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N172RV S/N 172S10116

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100 Hour/Annual Inspection

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Cessna Pg. 4 - 6-29-09

Adlog Pg. 2 - 12-5-09
Adlog Pg. 2 - 8-11-10
Adlog Pg. 3 - 12-2-10
Adlog Pg. 4 - 7-7-11
Adlog Pg. 5 - 2-23-12
Adlog Pg. 6 - 1-3-13
Adlog Pg. 6 - 11-15-13
Adlog Pg. 6 - 10-1-14
Adlog Pg. 7 - 9-3-15

FAR 91.207

Cessna Pg. 4 - 6-29-09

Adlog Pg. 2 - 8-11-10
Adlog Pg. 3 - 12-2-10
Adlog Pg. 4 - 7-7-11
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FAR 91.411

Cessna Pg. 2 - 7-28-08
Adlog Pg. 3 - 8-7-10
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FAR 91.413

Cessna Pg. 2 - 7-28-08
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Adlog Pg. 6 - 9-18-14

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N172RV S/N 172S10116

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Engine

25 Hour Inspection

Cessna Pg. 3 - 8-11-08

50 Hour Inspection

Cessna Pg. 4 - 3-10-09
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Adlog Pg. 2 - 5-11-10
Adlog Pg. 3 - 10-17-10
Adlog Pg. 3 - 2-28-11
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Adlog Pg. 2 - 1-5-09
Adlog Pg. 2 - 9-11-10
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N172RV S/N 172S10116

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Propeller

100 Hour Inspection

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Cessna Pg. 3 - 6-29-09

Annual Inspection

Adlog Pg. 2 - 12-5-09
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AD 00-04-01 -
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AD 08-19-05 - 11-5-08
AD 11-15-10 -
AD 11-26-04 - 1-3-13
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1-3-13
AD 09-26-12 -

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Calendar Index

January -	Airframe	Engine	Propeller	Avionics	Major Alterations
2008 -					
2009 -		1-05-09			
2010 -					
2011 -					
2012 -					
2013 -	1-03-13	1-03-13 1-15-13	1-03-13		1-03-13
2014 -					
2015 -					

February -	Airframe	Engine	Propeller	Avionics	Major Alterations
2008 -					
2009 -					
2010 -					
2011 -		2-28-11			
2012 -	2-23-12	2-23-12	2-23-12		2-23-12
2013 -					
2014 -					
2015 -					

March -	Airframe	Engine	Propeller	Avionics	Major Alterations
2008 -					
2009 -		3-10-09			
2010 -					
2011 -					
2012 -					
2013 -					
2014 -					
2015 -					

April -	Airframe	Engine	Propeller	Avionics	Major Alterations
2008 -					
2009 -					
2010 -					
2011 -					
2012 -					
2013 -					
2014 -					
2015 -					

May -	Airframe	Engine	Propeller	Avionics	Major Alterations
2008 -					
2009 -					
2010 -		5-11-10			
2011 -					
2012 -					
2013 -					
2014 -					
2015 -					

June -	Airframe	Engine	Propeller	Avionics	Major Alterations
2008 -					
2009 -	6-29-09	6-29-09	6-29-09		6-29-09
2010 -					
2011 -					
2012 -					
2013 -					
2014 -					
2015 -					

July -	Airframe	Engine	Propeller	Avionics	Major Alterations
2008 -				7-28-08	
2009 -					
2010 -					
2011 -	7-07-11	7-07-11	7-07-11		7-07-11
2012 -					
2013 -		7-15-13			
2014 -					
2015 -					

August -	Airframe	Engine	Propeller	Avionics	Major Alterations
2008 -		8-11-08			
2009 -					
2010 -	8-11-10				8-11-10
2011 -					
2012 -		8-21-12			
2013 -					
2014 -					
2015 -					

September -	Airframe	Engine	Propeller	Avionics	Major Alterations
2008 -					
2009 -		9-14-09			
2010 -		9-11-10			
2011 -					

2012 -					
2013 -					
2014 -					
2015 -	9-03-15	9-03-15	9-03-15		9-03-15

October -	Airframe	Engine	Propeller	Avionics	Major Alterations
2008 -					
2009 -					
2010 -		10-17-10			
2011 -					
2012 -					
2013 -					
2014 -	10-01-14	10-01-14		10-01-14	10-01-14
2015 -					

November -	Airframe	Engine	Propeller	Avionics	Major Alterations
2008 -	11-05-08	11-05-08	11-05-08		
2009 -					
2010 -			8-11-10		
2011 -					
2012 -					
2013 -	11-15-13			11-15-13	11-15-13
2014 -					
2015 -					

December -	Airframe	Engine	Propeller	Avionics	Major Alterations
2008 -					
2009 -	12-05-09		12-05-09		
2010 -	12-02-10	12-02-10	12-02-10	12-02-10	
2011 -					
2012 -					
2013 -					
2014 -					
2015 -					

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STC's

STC #SA02217AK Installation of Garmin GDL90 UAT Datalink sensor system - Cessna Pg. 1 - 9-26-08

N172RV Photo

Original Record N6330X Page 1

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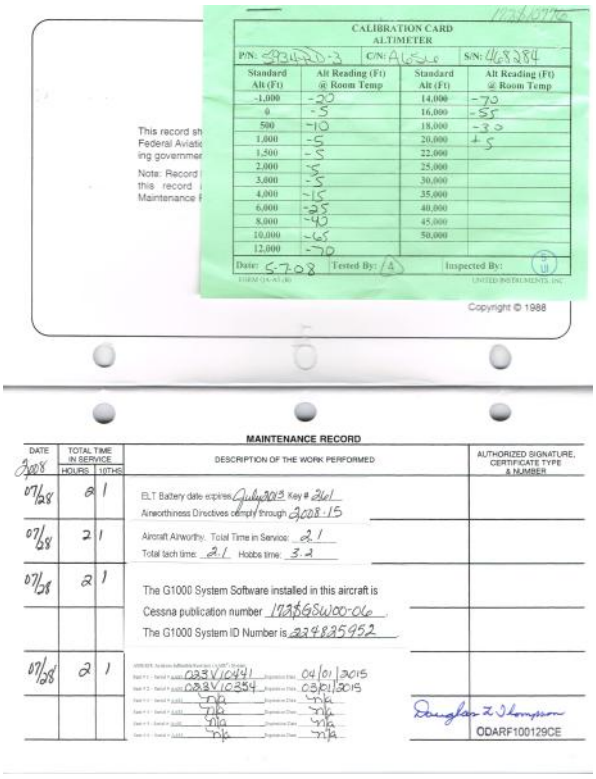

CALIBRATION CARD
ALTIMETER

P/N: 822420-3 C/N: AL5L6 S/N: 468284

Standard Alt (Ft)	Alt Reading (Ft) @ Room Temp	Standard Alt (Ft)	Alt Reading (Ft) @ Room Temp
-1,000	-20	14,000	-70
0	-5	16,000	-55
500	-10	18,000	-30
1,000	-5	20,000	+5
1,500	-5	22,000	
2,000	-5	25,000	
3,000	-5	30,000	
4,000	-15	35,000	
6,000	-25	40,000	
8,000	-40	45,000	
10,000	-65	50,000	
12,000	-70		

Date: 5-7-08 Tested By: [illegible] Inspected By: [illegible]

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MAINTENANCE RECORD

DATE	TOTAL TIME IN SERVICE HOURS	TOTAL TIME IN SERVICE TENTHS	DESCRIPTION OF THE WORK PERFORMED	AUTHORIZED SIGNATURE, CERTIFICATE TYPE & NUMBER
2008 07/28	2	1	ELT Battery date expires July 2013 Key # 361 Airworthiness Directives comply through 2008-15	
07/28	2	1	Aircraft Airworthy: Total Time in Service: 2.1 Total tach time: 2.1 Hobbs time: 3.2	
07/28	2	1	The G1000 System Software installed in this aircraft is Cessna publication number 1739GSW00-06 The G1000 System ID Number is 2398835952	
07/28	2	1	033V1044 04/01/2015 033V10354 03/01/2015 N/A N/A N/A N/A N/A N/A	Douglas L Thompson ODARF100129CE

MAINTENANCE RECORD

DATE 2008	TOTAL TIME IN SERVICE HOURS	10THS	DESCRIPTION OF THE WORK PERFORMED	AUTHORIZED SIGNATURE, CERTIFICATE TYPE & NUMBER
07/28	2	1	This aircraft has been inspected and found in compliance with the requirements of FAR 21.183 and all mandatory changes. The Transponder S/N 99107187 was inspected and tested on 07/14/08 and is in compliance with the FAR 91.413. The Static Pressure System was inspected and tested on 07/14/08. The ADC and Altimeter(s) have been inspected and tested and are in compliance with FAR 91.217 and 91.413 to an altitude of 20000 feet. ADC [illegible] Date 07/14/08 Altimeter(s) L 468284 Date 05/07/08 R N/A Date N/A ELT Certified and tested per FAR 91.207D. Standard Certificate of Airworthiness dated 07/28/08 has been issued by the undersigned.	Douglas R Thompson ODARF100129CE

Reg #: N6330X
Model: Cessna 172S
Serial: 172S10116
Work Order #: 21080

AIR CARE INC.
Aviation Services

Hobbs: 74.7
Tach: 63.5
Total Time: 63.5
Date: 9/22/08

Replaced LH 0B elevator static wick base P/N C592001-0205 & new wick P/N DD1W. For further details see WO# 21080 on file this station.

For Air Care, Inc.
FAA Repair Station
AC0R030C

MAINTENANCE RECORD

Reg #: N6330X
Model: Cessna 172S
Serial: 172S10776
Work Order #: 21137

AIR CARE INC.
Aviation Services

Hobbs: 112.9
Tach: 94.9
Total Time: 94.9
Date: 11/5/08

Performed 100 hr inspection using Air Care Inc Cessna 172S annual / 100 hr inspection checklist as a guide. C/W AD2001-06-17 by ground run. Check of idle mixture & speed. C/W SB08-74-01 by visual inspection of magneto internal parts. No defects noted. C/W SB08-73-01 by visual inspection. No defects noted. Ground ran acft. No defects noted. For further details see WO# 21137 on file this station. I certify that this engine has been inspected I/A/W a 100 hr inspection and is approved for return to service.

For Air Care, Inc.
FAA Repair Station
AC0R030C

Original Record N6330X Page 3

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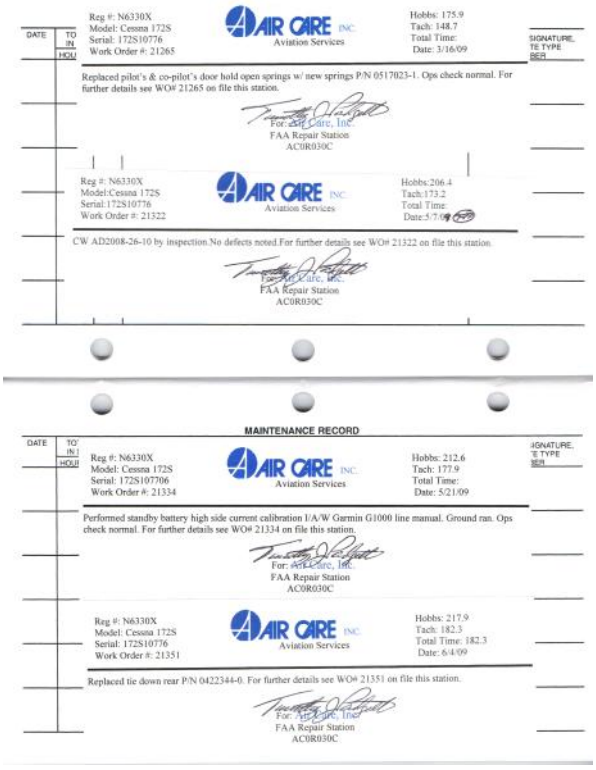


DATE | TO IN HOU | SIGNATURE, TE TYPE BER

Reg #: N6330X
Model: Cessna 172S
Serial: 172S10776
Work Order #: 21265

AIR CARE INC
Aviation Services

Hobbs: 175.9
Tach: 148.7
Total Time:
Date: 3/16/09

Replaced pilot's & co-pilot's door hold open springs w/ new springs P/N 0517023-1. Ops check normal. For further details see WO# 21265 on file this station.

For: Air Care, Inc.
FAA Repair Station
AC0R030C

Reg #: N6330X
Model:Cessna 172S
Serial:172S10776
Work Order #: 21322

AIR CARE INC
Aviation Services

Hobbs:206.4
Tach:173.2
Total Time:
Date:5/7/09

CW AD2008-26-10 by inspection.No defects noted.For further details see WO# 21322 on file this station.

For: Air Care, Inc.
FAA Repair Station
AC0R030C

MAINTENANCE RECORD

DATE | TO IN HOU | SIGNATURE, TE TYPE BER

Reg #: N6330X
Model: Cessna 172S
Serial: 172S107706
Work Order #: 21334

AIR CARE INC
Aviation Services

Hobbs: 212.6
Tach: 177.9
Total Time:
Date: 5/21/09

Performed standby battery high side current calibration I/A/W Garmin G1000 line manual. Ground ran. Ops check normal. For further details see WO# 21334 on file this station.

For: Air Care, Inc.
FAA Repair Station
AC0R030C

Reg #: N6330X
Model: Cessna 172S
Serial: 172S10776
Work Order #: 21351

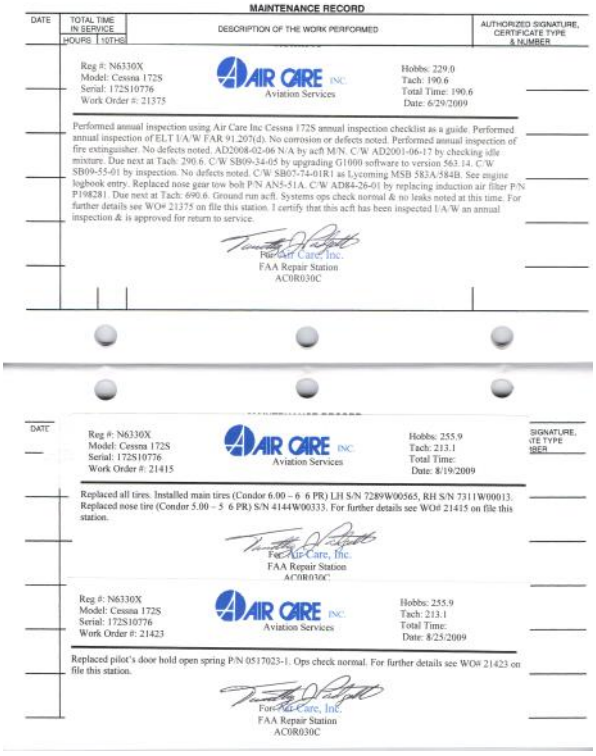
AIR CARE INC
Aviation Services

Hobbs: 217.9
Tach: 182.3
Total Time: 182.3
Date: 6/4/09

Replaced tie down rear P/N 0422344-0. For further details see WO# 21351 on file this station.

For: Air Care, Inc.
FAA Repair Station
AC0R030C

Airframe Index Engine Index Propeller Index AD Index



MAINTENANCE RECORD

DATE | TOTAL TIME IN SERVICE HOURS | 10THS | DESCRIPTION OF THE WORK PERFORMED | AUTHORIZED SIGNATURE, CERTIFICATE TYPE & NUMBER

Reg #: N6330X
Model: Cessna 172S
Serial: 172S10776
Work Order #: 21375

AIR CARE INC.
Aviation Services

Hobbs: 229.0
Tach: 190.6
Total Time: 190.6
Date: 6/29/2009

Performed annual inspection using Air Care Inc Cessna 172S annual inspection checklist as a guide. Performed annual inspection of ELT I/A/W FAR 91.207(d). No corrosion or defects noted. Performed annual inspection of fire extinguisher. No defects noted. AD2008-02-06 N/A by acft M/N. C/W AD2001-06-17 by checking idle mixture. Due next at Tach: 290.6. C/W SB09-34-05 by upgrading G1000 software to version 563.14. C/W SB09-55-01 by inspection. No defects noted. C/W SB07-74-01R1 as Lycoming MSB 583A/584B. See engine logbook entry. Replaced nose gear tow bolt P/N AN5-51A. C/W AD84-26-01 by replacing induction air filter P/N P198281. Due next at Tach: 690.6. Ground run acft. Systems ops check normal & no leaks noted at this time. For further details see WO# 21375 on file this station. I certify that this acft has been inspected I/A/W an annual inspection & is approved for return to service.

For Air Care, Inc.
FAA Repair Station
AC0R030C

DATE

Reg #: N6330X
Model: Cessna 172S
Serial: 172S10776
Work Order #: 21415

AIR CARE INC.
Aviation Services

Hobbs: 255.9
Tach: 213.1
Total Time:
Date: 8/19/2009

SIGNATURE, ...TE TYPE ...BER

Replaced all tires. Installed main tires (Condor 6.00 – 6 6 PR) LH S/N 7289W00565, RH S/N 7311W00013. Replaced nose tire (Condor 5.00 – 5 6 PR) S/N 4144W00333. For further details see WO# 21415 on file this station.

For Air Care, Inc.
FAA Repair Station
AC0R030C

Reg #: N6330X
Model: Cessna 172S
Serial: 172S10776
Work Order #: 21423

AIR CARE INC.
Aviation Services

Hobbs: 255.9
Tach: 213.1
Total Time:
Date: 8/25/2009

Replaced pilot's door hold open spring P/N 0517023-1. Ops check normal. For further details see WO# 21423 on file this station.

For Air Care, Inc.
FAA Repair Station
AC0R030C

Adlog Airframe Pg. 1

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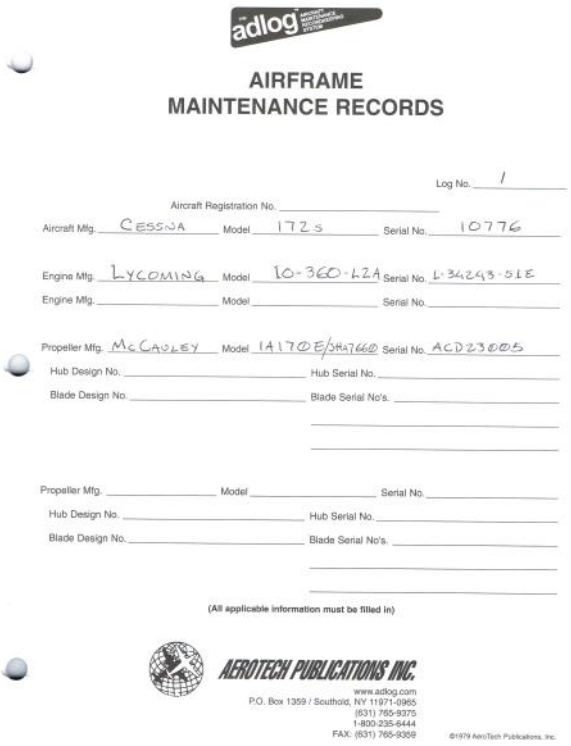

adlog

AIRFRAME
MAINTENANCE RECORDS

Log No. 1

Aircraft Registration No. _____

Aircraft Mfg. CESSNA Model 172S Serial No. 10776

Engine Mfg. LYCOMING Model IO-360-L2A Serial No. L-34243-51E

Engine Mfg. _____ Model _____ Serial No. _____

Propeller Mfg. McCAULEY Model 1A170E/JHA7660 Serial No. ACD23005

Hub Design No. _____ Hub Serial No. _____

Blade Design No. _____ Blade Serial No's. _____

Propeller Mfg. _____ Model _____ Serial No. _____

Hub Design No. _____ Hub Serial No. _____

Blade Design No. _____ Blade Serial No's. _____

(All applicable information must be filled in)

AEROTECH PUBLICATIONS INC.

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(631) 765-9375
1-800-235-6444
FAX: (631) 765-9359

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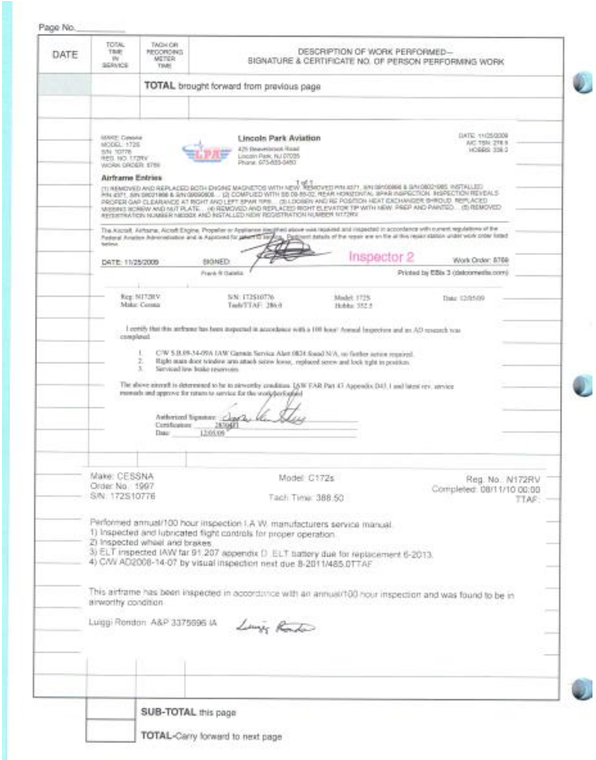
, Adlog Airframe Pg. 2

Airframe Index   Engine Index   Propeller Index   AD Index



Page No.________

DATE	TOTAL TIME IN SERVICE	TACH OR RECORDING METER TIME	DESCRIPTION OF WORK PERFORMED— SIGNATURE & CERTIFICATE NO. OF PERSON PERFORMING WORK
		TOTAL brought forward from previous page	

MAKE: Cessna
MODEL: 172S
S/N: 10776
REG. NO: 172RV
WORK ORDER: 8769

Lincoln Park Aviation
425 Beaverbrook Road
Lincoln Park, NJ 07035
Phone: 973-633-0450

DATE: 11/25/2009
A/C TSN: 278.9
HOBBS: 338.2

Airframe Entries

1 of 1

(1) REMOVED AND REPLACED BOTH ENGINE MAGNETOS WITH NEW. REMOVED P/N 4371, S/N 08100868 & S/N 0802-085. INSTALLED P/N 4371, S/N 08021868 & S/N 08090806 ... (2) COMPLIED WITH SB 08-55-02, REAR HORIZONTAL SPAR INSPECTION. INSPECTION REVEALS PROPER GAP CLEARANCE AT RIGHT AND LEFT SPAR TIPS ... (3) LOOSEN AND RE POSITION HEAT EXCHANGER SHROUD. REPLACED MISSING SCREW AND NUT PLATE ... (4) REMOVED AND REPLACED RIGHT ELEVATOR TIP WITH NEW. PREP AND PAINTED ... (5) REMOVED REGISTRATION NUMBER N6030X AND INSTALLED NEW REGISTRATION NUMBER N172RV

The Aircraft, Airframe, Aircraft 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 work order listed below.

DATE: 11/25/2009 SIGNED: Inspector 2 Work Order: 8769
Frank R Galella
Printed by EBis 3 (dalcomedia.com)

Reg: N172RV S/N: 172S10776 Model: 172S Date: 12/05/09
Make: Cessna Tach/TTAF: 286.9 Hobbs: 352.5

I certify that this airframe has been inspected in accordance with a 100 hour/ Annual Inspection and an AD research was completed.

1. C/W S.B.09-34-09A IAW Garmin Service Alert 0824 found N/A, no further action required.
2. Right main door window arm attach screw loose,, replaced screw and lock tight in position.
3. Serviced low brake reservoirs.

The above aircraft is determined to be in airworthy condition IAW FAR Part 43 Appendix D43.1 and latest rev. service manuals and approve for return to service for the work performed.

Authorized Signature: ________
Certification: 2830421
Date: 12/05/09

Make: CESSNA Model: C172s Reg. No.: N172RV
Order No.: 1997 Completed: 08/11/10 00:00
S/N: 172S10776 Tach Time: 388.50 TTAF:

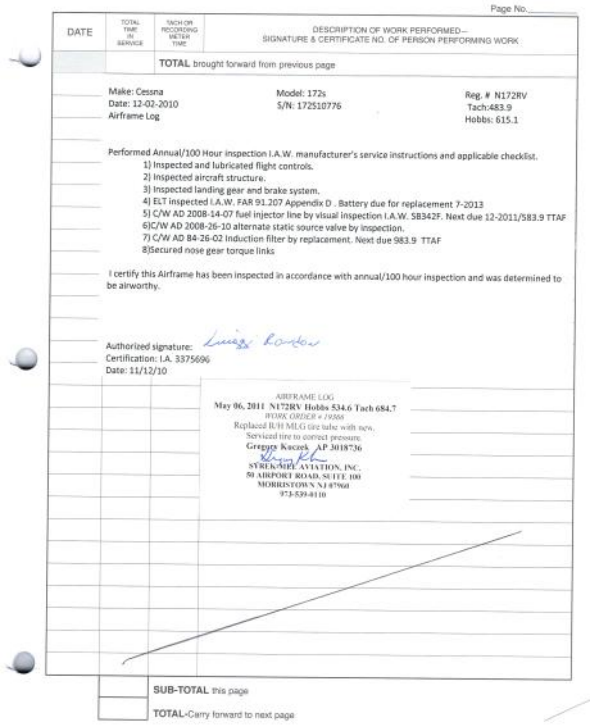
Performed annual/100 hour inspection I.A.W. manufacturers service manual.
1) Inspected and lubricated flight controls for proper operation.
2) Inspected wheel and brakes.
3) ELT inspected IAW far 91.207 appendix D. ELT battery due for replacement 6-2013.
4) C/W AD2008-14-07 by visual inspection next due 8-2011/485.0TTAF

This airframe has been inspected in accordance with an annual/100 hour inspection and was found to be in airworthy condition.

Luggi Rondon A&P 3375696 IA

SUB-TOTAL this page

TOTAL-Carry forward to next page



Page No.

DATE	TOTAL TIME IN SERVICE	TACH OR RECORDING METER TIME	DESCRIPTION OF WORK PERFORMED— SIGNATURE & CERTIFICATE NO. OF PERSON PERFORMING WORK
			TOTAL brought forward from previous page

Make: Cessna
Date: 12-02-2010
Airframe Log

Model: 172s
S/N: 172510776

Reg. # N172RV
Tach:483.9
Hobbs: 615.1

Performed Annual/100 Hour inspection I.A.W. manufacturer's service instructions and applicable checklist.

1) Inspected and lubricated flight controls.
2) Inspected aircraft structure.
3) Inspected landing gear and brake system.
4) ELT inspected I.A.W. FAR 91.207 Appendix D . Battery due for replacement 7-2013
5) C/W AD 2008-14-07 fuel injector line by visual inspection I.A.W. SB342F. Next due 12-2011/583.9 TTAF
6)C/W AD 2008-26-10 alternate static source valve by inspection.
7) C/W AD 84-26-02 Induction filter by replacement. Next due 983.9 TTAF
8)Secured nose gear torque links

I certify this Airframe has been inspected in accordance with annual/100 hour inspection and was determined to be airworthy.

Authorized signature: Luigi London
Certification: I.A. 3375696
Date: 11/12/10

AIRFRAME LOG
May 06, 2011 N172RV Hobbs 534.6 Tach 684.7
WORK ORDER # 19588
Replaced R/H MLG tire tube with new.
Serviced tire to correct pressure.
Gregory Kaczek AP.3018736
STREAMLINE AVIATION, INC.
50 AIRPORT ROAD, SUITE 100
MORRISTOWN NJ 07960
973-539-4110

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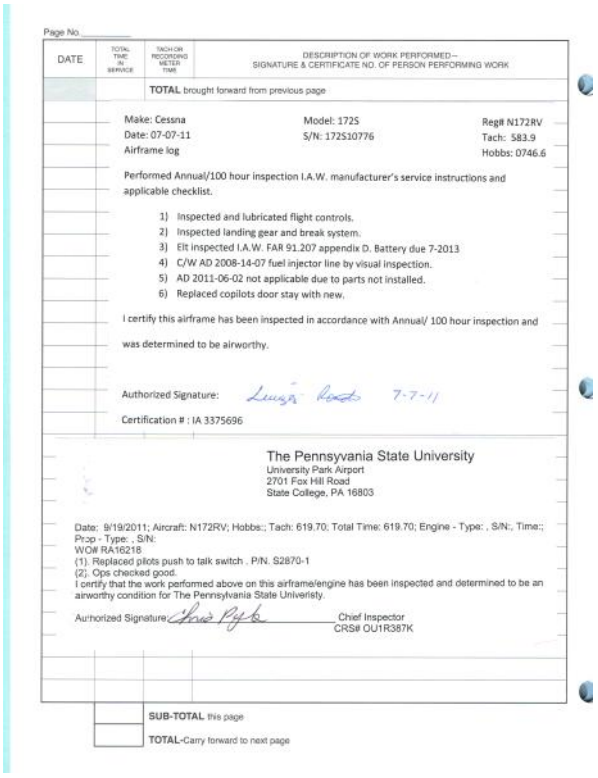

Page No. _____

DATE	TOTAL TIME IN SERVICE	TACH OR RECORDING METER TIME	DESCRIPTION OF WORK PERFORMED -- SIGNATURE & CERTIFICATE NO. OF PERSON PERFORMING WORK
			TOTAL brought forward from previous page

Make: Cessna
Model: 172S
Reg# N172RV
Date: 07-07-11
S/N: 172S10776
Tach: 583.9
Airframe log
Hobbs: 0746.6

Performed Annual/100 hour inspection I.A.W. manufacturer's service instructions and applicable checklist.

1) Inspected and lubricated flight controls.
2) Inspected landing gear and break system.
3) Elt inspected I.A.W. FAR 91.207 appendix D. Battery due 7-2013
4) C/W AD 2008-14-07 fuel injector line by visual inspection.
5) AD 2011-06-02 not applicable due to parts not installed.
6) Replaced copilots door stay with new.

I certify this airframe has been inspected in accordance with Annual/ 100 hour inspection and was determined to be airworthy.

Authorized Signature: Lewis Reed 7-7-11

Certification # : IA 3375696

The Pennsyvania State University
University Park Airport
2701 Fox Hill Road
State College, PA 16803

Date: 9/19/2011; Aircraft: N172RV; Hobbs:; Tach: 619.70; Total Time: 619.70; Engine - Type: , S/N:, Time:; Prop - Type: , S/N:
WO# RA16218
(1). Replaced pilots push to talk switch . P/N. S2870-1
(2). Ops checked good.
I certify that the work performed above on this airframe/engine has been inspected and determined to be an airworthy condition for The Pennsylvania State Univeristy.

Authorized Signature: Chief Inspector
CRS# OU1R387K

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DATE	TOTAL TIME IN SERVICE	TACH OR RECORDING METER TIME	DESCRIPTION OF WORK PERFORMED— SIGNATURE & CERTIFICATE NO. OF PERSON PERFORMING WORK
			TOTAL brought forward from previous page

N172RV S/N 172S10776 Tach: 637.8
Model: IO 360-L2A Date: 10/20/11 Hobbs: 816.4

Performed Oil change on this date. Drained oil removed and replaced oil filter. Cut filter open, no metal particles noted. Serviced Engine with 8qts. Exxon Elite 20W50. Performed engine run, no oil leaks noted.

A&P 3375696 IA
Luiggi Rondon

Fleet Air Services
75 Hangar Road
White Lake, New York 12786 *2/23/2012*

MAKE – Cessna MODEL – 172S REG – N172RV
S/N – 172S10776 Hobbs: 881.70 Tach: 684.10

Performed Annual/100 hour inspection this date in accordance with Cessna service instructions and applicable checklist. Opened all panels and inspected structure. Checked electrical system. Replaced main ship battery with new unit P/N G241. Removed, serviced and reinstalled standby battery. Inspected landing gear and brake systems. Cleaned and greased wheel bearings. Serviced NLG Strut. All Routine maintenance performed at this time. Tested ELT per Far 91-207 Appendix D, Battery next due June 2013. CW AD2008-14-07 Fuel injector line inspection. CW SB11-24-02 by installing new Avionics master switch P/N S3443-1-1.

I certify that this airframe has been inspected IAW an annual inspection and found to be in airworthy condition at this time.

John Nichols AP 131644050IA

Advanced Aircraft Services

Airframe Entries

Removed and replaced the Garmin standby batteries. S/N installed 12/108. Ops check good.

Maintenance Release

The aircraft and/or component(s) on N172RV was repaired and inspected in accordance with the current rules and regulations of Title 14 of the Code of Federal Regulations, was found Airworthy and was returned to service.

DATE: 10/15/2012 SIGNED: Work Order: 2016-10-2012

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DATE	TOTAL TIME IN SERVICE	TACH OR RECORDING METER TIME	DESCRIPTION OF WORK PERFORMED— SIGNATURE & CERTIFICATE NO. OF PERSON PERFORMING WORK
			TOTAL brought forward from previous page

MAKE: Cessna
MODEL: 172S
S/N: 172S10776
REG. NO: N112RV
WORK ORDER: 2853-12-2012

Advanced Aircraft Services
590 Airport Rd.
Lititz, PA 17543
Phone: 717-735-0179

DATE: 1/3/2013
A/C TSN: 1610.4
HOBBS: 783.1

Airframe Entries

Annual/100hr Airframe Inspection completed using FAR 43 Appendix D. Performed a light check. Lubed airframe. Checked cable tensions. Serviced the gascolator. ELT inspected in accordance with FAR 91.207(d). ELT batteries due 1/2016. All AD's current thru 2012-26. Ops check good ... AD 2012-22-01 Fuel Distribution, N/A per ASN ... C/W AD 2012-02-02 Fuel Return Line. No chafing found. No further work needed per the AD ... AD 2011-06-02 FADEC System, N/A Not installed ... AD 2006-26-10 Alt Static Source Valve, PCW ... AD 2006-10-02 Placard, N/A per ASN ... AD 2008-05-09 Crew Seats, N/A per ASN ... AD 2008-02-18 Pick Up Collar, N/A Not installed ... C/W AD 2001-06-17 Idle Mixture. The mixture rise is within the specs of the AD. No further work needed ... SB 11-24-02 Avionics Master Switch, Due at 1184.1 ... Removed and replaced the ELT battery ... Removed and replaced the fuel filler cap seals ... Removed and replaced the induction air filter ... Removed and replaced the muffler/header clamp hardware with stainless steel ... Removed and replaced the nose wheel bearings ... Removed and replaced all brake linings.

I certify that this AIRFRAME has been inspected IAW an Annual/100hr Inspection and was found to be in Airworthy condition.

DATE: 1/3/2013   SIGNED: [signature]   Work Order: 2853-12-2012

Richard [illegible] Barnhart II, IA [illegible]   Printed by Ellis 3 (datcomedia.com)

MAKE: Cessna
MODEL: 172S
S/N: 172S10776
REG. NO: N112RV
WORK ORDER: 3116-10-2013

ADVANCED Lancaster — **Advanced Lancaster LP**
590 Airport Rd
Lititz, PA 17543
Phone: 717-735-0179

DATE: 11/15/2013
A/C TSN: 1156.5
HOBBS: 886.0

Airframe Entries

Annual/100hr Airframe Inspection completed using FAR 43 Appendix D. Performed a light check. Lubed airframe. Checked cable tensions. Serviced the gascolator. ELT inspected in accordance with FAR 91.207(d). ELT batteries due 1/2018. All AD's current thru 2013-22. Ops check good ... AD 1984-26-01 Induction Air Filters, [illegible] Hobbs 1203.1 ... AD 2013-03-15 Aircraft Fuel Distribution, N/A by ASN ... Removed and replaced the L/H MLG tire and tube ... Removed and replaced a cut plate R/H MLG fairing ... Removed and replaced both fuel [illegible] ... Installed a [illegible] bolt on a exhaust clamp.

I certify that this AIRFRAME has been inspected IAW an Annual Inspection and was found to be in Airworthy condition.

DATE: 11/15/2013   SIGNED: [signature]   Work Order: 3116-10-2013

Richard [illegible] Barnhart II, IA [illegible]   Printed by Ellis 3 (datcomedia.com)

MAKE: Cessna
MODEL: 172S
S/N: 172S10776
REG. NO: N112RV
WORK ORDER: 3590-09-2014

ADVANCED Lancaster — **Advanced Lancaster LP**
590 Airport Rd
Lititz, PA 17543
Phone: 717-735-0179

DATE: 10/1/2014
A/C TSN: 968.2
HOBBS: 1298

Airframe Entries

Annual and 100hr Airframe Inspection completed using FAR 43 Appendix D. Performed a light check. Lubed airframe. Checked cable tensions. Serviced the gascolator. ELT inspected in accordance with FAR 91.207(d). ELT batteries due 1/2018. All AD's current thru 2014-19 ... C/W AD 2011-26-04 - Fuel injector lines. IAW Lycoming MSB 342F ... C/W AD 2001-06-17 - Idle mixture check ... Removed and replaced all spark plugs, installed Tempest fine wire plugs ... Removed and replaced both fuel cap gaskets ... Tightened and safetied the alternator belt ... Removed and replaced the oil filler tube gasket at crankcase. Retorqued all the oil return line hose clamps ... Removed and replaced all rocker box cover gaskets ... Removed and replaced 10 engine cowl [illegible] mounts ... Removed and replaced vacuum system filters ... Removed and replaced 7 flap and chafe plugs ... Drilled out and replaced several MLG wheel pant fasteners ... Removed and replace the R/H MLG tire and tube.

I certify that this AIRFRAME has been inspected IAW an Annual & 100hr Inspection and was found to be in Airworthy condition.

DATE: 10/1/2014   SIGNED: [signature]   Work Order: 3590-09-2014

Milan Jovanovic, IA: [illegible]   Printed by Ellis 3 (datcomedia.com)

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DATE	TOTAL TIME IN SERVICE	TACH OR RECORDING METER TIME	DESCRIPTION OF WORK PERFORMED— SIGNATURE & CERTIFICATE NO. OF PERSON PERFORMING WORK
			TOTAL brought forward from previous page

Private Flight Northeast
75 Hangar RD White Lake NY, 12786 (845) 583-4400
Cessna 172S N172RV S/N: 172S10776

03. September 2015 **Hobbs Time: 1443.1**

1. Completed Annual Inspection IAW Cessna Aircraft 100hr/Annual Inspection checklist and FAR 43 Appendix D.
2. Opened all inspection panels, removed cowling and wheel pants.
3. Lubricated airframe as required.
4. Checked control cables with proper tension found.
5. Cleaned, inspected and re-packed all wheel bearings as required.
6. Inspected landing gear with no defect noted.
7. Removed interior and all interior panels for inspection.
8. Visually inspected airframe and components with no defects noted.
9. Removed ELT inspected for condition and proper operation IAW FAR 91.207. Main battery expiration date 01/2018.
10. Complied with AD2011-26-04 Fuel injector lineshy inspection with no defect noted.
11. Complied with AD2001-06-17 Idle mixture check with proper condition noted.
12. Completed AD search and complied with all outstanding AD's as required. Reference AD list dated 09/15.
13. Closed all inspection panels. Installed wheel pants and cowls.

I certify this Aircraft was inspected in accordance with an Annual Inspection and found to be in an airworthy condition.
James T. Markey A&P31668721A

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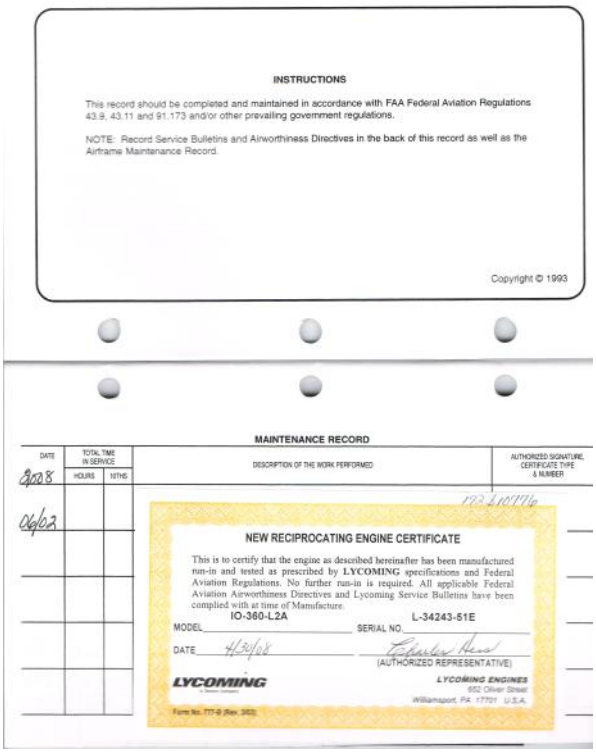

INSTRUCTIONS

This record should be completed and maintained in accordance with FAA Federal Aviation Regulations 43.9, 43.11 and 91.173 and/or other prevailing government regulations.

NOTE: Record Service Bulletins and Airworthiness Directives in the back of this record as well as the Airframe Maintenance Record.

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MAINTENANCE RECORD

DATE	TOTAL TIME IN SERVICE HOURS	TOTAL TIME IN SERVICE 10THS	DESCRIPTION OF THE WORK PERFORMED	AUTHORIZED SIGNATURE, CERTIFICATE TYPE & NUMBER
2008				
06/03				

NEW RECIPROCATING ENGINE CERTIFICATE

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

MODEL IO-360-L2A SERIAL NO. L-34243-51E

DATE 4/29/08 (AUTHORIZED REPRESENTATIVE)

LYCOMING

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

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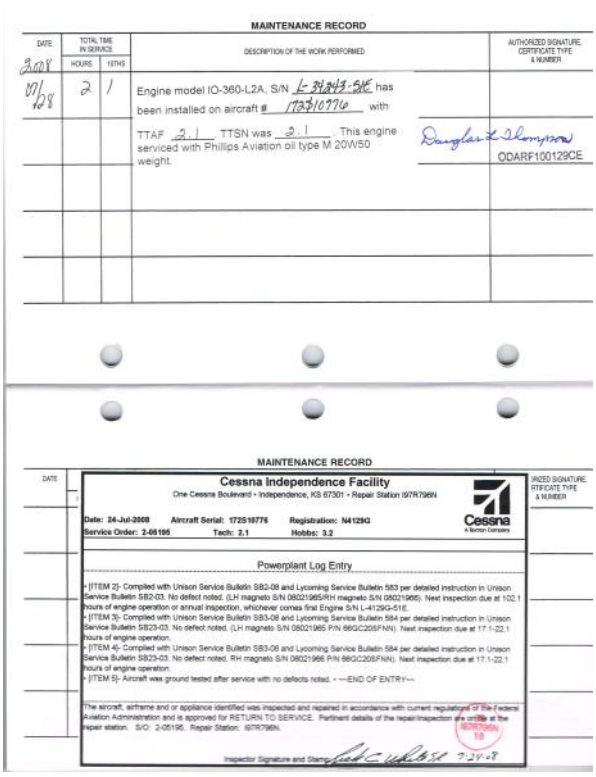

MAINTENANCE RECORD

DATE	TOTAL TIME IN SERVICE HOURS	TENTHS	DESCRIPTION OF THE WORK PERFORMED	AUTHORIZED SIGNATURE, CERTIFICATE TYPE & NUMBER
2008 07/28	2	1	Engine model IO-360-L2A, S/N L-31343-51E has been installed on aircraft # 172S10776 with TTAF 2.1 TTSN was 2.1 This engine serviced with Phillips Aviation oil type M 20W50 weight.	Douglas L Thompson ODARF100129CE

MAINTENANCE RECORD

DATE

Cessna Independence Facility
One Cessna Boulevard • Independence, KS 67301 • Repair Station I97R796N

Date: 24-Jul-2008 Aircraft Serial: 172S10776 Registration: N4129G
Service Order: 2-05195 Tach: 2.1 Hobbs: 3.2

Powerplant Log Entry

- [ITEM 2]- Complied with Unison Service Bulletin SB2-08 and Lycoming Service Bulletin 583 per detailed instruction in Unison Service Bulletin SB2-03. No defect noted. (LH magneto S/N 08021965/RH magneto S/N 08021965). Next inspection due at 102.1 hours of engine operation or annual inspection, whichever comes first Engine S/N L-4129G-51E.
- [ITEM 3]- Complied with Unison Service Bulletin SB3-08 and Lycoming Service Bulletin 584 per detailed instruction in Unison Service Bulletin SB23-03. No defect noted. (LH magneto S/N 08021965 P/N 66GC20SFNN). Next inspection due at 17.1-22.1 hours of engine operation.
- [ITEM 4]- Complied with Unison Service Bulletin SB3-08 and Lycoming Service Bulletin 584 per detailed instruction in Unison Service Bulletin SB23-03. No defect noted. RH magneto S/N 08021966 P/N 66GC20SFNN). Next inspection due at 17.1-22.1 hours of engine operation.
- [ITEM 5]- Aircraft was ground tested after service with no defects noted. • ~~END OF ENTRY~~

The aircraft, airframe and or appliance identified was inspected and repaired in accordance with current regulations of the Federal Aviation Administration and is approved for RETURN TO SERVICE. Pertinent details of the repair/inspection are on file at the repair station. S/O: 2-05195. Repair Station: I97R796N.

Inspector Signature and Stamp 7-24-08

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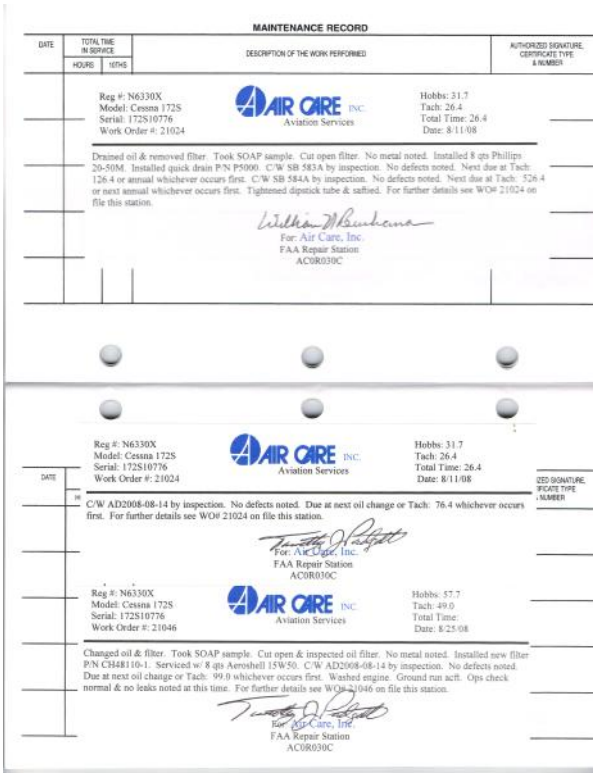

MAINTENANCE RECORD

DATE	TOTAL TIME IN SERVICE HOURS	TOTAL TIME IN SERVICE 10THS	DESCRIPTION OF THE WORK PERFORMED	AUTHORIZED SIGNATURE, CERTIFICATE TYPE & NUMBER

Reg #: N6330X
Model: Cessna 172S
Serial: 172S10776
Work Order #: 21024

AIR CARE INC.
Aviation Services

Hobbs: 31.7
Tach: 26.4
Total Time: 26.4
Date: 8/11/08

Drained oil & removed filter. Took SOAP sample. Cut open filter. No metal noted. Installed 8 qts Phillips 20-50M. Installed quick drain P/N P5000. C/W SB 583A by inspection. No defects noted. Next due at Tach: 126.4 or annual whichever occurs first. C/W SB 584A by inspection. No defects noted. Next due at Tach: 526.4 or next annual whichever occurs first. Tightened dipstick tube & saffied. For further details see WO# 21024 on file this station.

For: Air Care, Inc.
FAA Repair Station
AC0R030C

Reg #: N6330X
Model: Cessna 172S
Serial: 172S10776
Work Order #: 21024

AIR CARE INC.
Aviation Services

Hobbs: 31.7
Tach: 26.4
Total Time: 26.4
Date: 8/11/08

C/W AD2008-08-14 by inspection. No defects noted. Due at next oil change or Tach: 76.4 whichever occurs first. For further details see WO# 21024 on file this station.

For: Air Care, Inc.
FAA Repair Station
AC0R030C

Reg #: N6330X
Model: Cessna 172S
Serial: 172S10776
Work Order #: 21046

AIR CARE INC.
Aviation Services

Hobbs: 57.7
Tach: 49.0
Total Time:
Date: 8/25/08

Changed oil & filter. Took SOAP sample. Cut open & inspected oil filter. No metal noted. Installed new filter P/N CH48110-1. Serviced w/ 8 qts Aeroshell 15W50. C/W AD2008-08-14 by inspection. No defects noted. Due at next oil change or Tach: 99.0 whichever occurs first. Washed engine. Ground run acft. Ops check normal & no leaks noted at this time. For further details see WO# 21046 on file this station.

For: Air Care, Inc.
FAA Repair Station
AC0R030C

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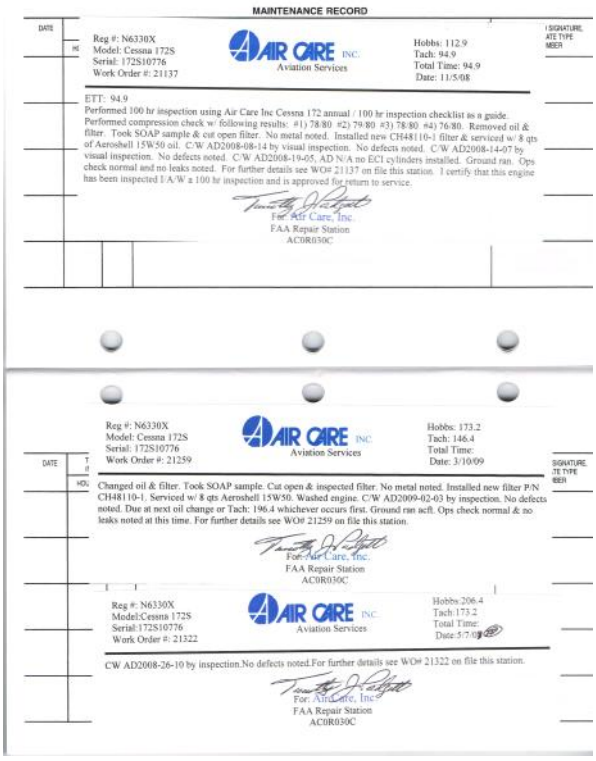

MAINTENANCE RECORD

DATE

Reg #: N6330X
Model: Cessna 172S
Serial: 172S10776
Work Order #: 21137

AIR CARE INC.
Aviation Services

Hobbs: 112.9
Tach: 94.9
Total Time: 94.9
Date: 11/5/08

ETT: 94.9
Performed 100 hr inspection using Air Care Inc Cessna 172 annual / 100 hr inspection checklist as a guide. Performed compression check w/ following results: #1) 78/80 #2) 79/80 #3) 78/80 #4) 76/80. Removed oil & filter. Took SOAP sample & cut open filter. No metal noted. Installed new CH48110-1 filter & serviced w/ 8 qts of Aeroshell 15W/50 oil. C/W AD2008-08-14 by visual inspection. No defects noted. C/W AD2008-14-07 by visual inspection. No defects noted. C/W AD2008-19-05, AD N/A no ECI cylinders installed. Ground ran. Ops check normal and no leaks noted. For further details see WO# 21137 on file this station. I certify that this engine has been inspected I A/W a 100 hr inspection and is approved for return to service.

For: Air Care, Inc.
FAA Repair Station
AC0R030C

Reg #: N6330X
Model: Cessna 172S
Serial: 172S10776
Work Order #: 21259

AIR CARE INC.
Aviation Services

Hobbs: 173.2
Tach: 146.4
Total Time:
Date: 3/10/09

Changed oil & filter. Took SOAP sample. Cut open & inspected filter. No metal noted. Installed new filter P/N CH48110-1. Serviced w/ 8 qts Aeroshell 15W/50. Washed engine. C/W AD2009-02-03 by inspection. No defects noted. Due at next oil change or Tach: 196.4 whichever occurs first. Ground ran acft. Ops check normal & no leaks noted at this time. For further details see WO# 21259 on file this station.

For: Air Care, Inc.
FAA Repair Station
AC0R030C

Reg #: N6330X
Model:Cessna 172S
Serial:172S10776
Work Order #: 21322

AIR CARE INC.
Aviation Services

Hobbs:206.4
Tach:173.2
Total Time:
Date:5/7/09

CW AD2008-26-10 by inspection.No defects noted.For further details see W/O# 21322 on file this station.

For: Air Care, Inc.
FAA Repair Station
AC0R030C

MAINTENANCE RECORD

DATE	TOTAL TIME IN SERVICE	DESCRIPTION OF THE WORK PERFORMED	AUTHORIZED SIGNATURE, CERTIFICATE TYPE & NUMBER

Reg #: N6330X
Model: Cessna 172S
Serial: 172S10776
Work Order #: 21375

AIR CARE INC. Aviation Services

Hobbs: 229.0
Tach: 190.6
Total Time: 190.6
Date: 6/29/2009

ETT: 190.6
Performed 100 hour inspection using Air Care Inc Cessna 172S 100 hour inspection checklist as a guide. Changed oil & filter. Took SOAP sample. Cut open & inspected filter. No metal noted. Installed new filter P/N CH48110-1. Serviced w/ 8 qts Aeroshell 15W50. Checked compression: #1) 74/80 #2) 73/80 #3) 76/80 #4) 74/80. C/W Lycoming MSB 583A/584B by inspection. No defects noted on LH mag. Replaced RH mag distributor block assy P/N K3822 (dated 2/2/09). Provides terminating action for MSB 584B (RH only) MSB 583A due at annual or Tach: 290.6 whichever occurs first. MSB 584B due at annual or Tach: 690.6 whichever occurs first. C/W AD2008-14-07 by inspection. No defects noted. Due next at Tach: 290.6. C/W AD2009-02-03 by inspection. Plug stamped "G". Provides terminating action. Recurring inspection N/A. Replaced spark plugs P/N REM38E. Washed engine. Ground run acft. Ops check normal & no leaks noted at this time. For further details see WO# 21375 on file this station. I certify that this engine has been inspected I/A/W a 100 hour inspection & is approved for return to service.

For Air Care, Inc.
FAA Repair Station
AC0R030C

MAINTENANCE RECORD

DATE	TOTAL TIME IN SERVICE HOURS	10THS	DESCRIPTION OF THE WORK PERFORMED	AUTHORIZED SIGNATURE, CERTIFICATE TYPE & NUMBER

Reg: N6330X
Make: Cessna

S/N: 172S10776
Tach/TTAF: 2[illegible].4

Model: 172S
Hobbs: 367.1

Date: 09/14/09

I certify that following work has been done I/A/W the latest M.M. and is in airworthy condition.

The following work was performed at this time,

1. Engine oil drained and filter removed and replaced with 7qts. Of 15-50W aero shell oil and CH48110-1 oil filter. Leak check good.

This engine is determined to be in airworthy condition and approved for return to service IAW latest manufactures service manual and FAA Regulations for this work performed.

Authorized Signature:
Certification: [illegible]
Date: 9-14-09

Record of Accessories and Major parts shipped with engine

Airframe Index Engine Index Propeller Index AD Index

LYCOMING
A Textron Company

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

RECORD of ACCESSORIES AND MAJOR PARTS SHIPPED with ENGINE

Model No: **IO-360-L2A** Serial No: **L-34243-51E** Engl: **ENPL-RT10437**

Order No: **AR316850** TC No: **1E10** Date: **4/30/2008**

Part Name	Part Number	Manufacturer	Serial	Setting
CARBURETOR				
INJECTOR	61J22088	PAM	70CU5008	2576536-2
LT ALTERNATOR RT ALTERNATOR				
MAGNETO LEFT MAGNETO RIGHT MAGNETO DUAL LASER IGN CONT	66GC20SFNN 66GC20SFNN	SLICK SLICK	08021965 08021966	
STARTER	31B23592	SKY-TEC	FN-1008105	
FUEL PUMP	LW-15473	LYC	1208 DC	
IGN HARNESS L IGN HARNESS R LASER IGN HARNESS	67P20409 67P20408	SLICK SLICK		
SPARK PLUG	1182-E7	Champion		
LT TURBOCHARGER RT TURBOCHARGER				
BYPASS VALVE				
DENSITY CONTR.				
PRESS. CONTR.				
AB PRESS REL.				
#1 INTERCOOLER #2 INTERCOOLER				

CRANKCASE MATCH NO. **K0870** CRANKSHAFT SERIAL NO. **V537951551**

All accessories listed are 0 (zero) time since New or 0 (zero) time since Overhaul.
All accessories are new unless part number is succeeded by –65 or –70.

Released: Inspector 59 Date: **4/30/2008** C of A Issued Date:

NOTE: Form to be used on all New, Overhauled, Rebuilt Engine Models.

Form ET-001 (REV 03/05)

Airworthiness Directive compliance list

Airframe Index Engine Index Propeller Index AD Index

LYCOMING A Textron Company

AIRWORTHINESS DIRECTIVE COMPLIANCE LIST

4/30/08

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

Engine Model No: **IO-360-L2A** Engine SN: **L-34243-51E**

AD NO. / SB	RV RV	Description / Method of Compliance	Next Due	Once	Rec	Code	Sign
2002-26-01 342	E	FUEL LINE AND SUPPORT CLAMP INSPECTION & INSTALL NEW LINES INST. WITH NEW CLAMP	100 HOURS		X	1	J
2004-10-14 475	C	CRANKSHAFT GEAR MODIFICATION AND ASSY PROCEDURES NEW P/N INSTALLED	N/A	X		1	J
2005-19-11 566		Crankshaft replacement Replace Crankshaft	N/A	X		1	J
2008-08-14 581		Inspection of Precision Airmotive Hex Plug in regulator cover Inspection per latest revision PRS-107	50 HOURS		X	1	J
71-05-02 327	C	INSPECTION OF CENTER MAIN BEARING NEW INSTALLED	N/A	X		1	J
71-11-02 328		REPLACEMENT OF EXH & INT HYD TAPPET PLUNGERS NEW P/N HYD TAPPETS INSTALLED	N/A	X		1	J
73-23-01 367	F	INSP FOR CRACKS IN PISTON PINS INST NEW PARTS	N/A	X		1	J
75-09-15 382		BENDIX FUEL INJ RS-43 INSP OF MOD OF FLOW DIVIDERS NEW P/N GASKET INSTALLED	N/A	X		1	J
94-06-09 517		INCOMPLETE INTERNAL GROUNDING ON MAG CAPACITORS NEW CONF. CAPACITORS INSTALLED	N/A	X		1	J
96-09-10 524		REPLACEMENT OF OIL PUMP IMPELLERS STEEL IMPELLERS INSTALLED	N/A	X		1	J
96-23-03 526	A	HIGH PRESSURE FUEL PUMP INSTALLED LW-16479 NEWLY MANUFACTURED PUMPS INST	N/A	X		1	J
97-15-11 527	C	RECALL OF PISTON P/N P/N LW-14877 NEW CONFIGURATION P/N INST	N/A	X		1	J
98-02-06 530	A	INSPECTION OF CRANKSHAFT ID FOR CORROSION MAG INSP./APPLY URETHABOND 104	N/A	X		1	J
2002-12-07 543	B	OIL FILTER CONVERTER PLATE GASKET REPLACEMENT NEW P/N CONVERTER PLATE INSTALLED	N/A	X		2	
2003-14-03 529	B	ROTARY FUEL PUMP TORQUE NEW PUMP WITH "M" SUFFIX INSTALLED	N/A		X	2	
2006-06-16 566 Sup 1		Replace crankshaft Crankshaft replaced	N/A	X		2	
2006-20-09 569	A	CRANKSHAFT REPLACEMENT REPLACE CRANKSHAFT	N/A	X		2	

Codes:
1 AD Applicable to Engine
2 AD Not Applicable to Engine
3 Field Compliance where applicable

FORM FAAR (REV. 11-98)

LYCOMING A Textron Company

AIRWORTHINESS DIRECTIVE COMPLIANCE LIST

4/30/08

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

Engine Model No: **IO-360-L2A** Engine SN: **L-34243-51E**

AD NO. / SB	RV RV	Description / Method of Compliance	Next Due	Once	Rec	Code	Sign
84-16-05 298	Inactive	AC FUEL PUMP OIL SEAL NEW CONF. FUEL PUMP INSTALLED	N/A	X		2	
86-06-03 302	A	REPLACEMENT OF CONNECTING ROD ASSY. NEW ROD CONFIGURATION	N/A	X		2	
86-20-04 307		OIL FILTER ADAPTER GASKET NEW CONF. GASKET INSTALLED	N/A	X		2	
87-22-06 306	4 B	REPLACEMENT OF BENDIX FUEL DIAPHRAGM ASSY NEW OR NEWLY O/H INSTALLED	N/A	X		2	
78-23-10 428		BENDIX FUEL INJ. BULLETIN RS-42 NEW P/N INSTALLED	N/A	X		2	
79-04-05 433	A	BENDIX FUEL INJ. BULLETIN RS-57 NEW P/N INSTALLED	N/A	X		2	
87-10-06 477	R1 A	INSPECTION AND REWORK OF LW-16790 ROCKER ARM ASSY NEW CONFIGURATION P/N INST.	N/A	X		2	
90-04-06 488	R1 A	PROPELLER GOVERNOR LINE SUPPORT NEW LINE W/STEEL CON. NUTS INS.	N/A	X		2	
92-12-05 501	B	LW-14877 PISTON PIN NEW PARTS INSTALLED	N/A	X		2	
93-14-15 N/A		INST OF PLCKRD DENOTING OPER. NOT TO EXCEED 33.8HG FIELD COMPLIANCE AFTER STC	N/A	X		2	
94-01-03 N/A	R2	DEFECTIVE IGN COILS AND ROTATING MAGNETS NEW CONFIGURATION PART INST.	N/A	X		2	
95-07-01 N/A		CONNECTING ROD BOLT FAILURE LYCOMING PART INSTALLED	N/A	X		2	
95-26-02 398		ENGINES OPERATED WITH LOW OCTANE FUEL ENGINE IS NEW OR HAS BEEN REBUILT AT MANUFACTURER	N/A	X		2	
98-17-11 N/A		CRANKSHAFT REPAIRED BY NELSON BALANCING SERVICE MAG/PARTICLE INSP OF CSHAFT	N/A	X		2	

Codes:
1 AD Applicable to Engine
2 AD Not Applicable to Engine
3 Field Compliance where applicable

FORM FAAR (REV. 11-98)

Airframe Index Engine Index Propeller Index AD Index

adlog

ENGINE MAINTENANCE RECORDS

Log No. ____

Aircraft Registration No. _____

Engine Manufacturer LYCOMING

Model IO-360-L2A

Serial No. L-34243-51E

Date installed on aircraft 7/28/08

Time Between Overhauls (TBO) 2000 Hours

If used on multi-engine aircraft:

☐ Right ☐ Left

☐ Front ☐ Rear

(All applicable information must be filled in)

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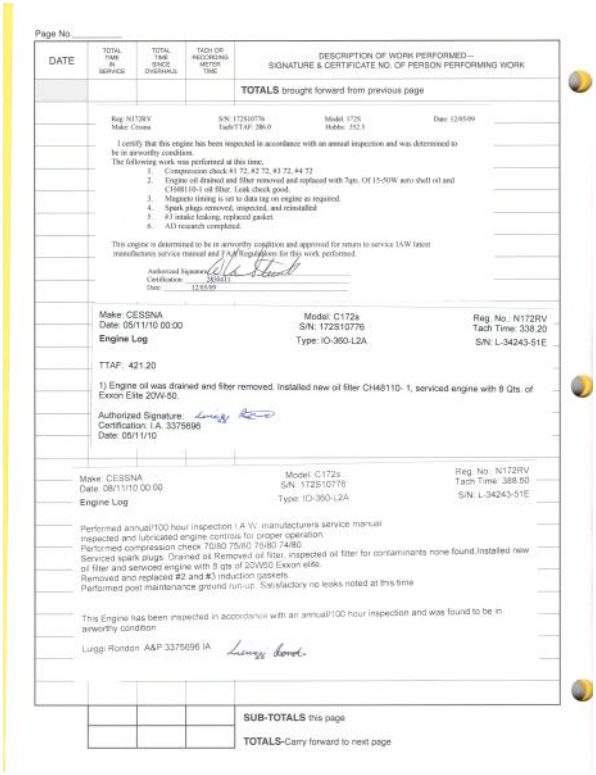


Page No.

