



ENGINE MAINTENANCE RECORDS

Aircraft Registration NS02JJ
Engine Position Right
Engine Serial No. 514534



ENGINE MAINTENANCE RECORDS

Log No. 1

Aircraft Registration No. NS02JJ

Engine Manufacturer TCM

Model TSTD-520-NIB

Serial No. 514534

Date installed on aircraft 11/25/09

Time Between Overhauls (TBO) 1600 Hours

If used on multi-engine aircraft:

Right Left

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
9-11-09	4583.0	0.0	



RAM Aircraft, Limited Partnership • Waco Regional Airport

TCM TSIO-520-NB Series VI Right Engine S/N 514534

Above referenced engine overhauled to new parts limits per FAR 43.2(a)(1)(2) to conform w/TCM SM X-30574A. 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. J dated 2/19/08. Above referenced engine modified to TSIO-520-NB 335 HP per STC SE4327SW-D Rev.4. Installed new RAM camshaft P/N 1058-1A, S/N I08037 per STC SE4327SW-D. AD 97-26-17 C/W per installation of overhauled VAR crankshaft P/N 649898, S/N K108904N per TCM CSB96-8. C/W ultrasonic inspection per MSB96-10A, due at next overhaul or when crankshaft removed. AD 99-19-01 N/A per crankshaft date of manufacture I/AW TCM MSB99-3C. AD 2000-23-21 N/A to crankshaft serial number/date of manufacture I/AW TCM Mandatory Service Bulletin MSB00-5D. Engine assembled with overhauled TCM heavy style crankcase P/N 654128-1, S/N J019015RPL. Installed new ECI Titan Nickel cylinders. Cylinder hold-down nuts replaced and torqued per Overhaul Manual Supplement. Installed new RAM FAA/PMA oil cooler P/N 2600-1, S/N 1753049. C/W AD 89-24-01 R1 per installation of starter adapter P/N 642085A4 with current scavenge pump gears. Installed new RAM/FAA/PMA fuel nozzles P/N 2562-14D. TCM Service Bulletin SB06-1A N/A per installation of RAM fuel nozzles. AD 86-13-04 R3 and AD 93-10-02 (MSB93-12) N/A per cylinders installed. MSB02-9, MSB06-2, Rev. 2 (ECI Cylinders) and AD 2004-08-10, MSB04-1, Rev. 2 (ECI cylinders) N/A per date of manufacturer. Engine accessories exchanged for overhauled or new units with exception of the vacuum pump and tach generator which were not installed per this work order. New Slick pressurized magnetos P/N 6320 installed per STC SE4651SW-D and pressurized. Service Bulletin SB3-08A N/A to magneto serial numbers installed. MSB94-8C on magneto timing procedure C/W per timing to STC 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. Installed RAM FAA-PMA oil cooler baffle P/N 1253-1. Installed RAM-FAA-PMA rocker box cover gaskets P/N 1387-1. C/W AD 78-06-01 per installation of intake tube P/N 642590. Category 1 thru 3 TCM Service Bulletin Compliance Listing in RAM Manual. Above referenced engine was made eligible for 1600 hr. TBO per TCM SIL98-9 Rev. A, Note 2. Aluminum alloy engine parts were coated per RAM Specification No. 1142. 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 4835.

Stephen Walls

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

TCM/RAM, TSIO-520-NB, S/N: 514534, Hobbs: 0.0 TT: 4583.0 SMOH: 0.0 Date: 11/25/09
 > Installed TSIO-520-NB, S/N: 514534, TIS: 4583.0, SMOH: 0.0 on right side of aircraft N502JJ, Cessna, 414, 414-0061.
 > Installed new Hartzell propeller (P/N: PHC-C3YF-2UF, S/N: EB7059B) in accordance with RAM STC SA09971SC-D, TIS: 0.0, SMOH: 0.0
 > Complied with AD 2000-01-06, "Exhaust system inspection / Overhaul" sections B,C,D,E,F, and G.
 Exhaust overhauled by Dawley Inc.
 This engine is returned to service.

