



**ENGINE
MAINTENANCE
RECORDS**

Aircraft Registration _____

Engine Position _____

Engine Serial No. 280728-R



ENGINE MAINTENANCE RECORDS

Log No. _____

Aircraft Registration No. _____

Engine Manufacturer Continental

Model IO-520-BB

Serial No. 280728-R

Date installed on aircraft _____

Time Between Overhauls (TBO) 1700 Hours

If used on multi-engine aircraft:

Right Left

254/752-8381

Waco Regional Airport • P.O. Box 5219 • Waco, Texas 76708

FAX 254-752-3307

1-800-445-9713

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DATE	TOTAL TIME IN SERVICE	TOTAL TIME SINCE OVERHAUL	TACH OR RECORDING METER TIME	DESCRIPTION OF WORK PERFORMED— SIGNATURE & CERTIFICATE NO. OF PERSON PERFORMING WORK
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Date	Total Time In Service	Total Time Since Overhaul	Tach or Recording Meter Time
4-13-12	1476.0	0	



CONTINENTAL IO-520-BB Engine S/N 280728-R

Above referenced engine overhauled to new parts limits per FAR 43.2(a)(1)(2) to conform w/TCM X30039A and I/A/W STC SE7325SW-D. Applicable AD's and Service Bulletins C/W at this time. All gears cleaned, polished when required, inspected, magnafluxed, and no cracks found. Finish and dimensional limits within RAM Gear Inspection Specification No. 1818, Rev. K dated 2-08-2010. Installed new RAM camshaft p/n 1058-1A, s/n XD11159 as direct PMA replacement of Continental camshaft. Installed lifters p/n 658088 int. p/n 658077 exh. AD 10-11-04 n/a to lifter p/n installed. AD 97-26-17 c/w per installation of overhauled VAR crankshaft p/n 642396 s/n F910 per TCM CSB96-8.C/W ultrasonic inspection per MSB96-10A due at next overhaul or when crankshaft removed. AD 99-19-01 c/w and found n/a per crankshaft date of manufacture I/A/W TCM MSB99-3C. AD 2000-23-21 N/A to crankshaft serial number/date of manufacture I/A/W TCM Mandatory Service Bulletin MSB00-5D. Engine assembled with overhauled Continental heavy style crankcase p/n 654132-2, s/n H229204RPL. Installed new Continental nicked cylinders. Cylinder hold-down nuts replaced and torqued per Overhaul Manual Supplement. Installed new oil cooler P/N 8000960, S/N 2083405. Engine accessories exchanged for overhauled or new units with exception of prop governor, Starter, alternator, vacuum pump and fuel pump which were not installed per this work order. Installed Bendix magnetos. MSB94-8D on magneto timing procedure c/w per timing to data plate TC degree requirements with TDC locator and protractor with pointer. Installed RAM/FAA/PMA rocker arms p/n 1842-3 and 1842-4. AD 98-01-08 N/A per installation of RAM/FAA/PMA rocker arms. Engine modified to IO- 520-BB per Continental Service Bulletin M-75-6, Rev. 1. Category 1 thru 3 TCM Service Bulletin Compliance Listing in RAM Manual. Above referenced engine eligible for 1700 hr. TBO per TCM SIL98-9 Rev. A. Installed RAM/FAA/PMA rocker arm cover p/n 2766-1. Installed RAM-FAA-PMA rocker arm cover gaskets p/n 1387-1. Installed RAM/FAA/PMA spring loaded induction clamps P/N 1170-2. Engine ground run on test stand per RAM specifications for 4 hours. Engine run-in with Phillips 20W-50 Type M mineral oil. See RAM Recommended Oil Grade Maintenance Tip MT-1 for recommended oils. Engine approved for return to service for the work performed. Engine preserved per Service Bulletin SIL99-1 temp. storage up to 90 days. Pertinent details on file under Project No. 6215.