DATE	TOTAL TIME IN SERVICE	TOTAL TIME SINCE OVERHAUL	TACH OR RECORDING METER TIME	DESCRIPTION OF WORK PERFORMED -- SIGNATURE & CERTIFICATE NO. OF PERSON PERFORMING WORK
				TOTALS brought forward from previous page

Reg: N172RV Make: Cessna S/N: 172S10776 Tach/TTAF: 386.0 Model: 172S Hobbs: 552.5 Date: 12/05/09

I certify that this engine has been inspected in accordance with an annual inspection and was determined to be in airworthy condition.
The following work was performed at this time.

1. Compression check #1 72, #2 72, #3 72, #4 72
2. Engine oil drained and filter removed and replaced with 7qts. Of 15-50W aero shell oil and CH48110-1 oil filter. Leak check good.
3. Magneto timing is set to data tag on engine as required.
4. Spark plugs removed, inspected, and reinstalled
5. #3 intake leaking, replaced gasket.
6. AD research completed.

This engine is determined to be in airworthy condition and approved for return to service IAW latest manufactures service manual and FAA Regulations for this work performed.

Authorized Signature: Certification: 2836811 Date: 12/05/09

Make: CESSNA
Date: 05/11/10 00:00
Engine Log

Model: C172s
S/N: 172S10776
Type: IO-360-L2A

Reg. No.: N172RV
Tach Time: 338.20
S/N: L-34243-51E

TTAF: 421.20

1) Engine oil was drained and filter removed. Installed new oil filter CH48110- 1, serviced engine with 8 Qts. of Exxon Elite 20W-50.

Authorized Signature:
Certification: I.A. 3375696
Date: 05/11/10

Make: CESSNA
Date: 08/11/10 00:00
Engine Log

Model: C172s
S/N: 172S10776
Type: IO-360-L2A

Reg. No.: N172RV
Tach Time: 388.50
S/N: L-34243-51E

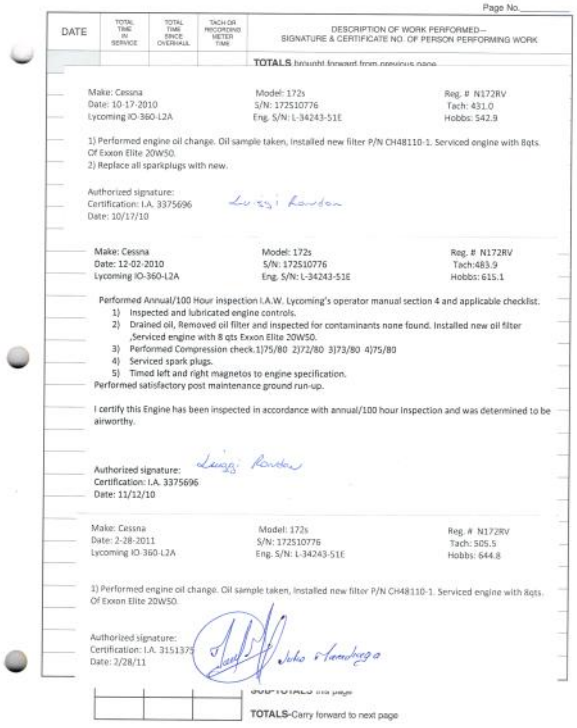
Performed annual/100 hour inspection I.A.W. manufacturers service manual
Inspected and lubricated engine controls for proper operation
Performed compression check 70/80 75/80 76/80 74/80
Serviced spark plugs. Drained oil Removed oil filter, inspected oil filter for contaminants none found.Installed new oil filter and serviced engine with 5 qts of 20W50 Exxon elite.
Removed and replaced #2 and #3 induction gaskets.
Performed post maintenance ground run-up. Satisfactory no leaks noted at this time

This Engine has been inspected in accordance with an annual/100 hour inspection and was found to be in airworthy condition

Luigi Rondon A&P 3375696 IA

			SUB-TOTALS this page
			TOTALS-Carry forward to next page

Airframe Index Engine Index Propeller Index AD Index



Page No.

DATE	TOTAL TIME IN SERVICE	TOTAL TIME SINCE OVERHAUL	TACH OR RECORDING METER TIME	DESCRIPTION OF WORK PERFORMED— SIGNATURE & CERTIFICATE NO. OF PERSON PERFORMING WORK

TOTALS brought forward from previous page

Make: Cessna
Date: 10-17-2010
Lycoming IO-360-L2A

Model: 172s
S/N: 172510776
Eng. S/N: L-34243-51E

Reg. # N172RV
Tach: 431.0
Hobbs: 542.9

1) Performed engine oil change. Oil sample taken, installed new filter P/N CH48110-1. Serviced engine with 8qts. Of Exxon Elite 20W50.
2) Replace all sparkplugs with new.

Authorized signature:
Certification: I.A. 3375696
Date: 10/17/10

Make: Cessna
Date: 12-02-2010
Lycoming IO-360-L2A

Model: 172s
S/N: 172510776
Eng. S/N: L-34243-51E

Reg. # N172RV
Tach:683.9
Hobbs: 615.1

Performed Annual/100 Hour inspection I.A.W. Lycoming's operator manual section 4 and applicable checklist.
1) Inspected and lubricated engine controls.
2) Drained oil, Removed oil filter and inspected for contaminants none found. Installed new oil filter ,Serviced engine with 8 qts Exxon Elite 20W50.
3) Performed Compression check.1)75/80 2)72/80 3)73/80 4)75/80
4) Serviced spark plugs.
5) Timed left and right magnetos to engine specification.

Performed satisfactory post maintenance ground run-up.

I certify this Engine has been inspected in accordance with annual/100 hour inspection and was determined to be airworthy.

Authorized signature:
Certification: I.A. 3375696
Date: 11/12/10

Make: Cessna
Date: 2-28-2011
Lycoming IO-360-L2A

Model: 172s
S/N: 172510776
Eng. S/N: L-34243-51E

Reg. # N172RV
Tach: 505.5
Hobbs: 644.8

1) Performed engine oil change. Oil sample taken, installed new filter P/N CH48110-1. Serviced engine with 8qts. Of Exxon Elite 20W50.

Authorized signature:
Certification: I.A. 3151375
Date: 2/28/11

SUB-TOTALS this page

TOTALS-Carry forward to next page

Page No.________

DATE	TOTAL TIME IN SERVICE	TOTAL TIME SINCE OVERHAUL	TACH OR RECORDING METER TIME	DESCRIPTION OF WORK PERFORMED— SIGNATURE & CERTIFICATE NO. OF PERSON PERFORMING WORK
				TOTALS brought forward from previous page

Make: Cessna   Model: 172S   Reg# N172RV
Date: 07-07-11   S/N: 172S10776   Tach: 583.9
Lycoming IO-360-L2A   Eng S/N: L-34243-51E   Hobbs: 0746.6

Performed Annual/ 100 hour inspection I.A.W. Lycoming's operators manual section 4 and applicable checklist.

1) Inspected and lubricated engine controls.
2) Drained oil, R&R oil filter, inspected filter for contamination non found, serviced engine with 8 qts. Exxon Elite 20W50.
3) Performed Compression check 1) 71/80 2)72/80 3)71/80 4) 74/80.

Performed Engine run up. Ops check; good, no leaks noted.

I certify that this engine has been inspected I.A.W. an annual/ 100 hour inspection and was determined to be airworthy.

Authorized signature: [signature] 7-7-11

Certification # : IA 3375696

Fleet Air Services
75 Hangar Road
White Lake, New York 12786   *2/23/2012*

MAKE – Lycoming   MODEL –IO-360-L2A   REG – N172RV
S/N – L-34243-51E   Hobbs: 881.70   Tach: 684.10

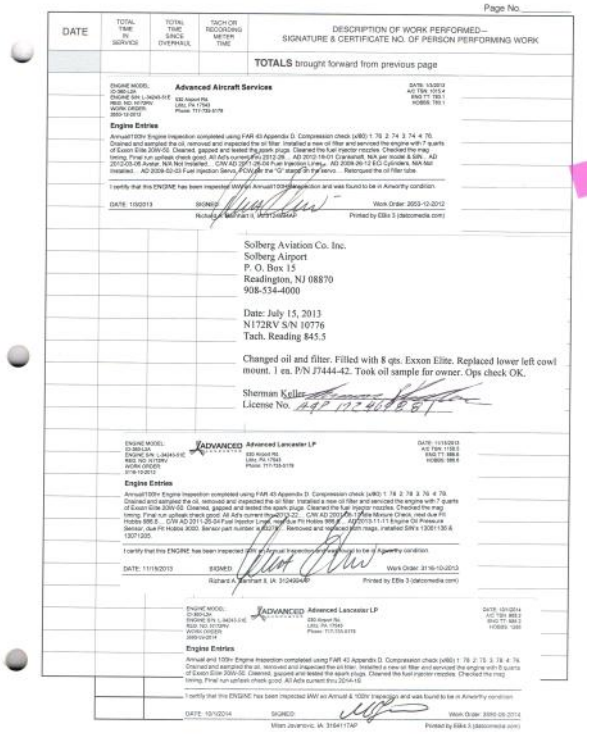
Performed Annual/100 hour inspection this date in accordance with manufactures service manual. Spark plugs cleaned, gapped and rotated. Drained oil, replaced filter and serviced with 8qts Exxon Elite 20W50 oil. Inspected exhaust. Lubed controls and checked function. Routine maintenance performed at this time. Compressions all over /80 #1 76, #2 74, #3 70, #4 76.

I certify that this Engine has been inspected IAW an annual inspection and found to be in airworthy condition at this time.

John Nichols [signature]   AP 1316440501A

Solberg Aviation Co. Inc.
Solberg Airport
P. O. Box 15
Readington, NJ 08870
908-534-4000
N172RV 08/21/2012 Tach. 740.8 Hobbs 957.1
Changed oil and filter. Filled with 8 quarts of Exxon Elite 20W50. Inspected oil filter and suction screen. No metal found.
Sherman Keller [signature]
License No. A&P 172464881

Airframe Index Engine Index Propeller Index AD Index



Page No.

DATE	TOTAL TIME IN SERVICE	TOTAL TIME SINCE OVERHAUL	TACH OR RECORDING METER TIME	DESCRIPTION OF WORK PERFORMED— SIGNATURE & CERTIFICATE NO. OF PERSON PERFORMING WORK

TOTALS brought forward from previous page

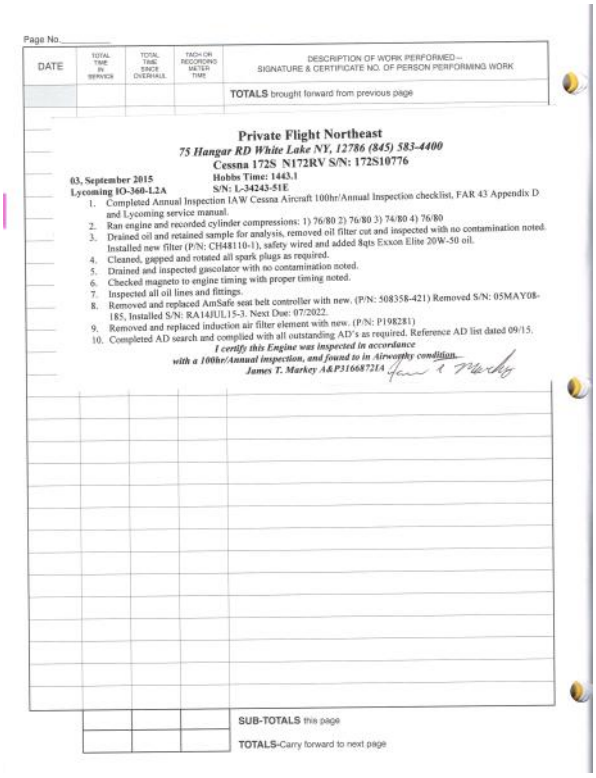
Solberg Aviation Co. Inc.
Solberg Airport
P. O. Box 15
Readington, NJ 08870
908-534-4000

Date: July 15, 2013
N172RV S/N 10776
Tach. Reading 845.5

Changed oil and filter. Filled with 8 qts. Exxon Elite. Replaced lower left cowl mount. 1 ea. P/N 37444-42. Took oil sample for owner. Ops check OK.

Sherman Keller
License No. [illegible]

Airframe Index Engine Index Propeller Index AD Index



Page No.

DATE	TOTAL TIME IN SERVICE	TOTAL TIME SINCE OVERHAUL	TACH OR RECORDING METER TIME	DESCRIPTION OF WORK PERFORMED— SIGNATURE & CERTIFICATE NO. OF PERSON PERFORMING WORK
				TOTALS brought forward from previous page

Private Flight Northeast
75 Hangar RD White Lake NY, 12786 (845) 583-4400
Cessna 172S N172RV S/N: 172S10776

03, September 2015 **Hobbs Time: 1443.1**
Lycoming IO-360-L2A **S/N: L-34243-51E**

1. Completed Annual Inspection IAW Cessna Aircraft 100hr/Annual Inspection checklist, FAR 43 Appendix D and Lycoming service manual.
2. Ran engine and recorded cylinder compressions: 1) 76/80 2) 76/80 3) 74/80 4) 76/80
3. Drained oil and retained sample for analysis, removed oil filter cut and inspected with no contamination noted. Installed new filter (P/N: CH48110-1), safety wired and added 8qts Exxon Elite 20W-50 oil.
4. Cleaned, gapped and rotated all spark plugs as required.
5. Drained and inspected gascolator with no contamination noted.
6. Checked magneto to engine timing with proper timing noted.
7. Inspected all oil lines and fittings.
8. Removed and replaced AmSafe seat belt controller with new. (P/N: 508358-421) Removed S/N: 05MAY08-185, Installed S/N: RA14JUL15-3. Next Due: 07/2022.
9. Removed and replaced induction air filter element with new. (P/N: P198281)
10. Completed AD search and complied with all outstanding AD's as required. Reference AD list dated 09/15.

I certify this Engine was inspected in accordance with a 100hr/Annual inspection, and found to in Airworthy condition.
James T. Markey A&P3166872IA

			SUB-TOTALS this page
			TOTALS-Carry forward to next page

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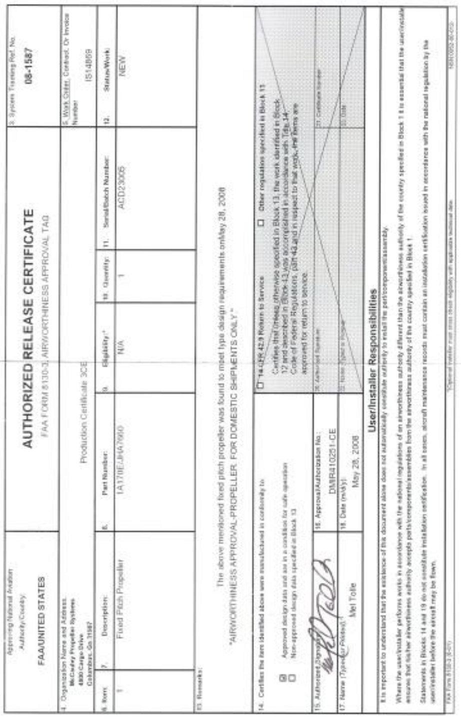


1. Approving National Aviation Authority/Country: FAA/UNITED STATES	2. AUTHORIZED RELEASE CERTIFICATE FAA FORM 8130-3, AIRWORTHINESS APPROVAL TAG	3. System Tracking Ref. No. 08-1587
4. Organization Name and Address: McCauley Propeller Systems 4800 Cargo Drive Columbus, Ga 31907	Production Certificate 3CE	5. Work Order, Contract, Or Invoice Number: IS14869

6. Item:	7. Description:	8. Part Number:	9. Eligibility:*	10. Quantity:	11. Serial/Batch Number:	12. Status/Work:
1	Fixed Pitch Propeller	1A170E/JHA7660	N/A	1	ACD23005	NEW

13. Remarks:

The above mentioned fixed pitch propeller was found to meet type design requirements onMay 28, 2008
"AIRWORTHINESS APPROVAL-PROPELLER. FOR DOMESTIC SHIPMENTS ONLY."

14. Certifies the item identified above were manufactured in conformity to:

- [x] Approved design data and are in a condition for safe operation
- [ ] Non-approved design data specified in Block 13

15. Authorized Signature: [signature]
16. Approval/Authorization No.: DMIR410251-CE
17. Name (Typed or Printed): Mel Tolle
18. Date (m/d/y): May 28, 2008

19. [ ] 14 CFR 43.9 Return to Service [ ] Other regulation specified in Block 13

Certifies that unless otherwise specified in Block 13, the work identified in Block 12 and described in Block 13 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.

20. Authorized Signature: 21. Certificate Number:
22. Name (Typed or Printed): 23. Date:

User/Installer Responsibilities

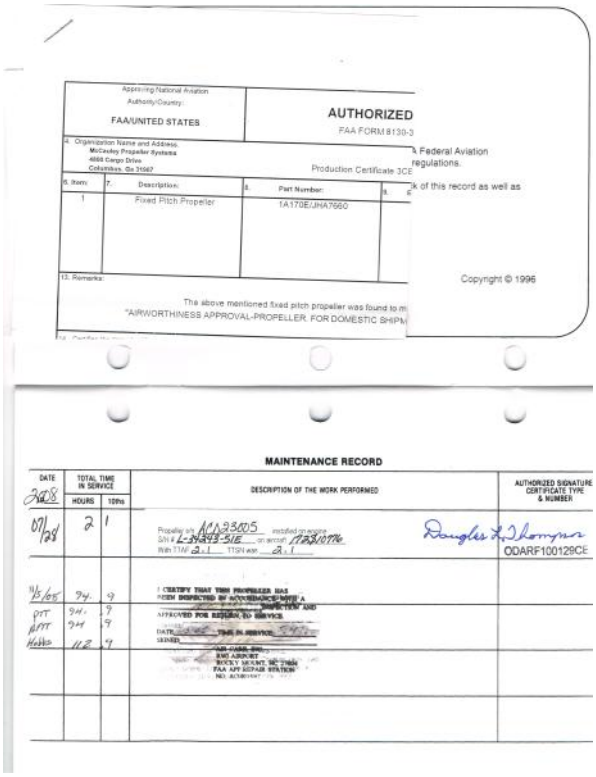
It is important to understand that the existence of this document alone does not automatically constitute authority to install the part/component/assembly.

Where the user/installer performs works 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 parts/components/assemblies from the airworthiness authority of the country specified in Block 1.

Statements in Blocks 14 and 19 do not constitute installation certification. In all cases, aircraft maintenance records must contain an installation certification issued in accordance with the national regulation by the user/installer before the aircraft may be flown.

FAA Form 8130-3 (6-01) *Optional installer must cross check eligibility with applicable technical data. NSN 0052-00-012-

Airframe Index Engine Index Propeller Index AD Index



Appointing National Aviation Authority/Country:
FAA/UNITED STATES

AUTHORIZED
FAA FORM 8130-3

4. Organization Name and Address:
McCauley Propeller Systems
4966 Cargo Drive
Columbus, Ga 31907

Production Certificate 3CE

A Federal Aviation regulations.

6. Item:	7. Description:	8. Part Number:	9.
1	Fixed Pitch Propeller	1A170E/JHA7660	

k of this record as well as

12. Remarks:

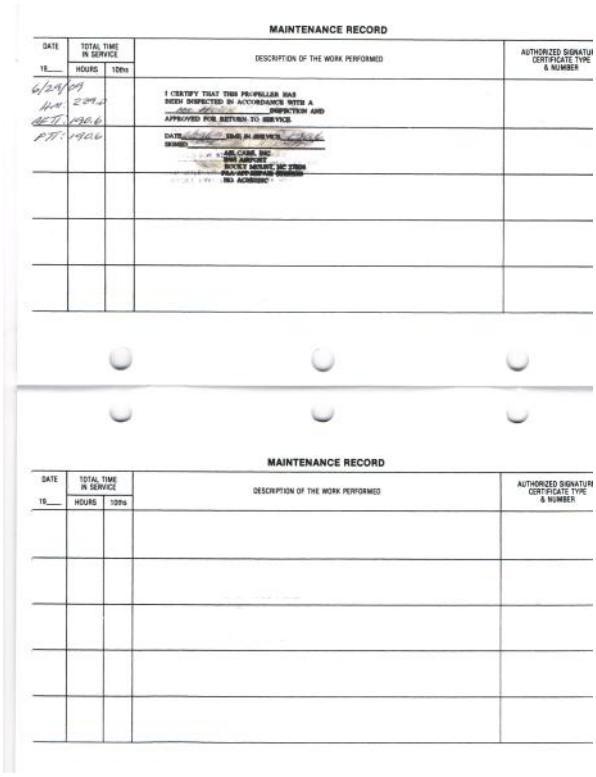
The above mentioned fixed pitch propeller was found to m
"AIRWORTHINESS APPROVAL-PROPELLER. FOR DOMESTIC SHIPM

Copyright © 1996

MAINTENANCE RECORD

DATE	TOTAL TIME IN SERVICE HOURS	TOTAL TIME IN SERVICE 100ths	DESCRIPTION OF THE WORK PERFORMED	AUTHORIZED SIGNATURE CERTIFICATE TYPE & NUMBER
07/28	2	1	Propeller s/n MA23805 installed on engine S/N # L-34849-51E on aircraft N330TK With TTAF 2.1 TTSN was 2.1	Douglas L. Thompson ODARF100129CE
11/15/05	94.	9	I CERTIFY THAT THIS PROPELLER HAS BEEN INSPECTED BY ACCORDANCE WITH A [illegible] AND APPROVED FOR RETURN TO SERVICE.	
DIT	94.	9		
DIT	94.	9	DATE [illegible] THIS IN SERVICE	
Hobbs	112.	9	SIGNED [illegible] [illegible] AIRCRAFT ROCKY MOUNT, NC 27804 FAA APP REPAIR STATION NO. A[illegible]	

Airframe Index Engine Index Propeller Index AD Index



MAINTENANCE RECORD

DATE 19__	TOTAL TIME IN SERVICE HOURS	10ths	DESCRIPTION OF THE WORK PERFORMED	AUTHORIZED SIGNATURE CERTIFICATE TYPE & NUMBER
6/24/09				
HH 2394			I CERTIFY THAT THIS PROPELLER HAS BEEN INSPECTED IN ACCORDANCE WITH A [illegible] INSPECTION AND APPROVED FOR RETURN TO SERVICE.	
SFI: 1986			DATE [illegible] TIME IN SERVICE [illegible] SIGNED [illegible] AIR CASE, INC [illegible]	
PTT: 1986				

MAINTENANCE RECORD

DATE 19__	TOTAL TIME IN SERVICE HOURS	10ths	DESCRIPTION OF THE WORK PERFORMED	AUTHORIZED SIGNATURE CERTIFICATE TYPE & NUMBER

PROPELLER MAINTENANCE RECORDS

Log No. 1

Aircraft Registration No. _____

Propeller Manufacturer McCAULEY

Hub Model _____

Blade Design No. ACD 23005

Hub Serial No. _____

Blade Serial No's.

1. _____
2. _____
3. _____
4. _____

Pitch Range:
High _____ Low _____
Feather _____ Reverse _____

Governor Manufacturer _____
Model No. _____
Serial No. _____

Date installed on aircraft _____
Time Between Overhauls (TBO) _____ Hours

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

(All applicable information must be filled in)

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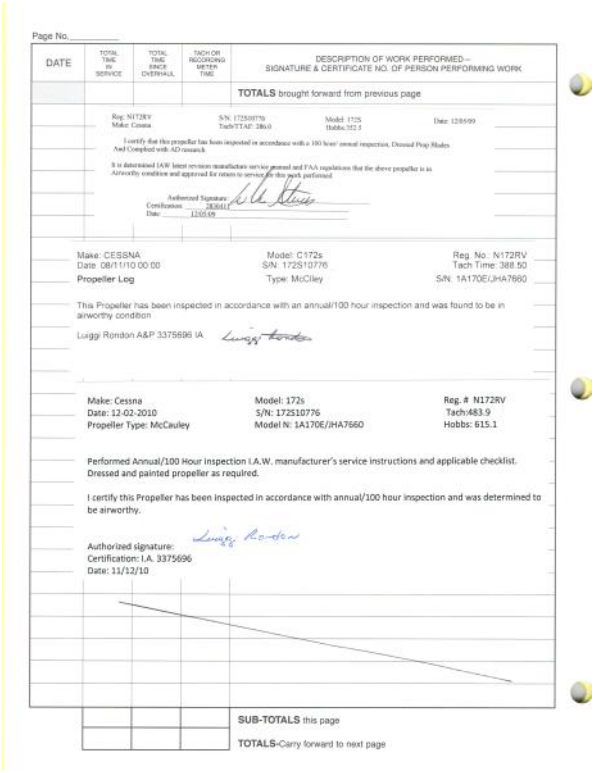
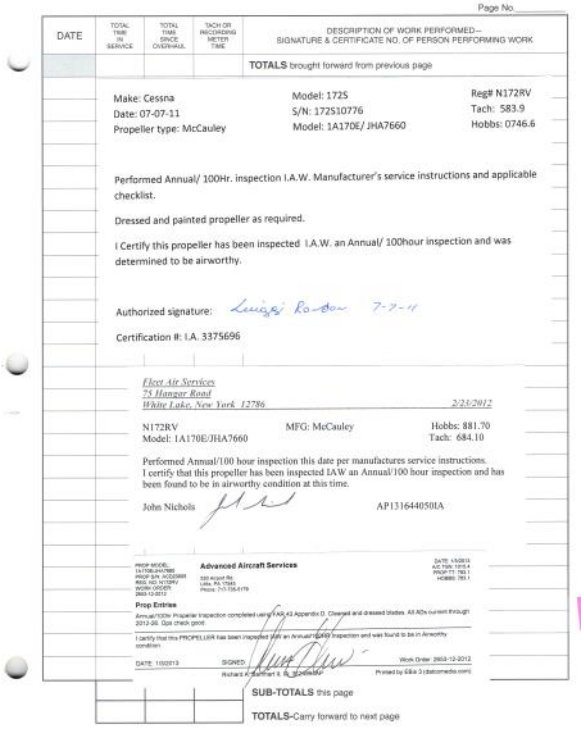


Page No.

DATE	TOTAL TIME IN SERVICE	TOTAL TIME SINCE OVERHAUL	TACH OR RECORDING METER TIME	DESCRIPTION OF WORK PERFORMED— SIGNATURE & CERTIFICATE NO. OF PERSON PERFORMING WORK
				TOTALS brought forward from previous page
				Reg: N172RV Make: Cessna S/N: 172S10776 Tach/TTAF: 386.0 Model: 172S Hobbs:352.5 Date: 12/05/09 I certify that this propeller has been inspected in accordance with a 100 hour/ annual inspection, Dressed Prop Blades And Complied with AD research. It is determined IAW latest revision manufacture service manual and FAA regulations that the above propeller is in Airworthy condition and approved for return to service for this work performed Authorized Signature: Certification: 2836417 Date: 12/05/09
				Make: CESSNA Model: C172s Reg. No.: N172RV Date: 08/11/10 00:00 S/N: 172S10776 Tach Time: 388.50 Propeller Log Type: McCliey S/N: 1A170E/JHA7660 This Propeller has been inspected in accordance with an annual/100 hour inspection and was found to be in airworthy condition Luggi Rondon A&P 3375696 IA
				Make: Cessna Model: 172s Reg.# N172RV Date: 12-02-2010 S/N: 172S10776 Tach:483.9 Propeller Type: McCauley Model N: 1A170E/JHA7660 Hobbs: 615.1 Performed Annual/100 Hour inspection I.A.W. manufacturer's service instructions and applicable checklist. Dressed and painted propeller as required. I certify this Propeller has been inspected in accordance with annual/100 hour inspection and was determined to be airworthy. Authorized signature: Certification: I.A. 3375696 Date: 11/12/10
				SUB-TOTALS this page
				TOTALS-Carry forward to next page



Page No.

DATE	TOTAL TIME IN SERVICE	TOTAL TIME SINCE OVERHAUL	TACH OR RECORDING METER TIME	DESCRIPTION OF WORK PERFORMED— SIGNATURE & CERTIFICATE NO. OF PERSON PERFORMING WORK
				TOTALS brought forward from previous page

Make: Cessna
Date: 07-07-11
Propeller type: McCauley

Model: 172S
S/N: 172S10776
Model: 1A170E/ JHA7660

Reg# N172RV
Tach: 583.9
Hobbs: 0746.6

Performed Annual/ 100Hr. inspection I.A.W. Manufacturer's service instructions and applicable checklist.

Dressed and painted propeller as required.

I Certify this propeller has been inspected I.A.W. an Annual/ 100hour inspection and was determined to be airworthy.

Authorized signature: Luigi Rondon 7-7-11

Certification #: I.A. 3375696

Fleet Air Services
75 Hangar Road
White Lake, New York 12786 *2/23/2012*

N172RV
Model: 1A170E/JHA7660

MFG: McCauley

Hobbs: 881.70
Tach: 684.10

Performed Annual/100 hour inspection this date per manufactures service instructions.
I certify that this propeller has been inspected IAW an Annual/100 hour inspection and has been found to be in airworthy condition at this time.

John Nichols AP13164050IA

Advanced Aircraft Services

Prop Entries

I certify that this PROPELLER has been inspected with an Annual/100hr inspection and was found to be in Airworthy condition.

DATE: 1/3/2013 SIGNED

Work Order: 2803-12-2012

SUB-TOTALS this page

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Airframe Index Engine Index Propeller Index AD Index

Page No.__________

DATE	TOTAL TIME IN SERVICE	TOTAL TIME SINCE OVERHAUL	TACH OR RECORDING METER TIME	DESCRIPTION OF WORK PERFORMED— SIGNATURE & CERTIFICATE NO. OF PERSON PERFORMING WORK
				TOTALS brought forward from previous page

PROP MODEL [illegible] PROP S/N: ACD23005 REG. NO. N172RV WORK ORDER 3116-10-2013

ADVANCED Advanced Lancaster LP [illegible] Lititz, PA 17543 Phone: 717-[illegible]

DATE: 11/15/2013 A/C TSN: [illegible] PROP TT: [illegible] HOBBS: [illegible]

Prop Entries

Annual/100hr Propeller inspection completed using FAR 43 Appendix D. Cleaned and dressed blades. All ADs current through 2013-22. Ops check good.

I certify that this PROPELLER has been inspected IAW an Annual Inspection and was found to be in Airworthy condition.

DATE: 11/15/2013 SIGNED [signature] Work Order: 3116-10-2013

Richard A. Barnhart II, IA: 3124[illegible] Printed by EBis 3 (datcomedia.com)

PROP MODEL 1A170E/JHA7660 PROP S/N: ACD23005 REG. NO. N172RV WORK ORDER 3890-09-2014

ADVANCED Advanced Lancaster LP [illegible] Lititz, PA 17543 Phone: 717-[illegible]

DATE: 10/1/2014 A/C TSN: [illegible] PROP TT: [illegible] HOBBS: [illegible]

Prop Entries

Annual and 100hr Propeller inspection completed using FAR 43 Appendix D. Cleaned and dressed blades. All ADs current through 2014-19.

I certify that this PROPELLER has been inspected IAW an Annual & 100hr inspection and was found to be in Airworthy condition.

DATE: 10/1/2014 SIGNED [signature] Work Order: 3890-09-2014

Milan Josinovic IA: 3[illegible]TAP Printed by EBis 3 (datcomedia.com)

Private Flight Northeast

75 Hangar RD White Lake NY, 12786 (845) 583-4400

Cessna 172S N172RV S/N: 172S10776

03, September 2015 **Hobbs Time: 1443.1**

McCauley 1A170E/JHA7660 **S/N: ACD23005**

1. Completed Annual Inspection IAW Cirrus Design 100hr/Annual Inspection checklist.
2. Lubricated propeller as required.
3. Dressed blades as required.
4. Completed AD search and complied with all outstanding AD's as required. Reference AD list dated 09/15.

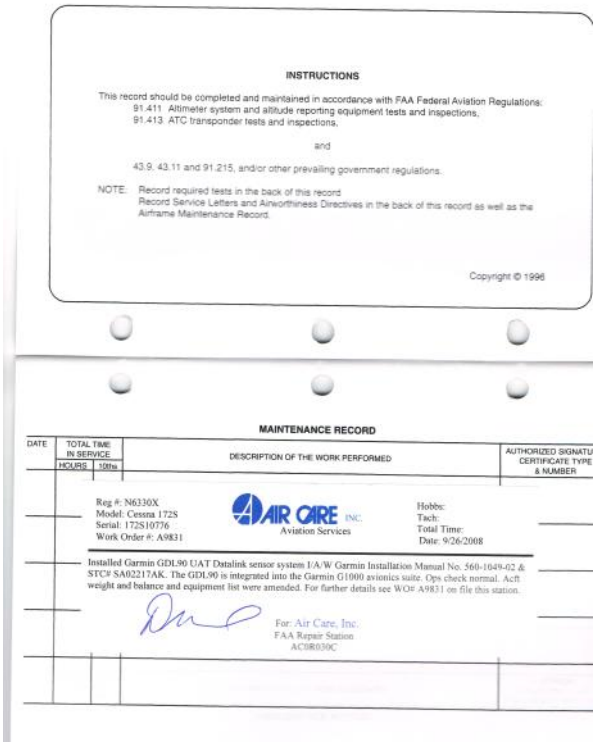
I certify this Propeller was inspected in accordance with an Annual Inspection and found to be in an airworthy condition.

James T. Markey A&P3166872IA [signature]

SUB-TOTALS this page

TOTALS-Carry forward to next page

Airframe Index Engine Index Propeller Index AD Index



INSTRUCTIONS

This record should be completed and maintained in accordance with FAA Federal Aviation Regulations:
91.411. Altimeter system and altitude reporting equipment tests and inspections,
91.413. ATC transponder tests and inspections,

and

43.9, 43.11 and 91.215, and/or other prevailing government regulations.

NOTE: Record required tests in the back of this record.
Record Service Letters and Airworthiness Directives in the back of this record as well as the Airframe Maintenance Record.

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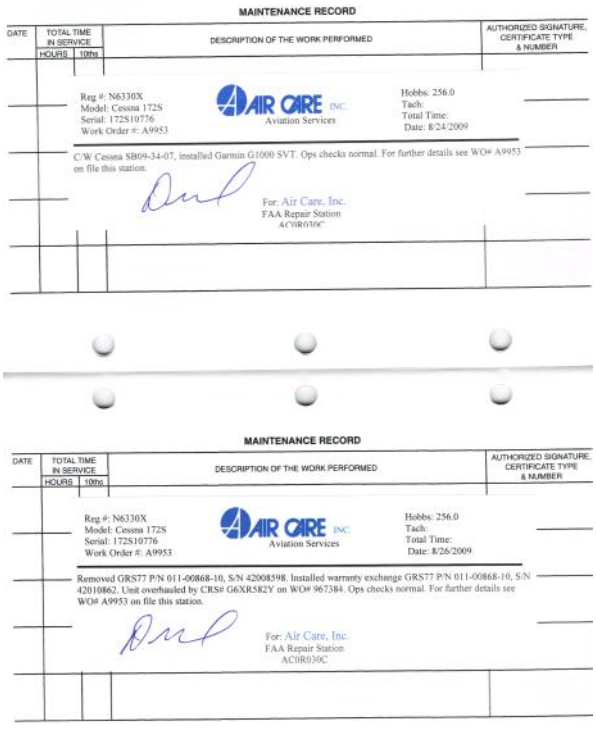
MAINTENANCE RECORD

DATE	TOTAL TIME IN SERVICE HOURS	TOTAL TIME IN SERVICE 10ths	DESCRIPTION OF THE WORK PERFORMED	AUTHORIZED SIGNATU CERTIFICATE TYPE & NUMBER
			Reg #: N6330X Model: Cessna 172S Serial: 172S10776 Work Order #: A9831 AIR CARE INC. Aviation Services Hobbs: Tach: Total Time: Date: 9/26/2008 Installed Garmin GDL90 UAT Datalink sensor system I/A/W Garmin Installation Manual No. 560-1049-02 & STC# SA02217AK. The GDL90 is integrated into the Garmin G1000 avionics suite. Ops check normal. Acft weight and balance and equipment list were amended. For further details see WO# A9831 on file this station. For: Air Care, Inc. FAA Repair Station AC0R030C	

Airframe Index Engine Index Propeller Index AD Index



MAINTENANCE RECORD

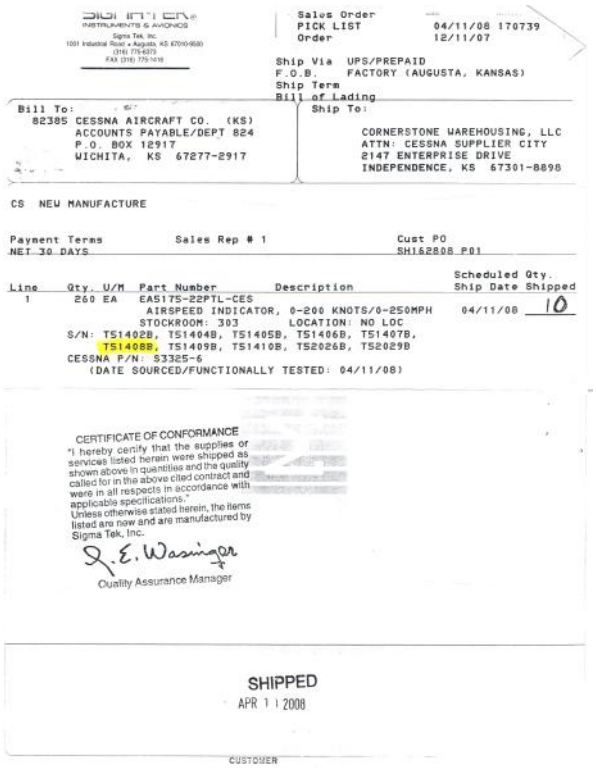
DATE	TOTAL TIME IN SERVICE HOURS	TOTAL TIME IN SERVICE 10ths	DESCRIPTION OF THE WORK PERFORMED	AUTHORIZED SIGNATURE, CERTIFICATE TYPE & NUMBER
			Reg #: N6330X Model: Cessna 172S Serial: 172S10776 Work Order #: A9953 AIR CARE INC. Aviation Services Hobbs: 256.0 Tach: Total Time: Date: 8/24/2009	
			C/W Cessna SB09-34-07, installed Garmin G1000 SVT. Ops checks normal. For further details see WO# A9953 on file this station. For: Air Care, Inc. FAA Repair Station AC0R030C	

MAINTENANCE RECORD

DATE	TOTAL TIME IN SERVICE HOURS	TOTAL TIME IN SERVICE 10ths	DESCRIPTION OF THE WORK PERFORMED	AUTHORIZED SIGNATURE, CERTIFICATE TYPE & NUMBER
			Reg #: N6330X Model: Cessna 172S Serial: 172S10776 Work Order #: A9953 AIR CARE INC. Aviation Services Hobbs: 256.0 Tach: Total Time: Date: 8/26/2009	
			Removed GRS77 P/N 011-00868-10, S/N 42008598. Installed warranty exchange GRS77 P/N 011-00868-10, S/N 42010862. Unit overhauled by CRS# G6XR582Y on WO# 967384. Ops checks normal. For further details see WO# A9953 on file this station. For: Air Care, Inc. FAA Repair Station AC0R030C	

Original Airspeed Indicator

Airframe Index Engine Index Propeller Index AD Index



Sigma Tek, Inc.
1001 Industrial Road • Augusta, KS 67010-9680
(316) 775-6370
FAX (316) 775-1018

Sales Order 04/11/08 170739
PICK LIST
Order 12/11/07

Ship Via UPS/PREPAID
F.O.B. FACTORY (AUGUSTA, KANSAS)
Ship Term
Bill of Lading

Bill To:
82385 CESSNA AIRCRAFT CO. (KS)
ACCOUNTS PAYABLE/DEPT 824
P.O. BOX 12917
WICHITA, KS 67277-2917

Ship To:
CORNERSTONE WAREHOUSING, LLC
ATTN: CESSNA SUPPLIER CITY
2147 ENTERPRISE DRIVE
INDEPENDENCE, KS 67301-8898

CS NEW MANUFACTURE

Payment Terms: NET 30 DAYS
Sales Rep # 1
Cust PO: SH162808 P01

Line	Qty.	U/M	Part Number	Description	Scheduled Ship Date	Qty. Shipped
1	260	EA	EA5175-22PTL-CES	AIRSPEED INDICATOR, 0-200 KNOTS/0-250MPH	04/11/08	10

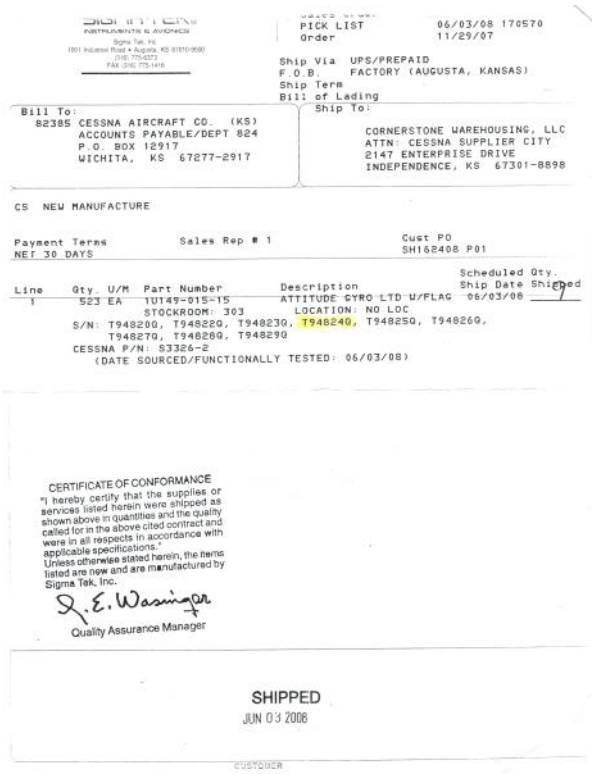
STOCKROOM: 303 LOCATION: NO LOC
S/N: TS1402B, TS1404B, TS1405B, TS1406B, TS1407B, TS1408B, TS1409B, TS1410B, TS2026B, TS2029B
CESSNA P/N: S3325-6
(DATE SOURCED/FUNCTIONALLY TESTED: 04/11/08)

CERTIFICATE OF CONFORMANCE
"I hereby certify that the supplies or services listed herein were shipped as shown above in quantities and the quality called for in the above cited contract and were in all respects in accordance with applicable specifications."
Unless otherwise stated herein, the items listed are new and are manufactured by Sigma Tek, Inc.
R. E. Wassinger
Quality Assurance Manager

SHIPPED
APR 11 2008
CUSTOMER

Original Attitude Gyro LTD W/Flag

Airframe Index Engine Index Propeller Index AD Index



PICK LIST 06/03/08 170570
Order 11/29/07

Ship Via UPS/PREPAID
F.O.B. FACTORY (AUGUSTA, KANSAS)
Ship Term
Bill of Lading

Bill To:
82385 CESSNA AIRCRAFT CO. (KS)
ACCOUNTS PAYABLE/DEPT 824
P.O. BOX 12917
WICHITA, KS 67277-2917

Ship To:
CORNERSTONE WAREHOUSING, LLC
ATTN: CESSNA SUPPLIER CITY
2147 ENTERPRISE DRIVE
INDEPENDENCE, KS 67301-8898

CS NEW MANUFACTURE

Payment Terms: NET 30 DAYS
Sales Rep # 1
Cust PO: SH162408 P01

Line	Qty.	U/M	Part Number	Description	Scheduled Ship Date	Qty. Shipped
1	523	EA	10149-015-15	ATTITUDE GYRO LTD W/FLAG	06/03/08	1

STOCKROOM: 303 LOCATION: NO LOC
S/N: T948200, T948220, T948230, T948240, T948250, T948260, T948270, T948280, T948290
CESSNA P/N: S3326-2
(DATE SOURCED/FUNCTIONALLY TESTED: 06/03/08)

CERTIFICATE OF CONFORMANCE
"I hereby certify that the supplies or services listed herein were shipped as shown above in quantities and the quality called for in the above cited contract and were in all respects in accordance with applicable specifications."
Unless otherwise stated herein, the items listed are new and are manufactured by Sigma Tek, Inc.
R. E. Wasinger
Quality Assurance Manager

SHIPPED
JUN 03 2008
CUSTOMER

adlog AIRCRAFT MAINTENANCE RECORDKEEPING SYSTEM

AVIONICS MAINTENANCE RECORDS

(including transponder biennial checks)

Log No. 2

Aircraft Registration No. ______

Aircraft Manufacturer CESSNA

Model 172S

Serial No. 10776

EQUIPMENT LISTING

List all installed avionics, autopilot and flight director equipment.

	Mfg.	Model	Serial No.
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
15.			
16.			
17.	[illegible]		
18.	[illegible]		
19.	[illegible]		
20.	[illegible]	4050-6081-100-000	19108975

AEROTECH PUBLICATIONS INC.

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Airframe Index Engine Index Propeller Index AD Index

Page No.

DATE	AIRFRAME TIME IN SERVICE	AVIONICS TIME IN SERVICE	DESCRIPTION OF WORK PERFORMED— SIGNATURE & CERTIFICATE NO. OF PERSON PERFORMING WORK

MAKE: Cessna
MODEL: 172S
S/N: 10776
REG. NO: 172RV
WORK ORDER: 8845

Lincoln Park Aviation
425 Beaverbrook Road
Lincoln Park, NJ 07035
Phone: 973-633-0450

DATE: 1/21/2010
A/C TSN:
TACH: 303.9

Airframe Entries

(1) REMOVED AND REPLACED TRANSPONDER WITH NEW. RE-LOADED SOFTWARE AND APPLICABLE OPTIONS AS REQUIRED. REMOVED P/N:011-N0779-10, S/N:89127187. INSTALLED P/N:011-N0779-10, S/N:89100399... (2) REMOVED AND REPLACED ELEVATOR CAP WITH NEW. PREP & PAINTED... (3) REMOVED AND REPLACED AVIONIC SWITCH WITH NEW. OPS CHECK OK... (4) Complied with FAR91.413 transponder certifications.

1 of 1

The Aircraft, Airframe, Aircraft 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 work order listed below.

Inspector 2

DATE: 1/21/2010 SIGNED: Work Order: 8845

Frank R Galella

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FAR 91.413 TESTS AND INSPECTIONS

Lincoln Park Aviation, CRS# LKPR101K certifies that the TRANSPONDER tests required by FAR 91.413 were performed in accordance with and comply to Appendix F of Part 43. The aircraft is returned to service.

Transponder #1 P/N 011-00779-10 S/N 89100399
Transponder #2 P/N — S/N —

Signature | Date 1-20-10 | Work Order # A0930

4-9-10 Hobbs: 411.7
Cessna 172 N172RV
Repair GDL-90 TFC with display on G1000 MFD screen by reprogramming correct N# of 1CAO into GDL90 memory and test ok. REF. WO 15361

LANCASTER AVIONICS INC
LANCASTER AIRPORT
LITITZ, PA 17543
DATE 4-9-10
CERTIFICATE NO. LN7R261N
SIGNED

MAKE: Cessna
MODEL: 172S
S/N: 10776
REG. NO: 172RV
WORK ORDER: 9033

Lincoln Park Aviation
Repair Station No. LKPR101K
425 Beaverbrook Road
Lincoln Park, NJ 07035
Phone: 973-633-0450

DATE: 6/4/2010
A/C TSN:
TACH: 340.3

Airframe Entries

(1) TROUBLE SHOT LOOSE PIN 17 AT CONNECT PT 305 (GIA #2). REMOVED AND REPLACED PIN WITH NEW. OPERATIONAL CHECK SATISFACTORY.

The Aircraft, Airframe, Aircraft 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 work order listed below.

Inspector 2

DATE: 6/4/2010 SIGNED: Work Order: 9033

Frank R Galella
Certified Repair Station No. LKPR101K

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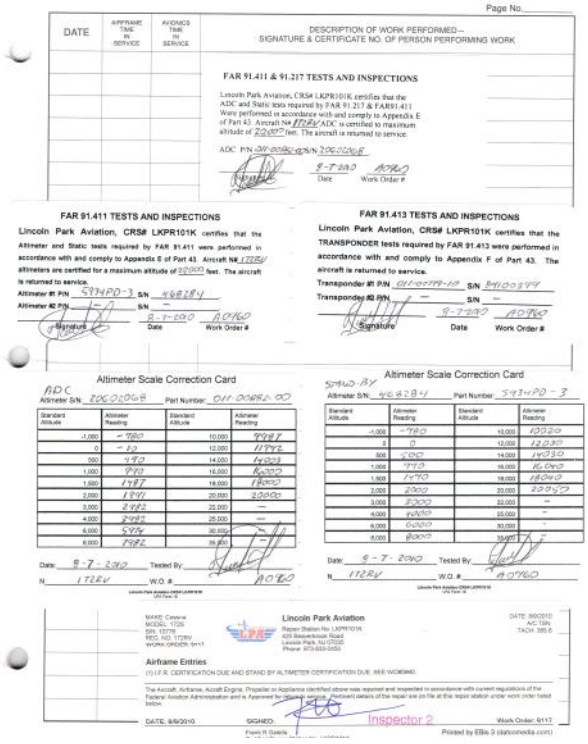
Airframe Index Engine Index Propeller Index AD Index



Page No.

DATE	AIRFRAME TIME IN SERVICE	AVIONICS TIME IN SERVICE	DESCRIPTION OF WORK PERFORMED— SIGNATURE & CERTIFICATE NO. OF PERSON PERFORMING WORK

FAR 91.411 & 91.217 TESTS AND INSPECTIONS

Lincoln Park Aviation, CRS# LKPR101K certifies that the ADC and Static tests required by FAR 91.217 & FAR91.411 Were performed in accordance with and comply to Appendix E of Part 43. Aircraft N# 172RV ADC is certified to maximum altitude of 22000 feet. The aircraft is returned to service.

ADC P/N 011-00882-00 S/N 20602068

Signature 8-7-2010 Date A0960 Work Order #

FAR 91.411 TESTS AND INSPECTIONS

Lincoln Park Aviation, CRS# LKPR101K certifies that the Altimeter and Static tests required by FAR 91.411 were performed in accordance with and comply to Appendix E of Part 43. Aircraft N# 172RV altimeters are certified for a maximum altitude of 22000 feet. The aircraft is returned to service.

Altimeter #1 P/N 394PD-3 S/N 468284

Altimeter #2 P/N — S/N —

Signature 8-7-2010 Date A0960 Work Order #

FAR 91.413 TESTS AND INSPECTIONS

Lincoln Park Aviation, CRS# LKPR101K certifies that the TRANSPONDER tests required by FAR 91.413 were performed in accordance with and comply to Appendix F of Part 43. The aircraft is returned to service.

Transponder #1 P/N 011-00779-10 S/N 84100394

Transponder #2 P/N — S/N —

Signature 8-7-2010 Date A0960 Work Order #

Altimeter Scale Correction Card

ADC

Altimeter S/N 20602068 Part Number 011-00882-00

Standard Altitude	Altimeter Reading	Standard Altitude	Altimeter Reading
-1,000	-980	10,000	9987
0	-10	12,000	11982
500	490	14,000	14003
1,000	990	16,000	16002
1,500	1987	18,000	18002
2,000	1991	20,000	20000
3,000	2982	22,000	—
4,000	3982	25,000	—
5,000	4976	30,000	—
6,000	5981	35,000	—

Date 8-7-2010 Tested By

N 172RV W.O. # A0960

Altimeter Scale Correction Card

STAND-BY

Altimeter S/N 468284 Part Number 394PD-3

Standard Altitude	Altimeter Reading	Standard Altitude	Altimeter Reading
-1,000	-980	10,000	10020
0	0	12,000	12030
500	500	14,000	14030
1,000	990	16,000	16000
1,500	1490	18,000	18040
2,000	2000	20,000	20050
3,000	3000	22,000	—
4,000	4000	25,000	—
5,000	5000	30,000	—
6,000	6000	35,000	—

Date 8-7-2010 Tested By

N 172RV W.O. # A0960

MAKE: Cessna
MODEL: 172S
SER. NO.: 172RV
REG. NO.: 172RV
ENGINE: Lycoming IO-360-L2A

Lincoln Park Aviation
Repair Station No. LKPR101K
429 Beaverbrook Road
Lincoln Park, NJ 07035
Phone: 973-633-3450

DATE: 8/6/2010
A/C TSN:
TACH: 580.6

Airframe Entries

(1) I.F.R. CERTIFICATION DUE AND STAND BY ALTIMETER CERTIFICATION DUE. SEE WO#3940

The Aircraft, Airframe, Aircraft 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 work order listed below.

DATE: 8/6/2010 SIGNED: Inspector 2 Work Order: 9117

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Airframe Index Engine Index Propeller Index AD Index

Page No.________

DATE	AIRFRAME TIME IN SERVICE	AVIONICS TIME IN SERVICE	DESCRIPTION OF WORK PERFORMED— SIGNATURE & CERTIFICATE NO. OF PERSON PERFORMING WORK

MAKE: Cessna
MODEL: 172S
S/N: 10776
REG. NO: 172RV
WORK ORDER: 9053

Lincoln Park Aviation
Repair Station No. LKPR101K
425 Beaverbrook Road
Lincoln Park, NJ 07035
Phone: 973-633-0450

DATE: 12/3/2010
A/C TSN:
TACH: 477.7

Airframe Entries

(1) PERFORMED OPERATIONAL INSPECTION ON G1000 SYSTEM AND FOUND TO BE OPERATING TO SPEC.

The Aircraft, Airframe, Aircraft 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 work order listed below.

DATE: 12/3/2010 SIGNED: Inspector 2 Work Order: 9053

Frank R Galetta
Certified Repair Station No. LKPR101K

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MAKE: Cessna
MODEL: 172S
S/N: 10776
REG. NO: 172RV
WORK ORDER: 9330

Lincoln Park Aviation
Repair Station No. LKPR101K
425 Beaverbrook Road
Lincoln Park, NJ 07035
Phone: 973-633-0450

DATE: 3/3/2011
A/C TSN: 505.8
TACH: 505.8

Airframe Entries S/N 011-01105-00

(1) TROUBLE SHOT. REMOVED #2 GIA 63W. S/N 68507281. INSTALLED S/N: 68505160. ALL WORK PERFORMED IAW GARMIN MANUAL SECTION 4.3.1. LOADED SOFTWARE AS REQUIRED.

The Aircraft, Airframe, Aircraft 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 work order listed below.

DATE: 3/3/2011 SIGNED: Inspector 2 Work Order: 9330

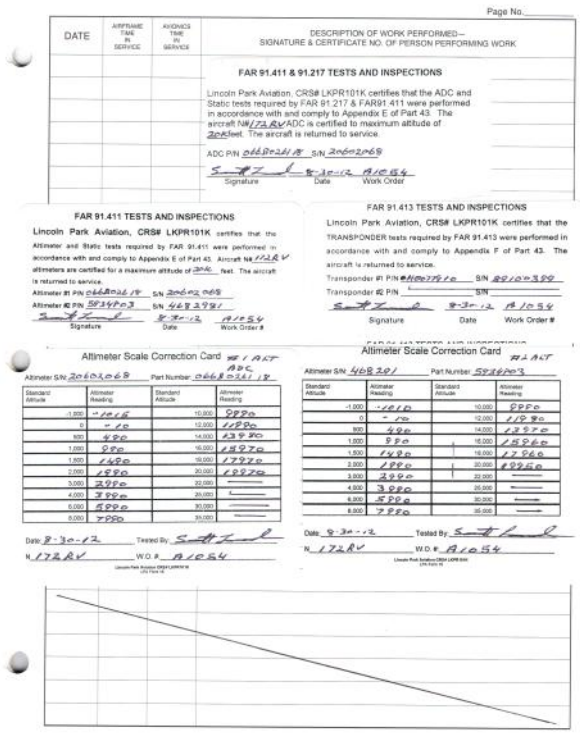
Frank R Galetta
Certified Repair Station No. LKPR101K

Printed by EBis 3 (dalcomedia.com)

Solberg Aviation Co. Inc.
Solberg Airport
P. O. Box 15
Readington, NJ 08870
908-534-4000

Cessna 172S S/N 172S10776 N172RV Tach. 617.4
Removed GIA 63W P/N 011-01105-00 S/N 68505160
and installed GIA 63W P/N 011-N1105-00 S/N 68506178
and set up per the Garmin Maintenance Manual.
Date: 09/15/2011
Sherman R. Keller
License No. A&P 172464881

Solberg Aviation Co. Inc.
Solberg Airport
P. O. Box 15
Readington, NJ 08870
908-534-4000
N172RV 08/21/2012 Tach. 740.8 Hobbs 957.1
C/W Cessna SEB 34-02 Garmin G1000 System Software
Upgrade to Version 0563.26.
Sherman Keller
License No. A&P 172464881



Page No.

DATE	AIRFRAME TIME IN SERVICE	AVIONICS TIME IN SERVICE	DESCRIPTION OF WORK PERFORMED— SIGNATURE & CERTIFICATE NO. OF PERSON PERFORMING WORK

FAR 91.411 & 91.217 TESTS AND INSPECTIONS

Lincoln Park Aviation, CRS# LKPR101K certifies that the ADC and Static tests required by FAR 91.217 & FAR91.411 were performed in accordance with and comply to Appendix E of Part 43. The aircraft N#172RV ADC is certified to maximum altitude of 20K feet. The aircraft is returned to service.

ADC P/N 066B0261 18 S/N 20602068

Signature [signature] Date 8-30-12 Work Order A1054

FAR 91.411 TESTS AND INSPECTIONS

Lincoln Park Aviation, CRS# LKPR101K certifies that the Altimeter and Static tests required by FAR 91.411 were performed in accordance with and comply to Appendix E of Part 43. Aircraft N# 172RV altimeters are certified for a maximum altitude of 20K feet. The aircraft is returned to service.

Altimeter #1 P/N 066B0261 18 S/N 20602068

Altimeter #2 P/N 5934P03 S/N 4682981

Signature [signature] Date 8-30-12 Work Order # A1054

FAR 91.413 TESTS AND INSPECTIONS

Lincoln Park Aviation, CRS# LKPR101K certifies that the TRANSPONDER tests required by FAR 91.413 were performed in accordance with and comply to Appendix F of Part 43. The aircraft is returned to service.

Transponder #1 P/N #4100779 10 S/N 89100399

Transponder #2 P/N ——— S/N ———

Signature [signature] Date 8-30-12 Work Order # A1054

Altimeter Scale Correction Card #1 ALT ADC

Altimeter S/N: 20602068 Part Number: 066B0261 18

Standard Altitude	Altimeter Reading	Standard Altitude	Altimeter Reading
-1,000	-1016	10,000	9990
0	-10	12,000	11990
500	490	14,000	13980
1,000	990	16,000	15970
1,500	1490	18,000	17970
2,000	1990	20,000	19970
3,000	2990	22,000	—
4,000	3990	25,000	—
6,000	5990	30,000	—
8,000	7990	35,000	—

Date: 8-30-12 Tested By: [signature]

N 172RV W.O.# A1054

Lincoln Park Aviation CRS# LKPR101K

Altimeter Scale Correction Card #2 ALT

Altimeter S/N: 468201 Part Number: 5934P03

Standard Altitude	Altimeter Reading	Standard Altitude	Altimeter Reading
-1,000	-1010	10,000	9990
0	-10	12,000	11980
500	490	14,000	13970
1,000	990	16,000	15960
1,500	1490	18,000	17960
2,000	1990	20,000	19950
3,000	2990	22,000	—
4,000	3990	25,000	—
6,000	5990	30,000	—
8,000	7990	35,000	—

Date: 8-30-12 Tested By: [signature]

N 172RV W.O.# A1054

Lincoln Park Aviation CRS# LKPR101K

Airframe Index   Engine Index   Propeller Index   AD Index

Page No.__________

DATE	AIRFRAME TIME IN SERVICE	AVIONICS TIME IN SERVICE	DESCRIPTION OF WORK PERFORMED— SIGNATURE & CERTIFICATE NO. OF PERSON PERFORMING WORK
			9-5-12 HOBBS: 969.5 CESSNA 172S ENG. HRS: 749.8 N172RV Repair inop GDL-90 since new G1000 SW. 0563.26 installed by loading Garmin supplied compatibility software patch. Ramp test ok. LANCASTER AVIONICS INC → REF. W/O 17493 LANCASTER AIRPORT LITITZ, PA 17543 DATE 9-5-12 CERTIFICATE NO. LN7R261N SIGNED [signature]

LANCASTER AVIONICS, INC. 500-U AIRPORT ROAD LITITZ, PA 17543 CRS# LN7R261N
LOG ID# 3366 08-November-2013 WO# 18517/1 AC TT 1158.3 HOBBS 1158.3
N172RV S/N 172S10776 CESSNA 172S Pg 1 / 1

**** ITEM # 18517-1 REPAIR GARMIN PFD ****
DISCREPANCY: RANGE KNOB INOP.
Model: GDU1044B Part#: 011-01274-00
ACTION: OPS CHECKED IN AIRCRAFT AND VERIFIED FAULT. REMOVED FAULTY GDU1044B PFD, S/N 51201775. INSTALLED WARRANTY EXCHANGE GDU1044B PFD, S/N 51205854. RELOADED G1000 SYSTEM SOFTWARE AND PERFORMED CONFIG SETUP. RAMP CHECKS GOOD.

[signature]
SCOTT KUHNS

LANCASTER AVIONICS INC. CRS # LN7R261N
I CERTIFY THAT THE ALTIMETER, ENCODER AND STATIC SYSTEM TESTS REQUIRED BY FAR 91.411 HAVE BEEN PERFORMED I/A/W FAR 43 APPENDIX E

UNIT	TYPE	TESTED TO
#1 ALTIMETER	Garmin	14,000 ft.
#2 ALTIMETER	United	14,000 ft.
ENCODER (S)	Garmin	14,000 ft.

