



## ENGINE MAINTENANCE RECORDS

Log No. 1

Aircraft Registration No. N444BZ

Engine Manufacturer TCM

Model TS10-520-NB

Serial No. 218817-R

Date installed on aircraft 10-14-02

Time Between Overhauls (TBO) 1600 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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Engine Previous Total: 2800.0  
 Hour Meter: 1237.3  
 Since Major Overhaul: 00.0  
 Propeller Total: 00.0  
 Date: 10-14-02


TCM TSIO-520-NB Series IV Left S/N 218817-R

Above referenced engine overhauled to new parts limits per FAR 43.2 (a) (1) (2) to conform with TCM SM X-30574A. All gears cleaned, polished when required, inspected, magnafluxed and no cracks found. Finish and dimensional limits within RAM Gear Inspection Specification No. 1818, Rev. E dated 5/18/98. Installed above referenced engine modified to TSIO-520-NB 325 HP per STC SE4327SW in left position of Cessna S/N 414-0490. See 337. Installed new RAM camshaft p/n 1058-1A, s/n G01027 per STC SE4327SW, Rev. 3. AD 97-26-17 C/W per installation of new VAR crankshaft P/N 649898 S/N N01JA184. Ultrasonic inspection per MSB96-10 due at next overhaul or when crankshaft removed. AD 99-19-01 N/A per crankshaft date of manufacture I/A/W TCM CSB99-3C. AD 2000 23-21 N/A to crankshaft serial number/date of manufacture I/A/W TCM Mandatory Service Bulletin MSB00-5C. Engine assembled with heavy style crankcase p/n 642094 modified to RAM p/n 1157-7 per STC SE3630SW. Installed new TCM Nickel cylinders. Cylinder hold-down nuts replaced and torqued per Overhaul Manual Supplement. Installed Floscan transducer per STC SE5726SW. Installed new McCauley propeller model 3AF32C515, S/N 020034. Engine accessories exchanged for remanufactured or new units except as noted. Installed new prop governor. Re-used customer's tach generator. Installed new RAM turbocharger S/N EJL1207. Installed overhauled wet vacuum pump. New Slick pressurized magnetos p/n 6320 installed per STC SE4651SW and pressurized. SB94-8A on magneto timing procedure C/W per timing to data plate TC requirements with TDC locator and protractor with pointer. Engine modified to TSIO-520-NB per Continental Service Bulletin M-75-6. AD 86-13-04 R3 n/a per new TCM cylinders installed. SA02-7 N/A per TCM cylinders installed. 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. Cadmium plating of engine hardware and associated lines and fittings per QQ-P-416C Class 2, Type II. AD 2000-01-16 C/W, see airframe log for details. Installed new Aeroquip integral firesleeved fuel, oil and hydraulic hoses meeting TSO-C53A Type D and TSO-C75 Type III. Installed overhauled oil cooler P/N 636900, S/N 2055. Exhaust slip joints modified per STC SA4331SW. C/W AD 78-06-01 per installation of intake tube p/n 642590. C/W AD 79-05-09 per installation of new current design oil pressure plunger assy. C/W AD 89-24-01 R1 per installation of starter adapter p/n 642085A2 with current scavenge pump gears. Category 1 thru 3 TCM Service Bulletin Compliance Listing in RAM Manual. Engine serviced with Phillips multi-grade 20W50 Type M mineral oil. See RAM Recommended Oil Grade Maintenance Tip MT-1 for recommended oils. AD 76-02-07 N/A per installation of ALV9510 alternator. Above referenced engine was made eligible for 1600 hr. TBO per TCM SIL98-9 Note 2 and RAM Service Letter 89-001. All aluminum alloy engine parts were coated per RAM Specification No. 1142. Propeller balanced per Service Manual with spinner and bulkhead installed. Installed spring loaded induction clamps p/n 1170-2 per STC SE3632SW. Installed RAM-FAA-PMA rocker box cover gaskets p/n 1387-1. Installed RAM FAA-PMA oil cooler baffle P/N 1253-1. C/W AD 93-16-15 per TCM SB MSB95-6 installation of fuel pump drive coupling P/N 653359. AD 93-10-02 (MSB 93-12) N/A per new TCM cylinders installed. All engine systems checked for leaks. Engine approved for return to service for RAM Aircraft test flight procedures. Pertinent details on file under project no. 407.

*Stephen Wade*

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


SUB-TOTALS this page  
 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
				TOTALS brought forward from previous page
				Hour Meter: <u>1237.8</u> SMOH: <u>.5</u> Date: <u>10-14-02</u>
				Engine pump pressure, idle, mixture, fuel flow, max RPM, manifold pressure, and oil pressure adjusted per RAM Series IV Specifications. Engine ground run power test good. Details are on file under project no. 407.
				<u>Stephen Wade</u> RAM Aircraft, Limited Partnership, P. O. Box 5219, Waco, Texas 76708 CRS VA1R551K
				I certify this <u>ENGINE</u> has been inspected in accordance with a/ <del>an</del> <u>100 HR</u> inspection and has been determined to be in an airworthy condition.
				Date <u>10-21-02</u> Tach <u>1238.8</u>
				Signed <u>Stephen Wade</u>
				RAM AIRCRAFT, LIMITED PARTNERSHIP REPAIR STATION NO. VA1R551K
				 AIR IMPRESSIONS, INC. <small>PROFESSIONAL AIRCRAFT SERVICE</small>
				7929 Airport Rd. Waco, Texas 76708 CRS No. AK6R541N
				I certify this <u>Engine</u> has been inspected in accordance with a <u>100 HR.</u> inspection and has been determined to be in an airworthy condition.
				DATE <u>11/11/2002</u> TACH <u>1238.8</u>
				ENGINE SMOH <u>1.5</u>
				ENGINE TT <u>2801.3</u>
				SIGNED <u>[Signature]</u>
				AIR IMPRESSIONS, INC REPAIR STATION # AK6R541N
				SUB-TOTALS this page

