

INSPECTION & MAINTENANCE RECORD

DATE

TOTAL
TIME

INSPECTION OR MAINTENANCE PERFORMED
AGENCY & CERTIFICATE NO.

WALLIN AGRI AVIATION

N440EM S/N 13503 A/C TT: 588.304/23/2017

PERFORMED 100 HOUR INSPECTION IN ACCORDANCE WITH ROBINSON R44 MAINTENANCE MANUAL. WASHED AND INSPECTED AIRFRAME, CHANGED ENGINE OIL AND REPAVED OIL FILTER, INSPECTED ALL SPARK PLUGS, CHECKED MAGNETO TIMING, INSPECTED CHIP DETECTORS. I CERTIFY THIS AIRCRAFT HAS BEEN INSPECTED IN ACCORDANCE WITH A 100 HOUR INSPECTION AND FOUND TO BE IN AIRWORTHY CONDITION.

MICHAEL L. WALLIN A&P

INSPECTION & MAINTENANCE RECORD

DATE	TOTAL TIME	INSPECTION OR MAINTENANCE PERFORMED AGENCY & CERTIFICATE NO.	
MAKE ROBINSON HELICOPTER COMPANY	MODEL R44 II	SERIAL NUMBER 13503	REGISTRATION N440EM
TOTAL TIME 630.57		TACH TIME 630.57	TIME SINCE O/H N/A

COMPLETED VISUAL INSPECTION REQUIREMENTS OF AD2016-26-04 THIS DATE IN ACCORDANCE WITH REQUIRED ACTIONS ITEMS (C)(1) AND (C)(2) OF AIRWORTHINESS DIRECTIVE AND REQUIREMENTS OF ROBINSON R44 SERVICE BULLETIN SB-89 DATED 30 MARCH 2015 COMPLIANCE PROCEDURE STEP #3 TO VERIFY NO CRACKS, DAMAGE AND/OR CORROSION AS SHOWN IN FIGURE 1 OF SB-89 IS PRESENT.

4-7-2017

KEVIN JACKSON AP/IA



Robinson R44 Raven II N440EM S/N 13503 ACTT: 631.8 04/16/2017

Performed 100 hour/300 hour/ annual inspection in accordance with the Robinson R44 Maintenance manual CH 2.40.
Performed 300 Hour lubrication of C181-3 bearing and changed hydraulic filter. Complied with Robinson Helicopter SB90 by installing airspeed placard PN G654-6. I certify this aircraft has been inspected in accordance with an annual inspection and was determined to be in an airworthy condition.

Jeffery D Houseman A&P IA

Ty W Prantl A&P

INSPECTION & MAINTENANCE RECORD



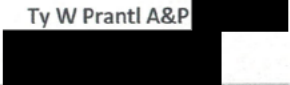
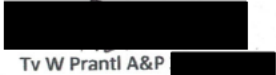
Robinson R44 Raven II N440EM S/N 13503 ACTT: 631.8 04/16/2017

I certify that this spray system has been inspected in accordance with the 100HR/Annual requirements of the simplex (ICA) PM011-HPR44III-25-007, Revision 7, dated February 4, 2013 and was determined to be in an airworthy condition.

Jeffery D Houseman A&P IA [REDACTED]

Ty W Prantl A&P IA [REDACTED]

