

# ENGINE DESCRIPTION

MANUFACTURER Lycoming MODEL AEIO-540-EXP

SERIAL NUMBER K-51198-03 DATE OF MANUFACTURE \_\_\_\_\_

RATED BHP 260 RPM 2700 MANIFOLD PRESSURE 24<sup>in</sup>

FUEL REQUIRED OCTANE/PERFORMANCE 100 LL

REGISTERED OWNER Mach Aviation

STREET & NO. \_\_\_\_\_

CITY, STATE, ZIP \_\_\_\_\_

REGISTERED OWNER \_\_\_\_\_

STREET & NO. \_\_\_\_\_

CITY, STATE, ZIP \_\_\_\_\_



# AIRWORTHINESS DIRECTIVE / FACTORY BULLETIN COMPLIANCE RECORD

NCY  
NO.

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.
<b>AD COMPLIANCE LIST = AEIO-540-EXP S/N L-51198-03;</b>  73-23-01R4 = NA BY MANUFACTURE 78-23-10 = NA BY MODEL 79-04-05 = NA BY MODEL 87-10-06R1 = NA BY PART NUMBER 91-14-22 = CW IAW SB475C 92-12-05 = NA BY MANUFACTURE 96-23-03 = NA BY SERIAL NUMBER #154735002 97-15-11 = NA BY MANUFACTURE 98-18-12 = NA BY MODEL 2002-23-06 = CW IAW SB554 2002-26-01 = CW IAW MSB342D  WORK ORDER NO. <u>51198</u> DATE: <u>05/07/03</u>  LY-CON REBUILDING CO.      (559) 651-1070						
02-26-01 SB342D	Fuel Line	05.04.05 099.4 HRS	Visual Check	Recur.	Next 100 HRS OR ANNUAL	Baki OLCAY #3892 <i>Baki</i>
SB518C	Thermostatic 94 Pass Valve	05.04.05 099.4 HRS	Inspected	Recur.	Next ANNUAL	Baki OLCAY #3892 <i>Baki</i>
02-26-01 SB342D	FUEL LINE	26.03.06 138.2	Visual	Recur	100 HRS/ ANNUAL	Hakan Kaygun 2181 <i>Kaygun</i>
SB518C	BYPASS VAL	26.03.06 138.2	Inspection	Recur	ANNUAL	Hakan Kaygun 2181 <i>Kaygun</i>



## INSPECTION &amp; MAINTENANCE RECORD



RE

DATE	TOTAL TIME	INSPECTION OR MAINTENANCE PERFORMED AGENCY & CERTIFICATE NO.
		<p>LYCOMING AEIO-540-EXP S/N L-51198-03 MAJOR ENGINE OVERHAUL WITH THE FOLLOWING PARTS INSTALLED: 1EA 71569-1 MOH GASKET SET, 2EA 18A19441 BRG, 6EA 18D23135 BRG, 12EA 72877R TAPPET, 12EA 78290 PLUNGER, 12EA 15B21319 SOCKET, 1EA LW-19340R CAM, 1EA AN565B1032H5 SCREW, 1EA 13E27622 NEW CRANKSHAFT S/N V537928507, 2EA 72801 CTWT, 2EA 72797 ROLLER, 2EA 72965 ROLLER, 8EA 71907 PLATE, 8EA LW-14820 RING, 1EA 13S19648 GEAR, 1EA STD-2247 BOLT, 4EA 646260 THRUST WASHER, 6EA AEL11750 CONNECTING ROD, 12EA 18M19389 BRG, 12EA 75061 BOLT, 12EA AEL12186 NUT, 1EA STD-1211 PLUG, 7EA STD-1339 PLUG, 1EA 75737 TUBE, 1EA LW-14756 GAGE, 1EA LW-11713 SPRING, 1EA 1028B BALL, 1EA NFSL-9901 HOUSING, 1EA 75287 BODY, 1EA STD-2168 NUT, 1EA STD-872 NUT, 3EA 31CD-20 STUD, 1EA 53E22144 VERNATHERM, 6EA LW-12427 NEW CYL ASSY, 6EA 859 NFS PISTON, 6EA SL13444-1 PIN, 6EA SL13790A SHAFT, 12EA SL12892 BUTTON, 12EA SL74637 BUSHING, 6EA 77611 GASKET, 4EA 75339 BAFFLE, 12EA LW-11485 SHROUD TUBE, 4EA 68761 TUBE, 1EA 68759 TUBE, 1EA 71737 TUBE, 6EA STD-1821 HOSE, 12EA 3606 CLAMP, 1EA NFSL-B540-1S HOSE KIT, 3EA LW-31H0.88 BOLT, 1EA 2524232-2 DIVIDER S/N 502C, 12EA LW-16266-10-75 CLAMP, 12EA LW-16266-10-13 CLAMP, 2EA 73136 BRACKET, 1EA LW-15473 FUEL PUMP S/N 5002, 1EA FM300A SERVO S/N 20241135, 2EA 67542 BRG, 4EA LW-13641 CUSHION, 1EA 6350 MAGNETO S/N 03010426, 1EA 6393 MAGNETO S/N 03021123, 1EA M6002 HARNESS, 12EA REM37BY SPARK PLUG, 1EA BCS206-149-12V STARTER S/N 1528033. COMPLY WITH PERTINENT A.D.'S &amp; S.B.'S. TEST RUN 10 HRS. PORT POLISH &amp; FLOW BALANCE CYLINDERS. SPL. COATING ON PISTONS, VALVE SPRINGS &amp; OIL PUMP GEARS. ALL INFORMATION ON FILE AT LY-CON REBUILDING CO. REFERENCE WO 51198</p> <p style="text-align: center;"><b>FOR USE IN EXPERIMENTAL AIRCRAFT ONLY</b></p> <p>LY-CON REBUILDING CO. 8231 W. Doe Avenue Visalia, CA 93291 (559)651-1070</p>
2-9-03		<p>10V INSTALLED ABOVE ENGINE ON FITTS # 2002  <i>Number 10. Number 304449107EA</i></p>

