

## ENGINE MAINTENANCE RECORD

AIRCRAFT SERIAL AND REGISTRATION 18281841 N120HP  
ENGINE MODEL AND SERIAL IO-540AB1A5 S/N: RL-17040-48E

D5518-3-13

### Rebuilt Reciprocating Engine Certificate

This is to certify that the engine as described hereinafter has been REBUILT in accordance with the applicable Lycoming specifications. It has been determined airworthy to return to service and is in a condition for safe operation. All applicable Federal Aviation Administration Airworthiness Directives and Lycoming Service Publications have been complied with. All accessories as part of the type certificate are new or newly rebuilt. Refer to enclosed Form ET001 for applicable accessory part numbers and serial numbers.

Part Number: RENPL-RT10221  
Serial Number RL-17040-48E  
Engine Model IO-540-AB1A5  
Work Order AR598569  
Total Time 0.0

*[Signature]*  
Authorized Representative

Date

Production Certificate #3

652 Oliver Street Williamsport, PA 17701 U.S.A  
Lycoming Engines is a division of Avco Corporation

**LYCOMING**

Form 2481 Rev 05/13



N120HP

01-06-2015

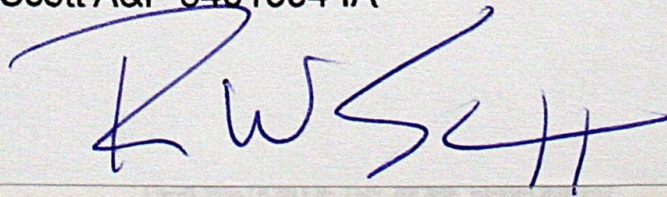
Actt: 2079.0

Engine tt: 0.0

Propeller SMOH: 0.0

Removed Lycoming IO-540-AB1A5, S/N: L-31270-48E and installed Factory Rebuilt Engine IO-540-AB1A5, S/N: RL-17040-48E. Engine came with build order # AR598569 from Lycoming with new Magnetos, Ignition harness', Injectors, fuel pump, fuel control and spark plugs. Removed Prop Governor P/N: DC290D1-F/T8, S/N: 060690 and reinstalled after Overhaul by Quality Aircraft W.O # WO1170017875. Replaced Prop control P/N: MC9862067-1, Throttle control P/N: MC9863055-9 and Mixture control P/N: MC-600-72. Ran aircraft and found to be operating within factory limits with no leaks. Approved for return to service.

Russell Scott A&P 3401594 IA

A handwritten signature in blue ink, appearing to read 'RWSCH', is written over the printed name.

N120HP

04-23-2015

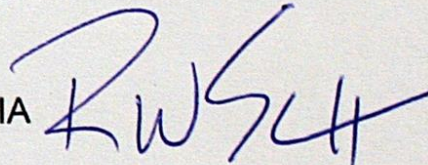
Actt: 2120.4

Engine tt: 2015.7

Propeller tt: 2015.7

Performed OHP 50hr inspection. Drained oil, replaced oil filter P/N: CH48110-1 and serviced engine with 9 qts Aeroshell 100 W oil. Replaced oil Temp sensor. Replaced oil pressure transducer. Aircraft approved for return to service.

Russell Scott A&P 3401594 IA

A handwritten signature in blue ink, appearing to read 'RWSCH', is written over the printed name.



N120HP

07-01-2015

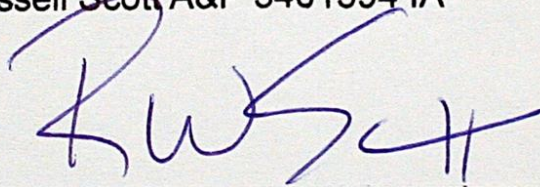
Actt: 2167.2

Engine tt: 88.2

Performed Cylinder compression check with the following results  
:#1 78/80,#2 76/80,#3 78/80,#4 72/80,#5 78/80,#6 78/80. Drained oil,  
replaced oil filter P/N :CH48110-1 and serviced engine with 8 qts.  
Aeroshell 100W oil.

I certify this Engine has been inspected in accordance with a  
100 hr. inspection and was determined to be in airworthy condition.

Russell Scott A&P 3401594 IA

A handwritten signature in blue ink, appearing to read 'RWS', is written over the printed name.

