

Legend
CUB
18RE

ENGINE LOG BOOK



Service Information

Consult the Continental Motors web site at continentalmotors.aero for engine related news or announcements. Continental Motors Internet Service contains useful information for Continental Motors engine owners, including electronic versions of the most current engine Instructions for Continued Airworthiness and service documents that may be pertinent to your engine model.

If Internet access is not available, contact our Customer Service Department at:
1-888-826-5465 Toll Free in the United States or
1-251-436-8299

Engine Returns

Return engines for core credit with this log book to:

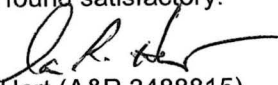
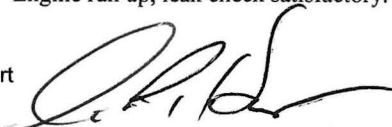
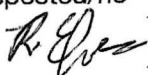

Continental Motors, Inc.
2039 Broad Street
Mobile, AL 36615 USA

ENGINE	Manufacturer/Make <u>CONTINENTAL MOTORS</u> Model <u>OX340AJJ2T4</u>
	Serial No. <u>G4B004</u>
	Type Certificate <u>EXPERIMENTAL</u>
	This engine is currently installed in aircraft: _____
	Max RPM <u>2700 rpm</u>
	H.P. <u>174</u>
	Compression Ratio <u>8.0:1</u>
	Fuel Grade <u>100/100LL</u>
	Oil Grade <u>Meets SAE J1899 or Mil-L-22851</u>
	Firing Order <u>1-3-2-4</u>
Recommended T.B.O. <u>2,000 Hr</u> Assembly Date <u>05/04/2018</u>	
AIRCRAFT	Installation in Aircraft Type _____ Reg No _____ Date _____
	First Flight Date _____
	Other _____

Engine Model, OX340AJJ2T4
Serial Number, G4B004
Assembly Date 05/04/2018
Run-in Date 05/10/2018
Test results are on file at Continental Motors, Inc.
All applicable directives are in compliance.
This engine is certified to be airworthy for installation on
airplanes meeting: (experimental certificates)

Crankcase S/N 117134
Crankshaft S/N N17KFA4709368#001
Camshaft S/N NS02204

Cylinders S/N
#1 AC18BC037
#2 AC18BC043
#3 AC17LA456
#4 AC18BA907
#5 N/A
#6 N/A

Date	Total Time		Time Since Last Overhaul		Engine Service and Maintenance Record Record maintenance actions including engine part removal and installation and compliance with inspections, Airworthiness Directives, Special Inspections, Modifications and Service Bulletins
	Hours	Min	Hours	Min	
					<p>Installed CONTINENTAL MOTORS OX-340, s/n: G4B004 engine in American Legend Cub SN AL-1225. Serviced with 5 qts. Aeroshell w100-50 mineral oil. Engine operational check found satisfactory.</p> <p> Darin Hart (A&P 3488815) American Legend Aircraft Company 21 August 2018</p>
<p>American Legend Aircraft Services 1810 Piper Lane – Sulphur Springs, TX 75482 USA Phone: 903-885-7000</p>					
					<p>September 26, 2018 AL-18 OX-340-AJJ2T4 Tach: 4.5 TAF: 4.5</p> <p style="text-align: right;">N18RE S/N: AL-1225 S/N: G4B004</p> <ol style="list-style-type: none"> 1. Change oil and filter AA48108. Serviced with 6 qts. Aeroshell W100-50 2. Cut and inspected oil filter element and found no metal 3. Engine run up, leak check satisfactory. <p>Darin Hart  Inspector for American Legend Aircraft Company A&P 3488815</p>
					<p>I certify CONTINENTAL engine OX-340, s/n: G4B004 in AL-18 N18RE s/n AL-1225 serviced w/6 qts Phillips 66 X/C 20W-50 and AA48108 oil filter. TAF: 35 hrs. Old filter cut/inspected/no metal found. Robert Elves (2824368) 04-24-18 </p>
					<p>I certify CONTINENTAL engine OX-340, s/n: G4B004 in AL-18 N18RE s/n AL-1225 serviced w/8 qts AeroShell 15W-50 & AA48108 oil filter. TAF: 85 hrs. Old filter cut/inspected/no metal found. Robert Elves, Repairman 2824368, 06-11-19 </p>

