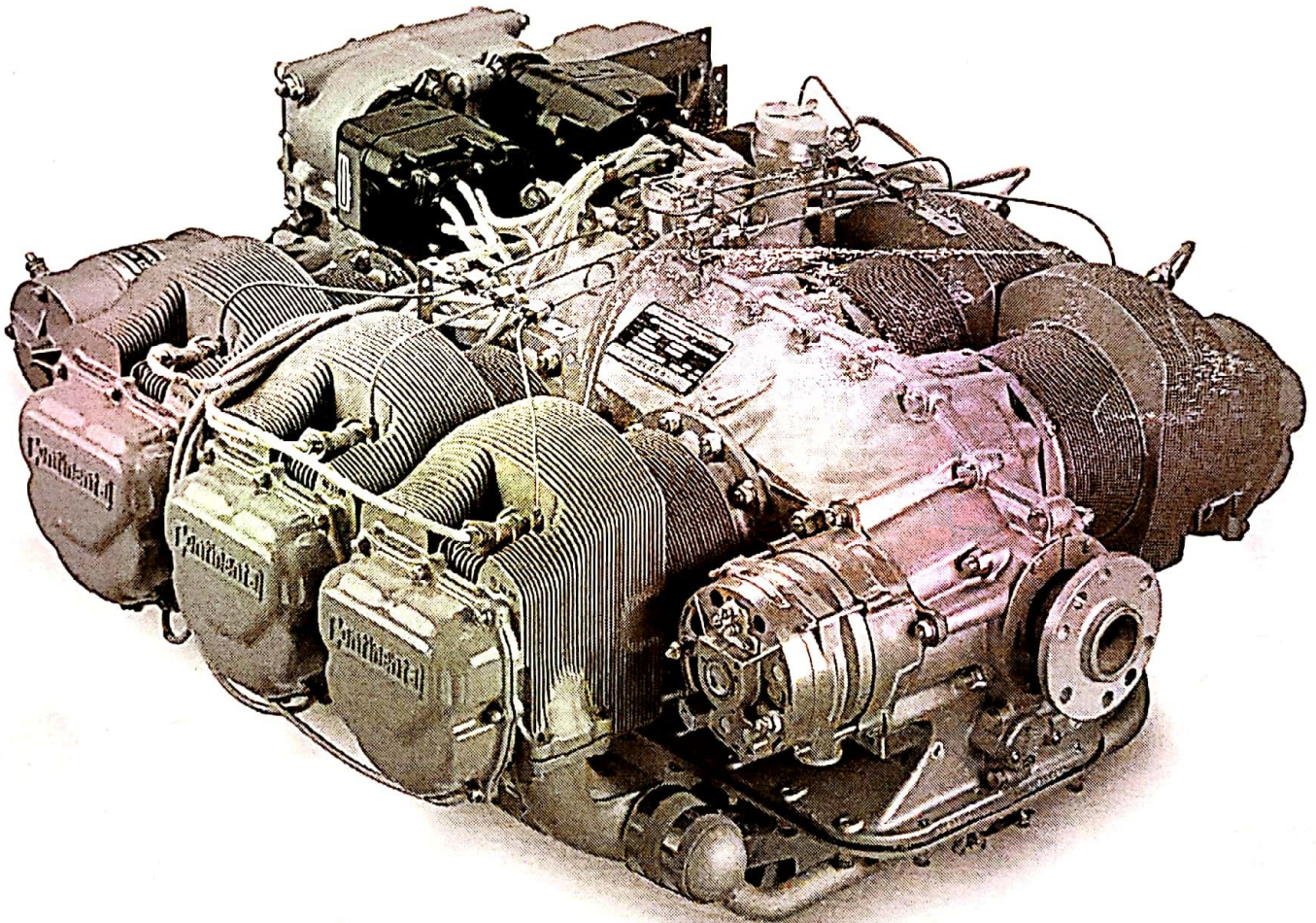


NH77PT  
N628M

# ENGINE LOG BOOK



**Teledyne Continental Motors, Inc.**



### Service Information

Service Bulletins and Technical Publications are available on a direct mail basis from the factory. Orders must be prepaid. Send for order form or call 334-438-3411, publications department, for information.

### Engine Returns

All returned engines are to be shipped with this log book Directly to:

Teledyne Continental Motors  
Abbeville Industrial Park  
Suite 159  
Abbeville, AL 36310

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



This engine model

was manufactured **Teledyne Continental Motors, Inc.**

A Teledyne Technologies Company

Motors in accordance with approved

Printed: 06/13/2006

Part 21 of the Federal Aviation Regulation. The approved design data for this engine

This engine model **10360ES6**, Serial No. **360207** was manufactured on **06/08/2006**

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.



