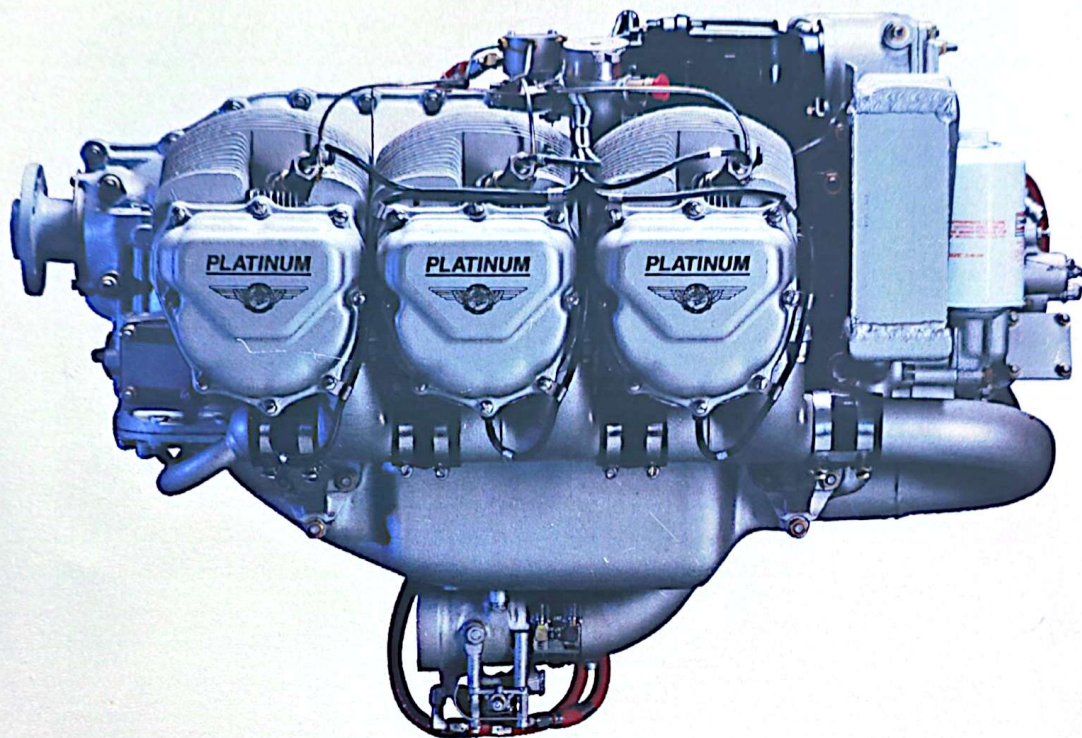


PLATINUM ENGINE LOG BOOK



CONTINENTAL MOTORS

PLATINUM ENGINE LOG BOOK



CONTINENTAL MOTORS

**USE ONLY FUEL CONFORMING TO ASTM D910
USE OF AUTOMOTIVE GAS IS NOT APPROVED.**



Teledyne Continental Motors, Inc.
A Teledyne Technologies Company

Printed: 08/02/2007

This engine model 10550N50, Serial No. 691330 was manufactured on 08/01/2007 by Teledyne Continental Motors in accordance with approved design data and the applicable requirements of Part 21 of the Federal Aviation Regulation. The approved design data for this engine incorporates all changes required by applicable Airworthiness Directives and Teledyne Continental Motors Service Bulletins.



TELEDYNE CONTINENTAL MOTORS
A TELEDYNE TECHNOLOGIES COMPANY
PRODUCTION CERTIFICATE NO. 508

Date	Total Time		Time Since Last Overhaul		Engine Service and Maintenance Record Installations, Inspections, Airworthiness Directives, Special Inspections, Modifications and Service Bulletins
	Hrs.	Min.	Hrs.	Min.	
28 Aug 07	5	7			<p>THE FOLLOWING SUPPLEMENTAL TYPE CERTIFICATE NUMBER HAS BEEN INSTALLED ON THIS ENGINE SE10589SC</p> <p>CDC <u>AO</u> on <u>08/28/07</u>. Cirrus Design Corporation Duluth, MN USA PC# 338CE</p>

9/21/2007
N193SR
Hobbs 38.3
Engine log

PARK RAPIDS AVIATION, INC.
301 AIRPORT ROAD
PARK RAPIDS, MN 56470
218-237-8528

Changed oil and filter. Serviced with 8qts. Phillips 20w50 mineral oil. Cut open filter. No metal noted. Run up and leak check ok.

Brad Olson

Brad Olson A&P 477049349

Engine log entry for N193SR
10-18-07 Hobbs: 55 Drained oil
and added 8qts Exxon Elite
20w50. Cut open oil filter
-no metal found.- Installed
new AA48108 oil filter. Leak
Check - satisfactory -


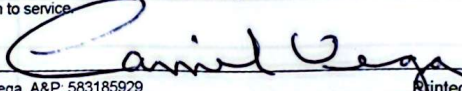


David Allen AHP2704874

ARAPAHOE AERO

12760 EAST CONTROL TOWER ROAD ENGLEWOOD, COLORADO 80112 (303) 799-8386
N193SR Continental IO-550-N (50) S/N: 691330 Engine Total Time: 74.1
27 February 2008 Flight Hobbs: 74.1 Hobbs: 98.3
Removed turbo controller P/N: 470688-0005, S/N: KGN00436 and installed new controller S/N:
LBN00720 as supplied by Tornado Alley. Ground run up and adjusted as required. Operational check and
leak check good. *Scott L. Utz* Scott L. Utz A&P523021803 26126