1. Approving National Aviation Authority Country UNITED STATES		2. AUTHORIZED RELEASE CERTIFICATE FAA FORM 8130-3, AIRWORTHINESS APPROVAL TAG			3. Form Tracking No. R3776	
4. Organization Name and Address Ram Aircraft, Limited Partnership 7505 Karl May Dr. • PO Box 5219 • Waco, Texas 76708				5. Work Order, Contract, Invoice # R3776		
6. Item 1	7. Description FUEL PUMP	8. Part Number 632818-11A1OH	9. Eligibility *	10. Quantity 1	11. Serial/Batch No. A058112B	12. Status/Work OVERHAULED
13. Remarks Overhauled VAW: <u>A30593A</u> and any applicable RAM Aircraft STC O.H. Manual Supplements. *Certifies that the work specified in Block 12/13 was carried out in accordance with JAR 145 and with respect to that work the aircraft component is considered ready for release to service under JAA Acceptance Certificate Number JAA.5208*						
14. Certifies the items identified above were manufactured in conformity to: <input type="checkbox"/> Approved design data and are in condition for safe operation <input type="checkbox"/> Non-approved design data specified in Block 13.			19. <input checked="" type="checkbox"/> 14 CFR 43.9 Return to Service <input type="checkbox"/> Other regulation specified in Block 13 Certifies that unless otherwise specified in block 13, the work identified in Block 12 and described in Block 13 was accomplished in accordance with Title 14, Code of Federal Regulations, part 43 and in respect to that work, no forms are approved for return to service			
15. Authorized Signature:		16. Approval/Authorization No. <i>[Signature]</i>		21. Certificate Number: VA1R551K		
17. Name (Typed or Printed) C. H. MUMFORD		18. Date (m/d/y) 3-6-03		23. Date (m/d/y) 3-6-03		
<p>USER/INSTALLER RESPONSIBILITIES: It is important to understand that the existence of this document alone does not automatically constitute authority to install the part/component/assembly. Where the user/installer performs work in accordance with the national regulations of airworthiness authority different than the airworthiness authority of the country specified in Block 1, it is essential that the user/installer ensures that his/her airworthiness authority accepts parts/components/assemblies from the airworthiness authority of the country specified in Block 1. Statements in Blocks 14 &amp; 19 do not constitute installation certification. In all cases, aircraft maintenance records must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.</p> <p>FAA Form 8130-3 (E-01)      *Installer must cross check eligibility with applicable technical data.      NSN: 0052-00-012-9005</p>						

ED—  
ORMING WORK

4-22-03 1299.7Hm Replaced GASKET ON ENGINE DRIVEN FUEL PUMP. <sup>W/O</sup> 3520 *[Signature]*

ADVANCE AIRCRAFT SERVICES, INC  
FAA CRS Q2AR598N  
355 PINSON DRIVE, CORPUS CHRISTI, TX 77416

**LEFT ENGINE LOG ENTRY**

DATE: 04/16/2003      REG: N444BZ  
MODEL: Cessna 414      SERIAL NUMBER: 0490  
Hobbs: 1298.5

Replaced left engine driven fuel pump P/N 632818-11, S/N 1374RA with P/N 632818-11A1-OH, S/N A058112B overhauled by Ram Aircraft, CRS no. VA1R551K, W.O. R3776. Operationally checked and leak checked satisfactory.

The aircraft, airframe, aircraft engine, or appliance identified above, was repaired and inspected in accordance with current regulations of the Federal Aviation Administration (FAA) and is approved for return to service with regards to the work performed.

Details on file under Work Order No: 5377  
*[Signature]*  
George H. Ham  
Ham's Aviation Maintenance Service, Inc. CRS H8MR479J

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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
				TOTALS brought forward from previous page
				DRAINED OIL, CHANGED FILTER/CLEANED SCREEN SERVICED <u>11</u> QUARTS <u>A/S 100W</u> WASHED AND GROUND OPERATED, NO OIL LEAKS NOTED. REFERENCE WORK ORDER <u>3583</u> DATE <u>8-8-03</u> TIME <u>1327.8</u> SIGNED <u>[Signature]</u>
				ADVANTAGE AIRCRAFT SERVICES, INC FAA CRS Q2AR598N 355 PINSON DRIVE, CORPUS CHRISTI, TX 78409
				DRAINED OIL, CHANGED FILTER/CLEANED SCREEN SERVICED <u>11</u> QUARTS <u>A/S 100W</u> WASHED AND GROUND OPERATED, NO OIL LEAKS NOTED. REFERENCE WORK ORDER <u>3197</u> DATE <u>9/24/03</u> TIME <u>1327.4</u> SIGNED <u>[Signature]</u>
				ADVANTAGE AIRCRAFT SERVICES, INC FAA CRS Q2AR598N 355 PINSON DRIVE, CORPUS CHRISTI, TX 78409



**AIR IMPRESSIONS, INC.**  
 PROFESSIONAL AIRCRAFT SERVICES  
 7929 Airport Rd.  
 Waco, Texas 76708  
 CRS No. AK6R541N


Engine TT: 2972  
 Engine SMOH: 172  
 Prop TT: 172  
 Hour Meter: 1409.3  
 Date: 12/15/2003

**RAM Series IV TCM TSIO-520-NB S/N L-218817-R**

On above referenced engine, removed all cowling for 100 Hour/Annual Inspection. Cleaned and gapped spark plugs. Drained oil, installed new oil filter, and refilled engine with Aeroshell 100w oil. Checked magneto timing. Inspected plug harness and all engine electrical. Checked all engine controls for movement and attach points. Inspected intake and exhaust system, condition and integrity of all engine accessories. Inspected engine mounts, all baffles and cowling. Inspected prop, spinner, and bulkhead. Inspected all fuel, oil, and hydraulic lines and fittings. Ran compression check and readings were: #1) 68/80, #2) 75/80, #3) 75/80, #4) 75/80, #5) 73/80, and #6) 75/80. C/W A.D. 2000-01-16 per para's (b), (c), and (f). (See A.D. listings) A.D.'s researched through bi-weekly 2003-24. Above work done in accordance with TCM and Cessna 414 Service Manuals and Air Impressions, Inc. 100 Hour/Annual Checklist. Engine ground run-up leak checked good and approved for return to service. Pertinent details are on file under work order 1533.