STATIC SYSTEM TEST DATE 9-18-14
SIGN [signature] DATE 9-18-14

LANCASTER AVIONICS INC
CRS # LN7R261N
CERTIFY THAT THE TRANSPONDER (S) TEST REQUIRED BY FAR 91.413 HAS BEEN PERFORMED I/A/W FAR 43 APPENDIX F

UNIT	TYPE
#1 TRANSP	GTX 33
#2 TRANSP	N/A

SIGN [signature]
DATE 9-18-14

9-18-14 1253.5

LANCASTER AVIONICS, INC

ALTIMETER/STATIC and ENCODER EVALUATION PER FAR 91.411 - FAR 43, APPENDIX "E"

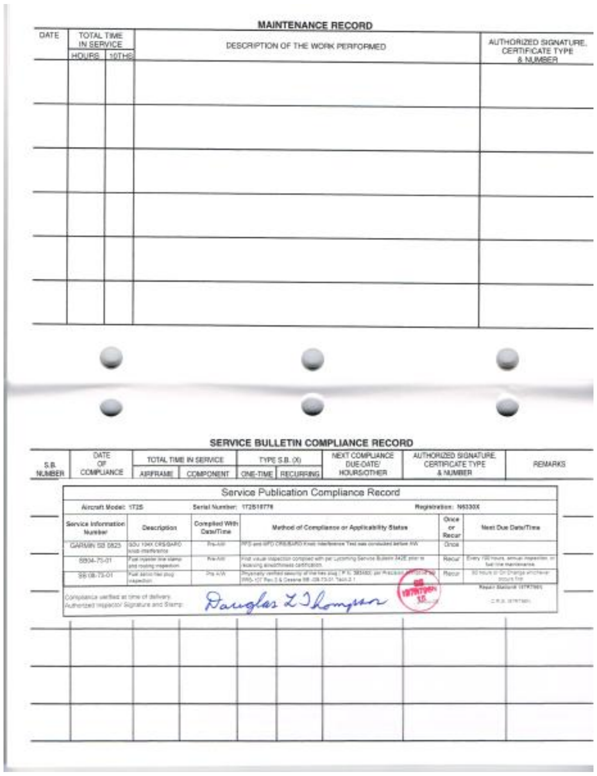
Customer: Nova Aviation Aircraft Type: C-172 N# 172RV

[redacted]

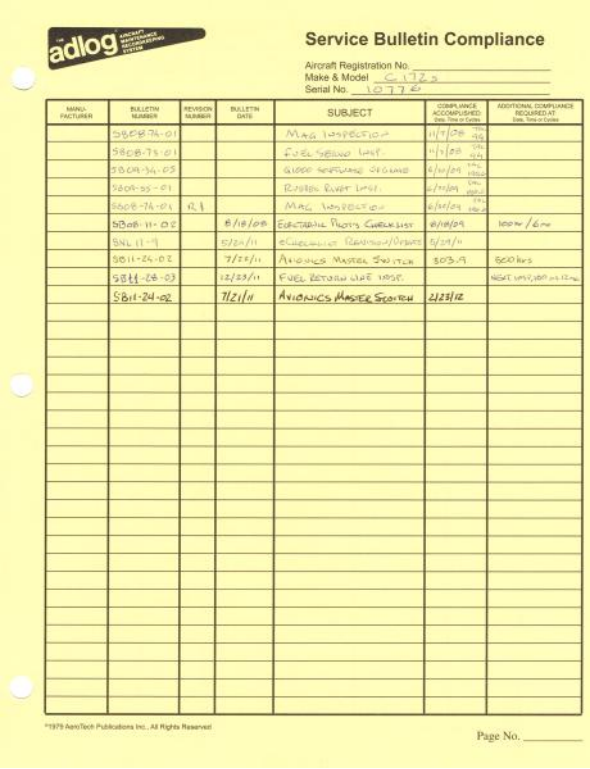
[illegible]

Technician [signature]
Date 9-18-14

CRS# LN7R261N


MAINTENANCE RECORD
DATE
TOTAL TIME IN SERVICE
HOURS
10THS
DESCRIPTION OF THE WORK PERFORMED
AUTHORIZED SIGNATURE, CERTIFICATE TYPE & NUMBER
SERVICE BULLETIN COMPLIANCE RECORD
S.B. NUMBER
DATE OF COMPLIANCE
TOTAL TIME IN SERVICE
AIRFRAME
COMPONENT
TYPE S.B. (X)
ONE-TIME
RECURRING
NEXT COMPLIANCE DUE-DATE/ HOURS/OTHER
AUTHORIZED SIGNATURE, CERTIFICATE TYPE & NUMBER
REMARKS
Service Publication Compliance Record
Aircraft Model:
Serial Number:
Registration:
Service Information Number
Description
Complied With Date/Time
Method of Compliance or Applicability Status
Once or Recur
Next Due Date/Time
GARMIN SB 0823
Once
Recur
Recur
Douglas L Thompson

Airframe Index Engine Index Propeller Index AD Index



adlog

Service Bulletin Compliance

Aircraft Registration No. _____
Make & Model C 172 S
Serial No. 1077 6

MANUFACTURER	BULLETIN NUMBER	REVISION NUMBER	BULLETIN DATE	SUBJECT	COMPLIANCE ACCOMPLISHED Date, Time or Cycles	ADDITIONAL COMPLIANCE REQUIRED AT Date, Time or Cycles
	SB98-74-01			MAG INSPECTION	11/7/08	
	SB08-74-01			FUEL SELECTOR VALVE	11/7/08	
	SB09-34-03			GLIDE SLOPE ANTENNA	6/10/09	
	SB09-55-01			RUDDER RIVET INSP.	6/10/09	
	SB08-74-01	R1		MAG INSPECTION	6/10/09	
	SB08-11-02		8/18/08	ELECTRICAL PWR'S CHECKLIST	8/18/09	100hr/6mo
	SNL11-9		5/20/11	ECHELLON REVISION/UPDATE	8/29/11	
	SB11-24-02		7/22/11	AVIONICS MASTER SWITCH	503.9	500 hrs
	SB11-28-03		12/23/11	FUEL RETURN LINE INSP.		NEXT 100hr, 100 hrs 12 mo
	SB11-24-02		7/21/11	AVIONICS MASTER SWITCH	2/23/12	

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Publications Aircraft Serial 172S10776

Airframe Index Engine Index Propeller Index AD Index

Publications

Print Listing

opeller Service Document Listing

Aircraft Serial: 172S10776

Publication Number	Issue Date	Compliance	Title of Publication General Information	Reference Document
SEL-28-01	03/15/2013	Mandatory	Fuel Line Inspection Fuel Line Inspection	
SEB-34-02-R02	03/13/2013	Mandatory	Garmin G1000 System Softw are Upgrade to Version Garmin G1000 System Softw are Upgrade to Version 0563.26 for Airplanes Equipped w ith NAV II (WAAS-Enabled Installations Only)	
SEB-32-02	01/14/2013	Recommended	Nose Gear Strut Tube Assembly Nose Gear Strut Tube Assembly	
SEL-05-03	11/28/2012	Informational	Chapter 4 Airw orthiness Limitations Added to the Chapter 4 Airw orthiness Limitations Added to the Maintenance Manual	
SEL-74-02	10/04/2012	Mandatory	Transmittal of Lycoming Mandatory Service Bullet Transmittal of Lycoming Mandatory Service Bulletin No. 603 and Slick Service Bulletin SB1-12	
SEL-12-01	06/22/2012	Mandatory	Transmittal of Lycoming Service Instruction No. 1 Transmittal of Lycoming Service Instruction No. 1070R, EASA SIB No: 2010-31, and EASA SIB No: 2011-01R2	
SEL-34-01	05/15/2012	Informational	Garmin G1000 Loading Updated Databases Garmin G1000 Loading Updated Databases	
SEL-51-01	01/13/2012	Informational	Use Of Corrosion Inhibiting Compounds Use Of Corrosion Inhibiting Compounds	
SNL11-29	11/22/2011	Informational	Cessna Service Document Change Notification Cessna Service Document Change Notification	
SB07-28-01-R01	09/22/2011	Mandatory	Fuel Return Line Inspection Fuel Return Line Inspection	
SB11-27-05	08/31/2011	Recommended	Aileron Control Cable Fairlead Modification Aileron Control Cable Fairlead Modification	MK172-27-02
MK172-27-02	08/31/2011	Not Applicable	Aileron Control Cable Fairlead Modification Aileron Control Cable Fairlead Modification	
SB11-24-02	07/22/2011	Recommended	Avionics Switch Inspection and Replacement Avionics Switch Inspection and Replacement	
SNL11-15	07/15/2011	Informational	Garmin SA1129A GRS77 Loss of Function Garmin SA1129A GRS77 Loss of Function	
SNL11-9	05/24/2011	Not Applicable	Electronic Pilot's Checklist Electronic Pilot's Checklist	
SNL11-3	03/15/2011	Not Applicable	2010 IGRF (International Geomagnetic Reference Fi 2010 IGRF (International Geomagnetic Reference Field) Magnetic Field Model	
SNL11-2	03/15/2011	Not Applicable	Removal of Affected Approaches in Database Cycle Removal of Affected Approaches in Database Cycle 1013 for Airplanes w ith Garmin G1000 and WAAS	
11-34-01-R01	02/15/2011	Recommended	Garmin G1000 System Softw are Upgrade to 0563.21 f Garmin G1000 System Softw are Upgrade to 0563.21 for Airplanes Equipped w ith NAV II and WAAS	
SNL11-1	01/18/2011	Not Applicable	Garmin G1000 AOPA Database Display for Airplanes Garmin G1000 AOPA Database Display for Airplanes Equipped w ith NAV II	

SB10-57-01	08/17/2010	Mandatory	Spar Rivet Inspection Spar Rivet Inspection	
ICA-172-33-00001A	07/13/2010	Mandatory	Whelen Model 71368 Landing, Taxi and Recognition Whelen Model 71368 Landing, Taxi and Recognition Light System ICA Supplement Revision A	
...07-80-01-R01	05/18/2010	Optional	Sky-Tec Starter Installation Sky-Tec Starter Installation	MK172-80-01A MK182-80-01A
MK172-80-01A	05/18/2010	Not Applicable	Sky-Tec Starter Installation Sky-Tec Starter Installation	SB07-80-01-R01
SB09-34-09	11/09/2009	Mandatory	GDU 104X CRS/BARO Knob Inspection GDU 104X CRS/BARO Knob Inspection	
SB07-34-01-R02	10/19/2009	Optional	Garmin G1000 NAV III Avionics Chartview Option Garmin G1000 NAV III Avionics Chartview Option	
SB09-55-02	08/31/2009	Mandatory	Horizontal Stabilizer Rear Spar Inspection Horizontal Stabilizer Rear Spar Inspection	
SB09-34-07	06/22/2009	Optional	Garmin G1000 Synthetic Vision Tech (SVT) Inst. Garmin G1000 Synthetic Vision Technology (SVT) Installation	
SB09-34-05	06/22/2009	Mandatory	Garmin G1000 Softw are Upgrade to Version 563.14 The Garmin G1000 system softw are shall be upgraded as described in this Service Bulletin.	
SB09-55-01	06/01/2009	Mandatory	Rudder Rivet Inspection Rudder Rivet Inspection	
SB08-74-01-R01	04/20/2009	Mandatory	Unison Industries Slick 4200/4300/6200/6300 Magne Unison Industries Slick 4200/4300/6200/6300 Magnetos Inspection	
ICA-172-34-00001	03/06/2009	Mandatory	G1000 Synthetic Vision Technology Option ICA Supp G1000 Synthetic Vision Technology Option ICA Supplement	
SNL09-2	02/09/2009	Informational	Loss of GPS/WAAS in Northern Latitudes Loss of GPS/WAAS in Northern Latitudes	
SNL09-1	02/09/2009	Informational	Garmin G1000 System LPV and LNAV/VNAV Approaches Garmin G1000 System LPV and LNAV/VNAV Approaches w ith Three-Character Airport Identifiers	
ICA-172-28-00001A	01/30/2009	Mandatory	Single Engine Restart Fuel Quantity Indication Sy Single Engine Restart Fuel Quantity Indication System ICA Supplement Revision A	
SB08-11-02	08/18/2008	Optional	Electronic Pilot's Checklist Availability SB08-11-02 has been issued to announce the availability of an Electronic Pilot's Checklist for the 2008 Garmin G1000 Nav II equipped airplanes. After installation, the Electronic Pilot's Checklist w ill be displayed on the Multi-Function Display (MFD) unit.	
ICA-172-23-00001B	08/30/2008	Mandatory	GDL-90 Traffic Datalink System ICA Supplement GDL-90 Traffic Datalink System ICA Supplement Revision B	
SNL08-9	05/05/2008	Informational	Cessna 2008 Service Directory The new Directory provides the latest information for the Cessna service organization, Cessna Service Stations and McCauley Propeller Service Stations located throughout the w orld. The Directory includes business hours and service and parts manager contacts for the Service Stations. A copy of the new Cessna 2008 Service Directory is included in each new propeller airplane delivered from the factory.	
SNL08-10	05/05/2008	Informational	Garmin G1000 Transponder Flight Id Operations To transmit the Garmin Service Advisory N.: 0806 Rev B: G1000 Transponder Flight Identification Operations that deals w ith the issues infrequently encountered w hen entering or changing a G1000 Transponder Flight Identification (ID) number using the PFD entry method	
SNL08-8	04/14/2008	Informational	Engine Fuel Flow Divider Cold Weather Operation	

			The purpose of this Service Newsletter is to transmit the attached Lycoming Service Instruction No. 1518, Reprint of Precision Service Information Letter No. SIL RS-84 concerning the engine fuel flow divider operation in cold weather.
	...06-3	02/25/2008	Informational	Garmin G1000 Loading Jeppesen Navdata on SD Cards Transmit Garmin Service Alert No. 0801: Supplemental Data Cards Should Not Be Used To Load Jeppesen NavData.
	SNL07-13	09/24/2007	Informational	Garmin G1000 GDC 74 Field Calibration Tool The purpose of this Service Newsletter is to transmit the attached Garmin Service Advisory No. 0720 Revision A: GDC 74(X) Field Calibration Tool; and to provide notification that the Garmin G1000 NAV III Line Maintenance Manual, Part Number 190-00352-00, has been updated to Revision J. The GDC 74 Field Calibration Tool softw are program dow nload is available from Garmin's w ebsite in the DEALER RESOURCES location. This tool w ill adjust the calibration of a GDC 74 unit that has failed the 14 CFR Part 43 Appendix E tests due to altitude drift. The GDC 74 Field Calibration Tool procedure is outlined in the Garmin GDC 74(X) Field Calibration Tool Instructions manual part number 190-00303-82 Revision A (or latest revision). This procedure w ill not modify or require any Cessna approved NAV III softw are.
	SB07-34-04	07/23/2007	Optional	Garmin G1000 Nav III FliteCharts & SafeTaxi Avail To announce the availability of the 010-00330-42 GDU Supplemental Database SD Cards w ith Garmin FliteCharts and SafeTaxi for Model Year 2004, 2005, and 2006 airplanes that have complied w ith SB07-34-02 (or latest revision): Garmin G1000 System Softw are Upgrade to Version 563.03.
	SB06-34-03R1	07/23/2007	Optional	Enablement of Garmin G1000 TAWS-B Revised to provide instructions for airplanes that comply w ith later system softw are SB07-34-02 (or latest revision): Garmin G1000 System Softw are Upgrade to Version 563.03.
	SNL07-10	05/14/2007	Informational	Garmin G1000 NAV III SD Cards Reports have been received that some SD Cards may not always function correctly. The affected SD Cards are manufactured by ATP Electronics, Inc. and utilized by Jeppesen in the Nav Data Starter Kits for use w ith the Aviation Database Update. To assist in eliminating a potential SD Card failure due to improper fit, it is recommended that SD Cards manufactured by ATP Electronics, Inc. be replaced w ith SD Cards manufactured by Sandisk or Toshiba.
	SNL07-9	04/16/2007	Informational	Maintaining Current Service and Operational Info. The purpose of this Service Newsletter is to inform Cessna Customers of the various options available to assist them in maintaining the currency of publications utilized for maintenance and operation of Cessna Propeller airplanes.
	SB07-25-03	03/09/2007	Mandatory	G1000 Arrival & Departure Proced. Softw are Alert The purpose of this Service Bulletin is to transmit Garmin Aerial Navigation Product Alert, Service Alert No. 070227-00.
	SNL07-5	02/26/2007	Optional	NAV III Global Positioning Fault Detection The purpose of this Service Newsletter is to inform ow ners and operators of 2007 NAV IIIairplanes of the various Global Positioning System (GPS) - Wide Area Augmentation System (WAAS) Fault Detection Exclusion (FDE) Prediction Programs available to assist them in flight planning operations.
	SNL07-4	02/05/2007	Informational	New Cessna 2007 Service Directory Announces a new Cessna Service Directory w hich supersedes the previous 2006 Directory, part number D7530-7-13.
	SNL06-18	12/26/2006	Informational	FAA-Approved Deicing Updates - Winter 2006/07 This Service Newsletter provides notification that Federal Aviation Administration (FAA) Notice Number N 8000.199

			[illegible] FAA - Approved Deicing Program Updates, Winter 2006 - 2007 has been issued.
	SNL06-17	12/18/2006	Informational	New ELT Placards The purpose of this Service Newsletter is to provide notification that new ELT placards are available. The new placards have been updated to state the current FAA regulation for servicing the ELT. FAA Regulation 91.52 no longer exists, and has been superseded by 14 CFR Part 91.207.
	SB06-34-04	10/02/2006	Optional	ADF and DME Installation To announce the availability of proprietary, serialized modification kits to install a Honeyw ell/Bendix-King KR87 ADR and KN63 DME in the affected Garmin G1000 NAV III Cessna Airplanes.
	SNL06-11	08/14/2006	Informational	Lamar TED4 Master Control Unit (MCU) Test Set The purpose of this Service Newsletter is to transmit revised instructions for the use of the Lamar TED4 MCU Test Set.
	SB06-34-03	05/22/2006	Optional	Enablement of Garmin G1000 TAWS-B TAWS-B System Softw are
	SNL06-9	04/24/2006	Informational	Approval of Diethylene Glycol Monomethyl Fuel Add The purpose of this Service Newsletter is to provide notification that the use of DIEGME or DEGMME fuel additive is an acceptable substitute for the affected airplanes that have previously been approved for the use of EGME fuel additive.
	SNL06-8	04/10/2006	Informational	Propeller Blade Leak Troubleshooting Instructions The purpose of Service Newsletter SNL06-8 is to provide assistance in identifying and assessing propeller oil leaks and determining the necessary corrective action.
	...06-27-01	04/10/2006	Optional	Flap Aft Roller Bearing Installation Modification Service experience indicates the potential for w earing of the flap supports by the flap aft rollers on airplanes that have the flaps cycled frequently. To assist in preventing the described condition from occurring, a modification of the flap roller assembly installation is being made available as detailed in Service Bulletin SB06-27-01. The existing aft roller assemblies are replaced w ith shorter rollers and large area stainless steel w ashers are added at each end of the rollers.
	SNL06-6	03/20/2006	Informational	FAA Approved Supplemental Type Certificates In response to customer inquiries, Cessna is providing this SNL06-6 to provide guidance to our customers regarding the incorporation of STC's and/or PMA approved parts that have not been evaluated by Cessna. Some examples of modifications and parts that may affect the airplane aerodynamics, gross w eight, flying characteristics, structure, systems or performance are: pow erplant and propeller changes, add-on w ing tip fuel tanks, vortex generators, camera modifications, w inglets, oversize tires, etc.
	SNL06-5	03/20/2006	Informational	Maintaining Current Service and Operational Info. The purpose of this Service Newsletter is to inform Cessna Customers of the various options available to assist them in maintaining the currency of publications utilized for maintenance and operation of Cessna Propeller airplanes.
	SNL05-16	11/21/2005	Informational	FAA- Approved Deicing Program Update To announce FAA Flight Standards Information Bulletin FSAT 05-02: FAA - Approved Deicing Prgram Updated, Winter 2005 - 2006.
N/A	SNL05-5	03/14/2005	Informational	Optional Low er Idle Valve Availability The purpose of this Service Newsletter is to transmit Lycoming Service Letter No. L242: Improved Low er Idle

			Valve in Fuel Injectors.	
SNL05-4	03/14/2005	Informational	FAA - Approved Deicing Program Update To announce FAA Flight Standards Information Bulletin FSAT 04-05: FAA - Approved Deicing Pgram Updated, Winter 2004 - 2005.	N/A
SNL05-2	01/31/2005	Informational	Handling of Airplane Gryo Instruments Maintenance Practices - Handling of Airplane Gryo Instruments.	
MK172-52-01	06/28/2004	Not Applicable	Security Lock Installation Security Lock Installation	SB04-52-01
SNL04-5	05/31/2004	Informational	FAA Approved Supplemental Type Certificates FAA Approved supplemental type certificates (STCs) and FAA-PMA approved parts	
MK172-61-01	11/14/2001	Not Applicable	Propeller Spinner Aft Bulkhead Replacement Propeller Spinner Aft Bulkhead Replacement	
MK172-23-01	01/31/2000	Not Applicable	Static Wick Replacement Static Wick Replacement	SNL00-4
MK172-24-03	09/13/1999	Not Applicable	Heavy Duty Battery (24V) Installation Heavy Duty Battery (24V) Installation	
MK172-57-02	01/19/1999	Not Applicable	Heavy Duty Flap Installation Heavy Duty Flap Installation	
SK150-46D	03/30/1992	Not Applicable	Circuit Breaker Replacement Circuit Breaker Replacement	SE76-15
SK210-56K	02/25/1987	Not Applicable	Integral Fuel Tank Sealing Kit Integral Fuel Tank Sealing Kit	
SK310-32D	04/04/1984	Not Applicable	Oxygen Refill Kit-Less Bottles Oxygen Refill Kit-Less Bottles	NA
[illegible]421-68D	05/07/1976	Not Applicable	Hydro Modification (Model SE588 and Model SE588 M Hydro Modification (Model SE589 and Model SE588 Modified w ith Service Kit SK210-38)	
SK150-20A	12/16/1974	Not Applicable	Wheel Balancer Wheel Balancer	
SK180-15D	09/06/1972	Not Applicable	SE269 Wing Repair Jig Complete SE269 Wing Repair Jig Complete	
SK180-18G	08/06/1971	Not Applicable	Fuselage Repair Jig Complete Fuselage Repair Jig Complete	
SK182-43	01/28/1969	Not Applicable	Cylinder Head Temperature Gage Calibration Unit Cylinder Head Temperature Gage Calibration Unit	
AK205-61E	01/11/1967	Not Applicable	Cessna 300 Series Radio Installation Kit Cessna 300 Series Radio Installation Kit (Includes Nav/Com 300R & Transceiver 300)	
AK172-98B	07/22/1966	Not Applicable	Cessna ADF 300 Installation Kit (14-Volt, Gonio T Cessna ADF 300 Installation Kit (14-Volt, Gonio Type)	
SK150-22	03/29/1966	Not Applicable	Diode Installation - Rotating Beacon (12 Volt) Diode Installation - Rotating Beacon (12 Volt)	
AK205-58A	02/14/1966	Not Applicable	Cessna Nav-O-Matic 200 Autopilot - 14 Volt (Basic Cessna Nav-O-Matic 200 Autopilot - 14 Volt (Basic Electronics)	N/A
AK172-97E	08/17/1965	Not Applicable	Gyros Installation - (Remanufactured Gyros) Less Gyros Installation - (Remanufactured Gyros) Less Vacuum System	
[illegible]205-46D	10/02/1964	Not Applicable	Cessna 300 Series Radio Installation Kit Cessna 300 Series Radio Installation Kit (Nav/Com, Transceiver, Nav/Omni)	
AK172-95	04/25/1964	Not Applicable	Vacuum System - Super Venturi Driven Vacuum System - Super Venturi Driven	

AK205-11B	10/07/1963	Not Applicable	Cessna Nav-O-Matic 300 Autopilot (Basic Electroni Cessna Nav-O-Matic 300 Autopilot (Basic Electronics)	
[illegible]055-1	12/19/1961	Not Applicable	Sun Visor Sun Visor	
SK70A50-2	08/24/1961	Not Applicable	Spar Splice - Left Rear Spar Splice - Left Rear	
SK70A50-1	08/24/1961	Not Applicable	Spar Splice - Right Rear Spar Splice - Right Rear	
AK175-29	05/11/1959	Not Applicable	Heavy Duty Axle Heavy Duty Axle	
AK52-3-553C	04/12/1956	Not Applicable	Cargo Tie-Down Lugs Cargo Tie-Down Lugs	N/A

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OWNER ADVISORY

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SEL-34-01

TITLE

NAVIGATION - GARMIN G1000 LOADING UPDATED DATABASES

TO:

Cessna 172R, 172S, 182T, T182T, 206H, and T206H Owners

REASON

This owner advisory is to inform you that SEL-34-01 has been issued.

The purpose of this service letter is to tell operators about new navigation and Garmin database functionality found in the NAV III G1000 System Software Version 0563.26.

DESCRIPTION

The G1000 System Software Version 0563.26 adds a feature that allows Garmin databases to crossfill across the Primary Flight Display (PFD) and Multi-Function Display (MFD) displays and also adds a feature that allows enablement of dual navigation databases with one set as active and the other as standby.

To crossfill Garmin databases across the PFD and MFD, go to the Cockpit Reference Guide (CRG) (Part Number 190-00384-12) (Revision A or later) Section 1.8 to find the Loading Updated Databases section and follow the steps in the Loading Garmin Database Updates section.

To use dual navigation databases, go to the CRG Section 1.8 to find the Loading Updated Databases section. To set a navigation database as active, follow the steps in the Loading the Jeppesen Navigation Database as the Active Navigation Database section. To set a navigation database as standby, follow the steps in the Loading the Jeppesen Navigation Database as the Standby Navigation Database section.

COMPLIANCE

INFORMATIONAL. This service letter is for informational purposes only.

LABOR HOURS

Not applicable

WARRANTY

Not applicable

NOTE: As a convenience, service documents are now available online to all our customers through a simple, free-of-charge registration process. If you would like to sign up, please visit the "Customer Access" link at www.cessnasupport.com to register.

Cessna Aircraft Company, Cessna Customer Service, P.O. Box 7706, Wichita, KS 67277, U.S.A. 1-316-517-5800, Fax 1-316-517-7271, Email: customercare@cessna.textron.com

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OWNER ADVISORY

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SEB-34-02

TITLE

NAVIGATION - GARMIN G1000 SYSTEM SOFTWARE UPGRADE TO VERSION 0563.26 FOR AIRPLANES EQUIPPED WITH NAV III (WAAS-ENABLED INSTALLATIONS ONLY)

TO:

Cessna 172, 182, and 206 Owners

REASON

This owner advisory is to inform you that SEB-34-02 Revision 1 has been issued.

Version 0563.26 software service bulletin provides an upgrade that includes the following changes:

- **Resolution for Garmin Service Advisory No. 1129 Rev A** – Momentary loss of GRS 77 and GDC 74A functions as addressed in Cessna Service Newsletter SNL11-15
- **Approach Identifiers** – Added the ability to check for approaches with 3-numeric approach identifiers so that WAAS LPV approaches with 3-numeric identifiers would be available; software fix to Garmin Service Advisory No.: 0825.
- **Flight Plan Sorting** – The functionality of sorting the stored flight plans was removed; software fix to Garmin Service Advisory No.: 1118.
- **Graphical METARs** – The display of graphical METARs is added to the active flight plan page and moving maps.
- **METAR Text** – Raw METAR text is displayed on the active flight plan page and moving maps when a METAR flag is highlighted with the map cursor.
- **Weather Legend** – A weather legend is added to the maps that share the weather-related soft keys (NEXRAD, XM, LTNG, and METAR). The display of this legend is controlled via the Legend soft key in the MAP tier of soft keys.
- **METAR Search Radius** – The active flight plan page can now be configured to show a METAR flag (and corresponding report) from a nearby location for any waypoint in the flight plan without an active reporting station. The search radius is set to 30 NM.
- **Selected-Altitude Intercept Arc** – A Selected-Altitude Intercept Arc is displayed on the moving maps that follow: Navigation map, PFD inset map, AUX - Trip Planning map, Active Flight Plan page map, and all NRST maps. A cyan arc is drawn across the active leg (when enabled via the Map Setup) to indicate the location at which the aircraft will reach the selected altitude based on the current barometric altitude, vertical speed, and ground speed.
- **Profile View** – The profile view option is added to the MFD Navigation Map. When enabled, the airplane's vertical position over terrain and obstacles is shown centered on the current ground track. When datalink weather is available, winds aloft information is also shown, which depicts a headwind or tailwind as a function of altitude. This vertical profile view is pilot configurable.
- **Circular SAR Pattern** – A circular search and rescue pattern is now available with the accomplishment of Cessna Service Bulletin SEB-34-01 Garmin G1000 Enhanced Search and Rescue Enablement.
- **Runway Highlights** – SVT no longer renders a runway highlight on the PFD synthetic view when there is obscuring terrain between the current aircraft position and the runway.
- **Dual Navigation Databases** – This feature allows a future navigation database to be stored in a standby location on the SD card in the bottom slot of each GDU. When the standby database becomes effective (as determined by the system date and time) the standby database will be automatically loaded into the active location internal to the GDU. This allows users to proactively update their aircraft with the next navigation cycle as soon as it becomes available, rather than having to wait until the first effective date to switch over.
- **Database Crossfill** – This feature allows most databases to be automatically cross-filled from the bottom SD card in one GDU to the bottom SD card in the other GDU. The following databases are supported: Basemap, Terrain, Airport Terrain, Obstacle, SafeTaxi, Airport Directory, and Standby Navigation.

Cessna Aircraft Company, Cessna Customer Service, P.O. Box 7706, Wichita, KS 67277, U.S.A. 1-316-517-5800, Fax 1-316-517-7271, Email: customercare@cessna.textron.com

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SEB-34-02

- **Startup Screen** – When the dual navigation database feature is active, the Garmin startup screen is now displayed for up to 150 seconds at power up, when necessary, while the internal navigation database is updating. The following message is displayed on the screen: "Please Wait. Navigation Database Update in Progress. Do Not Remove Power from Displays". If the database update has not completed during the allotted time, an error message is then displayed on the MFD and the navigation database is disabled for that power cycle.
- **DB SYNC** – Manual control of the DB SYNC function is removed.
- **Geometric Altitudes** – All GPS-derived geometric altitudes that are referenced to sea level are now displayed using the label "GSL".
- **Voice Call-Out Alerts** – Voice call-out alerts issued within 5 NM of a runway threshold are now based only upon the GPS height above that runway threshold.
- **Improved Lighting Curve** – The lighting curve has been updated for the displays and their bezels to provide more optimal dimming characteristics while under manual control with the dimming potentiometer.
- **Pilot-Selectable MGRS Position Format** – This configuration item enables the ability to display GPS position according to the Military Grid Reference System, and is controlled by a new setting on the AUX System Setup page.
- **Waypoint Arrival Alerts** – This configuration item enables the 'arriving at [waypoint]' advisory alert when the aircraft is 10 seconds away from reaching the arrival alert distance to the destination waypoint.

SEB-34-02 Revision 1 provides parts and instructions to upgrade the Garmin G1000 software on WAAS-enabled installations to version 0563.26.

COMPLIANCE

MANDATORY. This service bulletin must be accomplished within the next 200 hours of operation or 12 months, whichever occurs first.

NOTE: For NAV III airplanes equipped with GFC-700 autopilot, Cessna Service Bulletin SB09-34-05 (Garmin G1000 System Software Upgrade to 563.14 for Airplanes Equipped with NAV III and GFC 700 AFCS Autopilot) (or later revision) must be accomplished before compliance with this service bulletin.

NOTE: For NAV III airplanes equipped with KAP-140 autopilot, Cessna Service Bulletin SB07-34-02 (Garmin G1000 System Software Upgrade to 563.03) (or later revision) must be accomplished before compliance with this service bulletin.

NOTE: Existing Garmin software backup CDs shall be destroyed and discarded to eliminate the possibility of loading the incorrect software at a later date.

NOTE: Compliance with SEB-34-02 Revision 1 is not required if in compliance with the Original Issue.

LABOR HOURS

2.0 man-hours to load the software upgrade

If necessary, 0.2 man-hour to do the applicable configuration upload for airplanes equipped with the Garmin G1000 Terrain Awareness System (TAWS-B)

If necessary, 0.2 man-hour to do the applicable configuration upload for airplanes equipped with the Garmin G1000 Chartview System

If necessary, 0.2 man-hour to do the applicable configuration upload for airplanes equipped with Garmin G1000 Synthetic Vision Technology (SVT)

If necessary, 0.2 man-hour to do the applicable configuration upload for airplanes equipped with Garmin G1000 Search and Rescue

If necessary, 0.2 man-hour to do the standby battery ammeter battery calibration procedure

If necessary, 0.2 man-hour to do the dual audio panel configuration procedure

If necessary, 0.2 man-hour to do the applicable configuration upload for airplanes equipped with Garmin G1000 Enhanced Vision System (EVS)

WARRANTY

For airplanes identified within the serial effectivity and complying within 200 hours or twelve months from the original date of this service bulletin;

Applicable Cockpit Reference Guide (CRG) and software CD parts credit and a labor allowance credit of 2.0 man-hours per airplane will be provided to load the software upgrade.

If necessary, a labor allowance credit of 0.2 man-hour will be provided to do the applicable configuration upload for airplanes equipped with the Garmin G1000 Terrain Awareness System (TAWS-B).

If necessary, a labor allowance credit of 0.2 man-hour will be provided to do the applicable configuration upload for airplanes equipped with the Garmin G1000 Chartview System.

If necessary, a labor allowance credit of 0.2 man-hour will be provided to do the applicable configuration upload for airplanes equipped with Garmin G1000 Synthetic Vision Technology (SVT).

If necessary, a labor allowance credit of 0.2 man-hour will be provided to do the applicable configuration upload for airplanes equipped with Garmin G1000 Search and Rescue.

If necessary, a labor allowance credit of 0.2 man-hour will be provided to do the standby battery ammeter battery calibration procedure.

If necessary, a labor allowance credit of 0.2 man-hour will be provided to do the dual audio panel configuration procedure.

If necessary, a labor allowance credit of 0.2 man-hour will be provided to do the applicable configuration upload for airplanes equipped with Garmin G1000 Enhanced Vision System (EVS).

Freight will be credited at the most economical method unless pre-approved by Cessna. For pre-approval contact Cessna Service Parts and Programs Warranty Administration at Telephone: 316-517-4296, Fax: 316-206-2746 or E-mail: cpd2claims@cessna.textron.com.

To receive credit, the work must be completed within stated compliance timeframe and a Warranty Claim submitted by a Cessna Single Engine Authorized Service Facility within 30 calendar days of Service Bulletin compliance before the credit expiration dates shown below.

Domestic ..... April 27, 2013
International ..... April 27, 2013

Special Note to Authorized Service Facilities:

When you complete the Warranty Claim, the labor allowance claimed shall be itemized for each above action completed.

Please contact a Cessna Authorized Service Facility for detailed information and arrange to have Cessna service bulletin SEB-34-02 Revision 1 accomplished on your airplane.

NOTE: As a convenience, service documents are now available online to all our customers through a simple, free-of-charge registration process. If you would like to sign up, please visit the "Customer Access" link at www.cessnasupport.com to register.

SAIB CE-12-15 Special Airworthiness

Airframe Index Engine Index Propeller Index AD Index

FAA
Aviation Safety

SPECIAL AIRWORTHINESS INFORMATION BULLETIN

SAIB: CE-12-15
Date: January 30, 2012

SUBJ: DC Power Distribution System - Avionics Master Switch

This is information only. Recommendations aren't mandatory.

Introduction

This Special Airworthiness Information Bulletin (SAIB) informs registered owners and operators of an airworthiness concern associated with the avionics master switch on **Cessna Aircraft Company (Cessna) Model 172R, 172S, 182T, T182T, 206H and T206H airplanes.** There is a potential for an accelerated rate of failure of the switch, which may result in the loss of avionics equipment on Garmin G1000-equipped airplanes.

Although failure of the switch can result in loss of equipment, these airplanes are designed such that avionics equipment necessary for the pilot to continue safe flight and landing are still maintained through the aircraft's electrical system.

At this time, this airworthiness concern is not considered an unsafe condition that would warrant an airworthiness directive (AD) action under Title 14 of the Code of Federal Regulations (14 CFR part 39).

Background

We have received reports indicating a trend of failures associated with components of the Garmin G1000 avionics suite in the Cessna single-engine models identified above.

After investigating further and coordinating with Cessna, we determined that electrical contact erosion was occurring internal to the switch. This erosion is due to power-up surge currents caused by avionics equipment connected to one side of the switch (Avionics Bus 2). We reviewed the electrical distribution system for the affected models and found that in the event of a complete failure of the avionics master switch, essential equipment necessary to continue safe flight and landing will be maintained through alternate power sources.

Cessna has issued Service Bulletin SB 11-24-02 to address this issue.

Recommendations

We recommend the following for all owners and operators of Cessna Models 172R, 172S, 182T, T182T, 206H, and T206H aircraft equipped with a Garmin G1000 system:

1) Replacement of the avionics master switch (part number S3443-1-1) every 500 hours of operation following Cessna Service Bulletin SB11-24-02, dated July 21, 2011.

2) If you experience issues during power up of the avionics where a display or other equipment does not initially power and it requires cycling of the avionics master switch, take further action to isolate and identify the problem including inspection of the switch for possible impending failure.

3) If you experience any system failure in-flight or before flight, follow the appropriate published abnormal or emergency procedures, and have the failed system repaired before the next flight. Take further action to isolate and identify the problem including inspection of the avionics master switch for possible impending failure.

For Further Information Contact

Richard Rejniak, Aerospace Engineer, FAA, Wichita Aircraft Certification Office, 1801 Airport Rd, Room 100, Wichita, Kansas, 67209; phone: (316) 946-4128; fax: (316) 946-4107; e-mail: richard.rejniak@faa.gov.

For Related Service Information Contact

Cessna Aircraft Company, P.O. Box 7704 Wichita, KS 67277 and Attn: Customer Care; phone: 316-517-5800 or 800-423-7762, fax: 316-517-7271, web: , e-mail: customercare@cessna.textron.com.

Service Bulletin

July 22, 2011

SB11-24-02

TITLE

AVIONICS SWITCH INSPECTION AND REPLACEMENT

EFFECTIVITY

The following airplanes equipped with the Garmin G1000 Avionics system:

Model	Serial Numbers
172R	17281241 and On
172S	172S9810 and On
182T	18281228 and On
T182T	T18208232 and On
206H	20608215 and On
T206H	T20608450 and On

REASON

On airplanes equipped with the Garmin G1000 Avionics system, the AVIONICS switch may not operate correctly when it is used beyond its serviceable life limit. Cessna has decided to limit the life of this switch to 500 hours of operation.

DESCRIPTION

An inspection of the airplane paperwork is accomplished to determine the length of time the installed AVIONICS switch has been in service. Switches that have been in service for 500 hours of operation or more shall be replaced.

To obtain satisfactory results, procedures specified in this publication must be accomplished in accordance with accepted methods and prevailing government regulations. Cessna Aircraft Company cannot be responsible for the quality of work performed in accomplishing the requirements of this publication.

Cessna Aircraft Company, Customer Service, P.O. Box 7706, Wichita, Kansas 67277, U.S.A. (316) 517-5800, Facsimile (316) 517-7271
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COMPLIANCE

Recommended:

- A one time inspection of the maintenance records of the airplane to determine the time in service of the AVIONICS switch shall be accomplished at the next 100-hour / 12-month (annual-type) inspection.
- The part number S3443-1-1 AVIONICS switch shall be replaced every 500 hours of operation.
- Subsequent actions: This Service Bulletin and 500-hour component life limit shall remain in effect until superseded by revision of the Component Time Limits Section of the airplane Maintenance Manual (latest revision).

APPROVAL

FAA approval has been obtained on technical data in this publication that affects airplane type design.

MANPOWER

If necessary, 1.2 man-hours to replace the AVIONICS switch

REFERENCES

Model 172 Series 1996 and On Maintenance Manual

Model 182/T182 Series 1997 and On Maintenance Manual

Model 206/T206 Series 1998 and On Maintenance Manual

Model 172R/172S Wiring Diagram Manual

Model 182S/182T/T182T Wiring Diagram Manual

Model 206H/T206H Wiring Diagram Manual

NOTE: Make sure all publications used are complete and current. Refer to www.cessnasupport.com.

NOTE: This information shall be considered an amendment to the Cessna Manufacturer's Service/Maintenance Manual or Instructions for Continued Airworthiness and must be accomplished for ongoing airworthiness compliance as necessary in accordance with 14 CFR Part 43.13.

OTHER PUBLICATIONS AFFECTED

Model 172R & Model 172S Illustrated Parts Catalog

Model 182S/182T/T182T Illustrated Parts Catalog

Model 206H & Model T206H Illustrated Parts Catalog

NOTE: Make sure all publications used are complete and current. Refer to cessnasupport.com.

MATERIAL AVAILABILITY

The following parts are available from Cessna Service Parts and Programs through an appropriate Cessna Authorized Service Facility.

Part Number	Description	Qty/Airplane
S3443-1-1	Switch, Split Dual Rocker	1

ACCOMPLISHMENT INSTRUCTIONS

WEIGHT AND BALANCE INFORMATION

Negligible

Material Information

The part below may be necessary:

NEW P/N	QUANTITY	DESCRIPTION	OLD P/N	DISPOSITION
S3443-1-1	1	Switch, Split Dual Rocker	Same	Discard

Instructions

1. Look in the airplane paperwork to see if the AVIONICS switch was installed within the last 500 hours of operation of the airplane.
   - A. If the switch was installed within the last 500 hours of operation of the airplane, go to Step 2.
   - B. If the total time in service for the switch is 500 hours of operation or more, do as follows:
     - (1) Prepare the airplane for maintenance.
       - (a) Make sure that all switches are in the OFF/NORM position.
       - (b) Disconnect electrical power from the airplane.
         1. Electrically ground the airplane.
         2. Disconnect external electrical power.
         3. Disconnect the airplane battery.
     - (2) Attach maintenance warning tags to the battery and external power receptacle that have **"DO NOT CONNECT ELECTRICAL POWER - MAINTENANCE IN PROGRESS"** written on them.
     - (3) Remove the AVIONICS switch from the airplane as follows: (Refer to the applicable Airplane Model Maintenance Manual, Chapter 31, Instrument and Control Panels - Maintenance Practices.)
       - (a) Make sure that the MASTER and AVIONICS switches are in the off position.
       - (b) Remove and keep the screws that attach the switch panel to the instrument panel.
       - (c) Carefully pull out the switch panel as necessary to get access behind the switch panel.
       - (d) As applicable, record the location of the wires attached to the AVIONICS switch.
       - (e) Remove all four switch terminal screws to disconnect the AVIONICS switch from the switch wires.
       - (f) Remove the mounting bezel from the switch.
       - (g) Remove the AVIONICS switch from the switch panel.
     - (4) Discard the AVIONICS switch.
     - (5) Install a new S3443-1-1 AVIONICS switch as follows:
       - (a) Attach the AVIONICS switch to the kept switch mounting bezel.
       - (b) Use the recorded wire locations to correctly connect all four wires to the switch with the terminal screws supplied with the new S3443-1-1 AVIONICS switch.
       - (c) Torque the switch terminal screws to 10 inch-pounds, +2 or −2 inch-pounds.
       - (d) Carefully install the S3443-1-1 AVIONICS switch and the switch mounting bezel into the switch panel.

       - (e) Put the switch panel in position on the instrument panel.
       - (f) Install the kept screws that attach the switch panel to the instrument panel.
       - (g) Remove maintenance warning tags from battery and external power receptacle and connect the battery.
       - (h) Do an operational test of the AVIONICS switch.
2. Make an entry in the airplane logbook that states compliance and method of compliance with this Service Bulletin.

   NOTE: This information shall be considered an amendment to the Cessna Manufacturer's Service/Maintenance Manual or Instructions for Continued Airworthiness and must be accomplished for ongoing Airworthiness Compliance as necessary in accordance with 14 CFR Part 43.13.

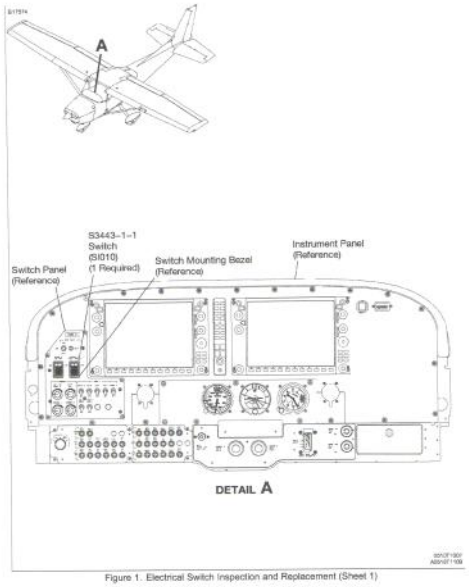

Figure 1. Electrical Switch Inspection and Replacement (Sheet 1)

OWNER NOTIFICATION

On August 12, 2011 the following message will be sent to applicable owners of record in SB11-24-02A.

Dear Cessna Single-Engine Piston Owner:

This Owner Advisory is to inform you that SB11-24-02 has been issued.

On airplanes equipped with the Garmin G1000 Avionics system, the AVIONICS switch may not operate correctly when it is used beyond its serviceable life limit. Cessna has decided to limit the life of this switch to 500 hours of operation.

An inspection of the airplane paperwork is accomplished to determine the length of time the installed AVIONICS switch has been in service. Switches that have been in service for 500 hours of operation or more shall be replaced.

Recommended:

- A one time inspection of the maintenance records of the airplane to determine the time in service of the AVIONICS switch shall be accomplished at the next 100-hour / 12-month (annual-type) inspection.
- The part number S3443-1-1 AVIONICS switch shall be replaced every 500 hours of operation.
- Subsequent actions: This Service Bulletin and 500-hour component life limit shall remain in effect until superseded by revision of the Component Time Limits Section of the airplane Maintenance Manual (latest revision).

The information contained in the referenced Cessna Service Bulletin must be considered an amendment to the Cessna Manufacturer's Service/Maintenance Manual or Instructions for Continued Airworthiness, and must be accomplished for ongoing Airworthiness Compliance as required per 14 CFR Part 43.13.

Please contact a Cessna Single Engine Authorized Service Facility for detailed information and arrange to have Cessna Service Bulletin SB11-24-02 accomplished on your airplane.

* * * * * * *

Single Engine

Cessna
A Textron Company

Service Bulletin

December 23, 2011 SB11-28-03

TITLE

FUEL RETURN LINE INSPECTION

EFFECTIVITY

Model	Serial Numbers
172R	17281573 thru 17281584, 17281588 thru 17281594, 17281596 thru 17281596
172S	172S11074 thru 172S11104, 172S11106, 172S11107, 172S11109 thru 172S11113, 172S11115 thru 172S11125, 172S11129 thru 172S11135, 172S11139 thru 172S11144

REASON

A report has been received that a part number 0516031-1 Fuel Return Line Assembly was found rubbing against the right steering tube assembly during rudder pedal actuation.

DESCRIPTION

This service bulletin provides instructions to inspect the fuel return line for damage, and if necessary, repair or replace the line assembly. Non-compliance with this service bulletin could potentially result in a fuel leak.

COMPLIANCE

Mandatory: Shall be accomplished at the next scheduled maintenance or inspection not to exceed 100 hours of operation or 12 months, whichever occurs first.

APPROVAL

FAA approval has been obtained on technical data in this publication that affects airplane type design.

MANPOWER

0.8 man-hour for inspection

If necessary, add 0.3 man-hour to replace the fuel return line assembly

If necessary, add 0.4 man-hour to repair the fuel return line assembly

To obtain satisfactory results, procedures specified in this publication must be accomplished in accordance with accepted methods and prevailing government regulations. Cessna Aircraft Company cannot be responsible for the quality of work performed in accomplishing the requirements of this publication.

Cessna Aircraft Company, Customer Service, P.O. Box 7706, Wichita, Kansas 67277, U.S.A. (316) 517-5800, Facsimile (316) 517-7271
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REFERENCES

Model 172 Series 1996 and On Maintenance Manual

NOTE: Make sure all publications used are complete and current.

NOTE: This information shall be considered an amendment to the Cessna Manufacturer's Service/Maintenance Manual or Instructions for Continued Airworthiness and must be accomplished for ongoing airworthiness compliance as required per 14 CFR Part 43.13.

OTHER PUBLICATIONS AFFECTED

Model 172R & Model 172S Illustrated Parts Catalog

NOTE: Make sure all publications used are complete and current.

MATERIAL PRICE AND AVAILABILITY

The part below is available from Cessna Service Parts and Programs through an appropriate Cessna Single Engine Authorized Service Facility.

Part Number	Description	Qty/Airplane
0516031-1	Fuel Line Assembly	1 (if required)

CREDIT INFORMATION

For airplanes in warranty and identified within the Serial Effectivity:

A labor allowance credit of 0.8 man-hour per airplane will be provided to inspect the fuel return line assembly as described in this service bulletin.

If necessary, an additional 0.3 man-hour per airplane will be provided to replace the fuel return line assembly as described in this service bulletin.

If necessary, an additional 0.4 man-hour per airplane will be provided to repair the fuel return line assembly as described in this service bulletin.

Freight will be credited at the most economical method unless pre-approved by Cessna. For pre-approval contact Cessna Service Parts and Programs Warranty Administration at Telephone: 316-831-4296, Fax: 316-206-2746 or E-mail: cpd2claims@cessna.textron.com.

To receive credit, the work must be completed and the Warranty Claim submitted by a Cessna Single Engine Authorized Service Facility within 30 calendar days of service bulletin compliance before the credit expiration dates shown below.

NOTE: Part number 0516031-1 fuel lines removed based on the inspection results of this service bulletin shall be held for field scrap per standard procedures.

Domestic ..... January 13, 2013
International ..... January 13, 2013

Special Note to Single-Engine Authorized Service Facilities:

When you complete the Warranty Claim, the labor allowance claimed shall be itemized for each above action completed.

ACCOMPLISHMENT INSTRUCTIONS

WEIGHT AND BALANCE INFORMATION
Negligible

Material Information

The part below may be necessary:

NEW P/N	QUANTITY	DESCRIPTION	OLD P/N	DISPOSITION
0516031-1	1	Fuel Line Assembly	Same	Refer to Credit Information Section.

Instructions

1. Prepare the airplane for maintenance.
   A. Make sure that all switches are in the OFF/NORM position.
   B. Disconnect electrical power from the airplane.
      (1) Disconnect the airplane battery.
      (2) Disconnect external electrical power.
   C. Attach maintenance warning tags to the battery and external power receptacle that have **"DO NOT CONNECT ELECTRICAL POWER - MAINTENANCE IN PROGRESS"** written on them.

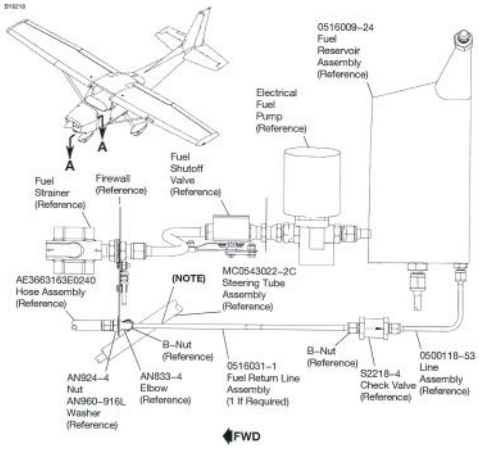
   WARNING: IF THE AIRPLANE HAS AMSAFE INFLATABLE RESTRAINTS, DO NOT REMOVE SEATS WITH THE SEAT BELTS BUCKLED OR THE ELECTRONICS MODULE ASSEMBLY (EMA) CONNECTED. DAMAGE TO THE SYSTEM CAN OCCUR AND AN ACCIDENTAL DEPLOYMENT OF THE SYSTEM CAN CAUSE INJURY.

2. Remove the access panel (230BT) and the rudder pedal close-out panel below the copilot's rudder pedals. (Refer to the Model 172 Series 1996 and On Maintenance Manual, Chapter 6, Access/Inspection Plates - Description and Operation.)
3. Make sure that the AN833-4 Elbow is installed in the 6 O'clock position as shown in View A-A of Figure 1.
   A. If the AN833-4 Elbow outlet is in the 6 O'clock position, go to Step 4.
   B. If the AN833-4 Elbow outlet is not in the 6 O'clock position, do as follows:
      (1) Remove the upper engine cowl. (Refer to the Model 172 Series 1996 and On Maintenance Manual, Chapter 71, Cowl - Maintenance Practices.)
      (2) Put a backup wrench on the AN833-4 Elbow.
      (3) Loosen the AN924-4 Nut.
      (4) Put the AN833-4 Elbow outlet in the 6 O'clock position.
      (5) Tighten the AN924-4 Nut and torque it to 225 inch-pounds, +25 or -25 inch-pounds.
4. (Refer to Figure 1, View A-A.) Do an inspection of the 0516031-1 Fuel Return Line Assembly as follows:
   A. With a flashlight and a mirror, do an inspection of the 0516031-1 Fuel Return Line Assembly for damage and for sufficient line clearance in the area of the MC0543022-2C Steering Tube Assembly.
      (1) If there is no damage to the 0516031-1 Fuel Return Line Assembly and the 0516031-1 Fuel Return Line Assembly does not touch the MC0543022-2C Steering Tube Assembly when the rudder pedals and nose wheel travel through the full left and right positions, go to Step 8.
      (2) If there is no damage to the 0516031-1 Fuel Return Line Assembly, but it does touch the MC0543022-2C Steering Tube Assembly when the rudder pedals and nose wheel travel

through the full left and right positions, hand form the line until you have clearance between the 0516031-1 Fuel Return Line Assembly and the MC0543022-2C Steering Tube Assembly when the rudder pedals and nose wheel travel through the full left and right positions. Then go to Step 6.

      (3) If there is damage to the 0516031-1 Fuel Return Line Assembly, do as follows:
         (a) Pull the fuel shutoff valve handle aft to shut off the fuel supply from the engine.
         (b) Remove the 0516031-1 Fuel Return Line Assembly and install protective caps on the S2218-4 Check Valve, AN833-4 Elbow at the firewall, and each end of the 0516031-1 Fuel Return Line Assembly.
         (c) Make sure that there is only residual fuel leakage from the S2218-4 Check Valve after you disconnect the 0516031-1 Fuel Return Line Assembly. If there is more than residual fuel leakage, you must replace the S2218-4 Check Valve. (Refer to the Model 172 Series 1996 and On Maintenance Manual, Chapter 28, Fuel Storage and Distribution - Maintenance Practices.)
         (d) Do an inspection of the damage on the 0516031-1 Fuel Return Line Assembly.
            1 If there is damage in the area of a bend radius of the line, you must remove and discard the 0516031-1 Fuel Return Line Assembly. Then go to Step 5.
            2 If there is damage on the line of a depth of more than 0.0035 inch, or you cannot measure the depth of the damage, you must remove and discard the 0516031-1 Fuel Return Line Assembly. Then go to Step 5.
            3 If there is damage on the line of a depth of 0.0035 inch or less and it is not in the area of a bend radius of the line, repair the damage to the 0516031-1 Fuel Return Line Assembly with blending procedures in accordance with FAA Advisory Circular 43.13-1B Acceptable Methods, Techniques, and Practices Aircraft Inspection and Repair. Then go to Step 5.
5. Install the 0516031-1 Fuel Return Line Assembly as follows:
   A. Remove the protective caps from the 0516031-1 Fuel Return Line Assembly, S2218-4 Check Valve, and AN833-4 Elbow at the firewall.
   B. Hand tighten the B-nuts at the two ends of the 0516031-1 Fuel Return Line Assembly.
   C. Put the 0516031-1 Fuel Return Line Assembly in the position that gives correct clearance between the airplane structure and the MC0543022-2C Steering Tube Assembly when the rudder pedals and nosewheel move through the full left and right positions.
   D. Hold the 0516031-1 Fuel Return Line Assembly in the correct position while you torque the B-nuts to 120 inch-pounds, +20 or –20 inch-pounds.
   E. Turn the nosewheel with a tow bar and move the copilot's rudder pedals at the same time while you look at the MC0543022-2C Steering Tube Assembly as it moves through its full range of motion. Make sure that the MC0543022-2C Steering Tube Assembly does not touch the 0516031-1 Fuel Return Line Assembly or the airplane structure.
      (1) If the 0516031-1 Fuel Return Line Assembly touches the right MC0543022-2C Steering Tube Assembly or the airplane structure, you must hand form the line until you have clearance between the 0516031-1 Fuel Return Line Assembly and the MC0543022-2C Steering Tube Assembly when the rudder pedals and nose wheel travel through the full left and right positions. Then go to Step 6.
      (2) If the 0516031-1 Fuel Return Line Assembly does not touch the right MC0543022-2C Steering Tube Assembly or the airplane structure, go to Step 6.
6. Push the fuel shutoff valve handle forward to the ON position.
7. Do a check for leaks at the 0516031-1 Fuel Return Line Assembly.
8. Install the access plate (230BT) and the rudder panel close-out panel. (Refer to the Model 172 Series 1996 and On Maintenance Manual, Chapter 6, Access/Inspection Plates - Description and Operation.)

9. If removed, install the upper engine cowl. (Refer to the Model 172 Series 1996 and On Maintenance Manual, Chapter 71, Cowl - Maintenance Practices.)
10. Remove maintenance warning tags from battery and external power receptacle and connect the battery.
11. Make an entry in the airplane logbook that states compliance and method of compliance with this service bulletin.



VIEW A-A
Looking Down at Correct Installation

NOTE: Turn the nosewheel with a tow bar and move the copilot's rudder pedals at the same time while you look at the MC0543022-2C Steering Tube Assembly as it moves through its full range of motion to make sure it does not touch the 0516031-1 Fuel Return Line Assembly or the airplane structure.

Figure 1. Fuel Return Line Inspection (Sheet 1)

OWNER NOTIFICATION

On December 23, 2011, the following message will be sent to applicable owners of record:

Dear Cessna Skyhawk Owner:

This owner advisory is to inform you that Service Bulletin SB11-28-03, Fuel Return Line Inspection, has been issued.

A report has been received that a part number 0516031-1 Fuel Return Line Assembly was found rubbing against the right steering tube assembly during full rudder pedal actuation.

This service bulletin provides instructions to inspect the fuel return line for damage, and if necessary, repair or replace the line assembly. Non-compliance with this service bulletin could potentially result in a fuel leak.

Compliance is Mandatory: Shall be accomplished at the next scheduled maintenance or inspection not to exceed 100 hours of operation or 12 months, whichever occurs first.

The information contained in the referenced Cessna Service Bulletin shall be considered an amendment to the Cessna Manufacturer's Service/Maintenance Manual or Instructions for Continued Airworthiness, and must be accomplished for ongoing airworthiness compliance as required per 14 CFR Part 43.13.

For airplanes in warranty and identified within the Serial Effectivity:

A labor allowance credit of 0.8 man-hour per airplane will be provided to inspect the fuel return line assembly as described in this service bulletin.

If necessary, an additional 0.3 man-hour per airplane will be provided to replace the fuel return line assembly as described in this service bulletin.

If necessary, an additional 0.4 man-hour per airplane will be provided to repair the fuel return line assembly as described in this service bulletin.

Freight will be credited at the most economical method unless pre-approved by Cessna. For pre-approval contact Cessna Service Parts and Programs Warranty Administration at Telephone: 316-831-4296, Fax: 316-206-2746 or E-mail: cpd2claims@cessna.textron.com.

To receive credit, the work must be completed and the Warranty Claim submitted by a Cessna Single Engine Authorized Service Facility within 30 calendar days of service bulletin compliance before the credit expiration dates shown below.

NOTE: Part number 0516031-1 fuel lines removed based on the inspection results of this service bulletin shall be held for field scrap per standard procedures.

Domestic	January 13, 2013
International	January 13, 2013

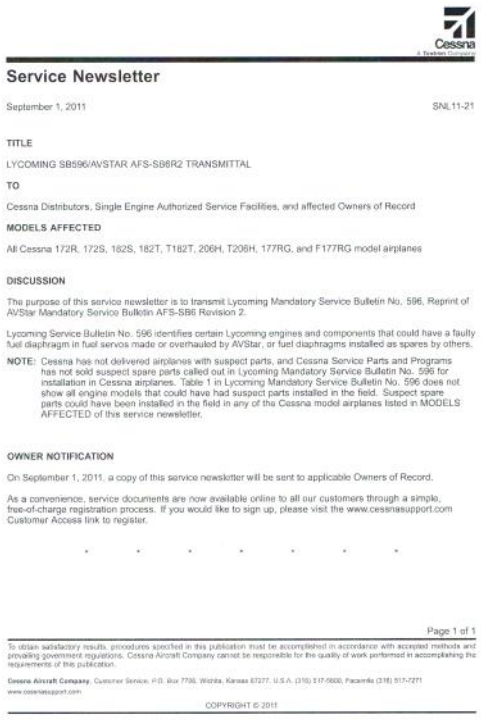
Please contact a Cessna Single Engine Authorized Service Facility for detailed information and arrange to have Cessna Service Bulletin SB11-28-03 accomplished on your airplane.

As a convenience, service documents are now available online to all our customers through a simple, free-of-charge registration process. If you would like to sign up, please visit the www.cessnasupport.com Customer Access link to register.

* * * * * * *

SNL 11-21 Lycoming SB596/AVSTAR AFS-SB6R2

Airframe Index Engine Index Propeller Index AD Index



Cessna
A Textron Company

Service Newsletter

September 1, 2011 SNL11-21

TITLE

LYCOMING SB596/AVSTAR AFS-SB6R2 TRANSMITTAL

TO

Cessna Distributors, Single Engine Authorized Service Facilities, and affected Owners of Record

MODELS AFFECTED

All Cessna 172R, 172S, 182S, 182T, T182T, 206H, T206H, 177RG, and F177RG model airplanes

DISCUSSION

The purpose of this service newsletter is to transmit Lycoming Mandatory Service Bulletin No. 596, Reprint of AVStar Mandatory Service Bulletin AFS-SB6 Revision 2.

Lycoming Service Bulletin No. 596 identifies certain Lycoming engines and components that could have a faulty fuel diaphragm in fuel servos made or overhauled by AVStar, or fuel diaphragms installed as spares by others.

NOTE: Cessna has not delivered airplanes with suspect parts, and Cessna Service Parts and Programs has not sold suspect spare parts called out in Lycoming Mandatory Service Bulletin No. 596 for installation in Cessna airplanes. Table 1 in Lycoming Mandatory Service Bulletin No. 596 does not show all engine models that could have had suspect parts installed in the field. Suspect spare parts could have been installed in the field in any of the Cessna model airplanes listed in MODELS AFFECTED of this service newsletter.

OWNER NOTIFICATION

On September 1, 2011, a copy of this service newsletter will be sent to applicable Owners of Record.

As a convenience, service documents are now available online to all our customers through a simple, free-of-charge registration process. If you would like to sign up, please visit the www.cessnasupport.com Customer Access link to register.

Page 1 of 1

To obtain satisfactory results, procedures specified in this publication must be accomplished in accordance with accepted methods and prevailing government regulations. Cessna Aircraft Company cannot be responsible for the quality of work performed in accomplishing the requirements of this publication.

Cessna Aircraft Company, Customer Service, P.O. Box 7706, Wichita, Kansas 67277, U.S.A. (316) 517-5800, Facsimile (316) 517-7271
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FAA
Aviation Safety

SPECIAL AIRWORTHINESS INFORMATION BULLETIN

SAIB: CE-12-15
Date: January 30, 2012

SUBJ: DC Power Distribution System - Avionics Master Switch
This is information only. Recommendations aren't mandatory.

SEE ATTACHED CESSNA BULLETIN

Introduction

This Special Airworthiness Information Bulletin (SAIB) informs registered owners and operators of an airworthiness concern associated with the avionics master switch on **Cessna Aircraft Company (Cessna) Model 172R, 172S, 182T, T182T, 206H and T206H airplanes.** There is a potential for an accelerated rate of failure of the switch, which may result in the loss of avionics equipment on Garmin G1000-equipped airplanes.

Although failure of the switch can result in loss of equipment, these airplanes are designed such that avionics equipment necessary for the pilot to continue safe flight and landing are still maintained through the aircraft's electrical system.

At this time, this airworthiness concern is not considered an unsafe condition that would warrant an airworthiness directive (AD) action under Title 14 of the Code of Federal Regulations (14 CFR part 39).

Background

We have received reports indicating a trend of failures associated with components of the Garmin G1000 avionics suite in the Cessna single-engine models identified above.

After investigating further and coordinating with Cessna, we determined that electrical contact erosion was occurring internal to the switch. This erosion is due to power-up surge currents caused by avionics equipment connected to one side of the switch (Avionics Bus 2). We reviewed the electrical distribution system for the affected models and found that in the event of a complete failure of the avionics master switch, essential equipment necessary to continue safe flight and landing will be maintained through alternate power sources.

Cessna has issued Service Bulletin SB 11-24-02 to address this issue.

Recommendations

We recommend the following for all owners and operators of Cessna Models 172R, 172S, 182T, T182T, 206H, and T206H aircraft equipped with a Garmin G1000 system:

1) Replacement of the avionics master switch (part number S3443-1-1) every 500 hours of operation following Cessna Service Bulletin SB11-24-02, dated July 21, 2011.

2) If you experience issues during power up of the avionics where a display or other equipment does not initially power and it requires cycling of the avionics master switch, take further action to isolate and identify the problem including inspection of the switch for possible impending failure.

