



Transport
Canada
Aviation

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D/S
RH
TP3910E

AIRCRAFT TECHNICAL LOGS

Section 3. ENGINE

Second Edition

January 1987

Canada

ENGINE LOG

1. Make TELEDYNE/CONTINENTAL
2. Model TS10-520-NB
3. Specification TC #EBCE
4. Manufacturer's Serial Number 509541
5. Date of Manufacture 6 APRIL 94
6. Aircraft Inspection Cycle 50/100/200

INSTALLATIONS, INSPECTIONS,

NOTE: USE BOTH PAGES AND AS MANY LINES AS REQUIRED FOR COMPLETE

DATE	TIME RUN		TIME SINCE OVERHAUL		
	HRS.	MIN.	HRS.	MIN.	
BROUGHT FORWARD					
APR 4 1994	00	00	3	0	THIS ENGINE INSTALLED ON C-47 D15 RH REPAIRS ENGINE THAT FAILED IN PHASE USED WITH T.O. OF TYPE "M" MAXIMUM OIL FIND TO BE OPERATING NORMALLY.
22-04-94	07	30	10	30	100 HRS INSPECTION AS PER TAP Q 2154-R1 ENG CON
19-06-94	46	55	50	25	50 HRS INSPECTION AS PER TAP Q 2154-R1 ENG CON CLEANED, REGAPPED, TESTED, ROTATED,
18-09-94	53	45	11	0	100 HRS INSPECTION AS PER TAP Q 2154-R1 ENG CON. CLEANED, REGAPPED, TESTED, ROTATED, MAES 4-75 5-77 6-75 ENG GROUND RUN FOUND
4 JAN 96	59	25	16	35	50 HRS INSPECTION AS PER Q 2154-R1 A.I.P. ENGINE CLEANED, TESTED, REGAPPED, ROTATED.
17 APRIL 95	57	05	20	40	200 HRS INSPECTION AS PER Q 2154-R1 A.I.P. ENGINE REPLACED. SPARK PLUGS CLEANED, TESTED, COMPTEST #1-72 #2-74 #3-74 #4-76 RUN TO BE OPERATING NORMALLY.
10 JULY 95	30	40	15	20	50 HRS INSPECTION AS PER TAP Q 2154-R1 ENG CON CLEANED, REGAPPED, TESTED, ROTATED, ENG OPERATIVE NORMALLY.
24 NOV 95	48	30	30	50	100 HRS INSPECTION AS PER TAP Q 2154-R1 ENG CON CLEANED, REGAPPED, TESTED, ROTATED, MAES 4-76 5-72 6-75 ENG CLEANED AS RE-
TOTAL THIS PAGE					CARRIED FORWARD
TOTAL FROM PREVIOUS SUMMARY					
TOTAL SINCE MFG.					

MAINTENANCE RECORD

1

REPAIRS, ADJUSTMENTS, MODIFICATIONS
ENTRIES. DRAW A DIAGONAL LINE THROUGH ANY UNUSED LINES IN DATE AND TIME COLUMNS.

SIGNATURE

LICENCE
NUMBER

Side by "A.H." AIRCRAFT ENGINE. THIS ENGINE
PARTS & ACCESSORIES REPLACED. ENGINE START-
ELECTRICAL RECONNECTED. ENGINE GOOD RUN &



74 333465.

TROUS CHECKED & LUBED, OIL FILTER CHANGED.



74 333465.

TROUS CHECKED & LUBED, OIL CHANGED, PINKS & HOLES
FIVE GROUND RUN FOUND TO BE OPERATIVE NORMALLY.

74 333465.

TROUS CHECKED & LUBED, OIL INTERCHANGED, PINKS & HOLES
TO FIVE TIMING CHECKED, COMPRESSION - 15.2-17.3-18
BOTH OPERATING NORMALLY.

R. J. J. J.

74 333465.

CONTRACTS JUDGE LUBED. OIL CHANGED. SPARK PLUGS
CLEANED AS REQUIRED. ENGINE GOOD RUN & FOUND TO BE

R. J. J. J.

74 333465.

CONTRACTS JUDGE LUBED. OIL FILTER PURCHASED
REPLACED & INSTALLED. PINKS TO ENGINE TIMING CHECKED.
#6-79 #6-77. CLEANING AS REQUIRED. ENGINE GOOD

R. J. J. J.

74 333465.

TROUS CHECKED & LUBED, OIL CHANGED PINKS & HOLES
CLEANED AS REQUIRED. FIVE GROUND RUN FOUND TO BE

CHECKED & LUBED, OIL FILTER CHANGED, PINKS & HOLES
TO FIVE TIMING CHECKED, COMPRESSION - 17.1-2-17.3-17.5
RUNNING, FIVE GROUND RUN FOUND TO BE OPERATIVE NORMALLY.

R. J. J. J.

74 333465.









MAXIMUM HOURS BETWEEN OVERHAULS 1600 HOURS.

ENGINE SERVICE AND

DATE	TIME RUN		TIME SINCE OVERHAUL		NOTE: USE BOTH PAGES AND AS MANY LINES AS REQUIRED FOR COMPLETE
	HRS.	MIN.	HRS.	MIN.	
BROUGHT FORWARD	→		305	50	
29 May 96	65	10	371	00	50 HRS INSP & AS PER TAPQ 2154 RI ENG CONTROLS REGRAPED, TESTED, ROTATED, ENG CLEANED AS REQUIRED.
26 Jun 96	50	10	421	10	200 HRS INSP & AS PER TAPQ 2154 RI ENG CONTROLS REGRAPED, TESTED, ROTATED, N/A TO ENG. 11.75 5.73 6.74 ENG CLEANED AS REQUIRED.
22 Jun 96	42	40	463	50	50 HRS INSP & AS PER TAPQ 2154 RI ENG CONTROLS REGRAPED, TESTED, ROTATED, ENG CLEANED NORMALLY.
19 Feb 97	51	30	515	20	180 HRS INSP & AS PER TAPQ 2154 RI ENG CONTROLS REGRAPED, TESTED, ROTATED, N/A TO ENG. 5.69 6.60 END ENG CLEANED AS REQUIRED.
28 May 97	49	55	565	15	50 HRS INSP & AS PER TAPQ 2154 RI ENG CONTROLS REGRAPED, TESTED, ROTATED, ENG CLEANED AS REQUIRED.
16 Sept 97	37	40	602	55	LEFT REAR CLAMP CLAMP CASE HALF CRACKED, N/A.
7 Nov 97			602	55	ENGINE REINSTALLED. CONTROLS RECON.
18 Dec 1998	79		484	14	ENGINE FILLED WITH 18L of 15W50 ELECTRICAL RECONNECTED. ENGINE
			681		100hr inspection and annual service performed in accordance with etc
TOTAL THIS PAGE					
TOTAL FROM PREVIOUS SUMMARY					
TOTAL SINCE MFG.					
					CARRIED FORWARD