[Signature]  
 Air Impressions, Inc.  
 CRS# AK6R541N


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**TOTALS**—Carry forward to next page

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				TOTALS brought forward from previous page
 <p><b>AIR IMPRESSIONS, INC.</b> PROFESSIONAL AIRCRAFT SERVICE</p> <p>7929 Airport Rd. Waco, Texas 76708 CRS No. AK6R541N</p>				<p>I certify this <u>Engine</u> has been inspected in accordance with a 100 HR. inspection and has been determined to be in an airworthy condition.</p> <p>DATE <u>12/15/2003</u> TACH <u>1409.3</u>            ENGINE SMOH <u>172</u>            ENGINE TT <u>2972</u>            SIGNED <u>[Signature]</u>  <b>AIR IMPRESSIONS, INC</b>  <b>REPAIR STATION # AK6R541N</b></p>
				<p><del>DRAINED OIL, CHANGED FILTER, CLEANED OIL</del>            SERVICED <u>21</u> QUARTS <u>A/S 100W</u>            WASHED AND GROUND OPERATED, NO OIL LEAKS            NOTED: REFERENCE WORK ORDER <u>3843</u>            DATE <u>3/6/04</u> TACH <u>1423.1</u>            SIGNED <u>[Signature]</u></p> <p>ADVANTAGE AIRCRAFT SERVICE, INC.  <b>FAA CRS Q2AR598N</b>            855 PINSON DRIVE, CORPUS CHRISTI, TX 78405</p>
				<p><del>DRAINED OIL, CHANGED FILTER, CLEANED OIL</del>            SERVICED <u>21</u> QUARTS <u>A/S 100W</u>            WASHED AND GROUND OPERATED, NO OIL LEAKS            NOTED: REFERENCE WORK ORDER <u>4050</u>            DATE <u>11/22/04</u> TACH <u>1481.7</u>            SIGNED <u>[Signature]</u></p> <p>ADVANTAGE AIRCRAFT SERVICES, INC.  <b>FAA CRS Q2AR598N</b>            355 PINSON DRIVE, CORPUS CHRISTI, TX 78405</p>
				SUB-TOTALS this page
				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
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### ENGINE LOG BOOK ENTRY

Engine: LEFT N444BZ TCM TSIO-520-NB 218817-R Date: 1/12/2005  
 Engine Total Time: 3073.4 TSO: 273.4 Indicated Time: 1510.7 HM W/O: 4112

COMPLETED A 100 HR / ANNUAL INSPECTION USING C414 SERVICE MANUAL CHAPTER 2A6. CHANGED OIL AND FILTER, SERVICED 11 QTS AEROSHELL 100W OIL. CLEANED, GAPPED, AND TESTED SPARK PLUGS. CLEANED FUEL INJECTOR NOZZLES. INSTALLED OVERHAUL VACUUM PUMP P/N 3P-207-JA S/N PE32285. REPLACED LT MAG MOUNT GASKET AND TIMED MAGS TO ENGINE. ADJUSTED IDLE AND MIXTURE. RESEARCHED AD'S THRU 2004-26 ISSUE. END.

DIFFERENTIAL COMPRESSION  
 1-80/66 4-80/64  
 2-80 72 5-80/72  
 3-80/74 6-80/72

I certify that this ENGINE has been inspected in accordance with a 100HR/Annual inspection and was determined to be in airworthy condition.  
 Date 1-12-05 Tach reading 1510.7 Total time 3073.4  
 Signed [Signature] David D. Holzschuh  
 FAA CRS Q2AR598N

355 Pinson Drive  
 Corpus Christi, TX 78406  
 (361)289-1884

ADVANTAGE AIRCRAFT SERVICES, INC.  
 FAA CRS Q2AR598N  
 355 PINSON DRIVE, CORPUS CHRISTI, TX 78406

DRAINED OIL, CHANGED FILTER/CLEANED SCREEN	11 QUARTS	A/S 100W	
WASHED AND GROUND OPERATED, NO OIL LEAKS			
NOTED REFERENCE WORK ORDER	427		
DATE	5-1-05	TIME 1510.7	
SIGNED	[Signature]		
ADVANTAGE AIRCRAFT SERVICES, INC.			
FAA CRS Q2AR598N			
355 PINSON DRIVE, CORPUS CHRISTI, TX 78406			
CHANGED OIL, CHANGED FILTER/CLEANED SCREEN	11 QUARTS	A/S 100W	
WASHED AND GROUND OPERATED, NO OIL LEAKS			
NOTED REFERENCE WORK ORDER	4423		
DATE	11-23-05	TIME 1612.5	
SIGNED	[Signature]		
ADVANTAGE AIRCRAFT SERVICES, INC.			
FAA CRS Q2AR598N			
355 PINSON DRIVE, CORPUS CHRISTI, TX 78406			



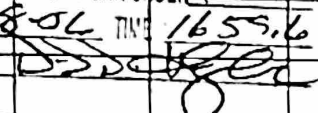
### ENGINE LOG BOOK ENTRY

Engine: LEFT N444BZ TCM TSIO-520-NB S/N 218817-R Date: 2/3/2006  
 Engine Total Time: 3185.5 TSO: 385.5 Indicated Time: 1622.8 HM W/O: 4478

COMPLETED A 100HR / ANNUAL INSPECTION USING CESSNA 414 SERVICE MANUAL CHAPTER 2. CHANGED OIL AND FILTER, SERVICED 11 QTS AEROSHELL 100W OIL. CLEANED, GAPPED, AND TESTED SPARKPLUGS. AD97-26-17 TCM CRANKS DUE AT O/H OR STRIKE. RESEARCHED AD'S THRU 2006-2 ISSUE. END.

DIFFERENTIAL COMPRESSION I certify that this ENGINE has been inspected in accordance with an Annual inspection and was determined to be in airworthy condition.  
 Date 2-3-06 Tach reading 1622.8 Total time 3185.5  
 Signed [Signature] David D. Holzschuh  
 FAA CRS Q2AR598N

355 Pinson Drive  
 Corpus Christi, TX 78406  
 (361) 289-1884

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
				TOTALS brought forward from previous page
	DRAINED OIL SERVICED	CHANGED FILTER 11 QUARTS	CLEANED SCREEN A/S 100W	
	WASHED AND NOTED	GROUND OPERATED	NO OIL LEAKS	
	DATE	REFERENCE WORK ORDER	4651	
	8-8-06	TIME	1655.6	
	SIGNED	 ADVANTAGE AIRCRAFT SERVICES, INC. FAA CRS Q2AR598N 355 PINSON DRIVE, CORPUS CHRISTI, TX 78406		

Date	Total Time In Service	Total Time Since Overhaul	Tach or Recording Meter Time
11-28-06	3251.3	451.3	1688.6



RAM Aircraft, Limited Partnership • Waco Regional Airport

TCM TSIO-520-NB Left Engine S/N 218817.R

On above referenced engine installed oil return line from air/oil separator to scavenge pump I/A/W RAM Dwg. 2048. See 337. Pertinent details on file under project no. 3076.

