

AIRCRAFT SERIAL # 2004
ENGINE SERIAL # 10101
Layout # 1

AIRCRAFT TECHNICAL LOGS

Section 3. ENGINE

Engine #1

ENGINE LOG

1. Make LYCOMING
2. Model IO-360-M1A
3. Specification 1ED
4. Manufacturer's Serial Number 6-2941-51A
5. Date of Manufacture 26 OCTOBER 2000
6. Aircraft Inspection Cycle _____

ENGINE SERVICE AND

MAINTENANCE RECORD

| DATE | TIME RUN | | TIME SINCE OVERHAUL | | NOTE | INSTALLATIONS, INSPECTIONS, etc. (USE BOTH SIDES AND AS MANY LINES AS REQUIRED FOR COMPLETE ENTRIES. DRAW A DIAGONAL LINE THROUGH ANY UNUSED LINES IN DATE AND TIME COLUMNS.) | SIGNATURE | LICENSE NUMBER |
|--------------|----------|------|-----------------------|--|---|---|--------------------|----------------|
| | HRS. | MIN. | HRS. | MIN. | | | | |
| | 7 | 6 | HOURS BROUGHT FORWARD | | | | | |
| August 21/01 | | | | | Diamond Date: 21 August 2001 SN: 42044 Reg: N244CS WDW PO-01-002 Hobbs 7.6 Engine SN: L2841131A Eng TTDN 7.6 Engine de-preservation carried out per de-preservation check sheet VA-P-09-05 Ground run up of engine performed. Found to be satisfactory. The following O/B and O/S have been carried out as applicable: O/B: 042002 / Operating Mandatory S/S S48 - Engine Oil/Fuel Pump replacement - NA by O/N The maintenance described above has been performed in accordance with the applicable standards of airworthiness. DIAMOND AIRCRAFT INDUSTRIES D.O.T. APPROVAL #161.83 Signature: <i>[Signature]</i> Lic. or Stamp: DA RDG | <i>From Historic Logs</i> | <i>[Signature]</i> | RDG |
| | | | | Diamond Date: August 23 2001 SN: 42044 Reg: N244DS WDW PO-01-002 Engine SN: L2841131A TTDN 7.6 Hobbs 7.6 Magnets replaced with new 2001 Manufactured Units per Union Industries instructions and SLL 06 LH Mag Model 4771 Removed SN: 02072868 New LH Mag Model 4771 SN: 01281973 RH Mag Model 4772 Removed SN: 02072918 New RH Mag Model 4772 Installed SN: 01281980 Engine to Mag being adjusted. Ground run up of aircraft performed and found to be satisfactory. The maintenance described above has been performed in accordance with the applicable standards of airworthiness. DIAMOND AIRCRAFT INDUSTRIES D.O.T. APPROVAL # 161.83 Signature: <i>[Signature]</i> Lic. or Stamp: DA RDG | | | | |
| | | | | | See Engine Logbook # 2 for entries since new | | | |
| | | | | | CARRIED FORWARD | | | |

TOTAL THIS PAGE
TOTAL FROM PREVIOUS SUMMARY
TOTAL SINCE MFG.

MAXIMUM HOURS BETWEEN OVERHAULS _____ HOURS.

TEXTRON Lycoming

ENGINE LOG

LOG # 2 (OLD)

SSP-1872-1

TEXTRON Lycoming

852 Oliver Street
Williamsport, PA 17701 U.S.A.
870/323-6181

Log #2
(Aircraft Log)

ENGINE LOG AND MAINTENANCE RECORD

RECORD OF TEXTRON LYCOMING

MAKE _____ MODEL _____ SERIAL _____

FROM _____ 19 ____ TO _____ 19 ____

DETAILING TIME FROM _____ HOURS TO _____ HOURS

SSP 1872-1

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October 1994

NEW RECIPROCATING ENGINE CERTIFICATE

This is to certify that the engine as described hereinafter has been manufactured run-in and tested as prescribed by **TEXTRON LYCOMING** specifications and Federal Aviation Regulations. No further run-in is required. All applicable Federal Aviation Administration Directives and Textron Lycoming Service Bulletins have been complied with at time of Manufacture.