3) If you experience any system failure in-flight or before flight, follow the appropriate published abnormal or emergency procedures, and have the failed system repaired before the next flight. Take further action to isolate and identify the problem including inspection of the avionics master switch for possible impending failure.

For Further Information Contact

Richard Rejniak, Aerospace Engineer, FAA, Wichita Aircraft Certification Office, 1801 Airport Rd, Room 100, Wichita, Kansas, 67209; phone: (316) 946-4128; fax: (316) 946-4107; e-mail: richard.rejniak@faa.gov.

For Related Service Information Contact

Cessna Aircraft Company, P.O. Box 7704 Wichita, KS 67277 and Attn: Customer Care; phone: 316-517-5800 or 800-423-7762, fax: 316-517-7271, web: www.cessnasupport.com, e-mail: customercare@cessna.textron.com.

Single Engine

Cessna
A Textron Company

Service Bulletin

July 22, 2011 SB11-24-02

TITLE

AVIONICS SWITCH INSPECTION AND REPLACEMENT

EFFECTIVITY

The following airplanes equipped with the Garmin G1000 Avionics system:

Model	Serial Numbers
172R	17281241 and On
172S	172S9810 and On
182T	18281228 and On
T182T	T18208232 and On
206H	20608215 and On
T206H	T20608450 and On

REASON

On airplanes equipped with the Garmin G1000 Avionics system, the AVIONICS switch may not operate correctly when it is used beyond its serviceable life limit. Cessna has decided to limit the life of this switch to 500 hours of operation.

DESCRIPTION

An inspection of the airplane paperwork is accomplished to determine the length of time the installed AVIONICS switch has been in service. Switches that have been in service for 500 hours of operation or more shall be replaced.

To obtain satisfactory results, procedures specified in this publication must be accomplished in accordance with accepted methods and prevailing government regulations. Cessna Aircraft Company cannot be responsible for the quality of work performed in accomplishing the requirements of this publication.

Cessna Aircraft Company, Customer Service, P.O. Box 7706, Wichita, Kansas 67277, U.S.A. (316) 517-5800; Facsimile (316) 517-7271
www.cessnasupport.com

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COMPLIANCE

Recommended:

- A one time inspection of the maintenance records of the airplane to determine the time in service of the AVIONICS switch shall be accomplished at the next 100-hour / 12-month (annual-type) inspection.
- The part number S3443-1-1 AVIONICS switch shall be replaced every 500 hours of operation.
- Subsequent actions: This Service Bulletin and 500-hour component life limit shall remain in effect until superseded by revision of the Component Time Limits Section of the airplane Maintenance Manual (latest revision).

APPROVAL

FAA approval has been obtained on technical data in this publication that affects airplane type design.

MANPOWER

If necessary, 1.2 man-hours to replace the AVIONICS switch

REFERENCES

Model 172 Series 1996 and On Maintenance Manual

Model 182/T182 Series 1997 and On Maintenance Manual

Model 206/T206 Series 1998 and On Maintenance Manual

Model 172R/172S Wiring Diagram Manual

Model 182S/182T/T182T Wiring Diagram Manual

Model 206H/T206H Wiring Diagram Manual

NOTE: Make sure all publications used are complete and current. Refer to www.cessnasupport.com.

NOTE: This information shall be considered an amendment to the Cessna Manufacturer's Service/Maintenance Manual or Instructions for Continued Airworthiness and must be accomplished for ongoing airworthiness compliance as necessary in accordance with 14 CFR Part 43.13.

OTHER PUBLICATIONS AFFECTED

Model 172R & Model 172S Illustrated Parts Catalog

Model 182S/182T/T182T Illustrated Parts Catalog

Model 206H & Model T206H Illustrated Parts Catalog

NOTE: Make sure all publications used are complete and current. Refer to cessnasupport.com.

MATERIAL AVAILABILITY

The following parts are available from Cessna Service Parts and Programs through an appropriate Cessna Authorized Service Facility.

Part Number	Description	Qty/Airplane
S3443-1-1	Switch, Split Dual Rocker	1

ACCOMPLISHMENT INSTRUCTIONS

WEIGHT AND BALANCE INFORMATION

Negligible

Material Information

The part below may be necessary:

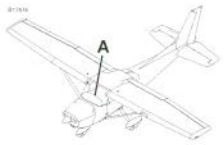
NEW P/N	QUANTITY	DESCRIPTION	OLD P/N	DISPOSITION
S3443-1-1	1	Switch, Split Dual Rocker	Same	Discard

Instructions

1. Look in the airplane paperwork to see if the AVIONICS switch was installed within the last 500 hours of operation of the airplane.
   - A. If the switch was installed within the last 500 hours of operation of the airplane, go to Step 2.
   - B. If the total time in service for the switch is 500 hours of operation or more, do as follows:
     - (1) Prepare the airplane for maintenance.
       - (a) Make sure that all switches are in the OFF/NORM position.
       - (b) Disconnect electrical power from the airplane.
         1. Electrically ground the airplane.
         2. Disconnect external electrical power.
         3. Disconnect the airplane battery.
     - (2) Attach maintenance warning tags to the battery and external power receptacle that have **"DO NOT CONNECT ELECTRICAL POWER - MAINTENANCE IN PROGRESS"** written on them.
     - (3) Remove the AVIONICS switch from the airplane as follows: (Refer to the applicable Airplane Model Maintenance Manual, Chapter 31, Instrument and Control Panels - Maintenance Practices.)
       - (a) Make sure that the MASTER and AVIONICS switches are in the off position.
       - (b) Remove and keep the screws that attach the switch panel to the instrument panel.
       - (c) Carefully pull out the switch panel as necessary to get access behind the switch panel.
       - (d) As applicable, record the location of the wires attached to the AVIONICS switch.
       - (e) Remove all four switch terminal screws to disconnect the AVIONICS switch from the switch wires.
       - (f) Remove the mounting bezel from the switch.
       - (g) Remove the AVIONICS switch from the switch panel.
     - (4) Discard the AVIONICS switch.
     - (5) Install a new S3443-1-1 AVIONICS switch as follows:
       - (a) Attach the AVIONICS switch to the kept switch mounting bezel.
       - (b) Use the recorded wire locations to correctly connect all four wires to the switch with the terminal screws supplied with the new S3443-1-1 AVIONICS switch.
       - (c) Torque the switch terminal screws to 10 inch-pounds, +2 or −2 inch-pounds.
       - (d) Carefully install the S3443-1-1 AVIONICS switch and the switch mounting bezel into the switch panel.

       - (e) Put the switch panel in position on the instrument panel.
       - (f) Install the kept screws that attach the switch panel to the instrument panel.
       - (g) Remove maintenance warning tags from battery and external power receptacle and connect the battery.
       - (h) Do an operational test of the AVIONICS switch.
2. Make an entry in the airplane logbook that states compliance and method of compliance with this Service Bulletin.

NOTE: This information shall be considered an amendment to the Cessna Manufacturer's Service/Maintenance Manual or Instructions for Continued Airworthiness and must be accomplished for ongoing Airworthiness Compliance as necessary in accordance with 14 CFR Part 43.13.



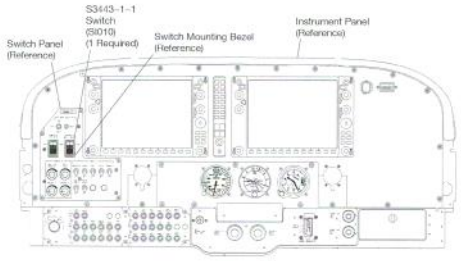


Figure 1. Electrical Switch Inspection and Replacement (Sheet 1)

OWNER NOTIFICATION

On August 12, 2011 the following message will be sent to applicable owners of record in SB11-24-02A.

Dear Cessna Single-Engine Piston Owner:

This Owner Advisory is to inform you that SB11-24-02 has been issued.

On airplanes equipped with the Garmin G1000 Avionics system, the AVIONICS switch may not operate correctly when it is used beyond its serviceable life limit. Cessna has decided to limit the life of this switch to 500 hours of operation.

An inspection of the airplane paperwork is accomplished to determine the length of time the installed AVIONICS switch has been in service. Switches that have been in service for 500 hours of operation or more shall be replaced.

Recommended:

- A one time inspection of the maintenance records of the airplane to determine the time in service of the AVIONICS switch shall be accomplished at the next 100-hour / 12-month (annual-type) inspection.
- The part number S3443-1-1 AVIONICS switch shall be replaced every 500 hours of operation.
- Subsequent actions: This Service Bulletin and 500-hour component life limit shall remain in effect until superseded by revision of the Component Time Limits Section of the airplane Maintenance Manual (latest revision).

The information contained in the referenced Cessna Service Bulletin must be considered an amendment to the Cessna Manufacturer's Service/Maintenance Manual or Instructions for Continued Airworthiness, and must be accomplished for ongoing Airworthiness Compliance as required per 14 CFR Part 43.13.

Please contact a Cessna Single Engine Authorized Service Facility for detailed information and arrange to have Cessna Service Bulletin SB11-24-02 accomplished on your airplane.

SNL 11-9 Electronic Pilot's Checklist

Airframe Index Engine Index Propeller Index AD Index

Cessna
A Textron Company

Service Newsletter

May 24, 2011 SNL11-9

TITLE

ELECTRONIC PILOT'S CHECKLIST

TO

Cessna Distributors, Single Engine Authorized Service Facilities, and affected Owners of Record

MODELS AFFECTED

All of the following propeller model airplanes equipped with the Garmin G1000 Avionics System:

172R, 172S, 182T, T182T, 206H, and T206H

DISCUSSION

The Electronic Pilot's Checklist for the above affected airplanes is available by download from www.cessnasupport.com.

After installation, the Electronic Pilot's Checklist will be displayed on the Multi-Function Display (MFD) unit.

NOTE: The Electronic Pilot's Checklist is presented in the English language only.

Like the paper copy of the Pilot's Checklist, the Electronic Pilot's Checklist is provided as a quick reference for convenience purposes only. Use of the Electronic Pilot's Checklist does not replace the requirement to use the approved Pilot's Operating Handbook (POH)/Airplane Flight Manual (AFM) instructions. The operator must verify and maintain current Electronic Pilot's Checklist files that will be made available with POH/AFM revisions.

Should inspection of the Electronic Pilot's Checklist file show that it is not current with the Pilot's Checklist revision, the owner/operator must remove the out-of-date Electronic Pilot's Checklist from the airplane or replace it with the current checklist. To do this, remove the Electronic Pilot's Checklist SD Card from the top MFD SD Card slot.

eCHECKLIST UPDATE
COMPLETED 5/29/11

To obtain satisfactory results, procedures specified in this publication must be accomplished in accordance with accepted methods and prevailing government regulations. Cessna Aircraft Company cannot be responsible for the quality of work performed in accomplishing the requirements of this publication.

Cessna Aircraft Company, Customer Service, P.O. Box 7706, Wichita, Kansas 67277, U.S.A. (316) 517-5800, Facsimile (316) 517-7271
www.cessnasupport.com

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U: nonaviation
P: Aviation

INSTRUCTIONS

1. Go to www.cessnasupport.com.
2. In the Customer Service box click on Customer Access and Login (if this is the first time that you have used the site, click Register).
3. Once you are logged in, choose your model in the "My Models" table on the left side of the screen.
4. If your model is not visible, add your model using the "My Preferences" tab.
5. In your model-specific screen, review the Maintenance Information and click Maintenance Software.
6. Click the link and follow the instructions to download and install the Electronic Checklist (ECL) file that is applicable to your model (i.e. turbo or non-turbo) and installed equipment (i.e. KAP140 or GFC700 autopilot).

OWNER NOTIFICATION

On May 24, 2011 a copy of this Service Newsletter will be sent to applicable owners of record in SNL11-9.

Cessna
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Owner Advisory

August 31, 2010 SB10-57-01A

Dear Cessna Owner:

This Owner Advisory is to inform you that SB10-57-01 Spar Rivet Inspection has been issued.

It has been determined that some airplanes may have two universal head type rivets installed through the left lower spar cap and the spar web at WS 99.00 and WS 97.00, where countersink head type rivets should have been installed.

The two rivets are examined to see if they are universal head type rivets. If universal head type rivets are installed, they must be removed and new countersink head type rivets are installed. In addition, if universal head type rivets are installed, an inspection of the strut upper fitting must be done to see if there is damage to the fitting. If there is damage to the fitting, the damage is to be repaired.

Compliance is Mandatory: Shall be accomplished within the next 100 hours of operation or 12 months, whichever occurs first.

The information contained in the referenced Cessna Service Bulletin shall be considered an amendment to the Cessna Manufacturer's Service/Maintenance Manual or Instructions for Continued Airworthiness, and shall be accomplished for ongoing airworthiness compliance as required per 14 CFR Part 43.13.

CREDIT INFORMATION

For Airplanes in Warranty

A labor allowance credit of 0.5 man-hour per airplane will be provided to perform the inspection.

If necessary, applicable parts credit and a labor allowance credit of 3.5 man-hour will be provided to replace the rivets.

To receive credit, the work must be completed and a Warranty Claim submitted by a Cessna Single Engine Service Station within 30 calendar days of Service Bulletin compliance before the credit expiration dates shown below.

Domestic . . . . . August 17, 2011
International . . . . . August 17, 2011

Please contact a Cessna Single Engine Service Station for detailed information and arrange to have Cessna Service Bulletin SB10-57-01 accomplished on your airplane.

To obtain satisfactory results, procedures specified in this publication must be accomplished in accordance with accepted methods and prevailing government regulations. Cessna Aircraft Company cannot be responsible for the quality of work performed in accomplishing the requirements of this publication.

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Single Engine

Cessna
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Service Bulletin

August 18, 2008 SB08-11-02

TITLE

ELECTRONIC PILOT'S CHECKLIST

EFFECTIVITY

The following airplanes equipped with the Garmin G1000 Nav III Avionics Option:

Model	Serial Numbers
172R	17281497 thru 17281544
172S	172S10656 thru 172S10782
182T	18282046 thru 18282129
T182T	T18208807 thru T18208893
206H	20608303 thru 20608311
T206H	T20608801 thru T20608869

NOTE: Airplane serial numbers beyond the above serial numbers will have the Electronic Pilot's Checklist installed during production of the airplane.

REASON

To provide the Electronic Pilot's Checklist for the above affected airplanes. After installation, the Electronic Pilot's Checklist will be displayed on the Multi-Function Display (MFD) unit.

NOTE: The Electronic Pilot's Checklist is presented in the English language only.

DESCRIPTION

The Electronic Pilot's Checklist is provided on a Secure Digital (SD) Card and instructions for installation of the checklist must be performed as described in this Service Bulletin.

Like the paper copy of the Pilot's Checklist, the Electronic Pilot's Checklist is provided as a quick reference for convenience purposes only. Use of the Electronic Pilot's Checklist, does not replace the requirement to use the approved Pilot's Operating Handbook (POH)/Airplane Flight Manual (AFM) instructions. The operator must verify and maintain current Electronic Pilot's Checklist files that will be made available with POH/AFM revisions. Should inspection of the Electronic Pilot's Checklist file show that it is not current with the Pilot's Checklist revision, the owner/operator must remove the out-of-date Electronic Pilot's Checklist from the airplane or replace it with the current checklist. To do this, remove the Electronic Pilot's Checklist SD Card from the top MFD SD Card slot.

To obtain satisfactory results, procedures specified in this publication must be accomplished in accordance with accepted methods and prevailing government regulations. Cessna Aircraft Company cannot be responsible for the quality of work performed in accomplishing the requirements of this publication.

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COMPLIANCE

Recommended: should be accomplished within the next 100 hours of operation or 6 months, whichever occurs first.

APPROVAL

FAA approval has been obtained on technical data in this publication that affects airplane type design.

MANPOWER

Approximately 0.3 man-hour to install the Electronic Pilot's Checklist.

REFERENCES

Model 172 Series 1996 and On Maintenance Manual

Model 182/T182 Series 1997 and On Maintenance Manual

Model 206/T206 Series 1998 and On Maintenance Manual

Garmin G1000 NAV III Line Maintenance Manual, Part Number 190-00352-00, Revision H (or latest revision)

Garmin G1000 Line Maintenance Manual And Configuration Manual, Part Number 190-00303-04, Revision D (or latest revision)

NOTE: Make sure all publications used are complete and current.

NOTE: This information shall be considered an amendment to the Cessna Manufacturer's Service/Maintenance Manual and should be accomplished within the specified time requirement.

OTHER PUBLICATIONS AFFECTED

Model 172 Series 1996 and On Illustrated Parts Catalog

Model 182S/182T/T182T Illustrated Parts Catalog

Model 206H & Model T206H Illustrated Parts Catalog

NOTE: Make sure all publications used are complete and current.

MATERIAL AVAILABILITY

The parts below are available from Cessna Customer Service at Phone: 316-517-5800 or Fax: 316-517-7271.

NOTE: Orders should be placed by completing and returning the attached Electronic Pilot's Checklist Order Form.

Part Number	Description	Qty/Airplane
172RCLBUSGSW	Model 172R Electronic Pilot's Checklist	1
172SCLBUSGSW	Model 172S Electronic Pilot's Checklist	1
182TCLBUSGSW	Model 182T Electronic Pilot's Checklist	1
T182TCLBUSGSW	Model T182T Electronic Pilot's Checklist	1
206HCLBUSGSW	Model 206H Electronic Pilot's Checklist	1
T206HCLBUSGSW	Model T206H Electronic Pilot's Checklist	1

CREDIT INFORMATION

The Electronic Pilot's Checklist will be provided at no charge as detailed in the attached Electronic Pilot's Checklist Order Form and must be ordered by the following expiration date:

Domestic . . . . . December 23, 2008
International . . . . . December 23, 2008

ACCOMPLISHMENT INSTRUCTIONS

Weight And Balance Information

Negligible

Instructions

1. Prepare the airplane for maintenance.
   A. Make sure that all switches are in the OFF/NORM position.
2. Make sure that the battery is connected. If desired, connect external electrical power to the airplane.
3. Make sure of approved system software as follows:
   A. Make sure that all of the necessary circuit breakers are engaged for normal mode startup of the Garmin G1000 system.
   B. Put the MASTER BAT switch and the AVIONICS BUS 1/BUS 2 switches to the ON position and let the system power up.
   C. In the AIRFRAME display box on the AUX-SYSTEM STATUS page on the MFD, make sure that the applicable airplane model software version displayed is as shown in Table 1.

Table 1. For GARMIN G1000 NAV III airplanes equipped with the GARMIN GFC-700 Autopilot

Model	Nav III System Software Version	POH/AFM	Pilot's Checklist
172R	0563.06 or later	172RPHBUS-00	172RCLBUS-00
172S	0563.06 or later	172SPHBUS-00	172SCLBUS-00
182T	0563.06 or later	182TPHBUS-01	182TCLBUS-01
T182T	0563.06 or later	T182TPHBUS-01	T182TCLBUS-01

Model	Nav III System Software Version	POH/AFM	Pilot's Checklist
206H	0563.06 or later	206HPHBUS-01	206HCLBUS-01
T206H	0563.06 or later	T206HPHBUS-01	T206HCLBUS-01

   D. Make sure that the software version, POH/AFM, and Pilot's Checklist in the airplane are as shown in Table 1.
   E. If the software version, POH/AFM, and Pilot's Checklist installed on your airplane are as shown in Table 1, go to Step 4.
   F. If the software version, POH/AFM, or Pilot's Checklist installed on your airplane is not as shown in Table 1, do as follows:
      (1) If the software version on your airplane is not the correct software version shown in Table 1, load the correct software with the Cessna NAV III Installation Software CD found in the protective sleeve from the POH. (Refer to the Garmin G1000 NAV III Line Maintenance Manual Revision M or latest revision.)
      (2) If the POH/AFM on your airplane is not the correct revision shown in Table 1, update to the correct revision.
      (3) If the Pilot's Checklist on your airplane is not the correct version shown in Table 1, replace it with the correct version.
4. Do the enablement of the Garmin G1000 Electronic Pilot's Checklist as follows:
   A. Disengage the MFD (AVN BUS 2) circuit breaker.
   B. Put the applicable airplane model and part number Electronic Pilot's Checklist SD Card into the top SD card slot in the MFD. Make sure that you install the correct model SD card.

      NOTE: The Electronic Pilot's Checklist SD Card stays in the top SD card slot in the MFD. You do not remove it.

      NOTE: The Electronic Pilot's Checklist SD Card is model and equipment specific. If you install the incorrect model SD card, the Electronic Pilot's Checklist will not operate.

   C. Engage the MFD (AVN BUS 2) circuit breaker.
5. Make sure that the Electronic Pilot's Checklist is installed correctly as follows:
   A. If "CHECKLIST" and the correct part number Electronic Pilot's Checklist as shown in Table 1 for the applicable model shows on the AIRFRAME display box on the AUX-SYSTEM STATUS page of the MFD, the Electronic Pilot's Checklist is installed correctly. Go to Step 6.
   B. If "CHECKLIST NOT AVAILABLE" shows on the AIRFRAME display box on the AUX-SYSTEM STATUS page of the MFD or does not show at all, you must try to install the Electronic Pilot's Checklist again. Do Steps 4A thru 4C again until "CHECKLIST" and the applicable part number Electronic Pilot's Checklist shows on the AIRFRAME display box on the AUX-SYSTEM STATUS page of the MFD in white.
6. Put the MASTER BAT switch and the AVIONICS BUS 1/BUS 2 switches in the off position.
7. If connected, remove external electrical power from the airplane.
8. Make an entry in the airplane logbook that states compliance and method of compliance with this Service Bulletin.

OWNER NOTIFICATION

On August 18, 2008 the following message will be sent to applicable owners of record in SB08-11-02A.

Dear Cessna Owner:

This Owner Advisory is to inform you that Service Bulletin SB08-11-02: Electronic Pilot's Checklist has been issued and the checklist is available for your airplane. After installation, the Electronic Pilot's Checklist will be displayed on the Multi-Function Display (MFD) unit.

NOTE: The Electronic Pilot's Checklist is presented in the English language only.

The Electronic Pilot's Checklist is provided on a Secure Digital (SD) Card and instructions for installation of the checklist shall be performed as described in SB08-11-02.

Like the paper copy of the Pilot's Checklist, the Electronic Pilot's Checklist is provided as a quick reference for convenience purposes only. Use of the Electronic Pilot's Checklist, does not replace the requirement to use the approved Pilot's Operating Handbook (POH)/Airplane Flight Manual (AFM) instructions. The operator must verify and maintain current Electronic Pilot's Checklist files that will be made available with POH/AFM revisions. Should inspection of the Electronic Pilot's Checklist file show that it is not current with the Pilot's Checklist revision, the owner/operator must remove the out-of-date Electronic Pilot's Checklist from the airplane or replace it with the current checklist. To do this, remove the Electronic Pilot's Checklist SD Card from the top MFD SD Card slot.

Compliance is recommended: should be accomplished within the next 100 hours of operation or 6 months, whichever occurs first.

The Electronic Pilot's Checklist will be provided at no charge, if ordered by December 23, 2008.

The information contained in the referenced Cessna Service Bulletin must be considered an amendment to the Cessna Manufacturer's Service/Maintenance Manual and should be accomplished within the specified time requirement.

Special Ordering Information and Procedure

Owners should order and obtain the Electronic Pilot's Checklist from Cessna Customer Service by using the attached ELECTRONIC PILOT'S CHECKLIST ORDER FORM. Then take the Electronic Pilot's Checklist SD Card to a Cessna Single Engine Service Station for the initial installation.

Please contact a Cessna Single Engine Service Station for detailed information and arrange to have Cessna Service Bulletin SB08-11-02 accomplished on your airplane.

* * * * * * *

Cessna
A Textron Company

THANK YOU FOR SUBSCRIBING TO THE ELECTRONIC CHECKLIST

We are confident that you will find the Electronic Checklist compliments your NAV III/ Garmin G1000 system. The MFD is able to display optional electronic checklists, customized for the Cessna Nav III, which allow a pilot to quickly find the proper procedure on the ground and during each phase of flight.

NOTICE

The Pilot's Checklist should not be used until the flight crew has become completely familiar with the airplane and systems. All normal and emergency procedure items and complete performance in the Pilot's Operating Handbook and FAA Approved Airplane Flight Manual shall take precedence in case of conflict.

REVISIONS

Electronic Checklist Subscription provided by The Cessna Aircraft Company will cover changes and/or additions to this electronic checklist. A CD containing the latest revisions to the Electronic Checklist will be sent automatically to you as part of the subscription service. The information contained on the CD can then be transferred unto the SD Card and reinserted with the updated Electronic Checklist file into the MFD.

CURRENCY

It is the responsibility of the owner to maintain this checklist in a current status when it is being used for operational purposes.

Owners should contact a Cessna Service Station whenever the Revision Status for their checklist is in question. The Revision Status Checklist is available on-line at cessnasupport.com. A Revision Status Checklist is also available in an automatic subscription service. Contact Cessna Propeller Aircraft Customer Services at 316-517-5800 for more information.

INSTALLATION PROCESS

1. Initial installation must be completed by an authorized Cessna Service Facility to ensure compliance with SB06-34-02 or later.
2. Insert the Electronic Checklist into the upper SD slot on the Multi Function Display (MFD) before the system is started.
3. When the BUS 2 switch is turned on the part number of the Electronic Pilot's Checklist will appear in the Power-Up display. If the SD card contains a valid checklist file, the power-up splash screen displays both the aircraft make and model to which the checklist applies and copyright information. If the SD card contains an invalid checklist file or no checklist, the power-up splash screen displays 'Invalid Checklist' or 'Checklist File Not Present' and the CHKLIST Softkey is disabled. If this error occurs, please call Cessna Propeller Aircraft Customer Service at 316-517-5800.

Cessna
E-Pilot's Checklist

ACCESSING AND NAVIGATING CHECKLISTS:

1) From any page, select the **CHKLIST** Softkey.

2) Turn the large **FMS** Knob to select the 'GROUP' field.

3) Turn the small **FMS** Knob to select the desired procedure and press the **ENT** Key.

4) Turn the large **FMS** Knob to select the 'Checklist' field.

5) Turn the **FMS** Knob to select the desired checklist and press the **ENT** Key.

6) Turn the **FMS** Knob to scroll through the checklist and highlight the desired checklist item (has a hollow white box for checkmark).

The following colors are used for checklist items:

- Blue - Item has not been highlighted
- White - Item is highlighted for selection
- Green - Item has been selected
- Yellow - Warning notes

7) Press the **ENT** Key or **DONE** Softkey to select the highlighted checklist item (item turns green and a checkmark is placed in the box next to the item). The next item is automatically highlighted for selection. Press the **CLR** Key to remove a check mark from an item.

8) Once the last item in a checklist is selected, 'Go to the next checklist?' is highlighted. Press the **ENT** Key to advance to the next checklist displayed.

9) Press the **EXIT** Softkey or hold down the **CLR** Key momentarily to exit the Checklist Page and return to the page last viewed.

IMMEDIATELY ACCESSING EMERGENCY PROCEDURES:

1) From any page, select the **CHKLIST** Softkey.

2) Press the **EMERGCY** Softkey.

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Owner Advisory

August 31, 2009 SB09-55-02A

Dear Cessna Owner:

This Owner Advisory is to inform you that SB09-55-02A: Horizontal Rear Spar Inspection has been issued.

It has been determined that on some airplanes the end of the horizontal stabilizer left and/or right rear spar may not be nested correctly in the spar tip joggle. The resultant overlap between the spar and the spar tip could over time potentially contribute to cracking in this area.

An inspection is done to see if there is joggle interference. If there is joggle interference, the skin in the area of the joggle is pulled back and the inboard section of the spar is trimmed until there is no interference with the joggle.

Compliance is mandatory: shall be accomplished within the next 100 hours of operation or 12 months, whichever occurs first.

The information contained in the referenced Cessna Service Bulletin shall be considered an amendment to the Cessna Manufacturer's Service/Maintenance Manual or Instructions for continued airworthiness, and must be accomplished for ongoing airworthiness compliance as required per 14 CFR Part 43.13.

For airplanes in warranty:

A labor allowance credit of 0.3 man-hour per airplane will be provided to inspect the joggle area between the horizontal stabilizer left and right rear spars and the spar tips.

If necessary, applicable parts credit and a labor allowance credit of 2.1 man hours per side will be provided to modify a rear spar.

To receive credit, the work must be completed and a Warranty Claim submitted by a Cessna Single Engine Service Station within 30 calendar days of Service Bulletin compliance before the credit expiration dates shown below.

Domestic .... August 31, 2010
International .... August 31, 2010

Please contact a Cessna Single Engine Service Station for detailed information and arrange to have Cessna Service Bulletin SB09-55-02 accomplished on your airplane.

* * * * * * *

Page 1 of 1

To obtain satisfactory results, procedures specified in this publication must be accomplished in accordance with accepted methods and prevailing government regulations. Cessna Aircraft Company cannot be responsible for the quality of work performed in accomplishing the requirements of this publication.

Cessna Aircraft Company, Customer Service, P.O. Box 7706, Wichita, Kansas 67277, U.S.A. (316) 517-5800, Facsimile (316) 942-9006

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MAINTENANCE RECORD

DATE	TOTAL TIME IN SERVICE		DESCRIPTION OF THE WORK PERFORMED	AUTHORIZED SIGNATURE, CERTIFICATE TYPE & NUMBER
	HOURS	10THS		

SERVICE BULLETIN COMPLIANCE RECORD

S.B. NUMBER	DATE OF COMPLIANCE	TOTAL TIME IN SERVICE		TYPE S.B. (X)		NEXT COMPLIANCE DUE-DATE/ HOURS/OTHER	AUTHORIZED SIGNATURE, CERTIFICATE TYPE & NUMBER	REMARKS
		AIRFRAME	COMPONENT	ONE-TIME	RECURRING			

Service Publication Compliance Record

Aircraft Model: 172S Serial Number: 172S10776 Registration: [illegible]

Service Information Number	Description	Complied With Date/Time	Method of Compliance or Applicability Status	Once or Recur	Next Due Date/Time
GARMIN SB 0823	[illegible]	[illegible]	[illegible]	Once	
SB04-73-01	Fuel injector line clamp and routing inspection	[illegible]	[illegible]	Recur	[illegible]
SB 08-73-01	Fuel servo [illegible] inspection	[illegible]	[illegible]	Recur	[illegible]

Compliance verified at time of delivery
Authorized Inspector Signature and Stamp: Douglas L Thompson [illegible]

Service Bulletins Performed on N6330X s/n 172S10776				
Air Care Inc.				
Service Bulletin #	**Tach Time**	**WO #**	**Date Performed**	**Description of Service Bulletin**
SB08-74-01	94	21137	11/7/2008	Mag insp
SB08-73-01	94	21137	11/7/2008	Fuel servo insp
SB09-34-05	190.6	21375	6/30/2009	G1000 software upgrade
SB09-55-01	190.6	21375	6/30/2009	Rudder rivet insp
SB08-74-01R1	190.6	21375	6/30/2009	Mag insp

N/A

Cessna
A Textron Company

Owner Advisory

October 19, 2009 SB07-34-01AR2

Dear Cessna Owner:

This Owner Advisory is to inform you t ll Avionics ChartView Option has been issued.

SB07-34-01 Revision 2 provides configuration upgrade and enabling instructions for the optional Garmin G1000 ChartView that is powered by Jeppesen Sanderson, Inc. ChartView has the ability to provide worldwide and regionalized electronic Jeppesen charts that depict the airplane position on a chart shown on the Multi-Function Display. ChartView requires an enablement card and a sustaining Electronic Chart Database Subscription that is obtained from Jeppesen and is available on an annual subscription basis. Jeppesen currently updates the ChartView database every 14 days which can be obtained via the internet.

NOTE: A ChartView subscription must be obtained from Jeppesen (1-800-621-5377 or www.jeppesen.com) prior to scheduling to have SB07-34-01R2 accomplished on your airplane.

Operating instructions for ChartView are provided in the Garmin G1000 Integrated Flight Deck Cockpit Reference Guide for Cessna NAV III, Part Number 190-00384-07 Rev. A (or latest revision).

Compliance is Optional: may be accomplished if desired.

NOTE: Compliance with this revision is not required if in compliance with the Original Issue or Revision 1 of this Service Bulletin.

NOTE: Garmin G1000 System Software Upgrade to Version 0563.03 (or later software) is required before compliance with this Service Bulletin: Accomplishment of SB07-34-02 (or later revision) installs software version 0563.03.

NOTE: Garmin System Software Version 0563.11 (or later software) is required before you can use the 010-00330-43 GDU Supplemental Database SD Cards. If you do not have Version 0563.11 or later software installed, accomplishment of SB09-34-05 (for airplanes with GFC 700 Autopilot) or SB09-34-06 (for airplanes with KAP-140 Autopilot) installs it on your airplane.

NOTE: The 010-00330-43 GDU Supplemental Database SD cards are required for use with Garmin Synthetic Vision Technology (SVT). It is recommended that you order the 010-00330-43 cards if you are considering purchasing SVT at a later date.

The information contained in the referenced Cessna Service Bulletin shall be considered an amendment to the Cessna Manufacturer's Service/Maintenance Manual.

Please contact a Cessna Single Engine Service Station for detailed information and arrange to have Cessna Service Bulletin SB07-34-01 Revision 2 accomplished on your airplane.

* * * * * * *

To obtain satisfactory results, procedures specified in this publication must be accomplished in accordance with accepted methods and prevailing government regulations. Cessna Aircraft Company cannot be responsible for the quality of work performed in accomplishing the requirements of this publication.

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Single Engine

ATTACHMENT

Cessna
A Textron Company

SB07-34-01 Revision 2

PART NO.	DESCRIPTION	PRICE	X	QTY	=	TOTAL
010-00330-53*	ChartView Enablement SD Card	$3180	X	___	=	_____
010-00330-42	GDU Supplemental Database SD Cards (2 each per airplane)	$1150/ Airplane	X	___	=	_____
010-00330-43**	GDU Supplemental Database SD Cards (2 each per airplane)	$1150/ Airplane	X	___	=	_____

*Requires a separate Jeppesen G1000 Electronic Chart Service Database Subscription that can be obtained by contacting Jeppesen at 1-800-621-5377 or www.jeppesen.com.

**NOT REQUIRED FOR AIRPLANE SERIAL NUMBERS 172S1545 and On, 172S10573 and On, 182S2146 and On, T18208909 and On, 20603317 and on, AND T20608901 and On. THE 010-00330-43 GDU SUPPLEMENTAL DATABASE SD CARDS WERE FACTORY INSTALLED ON THOSE AIRPLANES.

Subtotal _____

Tax** %_____ Tax _____

**** ALL PRICES ARE SUBJECT TO CHANGE WITHOUT NOTICE **** Total _____

THIS FORM MAY BE COMPLETED AND SUBMITTED BY A CESSNA SINGLE ENGINE SERVICE STATION OR AN INDIVIDUAL AIRPLANE OWNER. Please complete the following:

Service Station Information:

Airplane Serial Number:_____
Service Station Name:_____
Contact Name:_____
Shipping Address:_____
City:_____State:_____
Postal Code:_____Country:_____
Phone Number:_____
Fax Number:_____

Owner Information:

System ID Number:_____
Owner/Company Name:_____
Contact Name:_____
Mailing Address:_____
City:_____State:_____
Postal Code:_____Country:_____
Phone Number:_____
Fax Number:_____

Payment Information:

(Circle One) VISA, MasterCard, American Express
Name on the Card:_____
Card Number_____
Expiration Date: _____/_____
Cessna Customer Account Number:_____

Wire Transfer: Please submit order form prior to sending wire information. JP Morgan Chase Bank 1 Chase Manhattan Plaza New York, New York, 10081 USA. Account Number 910-1-209543, ABA Routing Number 0210-00021 Swift code Chasus33.

Customer Signature:_____ Date: _____/_____/_____

By signing this order form the customer agrees that, upon shipment to the customer, this purchase is non-refundable. Customer also understands that ChartView will require compliance with a Cessna Service Bulletin and may only be installed by a Cessna Authorized Service Station.

Fax Number: (316) 517-7271
Cessna Aircraft Company
Dept. 751/P.O. Box 7706
Wichita, Kansas 67277-7706
Phone Number: (316) 517-5800

SPECIAL NOTE: Orders are shipped premium carrier within 3-5 business days. **All orders will be charged sales tax unless a copy of your tax exemption form is included with this order.

SNL 05-11 Engine Starter Duty Cycle Times

Airframe Index Engine Index Propeller Index AD Index

Cessna
A Textron Company

Service Newsletter

August 1, 2005 SNL05-11

TITLE

ENGINE STARTER DUTY CYCLE TIMES

TO

Cessna Distributors, Single Engine Service Stations, CPC's and Applicable Owners of Record

EFFECTIVITY

All model 172R, 172S, 182S, 182T, T182T, 206H and T206H airplanes.

DISCUSSION

Reports have been received of failed engine starters at relatively low hours of operation. This Service Newsletter is being issued as a reminder about the engine starter duty cycle times as stated in the Pilot's Operating Handbook.

Normal Procedures: Starter duty cycle. Crank the starter for 10 seconds followed by a 20 second cool down period. This cycle can be repeated two additional times, followed by a ten minute cool down period before resuming cranking. Repeat cranking procedures above one more time. If the engine still fails to start, an investigation to determine the cause should be initiated. This duty cycle time should be strictly followed to enhance starter life and assist in reducing the possibility of premature engine starter failure.

For airplanes equipped with a Lamar engine starter, it is recommended that during normal scheduled 50 hour maintenance intervals, the starter drive should be lubricated as specified in the applicable model airplane Maintenance Manual. Lamar Technologies Corporation has also issued Service Information Letter No. SIL LSI-001 which outlines starter drive lubrication procedures. According to Lamar Technologies Corporation, operation of the affected starter motors will be improved, especially during cold weather, if the following procedure is accomplished after each 50 hours of engine operation.

1. Wash Bendix starter drive assembly with clean petroleum spirits.
2. Lubricate the Bendix starter drive assembly with spray silicone.

CAUTION: DO NOT USE SOLVENTS OTHER THAN PETROLEUM SPIRITS TO WASH THE STARTER DRIVE. ALSO, DO NOT USE GREASE, OIL OR GRAPHITE LUBRICANTS, ONLY SILICONE SPRAY LUBRICANTS ARE RECOMMENDED FOR SATISFACTORY OPERATION.

For model 206 airplanes equipped with a Sky-Tec engine starter, according to Sky-Tec, a small amount of dry-silicone type lubricant or light LPS (1) may be applied to the drive pinion gear and/or shaft to minimize surface corrosion. Never pressure wash the starter with water or any form of degreasing agent. Simply wipe it clean to remove any surface contaminants.

OWNER NOTIFICATION

On August 1, 2005 a copy of this Service Newsletter will be mailed to applicable Owners of Record for airplanes in warranty.

* * * * * * *

To obtain satisfactory results, procedures specified in this publication must be accomplished in accordance with accepted methods and prevailing government regulations. Cessna Aircraft Company cannot be responsible for the quality of work performed in accomplishing the requirements of this publication.

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LYCOMING
A Textron Company

652 Oliver Street
Williamsport, PA. 17701 U.S.A.
Tel. 570-323-6181
Fax. 570-327-7101
www.lycoming.textron.com

SERVICE INSTRUCTION

DATE: July 1, 2002

Service Instruction No. 1505
Engineering Aspects are
FAA Approved

SUBJECT: Cold Weather Starting

MODELS AFFECTED: All Lycoming aircraft engines.

TIME OF COMPLIANCE: At engine start in cold weather.

In extremely low temperatures, oil congeals, battery capacity is lowered, and the starter can be overworked. Improper cold weather starting can result in abnormal engine wear, reduced performance, shortened time between overhauls, or failure for the engine to operate properly.

The use of pre-heat will facilitate starting during cold weather, and is required when the engine has been allowed to drop to temperatures below +10°F/-12°C (+20°F/-6°C for –76 series engine models).

Be sure that the engine oil is in compliance with the recommended grades.

NOTE

The use of a heated dipstick is not approved because heat is not distributed throughout the engine, and concentrated heat may damage non-metal engine parts. Proper pre-heat requires a thorough decongealing of all oil.

To pre-heat using hot air:

1. Use a high-volume hot air heater.

CAUTION

DIRECT THE HOT AIR CAREFULLY TO AVOID HEAT DAMAGE TO NON-METAL PARTS. OPEN COWL FLAPS IF INSTALLED, SO THAT HEAT BUILD-UP DOES NOT DAMAGE WIRING, HOSES, ETC.

2. Apply hot air directly to the oil sump, external oil lines, cylinders, air intake, oil cooler and oil filter in 5 to 10 minute intervals. Between intervals, feel the engine to be sure that it is retaining warmth. Also check to be sure that there is no damaging heat build-up. During the last 5 minutes, direct heat to the top of the engine.

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3. Immediately after pre-heating, start the engine according to the normal starting process. Avoid cranking for more than 5 seconds each start attempt.

NOTE

Due to the battery being cold and subject to rapid discharge, an auxiliary power source is recommended.

4. Avoid rapid acceleration after a cold start. Do not exceed idle RPM, recommended in the engine Operator's Manual, until oil pressure is stabilized above the minimum idling range. Allow up to one minute for oil pressure to stabilize, since lines to the gage may remain cold. If oil pressure is not indicated within 30 seconds, shut down the engine and determine the cause. If no leaks or damage is found, repeat the pre-heat before restarting.

5. Allow the engine to warm up at idle speed until oil pressure and temperature are stabilized within normal limits and proceed to ground check in accordance with the airframe manufacturer's Pilots Operating Handbook.

6. Cycle the propeller control in accordance with the airframe and propeller manufacturer's instructions to insure warm oil is circulated into the propeller dome.

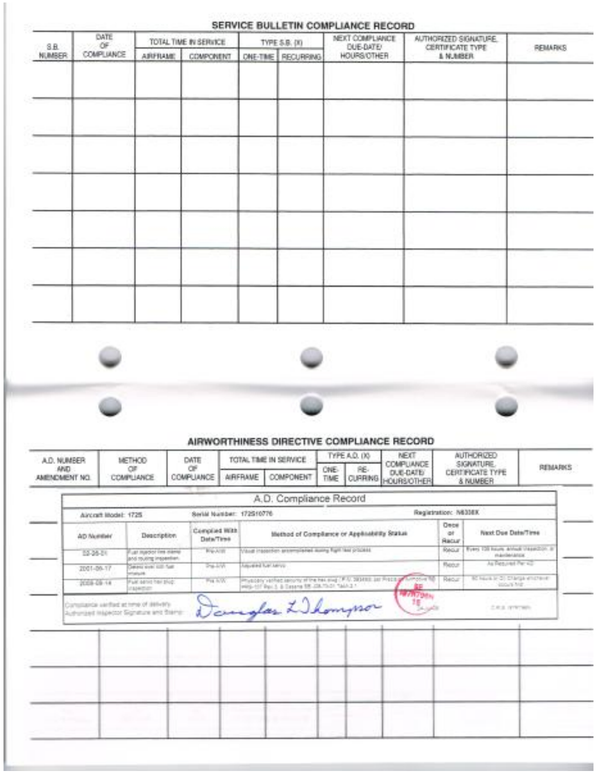
7. After completing the ground check, and before attempting takeoff, check oil pressure, oil temperature, and cylinder head temperature to be sure that all are well within their normal operating ranges.

8. Insure that when takeoff power is applied smoothly, oil pressure, fuel flow, manifold pressure, and RPM are steady. Surges or fluctuations may indicate that the engine is not warm enough for takeoff.

CAUTION

THE ENGINE MAY NOT BE WARM ENOUGH FOR TAKEOFF IF THERE ARE INDICATIONS OF:

1. ENGINE ROUGHNESS
2. LOW, HIGH OR SURGING RPM
3. HIGH, LOW, OR FLUCTUATING OIL PRESSURE
4. HIGH OR LOW FUEL FLOW
5. EXCESSIVE MANIFOLD PRESSURE



SERVICE BULLETIN COMPLIANCE RECORD

S.B. NUMBER	DATE OF COMPLIANCE	TOTAL TIME IN SERVICE		TYPE S.B. (X)		NEXT COMPLIANCE DUE-DATE/ HOURS/OTHER	AUTHORIZED SIGNATURE, CERTIFICATE TYPE & NUMBER	REMARKS
		AIRFRAME	COMPONENT	ONE-TIME	RECURRING			

AIRWORTHINESS DIRECTIVE COMPLIANCE RECORD

A.D. NUMBER AND AMENDMENT NO.	METHOD OF COMPLIANCE	DATE OF COMPLIANCE	TOTAL TIME IN SERVICE		TYPE A.D. (X)		NEXT COMPLIANCE DUE-DATE/ HOURS/OTHER	AUTHORIZED SIGNATURE, CERTIFICATE TYPE & NUMBER	REMARKS
			AIRFRAME	COMPONENT	ONE-TIME	RE-CURRING			

A.D. Compliance Record

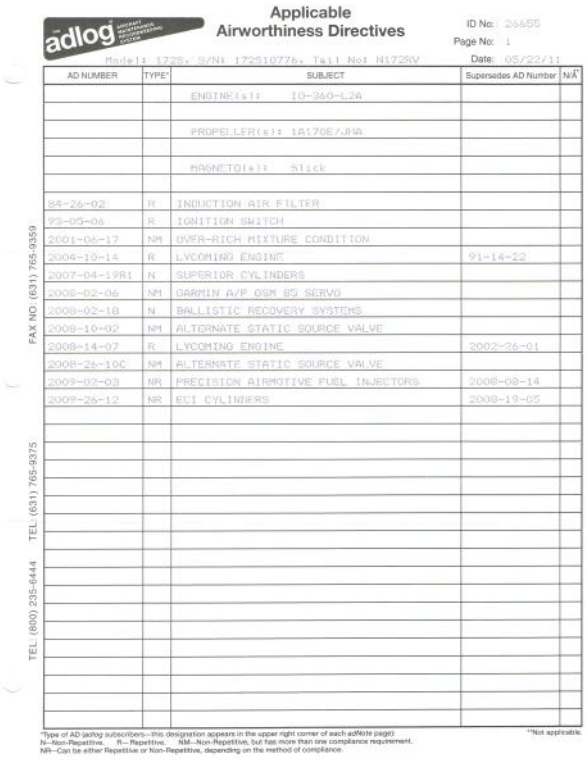
Aircraft Model: 172S Serial Number: 172S10776 Registration: N6338X

AD Number	Description	Complied With Date/Time	Method of Compliance or Applicability Status	Once or Recur	Next Due Date/Time
[illegible]	Fuel injector fire sleeve and routing inspection	[illegible]	Visual inspection accomplished during flight test process	Recur	Every 100 hours, annual inspection, or maintenance
2001-06-17	[illegible]	[illegible]	[illegible]	Recur	As Required Per AD
[illegible]	Fuel servo fuel plug inspection	[illegible]	[illegible]	Recur	[illegible]

Compliance verified at time of delivery
Authorized Inspector Signature and Stamp: Douglas L Thompson

Applicable Sheet 58/22/11 (last Adlog updated sheet)

Airframe Index Engine Index Propeller Index AD Index



adlog

Applicable Airworthiness Directives

ID No.: 26655
Page No: 1
Date: 05/22/11

Model: 172S, S/N: 172S10778, Tail No: N172SP

AD NUMBER	TYPE*	SUBJECT	Supersedes AD Number	N/A*
		ENGINE(s): IO-360-L2A		
		PROPELLER(s): 1A170E/JHA		
		MAGNETO(s): Slick		
84-26-02	R	INDUCTION AIR FILTER		
93-05-06	R	IGNITION SWITCH		
2001-06-17	NM	OVER-RICH MIXTURE CONDITION		
2004-10-14	R	LYCOMING ENGINE	91-14-22	
2007-04-19R1	N	SUPERIOR CYLINDERS		
2008-02-06	NM	GARMIN A/P GSM 85 SERVO		
2008-02-18	N	BALLISTIC RECOVERY SYSTEMS		
2008-10-02	NM	ALTERNATE STATIC SOURCE VALVE		
2008-14-07	R	LYCOMING ENGINE	2002-26-01	
2008-26-10C	NM	ALTERNATE STATIC SOURCE VALVE		
2009-02-03	NR	PRECISION AIRMOTIVE FUEL INJECTORS	2008-08-14	
2009-26-12	NR	ECI CYLINDERS	2008-19-05	

*Type of AD (adlog subscribers—this designation appears in the upper right corner of each adNote page):
N—Non-Repetitive. R—Repetitive. NM—Non-Repetitive, but has more than one compliance requirement.
NR—Can be either Repetitive or Non-Repetitive, depending on the method of compliance.

**Not applicable.

TEL (800) 235-6444 TEL (631) 765-8375 FAX NO. (631) 765-9359

2001-6-17 Over-Rich Mixture Condition

Airframe Index Engine Index Propeller Index AD Index

N172RN
AIRCRAFT REGISTRATION NO.
17259776
AIRCRAFT SERIAL NO.
CE-172
TYPE AIRCRAFT

adNote

2001-6-17 N/M
AD NUMBER

Over-Rich Mixture Condition

COMPLIANCE DATE	TOTAL TIME AT COMPLIANCE	TACH OR RECORDING METER TIME AT COMPLIANCE	METHOD OF COMPLIANCE	AUTHORIZED SIGNATURE & NUMBER

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Amendment 39-12164; Docket No. 2001-CE-14-AD.

(a) What airplanes are affected by this AD? This AD applies to Models 172R and 172S, all serial numbers, that are certificated in any category.

(b) Who must comply with this AD? Anyone who wishes to operate any of the above airplanes must comply with this AD.

(c) What problem does this AD address? The actions specified by this AD are intended to detect and correct an over-rich fuel mixture (improper fuel flow settings), which could result in rough engine operation or engine stoppage. This over-rich fuel mixture also contributes to the engine not restarting during flight when using published in-flight restart procedures.

(d) What must I do to address this problem? To address this problem, you must accomplish the following actions:

Action	Compliance Time	Special Instructions
(1) Accomplish one of the following inspections for proper engine idle speed and fuel control mixture setting: (i) Pilot Procedure: Accomplish the inspection with the engine oil temperature between 120 and 150 degrees Fahrenheit (F). Assure that the engine idle setting is between 575 and 625 revolutions per minute (RPM) and the mixture setting will produce a minimum 10 RPM rise and a maximum 50 RPM rise with the throttle at the hard ground idle stop. Screw the vernier mixture out slowly counterclockwise to obtain the RPM rise. (ii) Mechanic Procedure: Accomplish the inspection with the engine oil temperature between 120 and 150 degrees F. Assure that the fuel mixture setting is between 575 and 625 RPM and the mixture setting will produce a minimum 10 RPM rise and a maximum 20 RPM rise with the throttle at the hard ground idle stop. Screw the vernier mixture out slowly counterclockwise. The reason the limits are different than the pilot procedure is that the mechanic needs to establish a more accurate RPM indicator than the airplanes engine RPM gage. You will most likely need to use an electronic tachometer to verify speed changes.	Within the next 10 hours time-in-service (TIS) after April 20, 2001(the effective date of this AD), unless already accomplished.	The owner/operator holding at least a private pilot certificate as authorized by section 43.7 of the Federal Aviation Regulations (14 CFR 43.7) may accomplish the inspection specified in paragraph (d)(1)(i) of this AD. Make an entry into the aircraft records showing compliance with this portion of the AD in accordance with section 43.9 of the Federal Aviation Regulations (14 CFR 43.9). You may need to accomplish seasonal adjustments of the engine idle speed setting. These seasonal adjustments should not be included in your already established 12-month scheduled adjustments.
(2) If, during any inspection required by this AD, proper engine idle speed and fuel control mixture setting cannot be met, accomplish the following: (i) Adjust the fuel servo. This adjustment or any replacement must be accomplished by an appropriately-rated mechanic or at an appropriately-rated repair station; and (ii) Repeat the inspection specified in paragraph (d)(1) of this AD.	Accomplish the adjustment (if required) prior to further flight after the inspection required by paragraph (d)(1) of this AD. Reinspect within 25 hours TIS after the fuel servo adjustment.	If you have to adjust the servo more than twice over a 12-month period, obtain the next course of action from the FAA at the address referenced in paragraph (f) of this AD. We recommend you use an electronic strobe to verify RPM settings when making any adjustment.

(Over)⇒

(Continuation of Airworthiness Directive 2001-06-17)

Action	Compliance Time	Special Instructions
(3) Add the following information to the end of page 3-20, Section 3 Emergency Procedures of the Cessna 172R or 172S Pilot's Operating Handbook (POH) and FAA-approved Airplane Flight Manual (AFM): "IDLE POWER ENGINE ROUGHNESS An excessively rich idle fuel flow may cause low speed engine roughness during flight. During most in-flight low engine speeds (power off stalls, approach to landing, etc.), the mixture control is normally in the full-rich position. However, to improve engine roughness (caused by an improperly adjusted fuel servo) during low engine speeds while in flight, you should rotate the vernier mixture control (leaning of fuel mixture). You may also have to lean the fuel mixture if this low engine speed results in power loss and you need to restart the engine during flight. In all cases, you should land the airplane at the nearest airport for repairs if low speed engine roughness requires you to adjust the fuel mixture control to improve engine operation."	Within the next 10 hours TIS after April 20, 2001 (the effective date of this AD), unless already accomplished.	The owner/operator holding at least a private pilot certificate as authorized by section 43.7 of the Federal Aviation Regulations (14 CFR 43.7) may insert the information into the POH as specified in paragraph (d)(3) of this AD. You may insert a copy of this AD into the appropriate sections of the POH to comply with this action. Make an entry into the aircraft records showing compliance with portion of the AD in accordance with section 43.9 of the Federal Aviation Regulations (14 CFR 43.9).
(4) Insert the following information into the applicable Cessna Pilot's Operating Handbook (POH) and FAA-approved Airplane Flight Manual (AFM): "NORMAL PROCEDURES (Before Takeoff) Item 13. Throttle. 1. Verify smooth engine operation at idle speed of 575 to 625 TPM. 2. 1000 RPM or LESS"	Within the next 10 hours TIS after April 20, 2001 (the effective date of this AD), unless already accomplished.	The owner/operator holding at least a private pilot certificate as authorized by section 43.7 of the Federal Aviation Regulations (14 CFR 43.7) may insert the information into the POH as specified in paragraph (d)(4) of this AD. You may insert a copy of this AD into the appropriate sections of the POH to comply with this action. Make an entry into the aircraft records showing compliance with portion of the AD in accordance with section 43.9 of the Federal Aviation Regulations (14 CFR 43.9).

(e) Can I comply with this AD in any other way? You may use an alternative method of compliance or adjust the compliance time if:

(1) Your alternative method of compliance provides an equivalent level of safety; and

(2) The Manager, Wichita Aircraft Certification Office (ACO), approves your alternative. Submit your request through an FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Wichita ACO.

Note: This AD applies to each airplane identified in paragraph (a) of this AD, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (e) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if you have not eliminated the unsafe condition, specific actions you propose to address it.

(f) Where can I get information about any already-approved alternative methods of compliance? Contact Mr. Paul Pendleton, Aerospace Engineer, Wichita Aircraft Certification Office, FAA, 1801 Airport Road, Mid-Continent Airport, Wichita, Kansas 67209; telephone: (316) 946-4143; facsimile: (316) 946-4407.

(g) What if I need to fly the airplane to another location to comply with this AD? The FAA can issue a special flight permit under sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate your airplane to a location where you can accomplish the requirements of this AD.

(h) When does this amendment become effective? This amendment becomes effective on April 20, 2001.

FOR FURTHER INFORMATION CONTACT: Mr. Paul Pendleton, Aerospace Engineer, Wichita Aircraft Certification Office, FAA, 1801 Airport Road, Mid-Continent Airport, Wichita, Kansas 67209; telephone: (316) 946-4143; facsimile: (316) 946-4407.

Issued in Kansas City, Missouri, on March 23, 2001.

David R. Showers, Acting Manager, Small Airplane Directorate, Aircraft Certification Service.

Airframe Index   Engine Index   Propeller Index   AD Index

N172RV
AIRCRAFT REGISTRATION NO.
172S10776
AIRCRAFT SERIAL NO.
CE-172
TYPE AIRCRAFT

adNote

2007-4-19 Rev. 1 N
AD NUMBER

Superior Cylinders

If multi-engine: ☐ Left ☐ Right ☐ Front ☐ Rear   Engine Model/Serial No:

COMPLIANCE DATE	TOTAL TIME AT COMPLIANCE	TACH OR RECORDING METER TIME AT COMPLIANCE	METHOD OF COMPLIANCE	AUTHORIZED SIGNATURE & NUMBER
12-2-10	477.7	477.7	N/A by Parts not installed	Luigi Rondon A&P 3375646 29.

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Amendment 39-15005. Docket No. FAA-2006-25948; Directorate Identifier 2006-NE-32-AD.

Effective Date

(a) This airworthiness directive (AD) becomes effective May 7, 2007.

Affected ADs

(b) This AD revises AD 2007-04-19.

Applicability

(c) This AD applies to Superior Air Parts, Inc. (SAP), cylinder assemblies, manufactured between April 2007 and November 2005, part numbers (P/Ns): SA47000L-A1, SA47000L-A20P, SA47000S-A1, SA47000S-A20P, SA47000S-A21P, SA52000-A1, SA52000-A20P, SA52000-A21P, SA52000-A22P, SA52000-A23P, SA55000-A1, and SA55000-A20P, installed in Teledyne Continental Motors (TCM) 470, 520, and 550 series reciprocating engines. These P/N cylinder assemblies may be installed in the TCM engine models listed in the following Table 1.

Table 1.--Affected Teledyne Continental Engine Models

Engine Model	
O-470	-G, -K, -L, -M, -P, -R, -S, -U
IO-470	-C, -D, -E, -F, -G, -H, -L, -M, -N, -P, -R, -S, -U, -V
IO-520	-A, B, BA, C, CB, D, E, F, J, K, L, M, MB, MB
TSIO-520	-AF, B, BB, C, CE, D, DB, E, EB, G, H, J, JB, K, KB, L, LB, M, N, NB, P, R, T, UB, VB, WB
IO-550	-A, B, C, D, E, F, L

These engine models are installed in, but not limited to, the aircraft models listed in the following Table 2:

Aerotech Note: *Table 2 has been moved to page 2 to facilitate compilation of this adNote™.*

This AD also applies to SAP, cast cylinder assemblies, P/Ns SL32000W-A1, SL32000W-A20P, SL32000W-A21P, SL32000WH-A1, SL32000WH-A20P, SL32006W-A1, SL32006W-A20P, SL32006W-A21P, SL36000TW-A1, SL36000TW-A20P, SL36000TW-A21P, SL36000TW-A22P, SL36000W-A1, SL36000W-A20P, SL36000W-A21P, SL36006W-A1, SL36006W-A20P, and SL36006W-A21P, installed in Lycoming Engines (LE) 320, 360, and 540 series reciprocating engines and Avco Lycoming 540 series reciprocating engines. These P/N cylinder assemblies may be installed in the LE and AL engine models listed in the following Table 3.

Table 3.--Affected Lycoming Engines and Avco Lycoming Engine Models

Engine Model	
O-320	-A, -B, -C, -D, -E, H
IO-320	-B, -D, -E
LIO-320	-B
AEIO-320	-A, -B, -C
AEIO-320	-D, -E
O-360	-A, -B, -C, -D, -F, -G, -J
IO-360	-B, -J, -M
LO-360	-A
AEIO-360	-B, -H
HO-360	-C
HIO-360	-B
O-540	-A, -B, -E, -F, -G, -H, -J
IO-540	-A, -C, -D, -K, -T, -V, -W
AEIO-540	-D

These engine models are installed in, but not limited to, the aircraft models listed in the following Table 4.

Aerotech Note: *Table 4 has been moved to pages 2, 3 & 4 to facilitate compilation of this adNote™.*

These engine models are known to be installed in the aircraft models listed in the following Table 5:

Table 5.--Superior Air Parts, Inc.--Related Aircraft Models

Engine Model	Aircraft Manufacturer	Aircraft Model Designation
O-360-A1A2	American Champion	7GCBC & 7ECA

Unsafe Condition

(d) This AD results from comments from the Public on the existing AD. We are issuing this AD to prevent cylinder separation that can lead to engine failure, a possible engine compartment fire, and damage to the airplane.

Compliance

(e) You are responsible for having the actions required by this AD performed within the compliance times specified unless the actions have already been done.

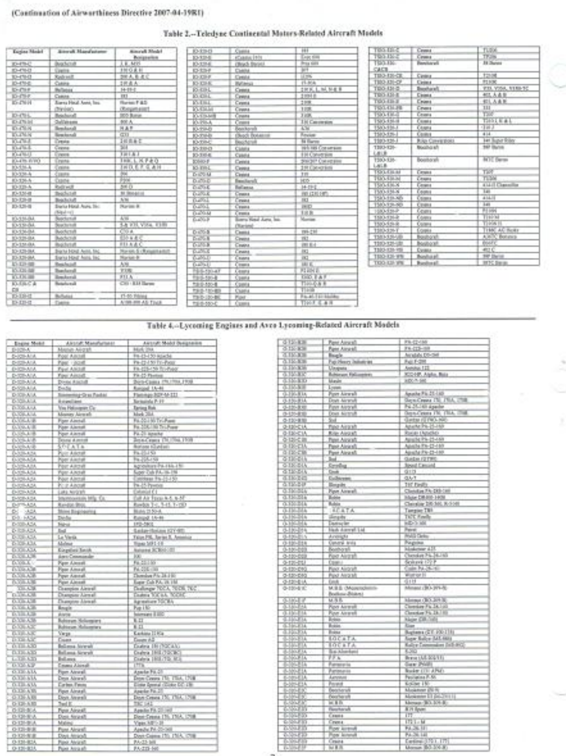
Determining Which Cylinder Assemblies Are Installed

(f) If aircraft engine records do not list the P/N of the cylinder installed during engine overhaul or repair, visually inspect the cylinders. The affected SAP cylinder head barrel flanges are marked: SA47000L-A1, SA47000L-A20P, SA47000S-A1, SA47000S-A20P, SA47000S-A21P, SA52000-A1, SA52000-A20P, SA52000-A21P, SA52000-A22P, SA52000-A23P, SA55000-A1, or SA55000-A20P or SL32000W-A1, SL32000W-A20P, SL32000W-A21P, SL32000WH-A1, SL32000WH-A20P, SL32006W-A1, SL32006W-A20P, SL32006W-A21P, SL36000TW-A1, SL36000TW-A20P, SL36000TW-A21P, SL36000TW-A22P, SL36000W-A1, SL36000W-A20P, SL36000W-A21P, SL36006W-A1, SL36006W-A20P, or SL36006W-A21P.