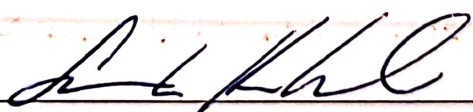
**TELEDYNE CONTINENTAL MOTORS**

A TELEDYNE TECHNOLOGIES COMPANY

PRODUCTION CERTIFICATE NO. 508





Date	Total Time		Time Since Last Overhaul		<b>Engine Service and Maintenance Record</b> Installations, Inspections, Airworthiness Directives, Special Inspections, Modifications and Service Bulletin
	Hrs.	Min.	Hrs.	Min.	
<b>Forward</b> —  ENGINE MODEL: 10360-ES ENGINE S/N: 360207 REG. NO: N177PT WORK ORDER: 27278-10-2007	<b>Commander Aero, Inc.</b> Repair Station No. GA5R-876M 10570 Springboro Pike Miamisburg, Ohio 45342 USA Phone: 888-881-5580			DATE: 10/15/2007 A/C TSN: 145.2 ENG TT: 102.2 HOBBS: 145.2	
<b>Engine Entries</b> (1) Changed oil & Filter. Serviced with Aeroshell 15W50. Cut open filter and inspect for particles.... (2) Took oil sample.... (3) Washed down engine and ran for leak check.					
<b>Maintenance Release</b> The aircraft and/or component(s) on N177PT was repaired and inspected in accordance with current FARs rules of the Federal Aviation Regulations and was found Airworthy for return to service. Pertinent details of the repair are on file at this repair station under Work Order No. 27278-10-2007, Dated 10/15/2007.					
<b>DATE: 10/15/2007</b>		<b>SIGNED:</b> 		<b>Work Order: 27278-10-2007</b>	
		Holland, Susan Certified Repair Station No. GA5R-876M		<b>Printed by EBis 3 (datcomedia.com)</b>	
ENGINE MODEL:		<b>Cirrus Design Factory Service Center</b>			DATE: 11/29/2007 A/C TSN: 174.5



ENGINE MODEL  
IO360ES6  
ENGINE S/N 360207  
REG NO 176PT  
WORK ORDER  
10324-11-2007

### Cirrus Design Factory Service Center

Repair Station No YD5R855Y  
4515 Taylor Circle  
Duluth, MN 55811  
Phone 218- 788-3101

DATE 11/29/2007  
A/C TSN 1715  
ENG TT 1715  
HOBBS 1715

### Engine Entries

(3) Performed engine cylinder compression and boroscope inspections, no discrepancies noted on boroscope inspection, compressions are as follows #1 78/80, #2 78/80, #3 78/80, #4 78/80, #5 78/80, #6 78/80, master onice reading of 47, work performed IAW T C M NM 1 (4) Removed cut open and performed particulate inspection on oil filter no discrepancies found, work done IAW AMM ch. 12-10.

I have reviewed the file on this aircraft and the accompanying discrepancy forms. The aircraft, airframe, aircraft engine, propeller, or appliance identified was inspected in accordance with current requirements of the Federal Aviation Administration and a list of discrepancy(ies) were provided to current owner/operator. Pertinent details of the inspection is on file at this Certified Repair Station No. CRS YD5R855Y.

DATE: 11/29/2007

SIGNED:



Dave Ruuskanen  
Certified Repair Station No. YD5R855Y

Work Order: 10324-11-2007

Printed by EBis 3 (datcomedia.com)



ENGINE MODEL  
10861ES6  
ENGINE S/N 360207  
REG NO 176PT  
WORK ORDER  
10345-12-2007

### Cirrus Design Factory Service Center

Repair Station No. YD5R855Y  
4515 Taylor Circle  
Duluth, MN 55811  
Phone: 218- 788-3101

DATE 12/17/2007  
A/C TSN 1724  
ENG TT 1724  
HOBBS 1724

### Engine Entries

(5) Researched engine ADs through bi-weekly issue 2007-24, all ADs are in compliance at this time.... (11) Drained engine oil and removed oil filter, cut open oil filter and performed particulate inspection, no discrepancies noted on inspection. Installed new Champion oil filter P/N CH48108-1 and serviced engine with 8Qts of Aeroshell 15W50 oil, leak and operational check good. Work performed IAW cirrus mm chapter 12-10... (17) Removed and reinstalled heat exchanger correctly IAW SR20 AMM 78-20.

I have reviewed the file on this aircraft and the accompanying discrepancy forms. The aircraft, airframe, aircraft engine, propeller, or appliance identified was repaired/inspected in accordance with current requirements of the Federal Aviation Administration and is approved for return to service. Pertinent details of repair are on file at this Certified Repair Station CRS YD5R855Y.

**DATE:** 12/17/2007

**SIGNED:** 

Steven LaMourrea  
Certified Repair Station No. YD5R855Y

**Work Order:** 10345-12-2007

**Printed by EBis 3 (datcomedia.com)**



**HERITAGE FLIGHT****CRSIGXR989E**

Engine

09/05/2008

212.4 Hobbs

212.4 ACTT

212.4 ETT

N176PT

W.O. SH07143

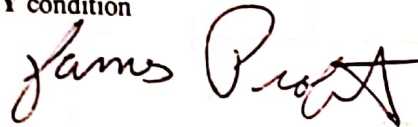
212.4 PTT

Compressions, 1) 76/80 2) 77/80 3) 75/80 4) 76/80 5) 76/80 6 77/80

- 1) Changed oil and Filter. Serviced with 8 quarts of Aeroshell 15W/50 and Ch 48109 filter. Checked old filter for metal (routine-none found).
- 2) Cleaned and gapped spark plugs. Checked magneto timing.
- 3) Cleaned fuel injectors and screens. Replaced induction air element with new P/N BA-24
- 4) Checked and set Fuel flows I/A/W TCM SID 97-3
- 5) Run up op's check ok.

