW
1	RETAINING RING	LYCOMING	N/A	STD-1221	N/A	NEW

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QTY	DESCRIPTION	MANUFACTURER	MODEL	PART NO.	SERIAL NO.	CONDITION
3	BOLT, 5/16-18 x 7/8 LONG HEX HD.	LYCOMING	N/A	LW-31H0.88	N/A	NEW
1	ADAPTER, PROP GOVERNOR	SUPERIOR	N/A	SL75545	N/A	NEW
1	CLIP, PROP GOVERNOR OIL LINE	LYCOMING	N/A	75165	N/A	NEW
1	PROP GOVERNOR OIL LINE	E.C.I.	N/A	AEL75167	N/A	NEW
1	SHAFT GEAR, PROP GOV DRIVE	SUPERIOR	N/A	SL68317	N/A	NEW
1	ACCESSORY HOUSING ASSY	SUPERIOR	N/A	SL76110	N/A	NEW
1	OIL PUMP HOUSING	E.C.I.	N/A	AEL78531	N/A	NEW
1	GEAR, OIL PUMP DRIVING	SUPERIOR	N/A	SL18109	N/A	NEW
1	GEAR, OIL PUMP DRIVEN	SUPERIOR	N/A	SL18110	N/A	NEW
1	SHAFT, OIL PUMP DRIVE	SUPERIOR	N/A	SL61174A	N/A	NEW
1	ADAPTER, VACUUM PUMP	SUPERIOR	N/A	SL61098	N/A	NEW
4	CYLINDER	LYCOMING	N/A	LW-12427	AO16137, AO151316, AO16134, AO231317	NEW
4	PISTON	NFS	N/A	L-410	N/A	NEW
4	PIN, PISTON	SUPERIOR	N/A	SL13444-1	N/A	NEW
4	VALVE, EXHAUST	LYCOMING	N/A	17B23936	N/A	NEW



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QTY	DESCRIPTION	MANUFACTURER	MODEL	PART NO.	SERIAL NO.	CONDITION
4	VALVE, INTAKE	LYCOMING	N/A	17A23938	N/A	NEW
4	ROCKER, EXHAUST	LYCOMING	N/A	19357	N/A	OVERHAULED
4	ROCKER, INTAKE	LYCOMING	N/A	19357	N/A	OVERHAULED
8	BUSHING, ROCKER	SUPERIOR	N/A	SL74637	N/A	NEW
4	ROCKER SHAFT	SUPERIOR	N/A	SL13790A	N/A	NEW
8	SHAFT BUTTON	SUPERIOR	N/A	SL12892	N/A	NEW
4	ROCKER COVER	LYCOMING	N/A	61247	N/A	NEW
1	HOUSING, ADJUSTABLE OIL	NFS	N/A	NFSL-9902	N/A	NEW
1	NIPPLE, OIL PRESSURE	LYCOMING	N/A	02G21382	N/A	NEW
2	SPACER	LYCOMING	N/A	74887	N/A	NEW
1	SPACER	LYCOMING	N/A	73161	N/A	NEW
1	GROMMET	LYCOMING	N/A	MS35489-20	N/A	NEW
1	HOSE .38 ID x 1.00 LG	LYCOMING	N/A	STD-1930	N/A	NEW
1	NUT, 5/16-18 NC-3 SLOTTED SHEAR	LYCOMING	N/A	STD-2168	N/A	NEW
18	NUT, 1/2-20 PLAIN	LYCOMING	N/A	STD-2090	N/A	NEW

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10-360-EXP, S/N L-54528-14E ENGINE OVERHAUL WITH THE FOLLOWING PARTS INSTALLED:

QTY	DESCRIPTION	MANUFACTURER	MODEL	PART NO.	SERIAL NO.	CONDITION
16	NUT, 3/8-24 PLAIN	LYCOMING	N/A	383-B	N/A	NEW
6	NUT, 10-32 SELF LOCKING	LYCOMING	N/A	MS21044N3	N/A	NEW
6	SCREW, 10-32 x 5/8	LYCOMING	N/A	STD-860	N/A	NEW
4	SCREW, 10-24 x 1/2	LYCOMING	N/A	STD-82	N/A	NEW
24	SCREW	LYCOMING	N/A	STD-1925	N/A	NEW
4	DRIVE STUD	LYCOMING	N/A	STD-1901	N/A	NEW
4	THRUBOLT	ECI	N/A	AEL76220	N/A	NEW
1	LIFTING STRAP	LYCOMING	N/A	60803	N/A	NEW
1	BRACKET	NFS	N/A	NFSLPFDB	N/A	NEW
4	PLUG	LYCOMING	N/A	STD-1339	N/A	NEW
9	PLUG	LYCOMING	N/A	1102	N/A	NEW
6	CLAMP	LYCOMING	N/A	LW-16266-10-13	N/A	NEW
6	CLAMP	LYCOMING	N/A	LW-16266-10-75	N/A	NEW
1	CLAMP	LYCOMING	N/A	LW-16266-25-38	N/A	NEW
2	BRACKET, 90 DEG.	LYCOMING	N/A	73136	N/A	NEW