MAINTENANCE RECORD

2

REPAIRS, ADJUSTMENTS, MODIFICATIONS <small>ENTRIES. DRAW A DIAGONAL LINE THROUGH ANY UNUSED LINES IN DATE AND TIME COLUMNS.</small>	SIGNATURE	LICENCE NUMBER
CHECKED & LUBED, OIL CHANGED, PLUGS & TUCKS CLEANED. REQUIRED, ENG. GROUND RUN FOUND TO BE OPERATING NORMALLY.		M 333465
CHECKED & LUBED, OIL & FILTER, PLUGS & TUCKS CLEANED. TIMING CHECKED, COMPRESSION - 1-70 2-74 3-75 4-70, ENG. GROUND RUN FOUND TO BE OPERATING NORMALLY.		M 333465
CHECKED & LUBED, OIL CHANGED, PLUGS & TUCKS CLEANED. AS REQUIRED, ENG. GROUND RUN FOUND TO BE OPERATING.		M 333465
CHECKED & LUBED, OIL & FILTER CHANGED, PLUGS & TUCKS CLEANED. TIMING CHECKED, COMPRESSION - 1-70 2-71 3-65 4-71 ENG. GROUND RUN FOUND TO BE OPERATING NORMALLY.		M 333465
CHECKED & LUBED, OIL CHANGED, PLUGS & TUCKS CLEANED. REQUIRED, ENG. GROUND RUN FOUND TO BE OPERATING.		M 333465
RINE OIL - 1/2 GROUND -		M 333465
TESTED, SAFETIED & SECURED, & FUNCTIONAL. AIRSHELL. OIL & FUEL HOSES REINSTALLED. GND RUN & FND TO BE OPERATING NORMALLY.		M 333465
out the maintenance described above has been applicable standards of Government		M 157104

MAXIMUM HOURS BETWEEN OVERHAULS 1600 HOURS.

ENGINE SERVICE AND

DATE	TIME RUN		TIME SINCE OVERHAUL		INSTALLATIONS, INSPECTIONS, NOTE: USE BOTH PAGES AND AS MANY LINES AS REQUIRED FOR COMPLETE
	HRS.	MIN.	HRS.	MIN.	
BROUGHT FORWARD →					
					Engines
18 Dec 98					77-13-22 MODIFIED IN JULY 1979
					78-06-01 MODIFIED IN MAY 1980
					79-05-09 MODIFIED IN MAY 1980
					82-09-01 NOT APPLICABLE BY SERIAL #
					86-13-04R3 NOT APPLICABLE BY TYPE INSTALLED
					89-24-01R1 MODIFIED IN DEC 1990
					80-01-04 MODIFIED IN MAY 1980
					81-24-06 NOT APPLICABLE BY SERIAL #
					87-23-08 WILL BE APPLICABLE AT ENGINE OVERHAULED
					88-03-06 NOT APPLICABLE BY TYPE INSTALLED
					91-19-03 NOT APPLICABLE BT TYPE INSTALLED
					93-08-17 TYPE NOT INSTALLED
					93-10-02 TYPE NOT INSTALLED
					93-16-15 TYPE NOT INSTALED
					94-06-09 TYPE NOT INSTALLED
					96-12-22 TYPE NOT INSTALLED
18 Dec 98					97-26-17 WILL BE APPLICABLE AT ENGINE OVERHAULED
					98-01-08 NOT INSTALLED
TOTAL THIS PAGE					CARRIED FORWARD
TOTAL FROM PREVIOUS SUMMARY					
TOTAL SINCE MFG.					

MAINTENANCE RECORD

REPAIRS, ADJUSTMENTS, MODIFICATIONS
ENTRIES. DRAW A DIAGONAL LINE THROUGH ANY UNUSED LINES IN DATE AND TIME COLUMNS.

SIGNATURE

LICENCE
NUMBER



Waco Regional Airport

Engine Total Time: 5541.35
Since Remanufacture: 602.55
Date: 10-21-97

Series I TCM TSIO-540-NB S/N 509541

Above referenced engine disassembled to facilitate a crankcase change. Installed heavy style case p/n 1157-18L, s/n 7B223. Referenced serviceable tag from Engine Components, Inc. dated 8-5-97. Engine modified by installation of oil pick-up tube p/n 1707-28 per RAM Dwg. No. 1707 Rev. G dated 12-1-96. Installed RAM modified oil pump p/n 1825-4 per Dwg. No. 1825 dated 11-2-95. Crankcase oil pump inlet/pick-up tube interface modified per RAM Dwg. 1891, Rev. A, dated 1-8-97. Installed per STC SE09281SC. Installed crankshaft p/n 642396, s/n D014. Reference serviceable tag from AEA dated 10-1-97. C/W SB MSB96-10 per ultrasonic inspection. Installed camshaft p/n 1058-3WL, S/N B94027 and lifters p/n 653888 (Int) and 6538777 (E..i). Installed modified connecting rods p/n 1162-1 with bearings p/n AC630826M010R per STC SE4327SW as FAA-PMA approved replacement. New TCM p/n 646592A2 main bearing set installed per overhaul manual. Reused customer's cylinders. Cylinder hold down nuts replaced and torqued per Overhaul Manual Supplement. Engine reassembled with all new gaskets and seals in accordance with TCM Service Manual X-30574A. Installed Prestolite starter p/n MHJ4003, s/n 3050599X. Installed fuel pump p/n 632818-11A3, s/n K108815RB. Removed and replaced existing Tanis Heater System p/n TAS100. All existing accessories installed in their respective positions with respective time in service. Accessories include fuel injection system, starter adapter, alternator, propeller governor, magneto and ignition harness. SB94-8 on magneto timing procedure c/w per timing to data plate requirements with TDC locator and protractor with pointer. AD 91-19-03 is n/a per code date of Champion oil filter p/n CH48108. Engine ground run on test stand per RAM Specifications for one (1) hour. Engine approved for return to service for installation and RAM Aircraft test flight procedures. Pertinent details on file under work order 2989.

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

MAXIMUM HOURS BETWEEN OVERHAULS _____ HOURS.

ENGINE SERVICE AND

DATE	TIME RUN		TIME SINCE OVERHAUL		INSTALLATIONS, INSPECTIONS, NOTE: USE BOTH PAGES AND AS MANY LINES AS REQUIRED FOR COMPLETE
	HRS.	MIN.	HRS.	MIN.	
BROUGHT FORWARD →					
6 July 1977					Work Report C-FDYS Both engines ..all cylinders removed,clean inspected ,and rings replaced for new chrome rings , equivalent to a 100 hrs (annual) inspection carried out The maintenance described above has been performed in accordance with the applicable standards of airworthiness <i>[Signature]</i> G.Bellinger M157104
23 Jan			848		hrs
6 May 2001			853		100 hrs inspection carried out new RHB 32E installed, exhaust removed inspected & the maintenance described accordance with the All cylinders removed and assembly using new valves engine ground run and
25 Sep 201					
TOTAL THIS PAGE					CARRIED FORWARD
TOTAL FROM PREVIOUS SUMMARY					
TOTAL SINCE MFG.					

MAINTENANCE RECORD

4

REPAIRS, ADJUSTMENTS, MODIFICATIONS
ENTRIES. DRAW A DIAGONAL LINE THROUGH ANY UNUSED LINES IN DATE AND TIME COLUMNS.

