

# ENGINE MAINTENANCE RECORDS



**WESTERN**  
*Skyways*  
INC.

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# ENGINE MAINTENANCE RECORDS

Log No. \_\_\_\_\_

Aircraft Registration No. N4245T

Engine Manufacturer Lycoming

Model IO-360-C1E6

Serial No. L-8596-S1A

Date installed on aircraft 7/19/02

Time Between Overhauls (TBO) 2000 Hours

If used on multi-engine aircraft:

☐ RIGHT

☒ LEFT

☐ FRONT

☐ REAR

TACH OR  
RECORDING  
METER  
TIME

DESCRIPTION OF WORK PERFORMED --  
SIGNATURE & CERTIFICATE NO. OF PERSON PERFORMING WORK



**WESTERN  
Skyways**  
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GOLD SEAL AIRCRAFT ENGINES

81 Creative Place  
Montrose, CO 81401  
www.westernskyways.com

(800) 870-8809  
(970) 249-0292  
FAX: (970) 249-4198

Engine Make: LYCOMING  
Serial Number: L-8596-51A  
Warranty Number: G2107  
Crankshaft Serial No: V537924822

Model: IO-360-C1E6

W/O No: 15122

Date: 07/10/02

Warranty Start Date: 07/02

Cylinder Part Number: LW12993

This engine and accessories listed below were overhauled to "Factory New Tolerances" per Overhaul Manual No: 60294-7-9 See back section for Airworthiness Directives and Service Bulletin compliance. This engine was run in a test cell. Total Previous Time: 4897.3 Hrs.

This engine meets requirements of LYCOMING SI-1009AQ for 2000.0 Hour TBO.

The accessories listed below were overhauled and supplied with this engine:

Component	Part No.	Serial No.	Component	Part No.	Serial No.
L/H Mag:	BL-349305-3	F02DA247R	Vac Pump:	N/A	N/A
R/H Mag:	BL-349365-6	F02DA249R	Wastegate:	N/A	N/A
Fuel Pump:	R00253-501	AA14154	Alt/Gen:	N/A	N/A
Inj/Carb:	2524590-8	44940	Pop Off:	N/A	N/A
Man Valve:	2524397-2	957	Controller:	N/A	N/A
Starter:	PM1204	85017508	VAPC:	N/A	N/A
Turbo:	N/A	N/A	Fuel Limiter:	N/A	N/A
			Tach Gen:	N/A	N/A
			Hyd Pump:	N/A	N/A

The engine and accessories listed above were overhauled and inspected in accordance with current Federal Aviation Regulations and were found airworthy for return to service. Pertinent details of this repair are on file at this Repair Station on above work order.

### MAINTENANCE RELEASE

Signature:

Repair Station No. WS9R5751



DATE

TACH OR  
RECORDING  
METER  
TIMEDESCRIPTION OF WORK PERFORMED --  
SIGNATURE & CERTIFICATE NO. OF PERSON PERFORMING WORKNovember 7, 2003  
N4542TPiper Seneca  
Hobbs: 2719.66  
TAT: 2713.38January 26, 2004  
N4542TPA34-2  
Right Tach: 2

Drained Oil and serviced engine with 8 qts W100  
Aeroshell Oil Installed new Champion Oil Filter, p/n  
CH48103-1. Oil Sample Taken. Washed engine. Leak  
checked. Aircraft Returned to service.


Changed oil on left engine using 8 qts, A/S 100W oil, new fi  
CH48103. Washed and ran engine. Leak check good. Airc  
returned to service.

Aircraft Returned to service.

AirZona Aircraft Services  
7100 Flightline Drive  
Kingman, AZ 86401  
(928) 757-7744

  
A&P158588391IA  
Anthony Keller

AirZona Aircraft Services  
7100 Flightline Dr.  
Kingman, AZ 86401  
(928) 757-7744 phone

  
A&P158588391IA  
Anthony Keller



April 15, 2004  
N4542T

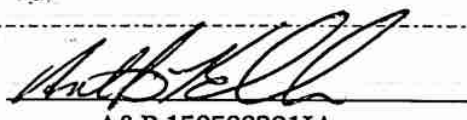
L Tach:2778.8

Piper Seneca  
Hobbs:2345.6

Changed Oil,servicing w/ 8 quarts W100 Aeroshell Oil. Changed filter,P/N  
CH48103-1. Washed and ran Left Engine. Leak check good.