I certify that this Engine has been inspected in accordance with an ANNUAL inspection and was determined to be in **AIRWORTHY** condition

James Proft for CRSIGXR989E

**HERITAGE FLIGHT****CRSIGXR989E**

Engine

08/14/2009

240.9 Hobbs

240.9 ACTT

240.9 ETT

N176PT

W.O. SH08876

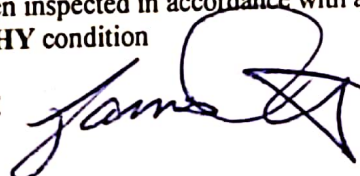
240.9 PTT

Compressions, 1) 74/80 2) 76/80 3) 72/80 4) 74/80 5) 74/80 6 70/80

- 1) Changed oil and Filter. Serviced with 8 quarts of Aeroshell 15W/50 and Ch 48109 filter. Checked old filter for metal (routine-none found).
- 2) Cleaned and gapped spark plugs. Checked magneto timing.
- 3) Cleaned fuel injectors and screens. Replaced induction air element with new P/N BA-24
- 4) Checked and set Fuel flows I/A/W TCM SID 97-3
- 5) Run up op's check ok.

I certify that this Engine has been inspected in accordance with an ANNUAL inspection and was determined to be in **AIRWORTHY** condition

James Proft for CRSIGXR989E





HERITAGE

N176PT – Cirrus SR20

S/N: 1682

Airframe: Hobbs 269.5

191.2 Flight Hobbs.

Engine Hours: 191.2

Engine TT: 191.2



Complied with the following items:

- Perform engine compression test 1) 77/80, 2) 75/80, 3) 74/80, 4) 77/80, 5) 75/80, 6) 77/80.
- Drain engine oil. Inspected engine oil filter for metal, (routine-none found) Install new oil filter PN CH48108-1 and safety.
- Clean, gap and rotate spark plugs, check magneto timing.
- Cleaned Fuel injectors and fuel screen.
- Service engine with 8 Qts of Aeroshell 15W50. Perform ground runs, check for leaks. No defects or leaks noted.
- Install new inter-baffle retension arm and spring PN 641346 and 641347 between cylinder #2 and # 4 IAW the TCM IO 360 CMM Ch 72-60.

*I certify that this Engine has been inspected IAW an "ANNUAL" Inspection and was determined to be in Airworthy condition.*

*"The above items were complied with per the "Manufactures Maintenance Procedures". This aircraft/engine is "Approved for Return to Service" for work performed.*

Date: 9/10/2010 Sign: \_\_\_\_\_

Cert# CRSIGXR989E WO#SH10616





NE X AIR  
AVIONICS

Mansfield Airport(1B9)  
265 Fruit St  
Mansfield, MA 02048  
CRS# N4OR087B

N628M

Oct 19, 2012

Hobbs: 352.2

Tach: 256.5

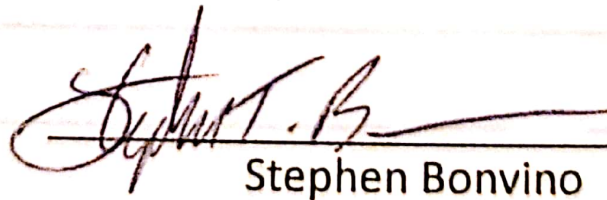
WO# 1310

Engine

Completed annual inspection IAW Cirrus SR20 & TCM IO-360 MM & MM Checklist. Drained oil, sample taken and replaced with 15W/50. Removed oil filter, cut open and inspected, no discrepancies found. Cleaned and lubricated all controls. C/W magneto engine timing. Performed differential compression test with the following results: 1: 74/80, 2: 72/80, 3: 73/80, 4: 74/80, 5: 71/80 and 6: 75/80. Updated the airworthiness directives through Bi-weekly issue 2012-21. Engine run and leak check normal.

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

Authorized Signature

  
Stephen Bonvino





Stephen Bonvino  
Mansfield Airport(1B9)  
265 Fruit St  
Mansfield, MA 02048  
CRS# N4OR087B

N628M  
Oct 24, 2013  
Hobbs: 372.4  
Tach: 272.0  
WO# 1823  
Engine

Completed annual inspection IAW Cirrus SR20 & TCM IO-360 MM & MM Checklist. Drained oil, sample taken and replaced with 15W/50. Removed oil filter, cut open and inspected, no discrepancies found. Cleaned and lubricated all controls. C/W magneto engine timing. Performed differential compression test with the following results: 1: 75/80, 2: 76/80, 3: 76/80, 4: 78/80, 5: 75/80 and 6: 79/80. Updated the airworthiness directives through Bi-weekly issue 2013-21. Engine run and leak check normal.