SIGNATURE

LICENCE
NUMBER

new

new oil filter installed & six
new air filter installed, all
re-installed

above has been performed in
applicable standards of Airworthiness. *G. Belanger* M157104
replaced by six overhead cylinder
new rings, new gasket but
found Perworth

Cessna 414 C_FDYS

Work report

- 1) 100 hrs inspection carried out as per Cessna Corporation inc
- 2) new GILL battery installed
- 3) both firewall clean and re-sealed
- 4) R/H engine l/h corner exhaust pipe replaced by overhauled one (tag attach)
- 5) L/H engine westgate valve remove to carried out better cleaning of rear engine compartment
- 6) All lights checked for proper operation
- 7) L/H gear door hinges replaced

THE MAINTENANCE DESCRIBED ABOVE HAS
BEEN PERFORMED IN ACCORDANCE WITH
THE APPLICABLE STANDARDS OF
AIRWORTHINESS

G. Belanger
G. BELANGER, LIC. 5157104

15 Dec 2001

ENGINE SERVICE AND

[illegible]

RONIG AIR SERVICE
115A Airport RD.
Newnan, GA 30263

AFTT: 3521.0

RIGHT ENG.: 873.0

HOBBS: 47.3

TSN:

DATE: 11-30-02

TSMOH:

1. Performed Annual Inspection IAW Cessna 414 Inspection Guide.
2. Up-graded aircraft from RAM I to RAM IV modification IAW STC. SE43275W, RAM drawing #1011 and RAM drawing #1622 and increase max takeoff weight to 6510 lbs., max ramp weight 6550 lbs, and increase max continuous power to 325 HP. Installation IAW RAM Limited Partnership STC SA3479SW. Aircraft equipped with McCauley C93 Props. The following instruments re-marked for STC: Tack Indicator PN/C668017-ORAM, SN/4745-overhauled, Manifold Pressure Gauge PN/66206-0101 OH, SN/25479-range marked, bench tested, Pilots Airspeed Indicator PN/C661040-0105, SN/413-range marked, bench tested, Co-Pilots Airspeed Indicator PN/2052-4NP, SN/T12641-range marked, bench tested, Installed Alcor Part #204-19B EGT Gauge Installed new EGT Harness PN/42527, and EGT Probes PN/86255 IAW Alcor STC SA 96 SW, Installed RAM Manifold Pressure Relief Valves PN/1020-2-OH, Left Engine SN/HD0110, Right Engine SN/LA0236. Aircraft equipped with Hoskins Digital Fuel Flow system IAW RAM STC. Installed RAM Slip Joints PN/1001-3.
3. Replaced Right Engine West Gate Controller Installed PN/633388-10, SN/GD0101.
4. Comp. Check #1- 74/80, #2- 73/80, #3- 71/80, #4- 70/80, #5-71/80, #6- 72/80.

I certify this engine has been inspected in accordance with an annual inspection and has been determined to be in airworthy condition.

RICKY RONIG AP2592944641A

TOTAL THIS PAGE						CARRIED FORWARD
TOTAL FROM PREVIOUS SUMMARY						
TOTAL SINCE MFG.						

MAINTENANCE RECORD

5

REPAIRS, ADJUSTMENTS, MODIFICATIONS
ENTRIES. DRAW A DIAGONAL LINE THROUGH ANY UNUSED LINES IN DATE AND TIME COLUMNS.

SIGNATURE

LICENCE
NUMBER

RONIG AIR SERVICE
115A Airport RD.
Newnan, GA 30263

AFTT: 3521.0
HOBBS: 53.9
DATE: 12-4-02

RT ENG.
TSN:
TSMOH: 873.0

1. Changed oil cleaned filter serviced with 12Qts of aeroshell 100 plus ground ran no leaks noted.
2. Repaired oil leaks right engine, oil separator valve cover gaskets.
3. Replaced fuel flow transducer PN/ 201BM, SN/ 121275.
4. Installed new (left) magneto PN/ 6320 SN/ 85112010-00.
5. Installed new (right) magneto PN/ 6320 also installed inline filter PN/ 1396-2 for pressure air.

I certify this aircraft, engine or component has been inspected or repaired in accordance with current Federal Aviation Regulation and has been determined to be in airworthy condition.

RICKY RONIG AP2592944641A



Make: Continental

Model: TSIO-520-NB

Serial No.: 509541

Hours: HOBBS 82.1



Log Book Entry

Reg. No.: N414G

Date: 03/10/03

W/O No.: 40615

Page: 1

Summary of work accomplished.

Installed new MIL-H-6000 5/8 hose on vacuum system control valve.
Ran engine, performed leak check.

Approval for Return to Service

All work has been performed in accordance with the applicable manufacturer's maintenance instructions and functionally checked for proper operation. The item identified above was repaired and inspected in accordance with current FAA regulations and is approved for return to service. Pertinent details of the repair are on file at this agency under this work order.

Authorized Signature:



Henry A. Roe Inspector

FAA Certified Repair Station WD4R618M

1635 NW 51st Place Fort Lauderdale, Florida 33309

Phone 954 491 3170 Fax 954 491 1612

MAXIMUM HOURS BETWEEN OVERHAULS _____ HOURS.

DATE	TIME RUN		TIME SINCE OVERHAUL		INSTALLATIONS, INSPECTIONS, <u>NOTE: USE BOTH PAGES AND AS MANY LINES AS REQUIRED FOR COMPLETE</u>
	HRS.	MIN.	HRS.	MIN.	
BROUGHT FORWARD →					

CARRIED FORWARD

MAINTENANCE RECORD

6

REPAIRS, ADJUSTMENTS, MODIFICATIONS
ENTRIES. DRAW A DIAGONAL LINE THROUGH ANY UNUSED LINES IN DATE AND TIME COLUMNS.

SIGNATURE

LICENCE
NUMBER



RAM Aircraft, Limited Partnership • Waco Regional Airport

Previous Engine Total: 5901.8
Hour Meter: 137.4
Since Overhaul: 963.1
Date: 3-19-04

TCM TSIO-520-NB Right Engine S/N 509541

The above referenced engine was disassembled to facilitate a case change. 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. C/W MSB96-10 ultrasonic inspection. Reinstalled cylinder assemblies. Installed accessories in their respective positions with existing time in service. Serviced engine with 100W Aeroshell oil. Ran on test stand for one (1) hr. Engine approved for return to service per RAM Test flight procedures. Engine preserved per Service Bulletin SIL99-1 temp. storage up to 90 days. Pertinent details on file under Project No. 1284.

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

S & SAVIATION CO (R)
CHEROKEE COUNTY AIRPORT
1800 AIRPORT DRIVE
BALL GROUND, GA.

MODEL: TSIO-520-NB
A/C REG: N414G
A/C S/N: 414-0024
ENG S/N: 509541

DATE: 03-26-04
TACH: 137.4
TOTAL: 5901.9
SMOH: 963.1

REMOVED ENGINE DUE TO CRACKED CRANK CASE. ENGINE SHIPPED TO RAM AIRCRAFT FOR REPAIRS. REPAIRS MADE UNDER RAM WORK ORDER #1284. INSTALLED ENGINE AND ADJUSTED FUEL PRESSURES, IDLE MIXTURES AND IDLE SPEED. ENGINE WASHED, TEST RAN, AND CHECKED FOR LEAKS. RETURNED TO SERVICE.