ARAPAHOE AERO

12760 EAST CONTROL TOWER ROAD ENGLEWOOD, COLORADO 80112 (303) 799-8386
N193SR Continental IO-550-N (50) S/N: 691330
24 March 2008 Hobbs: 0100.8 Flight Hobbs: 0075.7
Completed 50 hour inspection this date using Cirrus 50 Hour Inspection Items as a guide. Serviced engine
with 7 qts. Exxon Elite 20W50. Cut oil filter open and inspected, no ferrous contaminants noted. Oil
sample taken and submitted. Inspected engine case breather for obstructions. Visually inspected exhaust
system, no defects noted. Checked lubrication and operation of engine and propeller controls. Adjusted
propeller governor high RPM stop as needed and safetied. Post inspection and maintenance engine ground
run operational and leak check satisfactory. END.
L. John Wells L. John Wells A&P3221132 w/o 26253

Date	Total Time		Time Since Last Overhaul		Engine Service and Maintenance Record Installations, Inspections, Airworthiness Directives, Special Inspections, Modifications and Service Bulletins
	Hrs.	Min.	Hrs.	Min.	
Brought Forward →					
<div style="display: flex; justify-content: space-between;"> <div> <p>ENGINE MODEL: Twin Cities Aviation, Inc. ENGINE S/N: REG. NO. N193SR WORK ORDER: 2627-05-2008</p> </div> <div style="text-align: center;">  <p>8891 Airport Rd #A-2 Blaine, Minnesota 55449 Phone: 763-784-9165</p> </div> <div> <p>DATE: 5/30/2008 A/C TSN: 128.9 ENG TT: 128.9 HOBBS: 128.9</p> </div> </div> <p>Engine Entries</p> <p>Oil leak on engine. Tightened loose b-nuts and checked tighten rear oil pan bolts. Ran engine and found oil leak coming from between oil pump housing and engine case. Tightened all fasteners that secure oil pump housing and cleaned free of oil. Ran engine and oil continues to leak. This time oil is coming from stud at oil pump impeller case cover. Removed oil pump impeller cover cleaned and re-sealed with TCM gasket maker and Silk thread. Installed and torqued all fasteners. Ran engine still have oil dripping from same area. This time the oil pump housing assy was removed. Cleaned housing and checked for warpage found ok. Replaced gasket and installed. Ran engine still dripping oil in same area. Removed housing again found no problem with gasket installation. Also removed impeller cover and checked that silk thread seal was not disturbed during installation. This time while checking the oil pump housing for cracks it was noticed that the casting thickness where the stud leaks which is next to the pressure port is not thick enough to seal while under pressure. A new housing was ordered and matched against the old one. The new housing material thickness around that port is three times the thickness which would allow the gasket to properly seal. The impeller cover was installed with a new fabricated gasket. The oil pump housing was installed with a new gasket and secured. Engine was operated and no oil leaks were present. New oil Aero shell 15W50 and filter Champion CH48108-1. The following parts were replaced 2ea Gasket Annular MS769-12, 1ea Gasket annular MS35769-26, 2ea Gasket SA631034, Housing & shaft-oil Pump 63277-1.</p>					
<p>The aircraft, airframe, engine, propeller, or appliance above was repaired and / or inspected in accordance with current regulations of the Federal Aviation Administration and is approved for return to service.</p> <div style="display: flex; justify-content: space-between;"> <p>DATE: 5/30/2008</p> <p>SIGNED:  Camilo A Vega, A&P: 583185929</p> <p>Work Order: 2627-05-2008 Printed by EBis 3 (datcomedia.com)</p> </div>					
<div style="display: flex; justify-content: space-between;"> <div> <p>ENGINE MODEL: IO-550-N Twin Cities Aviation, Inc. ENGINE S/N: 691330 REG. NO. N193SR WORK ORDER: 2784-08-2008</p> </div> <div style="text-align: center;"> <p>8891 Airport Rd #A-2 Blaine, Minnesota 55449 Phone: 763-784-9165</p> </div> <div> <p>DATE: 9/18/2008 A/C TSN: 185.4 ENG TT: 185.4 HOBBS: 185.4</p> </div> </div> <p>Engine Entries</p> <p>CW a annual engine inspection IAW Cirrus SR 22 MM and IG. AD's researched to date. Researched all Cirrus SB's date. Cleaned engine. Quick drain verified closed and filter torqued and safetied. Cleaned and serviced K&N air filter. Cleaned, inspected, gapped and tested spark plugs. Borescoped/leakdown tested cylinders IAW TCM service bulletin SB03-3, Compression: #1 - 68/80, #2 - 70/80, #3 - 68/80, #4 - 68/80, #5 - 72/80, #6 - 71/80. TCM min for day 44/80. External mag timing checked and adjusted to 22 deg BTDC +/- 1 degree. Tested all ignition leads. Operation found satisfactory. Checked control travels and lubed rod ends. Visually inspected and pressurized muffler assembly. No defects noted. Ground run, ops and leak check satisfactory. I certify that this powerplant has been inspected IAW a annual inspection and was determined to be airworthy with respect to work performed at this date and time. The following discrepancies were addressed: ---CW AD 07-04-19 R1, Superior Air Parts Cylinders, Cylinders NOT Installed. No further action required. ---CW AD 07-16-10, Turbocharger Compressor Rotor, DNA by Serial Number, No further action required. ---CW AD 08-06-17, Turbine Housing Exhaust Flange, DNA By Model Number, No Further Action Required. ---Removed and installed two adel clamps P/N MS21919WDG48 on front lower engine. ---Installed wastegate linkage cable assembly P/N 22-5650008, Operational check satisfactory. ---Installed new safety exhaust bracket P/N ETI-G2-600-5.</p>					
<p>The aircraft, airframe, engine, propeller, or appliance above was repaired and / or inspected in accordance with current regulations of the Federal Aviation Administration and is approved for return to service.</p> <div style="display: flex; justify-content: space-between;"> <p>DATE: 9/18/2008</p> <p>SIGNED:  Jeff Iskierka, IA: 470046442</p> <p>Work Order: 2784-08-2008 Printed by EBis 3 (datcomedia.com)</p> </div>					
<div style="display: flex; justify-content: space-between;"> <div> <p>ENGINE MODEL: IO-550-N Twin Cities Aviation, Inc. ENGINE S/N: 691330 REG. NO. N193SR WORK ORDER: 2837-09-2008</p> </div> <div style="text-align: center;"> <p>8891 Airport Rd #A-2 Blaine, Minnesota 55449 Phone: 763-784-9165</p> </div> <div> <p>DATE: 9/30/2008 A/C TSN: 187.9 ENG TT: 187.9 HOBBS: 187.9</p> </div> </div> <p>Engine Entries</p> <p>Complied with 50 hr inspection, drained oil, took oil sample, removed filter, inspected filter, verified drain closed/locked/safetied, serviced engine with 7qts Aeroshell 15W50 installed new CH48108-1 filter, torqued and safetied, checked lights, checked electrolyte level, serviced tires, ground run, ops check and leak check satisfactory.</p>					
<p>The aircraft, airframe, engine, propeller, or appliance above was repaired and / or inspected in accordance with current regulations of the Federal Aviation Administration and is approved for return to service.</p> <div style="display: flex; justify-content: space-between;"> <p>DATE: 9/30/2008</p> <p>SIGNED:  Dennis Lentz, A&P: 2190097</p> <p>Work Order: 2837-09-2008 Printed by EBis 3 (datcomedia.com)</p> </div>					