*Robert Franklin*

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



### ENGINE LOG BOOK ENTRY

Engine LEFT N444BZ TCM TSIO-520-NB S/N 218817R Date: 3/2/2007  
 Engine T.T: 3287.5 TSO: 487.5 Indicated Time: 1724.8 W/O: 4823

COMPLETED A 100HR / ANNUAL INSPECTION USING C414 SERVICE MANUAL CHAPTER 2. CHANGED OIL AND FILTER, SERVICED WITH 11 QTS A/S 100W OIL. INSTALLED 12 EA NEW CHAMPION RHB32E SPARK PLUGS. PERFORMED 500 HR INTERNAL MAGNETO INSP., REPLACED CONTACT POINTS P/N M3081, REINSTALLED TIMED TO ENGINE AND PRESSURE LEAK CHECKED OK. SET-UP FUEL INJECTION PER RAM SPEC 36A REV 57. AD 86-24-02 DUE AT 7291.8 T.T.AF. RESEARCHED AD'S THRU 2007-03 END

#### PERFORMANCE / COMPRESSION

1-80/68 4-80/68  
 2-80/66 5-80/70  
 3-80/64 6-80/68

355 Pinson Drive  
 Corpus Christi, TX 78406  
 (361) 289-1884

I certify that this Engine has been inspected in accordance with a 100HR/Annual inspection and was determined to be in airworthy condition

Date 3-2-07 Tach reading 1724.8 Total time 3287.5

Signed David D. Holzschuh for

ADVANTAGE AIRCRAFT SERVICES, INC.  
 FAA CRS Q2AR598N  
 355 PINSON DRIVE, CORPUS CHRISTI, TX 78406

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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
TOTALS brought forward from previous page				
6/16/08				DRAINED OIL, CHANGED FILTER, OIL SERVICED <u>11</u> QUARTS <u>AS100W</u> WASHED AND GROUND OPERATED, NO OIL LEAKS NOTED. REFERENCE WORK ORDER <u>490</u> DATE <u>6/15/08</u> TIME <u>1730</u> SIGNED <u>[Signature]</u> ADVANTAGE AIRCRAFT SERVICES, INC. FAA CRS Q2AR598N 355 PINSON DRIVE, CORPUS CHRISTI, TX 78406
6/16/08				DRAINED OIL, CHANGED FILTER, CLEANED SCREEN SERVICED <u>11</u> QUARTS <u>AS100W</u> WASHED AND GROUND OPERATED, NO OIL LEAKS NOTED. REFERENCE WORK ORDER <u>502</u> DATE <u>6/15/08</u> TIME <u>1830</u> SIGNED <u>[Signature]</u> ADVANTAGE AIRCRAFT SERVICES, INC. FAA CRS Q2AR598N 355 PINSON DRIVE, CORPUS CHRISTI, TX 78406



### ENGINE LOG BOOK ENTRY

Engine LEFT N444BZ TCM TSIO-520-NB S/N 218817R Date: 4/22/2008  
 Engine T.T: 3446.2 TSO: 646.2 Indicated Time: 1883.5 HM W/O: 5119  
 COMPLETED A 100HR / ANNUAL INSPECTION IN ACCORDANCE WITH C414 SERVICE MANUAL  
 CHAPTER 2. CHANGED OIL AND FILTER, SERVICED 11 QTS A/S 100W OIL. CLEANED, GAPPED, AND  
 TESTED SPARK PLUGS. AD 97-26-17 TCM CRANKSHAFTS DUE AT O/H OR PROP STRIKE. REPLACED  
 NO 1-3 CYL INJECTOR SUPPORT P/N 0750117-31. RESEARCHED AD'S THRU 2008-08 ISSUE END.

**DIFFERENTIAL COMPRESSION**  
 1-801/62 4-801/70  
 2-801/68 5-801/66  
 3-801/66 6-801/70

I certify that this ENGINE has been inspected  
 in accordance with a 100HR/ANNUAL inspection  
 and was determined to be in airworthy condition  
 Date 4/22/08 Tach reading 1883.5 Total time 3446.2  
 Signed [Signature] David D. Holzschuh  
 FAA CRS Q2AR598N

ADVANTAGE AIRCRAFT SERVICES, INC.  
 FAA CRS Q2AR598N  
 355 PINSON DRIVE, CORPUS CHRISTI, TX 78406

6-18-08	1906.3			Cleaned #2 cyl. fuel injector INSTALLED NEW SPI CHT PROBE P/N 11113 Adjusted MAGNETO TIMING. REPLACED STARTER MOTOR O-RING W/05165 <u>[Signature]</u>
SUB-TOTALS this page				ADVANTAGE AIRCRAFT SERVICES, INC. FAA CRS Q2AR598N 355 PINSON DRIVE, CORPUS CHRISTI, TX 78406
TOTALS—Carry forward to next page				ADVANTAGE AIRCRAFT SERVICES, INC. FAA CRS Q2AR598N 355 PINSON DRIVE, CORPUS CHRISTI, TX 78406



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
				TOTALS brought forward from previous page
			A/S 100W	
			1839.7	
DATE 10-25-08				ADVANTAGE AIRCRAFT SERVICES, INC. 355 PINSON DRIVE, CORPUS CHRISTI, TX 78403
				dwa ad 00-01-16 Turc(B)
			A/S 100W	NO DEFECTS
			5300	
DATE 3-27-09			1885.8	ADVANTAGE AIRCRAFT SERVICES, INC. FAA CRS Q2AR598N 355 PINSON DRIVE, CORPUS CHRISTI, TX 78403
SIGNED				

Date	Total Time In Service	Total Time Since Overhaul	Tach or Recording Meter Time
05-18-09	3556.0	757.0	1993.3



RAM Aircraft, Limited Partnership • Waco Regional Airport

TCM TSIO-520-NB Left Engine S/N 218817-R

*PIA*  
*653877*  
*653888*  
*Verified*  
*5/2/10*  
*DA*

The above referenced engine was disassembled to facilitate a case change. The engine was cleaned, inspected and reassembled to service limits per TCM Overhaul Manual X-30574A. Reused crankshaft, camshaft and rod bearings. Installed serviceable crankcase, new lifters and main bearings. CW MSB96-10A ultrasonic inspection. Reinstalled cylinder assemblies. Installed accessories in their respective positions with existing time in service with the exception of the hydraulic pump which was not installed per this work order. Flushed oil cooler. Flushed all related hoses received. Serviced engine with 100W Aeroshell oil. Ran in test cell for one (1) hour. Engine is approved for return to service for work performed. Engine preserved per Service Bulletin SIL99-1 temp. storage up to ninety (90) days. Pertinent details on file under Project No. 4714.

