

# Teledyne Continental Motors

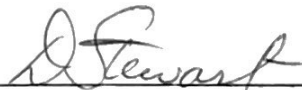
## ENGINE LOG BOOK



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

131  
52  
13

This engine model I0520BB52B, Serial No. 580077  
was manufactured on 11-28-99 by Teledyne Continental  
Motors in accordance with approved design data and the applicable  
requirements of Part 21 of the Federal Aviation Regulations. The  
approved design data for this engine incorporates all changes required  
by applicable Airworthiness Directives and Teledyne Continental  
Motors Service Bulletins.

  
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 **TELEDYNE  
CONTINENTAL MOTORS**  
An Allegheny Teledyne Company

308 3829210  
5788  
385 5444

385-5170  
382-5788

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

**POWERPLANT LOG** BEECH MODEL F33A SN: CE-1154 REG # N3077H  
 4/26/2000 TACH: 1067.4 A/C TT: 1125.4 ENGINE SN: 580077 TSN: 0.0  
 INSTALLED FACTORY NEW ENGINE MODEL IO-520 BB 52B SN: 580077, WITH NEW MOUNTS  
 AND BOLTS OPERATIONAL CHECKED AND SET IAW BONANZA MM. COMPLETED AN  
**ANNUAL INSPECTION** PER RAYTHEON AIRCRAFT BONANZA 100-HR OR ANNUAL LONG  
 FORM INSPECTION GUIDE PN 98-32227H. TCM **MSB 00-5** NOT APPLICABLE BY ENGINE S/N.  
 OSERVICED ENGINE WITH 12 QT'S AEROSHELL 100 MINERAL OIL. OPERATIONAL AND  
 LEAK CHECKED SATISFACTORY. NO OTHER APPLICABLE AD'S DUE THIS DATE THEU BY-  
 WEEKLY 2000-06. REF R.A.S. WO # 04-016618.

APPROVED FOR RETURN TO SERVICE  
 Signed *[Signature]* Title *[Signature]*  
 Certified Repair Station #BWVR672C  
 RAYTHEON AIRCRAFT SERVICES, INC.  
 P. O. Box 9162 WICHITA, KANSAS

06/07/01	44.4		44.4	Checked Compressions - All Good. Checked MAG Timing.
				Cleaned Gapped AND ROTATED SPARK PLUGS Run-up
				And ops checks Good. <i>[Signature]</i> Scott D. Hunkler AP65923884

**Capitol Aviation**  
**1761 West Kearney Lincoln NE 68524**

N3077H  
 Meter 1111.0  
 Eng TT 43.6

6/7/2001  
 ACTT 1169  
 Prop TT 43.6

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

Gary W. Vohnout AP5066494131A

*[Signature: Gary W. Vohnout]*

9 July 2002 N3077H Tach - 1143.8 AFTT - 1201.8 Eng. TT - **76.4** Prop. TT - **76.4**

Annual Inspection complied with this date. Compression test: 1. 66/80 2. 64/80 3. 61/80 4. 65/80 5. 65/80 6. 69/80.  
 Drained oil and removed filter. No contamination found. Installed new CH48109 filter, 11 qts. Phillips 20W50 oil.  
 Cleaned, tested and rotated plugs. Checked timing. Washed engine and lubed controls. This engine was inspected IAW  
 an Annual inspection following the scope and detail of FAR 43 app. D and Beech service manual and is returned to  
 service. *Ronald R. Grey* IA504028835

Annual Inspection complied with this date. Compression test: 1. 71/80 2. 70/80 3. 70/80 4. 70/80 5. 72/80 6. 71/80. Drained oil and removed filter. No contamination. Installed new CH48109 filter and 11 qts. 20W50 oil. Washed engine and lubed controls. Removed, cleaned, rotated, and tested spark plugs. This engine was inspected IAW an Annual Inspection following the scope and detail of FAR 43 app. D and Beech service manual and is returned to service.