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

Authorized Signature

A handwritten signature in black ink, appearing to read "Stephen Bonvino", written over a horizontal line.

Stephen Bonvino

Time Since  
Last Overhaul

Hrs.

Min.

# Engine Service and Maintenance Record

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

NE X AIR  
A V I O N I C S

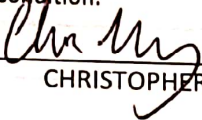
Mansfield Airport(189)  
265 Fruit St  
Mansfield, MA 02048  
CRS# N4OR087B

N628M  
Oct 24, 2014  
Hobbs: 390.9  
WO# 2344  
Engine

Completed annual inspection IAW Cirrus SR20 & TCM IO-360 MM & MM Checklist. Performed differential compression test with the following results: 1: 74/80, 2: 76/80, 3: 70/80, 4: 76/80, 5: 75/80 and 6: 78/80 MO: 47. Cleaned and lubricated all controls. Updated the airworthiness directives through Bi-weekly issue 2014-21. Repaired #5 Exhaust Manifold. Changed oil (15W-50) and Oil Filter (CH48108-1). Replaced exhaust gaskets (PN 50889-001) and Exhaust Nuts (PN 50890-001) for Cylinders #1, #3 and #5. Engine run and leak check normal.

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

Authorized Signature

  
CHRISTOPHER MOBERG

NE X AIR  
A V I O N I C S

Mansfield Airport(189)  
265 Fruit St  
Mansfield, MA 02048  
CRS# N4OR087B


N628M  
OCT. 23 2015  
Hobbs: 396.3  
Tach: 289.6  
WO# 2896

Completed annual inspection IAW Cirrus SR20 & TCM IO-360 MM & MM Checklist. Performed differential compression test with the following results: 1: 76/80, 2: 77/80, 3: 78/80, 4: 77/80, 5: 78/80 and 6: 78/80. Cleaned and lubricated all controls. Updated the airworthiness directives through Bi-weekly issue 2015-22. Drain and added 7 quarts of 15W-50 and Oil Filter (CH48108-1). Engine run and leak check normal.

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

**Note:** Work Order 2896 on File, Equipment List and Weight & Balance updated.

Authorized Signature

  
CHRISTOPHER MOBERG



Hrs.   Min.   Hrs.   Min.   Modifications and Service Bulletin									
Twin City Airmotive Inc (KFIT) Fitchburg, MA 01420 tel: 978-342-8700 twincity98@verizon.net									
Brou	Date: 11/1/16	Hobbs: 417.2	Tach: 307.2	N 628M	Engine Annual				
Compression Test		N/80	#1: 75	#2: 76	#3: 75	#4: 74	#5: 76	#6: 78	
Engine SMOH: 417.2					Airframe Serial #:		1682		

Performed the following annual inspection utilizing the manufacturer's annual inspection guide:

1. Performed compression check on engine with the following results: #1- 75/80 #2- 76/80, #3- 75/80, #4- 74/80, #5- 76/80, #6- 78/80.
2. Drained oil and removed filter to cut open and inspect for contaminants - none found. Installed new filter P/N CH48108-1. Oil sample was taken for analysis. Serviced engine with 8 Qts of Aeroshell 15W50 oil. Ran up engine and leak checked - none found at this time.
3. Removed all spark plugs. Tested, inspected, set gaps. Replaced (7) plugs with new P/N RHM38E. Installed others with new gaskets P/N M674.
4. Retorqued all induction, exhaust and rocker box cover hardware as required.
5. Removed fuel injector nozzles and soaked in cleaning solution. Cleaned and serviced fuel strainer with new oring and seal P/N MS29513-137 and P/N NAS1523-8B. Cleaned and reinstalled fuel injector nozzles and secured lines.
6. Complied with AD 2008-11-18 Leak and Exhaust System. Removed R/H and L/H muffler ball joint hardware. Pressure checked with no defects noted. Applied anti seize to ball joints and secured clamp hardware and safetied.
7. Removed and replaced (5) nose gear pucks with new P/N 11879-006. Secured all hardware. Performed inspection check for propeller clearance placing aircraft on scales per ACMM 32-20 D-3 and adding ballast as needed. Measured propeller clearance @ 8.687". Removed and replaced rebound bumpers with new P/N 14020-001. Secured and safetied.
8. Removed and replaced engine air filter with new P/N BA24.
9. Removed and replaced crankcase forward cover plate gasket with new P/N 653415.
10. Removed cylinder #2 and #6 exhaust rocker covers and removed old gasket material from surfaces. Reinstalled with new gaskets P/N SA63210 and secured all hardware.
11. Removed alternator 2 bolts. Reinstalled, torqued and safetied.
12. Removed L/H and R/H magnetos. Removed and replaced gaskets with new. Reinstalled and timed to 24 degrees BTDC. Synchronized together and secured hardware and wiring and lead caps.