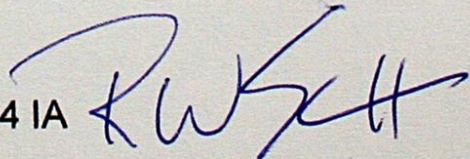
N120HP

09-29-2015

Actt: 2223.7

Performed OHP 50hr inspection. Drained oil, replaced oil filter  
P/N: CH48110-1 and serviced engine with 9 qts Aeroshell 100 W oil.  
Aircraft approved for return to service.

Russell Scott A&P 3401594 IA

A handwritten signature in blue ink, appearing to read 'RWS', is written over the printed name.

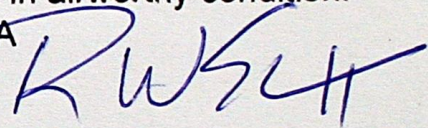


N120HP  
11-10-2015  
Actt: 2264.0

\* C/WAD 15-19-07 Fuel lines inspect, Due again @ Actt: 2374.0  
Performed Cylinder compression check with the following results  
:#1 78/80,#2 76/80,#3 78/80,#4 75/80,#5 74/80,#6 78/80. Drained oil,  
replaced oil filter P/N :CH48110-1 and serviced engine with 9 qts.  
Aeroshell 100W oil.

I certify this Engine has been inspected in accordance with a  
100 hr. inspection and was determined to be in airworthy condition.

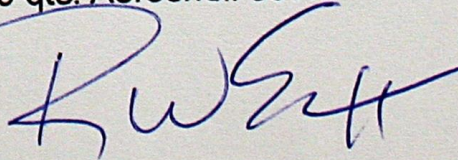
Russell Scott A&P 3401594 IA



N120HP  
01-04-2016  
Actt: 2316.0

Performed OHP 50hr inspection. Drained oil, replaced oil filter  
P/N: CH48110-1 and serviced engine with 9 qts. Aeroshell 80W.  
Approved for return to service.

Russell Scott A&P 3401594 IA





S  
N120HP  
03-16-2016  
Actt: 2373.1

\* C/W AD 15-19-07 Fuel lines inspect, Due again @ Actt: 2483.1  
Performed Cylinder compression check with the following results  
:#1 78/80, #2 76/80, #3 78/80, #4 78/80, #5 78/80, #6 78/80. Drained oil,  
replaced oil filter P/N :CH48110-1 and serviced engine with 9 qts.  
Aeroshell 100W oil. Replaced 6 lower spark plugs P/N: REM38E.

I certify this Engine has been inspected in accordance with a  
100 hr. inspection and was determined to be in airworthy condition.

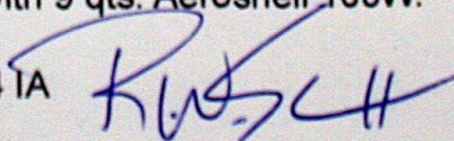
Russell Scott A&P 3401594 IA



N120HP  
06-03-2016  
Actt: 2457.9

Performed OHP 50hr inspection. Drained oil, replaced oil filter  
P/N: CH48110-1 and serviced engine with 9 qts. Aeroshell 100W.  
Approved for return to service.

Russell Scott A&P 3401594 IA





N120HP

09-30-2016

Actt: 2500.2

Engine tt: 421.2

Propeller SMOH: 421.2

\*NOTE: AD 13-11-11 Oil pressure switch due Replace @ Actt: 5079.0

\*C/W FAR 91.207(d) ELT test and inspect. New battery due Feb 2019

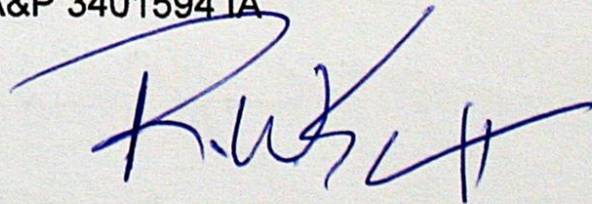
Performed Annual inspection in reference to CFR 43

Appendix"D". Replaced Aft inboard fuel sump drain on L/H wing.

Replaced L & R wing tip strobes P/N: 7081800. Replaced tail beacon bulb P/N: 34-0041987-02. Installed alternator filter P/N: LS03-01004.

I certify this aircraft has been inspected in accordance with an Annual inspection and was determined to be in airworthy condition.