Aircraft returned to service.

AirZona Aircraft Services, Inc.  
7100 Flightline Dr.  
Kingman, AZ. 86401  
928-757-7744

  
A&P 158588391IA  
Anthony Keller



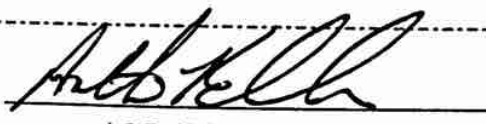
July 1, 2004  
N4542T

L Tach:2778.8

Piper Seneca  
Hobbs:2345.6

Changed Oil,servicing w/ 8 quarts 50W100 Aeroshell Oil. Changed  
filter,P/N CH48103-1. Washed and ran Left Engine. Leak check good.  
Aircraft returned to service.

AirZona Aircraft Services, Inc.  
7100 Flightline Dr.  
Kingman, AZ. 86401  
928-757-7744

  
A&P 158588391IA  
Anthony Keller



DATE

TACH OR  
RECORDING  
METER  
TIMEDESCRIPTION OF WORK PERFORMED --  
SIGNATURE & CERTIFICATE NO. OF PERSON PERFORMING WORK

November 4, 2004

Piper Seneca

N4542T L/Eng.Tach:2850.78 Hobbs:2354.9 L/Eng.TSO:295.34

Performed Annual Inspection in accordance w/ Piper Service Manual.

Complied w/ the following AD's: 2002-12-07 Oil filter converter

plate gasket, N/A to engine model number. Changed oil servicing Left Eng. w/ 8 qts. W100 Aeroshell Oil, changed filter using P/N CH48103, washed and ran engine, leak check good. Compression test as follows: 1) 79/80 2) 78/80 3) 75/80 4) 73/80.

I certify that this Left Engine has been inspected in accordance w/ an Annual Insp. and current FAR's and was found airworthy.

Air'Zona Aircraft Services, Inc.

7100 Flightline Dr.

Kingman, AZ. 86401

(928)757-7744

A&amp;P5298691631A

Leonard D. Helco



December 30, 2004

Piper Seneca

N4542T L/Eng.Tach:2860.86 R/Tach: 2855.04 Hobbs:2356.4

Replaced overhauled Starter with P/N MZ-4222, S/N FA1281A by  
FAA CRS # F8ZR871Y Falcon Aircraft Accessories; W/O# 4130. Ops check good.  
Aircraft returned to service.Air'Zona Aircraft Services, Inc.  
7100 Flightline Dr.  
Kingman, AZ. 86401  
(928)757-7744

Services, Inc.

1041

A&amp;P158588391IA

Anthony Keller



August 31, 2005

N4542T

Hobbs: 2362.3

S/N 34-7250128

Piper Seneca

LTach: 2899.08

Hobbs: 2357.8

LTach: 2878.11

Drained oil, took sample and serviced Left Engine w/ 8 quarts 15W50 Aeroshell  
Oil. Replaced filter w/ P/N CH48103-1. Washed and ran engine, leak check  
good. Aircraft returned to service.

Air'Zona Aircraft Services, Inc.

7100 Flightline Dr.

Kingman, AZ. 86401

(928)757-7744

A&amp;P158588391IA

Anthony Keller



January 20, 2006 S/N34-7250128 Piper PA-34-200  
N4542T Hobbs:2366.7 Tach:2921.74 LETSMOH:366.3  
RPTSMOH:366.3

## LEFT ENGINE

Performed Annual Inspection in accordance w/ Piper Service Manual. Complied w/ the following AD's: 05-19-11 Crankshafts 300 hp or less; N/A to engine model and serial no. 02-26-01 External fuel injection lines; no defects noted. 05-12-06 Impulse coupling riveted vs. snap ring type; N/A to engine model. Replaced Gasket on oil pressure adjustment valve w/ P/NMS35769-31. Performed Compression Test as follows: 1) 79/80 2) 78/80 3) 72/80 4) 78/80. I certify that this Engine has been inspected in accordance w/ an Annual Insp. and current FAR's and was found airworthy.