INSPECTION & MAINTENANCE RECORD

DATE	TOTAL TIME	INSPECTION OR MAINTENANCE PERFORMED AGENCY & CERTIFICATE NO.
4/16/2017		 Robinson R44 Raven II N440EM Lycoming IO-540-AE1A5 S/N L-35321-48E Eng TT:631.8 Performed 100 hour inspection in accordance with the Lycoming Operations manual. Drained oil, removed/inspected filter, installed new AA48108-2 filter and refilled with 9 quarts of 20W50XC in accordance with Lycoming SB 480E. Complied with SI 1129B by checking alternator belt tension. Complied with Lycoming SB388E by removing all exhaust valves, reaming valve guides and reinstalling valves. Complied with Lycoming SI 1080C Special items inspections. Complied with Lycoming SI 342F by inspecting fuel injection lines. Checked mag timing in accordance with TCM SB 643B. Complied with Lycoming SI 1191A by checking cylinder compression #1 76/80 #2 73/80 #3 70/80 #4 76/80 #5 73/80 #6 72/80, Tested/cleaned and reinstalled plugs. Removed air filter cleaned and reinstalled. Removed, cleaned and reinstalled Gascolator screen. No outstanding AD's at this time. I certify this engine has been inspected in accordance with a 100 hour inspection and was found to be in an airworthy condition. Ty W Prantl A&P 
		 Lycoming IO-540-AE1A5 SN L-3521-48E ACTT: 668.6 02/09/2018 Performed 100HR inspection as per the Lycoming operations and Maintenance manual. Drained engine oil, removed/inspected filter (no defects noted). Installed new filter PN AA48108-2 and reserviced with 8 quarts of Phillips 20W50XC as per SB 480E. Complied with Lycoming SI 1080C. Inspected fuel lines per SB342F. Checked alternator belt tension as per Lycoming SI 1129B. Performed compression check as per SI 1191 #1 75/80 #2 76/80 #3 75/80 #4 77/80 #5 76/80 #6 76/80. Removed, cleaned, tested plugs and reinstalled. Checked mag timing. Cleaned gascolator screen. Removed and replaced C771-1 air filter. Run up leak check good. No all AD's current thru 2018-02. I certify this engine has been inspected in accordance with a 100HR inspection and was determined to be in airworthy condition at this time. Ty W Prantl A&P 

INSPECTION & MAINTENANCE RECORD

DATE	TOTAL TIME	INSPECTION OR MAINTENANCE PERFORMED AGENCY & CERTIFICATE NO.
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Lycoming IO-540-AE1A5 SN L-3521-48E ACTT: 768.6 06/22/2018

Performed 100HR inspection as per the Lycoming operations and Maintenance manual. Drained engine oil, removed/inspected filter (no defects noted). Installed new filter PN AA48108-2 and reserviced with 8 quarts of Phillips 20W50XC as per SB 480E. Complied with Lycoming SI 1080C. Inspected fuel lines per SB342F and AD 2015-17-07. Checked alternator belt tension as per Lycoming SI 1129B. Performed compression check as per SI 1191 #1 76/80 #2 77/80 #3 75/80 #4 74/80 #5 75/80 #6 70/80. Removed spark plug and installed new units PN UREM38E. Checked mag timing. Cleaned gascolator screen. Removed and replaced C771-1 air filter. Replaced engine driven fuel pump with new unit PN LW15473. All work performed in accordance with the current Lycoming operations and maintenance manual. Run up leak check good. No all AD's current thru 2018-12. I certify this engine has been inspected in accordance with a 100HR inspection and was determined to be in airworthy condition at this time.

Ty W. Prantl A&P

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INSPECTION & MAINTENANCE RECORD

DATE	TOTAL TIME	INSPECTION OR MAINTENANCE PERFORMED AGENCY & CERTIFICATE NO.
	Lycoming IO-540-AE1A5 SN L-3521-48E ACTT: 876.2 07/16/2018	Performed 100HR inspection as per the Lycoming operations and Maintenance manual. Drained engine oil, removed/inspected filter (no defects noted). Installed new filter PN AA48108-2 and reserviced with 8 quarts of Phillips 20W50XC as per SB 480E. Complied with Lycoming SI 1080C. Inspected fuel lines per SB342F and AD 2015-17-07. Checked alternator belt tension as per Lycoming SI 1129B. Performed compression check as per SI 1191 #1 78/80 #2 78/80 #3 77/80 #4 75/80 #5 76/80 #6 70/80. Removed spark plugs, cleaned, tested and reinstalled. Checked mag timing.. C/W SB388-C by reaming all Exhaust valve guides. All work performed in accordance with the current Lycoming operations and maintenance manual. Run up leak check good. No all AD's current thru 2018-14. I certify this engine has been inspected in accordance with a 100HR inspection and was determined to be in airworthy condition at this time. Jeffery Dean Houseman A&P [Redacted Signature]
	N440EM Robinson R44 Raven II SN 13503 ACTT: 876.2 07/26/2018	Complied with 100HR inspection per the Robinson Helicopter Maintenance Manual Chapter 2.410. Installed new air filter C771-2, cleaned and inspected gascolator, reassembled and checked for leaks. Cleaned and inspected blades and repainted leading edge. All AD's current thru 2018-14. I certify this aircraft has been inspected in accordance with an 100HR/Annual inspection and was determined to be in an airworthy condition at this time. Jeffery Dean Houseman A&P [Redacted Signature]