Russell Scott A&P 3401594 IA

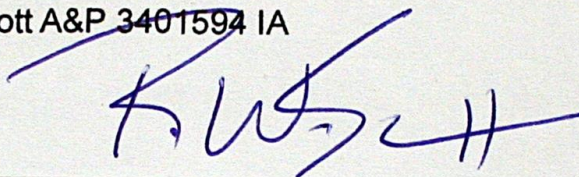
A handwritten signature in blue ink, appearing to read 'R. Scott', is written over the printed name 'Russell Scott A&P 3401594 IA'.



N120HP \*Note : Change of engine oil TYPE and manufacture.  
02-10-2017  
Actt: 2554.5

Performed OHP 50hr inspection. Drained oil, replaced oil filter  
P/N: CH48110-1 and serviced engine with 9 qts Phillips XC 20W-50  
oil. Approved for return to service.

Russell Scott A&P 3401594 IA

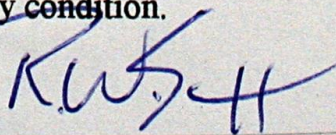


N120HP  
06-02-2017  
Actt: 2597.7

Performed OHP 100 hr. Inspection. Performed cylinder compression check  
with the following results: 1 78/80, 2 72/80, 3 76/80, 4 76/80, 5 72/80, 6 76/80.  
C/W 500 hr magneto inspection (Quality Aircraft Accessories W/O # 026170)  
P/N: 6351, S/N: 13040450 on L/H magneto only. Drained oil, changed oil filter  
(CH48110-1) and serviced engine with 9 qts. Phillips XC20W-50.

I certify this engine has been inspected in accordance with a 100 hr  
inspection and was determined to be in airworthy condition.

Russell Scott A&P 3401594 IA





N120HP

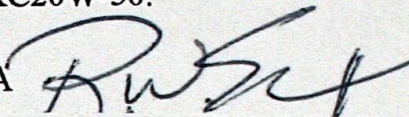
08-08-2017

Actt: 2647.9

Performed OHP 50 hr. Inspection. Drained oil, changed oil filter (CH48110-1) and serviced engine with 9 qts. Phillips XC20W-50.

Aircraft approved for return to service.

Russell Scott A&P 3401594 IA



N120HP

11-17-2017

Actt: 2693.7

Engine tt since new: 614.7

NOTE: AD 13-11-11 Oil press switch due replacement @ Actt: 5079.0

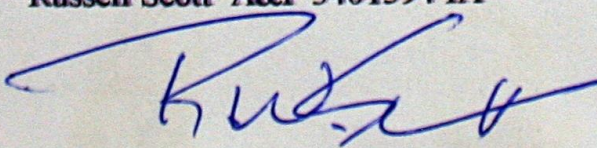
NOTE: AD 17-16-11 Connecting rods N/A - Not installed on engine

C/W AD 15-19-07 Fuel Injector lines Due again in 110 hrs. @ 2803.7

Performed OHP 100 hr. Inspection. Performed cylinder compression check with the following results: 1 76/80, 2 70/80, 3 68/80, 4 78/80, 5 70/80, 6 72/80. Cold. Drained oil, changed oil filter (CH48110-1) and serviced engine with 8 qts. Phillips XC20W-50.

I certify this engine has been inspected in accordance with a 100 hr inspection and was determined to be in airworthy condition.

Russell Scott A&P 3401594 IA





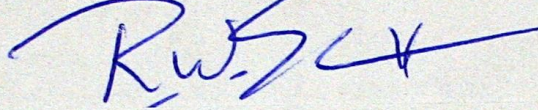
N120HP

01-31-2018

Actt: 2756.6

C/W OHP 50hr. Inspection. Drained oil, replaced oil filter CH48110-1  
and serviced engine with 8 qts. Phillips XC 20W-50 oil.

Russell Scott A&P 3401594 IA



N120HP

02/26/2018

Actt: 2764.8

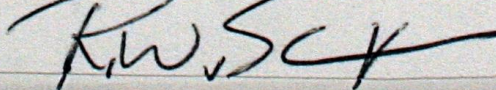
Removed fuel servo P/N: RSA-5AD1 (AV2576544-3), S/N:  
AV171462239 due to stiff mixture arm and loose base plate. Sent to Avstar for  
overhaul W/O#: 268911. Reinstalled Fuel servo on aircraft and adjusted  
mixture and Idle RPM to within factory limits.

\*Note: AD 2009-02-03 was complied with at overhaul by installing Gasket  
AV2577258.

