

Left

 **AMERICA'S**
AIRCRAFT ENGINES, INC.
TULSA, OKLAHOMA

 *The Standard*
-ENGINE LOG

ASA-SE-2

The subject aircraft was involved in an incident / accident on **9/23/2025** rendering it a Constructive Total Loss as not repairable within its insured value. For further details refer to insurance claim: **9422955904US**.

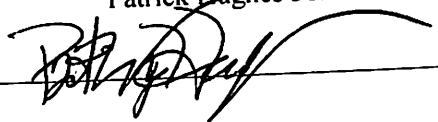
Signed: ***Underwriters Salvage Company***

Date: **1/6/2026**

AIG Aerospace Adjustment Services Inc
3500 Lenox Road, Suite 1100
Atlanta, GA 30326

| YEAR DATE | RECORDING TACH TIME | TODAY'S FLIGHT | TOTAL TIME IN SERVICE | Description of Inspections, Tests, Repairs and Alterations Entries must be endorsed with Name, Rating and Certificate Number of Technician or Repair Facility. (See back pages for other specific entries.) |
|------------------|---------------------------|-------------------|-----------------------------|---|
| 25 August 2024 | LT | | | Tach 3735, Installed McCauley 3AF34CS02 S/N 794702 Propeller. R. G. H. A-1 2649321 EA |
| 08 November 2024 | 3741.7 | | | Changed oil & filter. 8 qts 15W50 MS & AA48108-2. Leak check satisfactory. R. G. H. A-1 2649321 EA |
| 11 March 2025 | 3760.9 | | | Left Tach/TTC 3760.9/SANON 1402.9 Annual inspection completed this date. Compressions - Cool 80', 1) 74 2) 75 3) 70 4) 73 5) 74 6) 72. Inspected exhaust system. Verified engine control travels. Replaced #2 EGT probe. Pumps & leak check satisfactory. It certifies this engine has been inspected in accordance with the Annual Inspection and is in satisfactory condition at this time. R. G. H. A-1 2649321 EA |

| YEAR DATE | RECORDING TACH TIME | TODAY'S FLIGHT | TOTAL TIME IN SERVICE | Description of Inspections, Tests, Repairs and Alterations Entries must be endorsed with Name, Rating and Certificate Number of Technician or Repair Facility. (See back pages for other specific entries.) |
|--------------|---------------------------|-------------------|-----------------------------|--|
| 3-27-25 | 3782.1 | | | SERVICED OIL WITH 8 QTS 15W50 OIL AND AA48108-2 FILTER. LEAK CHECK OK. R. G. H. A-1 3730093 CAX |

| YEAR DATE | RECORDING TACH TIME | TODAY'S FLIGHT | TOTAL TIME IN SERVICE | Description of Inspections, Tests, Repairs and Alterations <small>Entries must be endorsed with Name, Rating and Certificate Number of (fic entries.)</small> |
|--------------|---------------------------|-------------------|-----------------------------|--|
| | | | | Piper PA34-200T N14SS 01/18/2018 S/N: 34-7770385 L Tach: 3599.1 TTE: 3058.5 SMOH: 1256.5 TSIO-360-EB(1) S/N 265868-R |
| | | | | Inspected this date for a 100HR Inspection. Compressions as follows 1) 70/80 2) 58/80 3) 63/80 4) 70/80 5) 63/80 6) 68/80 Drained oil serviced with aero shell W100 and CH48408-1 filter. Checked magneto timing, cleaned gapped and tested spark plugs. |
| | | | | I certify that this ENGINE has been inspected in accordance with an 100 inspection and found to be airworthy at this time-----END----- Patrick Hughes 3623081A&P |
| | | | |  |

[illegible]

tion of Inspections, Tests, Repairs and Alterations

ist be endorsed with Name, Rating and Certificate Number of
1 or Repair Facility. (See back pages for other specific entries.)

Aircraft Precision Maintenance Inc. Left
4700 Spartan Dr. #101 Denton TX 76207 PH (940) 765-7975
5/20/2008 Hobbs: 2613.8 TT: 2878.1 TSMOH: 1078.1
N14SS TCM TSIO-360-EB S/N: 265868-R

Performed annual inspection IAW Piper PA34-200T service manual and
inspection guide lines.