INSPECTION & MAINTENANCE RECORD

DATE	TOTAL TIME	INSPECTION OR MAINTENANCE PERFORMED AGENCY & CERTIFICATE NO.
12-14-18	983.0	Lycoming 19-S49-AE1AS SN L-3521-48 ACTT 983.0
		Performed 100 hr inspection as per the Lycoming ops and maintenance manual. Drained oil, removed/inspected filter (no defects noted).
		Installed new filter PN AA48108-2 and serviced with Phillips
		20W50XC as per SB 480E. Complied with Lycoming SI 1080C
		Inspected fuel lines per SB342F 480E . Performed compression check
		1) 78/79 2) 79/80 3) 79/79 4) 76/77 5) 76/80 6) 71/80
		Removed and cleaned spark plugs. Checked mag timing.
		Run up leak check good. I certify that this engine has
		been inspected IAW a 100hr inspection and was determined to
		be in an airworthy condition at this time
		Jason Lauer Sanders Att [REDACTED]
		[REDACTED]

INSPECTION & MAINTENANCE RECORD

Lycoming IO-540-AE1A5 SN L-3521-48E Eng TT: 1080.2

Complied with 100 Hour inspection as per Lycoming MM. Checked all AD's. Checked all company fluid levels. Drained oil, installed new oil and filter PN AA48108-2 and serviced with 8 qt of Phillips 20w50XC as per SB 480E. No defects noted in old filter. Installed overhauled Left Magneto P/N 10-600616-9 and Right magneto P/N 10-6000646-201, timed magnetos to 20* BTDC. Installed O/H starter P/N BC315-100-4. Cleaned and inspected spark plugs. Performed compression check. 1)77. 2)79. 3)78. 4)76. 5)77. 6)73. No defects noted in run up and leak check. I certify this engine has been inspected in accordance with a 100 hour inspection and found to be airworthy.

Jackie L Sanders Jr A&P

LYCOMING

New Reciprocating Engine Certificate

This is to certify that the engine as described hereinafter has been manufactured and ground operation tested as prescribed by Lycoming specification and Federal Aviation Regulations. All applicable Federal Aviation Airworthiness Directives applicable Lycoming Service Publications have been complied with at time of manufacture. Refer to enclosed Form ET001 for applicable accessory part numbers and serial numbers.

Serial Number L-35321-48E
Engine Model IO-540-AE1A5
Work Order [REDACTED]
Total Time 0 New

Form 777C Rev 07/12

[REDACTED]
Authorized Representative

9/24/12
Date

Production Certificate #3
652 Oliver Street Williamsport, PA 17701 U.S.A
Lycoming Engines is a division of Avco Corporation