\*Note: AD 2011-15-10 and AD 2012-03-06 are N/A by lot number of  
diaphragm assy.

\*Note: SB PRS-110 N/A by part number.

Approved for return to service Russell Scott A&P 3401594 IA





N120HP

C/W : AD 15-19-07 Fuel lines insp.

05/02/2018

ACTT :2797.0

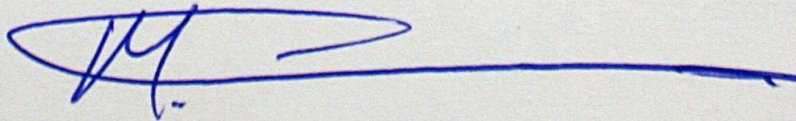
Engine TT: 718.0

Performed 100hr / Annual inspection. Drained oil, replaced oil filter P/N : CH48110-1 and serviced with 9qts. Phillips, XC 20W/50. Performed cylinder compression check with the following results #1 76/80,#2 78/80,#3 76/80,#4 78/80,#5 70/80,#6 72/80.

Ran aircraft, all systems check within limits, no leaks .

I certify this engine has been inspected in accordance with an Annual/ 100hr inspection and was determined to be in airworthy condition.

Michael Lane A&P 3511881 IA

A blue ink signature, likely of Michael Lane, consisting of a stylized 'M' followed by a long horizontal stroke.

08/01/2018

N120HP

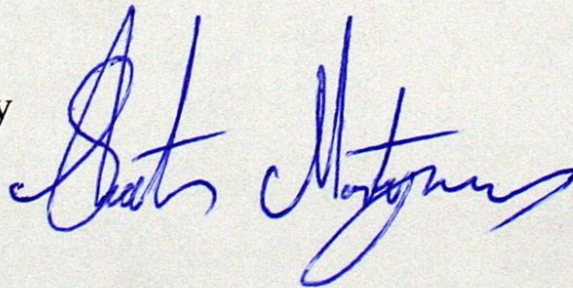
ACTT : 2808.7 Hrs

Engine TT: 729.7

Performed OHP 50 Hr. inspection. Drained engine oil, replaced oil filter PN CH48110-1 and serviced with 8qts. Phillips X/C SAE 20W-50 oil and 12oz CamGuard oil supplement. All work done in accordance with Lycoming MM and Cessna MM. Leak check performed, aircraft approved for return to service.

A&P 4055175

Shelton Montgomery

A blue ink signature, likely of Shelton Montgomery, featuring a stylized 'S' and 'M'.



08/29/2018

N120HP

ACTT: 2898.5 Hrs

Engine TT: 819.5 Hrs

Performed OHP 100 Hr service inspection on engine, drained engine oil, changed filter, P/N CH48110-1 and serviced with 8 quarts of Phillips X/C SAE 20W-50 oil and 12oz CamGuard oil supplement. Removed and replaced all spark plugs. Cylinder compressions, (1)65/80, (2)60/80, (3)65/80, (4) 76/80, (5) 70/80, (6)72/80. All work done in accordance with Lycoming MM and Cessna maintenance manual. Leak check performed, aircraft approved for return to service.

A&P 4055175

Shelton Montgomery

11/20/2018

N120HP

ACTT: 2903.3

Removed and replaced left magneto P/N: 6351 S/N: 10120396 and right magneto P/N: 6351 S/N: 10010731. Removed and replaced left hand magneto harness P/N: M2961. Work done in reference to Lycoming IO-540 Maintenance manual. Aircraft approved to return to service

Shelton Montgomery

A&P: 4055175



N120HP

01/23/2019

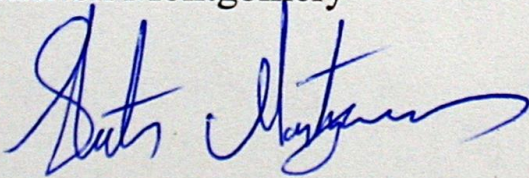
ACTT : 2964.2

Engine TT: 885.2

Performed OHP 50 hour inspection. Drained engine oil, replaced oil filter and serviced with 8 quarts of Phillips X/C SAE 20W-50 oil and 12oz CamGuard oil supplement. All work done in reference with Lycoming MM and Cessna MM. Leak check performed, aircraft approved for return to service.