SIGNED

CERT#: 256295713 A&P IIA

MAXIMUM HOURS BETWEEN OVERHAULS _____ HOURS.

MAINTENANCE RECORD

S & S AVIATION CO (R)

CHEROKEE COUNTY AIRPORT

1800 AIRPORT DRIVE

BALL GROUND, GA.

MODEL: TSIO-520-NB

A/C REG: N414G

A/C S/N: 414-0024

ENG S/N: 509541

DATE: 09-14-05

TACH: 256.8

TOTAL:

SMOH:

LICENCE
NUMBER

OIL DRAINED. FILTER REMOVED AND CHECKED. INSTALLED NEW CH48109 OIL FILTER. SERVICED ENGINE WITH AEROSHELL W100 OIL. ENGINE WASHED, TEST RAN, AND CHECKED FOR LEAKS. RETURNED TO SERVICE

SIGNED:

CERT#: 256295713 A&P IA



RAM Aircraft, Limited Partnership • Waco Regional Airport

Previous Engine Total: 6023.0

SMOH: 1084.3

Hour Meter: 258.6

Date: 10-04-05

TCM TSIO-520-NB Right Engine S/N 509541

The above referenced engine was disassembled due to metal contamination. The engine was cleaned, inspected and reassembled to service limits per TCM Overhaul Manual X-30574A. Reused crankcase, crankshaft, camshaft and lifters. Installed new main and rod bearings. C/W MSB96-10 ultrasonic inspection. New nuts and bolts installed in rods. Reinstalled cylinders assemblies. Note: Pistons not removed from cylinders. Installed overhauled oil cooler. C/W MSB96-10 ultrasonic inspection. New bolts and nuts installed in rods. Reinstalled cylinder assemblies. Note: Pistons not removed from cylinders. Flushed prop governor, lifters and starter adapter. Flushed all related hoses received. Serviced engine with 100W Aeroshell oil. Ran on test stand 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. 2315.

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

S & S AVIATION CO (R)

CHEROKEE COUNTY AIRPORT

1800 AIRPORT DRIVE

BALL GROUND, GA.

MODEL: TSIO-520-NB

A/C REG: N414G

A/C S/N: 414-0024

ENG S/N: 509541

DATE: 10-14-05

TACH: 258.7

TOTAL:

SMOH:

REMOVED AND REINSTALLED ENGINE FOR REPAIRS AT RAM AIRCRAFT UNDER PROJECT NO. 2315. INSTALLED NEW CH48109 OIL FILTER. SERVICED ENGINE WITH AEROSHELL W100 OIL. ENGINE WASHED, TEST RAN, AND CHECKED FOR LEAKS. RETURNED TO SERVICE.

SIGNED:

CERT#: 256295713 A&P IA

MAXIMUM HOURS BETWEEN OVERHAULS _____ HOURS.

S & S AVIATION CO (R)
CHEROKEE COUNTY AIRPORT
1800 AIRPORT DRIVE
BALL GROUND, GA.

MODEL: TSIO-520-NB
A/C REG: N414G
A/C S/N: 414-0024
ENG S/N: 509541

DATE: 03-01-06
TACH: 294.2
TOTAL: 6058.7
SMOH: 1119.5

OIL DRAINED. FILTER REMOVED AND CHECKED. SERVICED WITH AEROSHELL W-100 OIL AND CH48108 FILTER. COMPRESSIONS: #1-74, #2-72, #3 75, #4-75, #5-72, #6-79. SPARK PLUGS CLEANED, GAPPED, PAINTED, AND ROTATED. REMOVED, DISASSEMBLED AND INSPECTED MAGNETOS. REPLACED MAGNETO DISTRIBUTER BLOCK AND GEAR P/N K3823 IN LEFT MAG. REPLACED CONTACT ASSY IN RIGHT MAG P/N M3081. RE-INSTALLED MAGNETOS. FUEL SCREENS CHECKED AND CLEANED. REPLACED MAG PRESSURE FILTERS P/N 1396-2. INSTALLED NEW P12-8156 INDUCTION AIR FILTERS. ENGINE WASHED, TEST RAN, AND CHECKED FOR LEAKS. ADJUSTED FUEL PRESSURES. IDLE MIXTURES AND IDLE SPEED. RETURNED TO SERVICE.

SIGNED: *Eui Andrix*

CERT#: 260254230 A&P IA

S & S AVIATION CO (R)
CHEROKEE COUNTY AIRPORT
1800 AIRPORT DRIVE
BALL GROUND, GA.

MODEL: TSIO-520-NB
A/C REG: N414G
A/C S/N: 414-0024
ENG S/N: 509541

DATE: 07-19-06
TACH: 341.4
TOTAL:
SMOH:

REMOVED, DISASSEMBLED AND INSPECTED BOTH MAGNETOS. REPLACED BOTH MAIN CONTACT ASSY'S P/N M3081. ENGINE WASHED, TEST RAN, AND CHECKED FOR LEAKS. RETURNED TO SERVICE.

SIGNED: *Eui Andrix*

CERT#: 260254230 A&P IA

S & S AVIATION CO (R)
CHEROKEE COUNTY AIRPORT
1800 AIRPORT DRIVE
BALL GROUND, GA.

MODEL: TSIO-520-NB
A/C REG: N414G
A/C S/N: 414-0024
ENG S/N: 509541

DATE: 12-14-06
TACH: 0371.5
TOTAL:
SMOH:

OIL DRAINED. FILTER REMOVED AND CHECKED. INSTALLED NEW CH48108 OIL FILTER. SERVICED ENGINE WITH AEROSHELL W100 OIL. ENGINE WASHED, TEST RAN, AND CHECKED FOR LEAKS. RETURNED TO SERVICE.

SIGNED: *Eui Andrix*

CERT#: 260254230 A&P IA

S & S AVIATION CO (R)
CHEROKEE COUNTY AIRPORT
1800 AIRPORT DRIVE
BALL GROUND, GA.

MODEL: TSIO-520-NB
A/C REG: N414G
A/C S/N: 414-0024
ENG S/N: 509541

DATE: 04-01-07
TACH: 0380.2
TOTAL: 6144.7
SMOH: 1205.5

OIL DRAINED. FILTER REMOVED AND CHECKED. SERVICED WITH AEROSHELL W-100 OIL AND CH48108 FILTER. COMPRESSIONS: #1-76, #2-76, #3 79, #4-79, #5-75, #6-79. SPARK PLUGS CLEANED, GAPPED, PAINTED, AND ROTATED. ADJUSTED IGNITION TIMING. FUEL SCREENS CHECKED AND CLEANED. FABRICATED AND INSTALLED NEW MAG PRESSURE LINE AND REPLACED MAG PRESSURE FILTERS P/N 1396-2. INSTALLED NEW P12-8156 INDUCTION AIR FILTERS. ENGINE WASHED, TEST RAN, AND CHECKED FOR LEAKS. ADJUSTED FUEL PRESSURES. IDLE MIXTURES AND IDLE SPEED. RETURNED TO SERVICE.