ENGINE DESCRIPTION

MANUFACTURER LYCOMING MODEL IO-540-AE1A5
SERIAL NUMBER L-35321-48E DATE OF MANUFACTURE 24 SEPT 2012

RATED BHP _____ RPM _____ MANIFOLD PRESSURE _____

FUEL REQUIRED OCTANE/PERFORMANCE 100LL

REGISTERED OWNER _____

STREET NO. _____

CITY, STATE, ZIP _____

REGISTERED OWNER _____

STREET NO. _____

CITY, STATE, ZIP _____

R44 II

ENGINE ACCESSORIES INSTALLED

OIL COOLER	MEGGITT / STEWART WARNER	S/N <u>6034</u>
OIL COOLER (SMALL)	MEGGITT / STEWART WARNER	S/N <u>2708</u>
RIGHT MAGNETO	TCM AIRCRAFT PRODUCTS DIV.	S/N <u>E12HA061</u>
LEFT MAGNETO	TCM AIRCRAFT PRODUCTS DIV.	S/N <u>E12HA036</u>
ALTERNATOR	HARTZELL ENGINE TECHNOLOGIES	S/N <u>H-M091253</u>
STARTER	B & C SPECIALTY PRODUCTS	S/N <u>1112241125</u>
FUEL CONTROL	AVSTAR	S/N <u>AV022416</u>

IP SBR

INSTALLATION RECORD

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AIRWORTHINESS DIRECTIVE/FACTORY BULLETIN COMPLIANCE RECORD

A.D./BULL. NUMBER	ITEM AFFECTED	DATE & HRS. AT COMP.	METHOD OF COMPLIANCE	TYPE OF A.D. 1 TIME/RECUR.	NEXT COMP. DATE/HRS./CYCLE	AUTHORIZED SIGNATURE CERTIFICATE NO.
Lycoming SB 342	Injector Fuel Lines	JUN 3 '13 0	New lines and clamps installed	Recur	100 Hr or Annual	RHC PC424WE
Lycoming SB 388	Valve Stem Clearance	JUN 3 '13 0	New engine installed	Recur	300.0	RHC PC424WE
Lycoming SB 480	Oil Change	JUN 3 '13 4.04	Changed oil	Recur	29.04 hours or 4 months	RHC PC424WE
95-07-01	Connecting Rod Bolts	JUN 3 '13 0	Mfg'd by Lycoming	1 Time	N/A	RHC PC424WE
96-09-10	Sintered Iron Impeller	JUN 3 '13 0	Complied with by Mfg	1 Time	N/A	RHC PC424WE
96-23-03	Fuel Pumps	JUN 3 '13 0	N/A by D.O.M.	1 Time	N/A	RHC PC424WE
98-18-12	Fuel Pumps	JUN 3 '13 0	N/A by pump model	1 Time	N/A	RHC PC424WE
2000-18-53	Oil Filter Plate	JUN 3 '13 0	Converter plate not installed	1 Time	N/A	RHC PC424WE
2004-05-24	Crankshaft Gear Bolt	JUN 3 '13 0	Complied with by Lycoming	1 Time	N/A	RHC PC424WE
2004-10-14	Crankshaft Gear	N/A 0	N/A	Recur	Sudden Stoppage, or Gear Train Repair	RHC PC424WE
2005-12-06	TCM Magnetos	JUN 3 '13 0	N/A by Series	1 Time	N/A	RHC PC424WE
2005-19-11	Crankshaft	JUN 3 '13 0	N/A per SB 566	1 Time	N/A	RHC PC424WE
2009-02-03	RSA-10 Fuel Servo	JUN 3 '13 0	Part No. 2577258 Gasket installed	1 Time	N/A	RHC PC424WE
2011-26-04	Injector Fuel Lines	JUN 3 '13 0	New lines and clamps installed	Recur	100 Hr/Annual or at Overhaul	RHC PC424WE
2012-03-06	RSA-10 ADI Fuel Servo	JUN 3 '13 0	N/A by P/N	1 Time	N/A	RHC PC424WE
2012-19-01	Crankshaft	JUN 3 '13 0	N/A by Eng S/N	1 Time	N/A	RHC PC424WE

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6-7-2013	25.25	Drained oil. Removed and inspected filter (C/W SB 480) Installed new CH48108 filter & re-filled with 9 qts Phillips 25/50 XC Run up and leak check good. Removed faulty CHT Probe and installed new 3080-38 probe. Functional check good
		[Redacted Signature]



N440EM

S/N 13503

ACTT: 49.5

08/16/2013

Drained oil, removed and inspected filter (Lycoming SB 480E) no contaminants found, refilled with 9 qts
Phillips 20W50, installed new CH48108-2 filter. Run up and leak checked good.