*Ramir Muller*

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


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It is important to understand that where the user/installer performs work in accordance with the country specified in block 1, it is essential that the user/installer...

DATE	TIME IN SERVICE	TOTAL TIME SINCE OVERHAUL	TACH OR RECORDING METER TIME	DESCRIPTION OF WORK PERFORMED— SIGNATURE & CERTIFICATE NO. OF PERSON PERFORMING WORK
TOTALS brought forward from previous page				
8-12-09	2026.2 hr			Installed old Alternator P/N ALV55K S/N 6600170 w/original drive coupling Per instructions. Func/Lenk checks OK w/3452 <i>[Signature]</i> ADVANTAGE AIRCRAFT SERVICES, INC. FAA CRS Q2AR598N 355 PINSON DRIVE, CORPUS CHRISTI, TX 78406



### ENGINE LOG BOOK ENTRY

Engine: LEFT N444BZ TCM TSIO-520-NB S/N 218817-R Date: 5/28/2010  
 Engine T.T: 3617.8 TSO: 817.8 Indicated Time: 2055.1 HM W/O: 5646  
 COMPLETED A 100 HR / ANNUAL INSPECTION USING C414 SERVICE MANUAL CHAPTER 2.  
 CHANGED OIL AND FILTER, SERVICED 11 QTS AEROSHELL 100 W OIL. CLEANED, GAPPED, AND  
 TESTED SPARK PLUGS. AD 09-16-03 SAP CYLINDERS N/A ECI CYLINDERS INSTALLED AD 09-19-07  
 TCM EQ3 CYLINDERS N/A TCM CYLINDERS INSTALLED 10/14/02. AD 09-24-52 TCM LIFTERS N/A BY  
 P/N 653877, 65388. ADJUSTED T/O MAP AND FUEL FLOW PER RAM MANUAL SUPPLEMENT.  
 RESEARCHED AD'S THRU 2010-10 ISSUE

DIFFERENTIAL COMPRESSION  
 1-20/62 5-20/70  
 2-20/70 5-80/52  
 3-30/58 6-80/66

I certify that this ENGINE has been inspected  
 in accordance with a 100HR/Annual inspection  
 and was determined to be in airworthy condition  
 Date: 5-28-10 Ind reading 2055.1 Total time 3617.8  
 Signed: *[Signature]*

355 Pinson Drive  
 Corpus Christi, TX 78406  
 (361) 289-1884

ADVANTAGE AIRCRAFT SERVICES, INC.  
 FAA CRS Q2AR598N  
 355 PINSON DR CORPUS CHRISTI, TX 78406

David D. Holzschuh  
 FAA CRS Q2AR591

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
6/3/11			2098.8	TOTALS brought forward from previous page
1 6/6/80				CHANGED OIL & FILTER SHELL 100W & LEAK VIII-7
2 6/8/80				CHANGED COMPRESSION OK CHECKED MAPS
3 9/4/80				500HR INSPECTION & TUNE TO ENGINES
4 7/9/80				CLEANED FUEL FILTER. CLEANED AIR FILTER
5 8/11/80				CLEANED GAPSD & TESTED SPARK PLUGS.
6 6/5/80				FLIGHT 2000-1-16 Etc. 10 Sp. per 6. DEI hooked up to fuel filter running ok
				I certify that this aircraft/engine has been inspected in accordance with <u>Annual</u> inspection and was determined to be in <u>airworthy</u> condition.
				6/2/11 2098.8 <i>Michael Muzyczyn</i>
				Date Tach Time Signature
				Michael Muzyczyn A & P 1486790 IA



**ENGINE LOG BOOK ENTRY**

Engine: LEFT N444BZ TCM TSIO-520-NB S/N 218817-R Date: 3/13/2012  
 Engine T.T: Indicated Time: 2143.2 HM W/O: 6080  
 CHANGED OIL AND FILTER, INSPECTED OLD FILTER, NO METAL NOTED. SERVICED 11 QTS AEROSHELL 100W OIL. WASHED AND LEAK CHECKED OK. C/W AD 00-01-16 (PARA(b) CESSNA 50 HR EXHAUST INSP., NO DEFECTS NOTED.  
 355 Pinson Drive  
 Corpus Christi, TX 78406  
 (361) 289-1884

*David D. Holzschuh*  
 David D. Holzschuh  
 FAA CRS Q2AR598



**ENGINE LOG BOOK ENTRY**

Engine: LEFT N444BZ TCM TSIO-520-NB S/N 218817-R Date: 7/6/2012  
 Engine T.T: 3710.7 TSO: 910.7 Indicated Time: 2148.0 HM W/O: 5646  
 COMPLETED A 100 HR / ANNUAL INSPECTION USING FAR 43 APP D, AND C414 SERVICE MANUAL INSPECTED AND REPLACED OIL FILTER. SERVICED 1QT A/S 100W. CLEANED, GAPPED, AND TESTED SPARK PLUGS. RESEARCHED AD'S THRU 2012-12 ISSUE. END

**DIFFERENTIAL COMPRESSION**  
 1-80/56 4-80/72  
 2-80 70 5-80/46  
 3-80/64 6-80/65

I certify that this ENGINE has been inspected in accordance with a 100HR/Annual inspection and was determined to be in airworthy condition.  
 Date 7-6-12 Indicated Time 2148.0 Total Time 3710.7

355 Pinson Drive  
 Corpus Christi, TX 78406  
 (361) 289-1884

ADVANTAGE AIRCRAFT SERVICES, INC.  
 FAA CRS Q2AR598N

David D. Holzschuh  
 FAA CRS Q2AR598

DATE \_\_\_\_\_

K \_\_\_\_\_



**Waco Regional Airport, Waco TX 76708**

Reg #: N444BZ Date: 11/11/13 Work Order #: 13-0804  
 Make: Cessna Model: 414 Serial #: 0490 Hour Meter: 2179.8  
 Eng: TSIO-520-NB S/N: 218817-R (left) ETT: ~~XXXXXX~~ TSMOH: ~~XXXXX~~  
 3742.5 972.5

Performed annual inspection in accordance with FAR 43 Appendix D, Cessna 414 Maintenance manual and TCM manuals. Performed compression checks, results as follows: #1: 68/80, #2: 65/80, #3: 57/80, #4: 70/80, #5: 35/80 and #6: 52/80. Drained oil and changed filter. (CH48108-1) removed #5 cylinder. Installed new cylinder P/N CFCN71.2BCA-221 obtained from RAM Aircraft. Replenished oil supply with 12 qts. Philips 20W50M. oil for new #5 cylinder break in. Cleaned and gapped spark plugs. Checked magneto timing. C/W A.D. 2001-01-16 Paragraphs (b), (c) and (e), inspection of exhaust system components. Installed new intake manifold flex elbow, RAM P/N 1111-2, on inboard side. Washed engine. Run up checked O.K.