Continue

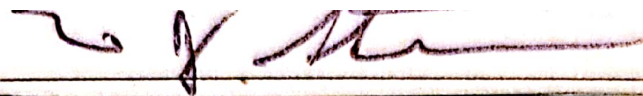
13. Removed starter. Removed and replaced oring with new P/N MS9021-038. Reinstalled and secured hardware and wiring.
14. Removed and replaced crush gaskets on oil pressure relief valve and oil sump screen. Secured and safetied.
15. Removed cylinder #6 intake tubes and filed damage on tube flare. Reinstalled with new gasket P/N 629925 and secured hardware.
16. Installed new oil cap P/N 640620-15.
17. Washed and cleaned engine
18. C/W Airworthiness Directive research to 2016/19 Biweekly Issuance.

End

This aircraft was inspected and/or repaired in accordance with the manufacturer's maintenance manuals. All systems interrupted have been tested and/or leak checked as necessary. This aircraft is approved for return to service with the respect to the work performed. Pertinent details are on file at this agency under work order no. 7763 and a copy has been provided to the owner/operator.

I certify that this Engine has been inspected in accordance with an Annual Inspection and WAS DETERMINED TO BE IN AIRWORTHY CONDITION.

Eric J. Steigelman A&P 10582467 I.A. By: 



9/26/2017 Hobbs 469<sup>4</sup> FET 353<sup>2</sup>

① Removed Eng Sent to  
Factory for IRON.

Majors ACP3354003



DATE:  
November 17, 2017

ENGINE MODEL:  
IO360ES6B

ENGINE S/N:  
360207

ENGINE T.T.  
353.7



**CONTINENTAL MOTORS SERVICES INC.**

This engine delivered to Continental Motors Inc. for inspection and repair due to a cracked crankcase. This engine was disassembled and inspected in accordance with CMI overhaul manual M-7 Revision Dated September 2016 and CMI Procedures Manual M-0 Revision Dated July 2017. The following serialized items were installed: Crankcase SN S17AA021, Camshaft SN 328802. All Cylinders were disassembled and repaired to a serviceable condition and fit with new rings. Engine assembled in accordance with CMI Overhaul Manual M-7 Revision Date September 2016 using new seals, gaskets, "O" rings, new Crankshaft bolts and main bearings, new rod bolts, nuts circlips, plates, and rod bearings Applicable Service Bulletins and Airworthiness Directives have been complied with.

**COMPLIED WITH THE FOLLOWING AIRWORTHINESS DIRECTIVES:**

97-26-17: Complied with by performing ultrasonic inspection. NEXT DUE: Next crankshaft removal.

This engine has been tested in accordance with procedures listed in overhaul manual M-7 and Procedure Manual M-0 and has been accepted. I certify that this engine has been repaired as indicated above and was determined to be airworthy with respect to the work performed. Details of this repair are on record at this facility. Work Order ES-7947.

Complied with: CSB08-9A, M87-16, M87-23, M93-4, M93-8, MSB94-8D, MSB96-10B, SB07-1, SB09-14, SB653, SID96-6, 97-26-17.

MECHANIC:

9CER853B

AUTHORIZATION:

9CER853B



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					

**Twin City Airmotive Inc (KFIT) Fitchburg, MA 01420 tel: 978-342-8700 twincity98@verizon.net**

**Date: 1/23/18 Hobbs: 469.4 Tach: 353.7 N 628M**

**Compression Test X/80 #1: #2: #3: #4: #5: #6: Engine Annual**

**Engine SMOH: Airframe Serial #: 1628**

**Performed the following annual inspection utilizing the manufacturer's annual inspection guide:**

1. Removed engine and sent to Continental Motors, Inc for repair due to cracked case. Installed repaired engine from Continental Motors, Inc work order no ES-7947 dated November 17, 2017. See 8130-3 work order ES-7947 Continental Motors, Inc approval certificate 9CER853B. IO-360ES6B s/n 360207. Installed engine on mount and torqued shock mounts. Installed baffles on engine. Connected hoses (fuel) that were removed in order to remove engine. Reinstalled engine ground heater that was removed in order to remove engine. Installed oil quick drain, oil temp probe and oil pressure sensor. Installed #2 alternator, governor, and L and R exhaust stacks. Connected drain line manifold at sump. Connected "P" leads and ground, tach drive pick up back of engine, and connected starter wire. Installed #1 alternator and connected wires. Connected CHT probes and EGT probes and safetied. Installed oil separator and hoses. Prop was installed and the alternator drive belt was adjusted. Checked engine timing. Connected alternate air linkage, prop linkage, mixture linkage, and throttle linkage. Installed alternator air duct. Reworked ignition harness, clamped and tywrapped. Installed wire connectors at right rear baffle. Performed compression checks with the following results, #1 74/80, #2 79/80, #3 79/80, #4 79/80, #5 79/80, #6 79/80.
2. Serviced repaired engine with 8Qts of Phillips 20W50 type M oil.
3. Cleaned and gapped spark plugs and reinstalled with new gaskets P/N M674.
4. Adjusted magneto timing to 24 degrees BTDC.
5. Cleaned and serviced gasolator with new oring and seal P/N MS29513-137 and P/N NAS1523-8B.
6. Complied with AD 2008-11-18 Leak and Exhaust System. Inspected heat exchanger per SB 2X-78-07R1. Pressure checked, no cracks or leaks noted at this time.
7. Removed and replaced engine air filter with new P/N BA24.
8. C/W ball joint check on left and right exhaust.
9. Cleaned ignition leads with solvent.