Cylinder Assembly Removal

[illegible]

(Over)



(Continuation of Airworthiness Directive 2007-04-19R1)

Table 2.--Teledyne Continental Motors-Related Aircraft Models

[illegible]

Table 4.--Lycoming Engines and Avco Lycoming-Related Aircraft Models

[illegible]

2

D-150-E2F	M.B.B.	Viscount Pacific (N/A-T-1)
D-150-E2G	Gotthilson	AA-5 Traveler
D-150-E2J	Gotthilson	AA-5 Charger
D-150-E4D	Beechcraft	80 Queen
D-150-E4G	Piper Aircraft	Cherokee (140)
D-150-H2AD	Cessna	Skyhawk 172N
D-150-H2AG	Pietenpol	Polish
D-150-K2E	Varga	Kachina 2150
D-150-M2A	Piper Aircraft	Twin Comanche (PA-30)
D-150-W4C	IL	
D-150-W4E	Bede	
D-150-W4G	King	
D-150-X2A	Bede Bede Aircraft	Aerostar
D-150-Z2A	M.B.B.	Mooney (BD-20A-2)
D-150-Z2B	M.B.B.	Mooney (BD-20A-2)
D-150-Z2J	Champion	402 (J)
D-150-Z4A	M.B.B.	Mooney (BD-20A-2)
D-150-Z4B	Bellanca Aircraft	
D-150-Z4E	Champion	T-41C-180
D-150-Z4G	Champion Aircraft	Citabria
D-150-Z2B	Bellanca Aircraft	
D-150-Z4J	Piper Aircraft	PA-30 Comanche (T)
80-A		
D-150-A4J-180	Piper Aircraft	Twin Comanche (PA-30)
80-A		
A22-150-B2	M.B.B.	Mooney (BD-20A-2)
A65-D2-C2-B	Mooney	301st Finally
A65-D2-C2GB	Rockwell Aerospace Ltd	EP-A
A65-D2-E2-L	Bellanca Aircraft	
A65D-150-E2A	Champion Aircraft	
A65D-150-E2B	Bellanca Aircraft	
A65D-150-E2G	Champion Aircraft	Decathalon (8KCAB-180)
A65D-150-E2K	Bellanca Aircraft	
A65D-150-E2M	Champion Aircraft	Decathalon (8KCAB)
D-150-A2-A	Bede Aircraft	Bede Total
D-150-A2-A	Beechcraft	Travel Air (95, B95)
D-150-A2-A	Piper Aircraft	Cherokee (PA-28)
D-150-A2-A	Interstate Aircraft Mfg. Co.	Cub Jet (J-3)
D-150-A2-A	Lake Aircraft	Renard (LA-4, LA-4-200, LA-4A)
D-150-A2-A	Zlin Aircraft	Trener Master (150, 250, 250A, 250AS, 250AF, 250AFS, 250AFX, 1700, 1700A, 1750)
D-150-A2-A	Interstate Aircraft	Mark "CJ6" (M-CJ6)
D-150-A2-A	Earl Bennin	Pennies Piper PA-30
D-150-A2-A	Stella	Renegat (SR-10)
D-150-A2-A	Hova	(JBU-Hova)
D-150-A2-A	Rogosia	(K-150)
D-150-A2-A	Wassmer	Super 1 (WA-80)
D-150-A2-A	Wassmer	Super 7B (L-40)
D-150-A2-A	Wassmer	Baladou (SFA-46)
D-150-A2-A	Wassmer	Pacific (WA-40)
D-150-A2-A	Aero	Condor (OK-JWB)
D-150-A2-A	Bellanca	7GCB
D-150-A2-A	Partenavia	Osprey (P-68)
D-150-A2-A	Zlin Aircraft	Zlin Trener Master 501
D-150-A2-A	Zlin Aircraft	Akrobat (Z-526)
D-150-A2-A	Pezetel	Koliber (PZL-150)
D-150-A2-A	T.E.A.M.	Sulo-150 (24)
D-150-A2-A	Mahew	Viper (MP-150B)
D-150-A2-A	Jura Swiss	AB-180
D-150-A2-A	Beagle	Airedale (A-150)
D-150-A2-A	Sotwestland	Bruce (Okie-Jokie)
D-150-A2-A	Kingsford Smith	Bushmaster (Okie)
D-150-A2-A	Jura Engine Service Ltd	Yoca (B-2)
D-150-A2-A	Piper Aircraft	Tobago TB-20
D-150-A2-A	Piper Aircraft	Comanche (PA-24)
D-150-A2-E	Lake Aircraft	Renard (LA-4, LA-4-200, LA-4A)
D-150-A2-E	Zlin Aircraft	Akrobat (Z-526 Trener, 50)
D-150-A2-G	Interstate Aircraft	Mark "CJ6" (M-CJ6)
D-150-A2-G	Interstate Aircraft	Mark 200, 300, 400A, 400SC
D-150-A2-G	Interstate Aircraft	Jihlavan, Sumavan (SH-300)
D-150-A2-G	Delfin	Dolphin (DL-65)
D-150-A2-G	Wassmer	(WA-80)
D-150-A2-G	Wassmer	Wiper (WP-180)
D-150-A2-G	Cessna Aircraft	Skyhawk
D-150-A2-G	Cessna Aircraft	Skyhawk (Dash-Piper PA-28-150)
D-150-A2-G	Cessna Aircraft	Cardinal (177
D-150-A2-G	Cessna Aircraft	150 (1A-C)
D-150-A2-G	Aero Commander	
D-150-A2-GAD	Beech Aircraft	Debonair 35
D-150-A2-GB	Piper Aircraft	Seminole (PA-44)
D-150-A2-LG	Wassmer	Europa WA-52
D-150-A2F	Erco	
D-150-A2F	Rocky	
D-150-A2A	Grove Air Sciences Inc	Buggins (SN-212)
D-150-A2A	S.O.C.A.T.A.	Rallye Commodore (150-MS1)
D-150-A2A	Saunin Aeronautique Normandy	Mousquetaire (S-140)
D-150-A2A	Bolkow	Klemm (KL-1 VFC)
D-150-A2A	Aerospatiale	Rallye 150
D-150-A2A	Bolkow	Klemm (KL-1 VFC)
D-150-A2D	Piper Aircraft	Commodore 4-24
D-150-A2D	Piper Aircraft	Cherokee C PA-28-140
D-150-A2G	Wassmer Aircraft	Wiper (1150-300)
D-150-A2G	Wassmer Aircraft	Mark 21 (M-CJ6)
D-150-A2E	Jet Helicopter	
D-150-A2F	Aero Commander	Lancer(690)
D-150-A2F	Cessna Aircraft	Centurion
D-150-A2G	Beech Aircraft	Bonz
D-150-A2A	C.A.S.P.S.A.S.P.	(SA-121)
D-150-A2A	Societe Aeronautique Normandie	Jodel (D-140C)
D-150-A2A	Bolkin	Regent (DR-400/180)
D-150-A2A	Bolkin	Petrolgrad (DR-400-180R)
D-150-A2A	Bolkin	(K-150)
D-150-A2A	S.O.C.A.T.A.	Rallye 180GT
D-150-A2A	S.O.C.A.T.A.	Sportsmo Sportsmo 180 (S2)
D-150-A2A	Partner Kompanii Co.	RACE Freelance
D-150-A2J	Hawk Aircraft Ltd	Polo
D-150-A2GAD	S.O.C.A.T.A.	Tobrik
D-150-A2GB	Piper Aircraft	Apollo (PA-360T)
D-150-A2GB	Piper Aircraft	Cherokee "B" PA-28-180
D-150-A4D	Varga	Kachina
D-150-A4E	Beech Aircraft	Musketeer Custom (B
D-150-A4F	Enterprise American	Sport
D-150-A4E	Beech Aircraft	Sundowner 180

D-150-A4G	Piper Aircraft	Archer II PA-28-18
D-150-A4H	Piper Aircraft	PA-28
D-150-A4J	Cessna Aircraft	177 (T)
D-150-A4F	Rans Inc	Super Cub Conversion
D-150-A4GD	C. Kolb and Co.	Kolb PA-150
D-150-D2E	Bolkow Aviation	BO5
D-150-C2A	Interstate Aircraft Mfg. Co.	Cub Jet (J-3-C)
D-150-C2E	Bellanca Aircraft	Super 150 (150C-CE)
D-150-C2T	Hawk	Sun Raider (CS-T-150)
D-150-C2E	Cheetah	Husky (A-1)
D-150-C2B	Hughes Tool Co.	(SHA)
D-150-C2E	Hughes Tool Co.	(SHA)
D-150-C2E	Hughes Tool Co.	(150-245-Military)
D-150-C2E	Bellanca Aircraft	Super 150 "B" TP
D-150-C2F	Maule	MX-7-180A
D-150-C2F	Penn Yan	Super Cub (J-3-C65)
D-150-C2GD	Piper Aircraft	Archer (PA-28)
D-150-E1A	Rotorway	Exec
D-150-E1A	Beech Aircraft	Travel Air (A-23, B-23)
D-150-E1A	Piper Aircraft	Cherokee (PA-28)
D-150-E1B	Beech Aircraft	Travel Air (B-95)
D-150-E1B	Piper Aircraft	Cherokee (PA-28-140)
D-150-E1C	Piper Aircraft	PA-28
D-150-E1C	Initial Compliance	See Res
D-150-E1J	Piper Aircraft	Arrow PA-28 (180)
D-150-E2F	Dyn	(J)
D-150-E2E	C.A.P.A.S.A.	C.A.P. (15)
D-150-E2G	Great Lakes	Trainer
D-150-E2B	American Bilmy	Sparrow (2)
D-150-E2J	Piper Aircraft	Cherokee
LS-300-A1GBD	Team Aircraft	Explorer
LS-300-A1EB	Piper Aircraft	Seminole (PA-44)
D-150-M2A	T.E. Bede Aircraft	Aerostar
D-150-C2A	Cessna Aircraft	Skyhawk (172)
D-150-E4F-A	Diamond Aircraft	DA-40
D-150-E4F-B	Yeng Aircraft	YK-36, EYT, EYX
D-150-E4F-E	Lakemist	260
A2C-150-E1J	Mooney	Ace (M-20A-J)
A2D-150-E2A	Great Lakes	Trainer
A22D-150-E2E	Muddy	CAP-10
A22D-150-E2A	Pilot	PZL
A22D-150-E2A	Bellanca Aircraft	Super Decathalon (8ECAB-180)
A22D-150-E2B	American Champion	Super Decathalon
18D-150-E2B	Hughes Tool Co.	269A
18D-150-E2E	Hughes Tool Co.	269A
18D-150-C2A	Schweizer	269C
18D-150-C2E	Hughes Tool Co.	300
18-D-150-A2E	Diamond	
18D-150-B2-A	Hughes Tool Co.	Military 269-A-1
18D-150-B2E	Hughes Tool Co.	269A
18D-150-D2A	Hughes Tool Co.	269C, 330C
18D-150-D2A	Schweizer	330C
18D-150-D1-E2	Thorpon Helicopter	120C
18D-150-D1-B2	Thorpon Helicopter	230C
18D-150-F1-E2	Thorpon Helicopter	Future 330F
18D-150-F1-B2	Thorpon Helicopter	Mark 330F-E
18D-150-F1-D2	Thorpon Helicopter	Mark 330F-D or
18D-150-D2-A	Schweizer	269
18D-150-F2-A	Sowarsoft	Mini-Helicopter
18D-150-D2-B	Sowarsoft	Mini-Helicopter -
D-54A-A1A	Diam-Piper/Piper	JP-1
D-54A-A1AD	Piper Aircraft	Commodore PA-30-160
D-54A-A1AJ	Helio	Military (E-25)
D-54A-A1AJ	Yugoslav Aviation	YA-1
D-54A-C1EE	Piper Aircraft	Arrow PA-28-180
D-54A-C1BD	Piper Aircraft	Commodore PA-24-260
D-54A-E2E	Piper Aircraft	Commodore PA-24-260
D-54A-E2E	Powell Bros	PB-1-3C
D-54A-E2E	Piper	Super Cub (J-3C)
D-54A-C1EE	Piper Aircraft	Arrow PA-28-180
D-54A-C1BD	Piper Aircraft	Commodore PA-24-260
D-54A-A2E2	Piper Aircraft	Military Arrow (I-) 1-1A
D-54A-A2E2	Denper	DC-3R
D-54A-A3B	Aero Commander	560
D-54A-A3B	MH Beam Mfg. Co.	Twin Cessna 310 (MH)
D-54A-A1EE	Piper Aircraft	Navy Arrow PA-28-200
D-54A-BF-A3	Piper Aircraft	Apache PA-23-250
D-54A-B0EF	Piper Aircraft	Cherokee PA-28-235
D-54A-B0E	Duro Aircraft	Diam-Piper PA-28-180
D-54A-B0C	Rockwell	NA-465
D-54A-D2B1	Piper Aircraft	Pawnee PA-25-235
D-54A-D2B1	Piper Aircraft	Cherokee PA-28-235
D-54A-D2B1	Piper Aircraft	Arrow PA-28-235
D-54A-D2B1	Stanley Mfg. Co.	Navion (L-17)
D-54A-D2B1	Rockwell Inc.	Navion A-3
D-54A-D2B1	S.O.C.A.T.A.	Rallye 235GX
D-54A-D2C1	Piper Aircraft	Pawnee PA-25-235
D-54A-B4B1	Piper Aircraft	Cherokee PA-28-235
D-54A-B4B1	Erickson	Cessna 172E-T-O
D-54A-B4B1	S.O.C.A.T.A.	Rallye 235GT
D-54A-B4B1	S.O.C.A.T.A.	Rallye 235C
D-54A-B4B1	Stacia	See Rocket M.S.T-235
D-54A-B4B1	Stacia	Super Rocket M.S.T-235
D-54A-B4B1	Stacia	Super Ski Rocket M.T-235
D-54A-B4C1	Piper Aircraft	Commodore PA-30-160
D-54A-BA4J	Cessna	Cessna 177 (T)
D-54A-BA4J	Sun-Kumbers	M-250, JP 295
D-54A-E4A1	Rotorway	Exec 2
	Piper Aircraft	Cherokee Six PA-32-300
D-54A-E4C1	Piper Aircraft	Cherokee Six PA-32-300
D-54A-E4C1	Piper Aircraft	Cherokee PA-28-235
D-54A-E4C1	Piper Aircraft	Cherokee PA-28-235
D-54A-E4C1	Piper Aircraft	Cherokee PA-28-235
D-54A-E4C1	Piper Aircraft	Cherokee PA-28-235
D-54A-E4C1	Piper Aircraft	Cherokee PA-28-235
D-54A-E1B1	Piper Aircraft	Cherokee PA-28-235
D-54A-E1B1	Omega Aircraft	ML 1333
D-54A-E1B1	Robinson	R-22
D-54A-E1A1	Piper Aircraft	Twin Cessna PA-28-180
D-54A-E1DD	Piper Aircraft	Arrow
D-54A-E1AA	Enstrom	Helicopter "280"
D-54A-E1AD	Goodwood	GA-200
D-54A-E2DE	Aero Boero	260
D-54A-F1ADD	Mooney	Bee Bonker M20-K 231
D-54A-E1ADD	Mooney	Super Bee Bonker M-20-231
D-54A-E1ADD	Mooney	Super Bee Bonker M-20-231
D-54A-A2J	Bolkow	R-160/235

D-54A-E1AT	Sutherland	Aztec Conversion
D-54A-E2BA	T.E. Bede Aircraft	Aerostar 600
D-54A-E2BA	Powell Bros	Commander 680
D-54A-E2CD	Interstate Aircraft Mfg. Co.	Cub Jet (J-3-C65)
D-54A-C4DD	Interstate Aircraft Mfg. Co.	SUN-RAY SUN-RAY SUN-RAY
D-54A-E4TT	Bellanca Aircraft	
D-54A-W1A1	Piper Aircraft	Commander 500
D-54A-FA4D1	Edward Aviation	Super 115
D-54A-FA4D2	Rotorcraft	115B
D-54A-FA4D2	Edward	115
D-54A-FA4D2	Lake Aircraft	Renard
D-54A-FA4D2	Mooney	M20-K 231, M20-K 231, M20-K
D-54A-W1AD	Maule	Star Bonker M20-K 231
D-54A-W1AD	Maule	Super Bonker 231-K 231
D-54A-W1AD	Maule	Super Bee Bonker M-20-231
D-54A-W1AD	Sebastian	Rosen Glider
D-54A-W1AD	Cessna Aircraft	Airtown C-150
AED-54A-D4AE	Christen	Pitts S-2E & 2B
AED-54A-D4AE	Sun-Kumbers	JP-260
AED-54A-D4AE	R.A.L.	MPT-50
AED-54A-D4AE	Mosquito	Mosquito 2125
AED-54A-D4BE	Mooney	Zlin-242
AED-54A-D4BE	R.A.L.	MPT-50
AED-54A-D4EE	Buckhart-Klub	GPSK-U-1 (ST-4aac)

N172RW
AIRCRAFT REGISTRATION NO.
17251077G
AIRCRAFT SERIAL NO.
CE-172
TYPE AIRCRAFT

adNote

2008-2-6 N/M
AD NUMBER

Garmin A/P GSM 85 Servo

COMPLIANCE DATE	TOTAL TIME AT COMPLIANCE	TACH OR RECORDING METER TIME AT COMPLIANCE	METHOD OF COMPLIANCE	AUTHORIZED SIGNATURE & NUMBER
11-3-10	477.7	477.7	MA by Model	Gregg Bowden A&P 3375645 IA

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Amendment 39-15336; Docket No. FAA- 2007-28730; Directorate Identifier 2007-CE-053-AD.

Effective Date

(a) This AD becomes effective on February 26, 2008.

Affected ADs

(b) None.

Applicability

(c) This AD applies to the GSM 85 servo gearbox units that are specified in paragraph (c)(1) of this AD and are installed on airplanes. These GSM 85 servo gearbox units are installed in, but not limited to, airplanes that are certificated in any category and presented in paragraph (c)(2) of this AD.

(1) GSM 85 servo gearbox units, part numbers (P/Ns): 011-00894- 00, 011-00894-02, 011-00894-04, 011-00894-06, 011-00894-07, 011- 00894-08, 011-00894-09, 011-00894-10, 011-00894-11, and 011-00894- 14.

(2) Airplanes with the GSM 85 servo gearbox units installed (other aircraft could have installations through other methods such as field approval):

Type Certificate Holder	Models
(i) Cessna Aircraft Company	172T, T182T, 206H, and T206H
(ii) Hawker Beechcraft Corporation	G36 and G58
(iii) Diamond Aircraft Industries GmbH	DA40 and DA40F
(iv) Columbia Aircraft Manufacturing	350 and 400
(v) Mooney Airplane Company, Inc.	M20M and M20R

Unsafe Condition

(d) This AD results from reports of certain GARMIN GSM 85 servo gearbox units that have foreign object debris inside the assembly. We are issuing this AD to detect and correct defective GARMIN GSM 85 servo gearbox units, which could result in jamming of the servo gearbox. This jamming could lead to the pilot having to apply sufficient control force to override the servo gearbox slip clutch in order to control the airplane. In certain situations, this could compromise the safety of the airplane if the pilot was not able to focus on critical duties due to having to tend to the servo gearbox.

Compliance

(e) To address this problem, you must do the following, unless already done:

Actions	Compliance	Procedures
(1) Check the serial tag of the installed GSM 85 servo gearbox unit to determine the mod level. The mod level marked on the serial tag indicates if the GSM 85 servo gearbox unit is already in compliance with this AD. (i) If the serial tag on the installed GSM 85 servo gearbox unit for P/Ns 011-00894-00 or 011-00894-10 is marked at mod level 3, no further action is required. (ii) If the serial tag on the installed GSM 85 servo gearbox unit for P/Ns 011-00894-02, 011-00894-04, 011-00894-06, 011-00894-07, 011-00894-08, 011-00894-09, 011-00894-11, or 011-00894-14 is marked at mod level 1, no further action is required. (iii) If the serial tag on the above GSM servo gearbox unit is not at mod level 1 or 3 as specified in paragraphs (e)(1)(i) and (e)(1)(ii) of this AD, then go to paragraph (e)(2) of this AD.	Check within the next 100 hours time-in-service (TIS) after February 26, 2008 (the effective date of this AD) or within the next 3 months after February 26, 2008 (the effective date of this AD), whichever occurs first.	Check following GARMIN International, Inc. Service Bulletin No. 0713, Revision A, dated May 7, 2007; Service Bulletin No. 0713, Revision B, dated May 18, 2007; Service Bulletin No. 0713, Revision C, dated May 29, 2007; Service Bulletin No. 0713, Revision D, dated June 13, 2007; or Cessna Aircraft Company Single Engine Service Bulletin SB07-22-01, dated June 4, 2007, as applicable. If the Mod Level of the P/Ns specified in paragraph (e)(1)(i) and (e)(1)(ii) are at mod level 1 and mod level 3, as applicable, make an entry into the aircraft logbook showing compliance with this portion of the AD in accordance with section 43.9 of the Federal Aviation Regulations (14 CFR 43.9). The owner/operator holding at least a private pilot certificate as authorized by section 43.7 of the Federal Aviation Regulations (14 CFR 43.7) may do this action.
(2) If the serial tag on the GSM 85 servo gearbox for P/Ns specified in paragraph (e)(1) of this AD is not marked at mod level 1 or mod level 3 as specified in paragraphs (e)(1)(i) and (e)(1)(ii) of this AD, inspect the servo gearbox for foreign object debris.	Within the next 100 hours TIS after February 26, 2008 (the effective date of this AD) or within the next 3 calendar months after February 26, 2008 (the effective date of this AD), whichever occurs first.	Follow the Modification Instructions in GARMIN International, Inc. Service Bulletin No. 0713, Revision A, dated May 7, 2007; Service Bulletin No. 0713, Revision B, dated May 18, 2007; Service Bulletin No. 0713, Revision C, dated May 29, 2007; Service Bulletin No. 0713, Revision D, dated June 13, 2007; or Cessna Aircraft Company Single Engine Service Bulletin SB07-22-01, dated June 4, 2007, as applicable.
(3) If foreign object debris is found during the inspection required in paragraph (e)(2) of this AD, remove and return the GSM 85 servo gearbox to the manufacturer for replacement.	Before further flight after the inspection required in paragraph (e)(2) of this AD.	Follow the Modification Instructions in GARMIN International, Inc. Service Bulletin No. 0713, Revision A, dated May 7, 2007; Service Bulletin No. 0713, Revision B, dated May 18, 2007; Service Bulletin No. 0713, Revision C, dated May 29, 2007; Service Bulletin No. 0713, Revision D, dated June 13, 2007; or Cessna Aircraft Company Single Engine Service Bulletin SB07-22-01, dated June 4, 2007, as applicable.

(Over)➔

Continuation of Airworthiness Directive 2008-02-06

Alternative Methods of Compliance (AMOCs)

(f) The Manager, Wichita Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Roger A. Souter, Aerospace Engineer, FAA, Wichita ACO, 1801 Airport Road, Room 100, Wichita, Kansas 67209; telephone: (316) 946- 4134; fax: (316) 946-4107; e-mail address: roger.souter@faa.gov. Before using any approved AMOC on any airplane to which the AMOC applies, notify your appropriate principal inspector (PI) in the FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO.

Material Incorporated by Reference

(g) You must use GARMIN International, Inc. Service Bulletin No. 0713, Revision A, dated May 7, 2007; GARMIN International, Inc. Service Bulletin No. 0713, Revision B, dated May 18, 2007; GARMIN International, Inc. Service Bulletin No. 0713, Revision C, dated May 29, 2007; GARMIN International, Inc. Service Bulletin No. 0713, Revision D, dated June 13, 2007; and Cessna Aircraft Company Single Engine Service Bulletin SB07-22-01, dated June 4, 2007, to do the actions required by this AD, unless the AD specifies otherwise.

(1) The Director of the Federal Register approved the incorporation by reference of this service information under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) For service information identified in this AD, contact GARMIN International, Inc., 1200 East 151st Street, Olathe, KS 66062; telephone: (913) 397-8200; fax: (913) 397-8282.

(3) You may review copies at the FAA, Central Region, Office of the Regional Counsel, 901 Locust, Kansas City, Missouri 64106; or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202- 741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

Issued in Kansas City, Missouri, on January 11, 2008.

John Colomy, Acting Manager, Small Airplane Directorate, Aircraft Certification Service.

[Airframe Index](#) [Engine Index](#) [Propeller Index](#) [AD Index](#)

N172RN
AIRCRAFT REGISTRATION NO.

172S10776
AIRCRAFT SERIAL NO.

CE-172
TYPE AIRCRAFT

adNote

2008-2-18 N
AD NUMBER

Ballistic Recovery Systems

COMPLIANCE DATE	TOTAL TIME AT COMPLIANCE	TACH OR RECORDING METER TIME AT COMPLIANCE	METHOD OF COMPLIANCE	AUTHORIZED SIGNATURE & NUMBER
12-2-10	477.7	477.7	N/A not installed	[illegible]

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Amendment [illegible]9-15348; Docket No. FAA-2007-29317; Directorate Identifier 2007-CE-079-AD.

Effective Date

(a) This AD becomes effective on February 28, 2008.

Affected ADs

(b) None.

Applicability

(c) This AD applies to the following airplane models, all serial numbers, certificated in any category, that are equipped with:

(1) BRS-172 Parachute System installed via Supplemental Type Certificate (STC) No. SA01679CH, or

(2) BRS-182 Parachute System installed via STC No. SA01[illegible]H.

Cessna 172 Models	Cessna 182 Models
172	182G
172A	182H
172B	182J
172C	182K
172D	182L
172E	182M
172F (USAF T-41A)	182N
172G	182P
172H (USAF T-41A)	182Q
172I	182R
172K	182S
172L	182T
172M	T182
172N	T182T
172P	
172Q	
172R	
172S	
R172J	
R172K	

Unsafe Condition

(d) This AD results from notification by Ballistic Recovery Systems, Inc. (BRS) that the pick-up collar assembly may prematurely move off the launch tube and adversely affect rocket trajectory during deployment. We are issuing this AD to prevent premature separation of the collar. This condition could result in the parachute failing to successfully deploy.

Cor pliance

(e) To address this problem, you must do the following, unless already done:

Actions	Compliance	Procedures
Remove and replace the pick-up collar support and two retaining screws.	Within the next 25 hours time-in-service after February 28, 2008 (the cirective date of this AD).	(i) For Cessna 172 series airplanes follow BRS SB 07-01, dated June 8, 2007. (ii) For Cessna 182 series airplanes, follow BRS SB 07-02, dated June 8, 2007.

Alternative Methods of Compliance (AMOCs)

(f) The Manager, Chicago Aircraft Certification Office, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Gregory Michalik, Senior Aerospace Engineer, FAA, 2300 East Devon Avenue, Des Plaines, Illinois, 60018; telephone: (847) 294-7135; fax: (847) 294-7834; e-mail: gregory.michalik@faa.gov. Before using any approved AMOC on any airplane to which the AMOC applies, notify your appropriate principal inspector (PI) in the FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO.

Material Incorporated by Reference

(g) You must use Ballistic Recovery Systems, Inc. Service Bulletin No. 07-01, dated June 8, 2007, for Cessna 172 series airplanes; or Ballistic Recovery Systems, Inc. Service Bulletin No. 07-02, dated June 8, 2007, for Cessna 182 series airplanes; to do the actions required by this AD, unless the AD specifies otherwise.

(1) The Director of the Federal Register approved the incorporation by reference of this service information under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) For service information identified in this AD, contact Ballistic Recovery Systems, Inc., 300 Airport Road, South Saint Paul, MN 55075-3551; telephone: (651) 457-7491; fax: (651) 457-8651.

(3) You may review copies at the FAA, Central Region, Office of the Regional Counsel, 901 Locust, Kansas City, Missouri 64106; or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

Issued in Kansas City, Missouri, on January 16, 2008.

James E. Jackson, Acting Manager, Small Airplane Directorate, Aircraft Certification Service.

N172RN
AIRCRAFT REGISTRATION NO.
172S10776
AIRCRAFT SERIAL NO.
CE-172
TYPE AIRCRAFT

adNote™

Alternate Static Source Valve

2008-10-2 N/M
AD NUMBER

COMPLIANCE DATE	TOTAL TIME AT COMPLIANCE	TACH OR RECORDING METER TIME AT COMPLIANCE	METHOD OF COMPLIANCE	AUTHORIZED SIGNATURE & NUMBER
12-2-10	477.7	477.7	C/W by visual insp	Luigi Rondon A&P 3375696 IA

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Amendment 39-15508; Docket No. FAA-2008-0471; Directorate Identifier 2008-CE-025-AD.

Effective Date

(a) This AD becomes effective on May 12, 2008.

Affected ADs

(b) None.

Applicability

(c) This AD applies to airplanes listed in Table 1 and Table 2 of this AD that:

(1) Have a part number (P/N) 2013142-18 alternate static air source selector valve installed after November 19, 2007; and

(2) Are certificated in any category:

Table 1.--Applicability for Airplanes That Had the Affected Part Installed at Manufacture

Model	Serial Nos. (S/Ns)
172S	172S10672 through 172S10674, 172S10676, 172S10678 through 172S10680, 172S10682, 172S10683, and 172S10685.
182T	18282062 and 18282066.
T182T	T18208822 and T18208828.
206	20800417, 20800418, and 20800419.
208B	208B1294 through 208B1310.

Note 1: Airplanes listed in Table 1 may have also had the affected part installed as a replacement part.

Aerotech Note: Table 2 that was in this position in the Original FAA version of this Airworthiness Directive, has been moved to the bottom of page 2 to facilitate compilation of this **adNote™**.

Note 2: P/N 2013142-18 replaced P/Ns 2013142-9, -13, and -17.

Unsafe Condition

(d) This AD is the result of reports of improper installation of the part number identification placard on the alternate static air source selector valve. We are issuing this AD to prevent erroneous indications from the altimeter, airspeed, and vertical speed indicators, which could cause the pilot to react to incorrect flight information and possibly result in loss of control.

Compliance

(e) For all affected airplanes, to address this problem, you must do the following, unless already done:

Actions	Compliance	Procedures
(1) Inspect the alternate static air source selector valve to assure that the part number identification placard is not obstructing the port.	(i) For static air source selector valves installed before May 12, 2008 (The effective date of this AD): Before further flight after May 12, 2008 (the effective date of this AD), and (ii) For static air source selector valves installed as modification or replacement parts on or after May 12, 2008 (the effective date of this AD): Before further flight after installation of a P/N 2013142-18 alternate static air source selector valve. Inspection of the part before installation is acceptable.	(A) Adjust the pilot and copilot seats as far aft as possible. (B) Use a flashlight and mirror to inspect the alternate static air source selector valve to assure the port on the forward end of the valve is clearly visible and not covered by the part number identification placard.
(2) If the alternate static air source selector valve port is found obstructed by the part number identification placard during any inspection required by paragraph (e)(1) of this AD, remove the placard from the valve body, discard the placard, and assure that the port is open and unobstructed.	Before further flight after any inspection required in paragraph (e)(1) of this AD where the port is found obstructed.	Make an entry in the aircraft records showing compliance with this portion of the AD following 14 CFR 43.9.

(f) Report the results of the inspection required by this AD where an obstruction was found to the FAA.

(1) Submit this report within 10 days after the inspection or 10 days after the effective date of this AD, whichever occurs later.

(2) Use the form in Figure 1 of this AD and submit it to FAA, Manufacturing Inspection District Office, Mid-Continent Airport, 1804 Airport Road, Room 101, Wichita, Kansas, 67209; or fax to (316) 946-4189.

(3) The Office of Management and Budget (OMB) approved the information collection requirements contained in this regulation under the provisions of the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq.) and assigned OMB Control Number 2120-0056.

(Over for page 2)➔

AD 2008-10-02 INSPECTION REPORT (REPORT ONLY IF A PART NUMBER IDENTIFICATION PLACARD IS OBSTRUCTING THE STATIC AIR SOURCE SELECTOR VALVE PORT)	
1. Inspection Performed By:	*2. Phone:*
3. Airplane Model:	*4. Airplane Serial Number:*
5. Airplane Total Hours TIS:	
6. Date of AD inspection:	
7. Inspection Results: (Note: Report only if a part number identification placard is obstructing static air source valve port.)	*8. Corrective Action Taken:*

Mail report to: Wichita Manufacturing Inspection District Office, Mid-Continent Airport, 1804 Airport Road, Room 101, Wichita, Kansas, 67209; or fax to (316) 946-4189.

Figure 1

Alternative Methods of Compliance (AMOCs)

(g) The Manager, Wichita Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in CFR 3 19. Send information to: Attn: David Fairback, Aerospace Engineer, FAA, Wichita ACO, 1801 Airport Road, Room 100, Wichita, Kansas 67209; telephone: 316-946- 4154; fax 316-946-4107; e-mail address: david.fairback@faa.gov. Before using any approved AMOC on any airplane to which the AMOC applies, notify your appropriate principal inspector (PI) in the FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO.

Issued in Kansas City, Missouri, on A 128, 2008.

Kim Smith, Manager, Small Airplane Directorate, Aircraft Certification Service.

Table 2.--Applicability for Airplanes That Could Have Had the Affected Part Installed as a Replacement Part or From Parts Held as Spares

Model	S/Ns
172	All S/Ns.
172R	All S/Ns beginning with 17280001.
172S	172S8001 through 172S10671.
F172D	All S/Ns.
F172E	All S/Ns.
F172F	All S/Ns.
F172G	All S/Ns.
F172H	All S/Ns.
F172K	All S/Ns.
F172L	All S/Ns.
F172M	All S/Ns.
F172N	All S/Ns.
F172P	All S/Ns.
FR172E	All S/Ns.
FR172F	All S/Ns.
FR172G	All S/Ns.
FR172H	All S/Ns.
FR172J	All S/Ns.
FR172K	All S/Ns.
P172D	All S/Ns.
R172E (USAF T-41B) (USAF T-41C and D)	All S/Ns.
R172F (USAF T-41D)	All S/Ns.
R172G (USAF T-41C or D)	All S/Ns.
R172H (USAF T-41D)	All S/Ns.
R172J	All S/Ns.
R172K	All S/Ns.
172RG	All S/Ns.
175	All S/Ns.
180	All S/Ns.
182	All S/Ns.
182S	18280001 through 18280944.
182T	18280945 through 18282061.
R182	All S/Ns.
T182	All S/Ns.
TR182	All S/Ns.
T182T	T18208001 through T18208821.
F182P	All S/Ns.
F182Q	All S/Ns.
FR182	All S/Ns.
185	All S/Ns.
206	All S/Ns.
206H	All S/Ns beginning with 20608001.
P206	All S/Ns.
U206	All S/Ns.
T206H	All S/Ns beginning with T20608001.
TU206A	All S/Ns.
TU206B	All S/Ns.
TU206C	All S/Ns.
TU206D	All S/Ns.
TU206E	All S/Ns.
TU206F	All S/Ns.
TU206G	All S/Ns.
207	All S/Ns.
208	20800001 through 20800416.
208B	208B0001 through 208B1293.
210	All S/Ns.
210-5 (205)	All S/Ns.
T210F	All S/Ns.
T210G	All S/Ns.
T210H	All S/Ns.
T210J	All S/Ns.
T210K	All S/Ns.
T210L	All S/Ns.
T210M	All S/Ns.
T210N	All S/Ns.
T210R	All S/Ns.
T303	All S/Ns.

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Airframe Index Engine Index Propeller Index AD Index

N172RV
AIRCRAFT REGISTRATION NO.
17250776
AIRCRAFT SERIAL NO.
CE-172
TYPE AIRCRAFT

adNote

2008-26-10 N/M
AD NUMBER

Alternate Static Source Valve

COMPLIANCE DATE	TOTAL TIME AT COMPLIANCE	TACH OR RECORDING METER TIME AT COMPLIANCE	METHOD OF COMPLIANCE	AUTHORIZED SIGNATURE & NUMBER
12-2-10	477.7	477.7	C/W by visual insp.	Luigi Rondon A&P 3375696 IA

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Amendment 39-15776; Docket No. FAA-2008-1328; Directorate Identifier 2008-CE-068-AD

Effective Date

(a) This AD becomes effective on January 5, 2009.

Affected ADs

(b) This AD relates to AD 98-01-01, Amendment 39-10287 and AD 2008-10-02, Amendment 39-15508. These ADs can be found on the Internet at the following Web site: http://rgl.faa.gov/.

Applicability

(c) This AD applies to all serial numbers (S/Ns) of the airplanes listed in Table 1 of this AD, certificated in any category, that:

(1) Were initially delivered from the manufacturer between January 1, 1993, and March 31, 2008, unless the modification/rework required in AD 2008-10-02 has been done and you remain in compliance with that AD; or

(2) Have a part number (P/N) 2013142-18 installed as a replacement part anytime after January 1, 1993, unless the modification/rework required in AD 2008-10-02 has been done and you remain in compliance with that AD.

Note 1: The affected part was shipped from Cessna Parts Distribution (CPD) between January 1, 1993, and March 31, 2008.

Note 2: P/N 2013142-18 replaced P/Ns 2013142-9, -13, and -17.

Aerotech Note: Table 1 has been moved from this location in the Original FAA version of this Airworthiness Directive to page 3, to facilitate compilation of this **adNote**™.

Unsafe Condition

(d) This AD is the result of reports of improper installation of the part number identification placard on the alternate static air source selector valve. We are issuing this AD to prevent erroneous indications from the altimeter, airspeed, and vertical speed indicators, which could cause the pilot to react to incorrect flight information and possibly result in loss of control.

Compliance

(e) To address this problem, you must do the following, unless already done. A person authorized to perform maintenance as specified in 14 CFR section 43.3 of the Federal Aviation Administration Regulations (14 CFR 43.3) is required to do all the actions required in this AD.

Actions	Compliance	Procedures
(1) For all affected airplanes that are not equipped for flight under instrument flight rules (IFR): Inspect the alternate static air source selector valve to assure that the part number identification placard is not obstructing the port.	Within the next 100 hours time-in-service (TIS) after January 5, 2009 (the effective date of this AD) or within the next 4 months after January 5, 2009 (the effective date of this AD), whichever occurs first.	Following the procedures in Cessna Single Engine Service Bulletin SB08-34-02, Revision 1, dated October 6, 2008, Cessna Caravan Service Bulletin CAB08-4, Revision 1, dated October 6, 2008; Cessna Single Engine Service Bulletin SEB08-5, dated October 13, 2008, or Cessna Multi-engine Service Bulletin MEB08-6, dated October 13, 2008, as applicable.
(2) For all affected airplanes that are equipped for flight under instrument flight rules (IFR): (i) Inspect the alternate static air source selector valve to assure that the part number identification placard is not obstructing the port; or (ii) Fabricate a placard that incorporates the following words (using at least 1/8-inch letters) and install this placard on the instrument panel within the pilot's clear view: "IFR OPERATION IS PROHIBITED" and "USE OF THE ALTERNATE STATIC AIR SOURCE IS PROHIBITED."	(A) Inspect within the next 10 days after January 5, 2009 (the effective date of this AD); or (B) Install placards before further flight after January 5, 2009 (the effective date of this AD).	Following the procedures in Cessna Single Engine Service Bulletin SB08-34-02, Revision 1, dated October 6, 2008, Cessna Caravan Service Bulletin CAB08-4, Revision 1, dated October 6, 2008; Cessna Single Engine Service Bulletin SEB08-5, dated October 13, 2008, or Cessna Multi-engine Service Bulletin MEB08-6, dated October 13, 2008, as applicable.
(3) For all affected airplanes that are equipped for flight under instrument flight rules (IFR): If placards were installed in accordance with paragraph (e)(2)(ii) of this AD, inspect the alternate static air source selector valve to assure that the part number identification placard is not obstructing the port.	Within the next 100 hours TIS after January 5, 2009 (the effective date of this AD) or within the next 4 months after January 5, 2009 (the effective date of this AD), whichever occurs first. After doing the inspection, remove the placards installed in accordance with paragraph (e)(2)(ii) of this AD before further flight.	Following the procedures in Cessna Single Engine Service Bulletin SB08-34-02, Revision 1, dated October 6, 2008, Cessna Caravan Service Bulletin CAB08-4, Revision 1, dated October 6, 2008; Cessna Single Engine Service Bulletin SEB08-5, dated October 13, 2008, or Cessna Multi-engine Service Bulletin MEB08-6, dated October 13, 2008, as applicable.
(4) For all affected airplanes: If the alternate static air source selector valve port is found obstructed by the part number identification placard during the inspection required in paragraphs (e)(1), (e)(2)(i), and (e)(3) of this AD, remove the placard from the valve body, discard the placard, and assure that the port is open and unobstructed.	Before further flight after the inspection required in paragraphs (e)(1), (e)(2)(i), and (e)(3) of this AD.	Following the procedures in Cessna Single Engine Service Bulletin SB08-34-02, Revision 1, dated October 6, 2008; Cessna Caravan Service Bulletin CAB08-04, Revision 1, dated October 6, 2008; Cessna Single Engine Service Bulletin SEB08-5, dated October 13, 2008; or Cessna Multi-engine Service Bulletin MEB08-6, dated October 13, 2008, as applicable.
(5) For all affected airplanes: When a replacement valve is needed, only install a P/N 2013142-18 alternate static air source selector valve that has been inspected and the port is found free from obstruction.	As of 10 days after January 5, 2009 (the effective date of this AD).	A person authorized to perform maintenance as specified in 14 CFR section 43.3 of the Federal Aviation Administration Regulations (14 CFR 43.3) is required to do the inspection.

(Over)→

(Page 2 of Airworthiness Directive 2008-26-10)

(f) Report to the FAA the results of the inspection required by this AD where an obstruction was found.

(1) Submit this report within 10 days after the inspection or 10 days after the effective date of this AD, whichever occurs later.

(2) Use the form in Figure 1 of this AD and submit it to FAA, Manufacturing Inspection District Office, Mid-Continent Airport, 1804 Airport Road, Room 101, Wichita, Kansas 67209; or fax to (316) 946-4189.

(3) The Office of Management and Budget (OMB) approved the information collection requirements contained in this regulation under the provisions of the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq.) and assigned OMB Control Number 2120-0056.

AD 2008-26-10 INSPECTION REPORT

(REPORT ONLY IF A PART NUMBER IDENTIFICATION PLACARD IS OBSTRUCTING THE STATIC AIR SOURCE SELECTOR VALVE PORT)

1. Inspection Performed By:	*2. Phone:*
3. Airplane Model:	*4. Airplane Serial Number:*
5. Airplane Total Hours TIS:	
6. Date of AD inspection:	
*7. Inspection Results: (Note: Report **only** if a part number identification placard is obstructing static air source valve port.)*	*8. Corrective Action Taken:*

Mail report to: Wichita Manufacturing Inspection District Office, Mid-Continent Airport, 1804 Airport Road, Room 101, Wichita, Kansas, 67209; or fax to (316) 946-4189

Figure 1

Alternative Methods of Compliance (AMOCs)

(g) The Manager, Wichita Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Ann Johnson, Aerospace Engineer, FAA, Wichita ACO, 1801 Airport Road, Room 100, Wichita, Kansas 67209; telephone: 316-946-4105; fax: 316-946-4107; e-mail address: ann.johnson@faa.gov. Before using any approved AMOC on any airplane to which the AMOC applies, notify your appropriate principal inspector (PI) in the FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO.

(h) AMOCs approved for AD 2008-10-02 are approved for this AD.

Material Incorporated by Reference

(i) You must use Cessna Single Engine Service Bulletin, SB08-34-02, Revision 1, dated October 6, 2008; Cessna Caravan Service Bulletin CAB08-4, Revision 1, dated October 6, 2008; Cessna Single Engine Service Bulletin SEB08-5, dated October 13, 2008; and Cessna Multi-engine Service Bulletin MEB08-6, dated October 13, 2008, to do the actions required by this AD, unless the AD specifies otherwise.

(1) The Director of the Federal Register approved the incorporation by reference of this service information under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) For service information identified in this AD, contact Cessna Aircraft Company, P.O. Box 7706, Wichita, Kansas 67277; telephone: (800) 423-7762 or (316) 517-6056; Internet: http:// www.cessna.com.

(3) You may review copies at the FAA, Central Region, Office of the Regional Counsel, 901 Locust, Kansas City, Missouri 64106; or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

Issued in Kansas City, Missouri, on December 15, 2008.

Kim Smith, Manager, Small Airplane Directorate, Aircraft Certification Service.

Table 1--Applicable Airplane Models

Models		
172	F172K	177
172A	F172L	177A
172B	F172M	177B
172C	F172N	177RG
172D	F172P	F177RG
172E	FR172E	180
172F (USAF T-41A)	FR172F	180A
172G	FR172G	180B
172H (USAF T-41A)	FR172H	180C
172I	FR172J	180D
172K	FR172K	180E
172L	R172D	180F
172M	R172E (USAF T-41B) (USAF T-41C and D)	180G
172N	R172F (USAF T-41)	180H
172P	R172G (USAF T-41C or D)	180J
172Q	R172H (USAF T-41D)	180K
172R	R172J	182
172S	R172K	182A
F172D	172RG	182B
F172E	175	182C
F172F	175A	182D
F172G	175B	182E
F172H	175C	182F
182G	A185F	U206D
182H	206	U206E
182J	206H	U206F
182K	P206	U206G
182L	P206A	207
182M	P206B	207A
182N	P206C	210T
182P	P206D	T207A
182Q	P206E	208
182R	T206H	208B
182S	TP206A	210
182T	TP206B	210A
F182P	TP206C	210B
F182Q	TP206D	210C
T182T	TP206E	210D
R182	TU206A	210E
T182	TU206B	210F
T182T	TU206C	210G
TR182	TU206D	210H
185	TU206E	210J
185A	TU206F	210K
185E	TU206G	210L
185C	U206	210M
185D	U206A	210N
185E	U206B	210R
A185E	U206C	210-5 (205)
310-5A (205A)	FT337F	
T210F	M337B (USAF 02A)	
T210G	T337B	
T210H	T337C	
T210J	T337D	
T210K	T337E	
T210L	T337F	
T210M	T337H	
T210N	T337H-SF	
T210R		
T303		
336		
337		
337-A (USAF 02B)		
337B		
337C		
337D		
337E		
337F		
337G		
337H		
F337E		
F337F		
F337G		
F337H		
F337J		

COMPLIANCE DATE	TOTAL TIME AT COMPLIANCE	TACH OR RECORDED METER TIME AT COMPLIANCE	METHOD OF COMPLIANCE	AUTHORIZED SIGNATURE & NUMBER

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Amendment 39-15770; Docket No. FAA-2008-1329; Directorate Identifier 2008-CE-066-AD

Effective Date

(a) This AD becomes effective on January 5, 2009.

Affected ADs

(b) This AD relates to AD 98-01-01, Amendment 39-10287 and AD 2008-10-02, Amendment 39-15508. These ADs can be found on the Internet at the following Web site: http://rgl.faa.gov/.

Applicability

(c) This AD applies to all serial numbers (S/Ns) of the airplanes listed in Table 1 of this AD, certificated in any category, that:

(1) Were initially delivered from the manufacturer between January 1, 1993, and March 31, 2008, unless the modification/rework required in AD 2008-10-02 has been done and you remain in compliance with that AD; or

(2) Have a part number (P/N) 2013142-18 installed as a replacement part anytime after January 1, 1992, unless the modification/rework required in AD 2008-10-02 has been done and you remain in compliance with that AD.

Note 1: The affected part was shipped from Cessna Parts Distribution (CPD) between January 1, 1993, and March 31, 2008.

Note 2: P/N 2013142-18 replaced P/Ns 2013142-8, -13, and -17.

Aerotech Note: Table 1 has been moved from this location in the Original FAA version of this Airworthiness Directive to page 3 to facilitate compilation of this adNote™.

Unsafe Condition

(d) This AD is the result of reports of improper installation of the part number identification placard on the alternate static air source selector valve. We are issuing this AD to prevent erroneous indications from the altimeter, airspeed, and vertical speed indicators, which could cause the pilot to react to incorrect flight information and possibly result in loss of control.

Compliance

(e) To address this problem, you must do the following, unless already done. A person authorized to perform maintenance as specified in 14 CFR section 43.3 of the Federal Aviation Administration Regulations (14 CFR 43.3) is required to do all the actions required in this AD.

Actions	Compliance	Procedures
(1) For all affected airplanes that are not equipped for flight under instrument flight rules (IFR): Inspect the alternate static air source selector valve to assure that the part number identification placard is not obstructing the port.	Within the next 100 hours time-in-service (TIS) after January 5, 2009 (the effective date of this AD) or within the next 4 months after January 5, 2009 (the effective date of this AD), whichever occurs first.	Following the procedures in Cessna Single Engine Service Bulletin SB08-34-02, Revision 1, dated October 6, 2008; Cessna Caravan Service Bulletin CAB08-4, Revision 1, dated October 6, 2008; Cessna Single Engine Service Bulletin SEB08-5, dated October 13, 2008; or Cessna Multi-engine Service Bulletin MEB08-6, dated October 13, 2008, as applicable.
(2) For all affected airplanes that are equipped for flight under instrument flight rules (IFR): (i) Inspect the alternate static air source selector valve to assure that the part number identification placard is not obstructing the port; or (ii) Fabricate a placard that incorporates the following words (using at least 1/8-inch letters) and install this placard on the instrument panel within the pilot's clear view: "IFR OPERATION IS PROHIBITED" and "USE OF THE ALTERNATE STATIC AIR SOURCE IS PROHIBITED."	(A) Inspect within the next 10 days after January 5, 2009 (the effective date of this AD); or (B) Install placards before further flight after January 5, 2009 (the effective date of this AD).	Following the procedures in Cessna Single Engine Service Bulletin SB08-34-02, Revision 1, dated October 6, 2008; Cessna Caravan Service Bulletin CAB08-4, Revision 1, dated October 6, 2008; Cessna Single Engine Service Bulletin SEB08-5, dated October 13, 2008; or Cessna Multi-engine Service Bulletin MEB08-6, dated October 13, 2008, as applicable.
(3) For all affected airplanes that are equipped for flight under instrument flight rules (IFR): If placards were installed in accordance with paragraph (e)(2)(ii) of this AD, inspect the alternate static air source selector valve to assure that the part number identification placard is not obstructing the port.	Within the next 100 hours TIS after January 5, 2009 (the effective date of this AD) or within the next 4 months after January 5, 2009 (the effective date of this AD), whichever occurs first. After doing the inspection, remove the placards installed in accordance with paragraph (e)(2)(ii) of this AD before further flight.	Following the procedures in Cessna Single Engine Service Bulletin SB08-34-02, Revision 1, dated October 6, 2008; Cessna Caravan Service Bulletin CAB08-4, Revision 1, dated October 6, 2008; Cessna Single Engine Service Bulletin SEB08-5, dated October 13, 2008; or Cessna Multi-engine Service Bulletin MEB08-6, dated October 13, 2008, as applicable.
(4) For all affected airplanes: If the alternate static air source selector valve port is found obstructed by the part number identification placard during the inspection required in paragraphs (e)(1), (e)(2)(i), and (e)(3) of this AD, remove the placard from the valve body, discard the placard, and assure that the port is open and unobstructed.	Before further flight after the inspection required in paragraphs (e)(1), (e)(2)(i), and (e)(3) of this AD.	Following the procedures in Cessna Single Engine Service Bulletin SB08-34-02, Revision 1, dated October 6, 2008; Cessna Caravan Service Bulletin CAB08-04, Revision 1, dated October 6, 2008; Cessna Single Engine Service Bulletin SEB08-5, dated October 13, 2008; or Cessna Multi-engine Service Bulletin MEB08-6, dated October 13, 2008, as applicable.
(5) For all affected airplanes: When a replacement valve is needed, only install a P/N 2013142-18 alternate static air source selector valve that has been inspected and the port is found free from obstruction.	As of 10 days after January 5, 2009 (the effective date of this AD).	A person authorized to perform maintenance as specified in 14 CFR section 43.3 of the Federal Aviation Administration Regulations (14 CFR 43.3) is required to do the inspection.

(Over)➔

(f) Report to the FAA the results of the inspection required by this AD where an obstruction was found:

(1) Submit this report within 10 days after the inspection or 10 days after the effective date of this AD, whichever occurs later.

(2) Use the form in Figure 1 of this AD and submit it to FAA, Manufacturing Inspection District Office, Mid-Continent Airport, 1801 Airport Road, Room 101, Wichita, Kansas 67209; or fax to (316) 946-4189.

(3) The Office of Management and Budget (OMB) approved the information collection requirements contained in this regulation under the provisions of the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq.) and assigned OMB Control Number 2120-0056.

AD 2008-26-10 INSPECTION REPORT

(REPORT ONLY IF A PART NUMBER IDENTIFICATION PLACARD IS OBSTRUCTING THE STATIC AIR SOURCE SELECTOR VALVE PORT)

1. Inspection Performed By:	*2. Phone:*
3. Airplane Model:	*4. Airplane Serial Number:*
5. Airplane Total Hours TIS:	
6. Date of AD inspection:	
*7. Inspection Results: (Note: Report **only** if a part number identification placard is obstructing static air source valve port.)*	*8. Corrective Action Taken:*

Mail report to: Wichita Manufacturing Inspection District Office, Mid-Continent Airport, 1801 Airport Road, Room 101, Wichita, Kansas, 67209; or fax to (316) 946-4189

Aerotech Note: Above address changed from 1804 to 1801.

Alternative Methods of Compliance (AMOCs)

(g) The Manager, Wichita Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Ann Johnson, Aerospace Engineer, FAA, Wichita ACO, 1801 Airport Road, Room 100, Wichita, Kansas 67209; telephone: 316-946-4105; fax: 316-946-4107; e-mail address: ann.johnson@faa.gov. Before using any approved AMOC on any airplane to which the AMOC applies, notify your appropriate principal inspector (PI) in the FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO.

(h) AMOCs approved for AD 2008-10-02 are approved for this AD.

Material Incorporated by Reference

(i) You must use Cessna Single Engine Service Bulletin, SB08-34- 02, Revision 1, dated October 6, 2008; Cessna Caravan Service Bulletin CAB08-4, Revision 1, dated October 6, 2008; Cessna Single Engine Service Bulletin SEB08-5, dated October 13, 2008; and Cessna Multi-engine Service Bulletin MEB08-6, dated October 13, 2008, to do the actions required by this AD, unless the AD specifies otherwise.

(1) The Director of the Federal Register approved the incorporation by reference of this service information under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) For service information identified in this AD, contact Cessna Aircraft Company, P.O. Box 7704, Wichita, Kansas 67277; telephone: (800) 423-7782 or (316) 517-6006; Internet: http://www.cessna.com.

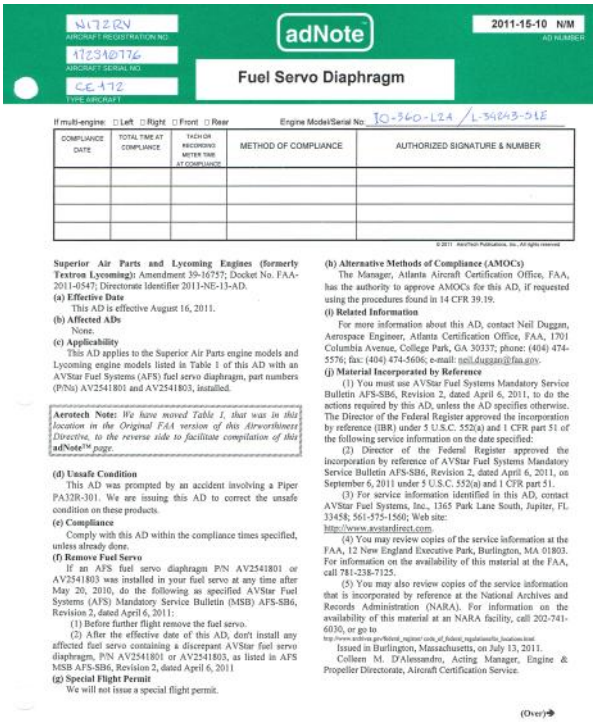
(3) You may review copies at the FAA, Central Region, Office of the Regional Counsel, 901 Locust, Kansas City, Missouri 64106; or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202- 741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

Issued in Kansas City, Missouri, on December 15, 2008.

Kim Smith, Manager, Small Airplane Directorate, Aircraft Certification Service.

Table 1--Applicable Airplane Models

Models		
172	F172K	177
172A	F172L	177A
172B	F172M	177B
172C	F172N	177RG
172D	F172P	F177RG
172E	FR172E	180
172F (USAF T-41A)	FR172F	180A
172G	FR172G	180B
172H (USAF T-41A)	FR172H	180C
172I	FR172J	180D
172K	FR172K	180E
172L	P172D	180F
172M	R172E (USAF T-41B) (USAF T-41C and D)	180G
172N	R172F (USAF T-41)	180H
172P	R172G (USAF T-41C or D)	180J
172Q	R172H (USAF T-41D)	180K
172R	R172J	182
172S	R172K	182A
F172D	172RG	182B
F172E	175	182C
F172F	175A	182D
F172G	175B	182E
F172H	175C	182F
182G	A185F	U206D
182H	206	U206E
182J	206H	U206F
182K	P206	U206G
182L	P206A	207
182M	P206B	207A
182N	P206C	T207
182P	P206D	T207A
182Q	P206E	206
182R	T206H	206B
182S	TP206A	210
182T	TP206B	210A
F182P	TP206C	210B
F182Q	TP206D	210C
FR182	TP206E	210D
R182	TU206A	210E
T182	TU206B	210F
T182T	TU206C	210G
TR182	TU206D	210H
185	TU206E	210J
185A	TU206F	210K
185B	TU206G	210L
185C	U206	210M
185D	U206A	210N
185E	U206B	210R
A185E	U206C	210-5 (205)
210-5A (205A)	F337F	
T210F	M337B (USAF 02A)	
T210G	T337B	
T210H	T337C	
T210J	T337D	
T210K	T337E	
T210L	T337F	
T210M	T337H	
T210N	T337H-SP	
T210R		
T303		
336		
337		
337A (USAF 02B)		
337B		
337C		
337D		
337E		
337F		
337G		
337H		
F337E		
F337F		
F337G		
F337H		
FT337E		



N172RV
AIRCRAFT REGISTRATION NO.
172S10776
AIRCRAFT SERIAL NO.
CE 172
TYPE AIRCRAFT

adNote

2011-15-10 N/M
AD NUMBER

Fuel Servo Diaphragm

If multi-engine: ☐ Left ☐ Right ☐ Front ☐ Rear Engine Model/Serial No: IO-360-L2A / L-34243-51E

COMPLIANCE DATE	TOTAL TIME AT COMPLIANCE	TACH OR RECORDING METER TIME AT COMPLIANCE	METHOD OF COMPLIANCE	AUTHORIZED SIGNATURE & NUMBER

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Superior Air Parts and Lycoming Engines (formerly Textron Lycoming): Amendment 39-16757; Docket No. FAA-2011-0547; Directorate Identifier 2011-NE-13-AD.

(a) Effective Date
This AD is effective August 16, 2011.

(b) Affected ADs
None.

(c) Applicability
This AD applies to the Superior Air Parts engine models and Lycoming engine models listed in Table 1 of this AD with an AVStar Fuel Systems (AFS) fuel servo diaphragm, part numbers (P/Ns) AV2541801 and AV2541803, installed.

Aerotech Note: *We have moved Table 1, that was in this location in the Original FAA version of this Airworthiness Directive, to the reverse side to facilitate compilation of this* **adNote**™ *page.*

(d) Unsafe Condition
This AD was prompted by an accident involving a Piper PA32R-301. We are issuing this AD to correct the unsafe condition on these products.

(e) Compliance
Comply with this AD within the compliance times specified, unless already done.

(f) Remove Fuel Servo
If an AFS fuel servo diaphragm P/N AV2541801 or AV2541803 was installed in your fuel servo at any time after May 20, 2010, do the following as specified AVStar Fuel Systems (AFS) Mandatory Service Bulletin (MSB) AFS-SB6, Revision 2, dated April 6, 2011:
(1) Before further flight remove the fuel servo.
(2) After the effective date of this AD, don't install any affected fuel servo containing a discrepant AVStar fuel servo diaphragm, P/N AV2541801 or AV2541803, as listed in AFS MSB AFS-SB6, Revision 2, dated April 6, 2011

(g) Special Flight Permit
We will not issue a special flight permit.

(h) Alternative Methods of Compliance (AMOCs)
The Manager, Atlanta Aircraft Certification Office, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19.

(i) Related Information
For more information about this AD, contact Neil Duggan, Aerospace Engineer, Atlanta Certification Office, FAA, 1701 Columbia Avenue, College Park, GA 30337; phone: (404) 474-5576; fax: (404) 474-5606; e-mail: neil.duggan@faa.gov.

(j) Material Incorporated by Reference
(1) You must use AVStar Fuel Systems Mandatory Service Bulletin AFS-SB6, Revision 2, dated April 6, 2011, to do the actions required by this AD, unless the AD specifies otherwise. The Director of the Federal Register approved the incorporation by reference (IBR) under 5 U.S.C. 552(a) and 1 CFR part 51 of the following service information on the date specified:
(2) Director of the Federal Register approved the incorporation by reference of AVStar Fuel Systems Mandatory Service Bulletin AFS-SB6, Revision 2, dated April 6, 2011, on September 6, 2011 under 5 U.S.C. 552(a) and 1 CFR part 51.
(3) For service information identified in this AD, contact AVStar Fuel Systems, Inc., 1365 Park Lane South, Jupiter, FL 33458; 561-575-1560; Web site: http://www.avstardirect.com.
(4) You may review copies of the service information at the FAA, 12 New England Executive Park, Burlington, MA 01803. For information on the availability of this material at the FAA, call 781-238-7125.
(5) You may also review copies of the service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at an NARA facility, call 202-741-6030, or go to http://www.archives.gov/federal_register/ code_of_federal_regulations/ibr_locations.html.

Issued in Burlington, Massachusetts, on July 13, 2011.
Colleen M. D'Alessandro, Acting Manager, Engine & Propeller Directorate, Aircraft Certification Service.

(Over)➔

Table 1–Affected Lycoming and Superior Air Parts Engines

Engine Manufacturer	Engine Model
Lycoming Engines	**AEIO-320**-D1B, -D2B, -E1A, -E1B, -E2A, -E2B
	AIO-320-A1A, -A1B, -A2A, -A2B, -B1B, -C1B
	IO-320-A1A, -A2A, -B1A, -B1B, -B1C, -B1E, -B1D, -B2A, -C1A, - C1B, -D1A, -D1C,
	-D1B, -E1A, -E1B,-E2A, -E2B, -F1A
	LIO-320-B1A, -C1A
	AEIO-360-A1A, -A1B, -A1B6,-A1E6, -A1C, -A1D, -A1E, -A2A, - A2B, -A2C, -B1B,
	-B1D, -B1F, -B1F6, -B1G6, -B2F, -B2F6, -B1H, - B4A, -H1A, -H1B
	AIO-360-A1A, -A1B, -A2A, -A2B, -B1B
	HIO-360-A1A, -A1B, -B1A, -B1B, -C1A, -C1B, -E1AD, -E1BD, - F1AD, -G1A
	IO-360-A1A, -A1B, -A1B6, -A1B6D, -A1C, -A1D, -A1D6, -A1D6D, -A2A, -A2B, -A2C,
	-A3B6, -A3B6D, -A3D6D, -B1A, -B1B, -B1C, - B1D, -B1E, -B1F, -B1F6, -B1G6 -B2E,
	-B2F, -B2F6, -B4A, -C1A, - C1B, -C1C, -C1C6, -C1D6, -C1E6,
	-C1E6D, -C1F,-C1G6, -D1A, -E1A, -F1A, -J1AD, -J1A6D, -K2A, -L2A, -M1A, -M1B
	LIO-360-C1E6, -M1A
	TIO-360-A1A, -A1B, -A3B6, -C1A6D
	IO-540-A1A5, -B1A5, -B1B5, -B1C5, -C1B5, -C1C5, -C2C, -C4B5, -
	C4B5D, -C4D5, -C4C5, -C4D5D, -D4A5, -D4B5, -D4C5, -E1A5, -
	E1B5, -E1C5, -G1A5, -G1B5, -G1C5, -G1D5, -G1E5, -G1F5, -J4A5, -
	K1A5, -K1A5D, -K1B5, -K1B5D, -K1C5, -K1D5, -K1E5, -K1E5D, -
	K1F5, -K1F5D, -K1G5, -K1G5D, -K1H5, -K1J5, -K1J5D, -K1K5, -
	K2A5, -L1A5, -L1A5D, -L1B5D, -L1C5, -M1A5, -M1A5D, -M1B5D,
	-M1C5, -M2A5D, -N1A5, -P1A5, -R1A5, -S1A5, -T4A5D, -T4B5, -
	T4B5D, -T4C5D, -U1A5D, -U1B5D, -V4A5D, -V4A5, -W1A5, -
	W1A5D, -W3A5D, -AA1A5, -AA1B5, -AB1A5, -AC1A5, -AE1A5, - AF1A5
	IGO-480-A1A6, -A1B6
	AEIO-540-D4A5, -D4B5, -D4C5, -D4D5, -L1B5D, -L1B5, -L1D5
	IVO-540-A1A
	TIO-540-A1A, -A1B, -A2A, -A2B, -A1C, -A2C, -C1A, -E1A, -F2BD,
	-G1A, -H1A, -J2B, -J2BD, -K1AD, -N2BD, -R2AD, -S1AD, -T2AD,
	-U2A, -V2AD, -W2A, -AA1AD, -AB1AD, -AB1BD -AE2A, -AF1A,
	-AF1B, -AG1A, -AH1A, -AJ1A, AK1A
	LTIO-540-F2BD, -J2B, -J2BD, -K1AD, -N2BD, -R2AD, -U2A, - V2AD, -W2A
	IO-720- A1A, -A1B, -A1BD, -B1A, -B1B, -B1BD, -C1B, -C1BD, -
	D1B, -D1BD, -D1C, -D1CD
	TIGO-541-B1A, -C1A, -D1A, -D1B, -E1A, -G1AD
Superior Air Parts	**IO-360**-A1A1, A1A2, A2A1, A2A2, A3A1, A3A2, B1A1, B1A2,
	B2A1, B2A2, B3A1, B3A2, B4A1, B4A2, B5A1, B5A2, B6A1,
	B6A2, C1A1, C1A2, C2A1, C2A2, C2A1, C3A2, D1A1, D1A2,
	D2A1, D2A2, D3A1, D3A2, D4A1, D4A2, D5A1, D5A2, D6A1,
	D6A2, E1A1, E1A2, E2A1, E2A2, E3A1, E3A2

84-26-2 R Induction Air Filters

Airframe Index   Engine Index   Propeller Index   AD Index

adNote

N172RV
AIRCRAFT REGISTRATION NO.