1. Performed compression test: #1 76/80 #2 64/80 #3 64/80 #4 30/80
#5 66/80 #6 68/80.
2. Replaced induction air filter element BA3.
3. Drained engine oil & removed filter. Cut open filter and inspected
elements for metal particles. None noted at this time. Installed
new CH48108-1 oil filter & filled sump with 8 quarts AeroShell
100W.
4. Removed and sent for repair #4 cylinder. See repair tag dated
5/15/08. Reinstalled cylinder, performed ground run. Ops check
ok.

Performed ground run, Ops check OK. I certify that this engine have
been inspected IAW an annual inspection and have been determined to
be in airworthy condition.

-----END-----

Adam L. Menge A&P-2731387-IA

Adam L. Menge

| YEAR 58 DATE | RECORDING TACH TIME | TODAY'S FLIGHT | TOTAL TIME IN SERVICE | Description of Inspections, Tests, Repairs and Alterations Entries must be endorsed with Name, Rating and Certificate Number of Technician or Repair Facility. (See back pages for other specific entries.) |
|--------------------|---------------------------|-------------------|-----------------------------|--|
| 7-1-08 | 2663 H880S | | | COMPLIED WITH REQUIREMENTS OF A 50 HOUR INSPECTION IAW PIPER MAINT. MANUAL. DRAINED OIL. SERVICED WITH 8 QTS AEROSHELL 100W. ^{ENGINE} AIRCRAFT AIRWORTHY AT THIS TIME. <i>SHO</i> 464024291 AP |

Haltom Aircraft Services 5007 Airport Rd., Hangar 3B Denton TX 76207 940-387-1818
N-14SS
Left engine

Left Tach: 3536.7
Eng.TT: 2993.1 SMOH: 1191.1

Date: 6/10/09

Checked compression: (1) 73/80 (2) 67/80 (3) 70/80 (4) 70/80 (5) 74/80 (6) 70/80
Changed oil and filter. Serviced with a CH48108 filter and 8 qt Aero Shell 100W oil.
Replaced all spark plugs (URHM38E).
Cleaned nozzles and replaced all seals and 'o' rings.
Replaced Bracket air filter element (BA3).
Set fuel pressures per SID 97-3B.
Checked ADs. None applicable at this time.
I certify this engine has been inspected in accordance with an annual inspection and was determined to be in
airworthy condition.

Gary Haltom
Gary Haltom, IA2212022

US FLIGHT SERVICES

PH#940-383-2484. 4850 Spartan Dr. Denton, TX. 76207.
N14SS Continental TSIO-360-EB Left Engine S/N: 265868-R
Tach: 3033.6 Total Time: 2490.0 SMOH: 688 8/9/2005

Completed 50,100 Hr/Annual Inspection In Accordance with Far 43 Appendix D and Piper PA34R-200T Service Manual. All applicable AD's completed. Refer to AD folder for compliance list. Cleaned fuel screen. Cleaned and gapped spark plugs. Replaced air box filter with a new BA-3 filter. Drained oil and removed filter replaced with 50W 100 Aeroshell oil and CH48108-1 filter. Compression was as follows #1 78/80 #2 72/80 #3 75/80 #4 74/80 #5 70 #6 72. Set fuel flows IAW SID 97-3. Completed engine run up and leak check, no leaks noted. Inspected and torqued all screws and clamps. All work done IAW aircraft service manual. I certify that this engine has been inspected IAW a 100Hr inspection and was determined to be in airworthy condition.

M.L. Edwards AP229111370IA

FLIGHT SERVICES 4700 Spartan Dr. Suite B
Denton, TX 76207 PH(940)323-2300
DATE:4/04/2006 W/O# 193
Hobbs:2278.7 Tach LT:3143.9 RT:3118.6
N14SS Piper: PA34-200T

Removed turbo charger and sent for overhaul at Main Turbo Systems, Inc. W/O# 33852/33853. Installed serviceable/new turbo with new V-clamps. Installed new oil suction lines and inlet hoses with new. Removed fuel pump, throttle body, injector spider, lines and nozzles and sent to Mikes Aircraft Fuel Metering Service, Inc. W/O# 17826 for overhaul. Installed overhauled fuel system with new O-rings, packing, and seals. Installed new fuel vent lines to drain overboard. Set fuel pressures in accordance with Teledyne Continental SID97-3 and performed test flights in accordance with Piper Seneca II service manual. Set exhaust bypass screw to meet performance requirements. Installed all new RHM38E spark plugs. Drained oil and removed filter and replaced with CH48108-1 and AeroShell 100W oil. Installed new Scat hose on air-oil separator. All work performed IAW Continental TSIO 360 overhaul manual and Piper PA34-200T service manual. This engine is approved for return to service in association with the work performed.