SIGNED: *Eui Andrix*

CERT#: 3191860 A&P IA

TOTAL THIS PAGE					
TOTAL FROM PREVIOUS SUMMARY					
TOTAL SINCE MFG.					

CARRIED FORWARD

MAINTENANCE RECORD

8

S&S AVIATION CO (R)

CHEROKEE COUNTY AIRPORT

1800 AIRPORT DRIVE

BALL GROUND, GA.

MODEL: TSIO-520-NB

A/C REG: N414G

A/C S/N: 414-0024

ENG S/N: 509541

DATE: 07-20-07

TACH: 0407.3

TOTAL:

SMOH:

LICENCE
NUMBER

OIL DRAINED. FILTER REMOVED AND CHECKED. INSTALLED NEW CH48108 OIL FILTER. SERVICED ENGINE WITH AEROSHELL W100 OIL. ENGINE WASHED, TEST RAN, AND CHECKED FOR LEAKS. RETURNED TO SERVICE.

SIGNED:

CERT#: 3191860 A&P IA

S&S AVIATION CO (R)

CHEROKEE COUNTY AIRPORT

1800 AIRPORT DRIVE

BALL GROUND, GA.

MODEL: TSIO-520-NB

A/C REG: N414G

A/C S/N: 414-0024

ENG S/N: 509541

DATE: 12-13-07

TACH: 0038.5

TOTAL:

SMOH:

OIL DRAINED. FILTER REMOVED AND CHECKED. INSTALLED NEW CH48108 OIL FILTER. SERVICED ENGINE WITH AEROSHELL W100 OIL. ENGINE WASHED, TEST RAN, AND CHECKED FOR LEAKS. RETURNED TO SERVICE.

SIGNED:

CERT#: 3191860 A&P IA

S&S AVIATION CO (R)

CHEROKEE COUNTY AIRPORT

1800 AIRPORT DRIVE

BALL GROUND, GA.

MODEL: TSIO-520-NB

A/C REG: N414G

A/C S/N: 414-0024

ENG S/N: 509541

DATE: 04-11-08

TACH: 0073.7

TOTAL: 6245.5

SMOH: 1306.3

OIL DRAINED. FILTER REMOVED AND CHECKED. SERVICED WITH AEROSHELL W-100 OIL. AND CH48108 FILTER. COMPRESSIONS: #1-76, #2-77, #3-78, #4-75, #5-75, #6-76. REPLACED ALL SPARK PLUGS WITH NEW RHB32E. CHECKED AND ADJUSTED IGNITION TIMING. FUEL SCREENS CHECKED AND CLEANED. FABRICATED AND INSTALLED NEW MAG PRESSURE LINE AND REPLACED MAG PRESSURE FILTERS P/N 1396-2. AD2007-04-19R1 DNA AFFECTED CYLINDERS NOT INSTALLED. ENGINE WASHED, TEST RAN, AND CHECKED FOR LEAKS. ADJUSTED FUEL PRESSURES, IDLE MIXTURES AND IDLE SPEED. RETURNED TO SERVICE.

SIGNED:

CERT#: 3191860 A&P IA

S&S AVIATION CO (R)

CHEROKEE COUNTY AIRPORT

1800 AIRPORT DRIVE

BALL GROUND, GA.

MODEL: TSIO-520-NB

A/C REG: N414G

A/C S/N: 414-0024

ENG S/N: 509541

DATE: 05-27-08

TACH: 0084.2

TOTAL:

SMOH:

REMOVED AND HONED ALL CYLINDERS. REPLACED ALL PISTON RINGS WITH NEW. REINSTALLED CYLINDERS WITH NEW GASKETS AND SEALS. REPLACED FUEL INJECTION MANIFOLD MOUNT BRACKET WITH NEW UNIT P/N 642064. REPLACED INBOARD INDUCTION ELBOW WITH SERVICEABLE UNIT. SERVICED ENGINE WITH PHILLIPS 20W50 OIL. AND CH48108-1 FILTER. ENGINE WASHED, TEST RAN, AND CHECKED FOR LEAKS. RETURNED TO SERVICE.

SIGNED:

CERT#: 3191860 A&P IA

MAXIMUM HOURS BETWEEN OVERHAULS _____ HOURS.

S & SAVIATION CO (R)

CHEROKEE COUNTY AIRPORT

1800 AIRPORT DRIVE

BALL GROUND, GA.

MODEL: TSIO-520-NB

A/C REG: N414G

A/C S/N: 414-0024

ENG S/N: 509541

DATE: 11-25-08

TACH: 0116.6

TOTAL:

SMOH:

OIL DRAINED. FILTER REMOVED AND CHECKED. INSTALLED NEW CH48108 OIL FILTER. SERVICED ENGINE WITH AEROSHELL W100 OIL. LUBRICATED EXHAUST SLIP JOINTS AND WASTEGATES WITH MOUSE MILK. ENGINE WASHED, TEST RAN, AND CHECKED FOR LEAKS. RETURNED TO SERVICE.

SIGNED: 

CERT#: 3191860 A&P IA

S & SAVIATION CO (R)

CHEROKEE COUNTY AIRPORT

1800 AIRPORT DRIVE

BALL GROUND, GA.

MODEL: TSIO-520-NB

A/C REG: N414G

A/C S/N: 414-0024

ENG S/N: 509541

DATE: 05-01-09

TACH: 0153.1

TOTAL: 6324.9

SMOH: 1385.7

OIL DRAINED. FILTER REMOVED AND CHECKED. SERVICED WITH AEROSHELL W-100 OIL AND CH48108 FILTER. COMPRESSIONS: #1-78, #2-71, #3 76, #4-78, #5-75, #6-77. CLEANED, GAPPED, AND ROTATED SPARK PLUGS. CHECKED AND ADJUSTED IGNITION TIMING. FUEL SCREENS CHECKED AND CLEANED. REPLACED MAG PRESSURE FILTERS P/N 1396-2. REPLACED OUTBOARD INDUCTION ELBOW WITH SERVICEABLE UNIT. ENGINE WASHED, TEST RAN, AND CHECKED FOR LEAKS. ADJUSTED FUEL PRESSURES, IDLE MIXTURES AND IDLE SPEED. RETURNED TO SERVICE.

SIGNED: 

CERT#: 3191860 A&P IA

S & SAVIATION CO (R)

CHEROKEE COUNTY AIRPORT

1800 AIRPORT DRIVE

BALL GROUND, GA.

MODEL: TSIO-520-NB

A/C REG: N414G

A/C S/N: 414-0024

ENG S/N: 509541

DATE: 10-20-09

TACH: 0194.2

TOTAL:

SMOH:

OIL DRAINED. FILTER REMOVED AND CHECKED. INSTALLED NEW CH48108 OIL FILTER. SERVICED ENGINE WITH AEROSHELL W100 OIL. LUBRICATED EXHAUST SLIP JOINTS AND WASTEGATES WITH MOUSE MILK. ENGINE WASHED, TEST RAN, AND CHECKED FOR LEAKS. RETURNED TO SERVICE.