I certify that this engine has been inspected in accordance with an ANNUAL / 100 Hr Inspection and has been determined to be in an airworthy condition.

*Gary Drapela*  
 Gary Drapela A&P 3542901 IA



**McGregor Executive Airport, McGregor TX 76657**

Reg #: N444BZ Date: 2-9-2015 Work Order #: 14-0622  
 Make: Cessna Model: 414 Serial #: 0490 Hour Meter: 2195.8 ACTT: 7476.9  
 Eng: TSIO-520-NB S/N: 218817-R (Left) ETT: 3758.5 TSMOH: 958.5

Performed an Annual Inspection as required by FAR 91.409 in accordance with the Cessna service manual, and FAR 43 Appendix D. Accomplished the following items: Compressions check results: #1 69/80, #2 63/80, #3 70/80, #4 60/80, #5 75/80 and #6 62/80. Drained oil and serviced engine with 12 qts. of Aeroshell 100w. Removed and replaced oil filter with new CH48108-1. Installed new crush gasket p/n MS35769-11. Cut open filter and inspected for metal, none detected at this time. Cleaned and gapped spark plugs. Checked magneto timing. C/W A.D. 2001-1-16 Paragraphs (b), (c) and (e), inspection of exhaust system components. Troubleshot alternator charging system on left engine, alternator is producing power normally. Removed and replaced alt out sensor on left engine with new p/n 9910094-3. Washed engine. Run up and leak check ok.

I certify that this engine has been inspected in accordance with an ANNUAL / 100 Hr Inspection and has been determined to be in an airworthy condition.

*Carl Farris*  
 Carl Farris A&P 3225044 I.A.


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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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Reg#: N444BZ      Date: 4/8/2016      W/O: 16-10618  
 Make: Continental      Model: TSIO-0520-NB      S/N: 218817-R  
 Engine tach: N/A      TTSMOH: 968.3      TTSN: 3,768.3

Performed an annual inspection on this engine. Cleaned and checked spark plugs, soaked injector nozzles, changed engine oil and filter (CH48108 series), installed new crush gasket (MS35769-11). C/W AD 2001-1-16 paragraphs (B), (C) and (E). Replaced 2 each clamps RAM P/N: 2274-20 and 2 each gasket s RAM P/N: 2535-250. Ground ops checked OK.

I certify that this engine has been inspected IAW an annual inspection and was determined to be in an airworthy condition. Additional details are on file at Texas Aero under Work Order # 16-10618.

Russell Smith *Russell B Smith*

3112876 IA



N#: N444BZ      Date: 6-20-17      W/O: 17-10674  
 Make: Continental      Model: TSIO-520-NB      S/N: 218817-R  
 TTSN: 3791.3      TTSMOH: 991.3      Engine Tach: N/A  
 Hobbs: 2228.4

Drained left engine oil and removed engine oil filter. Cut open and inspected engine oil filter. No metal found at this time. Installed engine oil drain plug with gasket P/N MS35769-11. Installed new left engine oil filter P/N CH48108-1 and serviced engine with 12 quarts of Aeroshell 100W. Removed, cleaned, inspected and re-gapped left engine spark plugs. Checked timing. Compressions #1. 71/80 #2. 72/80 #3. 66/80 #4. 72/80. #5. 78/80 #6. 70/80. Complied with AD 2001-1-16 par (b), (c), and (e) exhaust component inspection. All work done in accordance with C414 maintenance manual.

I certify that this aircraft has been inspected IAW FAR Part 43 appendix D for a 100 hr/Annual inspection and found to be airworthy at this time and approved for return to service. Additional details are on file at Texas Aero under Work Order # 17-10674

Louis Dean *Louis Dean*

A&P 3804378

Richard Hewgley *R. Hewgley*

A&P IA 2695103


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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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**N#:** N444BZ      **Date:** 5-20-17      **LH engine**  
**Make:** Continental      **Model:** TSIO-520-NB      **S/N:** 218817-R  
**TTSN:** 3791.3      **TTSMOH:** 991.3      **Engine Tach:** N/A  
**Hobbs:** 2228.4

Compressions: #1, 72/80. #2, 75/80. #3, 65/80. #4, 72/80. #5, 73/80. #6, 72/80. Drained engine oil and R/R oil filter P/N CH48108-1. Inspected Removed oil filter, no contaminants found. Serviced engine with Aeroshell W100. Inspected spark plugs. Complied with AD 2001-1-16 par (b), (c), and (e) exhaust component inspection. Run and Leak check good. All work done in accordance with C414 maintenance manual.

I certify that this aircraft has been inspected IAW FAR Part 43 appendix D for a 100 hr/Annual inspection and found to be airworthy at this time and approved for return to service.

Additional details are on file at Texas Aero under Work Order # 17-10674


Louis Dean Louis Dean      A&P 3804378  
 Richard Hewgley R.W. Hewgley      A&P IA 2695103

<b>MODEL</b>	CONTINENTAL TSIO-520-NB	Trim-Aire Aviation, Inc P.O. Box 447 Limestone County Airport Mexia, Texas 76667 (254) 562-2857	<b>DATE:</b>	7/16/2019
<b>S/N:</b>	218817-R		<b>W.O.:</b>	19-0163
<b>REG:</b>	N444BZ		<b>HOBBS:</b>	2269.0
<b>TTSN:</b> 3831.9	<b>SMOH:</b> 1031.9		<b>ACTT:</b>	7550.1

L/H Engine Log Entry

- 1 Performed a compression test as follows: 57, 58, 72, 75, 76, 62.
- 2 Checked mag timing.
- 3 Changed oil and filter p/n CH48108-1 and refilled with Aeroshell 100W.
- 4 Lubricated engine controls and cables.
- 5 Removed and replace spark plugs p/n URHB32E.
- 6 Ground ran engine, no leaks found, operation normal.
- 7 Complied with following AD's: AD2009-19-07 Previously Complied With, AD2010-11-04 N/A, AD2012-03-06 N/A, AD2012-10-13 N/A, AD2014-05-29 N/A, AD2016-16-12 N/A Engine has TCM cylinders.