-----end-----

Adam Menge A&P 2731387

US FLIGHT SERVICES

4700 BLD1. Spartan Dr. Denton, TX. 76207.

09/16/2006 N14SS Tach:3222.9 ETT:2679.3 TTSMOH: 877.3
Completed 50,100 Hr/Annual Inspection In Accordance with Far 43 Appendix D All applicable AD's completed. Refer to AD folder for compliance list. Cleaned fuel screen. Cleaned and gapped spark plugs. Replaced air filter with a new filter. Drained oil and removed filter replaced with W100 Plus Aeroshell oil and CH48108-1 filter. Compression was as follows #1 75/80 #2 73/80 #3 73/80 #4 68/80 #5 74/80 #6 74/80. Completed engine run up and leak check, no leaks noted. Inspected and torqued all screws and clamps. All work done IAW aircraft service manual. I certify that this engine has been inspected IAW a Annual/100Hr inspection and was determined to be in airworthy condition.

M.L. Edwards AP229111370IA

[Signature]

n of Inspections, Tests, Repairs and Alterations

be endorsed with Name, Rating and Certificate Number of

Aircraft Precision Maintenance Inc. Left
4700 Spartan Dr. Ste. 101 Denton, TX 76207 PH (940) 765.7975
12/14/2007 Hobbs: 2515.8 TT: 2780.1 TSMOH: 980.1
N14SS TCM TSIO-360-EB S/N: 265868-R

Performed annual inspection IAW Piper PA34-200T service manual and inspection guide lines.

1. Performed compression test: #1 76/80 #2 75/80 #3 74/80 #4 55/80 #5 75/80 #6 70/80.
 2. Replaced induction air filter element BA3.
 3. Replaced Air Wolf air oil separator can gasket with new W-2003.
 4. Removed and replaced both magnetos with overhauled PN 10-79020-18, SNs 1020228 and G319806DR. Set magneto timing.
 5. Drained engine oil & removed filter. Cut open filter and inspected elements for metal particles. None noted at this time. Installed new CH48108-1 oil filter & filled sump with 8 quarts AeroShell 100W+.
 6. Replaced all exhaust gaskets with new 630365.
 7. Replaced rocker box gaskets with new 655704.
 8. Installed new oil cooler brace shoe with new 632983.
 9. Removed and replaced manifold pressure line for gauge with new copper tubing.
 10. Replaced induction gasket on #1 cylinder with new.
- Performed ground run, Ops check OK. I certify that this engine have been inspected IAW an annual inspection and have been determined to be in airworthy condition.

END

Adam L. Menge A&P-2731387-IA

[Signature]

| YEAR DATE | RECORDING TACH TIME | TODAY'S FLIGHT | TOTAL TIME IN SERVICE | Descr Entries Technic |
|--------------|---------------------------|-------------------|-----------------------------|-----------------------------|
|--------------|---------------------------|-------------------|-----------------------------|-----------------------------|

US FLIGHT SERVICES **TT**
 Date 03 /02 /2005 L Tack 2929.1 Hobbs 1992.6 N# 14SS
 Model Piper Seneca II PA34-200T Engine Make: Continental
 Model: TSIO-360-EB S# 265868-R TT **TT** TSMOH 583.5
 100hr Insp. complied IAW PA34200T service manual.
 Cleaned Fuel screen cleaned and gaped spark plugs.
 Removed oil and Oil Filter and inspected no metal found.
 replaced Oil filter with CH48108-1 and oil with aero shell
 W100. Compression was as Follows 1# 76/80 2# 76/80
 3# 76/80 4# 76/80 5#76/80 6#74/80 Serviced battery.
 Checked and. Tourqed all clamps and screws. Complied
 with SID 97-3B set fuel pressure. All work
 was done IAW service manual. I certify that this Engine
 has been Inspected IAW a 100 hr insp. and was
 determined to be in airworthy Condition. Checked for
 any new services bulletins and AD's. no new AD's
 Completed engine run up and leak checked. no leaks
 Found. AD list provided in separate folder that must
 Accompany the log books.