CONTINUE

10. Covered cracked area in firewall box where fuel lines go through with 3M sealant P/N AC240B2.
11. Washed and cleaned engine
12. C/W Airworthiness Directive research to 2018/1 biweekly issuance.

END

This aircraft was inspected and/or repaired in accordance with the manufacturer's maintenance manuals. All systems interrupted have been tested and/or leak checked as necessary. This aircraft is approved for return to service with respect to the work performed. Pertinent details are on file at this agency under work order no. 8218 and a copy has been provided to the owner/ operator.

I certify that this Engine has been inspected in accordance with an Annual Inspection and WAS DETERMINED TO BE IN AIRWORTHY CONDITION.

Noel F. Fisher A&P 1905582 IA Noel F. Fisher



**Twin City Airmotive Inc (KFIT) Fitchburg, MA 01420 tel: 978-342-8700 twincity98@verizon.net**

**Date:** 3/12/19

**Hobbs:** 476.6

**Tach:** 358.1

**N** 628M

**Engine Annual**

**Compression Test** N/80

**#1:** 73

**#2:** 77

**#3:** 71

**#4:** 77

**#5:** 73

**#6:** 78

**Engine SREP:** 4.4

**Airframe Serial #:** 1628

**Performed the following annual inspection in accordance with FAR 43 Appendix D:**

1. Performed compression check on engine with the following results: #1- 73/80, #2- 77/80, #3- 71/80, #4- 77/80, #5- 73/80, #6- 78/80.
2. Drained oil and took oil sample for analysis. Removed filter and cut open to inspect for contaminants - none found. Installed new filter P/N CH48108-1 and serviced engine with 8 Qts of 20W50 Type M oil. Ran up engine and leak checked - none found at this time.
3. Removed all spark plugs. Cleaned, set gaps, tested. Replaced (5) plugs with new P/N RHM38E and reinstalled others with new gaskets P/N M674.
4. Retorqued all induction, exhaust and rocker box cover hardware as required.
5. C/W AD 2008-11-18 and SB 2X-78-07-R1 by inspection and pressure check of heat exchanger with no defects noted at this time. Next inspection due at 458.1 Flight Hobbs.
6. Cleaned, and serviced fuel strainer. Reinstalled with new stato-seal and secured. Inspected fuel injector nozzles and lines as satisfactory.
7. Removed and replaced engine air filter with new P/N BA24.
8. Removed all engine hoses firewall forward and sent out for duplication at Eastern Aero Supply, Inc. See work order no. 55638 for details. Installed new hoses P/N AE3660001E0240, AE3660001E0332, AE3660061E0074, AE7010101G0354, AE7010101E0274, AE7010001E0225 and AE7010201E0142.
9. Cleaned and lubricated engine controls.
10. Checked magneto timing as satisfactory at 24 degrees BTDC.
11. Washed and cleaned engine.
12. C/W Airworthiness Directive research to 2019/5 biweekly issuance.

-----End-----

This aircraft was inspected and/or repaired in accordance with the manufacturer's maintenance manuals. All systems interrupted have been tested and/or leak checked as necessary. This aircraft is approved for return to service with respect to the work performed. Pertinent details are on file at this agency under work order no. 8603 and a copy has been provided to the owner/ operator.

I certify that this Engine has been inspected in accordance with and Annual Inspection and WAS FOUND TO BE IN AIRWORTHY CONDITION.