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QTY	DESCRIPTION	MANUFACTURER	MODEL	PART NO.	SERIAL NO.	CONDITION
2	BAFFLE ASSEMBLY	LYCOMING	N/A	75339	N/A	NEW
1	BOLT	LYCOMING	N/A	LW-25-0.50	N/A	NEW
1	NIPPLE	LYCOMING	N/A	AN816-8	N/A	NEW
1	ELBOW	LYCOMING	N/A	74070	N/A	NEW
1	ELBOW	LYCOMING	N/A	MS20822-4	N/A	NEW
1	ELBOW	LYCOMING	N/A	MS20822-6	N/A	NEW
1	FITTING	LYCOMING	N/A	MS20823-8-4D	N/A	NEW
1	ELBOW	LYCOMING	N/A	AN844-10D	N/A	NEW
4	ELBOW, UNION	LYCOMING	N/A	AN791-2	N/A	NEW
8	CLAMP, HOSE	LYCOMING	N/A	LW-15592-5-05	N/A	NEW
8	CLAMP, HOSE	LYCOMING	N/A	LW-15592-8-28	N/A	NEW
4	HOSE, CYL DRAIN BACK	LYCOMING	N/A	STD-1821	N/A	NEW
1	TUBE, OIL DRAINBACK	SUPERIOR	N/A	SL68759	N/A	NEW
1	TUBE, OIL DRAINBACK	SUPERIOR	N/A	SL68760	N/A	NEW
2	TUBE, OIL DRAINBACK	SUPERIOR	N/A	SL68761	N/A	NEW

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QTY	DESCRIPTION	MANUFACTURER	MODEL	PART NO.	SERIAL NO.	CONDITION
1	GAGE, OIL LEVEL	LYCOMING	N/A	LW-16783-18	N/A	NEW
1	TUBE, OIL LEVEL GAGE	LYCOMING	N/A	75736	N/A	NEW
1	PLUG, OIL COOLER BYPASS	LYCOMING	N/A	62417	N/A	NEW
1	SUMP, COLD AIR INDUCTION	SUPERIOR	N/A	SV78950	J0327	NEW
2	RETAINER, CYLINDER BAFFLE	LYCOMING	N/A	71611	N/A	NEW
2	HOOK	LYCOMING	N/A	71610	N/A	NEW
1	ADAPTER, MAGNETO	LYCOMING	N/A	LW-12706	N/A	NEW
1	LEFT MAGNETO (DIRECT COUPLED)	TCM	S4LSC-21	10-500514-1	LY43906	OVERHAULED
1	MAGNETO, RIGHT (DIRECT COUPLED)	TCM	S4LSC-204	BL-600644-1	E14CA225R	NEW
1	HARNES	SLICK	N/A	M2364	N/A	NEW
1	PLUNGER, FUEL PUMP	SUPERIOR	N/A	SL61544	N/A	NEW
1	FUEL PUMP	LYCOMING	N/A	LW-15473	H1613	NEW
1	TUBE ASSEMBLY, FUEL	A.E.R.O.	N/A	APS12098-110	N/A	NEW
1	TUBE ASSEMBLY, FUEL	A.E.R.O.	N/A	APS12098-140	N/A	NEW
2	TUBE ASSEMBLY, FUEL	A.E.R.O.	N/A	APS12098-220	N/A	NEW

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QTY	DESCRIPTION	MANUFACTURER	MODEL	PART NO.	SERIAL NO.	CONDITION
4	NOZZLE, FUEL INJECTION	PRECISION	N/A	2524864-2	N/A	NEW
1	FUEL INJECTOR SERVO	PRECISION	RSA-5AD1	2524054-11	LY43576	OVERHAULLED
1	FLOW DIVIDER	BENDIX	N/A	2524232-2	515K	OVERHAULLED
8	SPARK PLUGS	CHAMPION	N/A	REM37BY	N/A	NEW
1	STARTER	SKY-TEC	N/A	149-12LS	F2L-281430	NEW
1	OIL FILTER	CHAMPION	N/A	CH48110-1	N/A	NEW
1	ADAPTER, OIL FILTER	DONALDSON INDUSTRIES	N/A	204418-156	N/A	NEW

THE LYCOMING IO-360-EXP, S/N L-54528-14E ENGINE IDENTIFIED ABOVE HAS BEEN OVERHAULLED IN ACCORDANCE WITH CURRENT FAA REGULATIONS AND IS APPROVED FOR RETURN TO SERVICE. ENGINE CRANKCASE WAS MODIFIED, AT THE TIME OF ENGINE ASSEMBLY WITH AN O-RING SEAL IAW LYCON STC SE01954SE. TEST CELL TIME, 1.6 HOURS. DETAILS OF THIS WORK ARE ON FILE AT THIS REPAIR STATION UNDER WORK ORDER 54528, DATED 04/12/14.