17280776
AIRCRAFT SERIAL NO.

CE172
TYPE AIRCRAFT

84-26-2 R
AD NUMBER

Induction Air Filters

If multi-engine: ☐ Left ☐ Right ☐ Front ☐ Rear

DATE	TOTAL TIME AT COMPL.	TACH OR RECORDING METER TIME AT COMPL.	METHOD OF COMPLIANCE	NEXT COMPL. DUE AT TOTAL TIME	NEXT COMPL. DUE AT DATE, TACH. OR RECORDING METER TIME	AUTHORIZED SIGNATURE & NUMBER
12-2-10	477.7	477.7	C/W by Replacement	977.7	977.7	[illegible] AP 3375[illegible]
9-2-15	1443.1	1443.1	C/W by Replacement	1943.1	1943.1	James T. Markey A&P3164[illegible] IA

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Amendment 39-4966. Applies to all paper induction air filters used in small airplanes.

Compliance: Required as indicated, unless already accomplished.

To prevent possible engine power loss or stoppage caused by engine ingestion of fragments of a deteriorated induction air filter, accomplish the following:

Within the next one hundred hours time-in-service after the effective date of this AD or prior to the accumulation of 500 hours time-in-service on the filter, whichever occurs later, and thereafter at intervals not exceeding 500 hours time-in-service on the filter:

(a) Replace the air filter with a new filter that is FAA approved for the airplane installation.

(b) Within 100 hours time-in-service replace any filter on which the time-in-service cannot be determined utilizing the airplane maintenance records for this determination.

NOTE: This AD does not alter current maintenance procedures which require inspection of paper induction air filters at 100 hours time-in-service and annual inspections and replacement as necessary based on filter condition.

This amendment becomes effective January 29, 1985.

Airframe Index Engine Index Propeller Index AD Index

N172RN
AIRCRAFT REGISTRATION NO.
172S10776
AIRCRAFT SERIAL NO.
CE-172
TYPE AIRCRAFT

adNote

93-5-6 R
AD NUMBER

Ignition Switch

DATE	TOTAL TIME AT COMPL.	TACH OR RECORDING METER TIME AT COMPL.	METHOD OF COMPLIANCE	NEXT COMPL. TOTAL TIME	DUE AT DATE, TACH, OR RECORDING METER TIME	AUTHORIZED SIGNATURE & NUMBER

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Amendment 39-8511. Docket 92-NM-155-AD.

Applicability: ACS and Gerdes ignition switches; as installed in, but not limited to, Piper Model PA-38-112 series airplanes, Schweizer Model G-164 series (including Model G-164A, G-164B, and G-164C) airplanes, Schweizer Model 2-37 and 2-37A series airplanes, and the following Cessna airplanes; certificated in any category:

Cessna Model	Serial Numbers		
150	15074429	through	15079405
A150	A1500069	through	A1500734
F150	F15001024	through	F15001429
FRA150	FRA1500212	through	FRA1500336
152	15279406	through	15286033
A152	A1520738	through	A1521049
F152	F15201429	through	F15201980
FA152	FA1520337	through	FA1520425
172	17261486	through	17276673
R172	R1722005	through	R1723454
172RG	172RG0001	through	172RG1191
F172	F17201545	through	F17202254
FR172	FR17200441	through	FR17200675
177	17701890	through	17702752
177RG	177RG0342	through	177RG1386
F177RG	F177RG0083	through	F177RG0177
180	18052317	through	18053203
182	18261706	through	18268615
R182	R18200001	through	R18202041
A182	A182-0137	through	A182-0148
F182	F18200001	through	F18200169
FR182	FR18200001	through	FR18200070
185	18503164	through	18504448
U206	U20601980	through	U20607035
207	20700023	through	20700788
210	21059830	through	21065009
P210	P21000001	through	P21000874

Compliance: Required as indicated, unless accomplished previously.

To prevent failure of ignition switches, accomplish the following:

(a) Within 100 flight hours after the effective date of this AD, or at the next annual inspection, whichever occurs first, perform an inspection of the ignition switch to detect wear and corrosion, and lubricate the switch, in accordance with ACS Service Bulletin SB92-01, dated August 15, 1992; or Cessna Service Bulletin SEB91-5, Revision 1, June 14, 1991. If wear or corrosion is detected, prior to further flight, replace the switch in accordance with the service bulletin. Repeat this inspection and lubricate the ignition switch in accordance with the service bulletin, thereafter, at intervals not to exceed 2,000 flight hours.

NOTE: ACS ignition switches that do not have a "start" position (models A-510-1 and A-510-5) or were manufactured on or after February 20, 1989, and have not accumulated 2,000 flight hours, need not be lubricated. The manufacture date is stamped on the switch body. These switches are identifiable by red paint in the screw heads on the back of the switch. However, manufacturer lubricated switches that have a "start" position, but do not have a starter solenoid diode, must be inspected and modified.

(b) Within 100 flight hours after the effective date of this AD, or at the next annual inspection, whichever occurs first, inspect the ignition switch installation to determine if a diode or other surge suppresser is installed on the starter solenoid. If one is not installed, prior to further flight, install a starter solenoid diode in accordance with ACS Service Bulletin SB92-01, dated August 15, 1992; or Cessna Service Bulletin SEB91-5, Revision 1, dated June 14, 1991.

NOTE: For operators using the Cessna service bulletin to install the diode in the starter solenoid: The procedures for installation are contained in Attachment to Service Bulletin SEB91-5R1, Revision 1, dated June 14, 1991.

(c) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Los Angeles Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Los Angeles ACO.

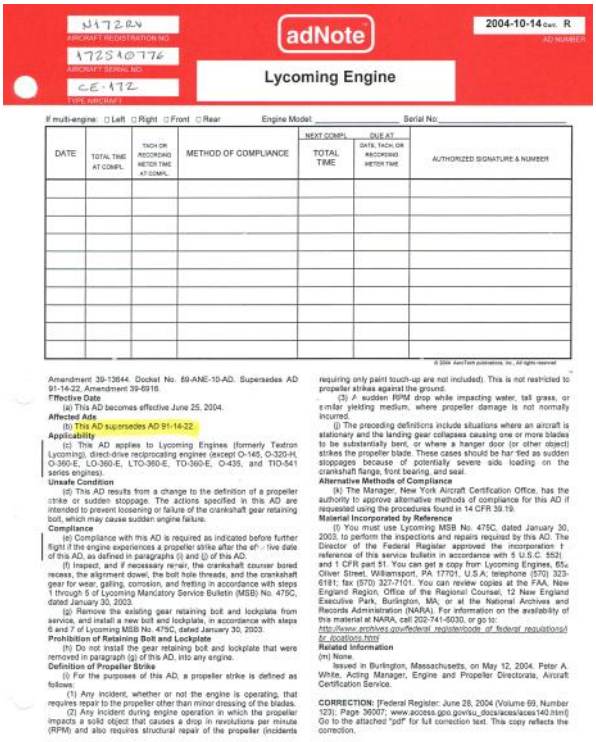
NOTE: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Los Angeles ACO.

(d) Special flight permits may be issued in accordance with FAR 21.197 and 21.199 to operate the airplane to a location where the requirements of this AD can be accomplished.

(e) The inspection, lubrication, replacement, and modification shall be done in accordance with ACS Service Bulletin SB92-01, dated August 15, 1992; or Cessna Service Bulletin SEB91-5, Revision 1, dated June 14, 1991, which includes Attachment to Service Bulletin SEB91-5R1, Revision 1, dated June 14, 1991. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR Part 51. Copies may be obtained from ACS Products Company, P.O. Box 152, 1585 Copper Drive, Lake Havasu City, Arizona 86403-0008; or Cessna Aircraft Company, Customer Services, P.O. Box 7704, Wichita, Kansas 67277. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Los Angeles Aircraft Certification Office, 3229 East Spring Street, Long Beach, California; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(f) This amendment becomes effective on April 29, 1993

Airframe Index Engine Index Propeller Index AD Index



N172RN
AIRCRAFT REGISTRATION NO.
172S10776
AIRCRAFT SERIAL NO.
CE-172
TYPE AIRCRAFT

adNote

2004-10-14 corr. R
AD NUMBER

Lycoming Engine

If multi-engine: ☐ Left ☐ Right ☐ Front ☐ Rear Engine Model: _____ Serial No: _____

DATE	TOTAL TIME AT COMPL	TACH OR RECORDING METER TIME AT COMPL	METHOD OF COMPLIANCE	NEXT COMPL: TOTAL TIME	DUE AT: DATE, TACH, OR RECORDING METER TIME	AUTHORIZED SIGNATURE & NUMBER

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Amendment 39-13644. Docket No. 69-ANE-10-AD. Supersedes AD 91-14-22, Amendment 39-6916.

Effective Date

(a) This AD becomes effective June 25, 2004.

Affected Ads

(b) This AD supersedes AD 91-14-22.

Applicability

(c) This AD applies to Lycoming Engines (formerly Textron Lycoming), direct-drive reciprocating engines (except O-145, O-320-H, O-360-E, LO-360-E, LTO-360-E, TO-360-E, O-435, and TIO-541 series engines).

Unsafe Condition

(d) This AD results from a change to the definition of a propeller strike or sudden stoppage. The actions specified in this AD are intended to prevent loosening or failure of the crankshaft gear retaining bolt, which may cause sudden engine failure.

Compliance

(e) Compliance with this AD is required as indicated before further flight if the engine experiences a propeller strike after the effective date of this AD, as defined in paragraphs (i) and (j) of this AD.

(f) Inspect, and if necessary re-air, the crankshaft counter bored recess, the alignment dowel, the bolt hole threads, and the crankshaft gear for wear, galling, corrosion, and fretting in accordance with steps 1 through 5 of Lycoming Mandatory Service Bulletin (MSB) No. 475C, dated January 30, 2003.

(g) Remove the existing gear retaining bolt and lockplate from service, and install a new bolt and lockplate, in accordance with steps 6 and 7 of Lycoming MSB No. 475C, dated January 30, 2003.

Prohibition of Retaining Bolt and Lockplate

(h) Do not install the gear retaining bolt and lockplate that were removed in paragraph (g) of this AD, into any engine.

Definition of Propeller Strike

(i) For the purposes of this AD, a propeller strike is defined as follows:

(1) Any incident, whether or not the engine is operating, that requires repair to the propeller other than minor dressing of the blades.

(2) Any incident during engine operation in which the propeller impacts a solid object that causes a drop in revolutions per minute (RPM) and also requires structural repair of the propeller (incidents requiring only paint touch-up are not included). This is not restricted to propeller strikes against the ground.

(3) A sudden RPM drop while impacting water, tall grass, or similar yielding medium, where propeller damage is not normally incurred.

(j) The preceding definitions include situations where an aircraft is stationary and the landing gear collapses causing one or more blades to be substantially bent, or where a hanger door (or other object) strikes the propeller blade. These cases should be handled as sudden stoppages because of potentially severe side loading on the crankshaft flange, front bearing, and seal.

Alternative Methods of Compliance

(k) The Manager, New York Aircraft Certification Office, has the authority to approve alternative methods of compliance for this AD if requested using the procedures found in 14 CFR 39.19.

Material Incorporated by Reference

(l) You must use Lycoming MSB No. 475C, dated January 30, 2003, to perform the inspections and repairs required by this AD. The Director of the Federal Register approved the incorporation by reference of this service bulletin in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. You can get a copy from Lycoming Engines, 652 Oliver Street, Williamsport, PA 17701, U.S.A.; telephone (570) 323-6181; fax (570) 327-7101. You can review copies at the FAA, New England Region, Office of the Regional Counsel, 12 New England Executive Park, Burlington, MA; or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html

Related Information

(m) None.

Issued in Burlington, Massachusetts, on May 12, 2004. Peter A. White, Acting Manager, Engine and Propeller Directorate, Aircraft Certification Service.

CORRECTION: [Federal Register: June 28, 2004 (Volume 69, Number 123), Page 36007; www.access.gpo.gov/su_docs/aces/aces140.html] Go to the attached "pdf" for full correction text. This copy reflects the correction.

Airframe Index   Engine Index   Propeller Index   AD Index

N172RV
AIRCRAFT REGISTRATION NO.
17251O776
AIRCRAFT SERIAL NO.
CE-172
TYPE AIRCRAFT

adNote

2008-14-7 R
AD NUMBER

Lycoming Engine

If multi-engine: ☐Left ☐Right ☐Front ☐Rear   Engine Model: ______   Serial No: ______

DATE	TOTAL TIME AT COMPL.	TACH OR RECORDING METER TIME AT COMPL.	METHOD OF COMPLIANCE	NEXT COMPL. DUE AT TOTAL TIME	NEXT COMPL. DUE AT DATE, TACH, OR RECORDING METER TIME	AUTHORIZED SIGNATURE & NUMBER
12-2-10	477.7	477.7	CW by visual insp IAW SB 342E	577.7	577.7	Luigi Rendon A&P 3375696 IA

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Amendment 39-15602. Docket No. FAA-2007-0216; Directorate Identifier 92-ANE-56-AD.

Effective Date

(a) This airworthiness directive (AD) becomes effective August 14, 2008.

Affected ADs

(b) This AD supersedes AD **2002-26-01**, Amendment 39-12966.

Applicability

(c) This AD applies to fuel injected reciprocating engines manufactured by Lycoming Engines that incorporate externally mounted fuel injection lines (engines with an "I" in the prefix of the engine model designation) as listed in the following Table 1:

Aerotech Note: Table 1 that was in this location in the FAA's Original version of this airworthiness directive has been moved to pg. 2 to facilitate compilation of this adNote™.

Engine models in Table 1 are installed on, but not limited to, Piper PA-24 Comanche, PA-30 and PA-39 Twin Comanche, PA-28 Arrow, and PA- 23 Aztec; Beech 23 Musketeer; Mooney 20, and Cessna 177 Cardinal airplanes.

(d) This AD is not applicable to engines having internally mounted fuel injection lines, which are not accessible.

(e) This AD is not applicable to engines that have a Maintenance and Overhaul Manual with an Airworthiness Limitations Section that requires inspection of externally mounted fuel injector lines. Those engines models are not included in Table 1 of this AD.

Unsafe Condition

(f) This AD results from Lycoming Engines revising their Mandatory Service Bulletin (MSB) to add new engine models requiring inspection, and from the need to clarify a repetitive inspection compliance time. We are issuing this AD to prevent failure of the fuel injector fuel lines that would allow fuel to spray into the engine compartment, resulting in an engine fire.

Compliance

(g) You are responsible for having the actions required by this AD performed within the compliance times specified unless the actions have already been done.

Engines That Have Had Initial Inspections

(h) For engines that have had initial inspections in accordance with Textron Lycoming MSB No. 342, dated March 24, 1972; Textron Lycoming MSB No. 342A, dated May 26, 1992; Textron Lycoming MSB No. 342B, dated October 22, 1993; Supplement No. 1 to MSB No. 342B, dated April 27, 1999; Textron Lycoming MSB No. 342C, dated April 28, 2000; Textron Lycoming MSB No. 342D, dated July 10, 2001; and Lycoming Engines MSB No. 342E, dated May 18, 2004, inspect in accordance with paragraph (j) of this AD.

Engines That Have Not Had Initial Inspections

(i) For engines that have not had initial inspections previously done in accordance with Textron Lycoming MSB No. 342, dated March 24, 1972; Textron Lycoming MSB No. 342A, dated May 26, 1992; Textron Lycoming MSB No. 342B, dated October 22, 1993; Supplement No. 1 to MSB No. 342B, dated April 27, 1999; Textron Lycoming MSB No. 342C, dated April 28, 2000; Textron Lycoming MSB No. 342D, dated July 10, 2001; or Lycoming Engines MSD No. 342E, dated May 18, 2004, inspect as follows:

(1) For engines that have not yet had any fuel line maintenance done, or have not had any fuel line maintenance done since new or since the last overhaul, inspect in accordance with paragraph (k) of this AD within 50 hours time-in-service (TIS) after the effective date of this AD.

(2) For all other engines, inspect in accordance with paragraph (k) of this AD within 10 hours TIS after the effective date of this AD.

Repetitive Inspections

(j) Thereafter, inspect at intervals of 100 hours TIS (not to exceed 110 hours), at each engine overhaul, and after any maintenance has been done on the engine where any clamp (or clamps) on a fuel injector line (or lines) has been disconnected, moved, or loosened, in accordance with paragraph (k) of this AD.

Inspection Criteria

(k) Inspect the fuel injector fuel lines and clamps between the fuel manifold and the fuel injector nozzles, and replace as necessary any fuel injector fuel line and clamp that does not meet all conditions specified in Lycoming Engines MSB No. 342E, dated May 18, 2004.

Alternative Methods of Compliance

(l) The Manager, New York Aircraft Certification Office, FAA, has the authority to approve alternative methods of compliance for this AD if requested using the procedures found in 14 CFR 39.19.

Related Information

(m) FAA Special Airworthiness Information Bulletin No. NE-07-49, dated September 20, 2007, is not mandatory, but has additional information on this subject.

(n) Contact Norm Perenson, Aerospace Engineer, New York Aircraft Certification Office, FAA, Engine & Propeller Directorate, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; e-mail: Norman.perenson@faa.gov; telephone (516) 228-7337; fax (516) 794-5531, for more information about this AD.

Material Incorporated by Reference

(o) You must use Lycoming Engines Mandatory Service Bulletin No. 342E, dated May 18, 2004, to perform the actions required by this AD. The Director of the Federal Register approved the incorporation by reference of this service bulletin in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Contact Lycoming Engines, 652 Oliver Street, Williamsport, PA 17701, or go to: http://www.lycoming.textron.com for a copy of this service information. You may review copies at the FAA, New England Region, 12 New England Executive Park, Burlington, MA; or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to:
http:// www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued in Burlington, Massachusetts, on June 24, 2008.

Peter A. White, Assistant Manager, Engine and Propeller Directorate, Aircraft Certification Service.

(See Table 1 on page 2)

(Page 2 of Airworthiness Directive 2008-14-07)

Table 1.--Engine Models Affected

Engine	Model
AEIO-320	-D1B, -D2B, -E1B, -E2B
AIO-320	-A1B, -BIB, -C1B
IO-320	-B1A, -B1C, -C1A, -D1A, -D1B, -E1A, -E1B, -E2A, -E2B
LIO-320	-B1A, -C1A
AEIO-360	-A1A, -A1B, -A1B6, -A1D, -A1E, -A1E6, -B1F, -B2F, -B1G6, **-B1H**, -B4A, -H1A, -H1B
AIO-360	-A1A, -A1B, -B1B
HIO-360	-A1A, -A1B, -B1A, -C1A, -C1B, -D1A, -E1AD, -E1BD, -F1AD, **-G1A**
IO-360	-A1A, -A1B, -A1B6, -A1B6D, -A1C, -A1D, -A1D6, -A2A, -A2B, -A3B6, -A3B6D, -B1B, -B1D, -B1E, -B1F, -B1G6, -B2F, -B2F6, -B4A, -C1A, -C1B, -C1C, -C1C6, -C1D6, -C1E6, -C1F, -C1G6, -C2G6, **-F1A**, -J1A6D, **-M1B**, -L2A, -M1A
IVO-360	-A1A
LIO-360	-C1E6
TIO-360	-A1B, -C1A6D
IGO-480	-A1B6
AEIO-540	-D4A5, -D4B5, -D4D5, -L1B5, -L1B5D, -L1D5
IGO-540	-B1A, -B1C
IO-540	-A1A5, -AA1A5, -AA1B5, -AB1A5, -AC1A5, **-AE1A5**, -B1A5, -B1C5, -C1B5, -C4B5, -C4D5D, -D4A5, -E1A5, -E1B5, -G1A5, -G1B5, -G1C5, -G1D5, -G1E5, -G1F5, -J4A5, -V4A5D, -K1A5, -K1A5D, -K1B5, -K1C5, -K1D5, -K1E5, -K1E5D, -K1F5, K1H5, -K1J5, -K1F5D, -K1G5, -K1G5D, -K1H5, -K1J5D, -K1K5, -K1E5, -K1E5D, -K1F5, -K1J5, -L1C5, -M1A5, -M1B5D, -M1C5, -N1A5, -P1A5, -R1A5, -S1A5, -T4A5D, -T4B5, -T4B5D, -T4C5D, -V4A5, -V4A5D, **-W1A5**, -W1A5D, -W3A5D
IVO-540	-A1A
LTIO-540	-F2BD, -J2B, -J2BD, -N2BD, -R2AD, -U2A, -V2AD, -W2A
TIO-540	-A1A, -A1B, -A2A, -A2B, -A2C, **AE1A5**, -AE2A, -AH1A, -AA1AD, -AF1A, -AF1B, -AG1A, -AB1AD, -AB1BD, -AH1A, -AJ1A, -AK1A, -C1A, -E1A, -G1A, -F2BD, -J2B, -J2BD, -N2BD, -R2AD, -S1AD, -U2A, -V2AD, -W2A
TIVO-540	-A2A
IO-720	-A1A, -A1B, -D1B, -D1BD, -D1C, -D1CD, -B1B, -B1BD, -C1B

Aerotech Note: We have highlighted the additional engines that we have found to be added to this airworthiness directive as compared with table 1 of the superseded AD. This may not be all inclusive. Please check carefully.

Airframe Index   Engine Index   Propeller Index   AD Index

adNote

N172RV
AIRCRAFT REGISTRATION NO.

10776
AIRCRAFT SERIAL NO.

C172
TYPE AIRCRAFT

2008-19-5 N/R
AD NUMBER

ECi Cylinders

If multi-engine: ☐ Left ☐ Right ☐ Front ☐ Rear   Engine Model: IO-360-L2A Serial No: L-34243-51E

DATE	TOTAL TIME AT COMPL.	TACH OR RECORDING METER TIME AT COMPL.	METHOD OF COMPLIANCE	NEXT COMPL. DUE AT TOTAL TIME	NEXT COMPL. DUE AT DATE, TACH, OR RECORDING METER TIME	AUTHORIZED SIGNATURE & NUMBER
9-28-09	2410.3		N/A 1AW SEC 4F		Cyl Change	[illegible signature] 2830411

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Engine Components, Inc. (ECi): Amendment 39-15672. Docket No. FAA-2008-0052; Directorate Identifier 2008-NE-01-AD.

Effective Date

(a) This airworthiness directive (AD) becomes effective October 20, 2008.

Affected ADs

(b) None.

Applicability

(c) This AD applies to the Lycoming Engines (formerly Textron Lycoming) models 320, 360, and 540 series, "Parallel Valve", reciprocating engines listed in Table 1 of this AD, with ECi cylinder assembly, part number (P/N) AEL65102 series "Titan", and with cylinder head, P/N AEL85099, installed.

(1) The applicable cylinder assembly serial numbers (SNs) are SN 1138-02 through SN 35171-22, (referred to in this AD as Group "A" cylinder assemblies); and

(2) SN 35239-01 through SN 37016-28 (referred to in this AD as Group "B" cylinder assemblies).

(3) Note that the cylinder assembly P/N is at the crankcase end of the cylinder assembly, and might be difficult to see. As a guide in determining if your cylinder assemblies are affected, all affected cylinder assemblies have cylinder head P/N AEL85099. The cylinder head P/N is at the top of the cylinder head, near the intake and exhaust valve springs, and is easier to locate than the cylinder assembly P/N.

(4) Note that the set of numbers appearing on the cylinder, above and to the left of the SN, in the form of " 3456" is not used for determining applicability.

Table 1--Engine Models

Cylinder Assembly Part Number	Installed on Engine Models
[illegible]	[illegible]

For information, the Lycoming Engines (formerly Textron Lycoming) models 320, 360, and 540 series, "Parallel Valve", reciprocating engines are installed on, but not limited to, the aircraft listed in the following Table 2:

Table 2--Engines Installed On, But Not Limited To

Engine Models	Installed on , But Not Limited To
[illegible]	[illegible]

2

Adlog Recurrent Airworthiness Directives Page 100

Airframe Index Engine Index Propeller Index AD Index

N172RV
AIRCRAFT REGISTRATION NO.
17258776
AIRCRAFT SERIAL NO.
CE-172
TYPE AIRCRAFT

adNote

Precision Airmotive Fuel Injectors

2009-2-3 N/R
AD NUMBER

If multi-engine: □ Left □ Right □ Front □ Rear Engine Model: ____ Serial No: ____

DATE	TOTAL TIME AT COMPL.	TACH OR RECORDING METER TIME AT COMPL.	METHOD OF COMPLIANCE	NEXT COMPL. DUE AT TOTAL TIME	NEXT COMPL. DUE AT DATE, TACH, OR RECORDING METER TIME	AUTHORIZED SIGNATURE & NUMBER
9-14-09	235.4		[illegible]	285.4		[illegible]

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Amendment 39-15793. Docket No. FAA-2008-0420; Directorate Identifier 2008-NE-10-AD.

Effective Date

(a) This airworthiness directive (AD) becomes effective February 9, 2009.

Affected ADs

(b) This AD supersedes AD 2008-08-14, Amendment 39-15466.

Applicability

(c) This AD applies to the following reciprocating engines with a Precision Airmotive LLC, RSA-5 or RSA-10 series, or Bendix, RSA-5 or RSA-10 series, fuel injection servo, having a servo plug gasket, part number (P/N) 365533, that was installed under the fuel injection servo plug, P/N 383493, on or after August 22, 2006:

(1) Lycoming Engines IO, (L)IO, TIO, (L)TIO, AEIO, AIO, IGO, IVO, and HIO series reciprocating engines.

(2) Teledyne Continental Motors LTSIO-360-RB and TSIO-360-RB reciprocating engines.

(3) Superior Air Parts, Inc. IO-360 series reciprocating engines.

(d) This AD also applies to any other Precision Airmotive LLC RSA-5 or RSA-10 series, or Bendix, RSA-5 or RSA-10 series, fuel injection servo:

(1) That was received for installation on an engine on or after August 22, 2006 without a P/N 2577258 gasket and it does not have a letter "G" on the fuel injection servo plug, P/N 383493, or

(2) Any fuel injection servo that the installation history is not known.

Unsafe Condition

(e) This AD results from Precision Airmotive LLC introducing the installation of a new improved servo plug gasket, P/N 2577258, to the affected Precision Airmotive LLC RSA-5 and RSA-10 series, and Bendix, RSA-5 and RSA-10 series, fuel injection servos. We are issuing this AD to prevent a lean running engine, which could result in a substantial loss of engine power and subsequent loss of control of the airplane.

Compliance

(f) You are responsible for having the actions required by this AD performed before further flight, unless the actions have already been done.

Initial Inspection

(g) Before further flight, inspect the fuel injection servo plug, P/N 383493, for looseness, by attempting to turn it by hand, while being careful not to damage the safety wire or seal. If the plug moves, it is loose.

(h) If the plug is not loose, go to paragraph (j) of this AD.

(i) If the plug is loose, do the following:

(1) Carefully cut and remove the safety wire that spans between the servo plug and regulator cover only.

(2) Remove the servo plug and gasket, P/N 365533, that is behind the plug. The gasket may be slightly stuck to the regulator cover.

(3) Examine the threads on the servo plug and regulator cover for damage. Threads should be smooth and consistent, with no burrs or chips. The servo plug outer diameter threads should also measure within 0.7419-0.7500-inch.

(4) If the threads on either the servo plug or the regulator cover are damaged, or do not measure within the limits in paragraph (i)(3) of this AD, the servo is not eligible for any installation and must be replaced before further flight.

(5) Replace the gasket, P/N 365533, with a new improved gasket, P/N 2577258.

(6) While the hex plug is removed, stamp or scribe the letter "G" onto the face of the hex plug. Information on stamping or scribing can be found in Precision Airmotive LLC Mandatory Service Bulletin (MSB) No. PRS-107 Revision 4, dated July 16, 2008.

(7) When reassembling, do not install any servo plug or regulator cover that is not eligible for installation. Install a new gasket, P/N 2577258, onto the servo plug and reassemble the servo plug to the regulator cover.

(8) Torque the servo plug to a new, higher torque of 90-100 in- lbs, to maintain the proper clamp-up force between the plug and cover.

(9) Safety wire the servo plug with 0.015 thru 0.026 inch diameter wire to the regulator cover screws. Information on properly safety wiring the plug can be found in Precision Airmotive LLC MSB No. PRS-107, Revision 4, dated July 16, 2008.

(10) Inspect all other safety wire on the servo. Replace any that are damaged.

Repetitive Inspections

(j) For servo plugs that passed inspection with a gasket, P/N 365533 installed, at every engine oil change or within every 50 hours of engine run time, whichever occurs first, repeat the inspection and remedial steps specified in paragraphs (g) through (i)(10) of this AD.

Mandatory Terminating Action

(k) By December 31, 2009, as mandatory terminating action to the repetitive inspections required by this AD, replace all servo plug gaskets, P/N 365533 that are installed on servos affected by this AD, with gasket, P/N 2577258.

(l) Use paragraphs (i)(1) through (i)(10) of this AD, to do the gasket replacements.

Prohibition of Installing Gasket P/N 365533

(m) After the effective date of this AD, do not install gasket, P/N 365533, onto any fuel injection servo.

Identification of Servo Plug Gaskets

(n) Servo plug gaskets, P/N 365533, are identified as being made of either a paper or fiber material, impregnated with synthetic rubber. They are relatively flexible and have a rough surface.

(o) Servo plug gaskets, P/N 2577258, are identified as being made of metal with a coating of synthetic rubber. They are relatively rigid and have a smooth surface.

Special Flight Permits Prohibited

(p) Under 14 CFR part 39.23, we are prohibiting special flight permits.

Alternative Methods of Compliance

(q) The Manager, Seattle Aircraft Certification Office, may approve alternative methods of compliance for this AD if requested using the procedures found in 14 CFR 39.19.

Related Information

(r) For Precision Airmotive LLC, Richard Simonson, Aerospace Engineer, Propulsion Branch, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055; e-mail: Richard.simonson@faa.gov; telephone (425) 917-6507; fax (425) 917-6590.

(s) For Lycoming Engines, Norm Perenson, Aerospace Engineer, New York Aircraft Certification Office, FAA, Engine & Propeller Directorate, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; e- mail: Norman.perenson@faa.gov; telephone (516) 228-7337; fax (516) 794-5531.

(t) For Teledyne Continental Motors, Kevin Brane, Aerospace Engineer, Atlanta Aircraft Certification Office, FAA, Small Airplane Directorate, One Crown Center, 1895 Phoenix Blvd., Suite 450, Atlanta, GA 30349; e-mail: kevin.brane@faa.gov; telephone (770) 703- 6063; fax (770) 703-6097.

(u) For Superior Air Parts, Inc., Tausif Butt, Aerospace Engineer, Special Certification Office, FAA, Rotorcraft Directorate, Southwest Regional Headquarters, 2601 Meacham Blvd., Fort Worth, Texas 76137; e-mail: Tausif.butt@faa.gov; telephone (817) 222-5196; fax (817) 222-5785.

(v) FAA Special Airworthiness Information Bulletin NE-09-04, dated January 9, 2009, also pertains to checking servo plugs for looseness on Precision Airmotive LLC RSA-5 and RSA-10 series, and Bendix RSA-5 and RSA-10 series, earlier produced fuel injection servos, not affected by this AD.

(w) Precision Airmotive LLC MSB No. PRS-107, Revision 4, dated July 16, 2008, also pertains to the subject of this AD. Contact Precision Airmotive LLC, 14800 40th Avenue, NE., Marysville, Washington 98271; telephone (360) 651-8282; http:// www.precisionairmotive.com, for a copy of this MSB.

Material Incorporated by Reference

(x) None.

Issued in Burlington, Massachusetts, on January 13, 2009.

Peter A. White, Assistant Manager, Engine and Propeller Directorate, Aircraft Certification Service.

Airframe Index Engine Index Propeller Index AD Index

N172RV
AIRCRAFT REGISTRATION NO.
10776
AIRCRAFT SERIAL NO.
C-172
TYPE AIRCRAFT

adNote

2009-26-12 N/R
AD NUMBER

ECi Cylinders

If multi-engine: ☐ Left ☐ Right ☐ Front ☐ Rear Engine Model: IO-360-L2A Serial No. L-34243-51E

DATE	TOTAL TIME AT COMPL.	TACH OR RECORDING METER TIME AT COMPL.	METHOD OF COMPLIANCE	NEXT COMPL. DUE AT TOTAL TIME	NEXT COMPL. DUE AT DATE, TACH OR RECORDING METER TIME	AUTHORIZED SIGNATURE & NUMBER
12-2-10	477.7	477.7	N/A by Parts not installed			[signature] A&P 3375[illegible] IA

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Amendment 39-16151. Docket No. FAA-2008-0052. Directorate Identifier 2008-NE-01-AD

Effective Date

(a) This airworthiness directive (AD) becomes effective February 4, 2010.

Affected ADs

(b) This AD supersedes AD 2008-19-05, Amendment 39-15672.

Applicability

(c) If your engine has not been overhauled, or not had any cylinder assemblies replaced since new, no further action is required.

(d) This AD applies to the Lycoming Engines (formerly Textron Lycoming) models 320, 360, and 540 series, "Parallel Valve," reciprocating engines listed in Table 1 of this AD, with ECi cylinder assembly, part number (P/N) AEL65102 series "Titan," and with cylinder head, P/N AEL85099, installed.

(1) The applicable cylinder assembly serial numbers (S/Ns) are S/N 1138-02 through S/N 35171-22 (referred to in this AD as Group "A" cylinder assemblies); and

(2) S/N 35238-01 through S/N 42179-30 (referred to in this AD as Group "B" cylinder assemblies).

(3) The cylinder assembly P/N is at the crankcase end of the cylinder assembly, and might be difficult to see. As a guide in determining if your cylinder assemblies are affected, all affected cylinder assemblies have cylinder head P/N AEL85099. The cylinder head P/N is at the top of the cylinder head, near the intake and exhaust valve springs, and is easier to locate than the cylinder assembly P/N.

(4) The set of numbers appearing on the cylinder, above and to the left of the S/N, in the form of "123456" is not used for determining this AD's applicability.

Table 1–Engine Models

Cylinder Assembly Part Number	Installed on Engine Models
AEL65102-NST04	O-320-A1B, A2B, A2C, A3D, A3A, A3B, B2B, B2C, B2D, B2E, B3B, B3C, C2B, C2C, C3B, C3C, D1A, D1AD, D1B, D1C, D1D, D1F, D2A, D2B, D2C, D2F, D2G, D2H, D2J, D3G, E1A, E1B, E1C, E1F, E1J, E2A, E2B, E2C, E2D, E2E, E2F, E2G, E2H, E3D, E3H; IO-320-A1A, A2A, B1A, B1B, B1C, B1D, B1E, B2A, D1A, D1AD, D1B, D1C, E1A, E1B, E2A, E2B; AEIO-320-D1B, D2B, E1A, E1B, E2A, E2B; AIO-320-A1A, A1B, A2A, A2B, B1B, C1B; LIO-320-B1A
AEL65102-NST05	IO-320-C1A, C1B, C1F, F1A; LIO-320-C1A
AEL65102-NST06	O-320-A1A, A2A, A2B, A2C, A3A, A3B, A3C, E1A, E1B, E2A, E2C (also, an O-320 model with no suffix); IO-320-A1A, A2A
AEL65102-NST07	IO-320-B1A, B1B; LIO-320-B1A
AEL65102-NST09	O-320-B1A, B1B, B2A, B2B, B3A, B3B, B3C, C1A, C1B, C2A, C2B, C3A, C3B, C3C, D1A, D1B, D2A, D2B, D2C
AEL65102-NST10	O-360-A1A, A1C, A1D, A2A, A2E, A3A, A3D, A4A, B1A, B1B, B2A, B2B, C1A, C1C, C1G, C2A, C2B, C2C, C2D, D1A, D2A, D2B; IO-360-B1A, B1B, B1C; HIO-360-A1A, B1A, B1B; HIO-360-B1A, B1B; AEIO-360-B1B; O-540-A1A, A1A5, A1B5, A1C5, A1D, A1D5, A2B, A1D5, A4A5, A4B5, A4C5, A4D5, B1A5, B1B5, B1D5, B2A5, B2B5, B2C5, B4A5, B4B5, D1A5, E1A5, E4A5, E4B5, E4C5, F1A5, F1B5, G1A5, G2A5; IO-540-C1B5, C1C5, C2C, C3B5, C4B5D, C4C5, D4A5, D4B5, D4C5, N1A5, N1A5D, T4A5D, T4B5, T4B5D, T4C5D, V4A5, V4A5D; AEIO-540-D4A5, D4B5, D4C5, D4D5
AEL65102-NST12	O-360-A1A, A1AD, A1D, A1F, A1F6, A1F6D, A1G, A1G6, A1G6D, A1H, A1H6, A1J, A1LD, A1P, A2A, A2D, A2F, A2G, A2H, A3A, A3AD, A3D, A4A, A4AD, A4D, A4G, A4J, A4JD, A4K, A4M, A4N, A4P, A5AD, B1A, B2C, C1A, C1C, C1E, C1F, C1G, C2A, C2B, C2C, C2D, C2E, C4F, C4P, D2A, F1A6, G1A6; HO-360-C1A; LO-360-A1G6D, A1H6; HIO-360-B1A, B1B, G1A; LTO-360-A1A6D; TO-360-A1A6D; IO-360-B1B, B1BD, B1D, B1E, B1F, B1F6, B1G6, B2E, B2F, B2F6, B4A, E1A, L2A, M1A, M1B; AEIO-360-B1B, B1D, B1E, B1F, B1F6, B1G6, B1H, B2F, B2F6, B4A, H1A, H1B; O-540-A4D5, B2B5, B2C5, B2C5D, B4B5, B4B5D, E4A5, E4B5, E4C5, G1A5, G2A5, H1A5, H1A5D, H1B5, H1B5D, H2A5, H2A5D, H2B5D; IO-540-C4B5, C4B5D, C4D5, C4D5D, D4A5, D4B5, D4C5, N1A5, N1A5D, T4A5D, T4B5, T4B5D, T4C5D, V4A5, V4A5D; AEIO-540-D4A5, D4B5, D4C5, D4D5
AEL65102-NST26	IO-540-J4A5, R1A5; TIO-540-C1A, F1A, G1A, J1A
AEL65102-NST38	IO-360-F1A; TIO-540-AA1AD, AB1AD, AB1BD, AF1A, AG1A, AK1A, C1A, C1AD, K1AD; LTIO-540-K1AD
AEL65102-NST43	O-360-J2A; O-540-F1B5, J1A5D, J1B5D, J1C5D, J1D5D, J2A5D, J2B5D, J2C5D, J2D5D, J3A5, J3A5D, J3C5D; IO-540-AB1A5, W1A5, W1A5D, W3A5D
AEL65102-NST44	O-540-L3C5D

The Lycoming Engines (formerly Textron Lycoming) models 320, 360, and 540 series "Parallel Valve", reciprocating engines are installed on, but not limited to, the aircraft listed in the following Table 2.

Table 2–Engines installed on, but Not Limited To

Engine Models	Installed on... But Not Limited To
[illegible]	[illegible]

2

3

G1000 SYNTHETIC VISION TECHNOLOGY (SVT) INSTRUCTIONS FOR CONTINUED AIRWORTHINESS (ICA)

- ATTACHMENT -

Cessna Aircraft Company
P.O. Box 7704
Wichita, Kansas 67277

Model Numbers
172R/172S
182T/T182T
206H/T206H

1. **Introduction**
   - A. The purpose of this Service Bulletin Attachment is to provide the maintenance technician with the information necessary to ensure the correct functionality and performance of the G1000 Synthetic Vision Technology (SVT) Option on the applicable Cessna Models.
   - B. This document is designed to satisfy the 14 CFR 23.1529 "Instructions for Continued Airworthiness" requirements associated with this installation. This document is a supplement to the applicable Model Maintenance Manual and may or may not be incorporated.
   - C. If this information is incorporated into the applicable Model Maintenance Manual, the maintenance manual shall take precedence over this document.

     NOTE: This document must be placed with the aircraft operator's Technical Library CD-ROM or Maintenance Manual and incorporated into the operator's scheduled maintenance program.
2. **Description and Operation**
   - A. Description
     - Synthetic Vision Technology (SVT) provides a three-dimensional forward view of terrain, obstacle and traffic features on the PFD and on the MFD in reversionary mode. The imagery shows the pilot's view of relevant features in relation to the aircraft attitude and attitude. Throughout this document and the Garmin Pilot Guide and Cockpit Reference Guide, SVT may also be referred to as Synthetic Vision System (SVS).
   - B. Operation
     - (1) SVT is activated from the Primary Flight Display (PFD) using the soft key located along the bottom edge of the Display. Pressing the soft keys turns the related function on or off. When SVT is activated, the pitch ladder increments are reduced to 10 degrees up and 7.5 degrees down. SVT functions are displayed on three levels of soft keys. The PFD soft key leads into the PFD function soft keys, including synthetic vision. Pressing the SYN VIS soft key displays the SVT feature soft keys. The soft keys are labeled SYN TERR, HRZN HDG, and APTSIGNS. The BACK soft key returns to the previous level of soft keys. SVT must be active before any other SVT feature may be activated.
     - (2) HRZN HDG and APTSIGNS soft keys are only available when the SYN TERR soft key is activated (gray with black characters). After activating the SYN TERR soft key, the HRZN HDG and APTSIGNS soft keys may be activated in any combination to display desired features. When system power is cycled, the last selected state (on or off) of the SYN TERR, HRZN HDG and APTSIGNS soft keys is remembered by the system. • SYN TERR soft key enables synthetic terrain depiction. • HRZN HDG soft key enables horizon heading marks and digits. • APTSIGNS soft key enables airport signposts. Refer to 190-00498-04 (or latest revision) Garmin G1000 Pilot's Guide for the Cessna NAV III, 190-00384-09 (or latest revision) Garmin G1000 Cessna NAV III Cockpit Reference Guide, and appropriate AFM Supplement for full operation instructions.

       NOTE: Pathways is configured OFF due to functionality issues. When the functionality is corrected, Pathways will be turned on and the ICA will be updated at that time.
   - C. System Component(s)
     - (1) SD Card, SVS Unlock
       - Garmin supplied Secure Digital (SD) card (P/N 010-00330-54) is required to unlock the SVT option on single PFD G1000 Systems such as NAV III airplanes.

         NOTE: Once SVT is unlocked on an airplane then the SD card is married to that S/N airplane. The unlock card cannot be used on other S/N airplanes.
     - (2) SD Card, Supplemental SVS Data
       - Garmin supplied SD Card (P/N 010-00330-43) contains the high definition terrain database (9 arc/second resolution) that is required with the SVT option. The SD Card resides in the bottom SD card slot on the PFD and MFD. This card replaces P/N 010-00330-42 SD Card (30-arc/second resolution) (or earlier part numbers).

(3) G1000 System Software

- Installation of SVT is only approved with NAV III System 563.14 (or later) software.

(4) Garmin GDU 1040 or 1044B

- SVT is displayed on the PFD, GDU 1040 (non-GFC-700 AFCS Models) or 1044B, which consists of a 10.4 inch LCD display with 1024x768 resolution. The GDU configured as a Primary Flight Display or PFD links to the MFD and displays all functions of the G1000 System during flight. The displays communicate throughout the system via a High-Speed Data Bus (HSDB) connection.

D. Aircraft Wiring

- There are no wiring changes needed to support the SVT installation option. The existing standard wiring supports the function. Refer to Chapter 34 (Navigation), of the applicable Model Wiring Diagram Manual for avionics wiring definition of the G1000 System as installed standard that supports the Synthetic Vision Technology Option.

3. **Removal and Installation**

NOTE: If applicable, make sure that the aircraft is configured for maintenance as defined by the associated system in the maintenance manual or in this document, including the removal of electrical power, avionics power, etc., prior to removal or installation of aircraft components.

NOTE: If the PFD/MFD is removed and the same one reinstalled then no action is required.

A. PFD Removal/Installation

(1) Refer to the applicable Model Maintenance Manual, Chapter 34 (Navigation), 34-60-10 Maintenance Practices, Section 3 or appropriate software Service Bulletin for parts and instructions on loading system software and configuration files.

(2) SVT configuration will not be overwritten (disabled) unless the NAV III configuration has been updated. In this case refer to Section 7A, (SVT Configuration Upload) within this document and perform steps to unlock SVT functionality.

B. MFD Removal/Installation

(1) Refer to the applicable Model Maintenance Manual, Chapter 34 (Navigation), 34-60-10 Maintenance Practices, Section 3 or appropriate software Service Bulletin for parts and instructions on loading system software and configuration files.

(2) SVT configuration will not be overwritten (disabled) unless the NAV III configuration has been updated. In this case refer to Section 7A, (SVT Configuration Upload) within this document and perform steps to unlock SVT functionality.

C. G1000 System Software & Configuration Files

- Anytime the NAV III configuration is updated for the G1000 system the SVT functionality for the aircraft installation is disabled. Refer to Garmin G1000 Line Maintenance Manual for Cessna NAV III, P/N 190-00352-00 Rev N or Later or appropriate Cessna Software Service Bulletin for parts and instructions on loading system software. Refer to Section 7A, (SVT Configuration Upload) within this document and perform steps to unlock SVT functionality.

4. **Maintenance and Special Tools**

NOTE: The Cessna NAV III Garmin G1000 software CD and SVS unlock SD card are needed when loading system software and unlocking the SVS function. These items should be stored as loose equipment on the airplane. Also refer to the applicable Model Maintenance Manual Chapter 34 (GIA 63 Integrated Avionics Installation – Maintenance Practices) for additional information on software loading.

A. GDU1XXX SD Card, SVS Unlock P/N 010-00330-54

B. Cessna NAV III Garmin G1000 Software Loader CD supporting System 563.14 software at minimum must be installed.

5. **Testing, Return to Service, and Troubleshooting**

A. Adjustment/Test

(1) For the Garmin GDU 1040 and GDU 1044B, refer to the applicable Model Maintenance Manual, Chapter 34 (Navigation), 34-60-10 Maintenance Practices or Garmin G1000 Line Maintenance Manual for Cessna NAV III, P/N 190-00352-00 Rev N or Later.

(2) For verification of the SVT functionality refer to Section 7B (SVT Upload Verification) of this document.

B. Inspection/Check

(1) Refer to Garmin G1000 Line Maintenance Manual for Cessna NAV III, P/N 190-00352-00 Rev N or Later.

C. Troubleshooting

(1) The SVT software feature requires the following G1000 sensors/data to be valid:

- Attitude & Heading (AHRS)
- GPS Position
- 9-arc/second terrain data.

(2) In the event that one of the above items fails or is unavailable, the SVS feature is automatically removed from the PFD in normal mode or the MFD in reversionary mode. The following table describes possible symptoms associated with the SVT function, and provides corresponding actions for troubleshooting:

Table 1 SVS Troubleshooting	
Symptom	Recommended Action
"SYN VIS" soft key does not appear on PFD soft key tier	1. Verify that the PFD and MFD software versions are shown to be GDU 9.05 or later (System 563.14 or later software), by checking the AUX – System Status Page on the MFD. 2. If GDU 9.05 version or later software is installed in the PFD and MFD, follow the steps provided in Section 7A, (SVT Configuration Upload) unlock the SVT feature.
3D terrain presentation does not appear on PFD	1. Verify that Synthetic Vision is activated by following the procedures outlined in SVT Upload Verification, included in Section 7B (SVT Upload Verification) of this document. 2. Verify that P/N 010-00330-43 SD Card, Supplemental Data (includes 9-arc/second terrain database) are installed in the lower slot of the PFD and MFD. 3. Verify that the alert messages shown in Table 2 are not displayed on the PFD Alerts Windows. If so, follow the solutions described in Table 2. 4. Verify that the G1000 Attitude & Heading data are valid on the PFD. Verify that a valid GPS 3D position solution is being received. Troubleshoot these systems in accordance with Garmin Line Maintenance Manual 190-00352-00. If a terrain database update has just been performed, allow the system time to initialize and verify the data. When the databases have been verified, the current database cycle and version are reported on the MFD AUX – System Status Page.

The following table provides SVS specific alert messages which may appear in the Alerts Window on the PFD (press the ALERTS soft key on the PFD to view the Alerts Window):

Table 2 SVS-Related Alert Messages		
Failure Message	Cause	Solution
SVS – SVS DISABLED: Out of available terrain region.	SVS is disabled because the aircraft exceeded the boundaries of the loaded terrain database.	1. Geographical operation limitations are defined in the SVS AFMS. 2. Ensure that operations are within this geographic area.
SVS – SVS DISABLED: Terrain DB Resolution too low	SVS is disabled because a 9-arc/second or better database is not currently loaded.	1. Ensure the P/N 010-00330-43 SD Card, Supplemental Data, are installed in the lower slot of each display. 2. If terrain data has been recently updated, ensure that the correct 9-arc/second databases were used.

6. **Airworthiness Limitations**

- The applicable Model Maintenance Manual, Chapter 5, Time Limits/Maintenance Checks, contains the system and airframe limitations.

  NOTE: The Airworthiness Limitations section is FAA-approved and specifies maintenance required under Section 43.16 and 91.403 of Title 14 Code of Federal Regulations, unless an alternative program has been FAA approved.

- The SVT system has no mandatory replacement time, inspection interval, or inspection procedures, and has no impact on the applicable Model Maintenance Manual, Chapter 5 Time Limits/Maintenance Checks.

7. **SVT System Configuration**

A. SVT Configuration Upload

(1) With the system still powered on, open the PFD (ESS and AVN BUS 1) and MFD (AVN BUS 2) circuit breakers.

(2) Remove database cards 010-00330-43 from the bottom slots of the PFD and MFD.

(3) Press and hold the ENTER key on the MFD, close the MFD (AVN BUS 2) circuit breaker.

(4) Release the MFD ENT key when the message **INITIALIZING SYSTEM** appears.

(5) Verify the MFD has entered CONFIG mode. If not, open the MFD circuit breakers and repeat Steps 7A(3) thru 7A(5).

(6) Insert SD loader card into top slot of PFD.

(7) Repeat Steps 7A(3) thru 7A(5) for the PFD, closing both PFD (ESS & AVN BUS 1) circuit breakers.

(8) Using the inner FMS knob on the PFD, go to the system group 'system upload' page.

(9) Activate the cursor and highlight CONFIGURATION files in the airframe field. Turn the inner FMS knob to select CONFIGURATION FILES and press the ENT key.

(10) Use the outer FMS knob to highlight 'ENABLE SVS SINGLE PFD in the file field. Turn the inner FMS knob to select ENABLE SVS SINGLE PFD and press the ENT key.

(11) Press the LOAD soft key.

(12) Monitor the status of the upload. When the upload is finished, press the ENT key to acknowledge the **UPLOAD COMPLETE** confirmation:

(13) Verify the SUMMARY FIELD displays **COMPLETE**.

(14) Open the PFD and MFD circuit breakers.

(15) Remove the SVT unlock sd card from the top card slot on the PFD.

NOTE: The SVT unlock card is to stay with the aircraft.

(16) Insert database cards 010-00330-43 (ref) into the bottom slots of the PFD and MFD.

B. SVT Upload Verification

(1) Close the PFD and MFD circuit breakers.

(2) On the PFD, press the PFD soft key.

(3) On the PFD, verify the presence of a SYN VIS soft key on the far left.

(4) On the PFD, press the SYN VIS soft key.

(5) On the PFD, verify three soft keys, beginning with the second key from the far left, are labeled as follows: SYN TERR, HRZN HDG, and APTSIGNS (some or all may be greyed out).

C. Field of View Option

(1) On the MFD, press the MENU key.

(2) Select MAP SETUP from the window that appears.

(3) Press the ENT key to bring up the map setup window.

(4) Ensure the GROUP is set to MAP, changing the setting with the FMS knobs if necessary.

(5) Use the outer FMS knob to select FIELD OF VIEW and the inner FMS knob to change the selection to On.

D. Power Down System

(1) Verify all circuit breakers closed (PFD and MFD).

(2) AVIONICS MASTER OFF, BAT MASTER OFF, and verify STDBY BATT OFF.

OWNER NOTIFICATION

On June 22, 2009 the following message will be sent to applicable owners of record in SB09-34-07A.

Dear Cessna Owner:

Service Bulletin SB09-34-07 Garmin G1000 Synthetic Vision Technology (SVT) Installation has been issued to provide enabling instructions for the Garmin G1000 system Synthetic Vision (SVT) without Pathways functionality.

Synthetic Vision Technology (SVT) provides a three-dimensional forward view of terrain, obstacle and traffic features on the PFD and on the MFD in reversionary mode. The imagery shows the pilot's view of relevant features in relation to the aircraft altitude and attitude.

Compliance is optional: may be accomplished if desired.

NOTE: Cessna Service Bulletins SB09-34-05 (or latest revision) Garmin G1000 System Software Upgrade to 563.14 for Airplanes Equipped with NAV III and GFC 700 AFCS Autopilot, and SB09-34-06 (or latest revision) Garmin G1000 System Software Upgrade to 563.14 for Airplanes Equipped with NAV III and Honeywell KAP-140 Autopilot if not already accomplished (or not required because the airplane is at software version 563.14 or later), must be accomplished before installation of the SVT option.

NOTE: SVT installation will require the completion and submittal of a Certification of Installation Form. In the event a replacement SVT unlock card is needed, it will be necessary that the Certification of Installation Form has been submitted to and on record at Cessna.

Garmin G1000 System Synthetic Vision (SVT) is obtained through the attached order form.

The information contained in the referenced Cessna Service Bulletin shall be considered an amendment to the Cessna Manufacturer's Service/Maintenance Manual.

Please contact a Cessna Single Engine Service Station for detailed information and arrange to have Cessna Service Bulletin SB09-34-07 accomplished on your airplane.

* * * * * * *

GDL 90 UAT Data Link Sensor System
Instructions for Continued Airworthiness

Part Number: 560-0279-01
Document Revision: C
19 September 2007

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GDL 90 STC Instructions for Continued Airworthiness
Garmin AT, Inc.
2345 Turner Rd SE
Salem, OR 97302
19 September 2007
Part #: 560-0279-01 Rev C

Revision Log

Rev	Date	Description	EN	By
-00--	26-Feb-04	Initial Release	7835	mak
-00A	26-Apr-04	Update document revisions for original STC issue (2.1). Remove PO Box from signature block.	7891	mak
-00B	08-Jun-04	Update MDL to Rev B for original STC issue (2.1).	7943	mak
-01--	04-Nov-04	Add GSL 71 information (1., 1.1, 2.1, 2.2, 2.3, 2.4, 2.5, 2.5.2, 2.5.3, 2.6, 2.7.2, 2.8, 2.12, 2.13, 2.14.). Update document versions for GDL 90 v2.0 CSA (2.1). Correct FAR reference (2.5.3).	8040	mak
-01A	12-Nov-04	Update document revisions for final submittal (2.1). Correct GSL 71 failure display reference (2.5).	8048	mak
-01B	24-Mar-2006	Clarify this document is ICA (§1). Move revision process from §2.15 (§1.1), definitions from §1.4 (§2.1), and assistance from §2.16 (§1.4). Update the list of reference publications and clarify retention (§2.1). Detail inspection steps (§2.5). Clarify the procedure for periodic check of altitude sources (§2.5.3). Add reference to see §2.1 for information on all UAT and GPS antenna types (§2.8).	8330	tlm mak
-01C	23-Apr-2007	Revise section to describe document control, move revision & distribution to new section 2.16 (1.1). Add contact information (1.4). Update documents, add GA 35 GA 36 GA 37 (2.1). Include MicroAPM (2.3, 2.5). Change annual to preceding 12 calendar months, clarify display inspection, (2.5). Indicate error indication locations, point to configuration logs (2.6). Use AC 21-40 wording (2.15).	8451	mak

Garmin AT, Inc.	Cage Code 0XCJ6	2345 Turner Road SE, Salem, Oregon USA
Title: GDL 90 STC Instructions for Continued Airworthiness		Number: 560-0279-01
Prepared By: Marvin A. Kumley		Date: 26 Feb 2004
Approved By: *Tom Mosher* Tom Mosher, GDL 90 Project Manager (approval signature on file)		Date: 26/Feb/2004
Approved By: *Paul Damschen* Paul Damschen, Sr. Systems Engineer (approval signature on file)		Date: 2/28/04

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GDL 90 STC Instructions for Continued Airworthiness
Garmin AT, Inc.
2345 Turner Rd SE
Salem, OR 97302
19 September 2007
Part #: 560-0279-01 Rev C

1 Introduction

This document contains Instructions for Continued Airworthiness (ICA) compliant with 14 CFR 23.1529 and Appendix G requirements. The ICA includes information required by the operator to adequately maintain the equipment installed under the GDL 90 UAT System STC. The GDL 90 UAT System includes the GDL 90 UAT and the Micro APM, and may also include the optional GSL 71 UAT Control Panel. The GDL 90 and GSL 71 products have built-in-test features that notify the flight crew in the event of system or unit failure, and the procedures herein augment those built-in-test functions. This document refers to other documents for specific information that is either part of the installation package or an existing part of the aircraft's permanent record.

1.1 Document Control

This document shall be released, archived, and controlled in accordance with the Garmin AT document control system. When this document is revised, refer to Section 2.16 for information on how to gain FAA acceptance or approval and how to notify customers of changes.

1.2 Airworthiness Limitations Section

The airworthiness limitations section is FAA approved and specifies inspections and other maintenance required and under §43.16 and §91.403 of the Federal Aviation Regulations (FAR) unless an alternative program has been FAA approved.

There are no mandatory replacement times for the GDL 90 UAT in this STC installation. There are no mandatory structural inspections associated with this STC.

1.3 Permission to Use Certain Documents

Permission is granted to any corporation or person applying for approval of a Garmin GDL 90 UAT or GSL 71 Control Panel to use and reference appropriate STC documents to accomplish the Instructions for Continued Airworthiness and show compliance with STC engineering data. This permission does not construe suitability of the documents. It is the responsibility of the applicant to determine the suitability of the documents for the ICA.

1.4 Assistance

Flight Standards Inspectors or the certificate holder's PMI have the required resources to respond to questions regarding this ICA. In addition, the customer may refer questions regarding this equipment and it's installation to the manufacturer, Garmin AT. Garmin AT customer assistance may be contacted during normal business hours via telephone 800-525-6726 or email from the Garmin web site at support.salem@garmin.com.

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2 Instructions for Continued Airworthiness

2.1 Introduction

Content, Scope, Purpose and Arrangement:	This document identifies the Instruction for Continued Airworthiness for the modification of the aircraft for installation of the Garmin GDL 90 UAT and/or GSL 71 UAT Control Panel.
Applicability:	Applies to aircraft altered by installation of the Garmin GDL 90 UAT system.
Definition of Abbreviations:	AEG – Aircraft Evaluation Group BIT – Built-In Test FSDO – Flight Standards District Office GPS – Global Positioning System ICA – Instructions for Continued Airworthiness LED – Light Emitting Diode MFD – Multi-Function Display PMI – Primary Manufacturing Inspector POI – Primary Operations Inspector STC – Supplemental Type Certificate UAT – Universal Access Transceiver WAAS – Wide Area Augmentation System
Precautions:	N/A, None
Units of measurement:	N/A, None
Referenced publications: *(or later FAA approved revisions)*	*560-1049-02 Rev. C GDL 90 Installation Manual *560-0278-01 Rev. D Master Data List *560-0215-04 Rev. C A-41 UAT Antenna Information *560-0253-00 Rev. B A-40 UAT Antenna Information *560-0949-01 Rev. D A-33 GPS Antenna Install Guide *560-5047-00 Rev. F A-34 & GA 35 GPS Antenna Install Guide *190-00438-01 Rev. D GA 56W Antenna Instructions *190-00522-01 Rev. B GA 55A, 56A, 57 Antenna Instr. *190-00848-00-Rev. A GA 35, GA 36, GA 37 Antenna Installation Instructions *560-0410-00 Rev. B GSL 71 Pilot's Guide *560-0411-00 Rev. D GSL 71 Installation Manual 560-7031-0 Rev. – GDL 90 Maintenance Manual Note: The maintenance manual document is only required for Garmin-approved repair stations.
Retention:	*This document (or later FAA-approved revisions), or the information contained within, should be contained in the permanent aircraft record as part of the ICA. The GDL 90 product CD 140-0063-xx contains the required documents.

2.2 *Description of Alteration*

Installation of the Garmin GDL 90 UAT Data Link Sensor with UAT antenna, GPS/WAAS antenna, and other system interfaces. The GDL 90 UAT interfaces to the pilot through optional

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GDL 90 STC Instructions for Continued Airworthiness
Garmin AT, Inc.
2345 Turner Rd SE — 19 September 2007
Salem, OR 97302 — Part #: 560-0279-01 Rev C

existing equipment, such as the Garmin AT MX20 Multi-Function Display. The GDL 90 UAT may also interface to the pilot through the optional GSL 71 UAT Control Panel, which may be installed under this STC.

2.3 *Control, Operating Information*

The GDL 90 UAT does not have a direct pilot interface. If the GDL 90 is interfaced to optional external controllers or display systems, consult the appropriate controller or display User's Guide for system operation and self-test information.

If the optional GSL 71 UAT Control Panel is installed, consult the GSL 71 documents listed in paragraph 2.1 of this document.

Aircraft-specific configuration information for the GDL 90 is stored in the MicroAPM. This information may be accessed using a PC as described in the GDL 90 Installation Manual listed in Section 2.1 of this document.

2.4 *Servicing Information*

None. In the event of system failure, return the GDL 90 or GSL 71 unit to the manufacturer or an approved repair station.

2.5 *Periodic Maintenance Instructions*

The GDL 90 UAT and MicroAPM are designed to detect internal failures. A thorough self-test is executed automatically upon application of power, and built-in test is continuously executed. Detected errors are indicated by failure LEDs on the GDL 90, and maintenance is on-condition. If the GDL 90 is interfaced to an optional external controller or MFD, detected errors may also be indicated by annunciation on the interfaced controller or MFD.

Note: The MicroAPM is installed in the wiring harness near the GDL 90 unit.

Operation of the GDL 90 is not permitted unless an inspection as described in this section has been completed within the preceding 12 calendar months. Conduct a visual inspection on the GDL 90 UAT Data Link Sensor and MicroAPM units and its wire harness to insure continued installation integrity:

a. Inspect the GDL 90 and MicroAPM for security of attachment
b. Inspect related antennas for proper sealing and attachment
c. Inspect condition of wiring, routing, and attachment/clamping.

The GSL 71 UAT Control Panel is also designed to detect internal failures. A self-test is executed automatically upon application of power, and built-in test is continuously executed. Detected errors at start-up are indicated by "TEST" "FAIL" on the GSL 71 LED display. Detected errors during use are indicated by "UAT" "FAIL" on the display.