A&P 4055175

Shelton Montgomery



03/12/2019

N120HP

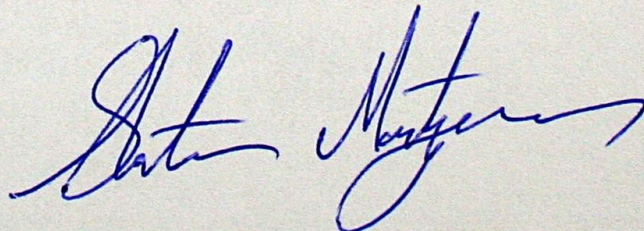
ACTT: 3006.2 Hrs

Engine TT: 927.2 Hrs

Performed OHP 100 Hr service inspection on engine, drained engine oil, changed oil filter, P/N CH48110-1 and serviced with 8 quarts of Phillips X/C SAE 20W-50 oil and 12oz CamGuard oil supplement. Cylinder compressions, (1)76/80, (2)74/80, (3)75/80, (4) 74/80, (5) 72/80, (6)70/80. All work done in accordance with Lycoming MM and Cessna maintenance manual. Leak check performed, aircraft approved for return to service.

A&P 4055175

Shelton Montgomery





CE  
10T

04/30/2019

N120HP

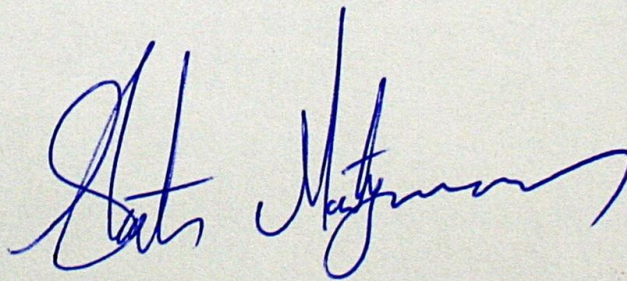
ACTT : 3056.0

Engine TT: 977.0

Performed OHP 50 hour inspection. Drained engine oil, replaced oil filter and serviced with 8 quarts of Phillips X/C SAE 20W-50 oil and 12oz CamGuard oil supplement. All work done in reference to Cessna Maintenance Manual. Leak check performed, aircraft approved for return to service.

A&P 4055175

Shelton Montgomery



06/04/2019

N120HP

ACTT: 3085.9

Engine TT: 1006.9

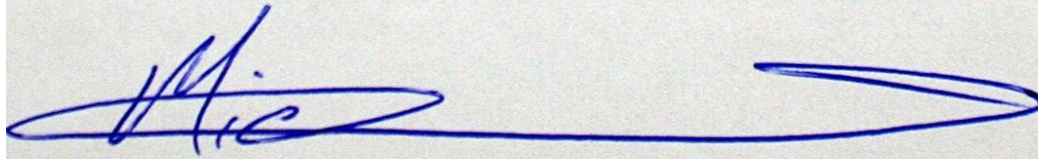
C/W: AD 15-19-07 Fuel lines insp.

Performed 100hr / Annual inspection in reference to 14 CFR 43 appendix D.

I certify this engine has been inspected in reference with an Annual / 100hr inspection and was determined to be in airworthy condition.

Michael Lane

A&P 3511881 IA





07/31/2019

N120HP

ACTT : 3112.6

Engine TT: 1033.6

Performed OHP 50 hour inspection. Drained engine oil, replaced oil filter and serviced with 8 quarts of Phillips X/C SAE 20W-50 oil. All work done in reference to Cessna Maintenance Manual. Leak check performed, aircraft approved for return to service.

Shelton Montgomery

A&P: 4055175



10/31/2019

N120HP

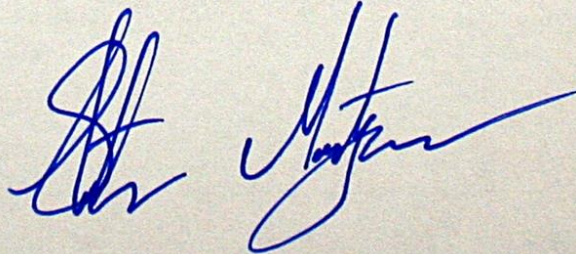
ACTT: 3158.5 Hrs

Engine TT: 1079.5 Hrs

Performed OHP 100 Hr service inspection on engine, drained engine oil, changed oil filter, P/N CH48110-1 and serviced with 8 quarts of Phillips X/C SAE 20W-50 oil and 12oz CamGuard oil supplement. All work done in reference with Lycoming Maintenance Manual and Cessna MM. Leak check performed, aircraft approved for return to service.