Date	Total Time		Time Since Last Overhaul		Engine Service and Maintenance Record Installations, Inspections, Airworthiness Directives, Special Inspections, Modifications and Service Bulletins
	Hrs.	Min.	Hrs.	Min.	

Brought f

ENGINE MODEL: IO-550-N
ENGINE S/N: 691330
REG. NO: N193SR
WORK ORDER:
3238-09-2009

Twin Cities Aviation, Inc.

8891 Airport Rd #A-2
Blaine, Minnesota 55449 USA
Phone: 763-784-9165

DATE: 10/2/2009
A/C TSN: 229.3
ENG TT: 229.3
HOBBS: 229.3

Engine Entries

CW a annual engine inspection IAW Cirrus SR 22 MM and IG. AD's researched to date. Researched all Cirrus SB's date. Cleaned engine. Drained oil and sample taken. Serviced w/ 7 qts of Aeroshell 15w-50 and a new CH48108-1 filter installed. Quick drain verified closed and filter torqued and safetied. Cleaned and reserviced induction air filter. Cleaned, inspected, gapped and tested spark plugs. Borescoped/leakdown tested cylinders IAW TCM service bulletin SB03-3. Compression: #1 - 70/80, #2 - 77/80, #3 - 72/80, #4 - 76/80, #5 - 75/80, #6 - 74/80. TCM min for day 44/80. External mag timing checked and adjusted to 22 deg BTDC +/- 1 degree. Tested all ignition leads. Operation found satisfactory. Checked control travels and lubed rod ends. Visually inspected and pressurized muffler assembly. No defects noted. Ground run, ops and leak check satisfactory. I certify that this powerplant has been inspected IAW a annual inspection and was determined to be airworthy with respect to work performed at this date and time. The following discrepancies were addressed: —CW a Annual Inspection, Tornado Alley Turbonormalizers, IAW Tornado Alley Instructions For Continued Airworthiness, I have inspected these turbonormalizers IAW Tornado Alley Instructions For Continued Airworthiness during an annual inspection and they were determined to be airworthy with respect to work performed at this date and time. —CW AD 09-16-03, SAP Cylinder Assemblies NOT installed. No further action required. —CW AD 09-19-07, EQ3 Cylinder Assemblies NOT installed. No further action required. —Stop drilled crack in left engine baffle at rear corner near inter-cooler, sealed with high temp RTV. Reinstalled inter-cooler and ducts.

The aircraft, airframe, engine, propeller, or appliance above was repaired and / or inspected in accordance with current regulations of the Federal Aviation Administration and is approved for return to service.

DATE: 10/2/2009

SIGNED:

Andrew Bougetz, IA: 2656245

Work Order: 3238-09-2009

Printed by EBis 3 (datcomedia.com)

ENGINE MODEL: IO-550-N
ENGINE S/N: 691330
REG. NO: N193SR
WORK ORDER:
3585-07-2010

Twin Cities Aviation, Inc.

Repair Station No. 5TCR105B
8891 Airport Rd #A-2
Blaine, Minnesota 55449 USA
Phone: 763-784-9165

DATE: 7/21/2010
A/C TSN: 298.2
ENG TT: 298.2
HOBBS: 298.2

Engine Entries

Adjusted FCU unmetereed pressure and adjusted manifold pressure IAW TCM SID97-3E and TAT continued airworthiness instructions. Operational check satisfactory, no leaks detected during ground run.

The aircraft, airframe, engine, propeller, or appliance above was repaired and / or inspected in accordance with current regulations of the Federal Aviation Administration and is approved for return to service.