Date	Total Time		Time Since Last Overhaul		Engine Service and Maintenance Record Record maintenance actions including engine part removal and installation and compliance with inspections, Airworthiness Directives, Special Inspections, Modifications and Service Bulletins
	Hours	Min	Hours	Min	
Carried forward →					I certify CONTINENTAL engine OX-340, s/n: G4B004 in AL-18 N18RE s/n AL-1225 serviced w/7 qts AeroShell 80W mineral oil & AA48108 oil filter. TTAF: 156.4 hrs. Tach: 128.3 hrs. Filter cut/inspected/metal found. Cylinders #3 & #4 subsequently replaced. Robert Elves, Repairman 2824368, 07-05-19 <i>Elves</i>
					CONTINENTAL engine OX-340, s/n: G4B004 in AL-18 N18RE s/n AL-1225 cylinders 3&4 non-serviceable. Replaced with Cylinder assemblies TISN04.OX14CA, SN(s) AC18EB140/ AC18BA925 respectively. Ops check good. TTAF: 156.4 hrs. Tach: 128.3 hrs. John Ostashek, Transport Canada AME# Robert Elves, Repairman 2824368 07-05-19 <i>Elves</i>
7/30/2019	148.1				Removed engine from aircraft and shipped to Continental Motors for inspection. <i>Del Hart A&P 348815</i>

Engine Model, OX340AJJ2T4
 Serial Number, G4B004
 Assembly Date 12/13/2019. Built to new Titan Limits using original crankcase, and oil sump. All other parts new.
 Run-in Date 12/17/2019
 Test results are on file at Continental Motors, Inc.
 All applicable directives are in compliance.
 This engine is certified to be airworthy for installation on airplanes meeting: (experimental certificates)

Crankcase S/N 117134
 Crankshaft S/N N18FFA4805107006
 Camshaft S/N NS02161

Cylinders S/N
 #1 AC19IA013
 #2 AC19IA016
 #3 AC19IA018
 #4 AC19GB096

Titan Representative *David E. Ahern*

American Legend Aircraft Services
 1810 Piper Lane – Sulphur Springs, TX 75482 USA
 Phone: 903-885-7000

Feb 14, 2020
 AL18
 Continental OX340AJJ2T4
 New tach installed Tach: 0 time
 JPI time and airframe TT 203.2

N18RE
 S/N: AL-1225
 s/n: G4B004

Engine: New 0.00

1. Engine removed from aircraft and sent to Continental on 7/30/2019. Continental inspected and rebuilt to new Titan limits (see engine log entry). Engine reinstalled on airframe per Legend installation drawings January, 2020 after return from Continental. Engine time is considered 0 TT since new.
2. Serviced engine with 7 quarts Aeroshell 100 mineral oil and installed new oil filter, safety wire.
3. Engine run up, leak check satisfactory.
4. Serviced, Inspected fuel system, flex line and hoses.
5. Installed new air filter assembly.
6. I certify that this engine has been inspected in accordance with an 100 hour inspection and was determined to be in an airworthy condition.

Darin Hart

Del Hart

A&P 348815

Inspector for American Legend Aircraft Company

Date	Total Time		Time Since Last Overhaul		Engine Service and Maintenance Record Record maintenance actions including engine part removal and installation and compliance with inspections, Airworthiness Directives, Special Inspections, Modifications and Service Bulletins
	Hours	Min	Hours	Min	

I certify CONTINENTAL engine OX-340, s/n: G4B004 in AL-18 N18RE s/n AL-1225 serviced w/8 qts Phillips 66 X/C 20W-50 and AA48108 oil filter. TTE: 25.1 hrs. Old filter cut/inspected/ no metal found. Robert Elves, Repairman 2824368 4-27-20

4-21-20 *R. Elves*

I certify CONTINENTAL engine OX-340, s/n: G4B004 in AL-18 N18RE s/n AL-1225 serviced w/8 qts Phillips 66 X/C 20W-50 and AA48108 oil filter. TAF: 30 hrs. Old filter cut/inspected/ no metal found. Robert Elves, Repairman 2824368