MODEL IO-360-M1A SERIAL NO. L-2441-51A
 DATE OCT 26 2000 *[Signature]*
 (AUTHORIZED REPRESENTATIVE)

TEXTRON Lycoming

652 Oliver Street
 Williamsport, PA 17701 U.S.A.

FORM NO. 217-B (Rev. 3/94)


ENGINE DESCRIPTION

| | | | | | |
|----------------------|------------------|--------------------|------------------------|------------------|---------|
| Mfg. | TEXTRON LYCOMING | Place | Williamsport, PA 17701 | Date | |
| Type | | Model | | Serial No. | |
| Rated H.P. | | Max. H.P. | | Weight (Dry) | |
| Rated R.P.M. | | Max. R.P.M. | | Oil Pressure | |
| Bore | | Stroke | | Displacement | Cu. In. |
| Compression Ratio | | Supercharger Ratio | | | |
| Reduction Gear Ratio | | | | | |
| Propeller | | Hub Design | | Hub Serial No. | |
| Blade Design | | Blade Serial No. | | Blade Serial No. | |
| Max. Hub H.P. | | Max. Blade H.P. | | | |
| Pitch | | Diameter | | Length | |
| Name | | | | | |
| Address | | | | | |

ENGINE LOG

Serial No. _____

| Date | Time | | REPAIRS - ADJUSTMENTS - SERVICE - REMARKS | Signature | License Number |
|-----------------|------|-----|--|-----------|----------------|
| | Hour | Min | | | |
| 1 Oct 03 | | | Inspection 40044 Engine Runover etc. SI MUI | | |
| | | | <i>See Engine Logbook for de-preservation entries dated August 2001</i> | | |
| Page Total | | | All Repair Data Must Bear the Endorsement of a Certificated Mechanic, and his Rating and Certificate Number MUST be Shown. | | |
| Brought Forward | | | | | |
| Total to Date | | | | | |



MODERN AERO INC
14801 PIONEER TRAIL
EDEN PRAIRIE, MN 55347
952-941-2595

Serial No. _____

| FAA APPROVED REPAIR STATION MZER198L | | | Signature | License Number |
|--|----------|------------|--|----------------|
| Model | DATE | HOBBY | | |
| N544DS | 10/23/01 | HOBBS 33 S | | |
| CHANGED OIL AND FILTER. NO METAL FOUND IN OLD FILTER. SERVICED WITH 8 QTS. PHILLIPS X-C 20W50 M. RUN-UP AND LEAK CHECK SATISFACTORY. REFERENCE MODERN AERO W.O. # 30272 <i>R. Molme</i> | | | | |
| Page Total | | | All Repair Data Must Bear the Endorsement of a Certificated Mechanic, and his Rating and Certificate Number MUST be Shown. | |
| Brought Forward | | | | |
| Total to Date | | | | |



MODERN AERO, INC.
14801 PIONEER TRAIL
EDEN PRAIRIE, MN 55347
952-941-2595

Date

NS44DS

DATE: 09/06/02

HOBBS: 193.2

I CERTIFY THAT THIS AIRCRAFT HAS BEEN INSPECTED IN ACCORDANCE WITH AN ANNUAL INSPECTION AND A LIST OF DISCREPANCIES AND UNAIRWORTHY ITEMS DATED 09/06/02 HAVE BEEN PROVIDED FOR THE AIRCRAFT OWNER. CHANGED OIL AND FILTER. CLEANED OIL SCREEN. NO METAL FOUND IN OLD FILTER. SERVICED ENGINE WITH 8 QTS 20W50 EXXON ELITE. CHECKED MAG TIMING, L: 26, R: 25. CHECKED ENGINE COMPRESSION: #1: 77/80, #2: 76/80, #3: 77/80, #4: 76/80. CLEANED, GAPPED, AND ROTATED SPARK PLUGS. CHECKED IGNITION LEADS. WASHED ENGINE. LUBRICATED ENGINE CONTROLS. CLEANED FUEL INLET SCREEN. CLEANED INDUCTION AIR FILTER. RESEALED FITTINGS AT FUEL SERVO FUEL PRESSURE MANIFOLD. COMPLIED WITH AD 93-02-05 BY INSPECTION OF FUEL

All repair dates must bear the endorsement of a Certified Mechanic, and his Rating and Certificate Number MUST be shown.