DATE: 7/21/2010

SIGNED:

Josh Shea
Certified Repair Station No. 5TCR105B

Work Order: 3585-07-2010

Printed by EBis 3 (datcomedia.com)

Airmotive Enterprises, Inc. N-Number: N193SR
16384 Airport Rd. Ste #8 Make: Cirrus
Brainerd, MN 56401 Model: SR-22
(218) 829-3398 S/N:
Tach/hobbs: 302.3 ACTT: SMOH:

Drained oil and added 7qts. Exxon Elite 20W50. Cut open oil filter -no metal found.- Installed new AA48108-2 oil filter. Washed down rear of engine and lower cowlings. Leak checks -satisfactory.-

David Ahlers

David Ahlers A&P2704874

Total Time		Time Since Last Overhaul		Engine Service and Maintenance Record Installations, Inspections, Airworthiness Directives, Special Inspections, Modifications and Service Bulletins
Hrs.	Min.	Hrs.	Min.	
→				



4535 Airport Approach Rd. Duluth, MN 55811
(218) 727-2911
Cirrus Authorized Service Center
Cessna Authorized Service Facility

Date: 10/06/2010; Aircraft: N193SR; Type: SR22; S/N: 2663; Hobbs: 335.7; Total Time: 262.3; Engine - Type: IO-550-N, S/N: 691330, Time: 262.3, SMOH: 262.3
Shop Order #: 10-7608
(FLT TIME: 262.3 Hrs.)

Performed 100 Hr inspection of engine IAW CDC AMM 5-20.

Researched engine ADs thru current bi-weekly 2010-20.

Changed engine oil and filter, Champion CH48108-1. Serviced with 8 qts of Phillips Type M engine oil.

Performed particulate inspection on filter, checked good. Ops and leak checks good. All work IAW CDC AMM.

Performed engine cylinder compression and borescope inspections. No discrepancies noted. Compressions as follows: #1 63/80, #2 72/80, #3 67/80, #4 72/80, #5 72/80, #6 72/80, master orifice reading of 41/80. Work performed IAW TCM MM and SB 03-3.

Adjusted magneto to engine timing as required IAW TAT ICA.

Removed #3 cylinder, inspected and found crack by lower spark plug hole. Replaced #3 cylinder with new TCM P/N 655932A3 S/N AC10FA175 IAW TCM IO-550 Overhaul manual.

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

Signature: _____

Rick Hagberg A&P 3268908



4535 Airport Approach Rd. Duluth, MN 55811
(218) 727-2911
Cirrus Authorized Service Center
Cessna Authorized Service Facility

Date: 12/17/2010; Aircraft: N193SR; Type: SR22; S/N: 2663; Hobbs: 359.9; Total Time: 278.8; Engine - Type: IO-550-N, S/N: 691330, Time: 278.8, SMOH: 278.8
Shop Order #: 10-7704

Removed starter adapter and starter replaced with new TCM units

Adapter 642085-1A1-E Batch 0001688614, starter 657596 Serial 4C3-381022

Return to Service

Signature: _____

Rick Hagberg A&P 3268908



N193SR

Engine Log

**VAIL VALLEY
JET CENTER**

Date: 2/6/11
Hobbs: 365.5
Tach: 284.1

Drained oil from engine. Removed oil filter and installed new P/N CH48108 -1. Cut open old filter and inspected for contaminants none found. Serviced engine with 7 Qts. of Phillips XC 20W50. Ground ran engine for leak check no leaks noted all work done IAW Cirrus SR-22 MM.

Next Oil Change Due: 415.5

PH# 970-524-4003

Reyes Pitman A&P2803975
Work order# 14539

Date	Total Time		Time Since Last Overhaul		Engine Service and Maintenance Record Installations, Inspections, Airworthiness Directives, Special Inspections, Modifications and Service Bulletins
	Hrs.	Min.	Hrs.	Min.	

Brought Forward



4535 Airport Approach Rd. Duluth, MN 55811
(218) 727-2911
Cirrus Authorized Service Center
Cessna Authorized Service Facility

Date: 11/04/2011; Aircraft: N193SR; Type: SR22; S/N: 2663; Hobbs: 454.3; Total Time: 354.9; Engine - Type: IO-550-N, S/N: 691330, Time: 354.9, SMOH: 354.9
Shop Order #: 11-8031
(FLT TIME: 354.9 Hrs.)
Performed Annual / 100 Hr inspection of engine IAW CDC AMM 5-20 and 5-30.
Changed engine oil and filter, Champion CH48108-1. Serviced with 8 qts of Phillips 20W50 engine oil.
Performed particulate inspection on filter, checked good. Cleaned main fuel screen. Cleaned and serviced air filter. Replaced clevis pins on wastegate cable ends. Inspected intake and exhaust systems.
Performed engine cylinder compression and borescope inspections, no discrepancies noted. Compressions as follows: #1 72/80, #2 71/80, #3 75/80, #4 69/80, #5 73/80, #6 68/80, master orifice reading of 40/80. Work performed IAW TCM MM and SB 03-3.
Checked magneto to engine timing as required IAW TAT ICA.
Cleaned, gapped, and tested all spark plugs.
Replaced LH and RH turbo support rods with new. Installed new bushings in hanger brackets as necessary.
Engine run up, leak, and ops check ok. I certify that this engine has been inspected in accordance with an Annual / 100 hr inspection and was determined to be in an airworthy condition.