7-13-20 *R. Elves*

I certify CONTINENTAL engine OX-340, s/n: G4B004 in AL-18 N18RE s/n AL-1225 serviced w/8 qts AeroShell 15W-50 and AA48108 oil filter installed. Old filter cut & inspected no metal found. Robert Elves, LSM-I 2824368 2-1-21

R. Elves

I certify CONTINENTAL engine OX-340, s/n: G4B004 in AL-18 N18RE s/n AL-1225 was inspected IAW ASTM F2339. Engine serviced and operational check found satisfactory. TTE: 100.3 Robert Elves, LSM-I 2824368 2-1-21

R. Elves

4/12/2021

N18RE

TACH 127.8

Installed Tanis Engine Preheat Kit p/n: TSP4CYL-2925-115 (dwg: 02925-115 Rev E), s/n: SE03232CH, included engineering substitution of pad element w/ threaded sump element p/n: TTP3038-115/50. Installation IAW Instructions: TNP2925 Rev E and AC 43.13-1B Ch 11 §§ 8-17. Pursuant 14 CFR 21.93(a) modification considered a minor change. Performed Functional System Check IAW Installation Guide: TNG1000 Rev E, system functioned as designed. Total installed weight less than 1.0-lb considered incidental no change in Wt & BI performed. Aircraft equipment list updated accordingly. Drained oil and installed new CH48108-1 oil filter. Cut old filter open no debris noted. Added 6 quarts Aeroshell 15W50 oil. Ops and leak check good.

Kevin D. Purstell

[Signature]

A&P 3585343 I.A.

5/11/2022

N18RE

AL18

S/N AL-1225

TACH 157.3

TTAF 360.5 Titan

Performed conditional inspection IAW Legend Aircraft MM APPENDIX C. Compressions were, #1 79/80. #2 76/80. #3 78/80. #4 76/80. Installed 8 new IK27 spark plugs. Drained oil installed new AA48108-2 filter. Added 6 quarts 15w-50 oil. Cut open oil filter no debris noted. Ops checked and leak checked engine. I certify this engine has been inspected IAW manufacturers maintenance and inspection guide and been found safe for operation.

Kevin D. Purstell


[Signature]

A&P 3585343 I.A.

Date	Total Time		Time Since Last Overhaul		Engine Service and Maintenance Record Record maintenance actions including engine part removal and installation and compliance with inspections, Airworthiness Directives, Special Inspections, Modifications and Service Bulletins
	Hours	Min	Hours	Min	

Carrie 5/11/2022 N18RE TITAN S/N G4B004 TACH 168.7
 TTAF 371.92 TSMO 168.7

Performed conditional inspection IAW Legend Aircraft MM APPENDIX C Rev 2.0. Compressions were, #1 76/80. #2 76/80. #3 77/80. #4 74/80. Installed 8 new Denso IK27 spark plugs. Drained oil installed new AA48108-2 filter. Added 7 quarts Aeroshell 15w-50 oil. Cut open oil filter no debris noted. Installed new air filter. Ops checked and leak checked engine. I certify this engine has been inspected IAW manufacturers maintenance and inspection guide and been found safe for operation.

Kevin D. Purstell  A&P 3585343 I.A.

5/15/2024 N18RE TITAN S/N G4B004 TACH 176.56
 TTAF 379.78 TSMO 176.56

Performed conditional inspection IAW Legend Aircraft MM APPENDIX C Rev 2.0. Compressions were, #1 76/80. #2 76/80. #3 74/80. #4 78/80. Drained oil installed new AA48108-2 filter. Added 7 quarts Aeroshell 15w-50 oil. Cut open oil filter no debris noted. Stop drilled small crack in engine baffle. Ops checked and leak checked engine. I certify this engine has been inspected IAW manufacturers maintenance and inspection guide and been found safe for operation.

Kevin D. Purstell  A&P 3585343 I.A.