RAM Aircraft, Limited Partnership, P.O. Box 5219, Waco, Texas 76708 CRS VA1R551K

TCM IO520-BB S/N 280728-R Installed on N166B TACH: 1532 hr. TT: 1480 hr. SMOH: 4 hr.	DATE: May 14, 2012
Removed engine IO-520-BB S/N 809612-R and installed S/N280728-R with new engine mounts (4)7351231-3 and hardware. All new hoses for fuel and oil. Most scat duct replaced. Installed gami injectors from the old engine after being sent to gami for OH. Newly OH fuel pump FT-B8.5/1-632818-11 S/N E237406RB from Great Planes Fuel Metering Inc. CRS 1GPR022B installed. Installed and repaired baffling as needed. Sent out Turbocharger 406610-9029 S/N HLR0541, wastegate 470908-9011 S/N AL016897 and controller 470688-5 S/N 031788 for OH by Main Turbo Systems Inc. CRS MAMR190K and reinstalled with new gaskets. Installed OH governor Woodward D210680 S/N 1819219 by H & S Prop CRS MQ5R050N. Welded small crack in heater tube and turbo inlet duct. Ran up and checked for leaks and proper fuel flow per TCM SID 97-3E, adjusted idle speed and mixture. I certify that this engine has been inspected in accordance with and Annual inspection and was found to be in an airworthy condition	