SIGNED: 

CERT#: 3191860 A&P IA

S & SAVIATION CO (R)

CHEROKEE COUNTY AIRPORT

1800 AIRPORT DRIVE

BALL GROUND, GA.

MODEL: TSIO-520-NB

A/C REG: N414G

A/C S/N: 414-0024

ENG S/N: 509541

DATE: 06-01-2010

TACH: 0277.0

TOTAL: 6448.8

SMOH: 1509.6

OIL DRAINED. FILTER REMOVED AND CHECKED. SERVICED WITH PHILLIPS 20W50 OIL AND CH48108-1 FILTER. COMPRESSIONS: #1-71, #2-XX, #3 77, #4-78, #5-78, #6-75. CLEANED, GAPPED, AND ROTATED SPARK PLUGS. REPLACED #2 CYLINDER WITH OVERHAULED UNIT P/N ECC71.2 S/N 35988-8. REMOVED, DISASSEMBLED AND INSPECTED LEFT AND RIGHT MAGNETOS. REPLACED DISTRIBUTOR BLOCK ASSY P/N K3823, CONTACT ASSY P/N M3081, DISTRIBUTOR DRIVE GEAR P/N K3828 IN BOTH MAGNETOS. SET INTERNAL TIMING AND REINSTALLED. AD2009-16-03 DNA AFFECTED CYLINDERS NOT INSTALLED. AD2009-19-07 C2 DNA AFFECTED CYLINDERS NOT INSTALLED. AD2010-11-04 DNA AFFECTED LIFTERS NOT INSTALLED. FUEL SCREENS CHECKED AND CLEANED. REPLACED MAG PRESSURE FILTERS P/N 1396-2. ENGINE WASHED, TEST RAN, AND CHECKED FOR LEAKS. ADJUSTED FUEL PRESSURES, IDLE MIXTURES AND IDLE SPEED. RETURNED TO SERVICE.

SIGNED: 

CERT#: 3191860 A&P IA

SINCE MFG.

MAINTENANCE RECORD

9

S & SAVIATION CO (R) MODEL: TSIO-520-NB
CHEROKEE COUNTY AIRPORT A/C REG: N414G
1800 AIRPORT DRIVE A/C S/N: 414-0024
BALL GROUND, GA. ENG S/N: 509541

DATE: 08-10-2010
 TACH: 0307.5
 TOTAL:
 SMOH:

INCENCE
NUMBER

OIL DRAINED. FILTER REMOVED AND CHECKED. INSTALLED NEW CH48108-1 OIL FILTER. SERVICED ENGINE WITH AEROSHELL W100 OIL. LUBRICATED EXHAUST SLIP JOINTS AND WASTEGATES WITH MOUSE MILK. ENGINE WASHED, TEST RAN, AND CHECKED FOR LEAKS. RETURNED TO SERVICE.

SIGNED:

E. H. Hix

CERT#: 3191860 A&P IA

S & SAVIATION CO (R) MODEL: TSIO-520-NB
CHEROKEE COUNTY AIRPORT A/C REG: N414G
1800 AIRPORT DRIVE A/C S/N: 414-0024
BALL GROUND, GA. ENG S/N: 509541

DATE: 07-01-2011
 TACH: 0370.2
 TOTAL: 6542.0
 SMOH: 1602.8

OIL DRAINED. FILTER REMOVED AND CHECKED. SERVICED WITH AEROSHELL W100 OIL AND CH48108-1 FILTER. COMPRESSIONS: #1-75, #2-76, #3 73, #4-78, #5-XX, #6-74. CLEANED, GAPPED, AND ROTATED SPARK PLUGS. REMOVED # 5 CYLINDER DUE TO LOW COMPRESSION. REPLACED EXHAUST VALVE AEC637781. INSTALLED CYLINDER WITH NEW GASKETS AND HARDWARE. FUEL SCREENS CHECKED AND CLEANED. REPLACED MAG PRESSURE FILTERS P/N 1396-2. ENGINE WASHED, TEST RAN, AND CHECKED FOR LEAKS. ADJUSTED FUEL PRESSURES, IDLE MIXTURES AND IDLE SPEED. RETURNED TO SERVICE.

SIGNED:

E. H. Hix

CERT#: 3191860 A&P IA

S & SAVIATION CO (R) MODEL: TSIO-520-NB
CHEROKEE COUNTY AIRPORT A/C REG: N414G
1800 AIRPORT DRIVE A/C S/N: 414-0024
BALL GROUND, GA. ENG S/N: 509541

DATE: 11-30-2011
 TACH: 0386.1
 TOTAL:
 SMOH:

OIL DRAINED. FILTER REMOVED AND CHECKED. INSTALLED NEW CH48108-1 OIL FILTER. SERVICED ENGINE WITH AEROSHELL W100 OIL. LUBRICATED EXHAUST SLIP JOINTS AND WASTEGATES WITH MOUSE MILK. ENGINE WASHED, TEST RAN, AND CHECKED FOR LEAKS. RETURNED TO SERVICE.

SIGNED:

E. H. Hix

CERT#: 3191860 A&P IA

Corporate Air Center N414G C-414 S/N: 4140024 HOBBS: 436.6



15452 - Airport Drive
 Burlington, WA 98233
 Phone (360) 757-7757
 Fax (360) 757-1557

C/W 50Hr. oil change. Drained oil and removed filter. Cut filter open, No metal found. Replaced filter with new P/N CH48108-1. Serviced engine with 12 Qts of Aeroshell 15W/50. C/W AD2000-01-16 part B. Ran engine and no leaks noted.

Paul Shinn
 Paul Shinn
 AP35174551A

06/20/2012

MAXIMUM HOURS BETWEEN OVERHAULS _____ HOURS.

ENGINE SERVICE AND

DATE

Corporate Air Center **N414G C-414 S/N: 0024 HOBBS: 463.3**

FOR COMPLETE

BROUGH
FORWARD



15452 - Airport Drive
Burlington, WA 98233
Phone (360) 757-7757
Fax (360) 757-1557

Airframe TT: 4344.3
R/H Eng SMOH: 1695.9
L/H Eng SMOH: 1517.2
R/H Prop SMOH: 1528.1
L/H Prop SMOH: 1528.1
Heater Hobbs: 1338.1

This engine was inspected in accordance with FAR 43 Appendix D for an 1001hr/Annual inspection. Compressions are as follows 1)25/80, 2)70/80, 3)70/80, 4)8/80, 5)70/80 and 6)70/80. Removed #1 and #4 cylinders. Replaced with new Superior Air Parts cylinders assy P/N 5A12006-A22P, S/N's 526F1210577 and 526F1210578. Serviced engine with 12 qts of Aeroshell 100 Mineral oil. Replaced #4 fuel injection line with new P/N 6636135-1. AD 2012-03-06 Fuel Servo Does Not Apply. AD 2012-10-13 Starter adapter is N/A by P/N C/W AD 2000-01-16 on both exhaust systems. Para B visual insp of exhaust every 50hr/30 days next due 4394.3, para C remove tail pipe and insp every 12mos next due 8/2013, C/W para D visual insp firewall eng beams and canted bulkhead next due at 4844.3, C/W para E pressure check exhaust every 12mos next due at 8/2013, para F is due at 4534.2, Para G is due at 6021.0 or 8/2014 which ever occurs first. AD 84-26-02 paper induction air filter is due at 4751.2. I certify that this engine has been inspected in accordance with a 100hr/Annual inspection and found to be in an airworthy condition.