*R. Gray IA504028835*

CENTRAL CYLINDER SERVICE INC.  
AIRCRAFT ENGINE REBUILDERS  
Certified Repair Station MY2R022L

6315 Lindbergh Drive • Riverfront Industrial Park • Omaha, NE 68110

Continental IO 520 BB S/N 580077 TT 137.1 9-9-04  
Prop strike inspection, repair and test run. Disassembled above engine, cleaned and inspected as necessary for sudden stoppage damage. Magnafluxed misc. steel parts. Magnafluxed crankshaft. Zyglo inspected crankcase. Reassembled engine using new cam and crank gear bolts, rod nuts and bolts, counterweight and crankshaft bushings, pins, plates and snaprings and necessary gaskets and seals. Reinstalled cylinders. Installed new Slick magnetos. No other cylinder work or accessory work done. Engine test ran and found airworthy. All work accomplished in accordance with Continental Service Publications. Details of work are on file at this facility W.O. 12016.

*[Signature]*  
for CRS MY2R022L

1 Dec 2005 Tach - 1204.5 AFTT - 1262.5 Eng. TT - 137.1 Prop. TT - 0.0

Removed engine and sent to Central Cylinder for tear-down inspection. Reinstalled using existing mounts, hoses, etc. Installed new CH48109-1 oil filter and 12 qts. 20W50 Phillips oil. Installed new BA-7112 air filter element. This engine was inspected in accordance with an Annual Inspection following the scope and detail of FAR 43 app. D and Beech maintenance manual and is returned to service. *Ronald R. Gray IA504028835*

17 Feb 2007 Tach - 1325.7 AFTT - 1383.7 Eng. TT - 258.3 Prop TT - 121.2

Annual Inspection complied with this date. Comp. Test. ① 71/80 ② 71/80 ③ 70/80 ④ 72/80 ⑤ 71/80 ⑥ 73/80. No oil change. Checked all controls and lubed. Checked intake and exhaust systems. Cleaned tested rotated plugs.

Annual Inspection CW Following  
Scope and Detail of FAR 43  
app. D and returned to service  
Ronald R. Gray IA504028835

*Ronald R. Gray*  
*IA504028835*

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	→				
28 Nov 2007	Tach -	1397.4			Removed #4 cylinder & sent to Central Cylinder for repair. Reinstalled using new gaskets. Drained oil and refilled with 52 qts Amsoil 100 mineral oil. Ronald R. Gray AP504028835
11 Sep 2008	Tach -	1404.3	AFTI -	1462.3	ETI - 336.9 PTI - 199.8 Annual Inspection complied with this date. Removed all six cylinders and sent to Central Cylinder for repair. Reinstalled with all new gasket and rings. Drained oil and removed filter. Installed new CH48109-1 filter and 12 qts A/S 100 mineral oil. Installed all new RHB32E spark plugs. Inspected all controls and lubed. Inspected exhaust and intake systems. Checked all wiring. Checked magnetron tuning. Checked oil ADs. Annual Inspection CW Following Scope and Detail of FAR 43 appt D and returned to service Ronald R. Gray IA504028835 Ronald R. Gray
10 Sep 2009	Tach -	1471.0			Drained oil and removed filter. No contamination found. Refilled with 11 qts A/S 100 and new CH48109-1 filter. R. Gray AP504028835
13 Mar 09	Tach -	1479.8	TI -	1537.8	ETI - 412.4 Prop TI - 275.3 Annual Inspection complied with this date. Compression check ① 72/80 ② 71/80 ③ 71/80 ④ 70/80 ⑤ 72/80 ⑥ 71/80. Checked timing. Inspected induction & exhaust systems. Inspected all engine controls. Inspected engine electrical system & wiring. Cleaned tested gapped and rotated plugs. This engine was inspected IAW an Annual Inspection C/w this date following the scope & detail of FAR 43 app D and is returned to service. R. Gray IA504028835

Advanced Air, Inc. 16801 McCandless Lane, Council Bluffs, IA 51503 712-323-2173

Date: 24Jan2011

W.O. 4434

Reg# N3077H

Tach: 1544.0

Aircraft Total Time: 1602.0

Continental IO-520BB-52B

S/N- 580077

TT- 476.6

TSOH- N/A

McCauley 3A32C406-D

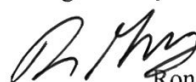
S/N- 040810

TT- 339.5

TSOH- N/A

- Completed an Annual Inspection this date utilizing a checklist conforming to the scope and detail as set forth by 14 CFR, Part 43, Appendix D.