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Operation of the GSL 71 is not permitted unless an inspection as described in this section has been completed within the preceding 12 calendar months. Conduct a visual inspection on the GSL 71 UAT Control Panel and its wire harness to insure continued installation integrity:

a. Inspect the GSL 71 for security of attachment
b. Inspect all knobs and buttons, and the LED display, for proper legibility
c. Inspect condition of wiring, routing, and attachment/clamping.

2.5.1 GDL 90 UAT Battery Replacement

The GDL 90 UAT has an internal keep-alive battery that will last about 10 years. The battery is used for retention of internal ram memory data and GPS system information. Regular planned replacement is not necessary. The GDL 90 UAT "maintenance" LED will be lit when replacement is required. The GDL 90 UAT will also send a "low battery" message for display on an optional controller or MFD when replacement is required. Once the low battery message is displayed, the battery should be replaced within 1 to 2 months.

If the battery is not replaced and becomes totally discharged, the GDL 90 UAT will remain fully operational, but the GPS signal acquisition time may be increased. There is no loss of function or accuracy of the GDL 90 UAT with a discharged battery.

The battery must be replaced by the Garmin AT factory repair station or factory authorized repair station. Refer to GDL 90 UAT Maintenance Manual, listed under reference documentation in paragraph 2.1 of this document, for battery replacement instructions.

2.5.2 GSL 71 Cleaning

The GSL 71 front bezel, keypad, and display can be cleaned with a soft cotton cloth dampened with clean water. DO NOT use any chemical cleaning agents. Extreme care must be taken to avoid scratching the surface of the display.

2.5.3 Altitude Encoder Calibration

The pressure altitude source used by the GDL 90 UAT must within the previous 24 months have been tested and inspected and found to be in compliance with Appendix E of 14 CFR 43 ("Altimeter System Test and Inspection") Sections (a) - Static pressure system, (b) - Altimeter, and (d) - Records, subject to the following notes:

- 14 CFR 43 Appendix E Section (c) does not apply to ADS-B equipment. Instead, verify that the altimeter data output is correctly provided to the UAT equipment by using one of the following procedures:
  - Use the GDL 90 Maintenance port to verify the ownship pressure altitude data, as discussed in the GDL 90 Installation Manual.
  - If equipped with a GSL 71 UAT Control Panel, the "Pres Alt" display field may be used to verify the altitude data provided by the altitude encoder.
  - The altitude value may be viewed on a UAT ADS-B Traffic display (MX20 or equivalent) that is receiving UAT ADS-B messages from the equipment under

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test. Configure any such display for a baro setting of 29.92 inches, if applicable, so that the display shows the uncorrected pressure altitude.

- If the GDL 90 altitude source is shared with a transponder, and is in compliance with FAR 91.413 (ATC Transponder Tests and Inspections), no additional altitude encoder tests are necessary. Use any of the above methods to verify that the altitude data is provided to the GDL 90.

2.6 Troubleshooting Information

Error indications are displayed on the GSL 71, optional interfaced display/controller, or the GDL 90 LEDs.

If error indications are displayed on the GDL 90 UAT LEDs, consult the Troubleshooting section contained in the GDL 90 UAT Installation Manual listed under reference documentation in paragraph 2.1 of this document. The 'GDL 90 Post-Installation Checkout log' in the aircraft permanent records includes the configuration information for the installation. (See the table at the end of Section 4 in the GDL 90 Installation Manual for a sample log.)

If error indications are shown on the GSL 71 LED display, consult the Troubleshooting section contained in the GSL 71 Installation Manual listed under reference documentation in paragraph 2.1 of this document. The 'GSL 71 Post-Installation Checkout log' in the aircraft permanent records includes the configuration information for the installation. (See the table at the end of Section 3 in the GSL 71 Installation Manual for a sample log.)

2.7 Removal and Replacement Information

2.7.1 GDL 90 UAT

If the GDL 90 UAT unit is removed and reinstalled, verify that the GDL 90 UAT unit power-up self-test sequence is successfully completed and that no failure messages are annunciated on any interfaced controller or MFD.

If the GDL 90 UAT unit is removed for repair and reinstalled, or if the GDL 90 UAT unit is removed and replaced with a different GDL 90 UAT unit, then follow 'Equipment Setup and Configuration' procedures contained in the GDL 90 UAT Installation Manual listed in paragraph 2.1 of this document, and verify that the GDL 90 UAT unit power-up self-test sequence is successfully completed and that no failure messages are annunciated on any interfaced controller or MFD.

If any work has been done on the aircraft that could affect the system wiring, antenna cable, or any interconnected equipment, verify that the GDL 90 UAT unit power-up self-test sequence is successfully completed and that no failure messages are annunciated on any interfaced controller or MFD.

Note: There are no special handling requirements for the GDL 90 UAT.

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2.7.2 GSL 71

If the GSL 71 unit is removed and reinstalled, verify that the GSL 71 unit power-up self-test sequence is successfully completed and that no failure messages are annunciated on any interfaced MFD.

If the GSL 71 unit is removed for repair and reinstalled, then follow 'Post-Installation Checkout' procedures contained in the GSL 71 Installation Manual listed in paragraph 2.1 of this document, and verify that the GSL 71 unit power-up self-test sequence is successfully completed and that no failure messages are annunciated on any interfaced MFD.

If any work has been done on the aircraft that could affect the system wiring or any interconnected equipment, verify that the GSL 71 unit power-up self-test sequence is successfully completed and that no failure messages are annunciated on any interfaced MFD.

Note: There are no special handling requirements for the GSL 71.

2.8 Diagrams

Refer to the GDL 90 UAT Installation Manual and/or the GSL 71 Installation Manual (both listed under reference documentation in paragraph 2.1 of this document) for drawings applicable to this installation. The GPS antenna is located on top of the fuselage. See the GPS antenna installation guide for the type of antenna installed (GPS antenna guides are listed under reference document paragraph 2.1 of this document). The UAT antennas are located on top and/or bottom of the fuselage. See the UAT antenna installation guide for the type of UAT antenna installed (listed under reference document paragraph 2.1 of this document).

2.9 Special Inspection Requirements

None, N/A.

2.10 Application of Protective Treatments

None, N/A.

2.11 Data Relative to Structural Fasteners

None, N/A.

2.12 Special Tools

No special tools are required for system checkout. See GDL 90 UAT or GSL 71 Control Panel Installation Manuals listed under reference documentation in paragraph 2.1 of this document.

2.13 Additional Instructions for Aircraft Operating under FAR 121/135

1. Aircraft Electrical Loads: Perform aircraft electrical system load analysis. See GDL 90 UAT and/or GSL 71 UAT Control Panel Installation Manuals listed in Section 2.1 of this document.

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GDL 90 STC Instructions for Continued Airworthiness
Garmin AT, Inc.
2345 Turner Rd SE — 19 September 2007
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2. Methods of balancing flight controls: N/A.
3. Special Repair Methods applicable to the airplane: See certificate holder's General Maintenance Manual for instructions.

2.14 Overhaul Period

The system does not require overhaul at a specific time period. Power on self-test and continuous BIT will monitor the health of the GDL 90 UAT and/or GSL 71 UAT Control Panel. If the unit indicates an internal failure, the unit may be removed and replaced.

2.15 Implementation and Record Keeping

Modification of an aircraft by this Supplemental Type Certificate obligates the aircraft operator to include the maintenance information provided by this document in the operator's aircraft maintenance manual and/or the operator's aircraft scheduled maintenance program.

2.16 ICA Revision & Distribution

ICA revisions must be submitted for ACO approval. The ACO will obtain AEG acceptance, and issue evidence of approval. After ACO approval, Garmin AT will release the revised ICA for customer use, and provide any required notification of the revision.

The latest revision of this document is distributed on the GDL 90 Product CD (P/N 140-0063-xxx), shipped with each new GDL 90 or GSL 71 unit. The latest revision is also available on the Garmin website (garmin.com). A Garmin Service Letter, describing ICA revision, will be sent to dealers and/or GDL 90 or GSL 71 owners of record if revision is determined to be significant.

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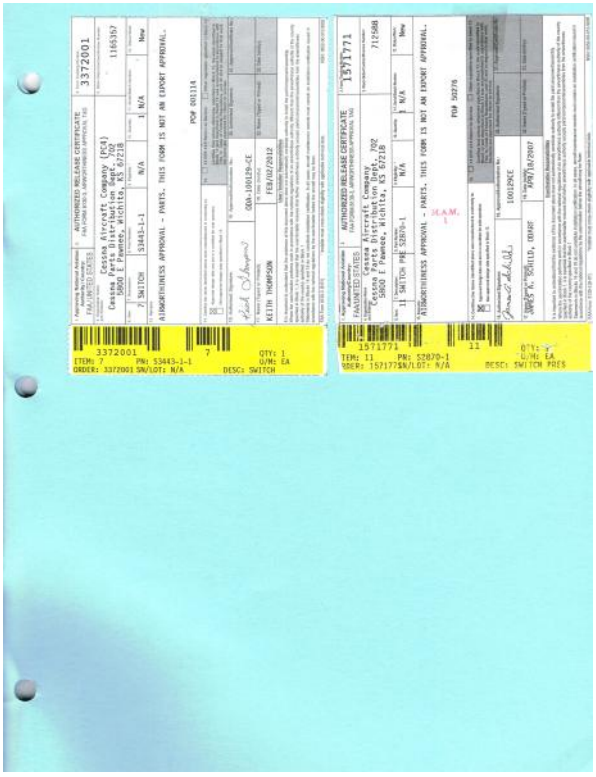

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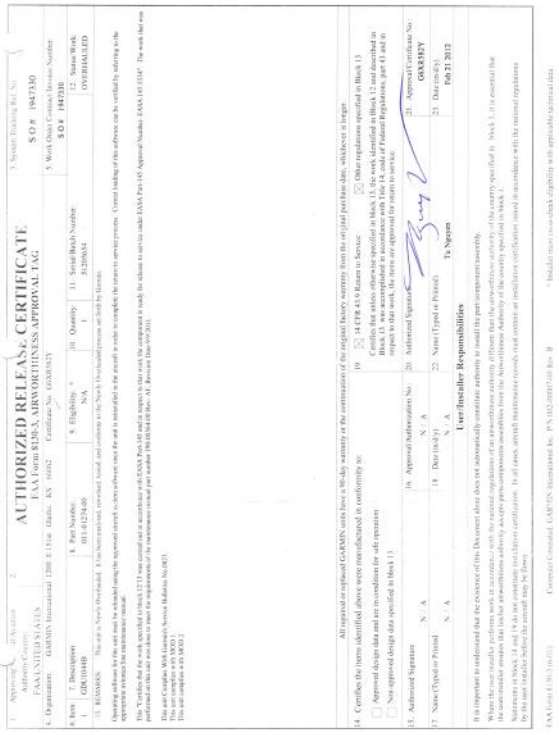

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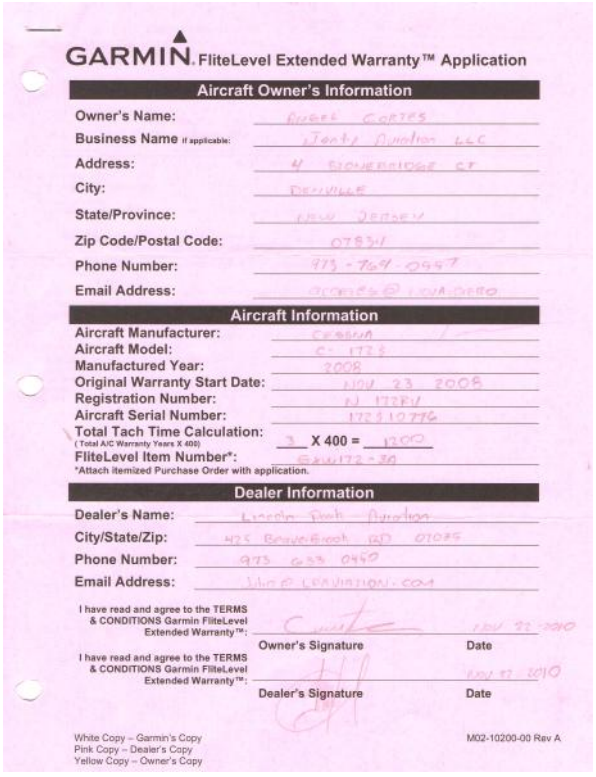

GARMIN. FliteLevel Extended Warranty™ Application

Aircraft Owner's Information

Owner's Name: ROBERT CORTES
Business Name if applicable: Liberty Aviation LLC
Address: 4 RICHBRIDGE CT
City: DENVILLE
State/Province: NEW JERSEY
Zip Code/Postal Code: 07834
Phone Number: 973-769-0957
Email Address: RCORTES@LIBAV.COM

Aircraft Information

Aircraft Manufacturer: CESSNA
Aircraft Model: C-172S
Manufactured Year: 2008
Original Warranty Start Date: NOV 23 2008
Registration Number: N 172RV
Aircraft Serial Number: 172S10776
Total Tach Time Calculation: 3 X 400 = 1200
(Total A/C Warranty Years X 400)
FliteLevel Item Number*: GAW172-30
*Attach itemized Purchase Order with application.

Dealer Information

Dealer's Name: Lincoln Park Aviation
City/State/Zip: 425 Boonton Rd NJ 07005
Phone Number: 973 633 0460
Email Address: JOHN@LPAVIATION1.COM

I have read and agree to the TERMS & CONDITIONS Garmin FliteLevel Extended Warranty™: Owner's Signature Date NOV 22 2010

I have read and agree to the TERMS & CONDITIONS Garmin FliteLevel Extended Warranty™: Dealer's Signature Date NOV 22 2010

White Copy – Garmin's Copy
Pink Copy – Dealer's Copy
Yellow Copy – Owner's Copy

M02-10200-00 Rev A

Plug Button S1093-1

Battery S4236-7

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3629444

Cessna Aircraft Company (PC4)
5800 E Pawnee, Wichita, KS 67210

1227582

5	BATTERY PN:S4236-7	N/A	1	121106	New

AIRWORTHINESS APPROVAL - PARTS. THIS FORM IS NOT AN EXPORT APPROVAL.

PO# 008814

ODA-100129-CE

KEITH THOMPSON

OCT/10/2012

Gasket B100142-1

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4359198
Cessna Aircraft Company (PC4)
Cessna Parts Distribution Dept. 702
5800 E Pawnee, Wichita, KS 67218
1401325
1 GASKET
B100142-1
5 N/A
New
AIRWORTHINESS APPROVAL - PARTS. THIS FORM IS NOT AN EXPORT APPROVAL.
Lot/Batch # 3Q13
PO# AOG-72414
ODA-100129-CE
DON P. MACY
24/SEP/2014

6.00-6/6/120 S/N 0258S00320

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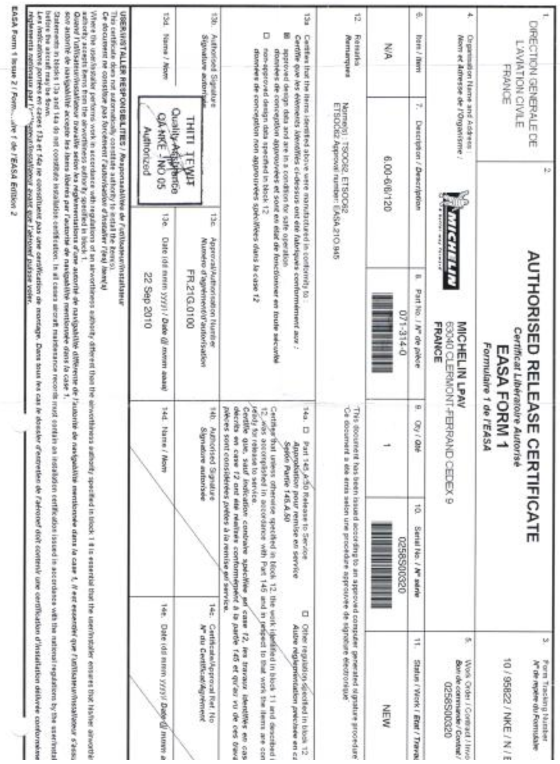

DIRECTION GENERALE DE L'AVIATION CIVILE FRANCE

AUTHORISED RELEASE CERTIFICATE
Certificat Libératoire Autorisé
EASA FORM 1
Formulaire 1 de l'EASA

Form Tracking Number / N° de repère du Formulaire: 10 / 95822 / NKE / N / E

Organisation Name and Address / Nom et Adresse de l'Organisme: MICHELIN LPAV 63040 CLERMONT-FERRAND CEDEX 9 FRANCE

Work Order / Contract / Invoice: 0258S00320

Item / Item	Description / Description	Part No. / N° de pièce	Qty / Qté	Serial No. / N° série	Status / Work / État / Travaux
N/A	6.00-6/6/120	071-314-0	1	0258S00320	NEW

Remarks / Remarques: Norme(s) : TSOC62, ETSOC62 ETSOC62 Approval number: EASA.21O.945

13c. Approval/Authorisation Number / Numéro d'agrément/d'autorisation: FR.21G.0100

13d. Name / Nom: THITI TEYUT Quality Assurance QA NKE - NO 05 Authorized

13e. Date (dd mmm yyyy) / Date (jj mmm aaaa): 22 Sep 2010

EASA Form 1 Issue 2 / Formulaire 1 de l'EASA Edition 2

6.00-6./6/120 S/N 4135S00065

Airframe Index Engine Index Propeller Index AD Index

1. Approving competent Authority Country / *Autorité Compétente/Pays*
DIRECTION GENERALE DE L'AVIATION CIVILE FRANCE

2. **AUTHORISED RELEASE CERTIFICATE**
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Formulaire 1 de l'EASA

3. Form Tracking Number / *N° de repère du Formulaire*
14 / 44417 / NKE / N / B

4. Organisation Name and Address / *Nom et Adresse de l'Organisme* :
MICHELIN – LPAV
Place des Carmes-Déchaux
63040 CLERMONT-FERRAND CEDEX 9
FRANCE

5. Work Order / Contract / Invoi... / *Bon de commande / Contrat / F...*
4135S00065

6. Item / *Item*	7. Description / *Description*	8. Part No. / *N° de pièce*	9. Qty / *Qté*	10. Serial No. / *N° série*	11. Status / Work / *Etat / Travau...*
N/A	6.00-6/6/120	070-314-0	1	4135S00065	NEW

12. Remarks / *Remarques*
Norme(s) : TSOC62, ETSOC62
ETSOC62 Approval number: EASA.21O.945

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'Ce document a été émis selon une procédure approuvée de signature electronique'

13a. Certifies that the items identified above were manufactured in conformity to :
Certifie que les éléments identifiés ci-dessus ont été fabriqués conformément aux :
☒ approved design data and are in a condition for safe operation
données de conception approuvées et sont en état de fonctionner en toute sécurité
☐ non-approved design data specified in block 12
données de conception non approuvées spécifiées dans la case 12

14a. ☐ Part 145.A.50 Release to Service / *Approbation pour remise en service Selon Partie 145.A.50*
☐ Other regulation specified in block 12 / *Autre réglementation précisée en ca...*
Certifies that unless otherwise specified in block 12, the work identified in block 11 and described in 12, was accomplished in accordance with Part 145 and in respect to that work the items are cons... ready for release to service.
Certifie que, sauf indication contraire spécifiée en case 12, les travaux identifiés en case ... décrits en case 12 ont été réalisés conformément à la partie 145 et qu'au vu de ces trava... pièces sont considérées prêtes à la remise en service.

13b. Authorised Signature / *Signature autorisée*	13c. Approval/Authorisation Number / *Numéro d'agrément/d'autorisation*	14b. Authorised Signature / *Signature autorisée*	14c. Certificate/Approval Ref. No / *N° du Certificat/Agrément*
THITI TEWIT / Quality Assurance / QA NKE - NO 05 / Authorized	FR.21G.0100		
13d. Name / *Nom*	13e. Date (dd mmm yyyy) / *Date (jj mmm aaaa)* 26 May 2014	14d. Name / *Nom*	14e. Date (dd mmm yyyy) / *Date (jj mmm aa...)*

USER/INSTALLER RESPONSIBILITIES / *Responsabilités de l'utilisateur/installateur*
This certificate does not automatically constitute authority to install the item(s).
Ce document ne constitue pas forcément l'autorisation d'installer l'(es) item(s)

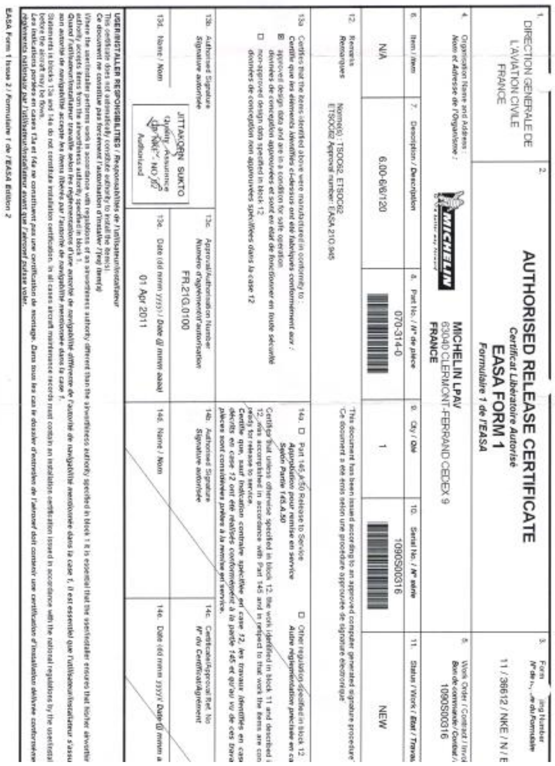
Where the user/installer performs work in accordance with regulations of an airworthiness authority different than the airworthiness authority specified in block 1 it is essential that the user/installer ensures that his/her airworthi... authority accepts items from the airworthiness authority specified in block 1.
Quand l'utilisateur/installateur travaille selon les réglementations d'une autorité de navigabilité différente de l'autorité de navigabilité mentionnée dans la case 1, il est essentiel que l'utilisateur/installateur s'assur... son autorité de navigabilité accepte les items libérés par l'autorité de navigabilité mentionnée dans la case 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 national regulations by the user/install... before the aircraft may be flown.
Les indications portées en cases 13a et 14a ne constituent pas une certification de montage. Dans tous les cas le dossier d'entretien de l'aéronef doit contenir une certification d'installation délivrée conformémen... réglements nationaux par l'utilisateur/installateur avant que l'aéronef puisse voler.

EASA Form 1 Issue 2 / *Formulaire 1 de l'EASA Edition 2*

6.00-6/6/120 S/N 1090S00316

Airframe Index Engine Index Propeller Index AD Index



1. DIRECTION GENERALE DE L'AVIATION CIVILE FRANCE

2. AUTHORISED RELEASE CERTIFICATE
Certificat Libératoire Autorisé
EASA FORM 1
Formulaire 1 de l'EASA

3. Form Tracking Number / *N° de ... du Formulaire*: 11 / 36612 / NKE / N / E

4. Organisation Name and Address : / *Nom et Adresse de l'Organisme :*
MICHELIN LPAV
63040 CLERMONT-FERRAND CEDEX 9
FRANCE

5. Work Order / Contract / Invoice / *Bon de commande / Contrat / ...*: 1090S00316

6. Item / *Item*	7. Description / *Description*	8. Part No. / *N° de pièce*	9. Qty / *Qté*	10. Serial No. / *N° série*	11. Status / Work / *Etat / Travaux*
N/A	6.00-6/6/120	070-314-0	1	1090S00316	NEW

12. Remarks / *Remarques*
Norme(s) : TSOC62, ETSOC62
ETSOC62 Approval number: EASA 21O.945

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13a. Certifies that the items identified above were manufactured in conformity to :
Certifie que les éléments identifiés ci-dessus ont été fabriqués conformément aux :
☒ approved design data and are in a condition for safe operation
données de conception approuvées et sont en état de fonctionner en toute sécurité
☐ non-approved design data specified in block 12
données de conception non approuvées spécifiées dans la case 12

14a. ☐ Part 145.A.50 Release to Service / *Approbation pour remise en service Selon Partie 145.A.50*
☐ Other regulation specified in block 12 / *Autre réglementation précisée en case 12*

13b. Authorised Signature / *Signature autorisée*: JITTAKORN SUKTO, Quality Assurance, NKE NO. 07, Authorized

13c. Approval/Authorisation Number / *Numéro d'agrément/d'autorisation*: FR.21G.0100

13d. Name / *Nom*

13e. Date (dd mmm yyyy) / *Date (jj mmm aaaa)*: 01 Apr 2011

14b. Authorised Signature / *Signature autorisée*

14c. Certificate/Approval Ref. No / *N° du Certificat/Agrément*

14d. Name / *Nom*

14e. Date (dd mmm yyyy) / *Date (jj mmm aaaa)*

USER/INSTALLER RESPONSIBILITIES / *Responsabilités de l'utilisateur/installateur*

EASA Form 1 Issue 2 / *Formulaire 1 de l'EASA Edition 2*

Airframe Index Engine Index Propeller Index AD Index

1. Approving National Aviation Authority/Country: FAA/UNITED STATES

2. **AUTHORIZED RELEASE CERTIFICATE**
FAA Form 8130-3, AIRWORTHINESS APPROVAL TAG

3. System Tracking Ref. No.: S O # 1034556

4. Organization: GARMIN International 1200 E 151st Olathe, KS 66062

5. Work Order Contract/Invoice Number: S O # 1034556

12. Status/Work: OVERHAULED

6. Item	7. Description	8. Part Number	9. Eligibility *	10. Quantity	11. Serial/Batch Number
1.	GIA63W	011-01105-00	N/A	1	68506178

13. REMARKS. This unit is Newly Overhauled. It has been analyzed, reworked, tested, and conforms to the Newly Overhauled process set forth by Garmin.

Operating software for this unit must be reloaded using the approved aircraft system software once the unit is reinstalled in the aircraft in order to complete the return to service process. Correct loading of this software can be verified by referring to the appropriate avionics/line maintenance manual.

This "Certifies that the work specified in block 12(13) was carried out in accordance with EASA Part-145 and in respect to that work the component is ready for release to service under EASA Part-145 Approval Number EASA.145.5314". The work that was performed on this unit was done to meet the requirement of the maintenance manual part number 190-00360-00 Rev. W, Revision Date 6/15/2009.

This unit complies with Mod 1

14. Certifies the items identified above were manufactured in conformity to:
☐ Approved design data and are in condition for safe operation
☐ Non-approved design data specified in block 13

15. Authorized Signature

16. Approval/Authorization No.: N / A

17. Name (Typed or Printed): N / A

18. Date (mm/dd/yy): N / A

User/Installer Responsibilities

It is important to understand that the existence of this Document alone does not automatically constitute authority to install the part/components assembly.

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 parts/components/assemblies from the Airworthiness Authority of the country specified in block 1.

Statements in block 14 and 19 do not constitute installation certification. In all cases, aircraft maintenance records must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.

15a. ☒ 14 CFR 43.9 Return to Service ☒ Other regulations specified in Block 13
Certifies that unless otherwise specified in block 13, the work identified in block 12 was performed in accordance with the applicable airworthiness requirements of Federal Regulations, part 43 and in respect to that work, the items are approved for return to service.

20. Authorized Signature:

22. Name (Typed or Printed): Hoang Tran

21. Approval/Certificate No.: GOXR382Y

23. Date (mm/dd/yy): Aug 13 2009

FAA Form 8130-3 (6/03) Computer Generated, GARMIN International Inc. P/N 007-00305-00 Rev. B * Installer must cross-check eligibility with applicable technical data.

MAJOR REPAIR AND ALTERATION
(AIRFRAME, POWERPLANT, PROPELLER, OR APPLIANCE)

US Department Of Transportation
Federal Aviation Administration

Form Approved
OMB No. 2120-0020
For FAA Use Only
Office Identification

INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form. This report is required by law (49 U.S.C. 1421). Failure to report can result in a civil penalty not to exceed $1,000 for each such violation (Section 901 Federal Aviation Act of 1958).

1. Aircraft	Make: Cessna	Model: 172S
	Serial No.: 172810776	Nationality and Registration Mark: USA N6330X
2. Owner	Name (As shown on registration certificate): Air Care Inc	Address (As shown on registration certificate): 7900 Air Care Drive, Elm City, NC 27822-8703

3. For FAA Use Only

4. Unit Identification / 5. Type

Unit	Make	Model	Serial No.	Repair	Alteration
AIRFRAME	(As described in item 1 above)				X
POWERPLANT					
PROPELLER					
APPLIANCE	Type				
	Manufacturer				

6. Conformity Statement

A. Agency's Name and Address	B. Kind of Agency	C. Certificate No.
AIR CARE, INC. 7900 Air Care Drive Elm City, NC 27822	U.S. Certificated Mechanic	ACOR030C
	Foreign Certificated Mechanic	
	X Certificated Repair Station	
	Manufacturer	

D. I certify that the repair and/or alteration made to the units (s) identified in item 4 above and described on the reverse or attachments hereto have been made in accordance with the requirements of Part 43 of the U.S. Federal Aviation Regulations and that the information furnished herein is true and correct to the best of my knowledge.

Date: September 26, 2008
Signature of Authorized Individual: Don Morrel

7. Approval for Return To Service

Pursuant to the authority given persons specified below, the unit identified in item 4 was inspected in the manner prescribed by the Administrator of the Federal Aviation and is X APPROVED ☐ REJECTED

BY	☐ FAA Flt. Standards Inspector	☐ Manufacturer	☐ Inspection Authorization	Other (Specify)
	☐ FAA Designee	X Repair Station	☐ Person Approved by Transport Canada Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
9/26/08	ACOR030C	Don Morrel

FAA Form 337 (12-88)

NOTICE

Weight and balance or operating limitation changes shall be entered in the appropriate aircraft record. An alteration must be compatible with all previous alterations to assure continued conformity with the applicable airworthiness requirements.

8. DESCRIPTION OF WORK ACCOMPLISHED (If more space is required, attach additional sheets. Identify with aircraft nationality and registration mark and date work completed.)

1. Installed Garmin GDL90 UAT data link sensor system I/A/W Garmin installation manual no. 560-1049-02 and STC# SA02217AK.

   A. The GDL90 is integrated into the Garmin G1000 Avionics suite and is an optional system within the G1000 system.

   B. The systems were configured per Cessna GDL90 configuration procedure and Garmin GDL90 installation manual.

   C. Operation of the GDL90 system is detailed in the G1000 integrated flight deck pilots guide no. 190-00498-02 and cockpit reference guide no. 190-00384-08.

2. The installation was done I/A/W applicable paragraphs of A.C. 43.13-1B and -2A.

3. No electromagnetic interference to existing equipment was found during operational tests.

4. The aircraft weight and balance and equipment list were amended.

5. Instructions for continued airworthiness are outlined in Garmin manual no. 560-0279-01.

END

☐ ADDITIONAL SHEETS ARE ATTACHED

* U.S. GOVERNMENT PRINTING OFFICE: 1977-771-021/344

Air Care, Inc. Revised Weight and Balance (Computed)

Airframe Index Engine Index Propeller Index AD Index

AIR CARE, INC.
P.O. BOX 7668
ROCKY MOUNT, N.C. 27804
FAA APPROVED R/S ACOR030C

ADDITIONAL EQUIPMENT LIST / REVISED WEIGHT AND BALANCE (COMPUTED)

REG NO: 6330X
A/C MAKE: CESSNA
A/C MODEL: 172S
A/C S/N: 172S10776

DATE: 09/26/08
TACH: 74
WORK ORDER #: A9831
SUPERCEDED DATE: 09/26/08

	WEIGHT	ARM	MOMENT
PREVIOUS A/C EMPTY	1733.70	41.48	71907.00
REMOVED ITEMS			
INSTALLED ITEMS			
GDL90 PROCESSOR	6.20	152.00	942.40
GPS ANTENNA	0.50	58.00	29.00
UAT TOP ANTENNA	0.50	41.00	20.50
UAT BOTTOM ANTENNA	0.50	134.00	67.00
NEW A/C EMPTY	1741.40	41.90	72965.90

NEW A/C E.W. : 1741.40
NEW A/C C.G. : 41.90
NEW USEFUL LOAD : 816.60

DON MORREL

AUTHORIZED SIGNATURE
AIR CARE, INC.
P.O. BOX 7668
ROCKY MOUNT, N.C. 27804
FAA APPROVED R/S ACOR030C

ABOVE INSTALLATION PERFORMED IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS AND IS APPROVED FOR RETURN TO SERVICE

COPY

— ORIGINAL IN POH —

AC Form 8050-64

Airframe Index Engine Index Propeller Index AD Index

U.S. Department of Transportation
Federal Aviation Administration

ASSIGNMENT OF SPECIAL REGISTRATION NUMBERS

Special Registration Number: N172RV

Aircraft Make and Model: CESSNA 172S

Present Registration Number: N6330X

Serial Number: 172S10776

Issue Date: Oct 15, 2009

ICAO AIRCRAFT ADDRESS CODE FOR N172RV - 50221046

JENTY AVIATION LLC
4 STONEBRIDGE CT
DENVILLE NJ 07834-1626

This is your authority to change the United States registration number on the above described aircraft to the special registration number shown.

Carry duplicate of this form in the aircraft together with the old registration certificate as interim authority to operate the aircraft pending receipt of revised certificate of registration. Obtain a revised certificate of airworthiness from your nearest Flight Standards District Office.

The latest FAA Form 8130-6, Application For Airworthiness on file is dated: Jul 28, 2008

The airworthiness classification and category: STD NORMUT

INSTRUCTIONS:

SIGN AND RETURN THE ORIGINAL of this form to the Civil Aviation Registry, AFS-750, within 5 days after the special registration number is placed on the aircraft. A revised certificate will then be issued.

The authority to use the special number expires: Oct 15, 2010

CERTIFICATION: I certify that the special registration number was placed on the aircraft described above.

Signature of Owner: [signature]

Title of Owner: OWNER - Sole member

Date Placed on Aircraft: 11-20-2009 PRIOR

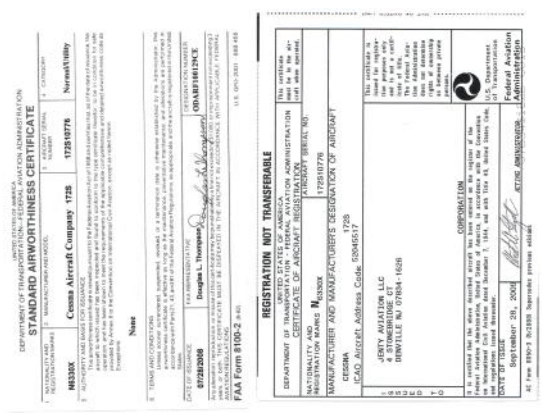
RETURN FORM TO:

Civil Aviation Registry, AFS-750
P.O. Box 25504
Oklahoma City, Oklahoma 73125-0504

AC FORM 8050-64 (5/2005) Supersedes Previous Edition

Original Airworthiness and Registration

[Airframe Index] [Engine Index] [Propeller Index] [AD Index]



UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION—FEDERAL AVIATION ADMINISTRATION
STANDARD AIRWORTHINESS CERTIFICATE

1 NATIONALITY AND REGISTRATION MARKS	2 MANUFACTURER AND MODEL	3 AIRCRAFT SERIAL NUMBER	4 CATEGORY
N6330X	Cessna Aircraft Company 172S	172S10776	Normal/Utility

5 AUTHORITY AND BASIS FOR ISSUANCE

Exceptions:

None

6 TERMS AND CONDITIONS

DATE OF ISSUANCE	FAA REPRESENTATIVE	DESIGNATION NUMBER
07/28/2008	Douglas L. Thompson	ODARF180129CE

FAA Form 8100-2

REGISTRATION NOT TRANSFERABLE

UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION
CERTIFICATE OF AIRCRAFT REGISTRATION

This certificate must be in the aircraft when operated.

NATIONALITY AND REGISTRATION MARKS N6330X

AIRCRAFT SERIAL NO. 172S10776

MANUFACTURER AND MANUFACTURER'S DESIGNATION OF AIRCRAFT
CESSNA 172S

ICAO Aircraft Address Code: 52045517

ISSUED TO
JENTY AVIATION LLC
4 STONEBRIDGE CT
DENVILLE NJ 07834-1626

CORPORATION

This certificate is issued for registration purposes only and is not a certificate of title. The Federal Aviation Administration does not determine rights of ownership as between private persons.

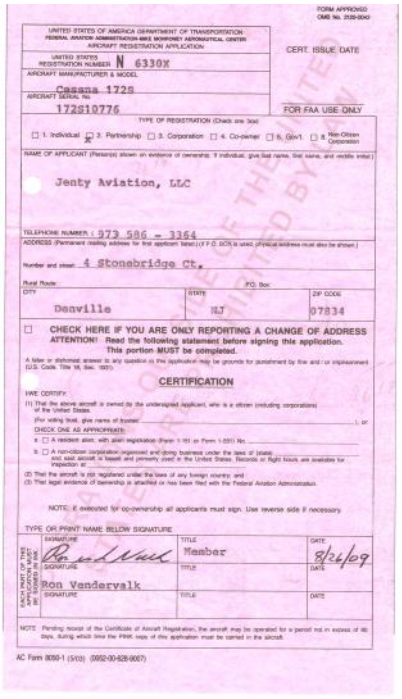
It is certified that the above described aircraft has been entered on the register of the Federal Aviation Administration, United States of America, in accordance with the Convention on International Civil Aviation dated December 7, 1944, and with Title 49, United States Code, and regulations issued thereunder.

DATE OF ISSUE
September 28, 2008

ACTING ADMINISTRATOR

U.S. Department of Transportation
Federal Aviation Administration

AC Form 8050-3 (8/2008) Supersedes previous edition



FORM APPROVED
OMB No. 2120-0042

UNITED STATES OF AMERICA DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION-MIKE MONRONEY AERONAUTICAL CENTER
AIRCRAFT REGISTRATION APPLICATION

CERT. ISSUE DATE

UNITED STATES REGISTRATION NUMBER: N 6330X

AIRCRAFT MANUFACTURER & MODEL: Cessna 172S

AIRCRAFT SERIAL No.: 172S10776

FOR FAA USE ONLY

TYPE OF REGISTRATION (Check one box)
☐ 1. Individual ☒ 2. Partnership ☐ 3. Corporation ☐ 4. Co-owner ☐ 5. Gov't. ☐ 8. Non-Citizen Corporation

NAME OF APPLICANT (Persons) shown on evidence of ownership. If individual, give last name, first name, and middle initial.)
Jenty Aviation, LLC

TELEPHONE NUMBER: 973 586 - 3364

ADDRESS (Permanent mailing address for first applicant listed.) (If P.O. BOX is used, physical address must also be shown.)
Number and street: 4 Stonebridge Ct.
Rural Route: P.O. Box:

CITY	STATE	ZIP CODE
Denville	NJ	07834

☐ CHECK HERE IF YOU ARE ONLY REPORTING A CHANGE OF ADDRESS

ATTENTION! Read the following statement before signing this application.
This portion MUST be completed.

A false or dishonest answer to any question in this application may be grounds for punishment by fine and / or imprisonment (U.S. Code, Title 18, Sec. 1001).

CERTIFICATION

I/WE CERTIFY:

(1) That the above aircraft is owned by the undersigned applicant, who is a citizen (including corporations) of the United States.
(For voting trust, give name of trustee: _____, I, or
CHECK ONE AS APPROPRIATE:
a. ☐ A resident alien, with alien registration (Form I-151 or Form I-551) No. _____
b. ☐ A non-citizen corporation organized and doing business under the laws of (state) _____ and said aircraft is based and primarily used in the United States. Records or flight hours are available for inspection at _____

(2) That the aircraft is not registered under the laws of any foreign country; and
(3) That legal evidence of ownership is attached or has been filed with the Federal Aviation Administration.

NOTE: If executed for co-ownership all applicants must sign. Use reverse side if necessary.

TYPE OR PRINT NAME BELOW SIGNATURE

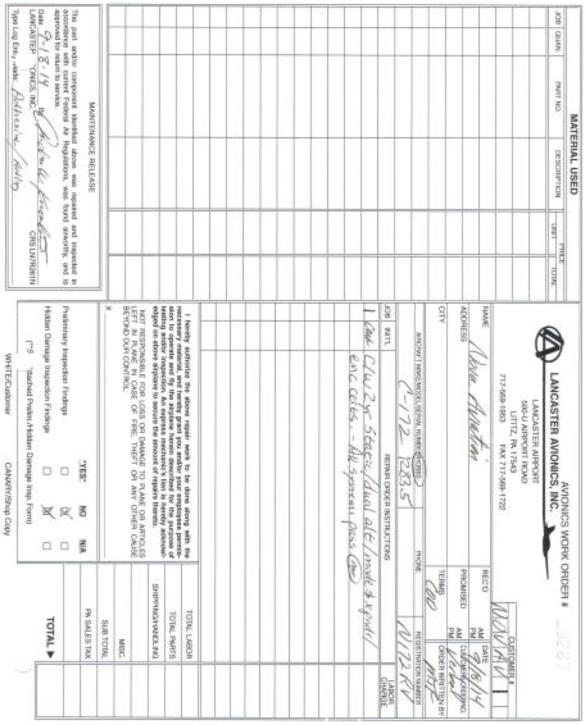
EACH PART OF THIS APPLICATION MUST BE SIGNED IN INK	SIGNATURE	TITLE	DATE
	Ron Vandervalk	Member	8/26/09
	SIGNATURE	TITLE	DATE
	Ron Vandervalk		
	SIGNATURE	TITLE	DATE

NOTE: Pending receipt of the Certificate of Aircraft Registration, the aircraft may be operated for a period not in excess of 90 days, during which time the PINK copy of this application must be carried in the aircraft.

AC Form 8050-1 (5/03) (0052-00-628-9007)

Lancaster Avionics W/O 19287

Airframe Index Engine Index Propeller Index AD Index



LANCASTER AVIONICS, INC.
LANCASTER AIRPORT
500-U AIRPORT ROAD
LITITZ, PA 17543
717-569-1903 FAX 717-569-1722

AVIONICS WORK ORDER # 19287

NAME: Dave Austin
RECD / DATE: 9/16/14
AIRCRAFT MAKE/MODEL/SERIAL NUMBER/HOURS: C-172 1283.5
REGISTRATION NUMBER: N172RV
TERMS: COD
ORDER WRITTEN BY: MTF

REPAIR ORDER INSTRUCTIONS

1 Chk C/W 2yr Static/dual alt/xpdr & xpndr/enc certs. - All systems pass

MATERIAL USED

JOB	QUAN.	PART NO.	DESCRIPTION	PRICE UNIT	PRICE TOTAL

I hereby authorize the above repair work to be done along with the necessary material, and hereby grant you and/or your employees permission to operate and fly the airplane herein described for the purpose of testing and/or inspection. An express mechanic's lien is hereby acknowledged on above airplane to secure the amount of repairs thereto.

NOT RESPONSIBLE FOR LOSS OR DAMAGE TO PLANE OR ARTICLES LEFT IN PLANE IN CASE OF FIRE, THEFT OR ANY OTHER CAUSE BEYOND OUR CONTROL.

X

	YES	NO	N/A
Preliminary Inspection Findings	☐	☒	☐
Hidden Damage Inspection Findings	☐	☒	☐

(*If "YES", attached Prelim./Hidden Damage Insp. Form)

TOTAL LABOR
TOTAL PARTS
SHIPPING/HANDLING
MISC.
SUB TOTAL
PA SALES TAX
TOTAL ▶

MAINTENANCE RELEASE

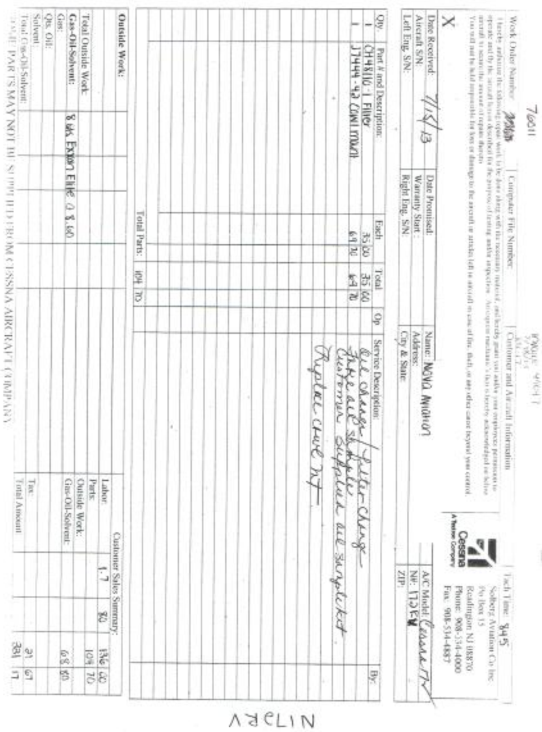
The part and/or component identified above was repaired and inspected in accordance with current Federal Air Regulations, was found airworthy, and is approved for return to service.

Date 9-18-14 By [signature]
LANCASTER AVIONICS, INC. CRS LN7R261N
Type Log Entry made: Airframe/Avionics

WHITE/Customer CANARY/Shop Copy

Solberg Aviation Co. Invoice 49047

Airframe Index Engine Index Propeller Index AD Index



76011

Invoice 49047

Work Order Number: 20160 | Computer File Number: | Customer and Aircraft Information | Tach Time: 845

Solberg Aviation Co Inc, Po Box 15, Readington NJ 08870, Phone: 908-534-4000, Fax: 908-534-4887

Cessna A Textron Company

X

Date Received: 7/15/13 | Date Promised: | Name: NOVA Aviation | A/C Model: Cessna 172

Aircraft S/N: | Warranty Start: | Address: | N#: 172EM

Left Eng. S/N: | Right Eng. S/N: | City & State: | ZIP:

Qty.	Part # and Description	Each	Total	Op	Service Description	By
1	CH48110-1 Filter	35.00	35.00		Oil change / filter change	
1	J7444-42 Cowl mount	69.70	69.70		Take oil sample	
					Customer supplied oil sample kit.	
					Replace cowl mt	
	Total Parts:		104.70			

Outside Work:

Total Outside Work:

Gas-Oil-Solvent: 8 qts Exxon Elite @ 8.60

Gas: Qts. Oil: Solvent: Total Gas-Oil-Solvent:

Customer Sales Summary			
Labor:	1.7	80	136.00
Parts:			104.70
Outside Work:			
Gas-Oil-Solvent:			68.80
Tax:			21.67
Total Amount:			331.17

SOME PARTS MAY NOT BE SUPPLIED FROM CESSNA AIRCRAFT COMPANY

N172EV

Lincoln Park Aviation
Repair Station No. LKPR101K
425 Beaverbrook Road
Lincoln Park, NJ 07035
Phone: 973-633-0450
Fax: 973-872-6256
Date: 3/3/2011, 8:32 AM

CUSTOMER INFORMATION

Nova Aviation
1 Airport Road
Suite 205
Morristown, NJ 07960
Reg. No: 172RV
Cessna 172S
Current A/C TT: 505.6, Tach: 505.6
A/C Serial: 10776

Customer Invoice
Work Order: 9330

Item: 1 - Airworthy Airframe (Warranty: Cessna)

Discrepancy	Hours	Subtotal
#2 GIA 63 W INOP. (#2 GPS, #2 NAV #COMM INOP).	3.70	0.00

Corrective Action
TROUBLE SHOT: REMOVED #2 GIA 63W, S/N:68507281. INSTALLED S/N: 68505160. ALL WORK PERFORMED I/A/W GARMIN MANUAL SECTION 4.3.1. LOADED SOFTWARE AS REQUIRED.

Qty	Unit	Part Number	Description	Serial Number	Unit Price	Subtotal
1		011-N1105-00	GIA 63W		0.00	0.00

Labor: $0.00 **Parts:** $0.00 **Shipping:** $0.00 **Item Subtotal:** $0.00

Additional Charges

Pilot Services	Tire Disposal	EPA Charge	Oil Analysis	Shop Supplies	Fuel	Misc.	Subtotal
0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00

Labor Summary
Shop Labor: $0.00 Outside Repair: $0.00

Taxed Items:
hop Labor, OSR Labor, Misc. Charges, Oil Analysis, Shop Parts, OSR Parts, Shop Supplies

Total Labor:	$0.00
Total Parts:	$0.00
Total Shipping:	$0.00
Additional Charges:	$0.00
Tax:	$0.00
Amount Due:	$0.00
Deposit:	$0.00
Balance Due:	$0.00

Important Information

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

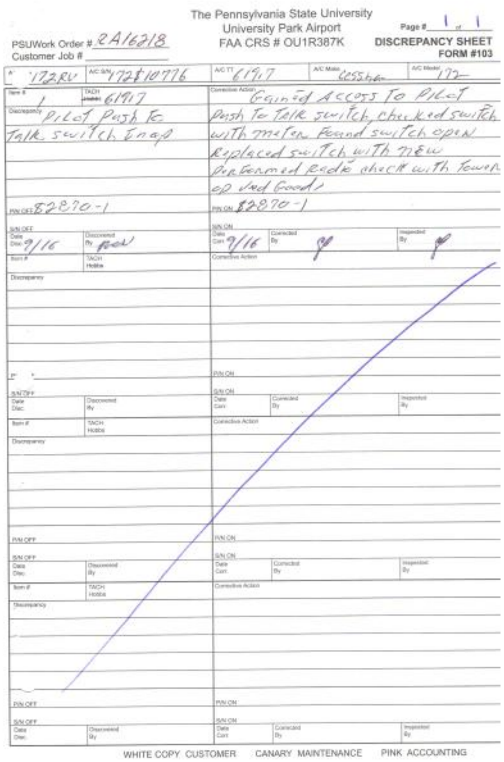
DATE 3 / 2 / 11

SIGNED ________ (signature of authorized representative)
Inspector 2

Nova Aviation or Authorized Representative — Date 3-3-11

1 of 1
Printed by EBis 3 (www.datcomedia.com)

Airframe Index   Engine Index   Propeller Index   AD Index



The Pennsylvania State University
University Park Airport
FAA CRS # OU1R387K

PSUWork Order # 2A16218
Customer Job #

Page # 1 of 1
DISCREPANCY SHEET
FORM #103

# 172RV	A/C S/N 172810776	A/C TT 6191.7	A/C Make Cessna	A/C Model 172

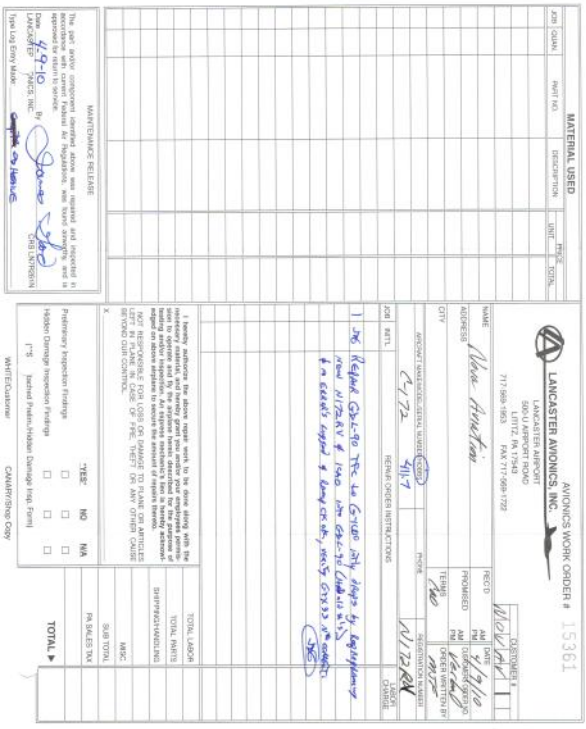
Item # 1
TACH 6191.7
Discrepancy: Pilot Push To Talk switch Inop

Corrective Action: Gained Access To Pilot Push To Talk switch, checked switch with meter. Found switch open. Replaced switch with new. Performed Radio check with Tower. Op Ched Good.

P/N OFF 82870-1
P/N ON 82870-1
S/N OFF
S/N ON

Date Disc 9/16 Discovered By [signature]
Date Corr 9/16 Corrected By [signature]
Inspected By [signature]

WHITE COPY CUSTOMER   CANARY MAINTENANCE   PINK ACCOUNTING



LANCASTER AVIONICS, INC.
LANCASTER AIRPORT
500 LI AIRPORT ROAD
LITITZ, PA 17543
717-569-1563 FAX 717-569-1722

AVIONICS WORK ORDER # 15361

CUSTOMER'S ORDER NO.

NAME Nora Armstrong
ADDRESS
CITY
PHONE
RECD AM PM DATE
PROMISED AM PM
TERMS
ORDER TAKEN BY
ORDER WRITTEN BY
REGISTRATION NUMBER
AIRCRAFT MAKE/MODEL/SERIAL NUMBER/ENGINE
JOB RETL
REPAIR ORDER INSTRUCTIONS
CASH CHARGE

MATERIAL USED

JOB / QUAN.	PART NO.	DESCRIPTION	UNIT PRICE	TOTAL

MAINTENANCE RELEASE

This part and/or component identified above was repaired and inspected in accordance with current Federal Air Regulations, was found airworthy, and is approved for return to service.

Date 4-9-10 By
LANCASTER AVIONICS, INC.
Type Log Entry Made
CAN LIN/SRVN

I hereby authorize the above repair work to be done along with the necessary materials and hereby grant you and/or your employees permission to operate the aircraft, vehicle or equipment listed above for the purpose of testing and/or inspection. An express mechanic's lien is hereby acknowledged on above airplane to secure the amount of repairs thereto.

PLEASE READ CAREFULLY. WE ARE NOT RESPONSIBLE FOR LOSS OR DAMAGE TO AIRCRAFT OR PARTS LEFT IN OUR CARE OR CUSTODY FOR REPAIR OR SERVICE WHICH IS CAUSED BY FIRE, THEFT OR ANY OTHER CAUSE BEYOND OUR CONTROL.

X

	"YES"	NO	N/A
Preliminary Inspection Findings	☐	☐	☐
Hidden Damage Inspection Findings	☐	☐	☐

☐ S Denied Public/Hidden Damage Insp. Form)

WHITE/Customer CANARY/Shop Copy

TOTAL LABOR
TOTAL PARTS
SHIPPING/HANDLING
MISC.
SUB TOTAL
PA SALES TAX
TOTAL ▶

Job Rel'd to 4-9-10 Tpc to Cirrus Jobs shops by Supplement
Need N172RN by 1pm. Set Cirrus Calibrate N172RN
to check output & bond check, check Cirrus Jobs complete

Lincoln Park Aviation
Repair Station No. LKPR101K
425 Beaverbrook Road
Lincoln Park, NJ 07035
Phone: 973-633-0450
Fax: 973-872-6256
Date: 8/9/2010, 8:47 AM

CUSTOMER INFORMATION

Nova Aviation
1 Airport Road
Suite 205
Morristown, NJ 07960
Reg. No: 172RV
Cessna 172S
Current A/C TT: , Tach: 385.6
A/C Serial: 10776

Customer Invoice
Work Order: 9117

Item: 1 - Airworthy Airframe

Discrepancy	Hours	Subtotal
I.F.R. CERTIFICATION DUE AND STAND BY ALTIMETER CERTIFICATION DUE.	Flat	648.00

Corrective Action
I.F.R. CERTIFICATION DUE AND STAND BY ALTIMETER CERTIFICATION DUE. SEE WO#0960

Labor: $648.00 **Parts:** $0.00 **Shipping:** $0.00 **Item Subtotal:** $648.00

Additional Charges

Pilot Services	Tire Disposal	EPA Charge	Oil Analysis	Shop Supplies	Fuel	Misc.	Subtotal
0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00

Labor Summary
Shop Labor: $648.00 Outside Repair: $0.00

Taxed Items:
Shop Labor, OSR Labor, Misc. Charges, Oil Analysis, Shop Parts, OSR Parts, Shop Supplies

Total Labor:	$648.00
Total Parts:	$0.00
Total Shipping:	$0.00
Additional Charges:	$0.00
Tax:	$45.36
Amount Due:	$693.36
Deposit:	$0.00
Balance Due:	$693.36

Important Information

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

DATE 8 9 10

SIGNED Inspector (signature of authorized representative)

Nova Aviation or Authorized Representative Date

1 of 1
Printed by EBis 3 (www.datoomedia.com)

Altimeter / Transponder / Static System
WORK ORDER
CRS# LKPR101K

Lincoln Park Aviation

Work Order No. A	0960
Date	8-7-2010
N Number	172RV
Make & Model	C-172S
Serial Number	10776
Tach	385.6

Name Verity Aviation LLC Phone ( ) ( )

Address City State Zip

ADC Make/Model Garmin / GDC-74A P/N 011-00882-00 S/N 2060206B

TRANSPONDER Make/Model Garmin / GTX 33 P/N 011-00779-10 S/N 89100379

STAND-BY Make/Model United Instruments 5934PD-3 P/N 5934PD-3 S/N 468284

WORK ACCOMPLISHED	HOURS	PRICE
IFR CERTIFICATION		$459.00
STAND-BY ALTIMETER CERTIFICATION		$189.00

QTY	PART NUMBER	DESCRIPTION	UNIT PRICE	AMOUNT

☒ LOG ENTRY ☐ FORM 337 ☐ W&B ☐ WARRANTY

The components identified were repaired/installed and inspected in accordance with current FAA regulations and were found airworthy for return to service.

Technician Julio Marodiaga Date 8-7-2010

Inspector Insp#4 Date 8-7-2010

	AMOUNT
LABOR	$648.00
PARTS	—
SUB-TOTAL	$648.00
TAX	$45.36
AMOUNT DUE	$693.36

☐ Number of Additional Sheets Used

Lincoln Park Aviation
425 Beaverbrook Road, Lincoln Park, NJ 07035
973-633-0450 • Fax 973-872-6256

LPA Form 15A

Expiration Date 01/30/2017

Airframe Index Engine Index Propeller Index AD Index

Save time! Update your Beacon online at: www.beaconregistration.noaa.gov

Mail or Fax to:
NOAA/SARSAT
NSOF, E/SPO53
1315 East West Hwy
Silver Spring, MD 20910
Fax No. 301-817-4565

Official 406 MHz ELT Registration Form

ELT Information

Beacon ID (Unique Identifier Number) 2DC84 3A93A FFBFF (15 digit character ID provided by ELT manufacturer)

ELT Manufacturer Artex Model No. ME 406 Decal Expiration Date 01/30/2017

Owner/Operator Information

Name Jenty Aviation, LLC.
Mailing Address 4 Stonebridge Ct.
City Denville
State/Province NJ
Zip (Postal)Code 07834
Country USA
E-mail rony@bellatlantic.net

Telephone
(973) 5863364 — Home Work [Cell] Fax Other
(973) 5863363 — [Home] Work Cell Fax Other
(973) 5400106 — Home [Work] Cell Fax Other
Home Work Cell Fax [Other]

Aircraft Information

Registration Number N172RV

Usage
☐ Government Military ☐ Government Non-military
☑ Commercial ☐ Non-commercial

Type
☑ Single-engine Propeller ☐ Single-engine Jet
☐ Multi-engine Propeller ☐ Multi-engine Jet ☐ Helicopter
☐ Other ____

Seating Capacity 4

Color White/Burgandy

Aircraft Manufacturer Cessna Aircraft
Model 172S Skyhawk
Additional Data ____

Survival Equipment
Deployable (Describe and List Quantity)
Fixed (Describe and List Quantity)

Principal Airport KMMU
City: Morristown State: NJ

Radio Equipment (Check all that apply)
☑ VHF ☐ MF ☐ HF ☐ SSB
☐ Other ____

Emergency Contact Information *(Please indicate someone other than the owner)*

Name of **Primary** 24-Hour Emergency Contact:
Angel Cortes
(973) 7690557 — Home Work [Cell] Fax Other
(973) 5400106 — Home [Work] Cell Fax Other
Home Work Cell Fax Other
Home Work Cell Fax Other

Name of **Alternate** 24-Hour Emergency Contact:
Melanie vanderVaik
(973) 586-3363 — [Home] Work Cell Fax Other
(201) 572-9421 — Home Work [Cell] Fax Other
Home Work Cell Fax Other
Home Work Cell Fax Other

If you have any questions about this form or with ELT registration in general, please call 1-888-212-SAVE or 301-817-4515.
For information on the U.S. Search and Rescue Satellite-Aided Tracking system, please visit www.sarsat.noaa.gov

OMB Auth:(0648-0295)
exp. 30AUG2014

SARSAT Beacon Registration
NOAA/SARSAT
NSOF, E/SPO53
1315 East West Hwy
Silver Spring MD 20910

February 2, 2015

Jenty Aviation, LLC.
4 Stonebridge Ct.
Denville NJ 07834

Beacon ID:
2DC84 3A93A FFBFF

Dear Jenty Aviation, LLC.,

Thank you for submitting an update for your 406 MHz emergency beacon registration, renewing your registration, or requesting a replacement decal.

A 15 character Unique Identifier Number (UIN) has been programmed into your 406 MHz emergency beacon by the manufacturer or an installer. The UIN is part of the message transmitted by the beacon when activated. The UIN is also referred to as the Beacon ID in NOAA's Registration Database. Please verify that the 15 character Beacon ID registered with NOAA is identical to the 15 character manufacturer/installer programmed UIN. The Beacon ID registered with NOAA is found on the upper right hand corner of this letter and the attached decal. Decals are no longer provided for Emergency Locator Transmitters (ELTs). For most beacons the manufacturer/installer programmed UIN can be found on an exterior or an interior surface of the beacon itself. It is also on the documentation provided by the manufacturer or installer. Please contact the manufacturer or installer if you cannot find or determine the manufacturer/installer programmed UIN. If the Beacon ID registered with NOAA is not identical to the manufacturer/installer UIN, please contact us immediately at one of the phone numbers listed below.

In the event that your beacon is activated the information you provided will be appended to the distress message transmitted to a Rescue Coordination Center. This information is critical for Search and Rescue (SAR) forces locating you, your vessel, or your aircraft in a timely manner and could possibly save your life. This letter is the proof-of-registration for your beacon.

The registration information you have provided has been entered into our database and a printout of this information is enclosed. Log on to your beacon registration account to review and/or update your registration information at: www.beaconregistration.noaa.gov. **Ensure that all your information is correct, especially the emergency point of contact information.** If you do not have internet access, you may also make the changes on the enclosed printout and return it to us at the address shown below or by fax at: 301-817-4565.

This letter is the proof-of-registration for your beacon. For all beacons except ELTs, a decal is enclosed that should be affixed to the registered beacon. Decals are no longer provided for Emergency Locator Transmitters (ELTs).It is recommended that you affix the decal to the beacon in such a way that it is visible when the beacon is properly mounted. Be sure the area is clean and dry when affixing the decal. It will take 48 hours for the decal adhesive to properly bond. A laminate is provided to protect the decal from exposure to the weather. Place this laminate over your decal.

Registration of 406 MHz emergency beacons is mandatory and must be renewed every two years. We will email, mail or fax you a reminder approximately two months prior to the expiration of your beacon registration.

Please read the beacon owner's manual carefully for instructions on proper installation, operation, maintenance, testing, removal, storage, and disposal of your beacon. Following the instructions in the owner's manual ensures that the beacon works properly when needed and eliminates false alerts which waste valuable Search and Rescue resources. If you have questions about information in the owner's manual please **contact the beacon manufacturer.**

The expiration date on the NOAA beacon registration decal **does not refer to the beacon battery or hydrostatic release expiration.** If you have any questions regarding beacon registration please **contact the NOAA Beacon Registration team** at beacon.registration@noaa.gov (please write "Beacon Registration" in the subject line), or call (888) 212-7283 or (301) 817-4515.