Air-Zona Aircraft Services, Inc  
7100 Flightline Dr.  
Kingman, AZ. 864101  
9928)757-7744

A&P158588391IA  
Anthony Keller

WORK PERFORMED --  
O. OF PERSON PERFORMING WORK

HORTON AVIATION SERVICES LLC  
2732 PERIMETER ROAD, SUITE 101  
NORTH LAS VEGAS, NEVADA 89032  
REPAIR STSTION # YHSR284L

N# N4542T MFG. PIPER MODEL PA 34-200T S/N 34-7250128 W.O. # 07-231 DATE 08/02/08 HOBBS 2378.4 L/TACH 2952.44 SMOH 1397.0

LEFT ENGINE IO-360-C1E6 S/N L-8596-51A

I certify that this engine has been inspected in accordance with an annual inspection and was determined to be in airworthy condition. Compression check: #1-67/80, #2-68/80, #3-65/80, #4-68/80. CHANGED OIL W100 AND OIL FILTER. 1) REMOVED AND REPLACED OIL TEMP PROBE, 2) REMOVED AND REPLACED CHT PROBES, 3) REPLACED ALL CYLINDER VALVE COVER GASKETS, 4) REPLACED ADEL CLAMPS ON ENGINE OIL COOLER LINE, 5) REMOVED AND REPLACED FUEL INJECTOR SEALS AND TORQUE TO SPECS, 6) STOP DRILLED CRACKED ENGINE EXHAUST BLAST PLATE, 7) REPLACED LOWER COWLING BAFFLE, 8) RESEALED #3 CYLINDER OIL RETURN LINE, 9) REPLACED INDUCTION AIR FILTERS, 10) REPLACED #1 INTAKE MANIFOLD GASKET, 11) REMOVED AND REPLACED TURBO V-BAND CLAMPS, 12) REPAIRED COWL AS REQUIRED, 13) ADDED OIL TEMP PROBES FOR EDM 760, 14) REPLACED TIT PROBE. APPROVE FOR RETURN TO SERVICE

HORTON AVIATION SERVICES LLC  
2732 PERIMETER ROAD, SUITE 101  
NORTH LAS VEGAS, NEVADA 89032  
REPAIR STSTION # YHSR284L

N# N4542T MFG. PIPER MODEL PA 34-200T S/N 34-7250128 W.O. # 09-151 DATE 8/15/2009 HOBBS 111.0 LEFT TACH 3007.32 SMOH 451.88

LEFT ENGINE IO-360-C1E6 S/N L-8596-51A

Changed oil and filter serviced with Aeroshell W100 and CH48103-1, Replaced all spark plugs with new REM 32E, Cleaned and reinstalled fuel injectors. Engine compressions as follows #1 60/80 #2 72/80 #3 70/80 #4 70/80. I certify that this engine has been inspected I/AW an annual inspection and was determined to be in an airworthy condition.

DATE	TACH OR RECORDING METER
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## DESCRIPTION OF WORK PERFORMED --

HORTON AVIATION SERVICES LLC  
FAA CRS YHSR-284L  
2732 PERIMETER ROAD, SUITE 101  
N. LAS VEGAS NV 89032

N# N4542T MFG. PIPER MODEL PA34-200T S/N 34-7250128 W.O. 10-137 DATE 7/14/2010

TACHI: 3038.27 LEFT ENGINE IO-360-C1E6 S/N L-8596-51A SMOH 482.83

Changed oil and filter serviced with Aero shell W100 PLUS oil, and CH48103-1 filter. Test run and leak checked normal.