Daniel Lorenz
Daniel Lorenz A&P34841151A

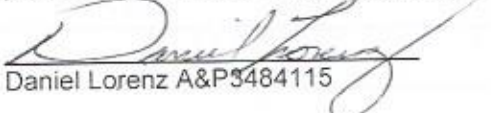
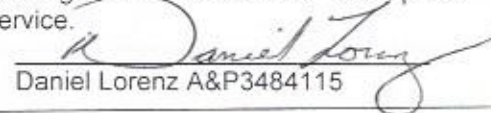
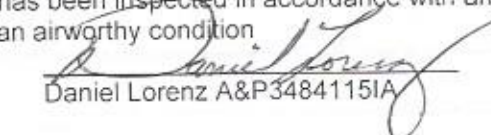
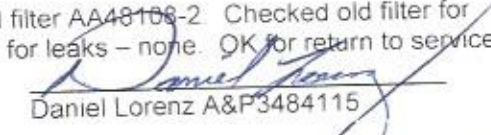
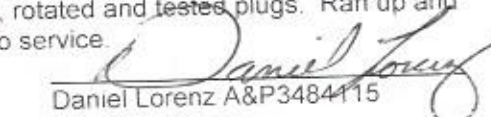
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TOTALS brought forward from previous page				
TCM IO520-BB S/N 280728-R Installed on N166B TACH: 1566 hr. TT: 1514 hr. SMOH: 38 hr.				DATE: June 21, 2012
<p>Changed oil to Aeroshell 15W50 10 qts. And filter AA48108-2. Checked old filter for ferrous metal – none. Replaced exhaust riser ETI-B-103-1 after repair by Tornado Alley Turbo, Inc. Ran up and checked for leaks - none found. OK for return to service per work performed.</p> <p style="text-align: right;"><i>Daniel Lorenz</i> Daniel Lorenz A&P34841151A</p>				
TCM IO520-BB S/N 280728-R Installed on N166B TACH: 1602 hr. TT: 1550 hr. SMOH: 74 hr.				Date: August 14, 2012
<p>Changed oil Aeroshell 15W50 10 qts. and filter AA48108-2. Checked old filter for ferrous metal – none. Removed prop to change front seal SA641250 and cleaned front crankshaft out. Replaced O-ring A-1633-3 in prop and reattached and torque. Ran up and checked for leaks - none found. OK for return to service per work performed.</p> <p style="text-align: right;"><i>Daniel Lorenz</i> Daniel Lorenz A&P34841151A</p>				
N166B, TCM IO520-BB S/N 280728-R TACH: 1641 hr. TT: 1589 hr. SMOH: 113 hr.				Date: October 10, 2012
<p>Changed oil Aeroshell 15W50 10 qts. and filter AA48108-2. Checked old filter for ferrous metal – none. Owner ran up and checked for leaks - none found. OK for return to service per work performed.</p> <p style="text-align: right;"><i>Daniel Lorenz</i> Daniel Lorenz A&P34841151A</p>				
N166B, TCM IO520-BB S/N 280728-R TACH: 1688 hr. TT: 1636 hr. SMOH: 160 hr.				Date: April 5, 2013
<p>Changed oil Aeroshell 15W50 10 qts. and filter AA48108-2. Checked old filter for ferrous metal – none. Removed, cleaned, gaped and rotated plugs. Ran up and checked for leaks - none found. OK for return to service per work performed.</p> <p style="text-align: right;"><i>Daniel Lorenz</i> Daniel Lorenz A&P34841151A</p>				
TCM IO520-BB S/N 280728-R Installed on N166B TACH: 1723 hr. TT: 1671 hr. SMOH: 195 hr.				DATE: June 13, 2013
<p>Changed oil Aeroshell 15W50 10 qts. and filter AA48108-2. Checked old filter for ferrous metal – none. Compression check cold #1)72/80 #2)75/80 #3)72/80 #4)72/80 #5)74/80 #6)71/80. Ran up and checked for leaks - none found. I certify that this engine has been inspected in accordance with and Annual inspection and was found to be in an airworthy condition</p> <p style="text-align: right;"><i>Daniel Lorenz</i> Daniel Lorenz A&P34841151A</p>				
SUB-TOTALS this page				
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				<p>TCM IO520-BB S/N 280728-R Installed on N166B TACH: 1801 hr. TT: 1749 hr. SMOH: 273 hr. DATE: April 1, 2014</p> <p>Changed oil Aeroshell 15W50 10 qts. and filter AA48108-2. Checked old filter for ferrous metal - none. Ran up and checked for leaks - none found. OK for return to service.</p> <p style="text-align: center;"><i>Daniel Lorenz</i> Daniel Lorenz A&P34841151A</p>
				<p>TCM IO520-BB S/N 280728-R Installed on N166B TACH: 1806 hr. TT: 1754 hr. SMOH: 278 hr. DATE: April 8, 2014</p> <p>Removed prop and cleaned out crankshaft. Replaced front crankshaft seal SA641250. Heli-Coil front bottom left cover bolt whole. Ran up and checked for leaks - none found. OK for return to service.</p> <p style="text-align: center;"><i>Daniel Lorenz</i> Daniel Lorenz A&P34841151A</p>
				<p>TCM IO520-BB S/N 280728-R Installed on N166B TACH: 1844 hr. TT: 1792 hr. SMOH: 316 hr. DATE: July 9, 2014</p> <p>Changed oil Aeroshell 15W50 10 qts. and filter AA48108-2. Checked old filter for ferrous metal - none. Compression check cold #1)73/80 #2)73/80 #3)73/80 #4)74/80 #5)76/80 #6)73/80. Cleaned, gapped and rotated plugs. Lubed exhaust waist gate with mouse milk. Ran up and checked for leaks - none found. I certify that this engine has been inspected in accordance with and Annual inspection and was found to be in an airworthy condition</p> <p style="text-align: center;"><i>Daniel Lorenz</i> Daniel Lorenz A&P34841151A</p>
				<p>TCM IO520-BB S/N 280728-R Installed on N166B TACH: 1844 hr. TT: 1842 hr. SMOH: 366 hr. DATE: March 10, 2015</p> <p>Changed oil Aeroshell 15W50 11 qts. and filter AA48108-2. Checked old filter for ferrous metal - none. Ran up and checked for leaks - none found. OK for return to service.</p> <p style="text-align: center;"><i>Daniel Lorenz</i> Daniel Lorenz A&P34841151A</p>
				<p>TCM IO520-BB S/N 280728-R Installed on N166B TACH: 1943 hr. TT: 1891hr. SMOH: 415 hr. DATE: July 22, 2015</p> <p>Changed oil Aeroshell 15W50 10 qts. and filter AA48108-2. Checked old filter for ferrous metal - none. Compression check cold #1)68/80 #2)63/80 #3)72/80 #4)72/80 #5)75/80 #6)68/80. Cleaned, gapped and rotated plugs. Lubed exhaust and waist gate with mouse milk. Tightened oil drain plug. Replaced air filter P10-5304. Ran up and checked for leaks - none found. I certify that this engine has been inspected in accordance with and Annual inspection and was found to be in an airworthy condition</p> <p style="text-align: center;"><i>Daniel Lorenz</i> Daniel Lorenz A&P34841151A</p>