Signature: James J. Imberg
James J. Imberg A&P 2751176 IA

	TACH		
3-22-12	394.0	SERVICED WITH 7 QTS OF PHILLIPS XCZOW50 ENGINE OIL & CHANGED TO NEW FILTER CHAMPION CH48108-1 1 PT CAMGARD	
7-28-12	439.2	SERVICED WITH 7 QTS OF PHILLIPS XCZOW50 ENGINE OIL & CHANGED FILTER CHAMPION CH48108-1 1 PT CAMGARD	

Wadena Aviation, Inc. 34038 County Hwy 77, Wadena, MN 56482. Tel- 218-631-1196,

11/02/2012, N193SR, Cirrus SR22, S/N 2663, Engine, Continental IO-550-N, S/N 691330, TT ~~450.5~~ hrs, Tach ~~450.5~~ hrs, TSNEW ~~450.5~~ hrs.
490.5 490.5 490.5

Compression Checked #1-75/80, 2-75/80, 3-79/80, 4-74/80 5-78/80, and 6-78/80. Cleaned and reoiled induction air filter element. Checked magneto timing. Oil and filter changed and filter inspected. Spark plugs cleaned and gapped.

I certify that this engine has been inspected in accordance with an Annual Inspection and was determined to be in airworthy condition.
Signature: Wadena A&P 2017686 IA

TACH 490.5
COPIED TIME

4-23-13	530.6	SERVICED W/ 7 QTS OF PHILLIPS XCZOW50 ENGINE OIL & CHANGED FILTER CHAMPION CH48108-1 1 PT CAMGARD	
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Date	Total Time		Time Since Last Overhaul		Engine Service and Maintenance Record Installations, Inspections, Airworthiness Directives, Special Inspections, Modifications and Service Bulletins
	Hrs.	Min.	Hrs.	Min.	

By Airmotive Enterprises, Inc.

16384 Airport Rd. Ste #8
Brainerd, MN 56401
(218) 829-3398
Hobbs: 683
SMOH: 683

N-Number: N193SR
Make: TCM
Model: IO-550-N
S/N: 691330
Date: 11/15/2013

Compression: #1-64/80, #2-67/80, #3-56/80, #4-64/80, #5-67/80, #6-65/80. #3 cylinder exhaust valve leakage noted during compression test. CW Continental SB03-3. Borscope inspection revealed no abnormal valve condition. Continued in service. Recommend re-check in 25 hours. Replaced all spark plugs with new RHB32E plugs. Removed both magnetos for 500hr inspection. Cleaned and inspected mags. Repacked magneto drive bearings. Set internal timing, re-installed, and timed to engine. Replaced magneto upper deck pressure filter with new. Drained oil and added 6 qts. Phillips XC 20W50 and 1 pint CamGuard. Cut open oil filter -no metal found.- Installed new CH48108 oil filter. Cleaned all 6 Gami fuel injector nozzles. Inspected intake and exhaust systems. Both tailpipes overhauled by Aerospace Welding Minneapolis due to cracks, W/O's 155754 and 155755. See 8130's for details. Checked all control ends and fittings. Inspected all engine appliances for condition and security. Cleaned and re-oiled K&N induction filter. Checked for applicable AD's through 2013-22. Run-up and leak checks -satisfactory.- I certify this engine has been inspected IAW a 100hr inspection.

David Ahlers A&P2704874

David Ahlers

12-1-13 RECHECKED COMP CYL #3 CHKD 75/80

9-18-14 CHANGED OIL 1 pt CAMGUARD 7 QTS XC 20/50 TACH 614.7
CHANGED FILTER CH48108-1

11/26/2014
N193SR

Make: Continental
Model: IO-550-N
S/N: 691330

Hobbs: 739 SMOH: 739



REQUEST
AIRCRAFT
Authorized Service Center

16384 Airport Road, Suite 8
Brainerd, MN 56401
218-829-3398

Compression: #1-75/80, #2-72/80, #3-73/80, #4-75/80, #5-76/80, #6-72/80. Cleaned, gapped, and rotated spark plugs. Checked magneto to engine timing. Inspected intake and exhaust systems. Cleaned crankcase breather in RH exhaust stack. Lubed wastegates and exhaust slip joints with MouseMilk. Checked all control ends and fittings. Inspected all engine appliances for condition and security. Checked for applicable AD's through 2014-22. Run-up and leak checks -satisfactory.- I certify this engine has been inspected IAW a 100hr inspection.

David Ahlers

David Ahlers A&P2704874

9-16-15 CHANGED OIL 1 pt CAMGUARD 7 QTS XC 20/50 TACH 654.8
CHANGED FILTER CH48108-1 (CUT FILTER NO METAL)

10-27-15 CHANGED OIL 1 pt CAMGUARD 7 QTS XC 20/50 TACH 705.0
CHANGED FILTER CH 48108-1 (CUT FILTER NO METAL)

Date	Total Time		Time Since Last Overhaul		Engine Service and Maintenance Record Installations, Inspections, Airworthiness Directives, Special Inspections, Modifications and Service Bulletins
	Hrs.	Min.	Hrs.	Min.	
Brought Forward	→				

AITKIN AVIATION INC Phone 218 927 4104

11-6-15 N193SR A/CTT 819.3 hrs. Engine TT 705.2 hrs. Performed annual inspection I/A/W Continental Engine IO550-N manual and Cirrus maintenance manual. Engine compressions #1 76/80, #2 78/80, #3 75/80, #4 74/80, #5 76/80, #6 75/80. Checked magneto to engine timing, removed, cleaned and reinstalled all spark plugs. Checked turbo linkage and all intake hoses, checked exhaust pipes, all checked ok. Checked air filter, and all appliances for security and operation. Checked all AD's through 2015-22. I certify that this engine has been inspected I/A/W an Annual inspection and found to be in airworthy condition.