- Removed left hand exhaust manifold and installed overhauled unit p/n 35-950005-37 from Aerospace Welding. Installed with 3 new gaskets p/n 652458 and 12 new nuts p/n MS20500-428. Adjusted fuel metering unit linkage to richen mixture at idle. Removed spark plugs, cleaned, tested and rotated. Checked mag to engine timing. Inspected engine electrical system and engine wiring. Inspected induction and exhaust systems. Inspected engine fuel system and cleaned screens. Drained oil and removed filter. Installed new CH48109-1 oil filter, 10 qts. 20W50 Phillips oil and 2 cans avblend oil additive. This engine was inspected in accordance with and Annual Inspection following the scope and detail of 14 CFR, Part 43, Appendix D and was found to be in an airworthy condition.



Ronald R. Gray AP5040288351A

Advanced Air, Inc. 16801 McCandless Lane, Council Bluffs, IA 51503 712-323-2173

Date: 1Mar2012

W.O. 4825

Reg# N3077H

Tach: 1559.6

Aircraft Total Time: 1617.6

Continental IO-520BB-52B

S/N- 580077

TT- 92.2

TSOH- N/A

McCauley 3A32C406-D

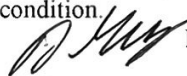
S/N- 040810

TT- 355.1

TSOH- N/A

- Completed an Annual Inspection this date utilizing a checklist conforming to the scope and detail as set forth by 14 CFR, Part 43, Appendix D. Comp: ① 65 ② 64 ③ 64 ④ 68 ⑤ 63 ⑥ 68

- Removed spark plugs, cleaned, tested and rotated. Checked mag to engine timing. Inspected engine electrical system and engine wiring. Inspected induction and exhaust systems. Inspected engine fuel system and cleaned screens. Drained oil and removed filter. Installed new CH48109-1 oil filter, 11 qts. 20W50 Phillips oil and 2 cans avblend oil additive. Removed inoperative alternator and installed new Plane Power p/n C28-150 s/n 150-113929. Test ran aircraft for ops check, no discrepancies noted. This engine was inspected in accordance with and Annual Inspection following the scope and detail of 14 CFR, Part 43, Appendix D and was found to be in an airworthy condition.



Ronald R. Gray AP35578431A

Advanced Air, Inc. 16801 McCandless Lane, Council Bluffs, IA 51503 712-323-2173

Date: 12Apr2013

W.O. 5247

Reg# N3077H

Tach: 1597.2

Aircraft Total Time: 1655.2

Continental IO-520BB-52B

S/N- 580077

TT- 529.8

TSOH- N/A

McCauley 3A32C406-D

S/N- 040810

TT- 392.7

TSOH- N/A

- Completed an Annual Inspection this date utilizing a checklist conforming to the scope and detail as set forth by 14 CFR, Part 43, Appendix D.

- Compression check: 1. 61/80 2. 58/80 3. 61/80 4. 66/80 5. 62/80 6. 70/80.

- Removed all fuel injectors and cleaned. Reinstalled and torqued to specs. Removed air filter element and installed new p/n BA-7112. Removed spark plugs, cleaned, tested and rotated. Checked mag to engine timing. Inspected engine electrical system and engine wiring. Inspected induction and exhaust systems. Inspected engine fuel system and cleaned screens. Drained oil and removed filter. Installed new CH48109-1 oil filter, 11 qts. 20W50 Phillips oil and 2 cans avblend oil additive. This engine was inspected in accordance with and Annual Inspection following the scope and detail of 14 CFR, Part 43, Appendix D and was found to be in an airworthy condition.



Ronald R. Gray AP35578431A

Advanced Air, Inc. 16801 McCandless Lane, Council Bluffs, IA 51503 712-323-2173  
Date: 1May2014 W.O. 5683 Reg# N3077H Tach: 1611.3  
Aircraft Total Time: 1669.3

Continental IO-520BB-52B S/N- 580077 TT- 543.9 TSOH- N/A  
McCauley 3A32C406-D S/N- 040810 TT- 406.8 TSOH- N/A

- Completed an Annual Inspection this date utilizing a checklist conforming to the scope and detail as set forth by 14 CFR, Part 43, Appendix D.