The aircraft and/or components above was repaired and inspected in accordance with Federal Aviation Regulations and is approved for return to service. Pertinent details are on file at this agency under above work order number. APPROVED FOR RETURN TO SERVICE

*James A. Watson*

HORTON AVIATION SERVICES LLC  
FAA CRS YHSR-284L  
2732 PERIMETER ROAD, SUITE 101  
N. LAS VEGAS NV 89032

N# N4542T MFG. PIPER MODEL PA-34-200 S/N 347250128 W.O. #11-038 DATE 2/12/2011 Left Tach:  
3053.31 Hobbs: 176.8 LEFT ENGINE IO-360-C1E6 S/N L-8596-51A SMOH: 497.87

COMPRESSION RESULTS #1 79/80 #2 79/80 #3 77/80 #4 79/80, removed cleaned and reinstalled fuel injectors. Changed oil and filter serviced with Aeroshell W100. Test run and leak check of engine appears normal.

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

HORTON AVIATION SERVICES LLC  
FAA CRS YHSR-284L  
2732 PERIMETER ROAD, SUITE 101  
N. LAS VEGAS NV 89032

N# N4542T MFG. PIPER MODEL PA-34-200 S/N 347250128 W.O. #11-038 DATE 2/12/2011 Left Tach:  
3053.31 Hobbs: 176.8 LEFT ENGINE IO-360-C1E6 S/N L-8596-51A SMOH: 497.87

C/W AD 81-19-04 by replacement of all engine hoses. Next due 2/2016. All work done I/A/W manufactures maintenance manual. *Chris*

HORTON AVIATION SERVICES LLC  
FAA CRS YHSR-284L  
2732 PERIMETER ROAD, SUITE 101  
N. LAS VEGAS NV 89032

N# N4542T MFG. PIPER MODEL PA-34-200 S/N 347250128 W.O. #12-067 DATE 2/27/2012 Left Tach:  
3081.54 Hobbs: 214.3 LEFT ENGINE IO-360-C1E6 S/N L-8596-51A SMOH: 526.1

COMPRESSION RESULTS #1 79/80 #2 79/80 #3 78/80 #4 79/80, removed cleaned and reinstalled fuel injectors. Changed oil and filter serviced with Aeroshell W100. Test run and leak check of engine appears normal.

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



**HORTON AVIATION SERVICES LLC**  
**FAA CRS YHSR-284L**  
**2732 PERIMETER ROAD, SUITE 101**  
**N. LAS VEGAS NV 89032**

**N# N4542T MFG. PIPER MODEL PA-34-200 S/N 347250128 W.O.**  
**#13-121 DATE 5/16/2013 Left Tach: 3116.23 Hobbs: 342.9**  
**LEFT ENGINE IO-360-C1E6 S/N L-8596-51A SMOH: 654.7**

COMPRESSION RESULTS #1 77/80 #2 75/80 #3 76/80 #4 76/80,  
 Changed oil and filter serviced with Aero shell W100. Test run and  
 leak check of engine appears normal.

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

The aircraft and/or components above was repaired and  
 inspected in accordance with Federal Aviation Regulations and  
 is approved for return to service. Pertinent details are on file at  
 this agency under above work order number.

*Chute*

**HORTON AVIATION SERVICES LLC**  
**FAA CRS YHSR-284L**  
**2732 PERIMETER ROAD, SUITE 101**  
**N. LAS VEGAS NV 89032**

**N# N4542T MFG. PIPER MODEL PA-34-200 S/N 347250128 W.O. #16-**  
**008 DATE 2/19/2016 Left Tach: 3117.89 Hobbs: 347.9 LEFT ENGINE**  
**IO-360-C1E6 S/N L-8596-51A SMOH: 556.36**

COMPRESSION RESULTS #1 76/80 #2 75/80 #3 72/80 #4 75/80,  
 Changed oil and filter serviced with Aero shell W100. Test run and leak  
 check of engine appears normal. I certify that this engine has been  
 inspected in accordance with an annual inspection and was determined  
 to be in an airworthy condition. **The aircraft and/or components above**  
**was repaired and inspected in accordance with Federal Aviation**  
**Regulations and is approved for return to service. Pertinent details**  
**are on file at this agency under above work order number.**

*Chute*

**HORTON AVIATION SERVICES LLC**  
**FAA CRS YHSR-284L**  
**2732 PERIMETER ROAD, SUITE 101**  
**N. LAS VEGAS NV 89032**