A&P 4055175

Shelton Montgomery





06/03/2020

N120HP

ACTT: 3203.7

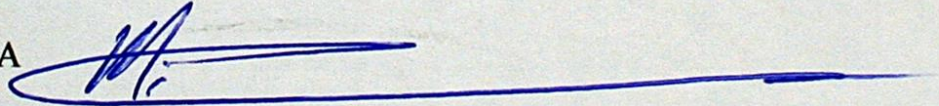
Engine TT: 1124.7

C/W: AD 15-19-07 Fuel lines insp.

Performed 100hr / Annual inspection. Drained engine oil, replaced oil filter and serviced with 8 quarts of Phillips X/C SAE 20W-50 oil and 12oz CamGuard oil supplement. Cylinder compressions, (1) 78/80, (2) 76/80, (3) 72/80, (4) 74/80, (5) 40/80, (6) 72/80. Removed cylinder #5 (P/N: LW13870, S/N: 117535), overhauled by D&B Aircraft Engines Inc., refer to invoice # 17523 for details. Ran aircraft, all systems check within limits, no leaks. I certify this engine has been inspected in accordance with an Annual / 100hr inspection and was determined to be in airworthy condition.

Michael Lane

A&P 3511881 IA



08/04/2020

N120HP

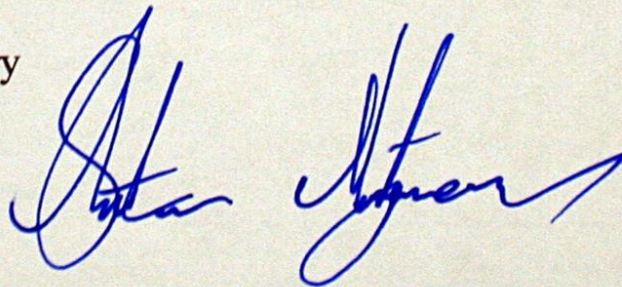
ACTT: 3251.9

Engine TT: 1172.9

Performed OHP 50 hour inspection. Drained engine oil, replaced oil filter and serviced with 8 quarts of Phillips X/C SAE 20W-50 oil and 12oz of Camguard oil supplement. All work done in reference to Cessna Maintenance Manual. Leak check performed, aircraft approved for return to service.

Shelton Montgomery

A&P: 4055175





09/14/2020

N120HP

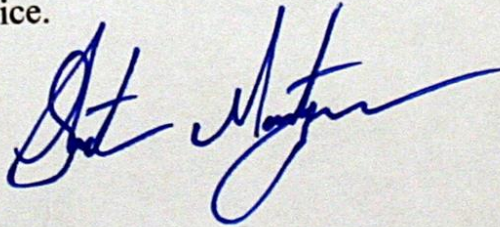
ACTT: 3309.2 Hrs

Engine TT: 1230.2 Hrs

Performed OHP 100 Hr service inspection on engine. Drained engine oil, changed oil filter (P/N CH48110-1) and serviced with 8 quarts of Phillips X/C SAE 20W-50 oil and 12oz Camguard oil supplement. Replaced 1 spark plug (P/N: REM38E). Cylinder compression: (1) 80/80, (2) 74/80, (3) 80/80, (4) 80/80, (5) 78/80, (6) 78/80. All work done in reference with Lycoming Maintenance Manual and Cessna MM. Leak check performed, aircraft approved for return to service.

A&P 4055175

Shelton Montgomery



11/19/20

N120HP

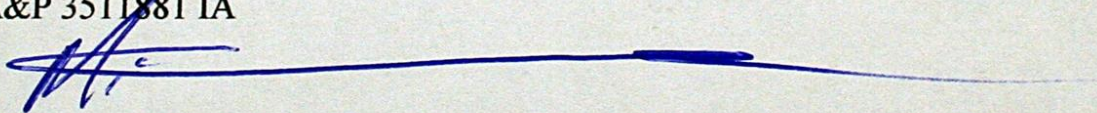
ACTT: 3362.2

Engine TT: 1283.2

Performed OHP 50 hour inspection. Drained engine oil, replaced oil filter and serviced with 8 quarts of Phillips X/C SAE 20W-50 oil and 12oz of Camguard oil supplement. All work done in reference to Cessna Maintenance Manual.