## INSPECTION &amp; MAINTENANCE RECORD

DATE	TOTAL TIME	INSPECTION OR MAINTENANCE PERFORMED AGENCY & CERTIFICATE NO.
6-9-03	23.4	ENGINE WAS TEST RUN ADJUSTED LEAKED CHECKED AND FOUND OK FOR FLIGHT. M/O.D.M. — 304949107IA
		<p><b>MACH AVIATION</b>  <b>Certifies that the work specified except as  otherwise specified was carried out in  accordance with JAR -145 and in respect  to that work the aircraft/aircraft component  is considered ready for Release to Service</b></p> <p>Date: 11/09/03 Signature: <i>[Signature]</i><sup>2181</sup>  JAA Approval Ref.: TR-00056 REF. MAO 129</p>
12/09/03	23.4	<p>THE CHIP OF VM-1000 HAS BEEN REPLACED.  THE TACH. TIME HAS BEEN RESET. <i>[Signature]</i><sup>2181</sup></p>

# INSPECTION & MAINTENANCE RECORD

DATE	TOTAL TIME	TACH.TIME	INSPECTION OR MAINTENANCE PERFORMED AGENCY & CERTIFICATE NO.
12/09/03	23.4	0.0	<p><b>MACH AVIATION</b>                      Certifies that the work specified except as otherwise specified was carried out in accordance with JAR -145 and in respect to that work the aircraft/aircraft component is considered ready for Release to Service</p>
03/08/04	47.5 HRS		
25/50/100 HRS, ANNUAL INSP. COMPLETED.			<p>Date: 03.08.04      Signature: #3852 Raki OLCAY                      JAA Approval Ref.: TR-00056 </p>
05.04.2005 99.4 HRS			<p><b>MACH AVIATION</b>                      Certifies that the work specified except as otherwise specified was carried out in accordance with JAR -145 and in respect to that work the aircraft/aircraft component is considered ready for Release to Service</p>
25/50/100 HRS, ANNUAL INSP. COMPLETED.			
			<p>Date: 05/04/2005      Signature: #3852 Raki OLCAY                      JAA Approval Ref.: TR-00056 </p>

# INSPECTION & MAINTENANCE RECORD

DATE	TOTAL TIME	TACH. TIME	INSPECTION OR MAINTENANCE PERFORMED AGENCY & CERTIFICATE NO.
26/03/2006	138.2	138.2	<p>MACH AVIATION                      Certifies that the work specified except as otherwise specified was carried out in accordance with JAR -145 and in respect to that work the aircraft/aircraft component is considered ready for Release to Service</p> <p>Date: 26/03/2006 Signature: <i>[Signature]</i> 2181 Hakon K...</p> <p>JAA Approval Ref. #TR-00056 #</p>
20/50/100 HRS ANNUAL INSPECTION COMPLETED			
25.08.06	154.8	154.8	<p>ENGINE HAS BEEN REMOVED FROM THE A/C FOR INSPECTION AND SENT TO LYCOM USA</p>

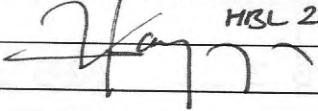
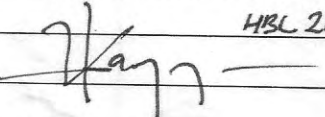




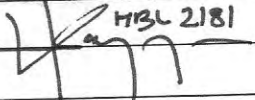
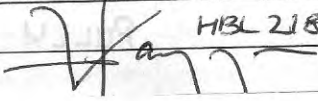
# INSPECTION & MAINTENANCE RECORD