**N# N4542T MFG. PIPER MODEL PA-34-200 S/N 347250128**  
**W.O. #17-059 DATE 3/17/2017 Left Tach: 3161.22 Hobbs: 400.1**  
**LEFT ENGINE IO-360-C1E6 S/N L-8596-51A SMOH: 599.69**

COMPRESSION RESULTS #1 76/80 #2 76/80 #3 75/80 #4 72/80,  
 Tightened clamps on #3 oil return line. Changed oil and filter  
 serviced with Aeroshell W100. Test run and leak check of engine  
 appears normal. I certify that this engine has been inspected in  
 accordance with an annual inspection and was determined to be in  
 an airworthy condition. **The aircraft and/or components above**  
**was repaired and inspected in accordance with Federal Aviation**  
**Regulations and is approved for return to service. Pertinent**  
**details are on file at this agency under above work order**  
**number.**

*Chute*

**HORTON AVIATION SERVICES LLC**  
**FAA CRS YHSR-284L**  
**2732 PERIMETER ROAD, SUITE 101**  
**N. LAS VEGAS NV 89032**

**N# N4542T MFG. PIPER MODEL PA-34-200 S/N 347250128**  
**W.O. #18-148 DATE 6/1/2018 Left Tach: 3185.3 Hobbs: 428.4**  
**LEFT ENGINE IO-360-C1E6 S/N L-8596-51A SMOH: 623.77**

COMPRESSION RESULTS #1 75/80 #2 76/80 #3 75/80 #4 52/80.  
 Changed oil and filter serviced with Aeroshell W100. Test run and  
 leak check of engine appears normal. I certify that this engine has  
 been inspected in accordance with an annual inspection and was  
 determined to be in an airworthy condition. **The aircraft and/or**  
**components above was repaired and inspected in accordance**  
**with Federal Aviation Regulations and is approved for return to**  
**service. Pertinent details are on file at this agency under above**  
**work order number.**

*Chute*

**HORTON AVIATION SERVICES LLC FAA CRS YHSR-284L**  
**2732 PERIMETER ROAD, SUITE 101 N. LAS VEGAS NV 89032**  
**N# N4542T MFG. PIPER MODEL PA-34-200 S/N 347250128 W.O.**  
**#19-190 DATE 9/9/2019 Left Tach: 3228.16 Hobbs: 477.3 LEFT**  
**ENGINE IO-360-C1E6 S/N L-8596-51A SMOH: 666.63**  
 COMPRESSION RESULTS #1 75/80 #2 76/80 #3 75/80 #4 62/80.  
 Changed oil and filter serviced with Aeroshell W100 plus. Test run  
 and leak check of engine appears normal. I certify that this engine  
 has been inspected in accordance with an annual inspection and  
 was determined to be in an airworthy condition. **The aircraft and/or**  
**components above was repaired and inspected in accordance**  
**with Federal Aviation Regulations and is approved for return to**  
**service. Pertinent details are on file at this agency under above**  
**work order number.**

*Lang 33815614*

**HORTON AVIATION SERVICES LLC FAA CRS YHSR-284L**  
**2732 PERIMETER ROAD, SUITE 101 N. LAS VEGAS NV 89032**  
**N# N4542T MFG. PIPER MODEL PA-34-200 S/N 347250128 W.O.**  
**#20-127 DATE 10/22/2020 Left Tach: 3257.83 Hobbs: 518.2**  
**LEFT ENGINE IO-360-C1E6 S/N L-8596-51A SMOH: 696.3**

COMPRESSION RESULTS #1 78/80 #2 76/80 #3 75/80 #4 73/80.  
 Changed oil and filter ch48103-1, serviced with Aeroshell W100 plus.  
 Removed and replaced starter, P/N on 149-NL, replaced #3 drain  
 back hose, replaced dip stick gasket, replaced #3 intake pipe gasket.  
 Test run and leak check of engine appears normal. As required by  
 F.A.R. 91.409 I certify that this engine Annual inspection was  
 complied with I/AW F.A.R. 43 Appendix D (Scope and Detail of  
 Items To Be Included in Annual and 100-Hour Inspections), and  
 found to be in an airworthy condition. **The aircraft and/or**  
**components above was repaired and inspected in accordance**  
**with Federal Aviation Regulations and is approved for return to**  
**service. Pertinent details are on file at this agency under above**  
**work order number.**