Raymond M. Pierce A&P 3079600

Mark Maljanian A&P 33545223 IA

**Twin City Airmotive Inc (KFIT) Fitchburg, MA 01420 tel: 978-342-8700 twincity98@verizon.net**

**Date:** 5/1/2020    **Hobbs:** 482.5    **Flt:** 362.2    **N** 628M    **Engine Annual**

**Compression Test** X/80    #1: 78    #2: 79    #3: 76    #4: 79    #5: 77    #6: 74

**Engine SMOH:** 362.2 / 8.5 SIRAN    **Airframe Serial #:** 1682

**Performed the following annual inspection utilizing the manufacturer's annual inspection guide:**

1. Performed compression checks on engine with the following results: #1- 78/80, #2- 79/80, #3- 76/80, #4-79/80, #5- 77/80, #6 74/80.
2. Drained engine and took sample for analysis. Removed filter and cut open to inspect for contaminants- none noted. Installed a new filter P/N CH48108-1. Serviced engine with 8 Qts of Phillips 20W50XC oil.
3. C/W AD 2008-11-18 per SB 2X-78-07R1 by inspection and pressure test of heat exchanger in accordance with manufacturer's instructions. Next inspection due Annual 2021/100hr.
4. Removed and disassembled gascolator and blew out screen with compressed air. Reassembled and reinstalled gascolator and turned fuel on to check for leaks - none noted.
5. Removed all spark plugs. Cleaned, set gaps, tested and reinstalled all plugs with new gaskets P/N M674.
6. Retorqued all induction, exhaust and rocker box cover hardware as required.
7. Adjusted alternator belt tension as required.
8. Cleaned and lubricated engine controls as needed.
9. Checked magneto timing and both mags are satisfactory at 24 degrees BTDC.
10. Removed all fuel injector nozzles and soaked in carb cleaner. Cleaned injectors with soap and water. Reinstalled all injectors as needed and connected all fuel lines.



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.	
Flight Forward					

11. Cleaned ignition leads with solvent.
12. Washed and cleaned engine.
13. C/W Airworthiness Directive research to 2020/08 biweekly issuance.

-----END-----

This aircraft was inspected and/or repaired in accordance with the manufacturer's maintenance manuals. All systems interrupted have been tested and/or leak checked as necessary. This aircraft is approved for return to service with respect to the work performed. Pertinent details are on file at this agency under work order no. 8981 and a copy has been provided to the owner/ operator.

I certify that this Engine has been inspected in accordance with an Annual Inspection and WAS DETERMINED TO BE IN AIRWORTHY CONDITION.

Mark Maljanian A&P 33545223 IA

## ENGINE LOG

1-15-2021

**STEEL**  
**AVIATION**

N628M	Eng. S/N:	360207
Make: Cirrus	Model:	IO-360ES
Hobbs: 490.5	Tach:	368.6
	TTSMOH:	

1. C/W ANNUAL INSPECTION in accordance with FAR 43 APPENDIX D - Using TCM/Cirrus AMM as a guide.
2. Removed and cut open oil filter, NDN installed new oil filter P/N AA48108-2. Serviced engine with 7 QT of 20/50 Phillips M mineral oil.
3. Removed all cylinders and connecting rods. Installed 6 repaired connecting rods from Aircraft Specialties see FAA form 8130-3 dated 7 Jan 2021
4. Installed 6 overhauled cylinders, P/N 655479 from Powermaster Aircraft Engines, see FAA form 8130-3 dated 1-08-2021

I certify that this engine has been inspected in accordance with (annual) inspection and was determined to be in airworthy condition.

Kevin Pierron A&P 3343189IA

1. Country/Region: FAA/United States		<b>AUTHORIZED RELEASE CERTIFICATE</b> FAA Form 8130-3, AIRWORTHINESS APPROVAL TAG			3. Form Number: 21-0108	
4. Organization Name and Address: Powermaster Aircraft Engines 9027 S. Airport Way Tulsa OK 74132					5. Work Order/Contract/Invoice Number: 21-0108	
6. Item:	7. Description:	8. Part Number:	9. Quantity:	10. Serial Number:	11. Status/Work:	
1	Cylinders	655479	6	See Block 12		
12. Remarks: Disassembled, cleaned and inspected. Bore Nickel Plated by Aircraft Cylinders of America-Tulsa OK. Replaced exhaust guides, ground seats, lapped intake valve to seat, lapped new exhaust valve to seat. Installed valves using new intake guide seals, intake and exhaust springs, roto coils and valve retainers. Fit Nickel ring sets to barrels, installed on pistons with new piston pins. SN's, AC06EB428, AC06EA960, AC06EB011, AC06EA984, AC06EA973, AC06EB405.						
13a. Certifies the items identified above were manufactured in conformity to:  <input type="checkbox"/> Approved design data and are in a condition for safe operation. <input type="checkbox"/> Non-approved design data specified in Block 12.			14a. <input type="checkbox"/> 14 CFR 43.9 Return to Service <input type="checkbox"/> Other regulation specified in Block 12  Certifies that unless otherwise specified in Block 12, the work identified in Block 11 and described in Block 12 was accomplished in accordance with Title 14, Code of Federal Regulations, part 43 and in respect to that work, the items are approved for return to service.			
13b. Authorized Signature:		13c. Approval/Authorization No.:		14b. Authorized Signature:		14c. Approval/Certificate No.:
						P46R287Y
13d. Name (Typed or Printed):		13e. Date (dd/mm/yyyy):		14d. Name (Typed or Printed):		14e. Date (dd/mm/yyyy):
				William R. Cunningham		1-08-2021
<b>User/Installer Responsibilities</b>						
It is important to understand that the existence of this document alone does not automatically constitute authority to install the aircraft engine/propeller/article.  Where the user/installer performs work in accordance with the national regulations of an airworthiness authority different than the airworthiness authority of the country specified in Block 1, it is essential that the user/installer ensures that his/her airworthiness authority accepts aircraft engine(s)/propeller(s)/article(s) from the airworthiness authority of the country specified in Block 1.  Statements in Blocks 13a and 14a do not constitute installation certification. In all cases, aircraft maintenance records must contain an installation certification issued in accordance with the applicable regulations before the aircraft may be flown.						