*Ly-Con*

# INSPECTION & MAINTENANCE RECORD

INSPECTION OR MAINTENANCE PERFORMED  
AGENCY & CERTIFICATE NO.

DATE	TOTAL TIME	
05-11-2015	1.5	First engine run at approx 15 min. Engine started easily and no leaks or problems noted.
8-18-15	11.9	changed oil + oil filter. Serviced with 2 qts of Exxon Elite and CH 48110-1 Filter. 3372595
11-30-15	3.15	changed oil + filter. Serviced with 8 qts Exxon Elite and CH 48110-1 Filter. 3372595
10-13-		

# INSPECTION & MAINTENANCE RECORD

INSPECTION OR MAINTENANCE PERFORMED  
AGENCY & CERTIFICATE NO.

DATE	TOTAL TIME	
6-21-16	Tach 50.5	Aircraft Total Time 50.5 Compression 1) 78/80 2) 77/80 3) 77/80 4) 78/80 Performed inspection on engine. Cleaned and replaced air filter and fuel filter. Checked timing to 25° BTDC Ben Felix 7/6/16 3871197 Repiman Experimental Aircraft Builders
8-19-16	Eng Tach 62.6	Changed oil & filter. Serviced with 8 qts Exxon Elite and CH-48110-1 filter. Ben Felix 3372595
4-14-17	Eng Tach 44.5 94.5	Changsed oil & filter. Serviced with 7 qts Exxon Elite, 16 oz Cam Guard and CH-48110-1 filter 7/6/16 3871197

# INSPECTION & MAINTENANCE RECORD

INSPECTION OR MAINTENANCE PERFORMED  
AGENCY & CERTIFICATE NO.

DATE	TOTAL TIME	
7-2-17	102.6	<p>Performed inspection on engine. Cleaned  <del>air</del> air filter and fuel filter. Cleaned                      spark plugs. Checked timing to 250 BTDC                      Installed pressure snubber PS-86 from Omega                      in manifold pressure line                      Compression 1) 75/80 2) 76/80 3) 74/80 4) 25/80                      Ken Felix 761-441-3871197                      Repairman Experimental Aircraft Builder</p>
10-18-17	124.4	<p>Changed engine oil + oil filter. Serviced with                      7 qts Exxon Elite 1 10 02 of Castrol                      and CH-48110-1 Filter <del>3871197</del> 3871197</p>



# INSPECTION & MAINTENANCE RECORD

INSPECTION OR MAINTENANCE PERFORMED  
AGENCY & CERTIFICATE NO.

DATE	TOTAL TIME	
7-26-18	167	Performed inspection on engine. Cleaned and gapped spark plugs. Compression 1 74/80 2 75/80 3 76/80 4 78/80 Changed engine oil and Filter and serviced with 2 qts Exxon Elite and 12 oz Can Guard, Hen Felix 3871197
1-26-19	200.4	Changed engine oil and Filter and serviced with 7 qts Exxon Elite and 12 oz Can Guard Hen Felix 3871197
1-15-20	240.0	Changed engine oil and Filter and serviced with 7 qts Exxon Elite and 12 oz Can Guard Hen Felix 3871197
		Hen Felix Repairman Experimental Aircraft Builder

# INSPECTION & MAINTENANCE RECORD

INSPECTION OR MAINTENANCE PERFORMED  
AGENCY & CERTIFICATE NO.

DATE	TOTAL TIME	INSPECTION OR MAINTENANCE PERFORMED AGENCY & CERTIFICATE NO.
8-24-19	2 1/2	Performed inspection on engine. Cleaned and gapped spark plugs. Compression 1 25/80 2 25/80 3 20/80 4 24/80 Cleaned and reinstalled air cleaner Men Felix T/A 3871197 Repairman Experimental Aircraft Builders
5-23-20	258.8	Replaced spark plugs with new Champion REM 37 134 Men Felix T/A 3871197 Repairman Experimental Aircraft Builders
9-17-20	282	Performed inspection on engine Compression 1 22/80 2 27/80 3 24/80 4 27/80 Men Felix T/A 3871197 Repairman Experimental Aircraft Builders
9-17-20	282	Changed engine oil & filter and serviced with 2 gal AeroShell 15W-50 and Champion 48110-1 Filter - T/A Felix