Complied with Robinson SB-86 rotor tach magnet inspection and application of adhesive.

Jeffery Dean Houseman A&P [Redacted Signature]

INSPECTION & MAINTENANCE RECORD

DATE	TOTAL TIME	INSPECTION OR MAINTENANCE PERFORMED AGENCY & CERTIFICATE NO.
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N440EM Lycoming IO-540-AE1A5 S/N L-35321 03/15/2014 EngTT: 106.9

Performed 100 hour inspection in accordance with Lycoming Operations manual. Drained oil, removed and inspected filter (no defects noted), installed new AA48108-2 filter and refilled with 9 quarts Phillips 20W50 oil. Removed, cleaned and inspected all spark plugs and reinstalled. Checked magneto timing 20* BTC. Checked compression #1 80/80 #2 78/80 #3 79/80 #4 79/80 #5 80/80 #6 78/80. Removed exhaust clamp under #4 cylinder and resealed. C/W SB388C by inspection of exhaust valve clearance, all measurements within limits. C/W SB342F by inspection of injection lines, no defects. Engine run up and leak check performed with no faults noted.

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

Jeffery Dean Houseman A&P

9/14/14	152.5	Drained oil removed and inspected filter per SB 488 Installed new AA48108-2 filter and filled with 8qts Phillips 20/50 XC Run up and leak check good

INSPECTION & MAINTENANCE RECORD

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TIME

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AGENCY & CERTIFICATE NO.



N440EM Lycoming IO-540-AE1A5 S/N L-35321 10/06/2014 EngTT: 178.0

Performed 100 hour inspection in accordance with Lycoming Operations manual. Drained oil, removed and inspected filter (no defects noted), installed new AA48108-2 filter and refilled with 9 quarts Phillips 20W50 oil. Removed, cleaned and inspected all spark plugs and reinstalled. Checked magneto timing 20* BTC. Checked compression #1 78/80 #2 78/80 #3 78/80 #4 77/80 #5 75/80 #6 78/80. C/W AD2011-26-04 (Jan 25, 2012) SB342F by inspection of injection lines, no defects. Engine run up and leak check performed with no faults noted.

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

[Redacted Signature]
Jeffery Dean Houseman A&P [Redacted]



N440EM Lycoming IO-540 TT:250.8 11/11/2014

Drained oil, removed and inspected filter (no defects) installed new AA48108-2 filter and refilled with 9 quarts Phillips 20/50 XC. Engine run up and leak check with no defects.

[Redacted Signature]
Jeffery Dean Houseman A&P [Redacted]

INSPECTION & MAINTENANCE RECORD

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INSPECTION & MAINTENANCE RECORD

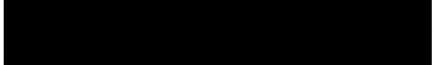
DATE	TOTAL TIME	INSPECTION OR MAINTENANCE PERFORMED AGENCY & CERTIFICATE NO.
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N440EM Lycoming IO-540-AE1A5 S/N L-35321 06/14/2015 EngTT: 378.9

Performed 100 hour inspection in accordance with Lycoming Operations manual. Drained oil, removed and inspected filter (no defects noted), installed new AA48108-2 filter and refilled with 9 quarts Phillips 20W50 oil. Removed, cleaned and inspected all spark plugs and reinstalled. Checked magneto timing 20* BTC. Checked compression #1 75/80 #2 74/80 #3 75/80 #4 74/80 #5 72/80 #6 75/80. C/W AD2011-26-04 (Jan 25, 2012) SB342F by inspection of injection lines, no defects. Installed new C771-2 air filter. Replaced bent push rod and tube on #3 cylinder with new gaskets. Removed exhaust for compliance with SB388, (reamed all guides) reinstalled exhaust. Engine run up and leak check performed with no faults noted.

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


 Jeffery Dean Houseman A&P 

INSPECTION & MAINTENANCE RECORD

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