Michael lane

A&P 3511881 IA





01/13/2021

N120HP

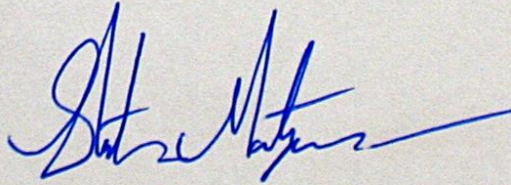
ACTT: 3409.4

Engine TT: 1330.4

Performed OHP 100 Hr service inspection on engine. Drained engine oil, changed oil filter (P/N CH48110-1) and serviced with 8 quarts of Phillips X/C SAE 20W-50 oil and 12oz Camguard oil supplement. Cylinder compression: (1) 76/80, (2) 78/80, (3) 80/80, (4) 80/80, (5) 72/80, (6) 76/80. Removed both Magnetos, 500 Hr Inspection performed by D&B Aircraft Engines Inc., refer to W/O# 16938 for further details, Re-Installed. All work done in reference with Lycoming Maintenance Manual and Cessna MM. Leak check performed, aircraft approved for return to service.

A&P 4055175

Shelton Montgomery



07/19/2021

N120HP

ACTT: 3448.6

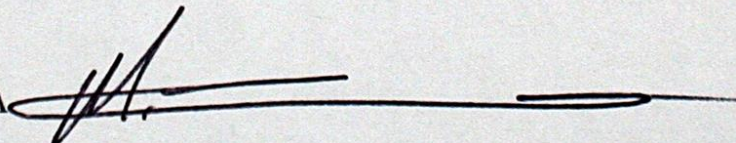
Engine TT: 1369.6

C/W: AD 15-19-07 Fuel lines insp.

Performed Annual inspection. Drained engine oil, replaced oil filter and serviced with 8 quarts of Phillips X/C SAE 20W-50 oil and 12oz CamGuard oil supplement. Cylinder compressions: (1) 80/80, (2) 78/80, (3) 78/80, (4) 80/80, (5) 68/80, (6) 78/80. Replaced 6 spark plugs (P/N: REM38E). Ran aircraft, all systems check within limits, no leaks. I certify this engine has been inspected in accordance with an Annual / 100hr inspection and was determined to be in airworthy condition.

Michael Lane

A&P 3511881 IA





08/11/2021  
N120HP  
ACTT: 3463.0  
Engine TT: 1384.0

Performed OHP 50 hour inspection. Drained engine oil, replaced oil filter and serviced with 8 quarts of Phillips X/C SAE 20W-50 oil and 12oz of Camguard oil supplement. All work done in reference to Cessna Maintenance Manual. Leak check performed, aircraft approved for return to service.

Shelton Montgomery  
A&P: 4055175



E  
10THS

08/11/2021  
N120HP  
ACTT: 3463.0  
Engine TT: 1384.0

Performed OHP 50 hour inspection. Drained engine oil, replaced oil filter and serviced with 8 quarts of Phillips X/C SAE 20W-50 oil and 12oz of Camguard oil supplement. All work done in reference to Cessna Maintenance Manual. Leak check performed, aircraft approved for return to service.

Shelton Montgomery  
A&P: 4055175





12/20/2021

N120HP

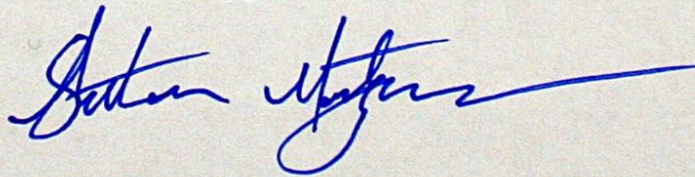
ACTT: 3514.5

Engine TT: 1435.5

Performed OHP 100 Hr service inspection on engine. Drained engine oil, changed oil filter (P/N CH48110-1) and serviced with 8 quarts of Phillips X/C SAE 20W-50 oil and 12oz Camguard oil supplement. Cylinder compression: (1) 78/80, (2) 74/80, (3) 78/80, (4) 78/80, (5) 67/80, (6) 78/80. All work done in reference with Lycoming Maintenance Manual and Cessna MM. Leak check performed, aircraft approved for return to service.