Brought Forward
Total to Date

Signature
License Number

ENGINE LOG

Serial No. _____

Date

INJECTOR LINES AND REPLACEMENT OF #4 FUEL INJECTOR LINE. NEXT DUE HOBBS: 293.2 OR 09/03. RETORQUED VALVE COVERS. CLEANED FUEL INJECTOR NOZZLES. REFERENCE MODERN AERO W/O# 31208. *James A. Slophey A1470044747JA*

Signature

License Number



MODERN AERO, INC.
14801 PIONEER TRAIL
EDEN PRAIRIE, MN 55347
952-941-2595

NS44DS

DATE: 9/13/02

HOBBS: 193.2

SET MIXTURE AND RIGGED THROTTLE CONTROLS AS REQUIRED. RUN-UP AND OPERATIONAL CHECK SATISFACTORY. ALL UN-AIRWORTHY DISCREPANCIES LISTED AT ANNUAL DATED 9/6/02 COMPLETED AT THIS TIME. REFERENCE W/O 31208 & 31235. *W/SB A1470044747JA 0676300*

Total to Date

Endorsement of a Rating and Certificate Number must be shown.

ENGINE LOG

Serial No. _____

| Date | Time | | REPAIRS - ADJUSTMENTS - SERVICE - REMARKS | Signature | License Number |
|----------|------|-----|--|--------------------|----------------|
| | Hrs | Min | | | |
| 12/05/02 | 225 | 0 | CHANGED OIL + FILTER | <i>[Signature]</i> | # 242075 |
| 5/21/03 | 269 | 0 | CHANGED OIL + FILTER | <i>[Signature]</i> | # 242075 |
| 9/15/03 | 293 | 0 | INSTALLED NEW SPARK PLUGS, CLEANED INJECTORS | <i>[Signature]</i> | # 242075 |
| | | | CHANGED OIL + FILTER | <i>[Signature]</i> | # 242075 |
| 1/2/04 | 317 | 5 | CHANGED OIL + FILTER | <i>[Signature]</i> | # 242075 |
| 7/26/04 | 357 | 6 | CHANGED OIL + FILTER | <i>[Signature]</i> | # 242075 |
| 9/18/04 | 363 | 5 | CLEANED, CAPRO + ROTATED PLUGS | <i>[Signature]</i> | # 242075 |
| 10/21/04 | 375 | 0 | CHANGED OIL + FILTER | <i>[Signature]</i> | # 242075 |
| 5/7/05 | 401 | 6 | CHANGED OIL | <i>[Signature]</i> | # 242075 |
| | | | Page Total | | |
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| | | | Total to Date | | |

All Repair Data Must Bear the Endorsement of a Certificated Mechanic, and his Rating and Certificate Number MUST be Shown.

ENGINE LOG

Serial No. _____

| Date | Time | | REPAIRS - ADJUSTMENTS - SERVICE - REMARKS | Signature | License Number |
|---------|------|-----|--|--------------------|----------------|
| | Hrs | Min | | | |
| 9/23/05 | 411 | 8 | CLEANED, CAPRO + ROTATED PLUGS, REPAIRED FOUR TOP PLUGS, | <i>[Signature]</i> | # 242075 |
| | | | CHANGED OIL + FILTER | <i>[Signature]</i> | # 242075 |
| 12/1/05 | 437 | 5 | CHANGED OIL | <i>[Signature]</i> | # 242075 |
| 5/24/06 | 462 | 5 | CHANGED OIL | <i>[Signature]</i> | # 242075 |
| 9/29/04 | 467 | 5 | CLEANED, CAPRO + ROTATED PLUGS | <i>[Signature]</i> | # 242075 |
| 3/25/07 | 482 | 1 | CHANGED OIL | <i>[Signature]</i> | # 242075 |
| 6/11/07 | 497 | 9 | CHANGED OIL + FILTER | <i>[Signature]</i> | # 242075 |
| 4/3/07 | 497 | 7 | CLEANED INJECTORS; CLEANED, CAPRO + ROTATED PLUGS; REPAIRED AIR FILTER; REPLACED | <i>[Signature]</i> | # 242075 |
| | | | REPLACED EXHAUST SYSTEM COMPONENTS | <i>[Signature]</i> | # 242075 |
| | | | Page Total | | |
| | | | Brought Forward | | |
| | | | Total to Date | | |