Daniel P Monahan
AP32484081A

08/17/2012

Corporate Air Center **N414G C-414 S/N: 0024 HOBBS: 463.3**



15452 - Airport Drive
Burlington, WA 98233
Phone (360) 757-7757
Fax (360) 757-1557

Airframe TT: 4344.3
R/H Eng SMOH: 1695.9
L/H Eng SMOH: 1517.2
R/H Prop SMOH: 1528.1
L/H Prop SMOH: 1528.1
Heater Hobbs: 1338.1

Replaced all 12 spark plugs with new Tempest URH1832E.s.

Daniel P Monahan
AP32484081A

08/17/2012

Corporate Air Center **N414G C-414 S/N: 0024 HOBBS: 486.6**



15452 - Airport Drive
Burlington, WA 98233
Phone (360) 757-7757
Fax (360) 757-1557

Airframe TT: 4367.6
R/H Eng SMOH: 1719.2
L/H Eng SMOH: 1540.5
R/H Prop SMOH: 1551.4
L/H Prop SMOH: 1551.4
Heater Hobbs: 1338.1

Drained oil and removed filter. Cut filter open and insp. No metal found. Replaced filter with new Tempest CH48108-1. Serviced engine with 12 qts of Aeroshell 15W-50. Replaced inboard induction elbow with new P/N 646019. Ran engine and no leaks noted.

Daniel P Monahan
AP32484081A

11/19/2012

6/12/2013	5157	Hobbs	DRAINED OIL - REMOVED FILTER. REPLACED WITH 10 QTS AEROSHELL 15W50 AND TEMPEST FILTER CH48108-1.
			MAINT TURN CHECK GOOD
			CARRIED FORWARD
			OWNER - PILOT
			CAF # 2858306
TOTAL THIS PAGE			
TOTAL FROM PREVIOUS SUMMARY			
TOTAL SINCE MFG.			

MAINTENANCE RECORD

10

Corporate Air Center N414G C-414 S/N: 0024 HOBBS: 522.6



15452 - Airport Drive
Burlington, WA 98233
Phone (360) 757-7757
Fax (360) 757-1557

Airframe TT: 4403.6
R/H Eng SMOH 1755.2
L/H Eng SMOH 1576.5
R/H Prop SMOH 1587.4
L/H Prop SMOH 1587.4
Heater Hobbs 1338.1

C/W AD2000-01-16 part B. Performed visual inspection of entire exhaust system. No cracks, sags, distortion or holes found. Lubed waste gate and slip joints with mouse milk. Next due in 4453.6 TT.

06/19/2013

Daniel P Monahan
AP32484081A

NATURE

LICENCE
NUMBER

Corporate Air Center N414G C-414 S/N: 0024 HOBBS: 540.5



15452 - Airport Drive
Burlington, WA 98233
Phone (360) 757-7757
Fax (360) 757-1557

Airframe TT: 4421.5
R/H Eng SMOH 1773.1
R/H Prop SMOH 1603.3

Removed R/H alternator. Installed Q/H Alternator P/N ALV-9510, S/N H-N061384. Ground ops check good. No leaks.

07/26/2013

Daniel P Monahan
AP32484081A

Command Aviation

PHONE 360 733 3174
2010 W Bakervue Rd

RIGHT ENGINE LOGBOOK INSERT

DATE: 06/01/2013

ENGINE MAKE: TCM MODEL: TSIO-520-ND S/N: 502541
ENG TTIS: 6735.4 SMOH: 1796.5 TOTAL CYCLES: N/A Installed on Aircraft: N414G ACT1: 4445.0

Completed 100 hour Engine Inspection. I certify that this engine has been inspected IAW an annual inspection and was determined to be in airworthy condition.

Maintenance performed at this time:

- Performed initial engine run checked engine oil level, inspected oil filter and Compression test 137480 26580 36490 47490 56880 56490. Cut open and inspected oil filter for contamination, none found. Performed all servicing and lubrication required for this type of inspection. Installed serviceable fuel pressure regulator. Serviced engine with Aeroshell 15W50 oil and a new Champion oil filter. Washed engine externally, inspected engine for general condition, performed a post engine performance run.

-END-

Maintenance Release: The Engine and/or component identified above was inspected and/or repaired, per current Regulations of the Federal Aviation Administration, and is subsequently approved for return to service.

Craig Scarnheim AP3406819A

MAXIMUM HOURS BETWEEN OVERHAULS _____ HOURS.

ENGINE SERVICE AND

DATE	TIME RUN		TIME SINCE OVERHAUL		NOTE: USE BOTH PAGES AND AS MANY LINES AS REQUIRED FOR COMPLETE
	HRS.	MIN.	HRS.	MIN.	

BROU
FORW

CommandAviation
PHONE 360 733 3174
2010 W Bakerview Rd

RIGHT ENGINE LOGBOOK INSERT

DATE: 02/19/2015
ENGINE MAKE: TCM MODEL: TSIO 520-NB S/N: 509541
ENG TTIS: 6772.8 SMOH: 1834.0 TOTAL CYCLES: N/A Installed on Aircraft: N414G ACTT: 4452.4

Completed 100 hour Engine Inspection, I certify that this engine has been inspected IAW an annual inspection and was determined to be in airworthy condition.
Maintenance performed at this time:

- Performed initial engine run, checked engine oil level, inspected oil filter and compression test. 175/80 2172/80 3168/80 4175/80 5175/80 6174/80. Cut open and inspected oil filter for contamination, none found. Performed all servicing and lubrication required for this type of inspection. Installed serviceable fuel pressure regulator. Serviced engine with Aeroshell 15w50 oil and a new Champion oil filter. Washed engine externally. Inspected engine for general condition, performed a post engine performance run.

- END -

Maintenance Release: The Engine and/or component identified above was inspected and/or repaired, per current Regulations of the Federal Aviation Administration, and is subsequently approved for return to service.

Craig Scammon AP3402816A

CommandAviation
2010 W Bakerview Road
Bellingham, WA 98226

RH ENGINE

A/C: N414G S/N: 414-0024 Hobbs: 683.2 AFTT: 45642 Date: 04/14/2016
ENGINE: TSIO 520-NB S/N: 509541 TSMOH: 1915.8

CW 100 hr. inspection IAW FAR part 43(d) C/W AD Amendment Effective by visual inspection of lines for condition and security. Performed compression test. Compressions as follows: #1 68/80 #2 70/80 #3 65/80 #4 71/80 #5 68/80 #6 70/80. Drained oil and removed oil filter. Installed new champion oil filter CH48108-1 and spark with 100W+. Removed the spark plugs, cleaned, gapped, tested and reinstalled. Replaced spark plug gaskets with new p/n: M574. All maintenance performed IAW C414 and TSIO 520 MM as applicable. Performed post maintenance ops and leak check, no defects noted.

I certify this engine installation was inspected IAW Annual Inspection and found to be in an airworthy condition.