*Chute*

**WESTERN SKYWAYS, INC.**  
**Gold Seal Aircraft Engine Warranty**

DATE 07/10/02

ENGINE IO-360-C1E6

SERIAL NUMBER L-8596-51A

WORK ORDER # 15122

WARRANTY NUMBER G2107

**FULL WARRANTY**

WESTERN SKYWAYS warrants the GOLD SEAL aircraft engine to be free from defects in material and workmanship under normal use for SIX (6) MONTHS from date of installation or beginning ten (10) days after shipment, whichever is applicable.

**LIMITED WARRANTY**

WESTERN SKYWAYS additionally warrants the major components to the end of the manufacturer's recommended TBO on a pro-rated basis at a minimum rate of 40 hours per month or actual time, whichever is greater. The following constitute "major components" for purposes of this GOLD SEAL aircraft engine limited warranty: crankcase and associated parts, cylinder assemblies and crankshaft and related parts.

**TERMS AND CONDITIONS**

1. The FULL WARRANTY and the LIMITED WARRANTY both include parts and labor. The FULL WARRANTY covers 100% parts and labor while the LIMITED WARRANTY covers parts and labor on a pro-rated basis.
2. Warranty service may be accomplished at facilities other than WESTERN SKYWAYS but ONLY AFTER PRIOR WRITTEN APPROVAL from WESTERN SKYWAYS and provided all work is performed at prevailing rates. WESTERN SKYWAYS retains the option to furnish any parts or accessories required for warranty service.
3. This warranty does not include shipping expenses.
4. This warranty is VOID on any engine or accessory which has been repaired or altered outside the WESTERN SKYWAYS facility without the prior written approval of WESTERN SKYWAYS. This warranty is also VOID on any engine which has been operated contrary to manufacturer's operating instructions or which, in WESTERN SKYWAYS' sole opinion, has been subjected to misuse, neglect, accident or the use of improper fuel.
5. Warranty repair or replacement of any part shall not extend this warranty beyond the original warranty time or hour limitation.
6. THERE ARE NO OTHER EXPRESS WARRANTIES. ALL IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF FITNESS AND MERCHANTABILITY FOR A PARTICULAR PURPOSE ARE HEREBY DISCLAIMED TO THE EXTENT LOCAL LAWS ALLOW DISCLAIMERS. IF NO DISCLAIMERS ARE ALLOWED, THE IMPLIED WARRANTIES ARE LIMITED IN TIME TO THE DURATION OF THIS WARRANTY. Local law may not allow limitations of implied warranties, so the above limitation may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state, province to province, country to country.
7. WESTERN SKYWAYS' TOTAL LIABILITY FOR DAMAGES RELATION TO OR ARISING OUT OF THE USE OF THE ENGINE, REGARDLESS OF THE TYPE OR CAUSE OF SUCH DAMAGE, SHALL NOT EXCEED THE ORIGINAL PURCHASE PRICE PAID FOR THE ENGINE.
8. IN NO EVENT SHALL WESTERN SKYWAYS BE LIABLE FOR ANY INDIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR SIMILAR DAMAGES (INCLUDING, BUT NOT LIMITED TO LOST PROFITS OR REVENUE, INABILITY TO USE PRODUCT OR OTHER ASSOCIATED EQUIPMENT, COST TO SUBSTITUTE EQUIPMENT, AND CLAIMS BY THIRD PARTIES) RESULTING FROM USE OF THE ENGINE.
9. Unless modified by a written agreement signed by WESTERN SKYWAYS, this warranty represents the complete and exclusive agreement between purchaser and WESTERN SKYWAYS with respect to this engine, superseding all prior agreements between the parties relating to the subject of this warranty other than WESTERN SKYWAYS and you should not rely on any such representation.