A&P 4055175

Shelton Montgomery



06/08/2022

N120HP

ACTT: 3537.9

Engine TT: 1458.9

C/W: AD 15-19-07 Fuel Lines Inspection

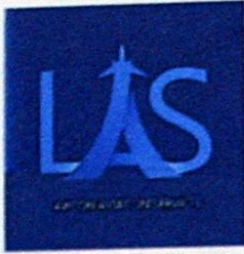
Performed Annual inspection. Drained engine oil, replaced oil filter and serviced with 8 quarts of Phillips X/C SAE 20W-50 oil. Cylinder compressions: (1) 72/80, (2) 68/80, (3) 74/80, (4) 78/80, (5) 68/80, (6) 78/80. Ran aircraft, all systems check within limits, no leaks. I certify this engine has been inspected in accordance with an Annual / 100hr inspection and was determined to be in airworthy condition.

Michael Lane

A&P 3511881 IA







Lawton Aviation Services  
PO Box 531  
Lawton, OK 73502  
580-351-2900

DATE: 8/8/2022

TAIL: N120HP

TAC:3744.9

REPLACED RING GEAR, FLYWHEEL AND STARTER.  
REINSTALLED ALL ENGINE COWLING AND TESTED-  
RAN ENGINE- GOOD. RETURNED TO SERVICE.

KENNETH WILLIAMS

A&P 2988462





Lawton Aviation Services  
PO Box 531  
Lawton, OK 73502  
580-351-2900

DATE: 1/20/2023

TAIL: N120HP

HOBBS: 3767.5

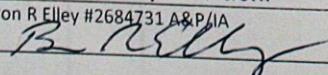
Ran aircraft, drained oil, removed oil filter and cut and checked for metal- none found. Replaced with new CH48110-1 oil filter and filled with 7qts 20W50XC. Add one bottle Camguard. Washed engine. Serviced all main and nose tires with nitrogen. OPS check- good. Returned to service.

KENNETH WILLIAMS

A handwritten signature in black ink, appearing to read 'Kenneth Williams', written in a cursive style.

A&P 2988462



N120HP - Engine Log	Cessna 182T	Serial# 18281841
Owner:	Lycoming IO-540-AB1A5 Serial# RL-17040-48E	Tach Time: 3786.6 (Hour Meter)
Date: 7/12/2023		TT= 1707.6
Description of work: 1. Cleaned, gapped and tested spark plugs. Checked ignition timing. Applied RTV to tear on SCAT tube at fresh air inlet. 2. Serviced engine with oil 8 quarts Phillips XC 20W50 and 12 oz. CamGuard and installed new oil filter Tempest 48110-2, cut open and inspected old filter for metal-none present. Safetied starter mounting bolt. 3. Checked Engine compressions:#1 72/80, #2 72/80, #3 72/80, #4 76/80, #5 70/80, #6 74/80. 4. Installed SAF-AIR products P5000 oil drain valve on oil sump. Torqued and safetied. leak/operational checked-good. 5. Installed new Donaldson air filter part# P106150. Verified torque and safetied alternator hold down bolt. Stop drilled R/H forward baffle at mounting hole. 6. Removed and Reinstalled #5 Cylinder after exhaust valve work completed by D&B Engines(Details available at D&B Engines). Leak and Operational checked-good. Updated AD compliance list, current through 7/12/2023. Complied with AD 15-19-07 Fuel Line Inspection- (Next Due 7/2024 or 3886.6). Completed 100 hour inspection this date in accordance with FAR 43, Appendix D and approved maintenance/service manual check list. Checked operation of all systems and found to be ok. <b>I certify that this Engine has been inspected in accordance with a 100hr inspection and was determined to be in airworthy condition.</b> Byron R Elley #2684731 A&P/IA 		

N120HP Hobbs 3803.6 2293.45 TTAf 3803.6 EngTSO 1724.6 Prop TSO 1724.6  
 Engine log August 1, 2024

Engine warmed up. Drained engine oil, refilled with 9 quarts of P66 XC 20W50 oil. Removed oil filter, inspected filter no faults found. Installed new CH48110-2 oil filter. Installed new engine air filter. Preformed compression checks, #1 74/80 #2 76/80 #3 80/80 #4 76/80 #5 78/80 #6 74/80. Removed, cleaned inspected and reinstalled with new gaskets the spark plugs. Cleaned and serviced fuel strainer. Washed down engine, preformed ground leak and ops checks, no faults found. Preformed static leak check of induction and exhaust system, no faults found. AD 15-19-07 CW by leak check inspection. See AD list.  
 I certify that this engine has been inspected, using manufacturers data, IAW an Annual inspection, and found to be in an airworthy condition.

Chris Pittman A&P 3067255 IA