Wesley Pearce A&P2729740

Wesley Pearce

IS

| YEAR DATE | RECORDING TACH TIME | TODAY'S FLIGHT | TOTAL TIME IN SERVICE | Description of Inspections, Tests, Repairs and Alterations Entries must be endorsed with Name, Rating and Certificate Number of Technician or Repair Facility. (See back pages for other specific entries.) |
|--------------|---------------------------|-------------------|-----------------------------|---|
|--------------|---------------------------|-------------------|-----------------------------|---|

3/12/2005 2936.9 2946.9 10 hrs has been added to each engine due
 to tampering with the tach by a customer.
 Wesley Pearce A&P 2729740

US FLIGHT SERVICES
 PH#940-383-2484. 4850 Spartan Dr. Denton, TX, 76207.
 TT: 2413.3 Tach:2956.9 Date: 3/15/2005 N 14SS
 Model: Continental
 100Hr inspection performed IAW PA34-200 aircraft service
 manual check list. No new AD's found at this time. Refer
 to AD folder for current list. Cleaned fuel screen, cleaned
 and gaped spak plugs. Replaced air box filter with a new
 BA-16 filter. drained oil and removed filter replaced with
 100W plus aeroshell oil and CH48110-1 filter. Compression
 was as follows #1 76 /80 #2 75/80 #3 75/80 #4 76/80.
 Completed engine run up and leak check, no leaks noted
 Inspected and torqed all screws and clamps. All work done
 IAW aircraft service manual. I certify that this engine
 has been inspected IAW a 100Hr inspection and was
 determined to be in a airworthy condition. END
 WESLEY PEARCE A&P 2729740

Wesley Pearce

[illegible]

US FLIGHT SERVICES
Date 09 /17 /2004 L Tack 2731.5 Hobbs 1764.8 N# 14SS
Model Piper Seneca II PA34-200T Engine Make: Continental
Model: TSIO-360-EB S# 265868-R TT2187.9 TSMOH 385.9
100hr Insp. complied IAW PA34200T service manual.
Cleaned Fuel screen cleaned and gaped spark plugs.
Removed oil and Oil Filter and inspected no metal found.
replaced Oil filter with CH48108-1 and oil with aero shell
W100.Compression was as Follows 1# 74/80 2# 76/80
3# 76/80 4# 76/80 5#75/80 6#75/80 Serviced battery.
Checked and. Tourqed all clamps and screws. All work
was done IAW service manual. I certify that this Engine
has been Inspected IAW a 100 hr insp. and was
determined to be in airworthy Condition. Checked for
any new services bulletins and AD's. no new AD's
Completed engine run up and leak checked, no leaks
Found. AD list provided in separate folder that must
Accompany the log books.
Wayne Pearce A&P2729740

Wesley Pearce A&P2729740

Wesley Pearce

ions
of
ies.)

[illegible]

US FLIGHT SERVICES
Date 12/16/2004 I. Tack 2829.1 Hobbs 1892.6 N# 14SS
Model Piper Seneca II PA34-200T Engine Make: Continental
Model: TSIO-360-EB S# 265868-R TT 2285.5 TSMOH 483.5
100hr Insp. complied IAW PA34-200T service manual.
Cleaned Fuel screen cleaned and gaped spark plugs.
Removed oil and Oil Filter and inspected no metal found.
replaced Oil filter with CH48108-1 and oil with aero shell
W100. Compression was as Follows 1# 78/80 2# 78/80
3# 76/80 4# 76/80 5#76/80 6#72/80 Serviced battery.
Checked and. Tourqed all clamps and screws. Complied
with SID 97-3B set fuel pressure. All work
was done IAW service manual. I certify that this Engine
has been Inspected IAW a 100 hr insp. and was
determined to be in airworthy Condition. Checked for
any new services bulletins and AD's. no new AD's
Completed engine run up and leak checked. no leaks
Found. AD list provided in separate folder that must
Accompany the log books.

Wesley Pearce A&P2729740

Wally Penn

ations
er of
tries.)

| YEAR DATE | RECORDING TACH TIME | TODAY'S FLIGHT | TOTAL TIME IN SERVICE | Description of Inspections, Tests, Repairs and Alterations Entries must be endorsed with Name, Rating and Certificate Number of Technician or Repair Facility. (See back pages for other specific entries.) |
|--------------|---------------------------|-------------------|-----------------------------|---|
|--------------|---------------------------|-------------------|-----------------------------|---|

Hobbs Readings

TT 1946.6

US FLIGHT SERVICES

TTSMOH

Date 04/07/2003 LTack 2496.8 hobbs1511.2 N# 14SS 146.6
changed oil and oil filter. Removed old 48108 and replaced with new
48108 oil filter. Old filter was cut open a few pieces of ferries metal
were found. Filled engine with 8qts of aero shell W-100 oil. Ran engine
and checked for leaks.