Ron Sieling A&P 3682463

ARAPAHOE AERO

12760 EAST CONTROL TOWER ROAD ENGLEWOOD, COLORADO 80112 (303) 799-8386

N193SR Continental IO-550-N(50) S/N: 691330 Engine Log Entry
04 January 2016 Flight Hobbs: 715.8 Hobbs: 0829.9
Installed new tailpipe clamps, P/N: 11-1100023. Torqued and safetied as needed. Next tailpipe clamp replacement due Flight Hobbs: 1165.8

L. John Wells A&P 3221132

w/o 36298



N193SR Airframe Log

Date: 1/15/2016

TT: Hobbs 831.4

Removed existing TIT probe and installed new Alcor TIT probe part number 86245 S/N 1540. Test ran all opps ok.

C. G. Lucas
PH# 970-524-4003

C. G. Lucas A&P2822684IA
Work order # SO-16-00619

5-20-16	CHANGED OIL & FILTER 1 pt CAMGUARD 7QTS XC 20/50			
	TACH 748.0	FILTER CH 48108-1		
11-2-16	"	"	"	"
	TACH 797.1	FILTER CH 48108-1		
9-29-17	TACH 844.3	CHANGED OIL & FILTER 1 pt CAMGUARD 7QTS		
		10.50 PHILLIPS XC, CHAMPION CH48108-1 FILTER		

Date	Total Time		Time Since Last Overhaul		Engine Service and Maintenance Record Installations, Inspections, Airworthiness Directives, Special Inspections, Modifications and Service Bulletins
	Hrs.	Min.	Hrs.	Min.	

Brought

PINE RIVER AEROMOTOR 218-587-5000

11-4-16 N193SR A/CTT 911.4 hrs. Engine TT 797.3 hrs. Performed annual inspection I/A/W Continental Engine IO550-N manual and Cirrus maintenance manual. Engine compressions #1 79/80, #2 79/80, #3 79/80, #4 79/80, #5 79/80, #6 79/80. Checked magneto to engine timing, removed, cleaned and reinstalled all spark plugs. Repaired engine baffling on left hand side. Checked turbo linkage and all intake hoses, checked exhaust pipes, all checked ok. Checked air filter, and all appliances for security and operation. Checked all AD's through 2016-22. I certify that this engine has been inspected I/A/W an Annual inspection and found to be in airworthy condition.

Ron Sieling A&P 3682463

Ron Sieling

PINE RIVER AEROMOTOR 218-587-5000

12-1-17 N193SR A/CTT 964.8 hrs. Engine TT 850.7 hrs. Performed annual inspection I/A/W Continental Engine IO550-N manual and Cirrus maintenance manual. Engine compressions #1 79/80, #2 79/80, #3 79/80, #4 79/80, #5 79/80, #6 79/80. Checked magneto to engine timing, removed, and replaced all spark plugs. Replaced exhaust heat shield on engine right hand side, P/N ETI-G2-20-21. Checked turbo linkage and all intake hoses, checked exhaust pipes, all checked ok. Checked air filter, and all appliances for security and operation. Checked all AD's through 2017-24. I certify that this engine has been inspected I/A/W an Annual inspection and found to be in airworthy condition.

Ron Sieling A&P 3682463

Ron Sieling

PINE RIVER AEROMOTOR 218-587-5000

11-15-17 N193SR A/CTT 964.8 hrs. Engine TT 850.7 hrs. Performed annual inspection I/A/W Hartzell propeller service manual. Checked for nicks on propeller and security. Checked all AD's through 2017-23. I certify that this propeller has been inspected I/A/W an Annual/ 100 hr. inspection and found to be in airworthy condition.

Ron Sieling A&P 3682463

Ron Sieling

Date	Total Time		Time Since Last Overhaul		Engine Service and Maintenance Record Installations, Inspections, Airworthiness Directives, Special Inspections, Modifications and Service Bulletins
	Hrs.	Min.	Hrs.	Min.	
Brought Forward	→				

PINE RIVER AEROMOTOR 218-587-5000

12-10-18 N193SR A/CTT 1013.3 hrs. Engine TT 899.1 hrs. Performed annual inspection I/A/W Continental Engine IO550-N manual and Cirrus maintenance manual. Engine compressions #1 78/80, #2 78/80, #3 78/80, #4 78/80, #5 79/80, #6 78/80. Checked magneto to engine timing, removed, and cleaned all spark plugs and reinstalled. Replaced exhaust heat shield hose clamp engine left hand side. Checked turbo linkage and all intake hoses, replaced 3 pins in turbo linkage cable. Checked exhaust pipes, all checked ok. Checked air filter, and all appliances for security and operation. Checked all AD's through 2018-24. I certify that this engine has been inspected I/A/W an Annual inspection and found to be in airworthy condition.

Ron Sieling A&P 3682463

Ron Sieling

12-10-18 CHANGED OIL & FILTER 1013.3 Hrs 7 QTS 10-50 PHILLIPS XC
1 PT CAMGUARD CH48108-1 FILTER

NORTHPOINT
AVIATION

16384 Airport Road
Brainerd, MN 56401
(218) 829-3398

Date: 8/23/2019; Aircraft: N193SR; Type: Fixed Wing; Tach: 947.10; Total Time:; Engine
- Type: IO-550-N, S/N: 691330, Time:; SMOH:

Shop Order #: SO-19-1006, Closed: 8/27/2019

Oil and filter change

Ran-up aircraft to operating temperature, drained oil and removed filter. Cut open filter; no metal found. Installed new CH48108 filter. Serviced engine with 7 qts Phillips XC20w-50 and camguard. Performed run-up and leak check; satisfactory

The aircraft, airframe, aircraft engine, propeller, or appliance identified above was repaired/ inspected IAW current Regulations of the Federal Aviation Administration and is approved for return to service. Pertinent details of the repair are on file at this facility under the shop order above.