- Compression check: 1. 66/80 2. 60/80 3. 65/80 4. 71/80 5. 70/80 6. 72/80

- Drained oil and removed filter. Cut filter for contamination inspection, none found. Installed new CH48109-1 oil filter, 10 qts. 20W50 Phillips oil and 2 bottles of Avblend oil additive. Test ran aircraft for leaks, no discrepancies noted. Removed air filter element and installed new p/n BA-7112. Removed spark plugs, cleaned, tested and rotated. Checked mag to engine timing. Inspected engine electrical system and engine wiring. Inspected induction and exhaust systems. Inspected engine fuel system and cleaned screens. This engine was inspected in accordance with and Annual Inspection following the scope and detail of 14 CFR, Part 43, Appendix D and was found to be in an airworthy condition.

Ronald R. Gray AP3557843IA

Advanced Air, Inc. 16801 McCandless Lane, Council Bluffs, IA 51503 712-323-2173  
Date: 9June2015 W.O. 6194 Reg# N3077H Tach: 1626.5  
Aircraft Total Time: 1684.5

Continental IO-520BB-52B S/N- 580077 TT- 559.1 TSOH- N/A  
McCauley 3A32C406-D S/N- 040810 TT- 422.0 TSOH- N/A

- Completed an Annual Inspection this date utilizing a checklist conforming to the scope and detail as set forth by 14 CFR, Part 43, Appendix D.

- Compression check: 1. 62/80 2. 52/80 3. 58/80 4. 52/80 5. 60/80 6. 68/80. MO - 44.

- Drained oil and removed filter. Cut filter for contamination inspection, none found. Installed new CH48109-1 oil filter, 10 qts. 20W50 Phillips oil and 2 bottles of Avblend oil additive. Test ran aircraft for leaks, no discrepancies noted. Removed spark plugs, cleaned, tested and rotated. Checked mag to engine timing. Inspected engine electrical system and engine wiring. Inspected induction and exhaust systems. Inspected engine fuel system and cleaned screens. This engine was inspected in accordance with and Annual Inspection following the scope and detail of 14 CFR, Part 43, Appendix D and was found to be in an airworthy condition.

Ronald R. Gray AP3557843IA

Advanced Air, Inc. 16801 McCandless Lane, Council Bluffs, IA 51503 712-323-2173  
Date: 28Nov2016 W.O. 6721 Reg# N3077H Tach: 1632.3  
Aircraft Total Time: 1632.3

Continental IO-520BB-52B S/N- 580077 TT- 564.9 TSOH- N/A  
McCauley 3A32C406-D S/N- 040810 TT- 427.8 TSOH- N/A

- Completed an Annual Inspection this date utilizing a checklist conforming to the scope and detail as set forth by 14 CFR, Part 43, Appendix D.

- Drained oil and removed filter. Cut filter for contamination inspection, none found. Installed new CH48109-1 oil filter and 12 qts. Aeroshell 100 Mineral oil. Test ran aircraft for leaks, no discrepancies noted. Removed all cylinders from engine. Installed owner supplied new Continental cylinder kits p/n 658611A4BP. Serial numbers installed: AC16AA282, AC16AA294, AC16AA301, AC16AA298, AC15LC112 and AC16BA827. Installed with supplied gasket kits. Removed flow divider and sent to Central Cylinder for repair. New diaphragm p/n 626536 and seal p/n 631330 installed. Reinstalled on aircraft and test run, no discrepancies noted. Replaced all spark plugs with new p/n URHB32E. Test ran aircraft and test flew, no discrepancies noted. Checked mag to engine timing. Inspected engine electrical system and engine wiring. Inspected induction and exhaust systems. Inspected engine fuel system and cleaned screens. This engine was inspected in accordance with and Annual Inspection following the scope and detail of 14 CFR, Part 43, Appendix D and was found to be in an airworthy condition.

Ronald R. Gray AP3557843IA



Advanced Air, Inc. 101 McCandless Lane, Council Bluffs, IA 51503 712-323-2173

Date: 14Dec2017

W.O. 7480

Reg# N3077H

Tach: 1656.4

Aircraft Total Time: 1656.4

Continental IO-520BB-52B

S/N- 580077

TT- ~~504.9~~ 589.0 TSOH- N/A

McCauley 3A32C406-D

S/N- 040810

TT- ~~427.8~~ 451.9 TSOH- N/A

- Completed an Annual Inspection this date utilizing a checklist conforming to the scope and detail as set forth by 14 CFR, Part 43, Appendix D.