All Repair Data Must Bear the Endorsement of a Certificated Mechanic, and his Rating and Certificate Number MUST be Shown.

ENGINE LOG

Serial No. _____

| Date | Time | | REPAIRS - ADJUSTMENTS - SERVICE - REMARKS | Signature | License Number |
|--------|------|-----|--|-------------|----------------|
| | Hrs | Min | | | |
| 03-07 | 4 | 97 | 9 Hobs I certify that this engine has been inspected and is in airworthy condition. Next due 2007-06-01, next annual. Ref. Airc. #SP 3834743 FA. | [Signature] | [License] |
| 6/4/08 | 5 | 25 | Changed run oil | [Signature] | [License] |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
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Page Total
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Total to Date

All Repair Data Must Bear the Endorsement of a Certificated Mechanic, and his Rating and Certificate Number MUST be Shown.

Diamond DA-40
S/N: 40044
Eng M/N: IO-360-M1A

N544DS
10-03-08
S/N: L-29411-51A

Tach: 477.2
Hobbs: 531.0
Engine T.T.: 477.2

Completed the following Maintenance:

1. Performed an Annual Inspection referencing the Diamond DA-40 Maintenance Manual. net
2. Researched AD's through the bi-weekly issue #2008-19F. ber
3. Differential Compressions: #1 78/80, #2 75/80, #3 75/80, #4 77/80.
4. Drained the engine oil and obtained a sample. Removed, cut open, and inspected the Oil Filter, no defects noted. Removed, cleaned, inspected, and reinstalled the Oil Screen using a new gasket. Installed a new Oil Filter (P/N: CH48110-1) and serviced the engine with 8 quarts of Exxon Elite 20W50 Oil. Leak check found satisfactory.
5. Removed, cleaned, and reinstalled the fuel injection nozzles, no leaks detected.
6. Complied with AD 2008-14-07 by inspection of the fuel injection lines and clamps between the fuel manifold and the fuel injector nozzles, referencing Textron Lycoming Service Bulletin 342E, no defects noted. Next due at 577.2 ACTI or fuel injector line maintenance.
7. Removed, cleaned, and reinstalled the inlet filter using new packing, safetied.
8. Removed, gapped, cleaned, inspected, rotated, and reinstalled the spark plugs using new gaskets, no defects found.
9. Removed, cleaned, inspected, and reinstalled the induction air filter, no defects noted.
10. Secured the Oil Filler Tube using a new Gasket (P/N: 72069).
11. Removed the Propeller Governor, sent to Maxwell Aircraft Service, Inc. for overhaul under work order #114337, and reinstalled. Next due Sep 2015.
12. Performed the 400-Hour Inspection of the Valves and Springs. Removed the Valve Covers, replaced the Gaskets (P/N: 75906), and reinstalled the Valve Covers. Next due at 877.2 ACTI. Certificate Number MUST be Shown.

Total to Date

CONT ->
ON NEXT PAGE

ENGINE LOG

Serial No. _____

13. Performed a 500-Hour Inspection on the L/H and R/H Magnets referencing the Lycoming Manual L-1503 Rev C. Replaced the Points and internally timed. Reinstalled the Magnets and timed to the engine referencing the Lycoming Manual L-1503 Rev C.
14. Inspected the lower case bolts referencing the Lycoming Maintenance Manual (Engine Overhaul Manual), 7-17 and found the lower case bolts tight.
15. Installed a new Clamp Assembly (P/N: 229-005) on cylinder #1 and cylinder #3 exhaust risers.
16. Removed and installed a new Engine Breather Hose.
17. Installed a new Dust Boots (P/Ns: A-549-A and A-551-A) on the Throttle Cable.