Signed: *[Signature]*

NorthPoint Aviation C.R.S 6DVR982C

Date	Total Time		Time Since Last Overhaul		Engine Service and Maintenance Record Installations, Inspections, Airworthiness Directives, Special Inspections, Modifications and Service Bulletins
	Hrs.	Min.	Hrs.	Min.	

Brought



16384 Airport Road
Brainerd, MN 56401
(218) 829-3398

Date: 9/24/2019; Aircraft: N193SR; Tach: 951.00; Prop - Type: , S/N: , Time: , SMOH:

Shop Order #: SO-19-1018, Closed: 9/24/2019

Remove prop governor for repair due to leak. Re-install after repair.
Removed prop governor P/N C290D3-R T23 S/N 070549 and sent to Maxwell Aircraft Service for repair. Repair performed under W/O #124055. Re-installed repaired prop governor P/N same S/N same with new gasket. Performed run-up and ops checks, satisfactory. Re-installed all cowling. All work done IAW Cirrus SR22 AMM.

The aircraft, airframe, aircraft engine, propeller, or appliance identified above was repaired/inspected IAW current Regulations of the Federal Aviation Administration and is approved for return to service. Pertinent details of the repair are on file at this facility under the shop order above.

Signed:

NorthPoint Aviation C.R.S 6DVR982C

PINE RIVER AEROMOTOR 218-587-5000

12-16-19 N193SR A/CTT 1072.0 hrs. Engine TT 957.9 hrs. Performed annual inspection I/A/W Continental Engine IO550-N manual and Cirrus maintenance manual. Engine compressions #1 79/80, #2 79/80, #3 79/80, #4 79/80, #5 79/80, #6 79/80. Checked magneto to engine timing, removed, and cleaned all spark plugs and reinstalled. Checked turbo linkage and all intake hoses, replaced 3 pins in turbo linkage cable. Checked exhaust pipes, all checked ok. Checked air filter, and all appliances for security and operation. Checked all AD's through 2019-25. I certify that this engine has been inspected I/A/W an Annual inspection and found to be in airworthy condition.

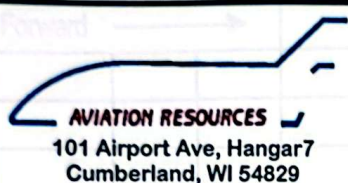
Ron Sieling A&P 3682463

Date		Total Time		Time Since Last Overhaul	
Hrs.	Min.	Hrs.	Min.	Hrs.	Min.

Engine Service and Maintenance Record

Installations, Inspections, Airworthiness Directives, Special Inspections, Modifications and Service Bulletins

Brought



N193SR	ENGINE LOG BOOK ENTRY					1/10/20
Cirrus	SR22 TN	S/N 2663	Flight	959.4	Hobbs	1073.5
Continental	IO550N(50)	S/N 691330	Flight	959.4	Hobbs	1073.5

Removed cowling. Removed left side exhaust system, installed new left hand exhaust manifold P/N 22-6850011, and attached supports with new support rod bushing P/N 22-6200021, new support rod wear sleeve P/N 22-6200048, and 2 new support bushings P/N 22-6200023. Installed new wastegate gasket P/N 652457, and new clevis pin P/N MS20392-1C25. Removed right exhaust system, installed new right hand exhaust manifold P/N 22-6850003, and attached supports with 2 new support rod bushings P/N 22-6200021, and new support rod wear sleeve P/N 22-6200048. Fabricated new heat shield for exhaust between #4 and #6, and secured with 4 Cherrymax rivets. Replaced wastegate cable with new P/N 22-5650009. Removed left turbocharger and installed unit P/N 466304-9003, overhauled by Main Turbo under WO#58158. Removed right side induction fuel drain, and installed new P/N 13913-002. Removed right intercooler to right tailpipe scat hose and replaced with new P/N 04-6400001-5-74-4. Removed all TN oil carrying hoses and replaced with 1 each new P/N AE3663161E0080, AE3663163B0230, AE3663162E0360, AE3663163G0120, AE6210H0207-180, AE3663162B0100, AE3663163G0200, and 2 of P/N AE3663163E0227, and AE3663161H0190; next due 1/2032. Removed all 12 ignition lead springs, applied red DeoxiT, and cleaned ignition lead parts, installed 12 new ignition lead springs P/N 10-32326. Removed #2, #3, #4, and #6 EGT probes and replaced all 4 with new P/N 16579-002. Removed right magneto S/N D07FA189, and installed 500-HR inspected and tested magneto S/N D04BA180, Horizon Aircraft Engine Services WO#31867, and timed to nominal of 21.5 ° BTDC. Adjusted magneto-to-engine timing from left @ +1.8° of nominal of 21.5 ° BTDC to 21.5° BTDC. Removed cotter pin and tightened nut on prop governor attach bolt; installed new cotter pin; ground run, leak, and ops check found satisfactory. Installed cowling. (Refer to Job #193SR1 for details.)