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TOTALS—Carry forward to next page

DATE	TOTAL TIME IN SERVICE	TOTAL TIME SINCE OVERHAUL	TACH OR RECORDING METER TIME	DESCRIPTION OF WORK PERFORMED— SIGNATURE & CERTIFICATE NO. OF PERSON PERFORMING WORK
				<p>TCM IO520-BB S/N 280728-R Installed on N166B DATE: April 4, 2017 TACH: 2234 TT: 6284 Engine TT: 2182 SMOH 706 Prop TT: 3019 SMOH: 702</p> <p>Changed oil Exxon Elite 20W50, 11 qts. and filter AA48108-2. Checked old filter for ferrous metal – none. Cleaned, gapped, rotated and tested plugs. Lubed exhaust and waste gate with mouse milk. Ran up and checked for leaks – none. OK for return to service.</p> <p style="text-align: right;"> Daniel Lorenz A&P3484115</p>
				<p>TCM IO520-BB S/N 280728-R Installed on N166B DATE: Sept. 11, 2017 TACH: 2311 TT: 6361 Engine TT: 2259 SMOH 783 Prop TT: 3096 SMOH: 779</p> <p>Changed oil Philips 66 X/C 20W50, 11 qts. and filter AA48108-2. Checked old filter for ferrous metal – none. Lubed exhaust and waste gate with mouse milk. Ran up and checked for leaks – none. OK for return to service.</p> <p style="text-align: right;"> Daniel Lorenz A&P3484115</p>
				<p>TCM IO520-BB S/N 280728-R Installed on N166B DATE: Sept 28, 2017 TACH: 2311 TT: 6361 Engine TT: 2259 SMOH 783 Prop TT: 3096 SMOH: 779</p> <p>Annual inspection completed. Compression check #1)74/80 #2)46/80 #3)70/80 #4)68/80 #5)66/80 #6)70/80. Found #2 Exhaust valve burned. Replaced #2 cylinder CL71.4-232-OH with OH from Ram S/N 75859-29 CRS# VA1R551K, gasket set 646563A1, gasket SA636465, 649965 and intake gaskets (3) SA536413. Cleaned, gapped, tested and rotated plugs. Cleaned injectors and installed new O-rings (12) SA630979-9, seals (6) 633958-3 and rubber washers (6) 640612. Lubed exhaust and waist gate with mouse milk. Replaced oil quick drain. Ran up and checked for leaks - none found. Test flew per SBM89-7R1. I certify that this engine has been inspected in accordance with and Annual inspection and was found to be in an airworthy condition.</p> <p style="text-align: right;"> Daniel Lorenz A&P3484115A</p>
				<p>TCM IO520-BB S/N 280728-R Installed on N166B DATE: Dec. 13, 2017 TACH: 2341 TT: 6392 Engine TT: 2290 SMOH 814 Prop TT: 3127 SMOH: 810</p> <p>Changed oil Aeroshell 15W-50, 11 qts. and filter AA48108-2. Checked old filter for ferrous metal – none. Ran up and checked for leaks – none. OK for return to service.</p> <p style="text-align: right;"> Daniel Lorenz A&P3484115</p>
				<p>TCM IO520-BB S/N 280728-R Installed on N166B DATE: July 11, 2018 TACH: 2401 TT: 6452 Engine TT: 2350 SMOH 874 Prop TT: 3187 SMOH: 870</p> <p>Changed oil Aeroshell 15W-50, 11 qts. and filter AA48108-2. Checked old filter for ferrous metal – none. Removed, cleaned, rotated and tested plugs. Ran up and checked for leaks – none. OK for return to service.</p> <p style="text-align: right;"> Daniel Lorenz A&P3484115</p>