SO#	21-30587	<b>SILVERHAWK AVIATION INC.</b>				DATE	02/04/2021
REG.	N628M	<b>Lincoln Municipal Airport [LNK]</b>				TACH	393.6
MAKE	TCM	MODEL	IO-360-ES	SERIAL NO.	360207	HOBBS	522.4

### Maintenance Record

1. Ran engine to warm up oil. Drained oil and removed oil filter to cut open for inspection with no discrepancies noted at this time. Installed new CH48108-1 oil filter and 7 quarts X/C 20w50 engine oil. Engine run and leak check satisfactory. Reference TCM Standard Practices Manual M-0 Chapter 6-4.8.2
2. Took oil sample using Avlabs kit P/N GA-001 and sent it out for analysis. Reference TCM Standard Practices Manual M-0 Chapter 6-4.8.4.

I certify this maintenance was inspected and is determined to be in an airworthy condition. Pertinent details are on file under the noted shop order number: 21-30587 Date: February 04, 2021

Signed: Benjamin Taylor  , for

Silverhawk Aviation, Inc. CRS# YQSR759U  
Lincoln, NE 68524

SO#	21-30836	<b>SILVERHAWK AVIATION INC.</b>				DATE	04/08/2021
REG.	N628M	<b>Lincoln Municipal Airport [LNK]</b>				TACH	437.1
MAKE	TCM	MODEL	IO-360-ES	SERIAL NO.	360207	HOBBS	574.6

#### Maintenance Record

1. Performed aircraft engine run, drained oil, removed oil filter; cut open to check for contaminants, none found. Installed new oil filter P/N: AA48108-1 and added 7 quarts of Phillips X/C20w50. Performed aircraft engine run, no leaks noted. Reference Cirrus SR20 maintenance manual 12-10.
2. Collected AvLabs oil sample and sent out for analysis. Referencing the AvLabs Oil Analysis Sampling Instructions.

I certify this maintenance was inspected and is determined to be in an airworthy condition. Pertinent details are on file under the noted shop order number: 21-30836 Date: April 08, 2021

Signed: Benjamin Taylor , for

Silverhawk Aviation, Inc. CRS# YQSR759U  
Lincoln, NE 68524

SO#	21-31311	<b>SILVERHAWK AVIATION INC.</b>				DATE	06/02/2021
REG.	N628M	<b>Lincoln Municipal Airport [LNK]</b>				TACH	476.0
MAKE	TCM	MODEL	IO-360-ES	SERIAL NO.	360207	HOUR	620.9

#### Maintenance Record - Engine

1. Performed aircraft engine run. Drained oil and removed old oil filter. Cut open old oil filter to check for contaminants with no discrepancies noted at this time. Installed new oil filter (P/N: CH48108-1) and serviced with 7 quarts of Phillips X/C 20W50 oil. Ran engine for leak check with none noted at this time. Reference Continental Maintenance Manual Standard Practice M-0 Ch. 6-4.8.2.
2. Collected AvLabs oil analysis and sent in for testing. Reference Continental Maintenance Manual Standard Practice M-0 Ch. 6-4.8.4.

I certify this maintenance was inspected and is determined to be in an airworthy condition. Pertinent details are on file under the noted Shop Order number: 21-31311 Dated: June 2, 2021

Signed: Benjamin Taylor , for

Silverhawk Aviation, Inc. CRS# YQSR759U  
Lincoln, NE 68524

ord  
ions,



SO#	21-31643	<b>SILVERHAWK AVIATION INC.</b>				DATE	08/02/2021
REG.	N628M	<b>Lincoln Municipal Airport [LNK]</b>				TACH	527.6
MAKE	TCM	MODEL	IO-360-ES	SERIAL NO.	360207	HOUR	680.2

### Maintenance Record - Engine

1. Drained engine oil and removed oil filter (P/N CH48108-1); cut and inspected oil filter with no discrepancies noted at this time. Installed new oil filter (P/N CH48108-1) and serviced engine with 7 quarts of Phillips X/C 20W-50 oil. Performed ground run with no leaks noted at this time. Reference Cirrus SR20 Airplane Maintenance Manual Ch. 12-10.
2. Collected oil sample for contamination check and sent out for evaluation. Reference Continental M-O Manual 6-4.8.4 and 6-4.8.5 for procedures.

I certify this maintenance was inspected and is determined to be in an airworthy condition.

Pertinent details are on file under the noted Shop Order number: 21-31643 Dated: August 2, 2021

Signed: Benjamin Taylor  , for

Silverhawk Aviation, Inc. CRS# YQSR759U  
Lincoln, NE 68524