- Compression check: (1. 72/80) (2. 77/80) (3. 76/80) (4. 74/80) (5. 72/80) (6. 78/80).

- Drained oil and removed filter. Cut filter for contamination inspection, none found. Installed new CH48109-1 oil filter and 12 qts. Aeroshell 100 Mineral oil. Test ran aircraft for leaks, no discrepancies noted. Test ran aircraft and test flew, no discrepancies noted. Checked mag to engine timing. Inspected engine electrical system and engine wiring. Inspected induction and exhaust systems. Inspected engine fuel system and cleaned screens. This engine was inspected in accordance with and Annual Inspection following the scope and detail of 14 CFR, Part 43, Appendix D and was found to be in an airworthy condition.

Ronald R. Gray AP3557843IA

Advanced Air, Inc. 101 McCandless Lane, Council Bluffs, IA 51503 712-323-2173

Date: 14May2018

W.O. 7849

Reg# N3077H

Tach: 1676.3

Aircraft Total Time:

- Removed complete engine fuel system (fuel pump, metering unit, flow divider and nozzles) and sent to Central Cylinder for repair. Reinstalled fuel pump, fuel metering unit, flow divider and nozzles after repair. Installed all new engine fuel system hoses. Hose part numbers: 2ea. p/n AE3663753E0382, 1ea. p/n AE3663753E0322, 1ea. p/n AE7010001E0064, 1ea. p/n 624000-4-0170 and 1ea. p/n 624000-6-0186. Test ran aircraft and test flew, no discrepancies noted.

Ronald R Gray AP3557843

Date: 11Apr2020  
ACTT: 1678.6

W.O.  
Eng. TT: 611.2

Reg# N3077H  
Prop TT: 474.1

AC S/N: CE-1154  
Hobbs/Tach: 1678.6

Continental IO-520BB-52B

S/N- 580077

TT- 611.2

TSOH- N/A

McCauley 3A32C406-D

S/N- 040810

TT- 474.2

TSOH- N/A

- Completed an Annual Inspection this date utilizing a checklist conforming to the scope and detail as set forth by 14 CFR, Part 43, Appendix D.

- Compression check: (1. 71/80) (2. 73/80) (3. 71/80) (4. 74/80) (5. 72/80) (6. 70/80).

- No oil change. Checked mag to engine timing. Inspected engine electrical system and engine wiring. Inspected induction and exhaust systems. Inspected engine fuel system and cleaned screens. This engine was inspected in accordance with and Annual Inspection following the scope and detail of 14 CFR, Part 43, Appendix D and was found to be in an airworthy condition.

Ronald R. Gray AP3557843IA

Date: 20Aug2021  
EngTT: 624.4

Reg# N3077H  
EngSMOH: n/a

Tach: 1691.8  
PropTT: 487.3

ACTT: 1691.8  
PropSMOH: n/a

Engine

- Completed an Annual Inspection this date utilizing a checklist conforming to the scope and detail as set forth by 14 CFR, Part 43, Appendix D. Complied with all applicable AD's and ICA's. Changed oil and filter. Inspected intake and exhaust systems. Inspected engine electrical system and wiring. This engine was inspected in accordance with an Annual Inspection following the scope and detail of 14 CFR, Part 43, Appendix D and was found to be in an airworthy condition. Oil change accomplished.

- Compression Check: (1. 65/80) (2. 65/80) (3. 67/80) (4. 65/80) (5. 65/80) (6. 70/80)

Ronald R Gray AP3557843IA

Date: 1Feb2023  
EngTT: 646.9

Reg# N3077H  
EngSMOH: n/a

Tach: 1714.3  
PropTT: 509.8

ACTT: 1714.3  
PropSMOH: n/a

Engine

- Completed an Annual Inspection this date utilizing a checklist conforming to the scope and detail as set forth by 14 CFR, Part 43, Appendix D. Complied with all applicable AD's and ICA's. Changed oil and filter. Inspected intake and exhaust systems. Inspected engine electrical system and wiring. This engine was inspected in accordance with an Annual Inspection following the scope and detail of 14 CFR, Part 43, Appendix D and was found to be in an airworthy condition. Oil change accomplished.

- Compression Check: (1. 66/80) (2. 65/80) (3. 64/80) (4. 67/80) (5. 62/80) (6. 72/80)

Ronald R Gray AP3557843IA