Craig Scammon A&P/IA
AP14067170

Professional Air 63132 Powell Butte Hwy. Bend, Oregon 97701 (541) 388-0019
Engine Model: TSIO-520-NB

N414G Hobbs: 746.1
Replaced nut, P/N 634511, on case through stud above and behind alternator in accordance with TCM Overhaul Manual, X30574, Change 8 dated 10/2013.
Pertinent details of work performed are on file at this location.

For FAA CRS# H6MR663L

CommandAviation
2010 W Bakerview Road
Bellingham, WA 98226

RH ENGINE

A/C: N414G S/N: 414-0024 Hobbs: 802.0 AFTT: 4683 Date: 05/18/2017
ENGINE: TSIO 520-NB S/N: 509541 TSMOH: 2034.6

CW 100 hr. inspection IAW FAR part 43(d) Performed compression test, compressions as follows: #1 76/80 #2 77/80 #3 65/80 #4 65/80 #5 68/80 #6 70/80. Drained oil and removed oil filter. Installed new champion oil filter CH48108-1 and spark with 100W+. Removed the spark plugs, cleaned, gapped, tested and reinstalled. Replaced spark plug gaskets with new p/n: M574. All maintenance performed IAW C414 and TSIO 520 MM as applicable. Performed post maintenance ops and leak check, no defects noted.

I certify this engine installation was inspected IAW Annual Inspection and found to be in an airworthy condition.

Craig Scammon A&P/IA
AP14067170

TOTAL
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PREV
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MAINTENANCE REC

CommandAviation

2010 W Bakerview Road
Bellingham, WA 98226

RH ENGINE
A/C: N414G S/N: 414-0024 Hobbs: 7012 Date: 06/10/2016
ENGINE: TSIO 520 NB S/N: 521470

Troubleshoot alternator wiring and found alternator field wire broken. Repaired broken wire and rechecked engine. All maintenance performed IAW C414 and TSIO 520 MM as applicable. Performed post maintenance ops and leak check. no defects noted

Craig Scarnhorn A&P IA

LICENCE
NUMBER

CommandAviation

2010 W Bakerview Road
Bellingham, WA 98226

RH ENGINE
A/C: N414G S/N: 414-0024 Hobbs: 748.8 AFTT: 4629.8 Date: 09/06/2016
ENGINE: TSIO-520-NB S/N: 521470 TSMOH: 1981.4

Drained oil and removed oil filter. Installed new champion oil filter CH48108-1 and svc with 100W+. Washed down engine. All maintenance performed IAW C414 and TSIO 520 MM as applicable. Performed post maintenance ops and leak check. no defects noted

Craig Scarnhorn A&P IA
AP34068161A

7-27-17 DRAINED OIL, NO FILTER CHANGE AT THIS TIME. SERVICE
HOBBS 830.6 ENGINE WITH AEROSHELL 100W+ WASH DOWN ENGINE.
RHENGINE PERFORM POST MAINT OPS / LEAK CHECK, NO DEFECTS NOTED
ALL MAINT PERFORMED IAW TSIO 520 MM.
Cassidy Cl ALP 302159

CommandAviation

2010 W Bakerview Road
Bellingham, WA 98226

RH ENGINE
A/C: N414G S/N: 414-0024 Hobbs: 845.4 AFTT: 4726.4 Date: 06/21/2018
ENGINE: TSIO-520-NB S/N: 509541 TSMOH: 2077.9

CW 100 hr inspection IAW FAR part 43(d). Performed compression test, compressions as follows: #1-65/80 #2-70/80 #3-73/80 #4-77/80 #5-73/80 #6-74/80. Drained oil and removed oil filter. Installed new champion oil filter CH48108-1 and svc with 100W+. Removed the spark plugs, cleaned, gapped, tested and reinstalled. Replaced spark plug gaskets with new pin. M674. All maintenance performed IAW C414 and TSIO 520 MM as applicable. Performed post maintenance ops and leak check, no defects noted. AD's checked thru weekly listing 2018-12.

I certify this engine installation was inspected IAW Annual Inspection and was determined to be in satisfactory condition.

Craig Scarnhorn A&P IA
AP34068161A

**RH ENGINE S/N 509541**

A/C N414G

Hobbs 873.2

A/C TT 4754.2 TSMOH 2105.7

Completed 100 hr inspection. Compression checked as follows: #1 78/80, #2 78/80, #3 78/80, #4 77/80, #5 78/80, #6 78/80. Oil drained and reserviced with Aeroshell 100 plus. Old filter removed and inspected, found to be OK, new 48108-1 filter installed. Spark plugs removed, cleaned, tested and reinstalled. Post maintenance runup and leak check completed, found OK.

I certify this engine has been inspected in accordance with annual inspection and found to be Airworthy.

Marvin Hornbostel, A & P 1897610 IA
Raven Aero Service, Inc.

ENGINE SERVICE AND

DATE	TIME RUN		TIME SINCE OVERHAUL		NOTE: USE BOTH PAGES AND AS MANY LINES AS REQUIRED FOR COMPLETE
	HRS.	MIN.	HRS.	MIN.	
BROUGHT FORWARD					

Mustang Maintenance & Repairs Ltd.

July 31, 2019

4776.9 TTSN

N414G

S/N 414-0024

Left engine starter wiring repaired.

Right engine inspected for source of oil leaks. Suspect over serviced and crankcase breather is venting.

Herby certify that the maintenance described herein has been performed in accordance with the applicable airworthiness requirements.

Signature of AME

432739

License No.

Work Sheets on File.

OCT 3, 2019	15	.7	2144	.1	TSMOH	(4776.9 ACTT) 80
FEB 26, 2020	7	.5	2151	.6	TSMOH	(4800.1 ACTT) 80

02/10/2021	N414G	TCM TSIO-520NB	S/N: 509541	Right Engine Log
MX Hobbs		ACTT	ENGINE SMOH	ENGINE TSN
918.6		4799.6	2151.1	7092.9

Complied with a 100 hour Inspection. Serviced engine with 12 qts of Aeroshell w100 SAE 50 mineral oil and oil filter P/N AA48108-2. Cleaned and tested spark plugs. Performed compression test, 1) 77/80, 2) 78/80, 3) 68/80, 4) 77/80, 5) 72/80, 6) 75/80. Operational and leak checks normal.

All work done Referencing Cessna SM, TCM SM, AC43.13-1B, 14 CFR Part 43 Appendix D, ICA's and standard practices.

I certify this aircraft has been inspected referencing a 100 hour Inspection checklist with no defects noted at this time.

Oscar Gomez

A&P 3609700

02/13/2021 RH Engine Log N414G MX Hobbs: 918.6 TTAF: 4799.6

Complied with a Annual Inspection using Checklist.

All work done IAW Cessna SM, Continental SM, Reference AC43.13-1B, ICA's and standard practices ops and leak check good.

I certify this engine has been inspected IAW an Annual/ 100-hour checklist and is approved for return to service at this time.

Steven R Fox

Steven R Fox

A&P 3916289 IA

CARRIED FORWARD

TOTAL THIS PAGE

TOTAL FROM PREVIOUS SUMMARY

TOTAL SINCE MFG.