Wesley Pearce A&P2729740

Wesley Pearce

| YEAR DATE | RECORDING TACH TIME | TODAY'S FLIGHT | TOTAL TIME IN SERVICE | Description of Inspections, Tests, Repairs and Alterations Entries must be endorsed with Name, Rating and Certificate Number of Technician or Repair Facility. (See back pages for other specific entries.) |
|--------------|---------------------------|-------------------|-----------------------------|---|
|--------------|---------------------------|-------------------|-----------------------------|---|

07/01

2517.22

20.42

TSMOH

167.92

Prop left in fether position; clamped
on prop paddles turned prop back out
of fether position untill it was locked
Ran up+ tested, tested OK.

Wesley Pearce

A & P 2729740

Wesley Pearce

YEAR

DATE

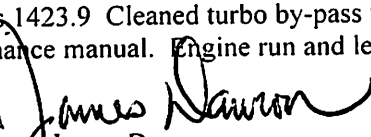
Tomlinson Aviation 2230 Airport Drive Gainesville, TX 76240 940 612-2044

10/21/02 Hobbs 1406.7 Tach 2400.39 hours. (Left engine) Set fuel flows per SID 97-2.
Replaced # 2 EGT probe P/N P 102.


James Damron
A&P 2704630.

Tomlinson Aviation 2230 Airport Drive Gainesville, TX 76240 940 612-2044

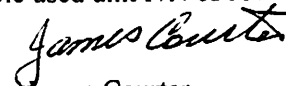
11/8/2002 Tach 2418.61 Hobbs 1423.9 Cleaned turbo by-pass valve and adjusted to specifications in PA-32 maintenance manual. Engine run and leak checked good.


James Damron
A&P 2704630

ations

per of
ntries.)**Tomlinson Aviation 2230 Airport Drive Gainesville, TX 76240 940 612-2044**

1/22/2003 Tach 2440.09 hours Hobbs 1447.44 (Left Engine). This engine inspected within the scope and depth of FAR 43 Appendix D. The following maintenance was performed: Compression as follows: #1 75/80, #2 74/80, #3 72/80, #4 74/80, #5 74/80, #6 75/80. Oil drained and oil filter removed. Serviced engine with eight quarts of Aero Shell W-100 oil and installed new oil filter, CH 48108. Old oil filter cut open and found several pieces of ferries and non ferries metal. Removed sparkplugs, cleaned, gapped and reinstalled. Replaced #6 intake tube due to leak with serviceable used unit P/N 631875. Engine run and leak checked good.


James Courter
A&P 263802090

| YEAR _____ DATE | RECORDING TACH TIME | TODAY'S FLIGHT | TOTAL TIME IN SERVICE | Description of Inspections, Tests, Repairs and Alterations Entries must be endorsed with Name, Rating and Certificate Number of Technician or Repair Facility. (See back pages for other specific entries) |
|-----------------------|---------------------------|-------------------|-----------------------------|--|
|-----------------------|---------------------------|-------------------|-----------------------------|--|

PROPELLER S/N AN3763
HAS BEEN REPAIRED THIS DATE
07/01/02 IN ACCORDANCE WITH
MANUAL(S) 117D Rev. 7, 202A Rev.15,
UNDER W/O # 6279.
THE MECHANIC MAKING THE
INSTALLATION MUST C/W
14 CFR PART 43.9.
R & D PROPELLER SERVICE, INC.
6820 PICCADILLY
HOUSTON, TX 77061
CRS# R3DR343X
SIGNED Carroll Hoof

| YEAR DATE | RECORDING TACH TIME | TODAY'S FLIGHT | TOTAL TIME IN SERVICE | Description of Inspections, Tests, Repairs and Alterations Entries must be endorsed with Name, Rating and Certificate Number of Technician or Repair Facility. (See back pages for other specific entries.) |
|--------------|---------------------------|-------------------|-----------------------------|--|
|--------------|---------------------------|-------------------|-----------------------------|--|