DATE	TOTAL TIME	INSPECTION OR MAINTENANCE PERFORMED AGENCY & CERTIFICATE NO.
15/11/06	162.0	ENGINE HAS INSTALLED BACK, TC-ABS.
20.03.07	165.0	20/50/100 HRS / ANNUAL INSPECTION HAS BEEN CARRIED OUT. TEST RUN / FLIGHT COMPLETED. ENGINE HAS FOUND SERVICABLE / AIRWORTHY. REF: MAO 149. HAKAN KAYGUN. <sup>2181</sup> <i>[Signature]</i>
30.03.08	191.4	20/50/100 HRS / ANNUAL INSPECTION HAS BEEN CARRIED OUT. TEST RUN PERFORMED. ENGINE HAS BEEN FOUND FULLY SERVICABLE AND AIRWORTHY. HAKAN KAYGUN <sup>2181</sup> <i>[Signature]</i>
09.03.09	215.9	20/50/100 HRS / ANNUAL INSPECTION HAS BEEN CARRIED OUT. TEST RUN / TEST FLIGHT PERFORMED. ENGINE HAS BEEN FOUND FULLY SERVICABLE AND AIRWORTHY. HAKAN KAYGUN <sup>2181</sup> <i>[Signature]</i>

## INSPECTION &amp; MAINTENANCE RECORD

DATE	TOTAL TIME	INSPECTION OR MAINTENANCE PERFORMED AGENCY & CERTIFICATE NO.
20.03.2010	240,9	25/50/100 HRS AND ANNUAL INSPECTION HAVE BEEN CARRIED OUT ON THIS EXPERIMENTAL ENGINE. GROUND TEST RUN COMPLETED. NO LEAKS FOUND. ENGINE IS FULLY SERVICEABLE AND AIRWORTHY.  HAKAN KAYGUN HBL 2181 
22.03.2011	267,7	25/50/100 HRS AND ANNUAL INSPECTION HAVE BEEN CARRIED OUT ON THIS EXPERIMENTAL ENGINE. GROUND TEST RUN COMPLETED. NO LEAKS FOUND. ENGINE IS FULLY SERVICEABLE AND AIRWORTHY.  HAKAN KAYGUN HBL 2181 

# INSPECTION & MAINTENANCE RECORD

DATE	TOTAL TIME	INSPECTION OR MAINTENANCE PERFORMED AGENCY & CERTIFICATE NO.
06.02.12	286,5	25/50/100 HRS AND ANNUAL INSPECTIONS HAVE BEEN CARRIED OUT ON THIS EXPERIMENTAL ENGINE. GROUND TEST DONE NO LEAKS FOUND. FLIGHT TEST PERFORMED. THIS ENGINE IS IN FULLY AIRWORTHY AND SERVICEABLE. HAKAN KAYGUN  H13L 2181
26.02.2013	310,6	25/50/100 HRS AND ANNUAL INSPECTIONS HAVE BEEN CARRIED OUT ON THIS EXPERIMENTAL ENGINE. GROUND TEST DONE NO LEAKS FOUND FLIGHT TEST PERFORMED. THIS EXPERIMENTAL ENGINE IS IN FULLY AIRWORTHY AND SERVICEABLE HAKAN KAYGUN  H13L 2181


Date: 24.02.14

TTAF: 327.8

TSN: 327.8

TSO: 165.8

25/50/100/400 HRS AND ANNUAL INSPECTIONS HAVE BEEN CARRIED OUT ON THIS EXPERIMENTAL ENGINE. GROUND TEST DONE NO LEAKS FOUND. THIS EXPERIMENTAL ENGINE IS FULLY AIRWORTHY AND SERVICEABLE.

HAKAN KAYGUN 

# INSPECTION & MAINTENANCE RECORD

DATE

TOTAL  
TIME

INSPECTION OR MAINTENANCE PERFORMED  
AGENCY & CERTIFICATE NO.

Date: 13.02.2015

TTAF: 340,2

TSN: 340,2

THIS ENGINE IS REMOVED FROM TC-ABS AND STORED IAW LYCOMING SERVICE LETTER L180

*M. A. Agün*  
HBL2244

MAK HAVACILIK ve TURİZM LTD.

Make: Ly-Con

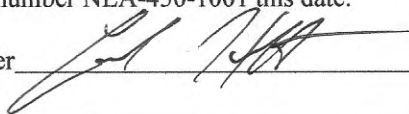
Model: AEIO-540-EXP

ESN: L-51198-03

ETTSN: 340.2 TTAF: 0.0

Installed engine, Ly-Con Experimental Engine AEIO-540-EXP, serial number L-51198-03 on MAKO N580L LLC  
NLA-450, serial number NLA-450-1001 this date.

Conrad Huffstutler



Date:

7/3/17

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