I certify that this engine has been inspected in accordance with an Annual Inspection and was determined to be in airworthy condition and is approved for return to service. Pertinent details of this inspection are on file at this Repair Station under the work order listed.

Modern Aero, Inc.
14801 Pioneer Trail
Eden Prairie, MN 55347

Authorized Signature: *[Signature]*
WOM 36223 FAA CRS AMZLR198L

License Number _____

Page Total
Brought Forward
Total to Date

Repair Data Must Bear the Endorsement of a Certified Mechanic, and his Rating and Certificate Number MUST be Shown.

ENGINE LOG

Serial No. _____

| Date | Time | | REPAIRS - ADJUSTMENTS - SERVICE - REMARKS | Signature | License Number |
|--------|------|-------|--|--------------------|----------------|
| | Hrs | Min | | | |
| 1/8/09 | 4 | 57.25 | changed oil + filter, serviced with 8 qt. AeroShell 15W-50 Engine ground run & checked OK | <i>[Signature]</i> | AP3257309 |

ENGINE MODEL: IO-300-M1A
ENGINE S/N: L129411-51A
REG. NO. 54403
WORK ORDER: 4102-04-2009

Executive Beechcraft STL, Inc.
Repair Station No. 02BR1520
332 Beechcraft Ave.
Chesterfield, MO 63005
Phone: 636-332-4800

DATE: 4/17/2009
A/C FSN: 8217
ENG FT: 8217
HSR888: 8217

Engine Entries
(1) Tightened dipstick tube. Washed oil off of engine. (2) Installed new left hand magneto pin 4771-ah 0829-1526. Adjusted magnet timing with T 300 Synchronizer.

Maintenance Release
With respect to the work performed, this engine is determined to be in airworthy condition and is approved for return to service. Pertinent details of the repairs are on file at the repair station 02BR1520 under the above noted work order.

DATE: 4/17/2009
SIGNED: *[Signature]*
Christopher T. Schubert
Certified Repair Station No. 02BR1520

Work Order: 4102-04-2009
Printed by EBis 3 (datcomedia.com)

ENGINE LOG

Serial No. _____

ENGINE

Reg: NS44DS
Model: IO-360-M1A
SN: 1-29411-51A
W/O: MS-09-00552



Date: 31 July 2009
Tech: 606.1
ACTT: 606.1
ETT: 606.1

ense
rber

Removed this engine from aircraft NS44DS (model DA.40, s/n 40.044) due to a propeller strike.

Pertinent details are on file under the above work order.

Signed: *[Signature]*

CRS-6MSTR576Y
525 Turbine Ave, Chesterfield, MO (636)332-6155

Page Total
Brought Forward
Total to Date

All Repair Data Must Bear the Endorsement of a Certified Mechanic, and his Rating and Certificate Number MUST be Shown.

ENGINE LOG

Serial No. _____

Date: _____
Time: _____
Hrs: _____
Min: _____

REPAIRS - ADJUSTMENTS - SERVICE - REMARKS

Signature

License
Number

*End of Logbook
9/2/2009*

Page Total
Brought Forward
Total to Date

All Repair Data Must Bear the Endorsement of a Certified Mechanic, and his Rating and Certificate Number MUST be Shown.

ENGINE LOG BOOK



Engine Log & Maintenance Record

LOG #: _____

RECORD OF Lycoming IO-360-M1A L-21109-51E
(MAKE) (MODEL) (SERIAL)

AIRCRAFT REGISTRATION NUMBER: N544DS

FROM 10/1 2021 TO _____ 20____

DETAILING TIME FROM _____ TO _____
(HOURS) (HOURS)

If used on a multi-engine aircraft: Right Left Front Rear

Overhaul Reciprocating Engine Certificate

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

LYCOMING

Part Number HENPL-RT10051
Serial Number L-21109-51E
Engine Model IO-360-M1A
Work Order KM784766
Total Time 3283.5

Charles Hese 8/5/21
Authorized Representative Date

Repair Station EJ1R115K

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

Form 2480 Rev 05-13