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

  
 Chris Savage A&P 32532381A

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MODEL: ISIO-520-NB

S/N- 218817-R

TSO: 1048.9

P.O. Box 447  
Limestone County Airport  
Mexia, Texas 76667  
(254) 562-2857

DATE: 08-19-2020

W.O. 20-0170

HOBBS: 2285.6

ACTT: 7567.6

LEFT ENGINE LOG ENTRY

ANNUAL INSPECTION

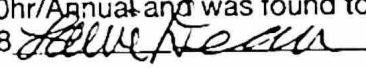
1. ENG. COMP. #1 76/80, #2 72/80, #3 75/80, #4 78/80, #5 78/80, #6 78/80
2. REMOVED OIL FILTER, CUT AND INSP'D, NO METAL OR CONTAMINATES FOUND. INSTALLED NEW CH48108-1 OIL FILTER
3. REMOVED AND CLEANED ALL FUEL INJECTERS
4. C/W AD 2000-01-16 DATED 02/15/2000. REF AIRFRAME LOG
5. REPL GOVERNOR GASKET; PN AA914
6. REPL'D STARTER O-RING, PN MS9021-038
7. REPL'D ALT GASKET, PN 653981
8. C/W AD 2000-01-16 DATED : 02/15/2000 REF AIRFRAME LOG

ENGINE TEST RAN, INSPECTED FOR OIL LEAKS NONE FOUND. ENG APPROVED FOR RETURN TO SERVICE

  
HENRY C. HENDRICKSON - A&P 1677108

I CERTIFY THAT THIS ENGINE HAS BEEN INSPECTED IAW AN ANNUAL INSPECTION AND WAS DETERMINED TO BE IN AN AIRWORTHY CONDITION.

  
CHRIS SAVAGE A&P 32532381A

N444BZ Hobbs 2298.8 Date 11-30-21 LH engine  
Compressions: #1, 72/80. #2, 68/80. #3, 68/80. #4, 76/80. #5, 74/80. #6, 76/80. I certify that this engine has been inspected in accordance with a 100hr/Annual and was found to be in a condition for safe operation. Louis Dean A&P IA 3804378 

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Work Order: 22-1050 N444BZ

Engine Model: TCM TSIO-520-NB	ENG SN: 218817-R	Position: Left	TSOH 1077.1	Hobbs: 2314.4	Date: 19 Jan 23
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Performed an Annual Inspection as required by FAR 91.409 in accordance with the Cessna 414 series service manual, TCM Engine manual, and FAR 43 Appendix D. All AD's complied with through Bi-Weekly 2023-1.

- 1) Engine compressions as follows: #1)62/80, #2)63/80, #3)70/80, #4)62/80, #5)70/80, and #6)69/80, master orifice 45.
- 2) Removed oil filter and drained the oil. Installed a new oil filter P/N CH48108-1 and added 12 quarts of Phillips XC 20W50. Replaced drain plug crush gasket with new, PN MS35769-11.
- 3) Cleaned, gapped, and tested the spark plugs and replaced Gasket P/N M0674 (12).
- 4) Oil Leaking from LH Engine Push Rod Tubes On #1, #3, #4 and #5 Cylinders. Removed push rod tube packings. Replaced push rod tube packings with new packing and new valve cover gaskets using gasket set P/N SA520T1 (3 total) on LH engine cyl #4, cyl #3, and cyl #5 IAW EMM 72-60. Installed new push rod tube packings and valve cover gaskets using gasket set P/N SA520T1. IAW EMM 72-60. Leak check required. During engine runs, ops and leak checked satisfactory.
- 5) Removed LH engine prop governor P/N DCFS290D9E-T3, S/N 010208 due to leaking from governor body. Installed repaired LH engine prop governor P/N DCFS290D9E-T3, S/N 010208. Reinstalled engine baffling panels and sealed edges. Used new prop governor gasket P/N AA9144. Ref. AMM 10-7. Needs engine run to check engine and prop rigging. During engine runs, ops and leaked check satisfactory.
- 6) Oil hoses overdue replacement. Manufacture date 12/00. Removed oil hoses on left engine and replaced with new hose (kit) P/N I443-5L. Operational check satisfactory.
- 7) Removed left and right engine magneto pressurization filters and replaced with two new filters P/N I396-2. IAW AC43.13-1B.
- 8) Turbo charger tab washers rusted and deteriorated. Action deferred until next inspection.
- 9) Complied with AD 2000-01-16 paragraphs b through g to detect and correct cracks and corrosion on the exhaust system (recurring). Removed exhaust components from left engine and forwarded to AWI to comply with inspection. Installed 1 new LH stack assy. P/N A9910295-13, 2 new slip joints P/N A9910296-7, 1 new LH elbow P/N A9910299-3, 1 new waste gate overboard tube P/N A9910299-6, 1 new waste gate bypass elbow P/N A9910299-5, 2 new waste gate gaskets P/N 2570-1, 1 new bypass gasket P/N 17189-200N1, 2 new end seals P/N 17189-250N1, 1 overhauled header P/N 8226-9, 2 new slip joint hardware kits P/N 1001-6, 1 new waste gate hardware kit P/N WGH8816, 1 new turbo hardware kit P/N TH448, 1 new RH stack assy. P/N A9910295-14, 1 new RH elbow P/N A9910299-4, 6 new exhaust stack gaskets P/N SA628260 on the LH engine IAW AMM 9-81. Next inspection due IAW AD 2000-01-16 column (b) January 2024 or 50 hours. whichever occurs first; IAW column c and e January 2024, IAW column g January 2035 or 10,095.5 total time. whichever occurs first. Column f N/A, no multi segment v-band clamps installed.
- 10) Comply with AD 96-12-22, to prevent loss of engine oil due to loose filter adapter (recurring). Affected oil filter adapter not installed.
- 11) Comply with AD 2022-16-03, improperly lubricated magnetos. N/A by serial number. Affected magnetos not installed.
- 12) Comply with AD 2009-19-07C2, superior air parts cylinders (recurring). N/A, affected cylinders not installed.
- 13) Comply with AD 2009-16-03, prevent separation of the cylinder head (recurring). Previously complied with.
- 14) Comply With AD 97-26-17, to prevent crankshaft failure. Previously complied with.
- 15) Comply With AD 93-08-17, oil pickup tube. Complied with at overhaul
- 16) #1 engine #1-cylinder exhaust studs broken off. Removed cyl. #1 on engine #1 and sent for repair (Sal's) IAW EMM 72-10. installed #1 cyl. on #1 engine using gasket set P/N SA520T1. Installed (3) P/N 41402-16 baffle screws during final assembly. IAW EMM 72-50. Operational check satisfactory.
- 17) Left engine cylinder #1 EGT probe split in half. Removed LH engine cyl. #1 EGT probe and replaced with new EGT probe P/N 86255. IAW AC 43.13-1B. Ops check required. Ops checked satisfactory.
- 18) LH engine exhaust outboard support bracket broken. Removed LH engine exhaust outboard support bracket and replaced with a new support bracket P/N 5250101-3 IAW AC 43.13-1B