MAKE CONTINENTAL MODEL TSIO-360-EB
 SERIAL# 265868-R DATE 8/7/02
 TIME SMOH 0.0 TOTAL TIME 1800

America's Aircraft Engines, Inc. certifies that this engine has been disassembled, overhauled and tested in accordance with recommended procedures and all clearances and tolerances are within specified limits. Procedures and limits used are as contained in engine manufacturers overhaul manual number X30596A

America's Aircraft Engines, Inc. certifies the engine identified above was overhauled and inspected in accordance with current regulations of the Federal Aviation Administration and is approved for return to service. Following A.D.'s complied with SEE NOTES.

Pertinent details of the overhaul are on file at America's Aircraft Engines, Inc. work order number 602092

Signed Bill Coppel
 Authorized Signature

For America's Aircraft Engines, Inc.
 PO Box 582453
 Tulsa, OK 74158

FORM AAE 101

CERTIFIED REPAIR STATION NO. IAXR223L

N14SS PA-34-200T Seneca Engine S/N 265868-R W.O.# 02-0606 Hobbs

Time 1364.6 15 Aug 2002 LT Tach 2358.3

Installed L/H engine S/N 265868-R after overhaul by Americas Aircraft Engines. Propeller and propeller governor were sent out for inspection, cleaning and reseal due to possible metal contamination. Engine was serviced with 8 quarts of Aero Shell 100 Mineral oil. Performed ground run up and operational and leak check all indications were normal. Engine still requires in flight brake-in.

THE AIRCRAFT, AIRFRAME, ENGINE, PROPELLER OR APPLIANCE IDENTIFIED ABOVE WAS REPAIRED AND INSPECTED IN ACCORDANCE WITH CURRENT REGULATIONS OF THE FEDERAL AVIATION ADMINISTRATION AND IS APPROVED FOR RETURN TO SERVICE. PERTINENT DETAILS OF THE REPAIR ARE ON FILE AT THIS REPAIR STATION UNDER THE WORK ORDER LISTED ABOVE.

AUTHORIZED REPRESENTATIVE FOR

TEXAS AERO FAA CERTIFIED REPAIR STATION # GRMR442E, 7815 KARL MAY DR., WACO, TX 76708, 254-752-9731

and Alterations
 Certificate Number of
 per specific entries.)

Notes

CONTINENTAL TSIO-360-EB

S/N 265868-R

AD NOTES

W/O 602092

A.D. 81-13-10 AMEND 39-4140 C/W TORQUED OIL PUMP DRIVE SHAFT TO 300 INCH LBS.

A.D. 81-23-02 AMEND N/A AFFECTED OIL FILTER ADAPTER GASKET NOT INSTALLED.

A.D. 88-03-06 AMEND 39-5888 N/A INSTALLED ACCEPTABLE CHAMPION OIL FILTER.

A.D. 91-19-03 AMEND 39-8030 N/A AFFECTED OIL FILTER NOT INSTALLED.

A.D. 92-04-09 AMEND 39-8585 N/A INSTALLED FACTORY NEW CYLINDER ASSEMBLIES.

A.D. 93-10-02 AMEND 39-8603 C/W I.A.W. TCM MSB 93-12.

A.D. 95-08-10 AMEND 39-9282 N/A BY ENGINE SERIAL NUMBER.

A.D. 95-21-15 AMEND 39-9402 N/A OWNER/OPERATOR RESPONSIBILITY TO USE PROPER OCTANE FUEL.

A.D. 97-26-17 AMEND 39-10260 INSTALLED FACTORY NEW V.A.R. CRANKSHAFT.

A.D. 2000-23-21 AMEND 39-11994 N/A AFFECTED CRANKSHAFT NOT INSTALLED.

A.D. 2002-13-04 AMEND 39-12792 N/A INSTALLED BENDIX MODEL S6LN-25 MAGNETO'S.

Bill Copple

BILL COPPLE 441648725

Engine Record General Information

Manufacturer Continental

Model TS10-360-EB

Serial ~~265880~~ 265868R

Type Certificate _____

This engine is currently installed in aircraft: _____

Minimum Octane Fuel _____

Oil Grade Summer _____

Winter _____

Magneto Time _____

Point Setting _____

Firing Order _____

Spark Plug Gap _____

Manufacturer's Recommended Overhaul at _____ hours