Sincerely,

Christopher O' Connors,
SARSAT Program Manager

SARSAT Beacon Registration
NSOF, E/SPO53
1315 East West Hwy
Silver Spring MD 20910

Tel: 301-817-4515
Tel: 1-888-212-SAVE (7283)
Fax: 301-817-4565

Expiration Date 03/29/2015

Airframe Index Engine Index Propeller Index AD Index

Save time! Update your beacon online at: www.beaconregistration.noaa.gov

Mail or Fax to:
NOAA/SARSAT
NSOF, E/SPO53
1315 East West Hwy
Silver Spring, MD 20910
Fax No. 301-817-4565

Official 406 MHz ELT Registration Form

ELT Information

Beacon ID (Unique Identifier Number) 2 D C 8 4 3 A 9 3 A F F B F F (15 digit character ID provided by ELT manufacturer)

ELT Manufacturer Artex | Model No. ME 406 | Decal Expiration Date 03/29/2015

Owner/Operator Information

Name Jenty Aviation, LLC.
Mailing Address 4 Stonebridge Ct.
City Denville
State/Province NJ
Zip (Postal) Code 07834
Country USA
E-mail rony@bellatlantic.net

Telephone
(973) 5863364 — Home Work [Cell] Fax Other
(973) 5863363 — [Home] Work Cell Fax Other
(973) 5400106 — Home [Work] Cell Fax Other
Home Work Cell Fax [Other]

Aircraft Information

Registration Number N172RV

Usage
☐ Government Military ☐ Government Non-military
☑ Commercial ☐ Non-commercial

Type
☑ Single-engine Propeller ☐ Single-engine Jet
☐ Multi-engine Propeller ☐ Multi-engine Jet ☐ Helicopter
☐ Other ____

Seating Capacity 4

Color White/Burgandy

Aircraft Manufacturer Cessna Aircraft

Model 172S Skyhawk

Additional Data ____

Survival Equipment
Deployable (Describe and List Quantity)
Fixed (Describe and List Quantity)

Principal Airport KMMU
City: Morristown State: NJ

Radio Equipment (Check all that apply)
☑ VHF ☐ MF ☐ HF ☐ SSB
☐ Other ____

Emergency Contact Information *(Please indicate someone other than the owner)*

Name of **Primary** 24-Hour Emergency Contact:
Angel Cortes
(973) 7690557 — Home Work [Cell] Fax Other
(973) 5400106 — Home [Work] Cell Fax Other
Home Work Cell Fax Other
Home Work Cell Fax Other

Name of **Alternate** 24-Hour Emergency Contact:
Melanie vanderValk
(973) 586-3363 — [Home] Work Cell Fax Other
(201) 572-9421 — Home Work [Cell] Fax Other
Home Work Cell Fax Other
Home Work Cell Fax Other

If you have any questions about this form or with ELT registration in general, please call 1-888-212-SAVE or 301-817-4515.
For information on the U.S. Search and Rescue Satellite-Aided Tracking system, please visit www.sarsat.noaa.gov

OMB Auth 0648-0295r
exp. 30AUG2014

SARSAT Beacon Registration
NOAA/SARSAT
NSOF, E/SPO53
1315 East West Hwy
Silver Spring MD 20910

April 1, 2013

Jenty Aviation, LLC.
4 Stonebridge Ct.
Denville NJ 07834

Beacon ID:
2DC84 3A93A FFBFF

Dear Jenty Aviation, LLC.,

Thank you for submitting an update for your 406 MHz emergency beacon registration, renewing your registration, or requesting a replacement decal.

A 15 character Unique Identifier Number (UIN) has been programmed into your 406 MHz emergency beacon by the manufacturer or an installer. The UIN is part of the message transmitted by the beacon when activated. The UIN is also referred to as the Beacon ID in NOAA's Registration Database. Please verify that the 15 character Beacon ID registered with NOAA is identical to the 15 character manufacturer/installer programmed UIN. The Beacon ID registered with NOAA is found on the upper right hand corner of this letter and the attached decal. Decals are no longer provided for Emergency Locator Transmitters (ELTs). For most beacons the manufacturer/installer programmed UIN can be found on an exterior or an interior surface of the beacon itself. It is also on the documentation provided by the manufacturer or installer. Please contact the manufacturer or installer if you cannot find or determine the manufacturer/installer programmed UIN. If the Beacon ID registered with NOAA is not identical to the manufacturer/installer UIN, please contact us immediately at one of the phone numbers listed below.

In the event that your beacon is activated the information you provided will be appended to the distress message transmitted to a Rescue Coordination Center. This information is critical for Search and Rescue (SAR) forces locating you, your vessel, or your aircraft in a timely manner and could possibly save your life. This letter is the proof-of-registration for your beacon.

The registration information you have provided has been entered into our database and a printout of this information is enclosed. Log on to your beacon registration account to review and/or update your registration information at: www.beaconregistration.noaa.gov. **Ensure that all your information is correct, especially the emergency point of contact information.** If you do not have internet access, you may also make the changes on the enclosed printout and return it to us at the address shown below or by fax at: 301-817-4565.

This letter is the proof-of-registration for your beacon. For all beacons except ELTs, a decal is enclosed that should be affixed to the registered beacon. Decals are no longer provided for Emergency Locator Transmitters (ELTs).It is recommended that you affix the decal to the beacon in such a way that it is visible when the beacon is properly mounted. Be sure the area is clean and dry when affixing the decal. It will take 48 hours for the decal adhesive to properly bond. A laminate is provided to protect the decal from exposure to the weather. Place this laminate over your decal.

Registration of 406 MHz emergency beacons is mandatory and must be renewed every two years. We will email, mail or fax you a reminder approximately two months prior to the expiration of your beacon registration.

Finally, we ask that you carefully read your owner's manual for instructions on installation and self-testing, as well as on proper removal and stowage of your beacon. These are important factors in ensuring the beacon works correctly when needed and reducing false alerts which needlessly tie up SAR forces and waste valuable resources. If you have any questions regarding your registration or wish to provide registration updates via email, contact NOAA s Beacon Registration Database team at beacon.registration@noaa.gov or by phone at 1-888-212-7283 or at 301-817-4515. If email is used, type Beacon Registration for Subject.

Sincerely,

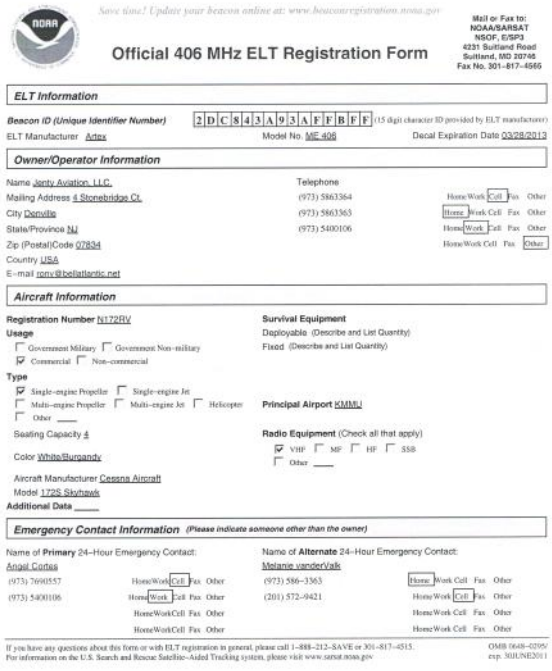
Christopher O' Connors,
SARSAT Program Manager

SARSAT Beacon Registration
NSOF, E/SPO53
NOAA
1315 East West Hwy
Silver Spring MD 20910-3282

Tel: 301-817-4515
Tel: 1-888-212-SAVE (7283)
Fax: 301-817-4565

Expiration Date 03/28/2013

Airframe Index Engine Index Propeller Index AD Index



Save time! Update your beacon online at: www.beaconregistration.noaa.gov

Official 406 MHz ELT Registration Form

Mail or Fax to:
NOAA/SARSAT
NSOF, E/SP3
4231 Suitland Road
Suitland, MD 20746
Fax No. 301-817-4566

ELT Information

Beacon ID (Unique Identifier Number) 2 D C 8 4 3 A 9 3 A F F B F F (15 digit character ID provided by ELT manufacturer)
ELT Manufacturer Artex Model No. ME 406 Decal Expiration Date 03/28/2013

Owner/Operator Information

Name Jenty Aviation, LLC.
Mailing Address 4 Stonebridge Ct.
City Denville
State/Province NJ
Zip (Postal)Code 07834
Country USA
E-mail ronv@bellatlantic.net

Telephone
(973) 5863364 Home/Work Cell Fax Other
(973) 5863365 Home Work Cell Fax Other
(973) 5400106 Home Work Cell Fax Other
Home/Work Cell Fax Other

Aircraft Information

Registration Number N172RV
Usage
☐ Government Military ☐ Government Non-military
☑ Commercial ☐ Non-commercial
Type
☑ Single-engine Propeller ☐ Single-engine Jet
☐ Multi-engine Propeller ☐ Multi-engine Jet ☐ Helicopter
☐ Other ____
Seating Capacity 4
Color White/Burgandy
Aircraft Manufacturer Cessna Aircraft
Model 172S Skyhawk
Additional Data ____

Survival Equipment
Deployable (Describe and List Quantity)
Fixed (Describe and List Quantity)

Principal Airport KMMU

Radio Equipment (Check all that apply)
☑ VHF ☐ MF ☐ HF ☐ SSB
☐ Other ____

Emergency Contact Information (Please indicate someone other than the owner)

Name of **Primary** 24-Hour Emergency Contact:
Angel Cortes
(973) 7690557 Home/Work Cell Fax Other
(973) 5400106 Home Work Cell Fax Other
Home/Work Cell Fax Other
Home/Work Cell Fax Other

Name of **Alternate** 24-Hour Emergency Contact:
Melanie vanderVaik
(973) 586-3363 Home Work Cell Fax Other
(201) 572-9421 Home/Work Cell Fax Other
Home/Work Cell Fax Other
Home/Work Cell Fax Other

If you have any questions about this form or with ELT registration in general, please call 1-888-212-SAVE or 301-817-4515.
For information on the U.S. Search and Rescue Satellite-Aided Tracking system, please visit www.sarsat.noaa.gov

OMB 0648-0295/
exp. 30JUNE2011

COSPAS-SARSAT
PROOF OF REGISTRATION
EXP. DATE 03/28/2013
2DC843A93AFFBFF
TAIL NUMBER
N172RV

SARSAT Beacon Registration
NOAA/SARSAT
NSOF, E/SP3
4231 Suitland Road
Suitland MD 20746

March 29, 2011

Jenty Aviation, LLC.
4 Stonebridge Ct.
Denville NJ 07834

Beacon ID:
2DC843A93AFFBFF

Dear Jenty Aviation, LLC.,

Thank you for submitting your 406 MHz emergency beacon registration.

A 15 character Unique Identifier Number (UIN) has been programmed into your 406 MHz emergency beacon by the manufacturer or an installer. The UIN is part of the message transmitted by the beacon when activated. The UIN is also referred to as the Beacon ID in NOAA's Registration Database. Please verify that the 15 character Beacon ID registered with NOAA is identical to the 15 character manufacturer/installer programmed UIN. The Beacon ID registered with NOAA is found on the upper right hand corner of this letter and the attached decal. For most beacons the manufacturer/installer programmed UIN can be found on an exterior or an interior surface of the beacon itself. It is also on the documentation provided by the manufacturer or installer. Please contact the manufacturer or installer if you cannot find or determine the manufacturer/installer programmed UIN. If the Beacon ID registered with NOAA is not identical to the manufacturer/installer UIN, please contact us immediately by phone at one of the phone numbers listed below.

In the event that your beacon is activated the information you provided will be appended to the distress message transmitted to a Rescue Coordination Center. This information is critical for Search and Rescue (SAR) forces locating you, your vessel, or your aircraft in a timely manner and could possibly save your life. This letter constitutes proof of beacon registration.

The registration information you have provided has been entered into our database and a printout of this information is enclosed. Log on to your beacon registration account to review and/or update your registration information at: www.beaconregistration.noaa.gov. **Ensure all your information is correct, especially the emergency point of contact information.** If you do not have internet access, you may also make changes by hand on the enclosed printout and return it to us at the address shown below or by fax at: 301-817-4565.

Enclosed is a proof-of-registration decal that may be used to provide proof of registration. It is recommended that you affix the decal to the beacon in such a way that it is visible when the beacon is properly mounted. Be sure the area is clean and dry when affixing the decal. It will take 48 hours for the decal adhesive to properly bond. A laminate is provided to protect the decal from exposure to the weather. Place this laminate over your decal. Note that either this letter or the enclosed decal may be used as proof of beacon registration.

Registration of 406 MHz emergency beacons is mandatory and only valid for two years. You are required to re-register your beacon with NOAA in two years. We will email, mail or fax you a request for confirmation approximately two months prior to the expiration of your beacon registration.

Finally, we ask that you carefully read your owner's manual for instructions on installation and self-testing, as well as on proper removal and stowage of your beacon. These are important factors in ensuring the beacon works correctly when needed and reducing false alerts which needlessly tie up SAR forces and waste valuable resources. If you have any questions regarding your registration or wish to provide registration updates via email, contact NOAA's Beacon Registration Database team at beacon.registration@noaa.gov or by phone at 1-888-212-7283 or at 301-817-4515. If email is used, type "Beacon Registration" for Subject.

SARSAT Beacon Registration
NSOF, E/SP3
NOAA
4231 Suitland Road
Suitland MD 20746-4304

Tel: 301.817-4515
Tel: 1-888-212-SAVE (7283)
Fax: 301-817-4565

Sincerely,

Christopher O' Connors,
SARSAT Program Manager

ELT 15 Digit Unique Number

Airframe Index Engine Index Propeller Index AD Index

Phone Setup Page 1 of 1

Aircraft Order System

User Login | Cert Data - List
Aircraft Order - List | Firm SER List
Aircraft Schedule | Marketing Spec
Inquiry List - Unit - Search | Post Delivery
Phone Setup | FK Usage

Cessna
A Textron Company

Phone Service/Setup - 172S, 010776

Technical Service/Setup	Value
ELT 15 Digit Unique Number	2dc843a93affbfff USA

Model: Skyhawk(180hp) (172S) Serial: 010776 Submit

AOS Home Page

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Aircraft Order System is the exclusive property of Cessna Aircraft Company, and is covered by the Cessna Confidentiality policy.
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http://csictap507.cessna.textron.com/servlet/Jaws/AAWeb/webserver/uf_phonesetup 7/24/2008

GARMIN. | 1200 East 151st Street
Olathe, Kansas 66062
P: 913-397-8200 F: 913-397-8282

January 26, 2011

Angel Cortes
Jenty Aviation LLC
4 Stonebridge Ct
Denville, NJ 07834

Dear Angel,

Thank you for choosing FliteLevel Extended Warranty™ to provide a complete support package for your Garmin Integrated Avionics System. FliteLevel supplies you with world class Garmin factory technical assistance supported by a global network of authorized service centers. This is designed to give you piece of mind and comprehensive protection against the unexpected.

You have selected the FliteLevel Extended Warranty™ program for LRU's plus Labor.

Enclosed you will find the following:
- Terms and Conditions
- Warranty Card (2)

Garmin recommends that you keep one Warranty card for yourself, and one with the aircraft log book.

For your convenience, listed below are coverage points for Garmin FliteLevel Extended Warranty™:

Included
- No charge 24/7 AOG coverage
- Priority Service – Unit exchange of LRU's for quick turn around
- Recommended Garmin Service Bulletins
- GDC74(X) recalibration (up to 2.5 hrs)
- Warranty Transfer upon sale of aircraft.

Not Included
- Data such as update cards (Jeppesen, Terrain, TAWS, FliteCharts, SafeTaxi, Chartview, and Obstacle).
- Optional or OEM Service Bulletins.
- Labor in excess of recommended troubleshooting, removal, or installation of the LRU.
- FAA Regulatory inspections and regular maintenance items
- Squelch or volume adjustments
- Chemicals, sealant, paint, or electrical supplies
- Travel and mileage expenses related to labor
- Other incidental or consequential damages, loss of use
- Failures due to abuse, misuse, accident, natural disasters or unauthorized alteration or repairs, improper installation or modification
- Damage to the product caused by other equipment installed on the aircraft

Please feel free to contact Garmin should questions arise concerning FliteLevel Extended Warranty™ coverage or system operation at techsupp@garmin.com or via phone at:

US: 1-866-739-5687
Canada: 1-866-429-9296

Regards,
Garmin Aviation Warranty Administration

TERMS & CONDITIONS
Garmin FliteLevel Extended Warranty™

This Contract is not an insurance contract.

1. **Parties.** Garmin International, Inc., 1200 East 151st Street, Olathe, Kansas 66062 ("Garmin"), is the obligor under this Extended Warranty. "You" and "Your" means the purchaser of the product(s) covered under the Extended Warranty and any authorized transferee/assignee of the purchaser. "Product(s)" means only those certain products covered under the Extended Warranty.

2. **Contract.** These terms and conditions ("Terms and Conditions"), Your application which includes the part number kit for the Extended Warranty ("Application"), and the confirmation of Your Extended Warranty received from Garmin ("Confirmation"), if any, shall constitute the entire Extended Warranty contract ("Contract"). Your Application shall constitute an offer for the Contract, and Garmin's Confirmation, if given by Garmin, shall constitute an acceptance of the Contract. No such Contract shall be binding until Garmin's Confirmation is given. The Confirmation describes the Product(s), the type of Extended Warranty purchased, the purchase price of the Extended Warranty ("Contract Price"), and when the Contract starts and how long it lasts. The Contract provides coverage only for the Product(s) listed on the Confirmation.

3. **Extended Warranty.** Garmin agrees to extend Garmin's Limited Warranty for the Product(s) to You for the additional time period or aircraft total Tachometer Time noted on the Application, whichever comes first. You will be required to produce written evidence of Your Extended Warranty in order for the Extended Warranty to be honored. Within the Extended Warranty period, Garmin will, at its sole discretion, replace or repair upon Your request any components that fail in normal use. Such replacement or repairs will be made at no charge to You for parts and/or labor incidental to the direct repair of the Product(s) covered under the Extended Warranty. Garmin may, at its discretion with prior approval, reimburse an authorized Garmin Service Authorized Center ("Authorized Service Center") for associated labor costs incurred for removal and replacement of the Product(s). You shall be responsible for any transportation or other costs necessary to get the Product(s) to an Authorized Service Center. This Extended Warranty does not cover failures due to abuse, misuse, natural disasters or weather, accident, unauthorized alterations or repairs, damage caused by faulty or improperly installed batteries, and the specific Exclusions referenced in Section 8 below. **Some program features will not be available for aircraft located outside of the continental United States or Canada.**

   THE WARRANTIES AND REMEDIES CONTAINED HEREIN ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING ANY LIABILITY ARISING UNDER ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THIS EXTENDED WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, WHICH MAY VARY FROM STATE TO STATE.

   IN NO EVENT SHALL GARMIN BE LIABLE FOR ANY INCIDENTAL, SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES, WHETHER RESULTING FROM THE USE, MISUSE, OR INABILITY TO USE A PRODUCT OR FROM DEFECTS IN THE PRODUCT. Some states do not allow the exclusion of incidental or consequential damages, so the above limitations may not apply to You.

   Garmin retains the exclusive right to replace or repair the Product(s). SUCH REMEDY SHALL BE YOUR SOLE AND EXCLUSIVE REMEDY FOR ANY BREACH OF THIS EXTENDED WARRANTY.

4. **Details of Service.** You will need to take the Product(s) to an Authorized Service Center for Extended Warranty service. If You cannot locate an Authorized Service Center, please contact Garmin at www.garmin.com. Neither Garmin nor the Authorized Service Center will be responsible for delays or failure in performing service caused by acts of nature, acts of any government, or causes beyond their control. Any repairs made to the Product(s) by someone other than an Authorized Service Center will not be honored or reimbursed under the Extended Warranty.

5. **Non-Repairable Products and Replacement Products.** If the Authorized Service Center is notified that the Product is non-repairable, or if repair parts become unavailable, You may receive a new or reconditioned product of like kind and quality as Your remedy under the Extended Warranty, to be determined at Garmin's discretion. Garmin will attempt to provide a replacement product with equal or similar features and functionality.

6. **Rejection or Cancellation by Garmin.** Garmin may reject Your request for Extended Warranty if You provide false or incomplete information. Garmin may cancel the Contract for breach of contract by You, nonpayment by You, or fraud or material misrepresentation by You in attempting to obtain or obtaining the Contract or presenting a claim for service. If Garmin rejects the request for Extended Warranty or cancels the Contract during the first thirty (30) days of the Contract, Garmin will deduct a ten percent (10%) cancellation fee and You will receive the remaining amount You paid for the Extended Warranty except there will be no refund of any functionality test fees. If Garmin cancels the Contract after the first thirty (30) days for any contractual reason except fraud or misrepresentation, You will receive a refund equal to a prorated amount of the Contract Price (based on the duration of the Contract), less claims paid. If Garmin cancels the Contract after the first thirty (30) days because of fraud or misrepresentation by You, Garmin shall, in its sole discretion, determine what, if any amount, will be returned to you. Notice of the cancellation by Garmin will be sent to You at least thirty (30) days before cancellation, and will state the effective date and reason for cancellation.

7. **Transfer of Contract.** You may transfer this Contract for the Product to another person or entity by writing to the Garmin Extended Warranty Administrator, Garmin International, Inc., 1200 East 151st Street, Olathe, KS 66062. The notice must include the name, address and telephone number of the person or entity to whom the Contract is being transferred. As long as Your Contract is valid, Your transfer takes effect as soon as the Garmin Extended Warranty Administrator receives Your written notice, processes such request, and sends Confirmation to the new person or entity.

8. **EXCLUSIONS FROM SERVICE. YOUR CONTRACT DOES NOT COVER LOSS OR DAMAGE RESULTING FROM:**

   a. **Use of the Product(s) in a manner other than normal use and operation in accordance with Garmin's specifications and instructions for use, lack of Garmin-specified regular maintenance, improper equipment modifications and improper installations.**
   b. **Theft, negligence, accident and subsequent damage, misuse or abuse.**
   c. **Pre-existing conditions that exist prior to the Contract effective date and are known to You.**
   d. **Unauthorized alterations or repairs by third parties.**
   e. **Damage to the Product caused by natural disasters, weather, or other equipment installed on the aircraft.**

9. **Your Duties under the Contract.** For the Contract to remain active, You must maintain the Product in accordance with Garmin's service requirements as specified in all applicable manuals and documents accompanying or relating to Your Product(s). In addition, You promise and assure full cooperation with the Authorized Service Center and its authorized designees, in providing such Extended Warranty service.

10. **Limitation of Liability.**

    a. **To the extent permitted by applicable law, Garmin's total liability under the Contract, and that of Authorized Service Center, for any allegedly defective Product(s) or components shall be limited to repair or replacement of the Product(s) or components.**
    b. **To the extent permitted by applicable law, neither Garmin nor Authorized Service Center or its designees shall have any liability for special, indirect, incidental or consequential damages, including lost revenues or profit, related to any service provided under the Contract, including, but not limited to, any delay in rendering service, loss of data, fuel costs or other expenses or damages, or loss of aircraft use during the repair period of the product(s) or while otherwise awaiting parts.**
    c. **Garmin does not assume any responsibility or liability for their agents and assignees other than as specifically described in this Contract.**
    d. **The Contract does not create any additional rights against Garmin or the Authorized Service Centers.**

11. **Governing Law.** Unless otherwise governed by applicable state law, the Contract shall be interpreted and enforced in accordance with the laws of Kansas. Any action or proceeding seeking to enforce any provision of, or based on any right arising out of, this Contract shall be brought in the federal or state courts located in the State of Kansas and each party consents to the jurisdiction of such courts and waives any objection to venue laid therein.

12. **Entire Agreement.** This Contract contains the entire understanding between the parties with the respect to the matters contemplated by this Contract and supersedes all prior written or oral communications, negotiations, understandings or agreements of any kind with respect to such matters. If there is a conflict between the Contract and information communicated either orally or in writing by Garmin, Authorized Service Center, or their respective employees or agents, the provisions of this Contract shall control.

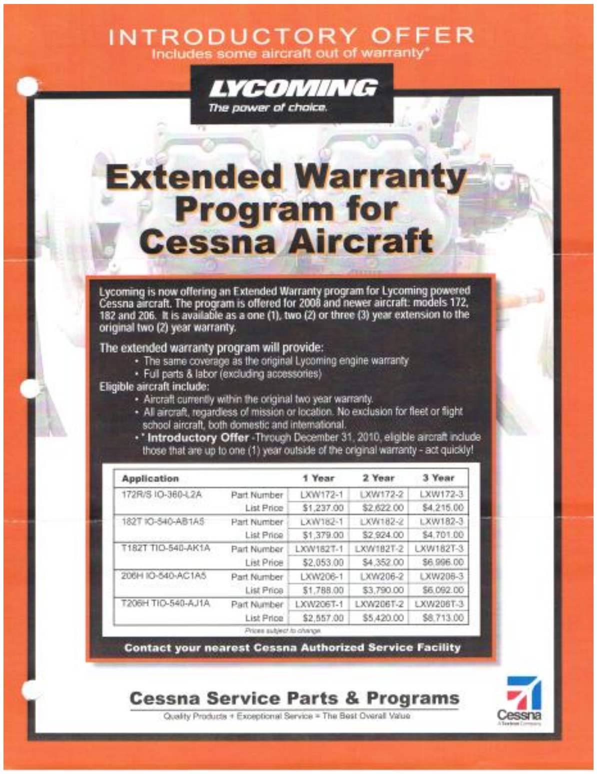
13. **Subrogation.** If Your Product is replaced under the terms of this Contract, You agree to subrogate and assign Your rights of recovery to Garmin. You will be reimbursed for any reasonable costs and expense You may incur in connection with the subrogation and assignment of Your rights. You will be made whole before Garmin retains any amounts which may be recovered.

14. **Severability.** The invalidity or unenforceability of any provision of this Contract shall not affect the validity or enforceability of any other provisions hereof. If any of the covenants or agreements in this Contract are determined to be unenforceable by reason of extent, scope, duration or otherwise, then the parties contemplate that the court making such determination shall reduce such extent, scope, duration or other provision and enforce them in their reduced form.

15. **Headings.** The headings in this Contract are provided for convenience only and shall not affect the construction or interpretation of this Contract.

Extended Warranty Program for Cessna Aircraft

Airframe Index   Engine Index   Propeller Index   AD Index



INTRODUCTORY OFFER
Includes some aircraft out of warranty*

LYCOMING
The power of choice.

Extended Warranty Program for Cessna Aircraft

Lycoming is now offering an Extended Warranty program for Lycoming powered Cessna aircraft. The program is offered for 2008 and newer aircraft: models 172, 182 and 206. It is available as a one (1), two (2) or three (3) year extension to the original two (2) year warranty.

The extended warranty program will provide:
- The same coverage as the original Lycoming engine warranty
- Full parts & labor (excluding accessories)

Eligible aircraft include:
- Aircraft currently within the original two year warranty.
- All aircraft, regardless of mission or location. No exclusion for fleet or flight school aircraft, both domestic and international.
- * **Introductory Offer** -Through December 31, 2010, eligible aircraft include those that are up to one (1) year outside of the original warranty - act quickly!

Application		1 Year	2 Year	3 Year
172R/S IO-360-L2A	Part Number	LXW172-1	LXW172-2	LXW172-3
	List Price	$1,237.00	$2,622.00	$4,215.00
182T IO-540-AB1A5	Part Number	LXW182-1	LXW182-2	LXW182-3
	List Price	$1,379.00	$2,924.00	$4,701.00
T182T TIO-540-AK1A	Part Number	LXW182T-1	LXW182T-2	LXW182T-3
	List Price	$2,053.00	$4,352.00	$6,996.00
206H IO-540-AC1A5	Part Number	LXW206-1	LXW206-2	LXW206-3
	List Price	$1,788.00	$3,790.00	$6,092.00
T206H TIO-540-AJ1A	Part Number	LXW206T-1	LXW206T-2	LXW206T-3
	List Price	$2,557.00	$5,420.00	$8,713.00

Prices subject to change

Contact your nearest Cessna Authorized Service Facility

Cessna Service Parts & Programs
Quality Products + Exceptional Service = The Best Overall Value

Cessna

Renewal Notice

Cessna
A Textron Company

Cessna Revision Service Renewal Form

D[illegible] 10/1/2010
C[illegible] No: **172S** **Unit:** 172S10776 **Serial:** 172S10776 **Subscription ID:** 157583

Your Revision Service(s) will expire on 11/30/2010. Please check your ADDRESS below, make any changes necessary in the blanks to the right and then send this renewal notice and your payment to us at the address below.

☐ Name & Address are correct as shown below:

Mr. Ron Vandervalk
Jenty Aviation, Inc.
4 Stonebridge Ct
Denville NJ 07834

☐ Change Name and/or address as shown below:

____
____
____
____
Phone: ______________
Fax: ______________
E-mail: ______________

This subscription will automatically transfer with the change of ownership of the aircraft unless otherwise notified. No refund will be made for unused portion.

QTY	NUMBER	DESCRIPTION	UNIT COST	TOTAL COST
1	OA-DUPSERG100	Owner Advisory Dup. Sub. for Restart G1000	$41.00	41.00

Revision Service Subtotal: US $ **41.00**

U.S. Subscribers - Add your local Sales/Use Tax (or supply your Exemption Certificate) _____% **US $** ______

One Year Renewal - Total Due: US $ ______

Method of Payment

Open Account No: ________ Authorized Signature: ______________________ PO No: ________

☐ Check No: ________ ☐ Money Order Enclosed ☐ Wire Transfer

Credit Card Type - (Please circle one) Visa / MasterCard / American Express Expiration Date: ________

Card # ______________ Card Holder: ______________ Signature: ______________

Special Notice to International Customers who desire to pay via wire transfer: SUBSCRIPTIONS TO BE PAID IN U.S. DOLLARS ONLY. Bank transfer should be made to: JP Morgan Chase Bank, 1 Chase Manhattan Plaza, New York, New York, 10081 U.S.A., payable to Cessna Aircraft Company account number 910-1-209643, ABA Routing No. 0210-00021, Swift Code Chasus33. Please attach a copy of the bank transfer notice with name and description of subscription to this order form and forward both items directly to Cessna Aircraft Company at the address listed below. PLEASE REFERENCE THE ABOVE SUBSCRIPTION ID NUMBER ON ALL WIRE TRANSFERS.

All revision service shipments are F.O.B. Wichita. Domestic shipments will be sent United Parcel Service, parcel post or surface freight collect, export shipments will be sent air freight collect.

PRICE AND CONTENT SUBJECT TO CHANGE WITHOUT NOTICE

Visit our web site, www.cessnasupport.com, for additional information!

Page 1 of 1

Cessna Aircraft Co., Publications - Dept. 754, P.O. Box 7706, Wichita, KS 67277, U.S.A.
Telephone: 316-517-6215, FAX: 316-517-5802

Renewal Notice

Cessna
A Textron Company

sna Revision Service Renewal Form

Date: 12/10/2009

Cust No: 172S Unit: 172S10776 Serial: 172S10776 Subscription ID: 166186

Your Revision Service(s) will expire on 01/31/2010. Please check your ADDRESS below, make any changes necessary in the blanks to the right and then send this renewal notice and your payment to us at the address below.

☐ Name & Address are correct as shown below:

Mr. Ron Vandervalk
Jenty Aviation, Inc.
4 Stonebridge Ct
Denville NJ 07834

☐ Change Name and/or address as shown below:

Phone: _____
Fax: _____
E-mail: _____

This subscription will automatically transfer with the change of ownership of the aircraft unless otherwise notified. No refund will be made for unused portion.

QTY	NUMBER	DESCRIPTION	UNIT COST	TOTAL COST
1	172SCLBUSGSW	172S GFC700 Electronic Checklist	$147.00	147.00
		Revision Service Subtotal: US $		**147.00**
		U.S. Subscribers - Add your local Sales/Use Tax (or supply your Exemption Certificate) ____%	**US $**	
		One Year Renewal - Total Due: US $		

hod of Payment

☐ Open Account No: _____ Authorized Signature: _____ PO No: _____

☐ Check No: _____ ☐ Money Order Enclosed ☐ Wire Transfer

Credit Card Type - (Please circle one) Visa / MasterCard / American Express Expiration Date: _____

Card # _____ Card Holder: _____ Signature: _____

Special Notice to International Customers who desire to pay via wire transfer: SUBSCRIPTIONS TO BE PAID IN U.S. DOLLARS ONLY. Bank transfer should be made to: JP Morgan Chase Bank, 1 Chase Manhattan Plaza, New York, New York, 10081 U.S.A., payable to Cessna Aircraft Company account number 910-1-209543, ABA Routing No. 0210-00021, Swift Code Chasus33. Please attach a copy of the bank transfer notice with name and description of subscription to this order form and forward both items directly to Cessna Aircraft Company at the address listed below. PLEASE REFERENCE THE ABOVE SUBSCRIPTION ID NUMBER ON ALL WIRE TRANSFERS.

All revision service shipments are F.O.B. Wichita. Domestic shipments will be sent United Parcel Service, parcel post or surface freight collect, export shipments will be sent air freight collect.

PRICE AND CONTENT SUBJECT TO CHANGE WITHOUT NOTICE

Visit our web site, www.cessnasupport.com, for additional information!

NOT RENEWED

* WILL MONITOR CHANGES & WILL SUBSCRIBE IF CLIENTS ARE INVOLVED AC

Cessna Aircraft Co., Publications - Dept. 754, P.O. Box 7706, Wichita, KS 67277, U.S.A.
Telephone: 316-517-6215, FAX: 316-517-5802

Page 1 of 1

Renewal Notice

Cessna
A Textron Company

Cessna Revision Service Renewal Form

Date: 2/25/2010

Cust No: 172S Unit: 172S10776 Serial: 172S10776 Subscription ID: 166186

Your Revision Service(s) will expire on 01/31/2010. Please check your ADDRESS below, make any changes necessary in the blanks to the right and then send this renewal notice and your payment to us at the address below.

☐ Name & Address are correct as shown below:

Mr. Ron Vandervalk
Jenty Aviation, Inc.
4 Stonebridge Ct
Denville NJ 07834

☐ Change Name and/or address as shown below:

Phone: _____
Fax: _____
E-mail: _____

This subscription will automatically transfer with the change of ownership of the aircraft unless otherwise notified. No refund will be made for unused portion.

QTY	NUMBER	DESCRIPTION	UNIT COST	TOTAL COST
1	172SCLBUSGSW	172S GFC700 Electronic Checklist	$147.00	147.00
		Revision Service Subtotal: US $		**147.00**
		U.S. Subscribers - Add your local Sales/Use Tax (or supply your Exemption Certificate) ____%	**US $**	
		One Year Renewal - Total Due: US $		

M d of Payment

☐ Open Account No: _____ Authorized Signature: _____ PO No: _____

☐ Check No: _____ ☐ Money Order Enclosed ☐ Wire Transfer

Credit Card Type - (Please circle one) Visa / MasterCard / American Express Expiration Date: _____

Card # _____ Card Holder: _____ Signature: _____

Special Notice to International Customers who desire to pay via wire transfer: SUBSCRIPTIONS TO BE PAID IN U.S. DOLLARS ONLY. Bank transfer should be made to: JP Morgan Chase Bank, 1 Chase Manhattan Plaza, New York, New York, 10081 U.S.A., payable to Cessna Aircraft Company account number 910-1-209543, ABA Routing No. 0210-00021, Swift Code Chasus33. Please attach a copy of the bank transfer notice with name and description of subscription to this order form and forward both items directly to Cessna Aircraft Company at the address listed below. PLEASE REFERENCE THE ABOVE SUBSCRIPTION ID NUMBER ON ALL WIRE TRANSFERS.

All revision service shipments are F.O.B. Wichita. Domestic shipments will be sent United Parcel Service, parcel post or surface freight collect, export shipments will be sent air freight collect.

PRICE AND CONTENT SUBJECT TO CHANGE WITHOUT NOTICE

Visit our web site, www.cessnasupport.com, for additional information!

Cessna Aircraft Co., Publications - Dept. 754, P.O. Box 7706, Wichita, KS 67277, U.S.A.
Telephone: 316-517-6215, FAX: 316-517-5802

Page 1 of 1

CONFIGURATION STATEMENT

Cessna
A Textron Company

Model:	172S Skyhawk
Serial Number:	172S10776
Registration Number:	N6330X
Date of Airworthiness:	28 July, 2008

There have been no major modifications, changes, or other alterations accomplished subsequent to manufacture and original airworthiness certification of this aircraft.

Douglas L. Thompson ODAR F100129CE
Quality Assurance \ FAA ODAR
Cessna Aircraft Company
Independence, KS 67301

NOISE COMPLIANCE STATEMENT
CESSNA MODEL 172S Skyhawk
S/N 172S10776

The aircraft identified on this document was produced in compliance with the approved Type Design identified in FAA Aircraft Type Certificate No. 3A12 and Type Certificate Data Sheet No.3A12, Revision 77, dated 06/18/2008

The Federal Aviation Authority of the United States of American does not issue certificates for compliance with noise limitations identified in Chapter 14, Section 1, Subpart 36, of the Code of Federal Regulations, generally referred to as FAR Part 36. The current requirements of ICAO Annex 16, Chapter 10, are identical to the noise limitations set forth in FAR Part 36.

The Cessna Model 172S Skyhawk has demonstrated compliance to the noise limitation requirements of FAR Part 36 and was granted Type Approval with issue of Type Certificate Number 3A12 to Cessna Aircraft Company.

At the time of Original Airworthiness Certification on 28 July, 2008, the aircraft identified on this document was in compliance with FAR 36 and ICAO Annex 16, Chapter 10 with a demonstrated noise signature (per FAR 36, Appendix G) of 82.7 dBa. Any subsequent alterations or modifications to this aircraft may invalidate this compliance.

Douglas L. Thompson ODARP100129CE
Quality Assurance \ FAA ODAR

28 July, 2008
Date

Cessna Aircraft Company P.O. BOX 1996, 14115 Russ Meyer Boulevard, Independence, Kansas 67301- 620-332-8000

Cessna
A Textron Company

Certificate of United States of America Origin

The aircraft identified on this document was produced by Cessna Aircraft Company, Independence, Kansas, U.S.A., under authority of FAA Production Certificate No. 4. This aircraft was fabricated and completed at manufacturing facilities of Cessna Aircraft Company in Independence, Kansas, U.S.A.

Subject Aircraft

Description: High-wing, all metal, tri-cycle gear, conventional configuration, unpressurized cabin, single reciprocating engine.

Design Approval: FAA Aircraft Type Certificate No. 3A12 and Type Certificate Data Sheet No.3A12, Revision 77.

Certification Basis: FAA FAR Part 23, Normal/Utility Category

Model Designation: 172S

Model Name: Skyhawk

Serial Number: 172S10776

Registration: N6330X

Manufacturer: Cessna Aircraft Company

Date of Manufacture: 28 July, 2008

Place of Manufacture: Independence, Kansas, U.S.A.

Douglas L. Thompson
ODARF100129CE
Quality Assurance \ FAA ODAR
Cessna Aircraft Company
Independence, KS 67301

28 July, 2008
Date

Cessna Aircraft Company One Cessna Boulevard, P.O. Box 1996, Independence, Kansas 67301, 316/332-0000

AIRWORTHINESS DIRECTIVES and SERVICE BULLETINS
COMPLIANCE STATEMENTS
CESSNA MODEL 172S Skyhawk
S/N 172S10776

The aircraft identified on this document was produced by Cessna Aircraft Company, Independence, Kansas, USA, under the authority of FAA Production Certificate No. 4. This aircraft was manufactured in accordance with the approved Type Design identified in FAA Aircraft Type Certificate Number 3A12, Type Certificate Data Sheet Number 3A12, Revision 77, dated 06/18/2008.

The aircraft identified on this document is a new aircraft that has been inspected and found in compliance with:

a. all applicable FAA Airworthiness Directives (Ads) issued through Sequence Number 2008-15, and

b. all applicable mandatory Service Bulletins and Service Letters issued through 28 July, 2008, and

c. the recommended Service Bulletins and Service Letters incorporated at the request of the purchaser.

Except as identified and approved in the Production Limitation Record for Production Certificate Number 4, as of the date of this document there are no alterations from the approved Type Design embodied in this aircraft.

Douglas L. Thompson ODARF100129CE
Quality Assurance \ FAA ODAR

28 July, 2008
Date

Cessna Aircraft Company P.O. BOX 1996, 14115 Russ Meyer Boulevard, Independence, Kansas 67301- 620-332-0000

OMB 2120-0018

STATEMENT OF CONFORMITY

Section I - Aircraft

1. Make: Cessna	2. Model: 172S
3. Serial No.: 172S10776	4. Registration No.: N6330X

Section II - Engine

1. Make: Lycoming	2. Model: IO-360-L2A
3. Serial No.: L-34243-61E	

Section III - Propeller

1. Make: McCauley	2. Model: 1A17OEI/JHA7660
3. Hub Serial No: ACD23008	4. Blade Serial Nos.:

Section IV - Certification

I hereby certify that:

☒ A. have complied with Section 21.33(a.).

☒ B. The aircraft described above, produced under type certificate only (FAR 21 Subpart F), conforms to its type certificate, is in a condition for safe operation, and was flight checked on 28 July, 2008 (Date)

☒ C. The engine or propeller described above, presented herewith for type certification, conforms to the type design therefor.

☒ D. The engine or propeller described above produced under type certificate only (FAR 21 Subpart F), conforms to its type certificate and is in a condition for safe operation. The engine or, if applicable, the variable pitch propeller was subjected by the manufacturer to a final operation check on. 28 July, 2008 (Date)

Deviations:

Signature of Certifier: Douglas L. Thompson ODAR110012SOE	Title: Quality Assurance \ FAA ODAR
Organization: Cessna Aircraft Company	Date: 28 July, 2008

Cessna
A Textron Company

A WORD ABOUT LEATHER

Real leather is a natural product, and as such will always bear the markings of its natural origin. It is these "marks of life" that make each hide entirely unique.

These marks in no way detract from the finished product - in fact, they enhance it by providing it with character and individuality. Combined with its amazingly graceful aging properties, leather can actually improve with time and wear.

Because no two hides are alike and textures vary, dye and finish penetrations will differ, however carefully applied. It takes two hides for Model 172, three hides for Model 182, and four hides for Model 206. While every attempt is made to achieve uniformity, some variation in color may occur: but this, like many natural marks and features on a hide, forms part of the natural charm of the finished seat.

TSC-01V 24VDC Charger

Input: 110-120 VAC @ 60 HZ 3.4 Amps
Output: 27 VDC Nominal 7.7 Amps
Operating Temperature: 23º F to 104ºF
Weight: 3.3 pounds

Gill SINCE 1920
The Original Equipment Aircraft Battery

- Small lightweight
- "Smart" state-of-the-art software
- Charger starts when battery requires charge
- Adjusts to all "Gill" 24 volt batteries
- LED progress indicators- indicates battery charge level
- Microprocessor allows charging to be precisely tailored to match battery requirements.
- "Smart" Circuit will not overcharge battery
- Circuit Protection - reverse and short protection (No voltage at output when not connected to battery)
- Sleep mode when battery is charged

TELEDYNE BATTERY PRODUCTS
A Teledyne Technologies Company
840 W. Brockton Ave., Redlands, CA 92374
(800) 456-0070 • (909) 793-3131 • Fax: (909) 793-5818
www.gillbatteries.com

TBP 2/8/11

STRAIGHT BILL OF LADING - ORIGINAL - NOT NEGOTIABLE - SHORT FORM
RECEIVED, subject to the classification and tariffs in effect on the date of the issue of this Bill of Lading.
SHIPPER/OFFEROR: TELEDYNE BATTERY PRODUCTS / 840 W. BROCKTON AVE. / REDLANDS, CA 92374 / 909-793-3131

SHIPPER NO. PS1200000000175
SALES ORDER BPS0023074
DATE FEB 0 2 2012

CONSI PO 1701485
ROUTI LOT AV0212390011
KOLIVER 2/7/12

Customer Order 1701485
Via CONWAY
PREPAID

8130 TAGS AND COC REQUIRED

ORDERED	SHIPPED	BACK ORDERED	ITEM NUMBER	CODE	DESCRIPTION	WEIGHT/LBS
2	2	0	BP-30030		BATTERY,G641,RIBBED,DRY	39.0
1	1	0	BP-60080		STC KIT,SH297NM	4.0
2	2	0	BP-60147		CHRGR,BATTERY,TSC-01V,24V,ASSY, 120V W/ ALLIGATOR CLIPS	4.5
3	3	0	BP-60217		CHARGER,TOHC DUAL MODE	12.5
4	4	0	[illegible]		BATTERY,7641-[illegible],RIBBED,L,NONSPILLABLE	10.1
6	6	0	BP-60050		HYDROMETER 1.100-1.300,Freas#1, SPECIFIC GRAVITY 80/80f	0.2
8	8	0	BP-30004		BATTERY,G88,DRY	61.0
10	10	0	BP-20008		BATTERY,G241,DRY	21.0
10	10	0	BP-20018		BATTERY,G247,DRY	19.0
18	18	0	BP-20068		BATTERY,GE50C,DRY	57.8
22	22	0	BP-21105		BATTERY,G243S,SRT, NONSPILLABLE	31.8

Subject to Section 7 of conditions of applicable bill of lading, if this shipment is to be delivered to the consignee, the consignor shall sign the following statement:
(Signature of Consignor)
Rec'd $____ to apply in prepayment of charges on the property described hereon.
Agent or Cashier
Per____
(The signature here acknowledges only the amount prepaid.)
Charges advanced:
$

PALLETS	NO. OF PACKAGES	HM	DESCRIPTION, SPECIAL MARKS AND EXCEPTIONS	WEIGHT/LBS SUB. TO CORR.	CLASS OR RATE	CHECK COL.
			UN2794, BATTERIES, WET, FILLED WITH ACID, 8, III		65	
			UN2796, BATTERIES FLUID, ACID, 8, II		65	
			UN27[illegible] BATTERY, FLUID, ACID, 8, [illegible] QTY"		65	
			CO[illegible] COMMODITY - ORM-D		65	
			BATTERY, NONSPILLABLE		65	
			BATTERIES, ELECTRONIC STORAGE DRY		65	
			ACCESSORIES		65	
			PALLET WEIGHT			
			TOTAL WEIGHT			

PAGE 1

EMERGENCY RESPONSE PHONE NUMBER
INFO TRAC
800-535-5053 OR
352-323-3500 24/HR

Placard Offered / Received

TELEDYNE BATTERY PRODUCTS____
Per ____
Permanent post-office address of shipper - Redlands, California TBP D 840-1, Rev 11-09

1

Carrier ____ Agent
Per ____
(This Bill of Lading is to be signed by the shipper of the carrier issuing same.)
This load was properly secured when exiting shippers facility.

AVIALL - TRUE CERTIFIED COPY

STRAIGHT BILL OF LADING - ORIGINAL - NOT NEGOTIABLE - SHORT FORM

RECEIVED, subject to the classification and tariffs in effect on the date of the issue of this Bill of Lading.

SHIPPER/OFFEROR: TELEDYNE BATTERY PRODUCTS / 840 W. BROCKTON AVE. / REDLANDS, CA 92374 / 909-793-3131

SHIPPER NO. PS1200000000175

SALES ORDER BPSO023074

DATE FEB 0 2 2012

CONSIGNEE	AVIALL 2750 REGENT BLVD.	Customer Order 1701485
ROUTE	800-284-2551 DFW AIRPORT, TX 75261-9048	Via CONWAY **PREPAID**

These commodities, technology or software were exported from the United States in accordance with the Export Administration Regulations. Diversion contrary to U.S. law prohibited.

ORDERED	SHIPPED	BACK ORDERED	ITEM NUMBER	CODE	DESCRIPTION	WEIGHT(LBS)
22	5	17	BP-21113		BATTERY,G250S,VRLA, NONSPILLABLE, PIPER PART # 601-915	33.8
40	40	0	BP-21107		BATTERY,G35S,SRT,NONSPILLABLE	30.6
50	50	0	BP-21106		BATTERY,G25S,SRT,NONSPILLABLE	25.6
64	64	0	BP-20016		BATTERY,G246,DRY	34.4
72	72	0	BP-20200		BATTERY,G638LE,RIBBED,DRY	65.8
128	128	0	BP-20010		BATTERY,G242,DRY	23.0
128	128	0	BP-20012		BATTERY,G243,DRY	23.0
144	144	0	BP-20054		BATTERY,G25,DRY	18.0
216	216	0	BP-20058		BATTERY,G35,DRY	21.5
448	448	0	BP-53055		ACID PACK,1.285SG,2QT,GILL, CONSUMER COMMODITY ORM-D	6.0
480	480	0	BP-53056		ACID PACK,1.285SG,3QT,GILL, CONSUMER COMMODITY ORM-D	9.3

Subject to Section 7 of conditions of applicable bill of lading, if this shipment is to be delivered to the consignee, the consignor shall sign the following statement:

(Signature of Consignor)

Rec'd $_____ to apply in prepayment of charges on the property described hereon.

Agent or Cashier

Per _____ (The signature here acknowledges only the amount prepaid.)

Charges advanced: $

Christina Dillard

PALLETS	NO. OF PACKAGES	HM	DESCRIPTION, SPECIAL MARKS AND EXCEPTIONS	WEIGHT(LBS SUB. TO CORR.	CLASS OR RATE	CHECK COL.
			UN2794, BATTERIES, WET, FILLED WITH ACID, 8, III		65	
			UN2796, BATTERIES FLUID, ACID, 8, II		65	
			UN2796, BATTERY FLUID, ACID, 8, II, "LTD QTY"		65	
	928		CONSUMER COMMODITY - ORM-D	7008	65	
	121		BATTERY, NON-SPILLABLE	3569	65	
	800		BATTERIES, ELECTRONIC STORAGE DRY	22270	65	
	13		ACCESSORIES	56	65	
23			PALLET WEIGHT	920		
			TOTAL WEIGHT	33,823		

EMERGENCY RESPONSE PHONE NUMBER INFO TRAC 800-535-5053 OR 352-323-3500 24/HR

Placard Offered / Received

TELEDYNE BATTERY PRODUCTS

Per Rey Melendez FEB 0 2 2012

Permanent post-office address of shipper - Redlands, California TBP D 002-1, Rev 11-09

2

Carrier _____ Agent

Per _____

(This Bill of Lading is to be signed by the shipper of the carrier issuing same.)

This load was properly secured when exiting shippers facility.

AVIALL - TRUE CERTIFIED COPY - 02/16/2012 - 24296 - AV02122390011

1. Approving National Aviation Authority/Country: FAA / UNITED STATES

2. **AUTHORIZED RELEASE CERTIFICATE**

FAA Form 8130-3, AIRWORTHINESS APPROVAL TAG

3. Form Tracking Number: 23074

4. Organization Name and Address: Teledyne Battery Products, 840 West Brockton Ave., Redlands, CA USA 92374 — PMA Number: PQ1006NM

5. Work Order/Contract/Invoice Number: 23074

6. Item:	7. Description:	8. Part Number:	9. Eligibility: *	10. Quantity:	11. Serial/Batch Number:	12. Status/Work:
1	Aircraft Battery	7641-20	N/A	4	N/A	NEW
2	Aircraft Battery	G-241		10	N/A	NEW
3	Aircraft Battery	G-242		128	N/A	NEW
4	Aircraft Battery	G-243		128	N/A	NEW
5	Aircraft Battery	G-243S		22	N/A	NEW
6	Aircraft Battery	G-246		64	N/A	NEW
7	Aircraft Battery	G-247		10	N/A	NEW
8	Aircraft Battery	G-25		144	N/A	NEW
9	Aircraft battery	G-250S		5	N/A	NEW
10	Aircraft Battery	G-25S		50	N/A	NEW

13. Remarks: AIRWORTHINESS APPROVAL - This is the certification statement for the products listed on the attached Serial Number Log Document dated Feb 2 2012 containing 5 page(s) with form tracking number 23074 on each page.

14. Certifies the items identified above were manufactured in conformity to:

- [X] Approved design data and are in condition for safe operation.
- [ ] Non-approved design data specified in Block 13.

19. [ ] 14 CFR 43.9 Return to Service [ ] Other regulation specified in Block 13

Certifies that unless otherwise specified in block 13, the work identified in Block 12 and described in Block 13 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.

15. Authorized Signature:	16. Approval/Authorization No.: DMIR 830638-NM	20. Authorized Signature:	21. Approval/Certificate No.:
17. Name (Typed or Printed): James Ellison	18. Date (m/d/y): Feb-02-2012	22. Name (Typed or Printed):	23. Date (m/d/y):

User/Installer Responsibilities

It is important to understand that the existence of this document alone does not automatically constitute authority to install the part/component/assembly.

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 accepts parts/components/assemblies from the airworthiness authority of the country specified in Block 1.

Statements in Blocks 14 and 19 do not constitute installation certification. In all cases, aircraft maintenance records must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.

FAA Form 8130-3 (6-01) *Installer must cross-check eligibility with applicable technical data. NSN: 0052-00-012-9005

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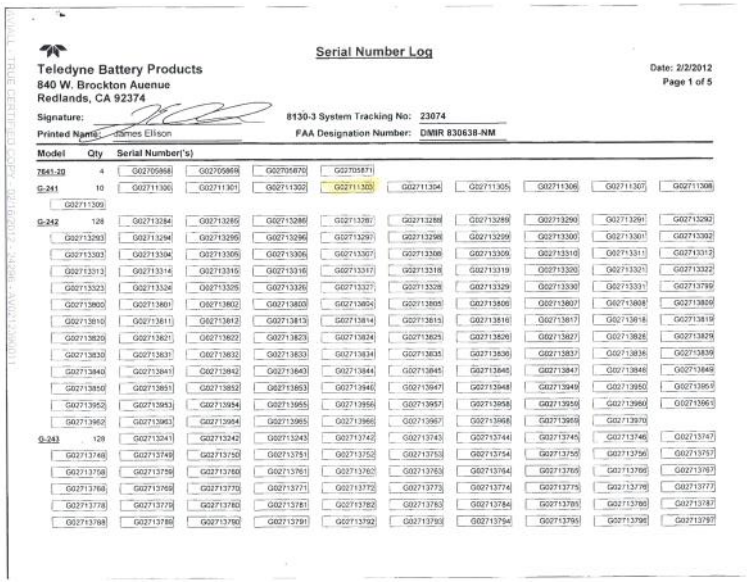


Serial Number Log

Teledyne Battery Products
840 W. Brockton Auenue
Redlands, CA 92374

Date: 2/2/2012
Page 1 of 5

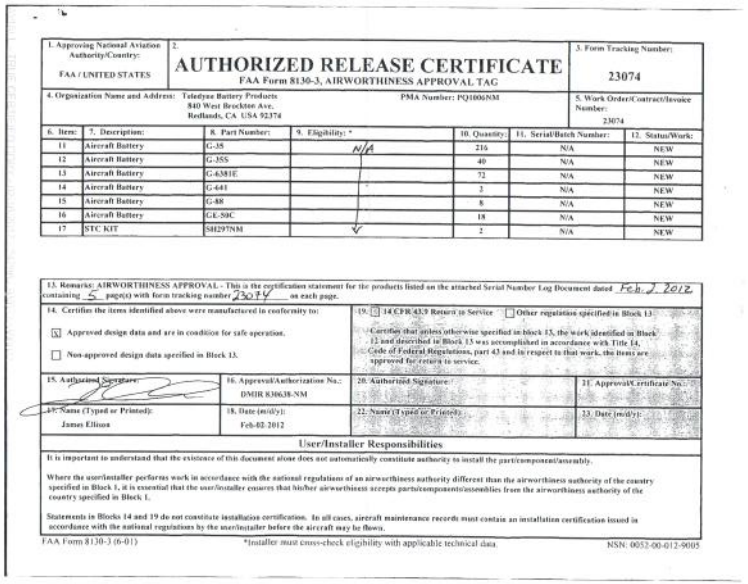
Signature:

Printed Name: James Ellison

8130-3 System Tracking No: 23074

FAA Designation Number: DMIR 830638-NM

Model	Qty	Serial Number('s)								
7641-20	4	G02705868	G02705869	G02705870	G02705871					
G-241	10	G02711300	G02711301	G02711302	G02711303	G02711304	G02711305	G02711306	G02711307	G02711308
		G02711309								
G-242	128	G02713284	G02713285	G02713286	G02713287	G02713288	G02713289	G02713290	G02713291	G02713292
		G02713293	G02713294	G02713295	G02713296	G02713297	G02713298	G02713299	G02713300	G02713301	G02713302
		G02713303	G02713304	G02713305	G02713306	G02713307	G02713308	G02713309	G02713310	G02713311	G02713312
		G02713313	G02713314	G02713315	G02713316	G02713317	G02713318	G02713319	G02713320	G02713321	G02713322
		G02713323	G02713324	G02713325	G02713326	G02713327	G02713328	G02713329	G02713330	G02713331	G02713799
		G02713800	G02713801	G02713802	G02713803	G02713804	G02713805	G02713806	G02713807	G02713808	G02713809
		G02713810	G02713811	G02713812	G02713813	G02713814	G02713815	G02713816	G02713817	G02713818	G02713819
		G02713820	G02713821	G02713822	G02713823	G02713824	G02713825	G02713826	G02713827	G02713828	G02713829
		G02713830	G02713831	G02713832	G02713833	G02713834	G02713835	G02713836	G02713837	G02713838	G02713839
		G02713840	G02713841	G02713842	G02713843	G02713844	G02713845	G02713846	G02713847	G02713848	G02713849
		G02713850	G02713851	G02713852	G02713853	G02713946	G02713947	G02713948	G02713949	G02713950	G02713951
		G02713952	G02713953	G02713954	G02713955	G02713956	G02713957	G02713958	G02713959	G02713960	G02713961
		G02713962	G02713963	G02713964	G02713965	G02713966	G02713967	G02713968	G02713969	G02713970	
G-243	128	G02713241	G02713242	G02713243	G02713742	G02713743	G02713744	G02713745	G02713746	G02713747
		G02713748	G02713749	G02713750	G02713751	G02713752	G02713753	G02713754	G02713755	G02713756	G02713757
		G02713758	G02713759	G02713760	G02713761	G02713762	G02713763	G02713764	G02713765	G02713766	G02713767
		G02713768	G02713769	G02713770	G02713771	G02713772	G02713773	G02713774	G02713775	G02713776	G02713777
		G02713778	G02713779	G02713780	G02713781	G02713782	G02713783	G02713784	G02713785	G02713786	G02713787
		G02713788	G02713789	G02713790	G02713791	G02713792	G02713793	G02713794	G02713795	G02713796	G02713797



1. Approving National Aviation Authority/Country: FAA / UNITED STATES

2. **AUTHORIZED RELEASE CERTIFICATE**
FAA Form 8130-3, AIRWORTHINESS APPROVAL TAG

3. Form Tracking Number: 23074

4. Organization Name and Address: Teledyne Battery Products, 840 West Brockton Ave., Redlands, CA USA 92374 — PMA Number: PQ1006NM

5. Work Order/Contract/Invoice Number: 23074

6. Item:	7. Description:	8. Part Number:	9. Eligibility: *	10. Quantity:	11. Serial/Batch Number:	12. Status/Work:
11	Aircraft Battery	G-35	N/A	216	N/A	NEW
12	Aircraft Battery	G-35S		40	N/A	NEW
13	Aircraft Battery	G-6381E		72	N/A	NEW
14	Aircraft Battery	G-641		3	N/A	NEW
15	Aircraft Battery	G-68		8	N/A	NEW
16	Aircraft Battery	GL-50C		18	N/A	NEW
17	STC KIT	SH297NM		2	N/A	NEW

13. Remarks: AIRWORTHINESS APPROVAL - This is the certification statement for the products listed on the attached Serial Number Log Document dated Feb. 7 2012 containing 5 page(s) with form tracking number 23074 on each page.

14. Certifies the items identified above were manufactured in conformity to:
- [X] Approved design data and are in condition for safe operation.
- [ ] Non-approved design data specified in Block 13.

19. [ ] 14 CFR 43.9 Return to Service [ ] Other regulation specified in Block 13
Certifies that unless otherwise specified in block 13, the work identified in Block 12 and described in Block 13 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.

15. Authorized Signature:

16. Approval/Authorization No.: DMIR 830638-NM

17. Name (Typed or Printed): James Ellison

18. Date (m/d/y): Feb-02-2012

20. Authorized Signature:

21. Approval/Certificate No.:

22. Name (Typed or Printed):

23. Date (m/d/y):

User/Installer Responsibilities

It is important to understand that the existence of this document alone does not automatically constitute authority to install the part/component/assembly.

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 accepts parts/components/assemblies from the airworthiness authority of the country specified in Block 1.

Statements in Blocks 14 and 19 do not constitute installation certification. In all cases, aircraft maintenance records must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.

FAA Form 8130-3 (6-01) *Installer must cross-check eligibility with applicable technical data. NSN: 0052-00-012-9005

Serial Number Log

Teledyne Battery Products
840 W. Brockton Auenue
Redlands, CA 92374

Date: 2/2/2012
Page 5 of 5

Signature: [signature]
Printed Name: James Ellison

8130-3 System Tracking No: 23074
FAA Designation Number: DMIR 830638-NM

Model	Qty	Serial Number('s)								
G-35S	40	G02705950	G02705951	G02705952	G02705953	G02705954	G02705955	G02705956	G02705957	G02705958
	G02705959	G02705960								
G-6381E	72	G02707018	G02707657	G02707658	G02707659	G02707660	G02707661	G02707662	G02707663	G02707664
	G02707665	G02707666	G02707667	G02707668	G02707669	G02707670	G02707671	G02707672	G02707673	G02707674
	G02707675	G02707676	G02707677	G02707678	G02707679	G02707680	G02707681	G02707682	G02707683	G02707684
	G02707685	G02707686	G02707687	G02707688	G02707689	G02707690	G02707691	G02707692	G02707693	G02707694
	G02707695	G02707696	G02707697	G02707698	G02707699	G02707700	G02707701	G02707702	G02707703	G02707704
	G02707705	G02707706	G02707707	G02707708	G02707709	G02707710	G02707743	G02707744	G02707745	G02707746
	G02707747	G02707748	G02707749	G02707750	G02707751	G02707752	G02707753	G02707754	G02707755	G02707756
	G02707757	G02707758	G02707759							
G-641	2	G02707148	G02707149							
G-88	8	G02707780	G02707781	G02707782	G02707783	G02707784	G02707785	G02707786	G02711777	
GE-50C	18	G02707030	G02707035	G02707036	G02707037	G02707038	G02707039	G02707040	G02707041	G02707042
	G02707043	G02707050	G02707051	G02707052	G02708326	G02708327	G02708328	G02708329	G02708330	
SH297NM	2	10001878	10001879							
Total:	923									

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TELEDYNE BATTERY PRODUCTS
REDLANDS, CALIFORNIA 92375

CERTIFICATE OF COMPLIANCE

ISSUE TO: AVIALL CENTRAL WAREHOUSE
ADDRESS: 2750 REGENT BLVD
CITY, STATE, ZIP: DFW AIRPORT, TX 75261-9048
COUNTRY: USA

PART NUMBER	QUANTITY	P.O. NUMBER	SHIPPER NO.
1. ACID PACK, 1.285SG, 2QT, GILL, CONSUMER COMMODITY ORM-D	448	1701485	BPS0023074
2. ACID PACK, 1.285SG, 3QT, GILL, CONSUMER COMMODITY ORM-D	480	1701485	BPS0023074
3. CHRGR, BATTERY, TSC-01V, 24V, ASSY 120V W/ ALLIGATOR CLIPS	2	1701485	BPS0023074
4. CHARGER, TDMC DUAL MODE	3	1701485	BPS0023074
5. HYDROMETER 1.100-1.300, Freas#1, SPECIFIC GRAVITY 80/80f	6	1701485	BPS0023074

APPLICABLE SPECIFICATIONS: MIL-B-83769 ☐

OTHER ☑ PER TELEDYNE DWG

☐ PER TELEDYNE DWG

☑ ELECTROLYTE DOES NOT HAVE SHELF LIFE LIMITATIONS

This is to certify that all conditions pertaining to quality and performance as specified in your purchase order have been attested to, and that reports thereof are on file in this department.

TELEDYNE BATTERY PRODUCTS

[signature]
Signature

Quality Engineer
Title

02/02/2012
Date

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