X *JAC Baker*

Justin C. Baker IA543081705

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3 WORK

TCM/RAM, TSIO-520-NB, S/N: 514534, Hobbs: 43.7 TT: 4626.7 SMOH: 43.7 Date: 05/24/10
 > Drained oil and serviced with 10 quarts Phillips 20x-50 XC.
 > Replaced oil filter CH48108-1.
 > Pulled oil sample and shipped to Aviation Oil Analysis for processing.
 > Complied with AD 2000-01-06, "Exhaust system inspection" section B no defects noted.
 This engine is returned to service.
 X Justin C. Baker Justin C. Baker IA543081705

N502JJ, Hobbs: 68.5, TTE: 4651.5, TSMOH: 68.5 09/16/10
 > Complied with an annual inspection on right engine.
 > Complied with AD 2000-01-16, "Exhaust inspection" parts (c) and (d).
 I certify this Engine has been inspected in accordance with an annual inspection and has been found to be in an airworthy condition. X Justin C. Baker Justin C. Baker IA543081705

N502JJ BLUE MOUNTAIN AIRCRAFT 11/25/2011
 (541) 663-6139
 RIGHT ENGINE S/N: 514534
 TACH: N/A HOBBS: 132.4 TTE: 4715.4 SMOH: 132.4
 > Complied with an Annual inspection.
 > Changed oil and serviced with 12 quarts Phillips 20-50XC
 > Complied with recurring AD 2000-01-16 parts b, c, and e.
 I certify this ENGINE has been inspected in accordance with an annual inspection and has been found to be in an airworthy condition. X Justin C. Baker Justin C. Baker IA543081705

N502JJ BLUE MOUNTAIN AIRCRAFT 12/1/2012
 (541) 663-6139
 RIGHT ENGINE S/N: 514534
 TACH: N/A HOBBS: 194.2 TTE: 4777.2 SMOH: 194.2
 > Complied with an Annual inspection.
 > Changed oil and serviced with 12 quarts Phillips 20-50XC
 > Complied with recurring AD 2000-01-16 parts b, c, and e.
 I certify this ENGINE has been inspected in accordance with an annual inspection and has been found to be in an airworthy condition. X Justin C. Baker Justin C. Baker IA543081705

N502JJ BLUE MOUNTAIN AIRCRAFT 11/23/2013
 (541) 663-6139
 RIGHT ENGINE S/N: 514534
 TACH: N/A HOBBS: ~~192.4~~ 223.4 TTE: ~~4775.4~~ 4806.4 SMOH: ~~192.4~~ 223.4
 > Complied with an Annual inspection.
 > Changed oil and serviced with 12 quarts Phillips 20-50XC
 > Complied with recurring AD 2000-01-16 parts b, c, and e.
 I certify this ENGINE has been inspected in accordance with an annual inspection and has been found to be in an airworthy condition. X Justin C. Baker Justin C. Baker IA543081705

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DA	N502JJ	BLUE MOUNTAIN AIRCRAFT (541) 663-6139 RIGHT ENGINE S/N: 514534	12/17/2014
TACH: N/A		HOBBS: 266.2	TTE: 4849.2
SMOH: 266.2			
> Complied with an Annual inspection. > Changed oil and serviced with 12 quarts Phillips 20-50XC > Complied with recurring AD 2000-01-16 parts b, c, and e.			
I certify this ENGINE has been inspected in accordance with an annual inspection and has been found to be in an airworthy condition. X <u><i>[Signature]</i></u> Justin C. Baker IA543081705			

DA	N502JJ	BLUE MOUNTAIN AIRCRAFT (541) 663-6139 RIGHT ENGINE S/N: 514534	12/2/2015
TACH: N/A		HOBBS: 399.9	TTE: 4982.9
SMOH: 399.9			
> Complied with an Annual inspection. > Changed oil and serviced with 12 quarts Phillips 20-50XC > Complied with recurring AD 2000-01-16 parts b, c, and e.			
I certify this ENGINE has been inspected in accordance with an annual inspection and has been found to be in an airworthy condition. X <u><i>[Signature]</i></u> Justin C. Baker IA543081705			

DA	N502JJ	BLUE MOUNTAIN AIRCRAFT (541) 663-6139 RIGHT ENGINE S/N: 514534	2/17/2017
TACH: N/A		HOBBS: 511.4	TTE: 5094.4
SMOH: 511.4			
> Complied with an Annual inspection. > Changed oil and serviced with 12 quarts Phillips 20-50XC > Complied with recurring AD 2000-01-16 parts b, c, and e.			
I certify this ENGINE has been inspected in accordance with an annual inspection and has been found to be in an airworthy condition. X <u><i>[Signature]</i></u> Justin C. Baker IA543081705			

	1-23-18, HOBBS: 521.4	- Complied with an Annual inspection
		- Complied with recurring AD 2000-01-16
I certify this ENGINE has been inspected in accordance with an annual inspection and has been found airworthy		
<u><i>[Signature]</i></u> IA543081705		

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