THIS AIRCRAFT ENGINE/PROPELLER COMBINATION WAS INSPECTED AND/OR WAS REPAIRED IN ACCORDANCE WITH CURRENT REGULATIONS OF THE FAA, AND IS APPROVED FOR RETURN TO SERVICE.

JIM BARKER A&P/IA 2755069
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Email jim@aviationvibes.com



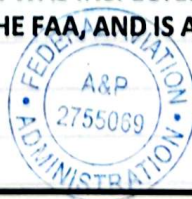
AVIATION RESOURCES, LLC
Hangar (715) 822-5787
www.aviationvibes.com

N193SR	ENGINE AIRFRAME LOG BOOK ENTRY					1/16/20
Cirrus	SR22 TN	S/N 2663	Flight	962.2	Hobbs	1076.3
Continental	IO550N(50)	S/N 691330	Flight	962.2	Hobbs	1076.3

Removed cowling. Checked security of oil lines at rear of engine. Replaced slave wastegate actuation spring with new. Re-located upward spring attachment. Re-installed master wastegate oil feed and drain lines. Leak check; found satisfactory. Installed winterization kit, P/N 70102-002. Installed cowling. (Refer to Job #193SR1 for details.)

THIS AIRCRAFT ENGINE/PROPELLER COMBINATION WAS INSPECTED AND/OR WAS REPAIRED IN ACCORDANCE WITH CURRENT REGULATIONS OF THE FAA, AND IS APPROVED FOR RETURN TO SERVICE.

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d/b/a MILLION AIR - RICHMOND
Cirrus Design Service Center
CRS VXWR051W

<u>Aircraft</u>		<u>Engine</u>		<u>Propeller</u>			
Manufacturer:	Cirrus	Date:	9/3/2021	Manufacturer:	Continental	Manufacturer:	Hartzell
Model:	SR22	W.O.:	M210805	Model:	IO-550-N(50)	Model:	PHC-J3YF-1N
S/N:	2663	FHM:	1062.2	S/N:	691330	S/N:	FP5991B
Reg #:	N193SR	Hobbs:	1209.4	TSN:	1062.2	TSN:	1062.2
TAT:	1062.2						

ENGINE LOGBOOK INSERT

The engine identified above was repaired and/or inspected in accordance with current Federal Aviation Regulations. Pertinent details of this maintenance are on file at this repair station.

Airworthiness Directives (AD's)

The following AD's were complied with during this maintenance event:

2020-16-11 (Continental Aerospace Technologies, Inc.) AD does not apply. No record of any cylinder replacement after 11/15/2013 in engine logbook.

Maintenance

Drained oil and removed oil filter. The filter was cut open and inspected. No abnormalities were found. Installed new oil filter (AA48108-2) and 2 gallons of Phillips 66 X/C 20W50 oil.

Installed new oil seal (643265AC) behind drive gear inside #1 alternator.

Performed dye penetrant inspection @ injector bosses on cylinders 1, 3 & 5, no cracks were found.

Adjusted max fuel flow to 35 mph. REF: TAT Manual

Removed propeller governor (P/N: C290D3R/T23 S/N: 070549) for overhaul. Reinstalled serviceable overhauled original propeller governor (S/N: 070549). OP's and leak checks good. [Propeller governor was overhauled by SENSENICH PROPELLER SERVICE, INC. (CRS #: QV9R194N) on work order L4644]

The above maintenance was accomplished referencing the Continental Engine M&O Manual and/or vendor manuals and documented as required by 14 CFR 43.9. With regard to the work performed, I certify that this engine is approved for return to service.

Inspections

The engine listed above was inspected (annual/100 hour engine items) using the Cirrus SR22 current inspection guide in AMM 05-30 (revised Aug. 20, 2019).

Engine cylinder compression checks were as follows;

- 1) 68/80
- 2) 65/80
- 3) 63/80
- 4) 65/80
- 5) 72/80
- 6) 61/80

Master Orifice Reading: 54

Tornado Alley Turbo, Inc. ICA 22-6460004, Rev. C - Annual requirements.

The above inspections were accomplished in accordance with the Cirrus SR22 Airplane Maintenance Manual and/or vendor manuals as required by 14 CFR 91.409(a)(1). With regard to the work performed, I certify that this engine is in airworthy condition.

Signed: _____

Print: _____

for

COMMONWEALTH AVIATION SERVICE, INC.

d/b/a MILLION AIR - RICHMOND

F.A.A. Approved Repair Station No. VXWR051W

TACH & TSNEW: 1293.2 HRS (HOBBS) 1129.6 HRS (FLIGHT HOBBS) N193SR

'd
1S,

11/01/2022 TACH&TSNEW; 1293.2 HRS(HOBBS) 1129.6 HRS(FLIGHT HOBBS) N193SR
I CERTIFY THIS ENGINE HAS BEEN INSPECTED IN ACCORDANCE WITH AN ANNUAL
INSPECTION AND WAS DETERMINED TO BE AIRWORTHY.

PHILIP D. CHAFFEE A&P 1990828 IA

TACH & TSNEW: 1293.4 HRS (HOBBS) 1129.6 HRS (FLIGHT HOBBS) N193SR

Performed 100 hr inspection in accordance with manufacture guidelines and FAR 43.13 appendix D. Installed L/H magneto S6RSC-25P S/N h-y110125. Timed to engine and run up checked drop. Cleaned, gapped and test spark plugs. Compressions all 67/80 and above. Installed new air-filter, and checked all appliances for security and operation. I certify that this engine has been inspected in accordance with a 100 hour inspection and has been determined to be in air worthy condition at this time. Paul E. Rush A&P
492669013.