01 of 01

I certify that this engine has been inspected in accordance with an ANNUAL Inspection and has been determined to be airworthy

Charles Donley AP 3073534 IA


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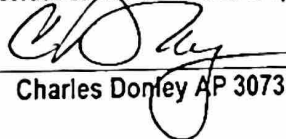
Work Order: 23-0259 N444BZ

A/C Model: Cessna 414	AC SN: 414-0490	Reg No: N444BZ	Total Time 7623.1	Hobbs: 2341.1	Date: 1 Jun 2023
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Performed the following maintenance IAW the Cessna 414 Chancellor Service Manual dated 1 Nov 1984:

- 1) Prop heat indicator has no indication. Troubleshooting found the prop deice indicator faulty, one prop blade R/H engine (marked on hub) with a faulty boot, and the brush block for the R/H engine with two cracked brushes. Contacted propeller overhaul shop (Texas Propeller and Accessories) who agreed to warranty the faulty boot. Removed R/H propeller heat brush bock from aircraft. Removed 2 brush assemblies part number RAB40012 from brush bock and replaced with new. Reinstalled brush block assembly on R/H Engine, adjusted and secured IAW Cessna 414 M/M 13-60, Propeller Deice System. Checked system for continuity. Placarded propeller deice system INOP in full view of the pilot. Returned aircraft to owner for operation with limitation, "PROP DEICE SYSTEM INOP".
- 2) Installed new nut on seat #3, P/N: CM3224-4. IAW Cessna 414 AMM 25-20.
- 3) Re-attached #4 seat trim with new hardware reference AC 43.13-1B. hardware form free stock.
- 4) Pilot's altitude indicator tumbled in flight. Removed glare shield. Removed pilot's attitude indicator and bench tested, test satisfactory. Reinstalled pilot's attitude indicator IAW Cessna 414 Service Manual section 12 page 12-11. Work performed by Josh Graf. Reinstalled glare shield.
- 5) Oil leaking from LH engine. Degreased L/H engine and dried it off. Ran engine and checked for oil leaks. Leak checked satisfactory.
- 6) When switched from main to aux, L&R aux fuel pump breakers tripping. Troubleshooting revealed both auxiliary in-line fuel pumps have failed. De-fueled LH and RH aux fuel tanks. Removed LH aux fuel pump P/N: A8150-B S/N: illegible. Removed RH aux fuel pump P/N: A8150-B S/N: 103878. Installed LH new aux fuel pump P/N: A8150-B, S/N: 103878. Installed RH new aux fuel pump P/N: P/N: A8150-B S/N: 114476. Refueled LH and RH wing aux fuel tanks ops check both fuel aux pumps. Pumps came on and no breakers popped. Ref aircraft service manual 11-14. Leaks check satisfactory. Access panels to pumps closed up.
- 7) Masked under wing area. Cleaned area and prepped for paint. Painted area white IAW AC 43.13-1B Chapter 2, Section 2.
- 8) LH inboard cowl flap actuator disconnected. Reconnected L/H inboard cowl flap actuator rod. Ops checked cowl flaps for proper rigging. Ops checked good. Ref. AMM Section 9-12.
- 9) Tail nav light inop. Removed tail nav light lens. Removed inoperative GE307 bulb and replaced with new GE307 bulb. Ops checked satisfactory. Reinstalled tail nav light lens.
- 10) R/H wing access panel screw nut plates, stripped out and one missing. Drilled out stripped studs. Drilled out damaged nutplates and installed new nutplates part number MS21050L3. Ref. AC43.13-1B 4-57.

For work performed and recorded above, this aircraft is approved for return to service.

  
Charles Donfey AP 3073534 IA


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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
				<b>TOTALS</b> brought forward from previous page



7929 Karl May Dr.  
Waco, Texas 76708  
CRS No. AK6R541N

Engine TT: 3917.6  
 Engine SMOH: 1117.6 (10/02)  
 Prop SMOH: 40.5 (1/23)  
 Hour Meter: 2354.9  
 Date: 02/01/2024

Continental TSIO-520-NB RAM SIV S/N L-218817-R

On above referenced engine, removed all cowling for 100 Hour/Annual Inspection. Cleaned and gapped spark plugs. Drained oil, installed new oil filter, and refilled engine with Phillips XC 20W-50 oil. Checked magneto timing. Inspected plug harness and all engine electrical. Checked all engine controls for movement and attach points. Inspected intake and exhaust system, condition and integrity of all engine accessories. Inspected engine mounts, all baffles and cowling. Inspected prop, spinner, and bulkhead. Inspected all fuel, oil, and hydraulic lines and fittings. Ran compression check and readings were: #1) 71/80, #2) 70/80, #3) 60/80, #4) 74/80, #5) 75/80, and #6) 72/80. Installed new lifters, P/N's SA646277 and SA628488. C/W A.D. 2000-01-16 per para's (b), (c), (d) and (e). (Paragraph (b) next due at 2404.9 HM.) Installed new overboard exhaust pipe. Cleaned induction air filter. Resealed fuel control unit. Performed set-up of systems per service manual and RAM Specs. Installed new studs as needed at #6-cylinder. A.D.'s researched through bi-weekly 2024-01. Above work done in accordance with Continental and Cessna 414 Service Manuals and Air Impressions, Inc. 100 Hour/Annual Checklist. Engine ground run-up leak checked good and approved for return to service. Pertinent details are on file under work order #5815

*[Signature]*  
 Air Impressions, Inc.  
 CRS# AK6R541N



7929 Karl May Dr.  
Waco, Texas 76708  
CRS No. AK6R541N

I certify this Engine has been inspected in accordance with a 100 HR. Inspection and has been determined to be in an airworthy condition.

DATE 02/01/2024 TACH 2354.9  
 ENGINE SMOH 1117.6 (10/02)  
 ENGINE TT 3917.6  
 WORK ORDER #5815  
 SIGNED [Signature]

AIR IMPRESSIONS, INC  
 REPAIR STATION # AK6R541N

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