US Department
of Transportation
Federal Aviation
Administration

**MAJOR REPAIR AND ALTERATION
(Airframe, Powerplant, Propeller, or Appliance)**

OMB No. 2120-0020
Exp. 5/31/2018

Electronic Tracking Number

For FAA Use Only

INSTRUCTIONS: Print or type all entries. See Title 14 CFR §43.9, Part 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. §44701). Failure to report can result in a civil penalty for each such violation. (49 U.S.C. §46301(a))

1. Aircraft	Nationality and Registration Mark USA/N18RE	Serial No. AL-1225
	Make American_Legend	Model Super_Legend Series XP
2. Owner	Name (As shown on registration certificate) Big_Bird_1_LLC	Address (As shown on registration certificate) Address 441_Bamboo_Ln
		City Melbourne State FL
		Zip 32935 Country USA

3. For FAA Use Only

4. Type		5. Unit Identification			
Repair	Alteration	Unit	Make	Model	Serial No.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	AIRFRAME	<u>American_Legend</u>	(As described in Item 1 above)	<u>AL-1225</u>
<input type="checkbox"/>	<input type="checkbox"/>	POWERPLANT			
<input type="checkbox"/>	<input type="checkbox"/>	PROPELLER			
<input type="checkbox"/>	<input type="checkbox"/>	APPLIANCE	Type		
			Manufacturer		

6. Conformity Statement

A. Agency's Name and Address		B. Kind of Agency		C. Certificate No. 2824368
Name Robert_Elves	Address 441_Bamboo_Ln City Melbourne State FL Zip 32935 Country USA	<input checked="" type="checkbox"/> U. S. Certified Mechanic	Manufacturer	
		<input type="checkbox"/> Foreign Certified Mechanic		
		<input type="checkbox"/> Certified Repair Station		
		<input type="checkbox"/> Certified Maintenance Organization		

D. I certify that the repair and/or alteration made to the unit(s) identified in item 5 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.

Extended range fuel per 14 CFR Part 43 App. B <input checked="" type="checkbox"/>	Signature/Date of Authorized Individual <i>R. Elves</i>
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7. Approval for Return to Service

Pursuant to the authority given persons specified below, the unit identified in item 5 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is Approved Rejected

BY	FAA Fit. Standards Inspector	Manufacturer	Maintenance Organization	Persons Approved by Canadian Department of Transport
	FAA Designee	Repair Station	<input checked="" type="checkbox"/> Inspection Authorization	Other (Specify)

Certificate or Designation No. 2824368	Signature/Date of Authorized Individual <i>R. Elves</i>
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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.)

USA/N18RE

04-24-19

Nationality and Registration Mark

Date

Extended-range_32_gallon_RJS-3005201_aviation_fuel_cell_installed_IAW_14CFR/Pt.
43,App.B(d)_to_forward_baggage_area._Weight:_15lbs,_Arm:57,_Moment:_855.

Additional Sheets Are Attached

TANIS

PREHEAT SYSTEM
115 VOLT

COLD WEATHER MODIFICATION



P/N: TSP4CYL-2925-115
ENGINE PREHEAT KIT - 115 VOLT

PURPOSE:

TOP LEVEL DRAWING - ELIGIBILITY, PARTS, AND RELATED DOCUMENTS REQUIRED FOR INSTALLATION, OPERATION, AND CONTINUED AIRWORTHINESS.
(REPLACES TAS75-01 AND TAS100 SERIES 4-CYLINDER KITS)

ELIGIBILITY:

4-CYLINDER CONTINENTAL AND LYCOMING ENGINES, STC-AML SE03232CH AND EASA 10054417.

SUPPLEMENTARY INFORMATION:

- A. START INSTALLATION WITH ITEM INVENTORY AND KIT INSTALLATION INSTRUCTION.
- B. TOOLS HARDWARE AND BONDING SEALANT NOT SUPPLIED REFER RELATED DOCUMENTS.
- C. STANDARD OPTIONS LISTED IN INSTALLATION GUIDE TNG1000.
- D. DOCUMENTS AVAILABLE AT WWW.TANISAIRCRAFT.COM OR CONTACT TANIS AIRCRAFT PRODUCTS.

INCLUDES THE FOLLOWING CHECKED [✓] ITEMS:

QTY	ITEM NUMBER	DESCRIPTION
[-]	1 CB911	SOLVENT WIPE
[✓]	1 TC02859	CABLE KIT
[-]	1 TEP2653-115/40	PAD HEAT ELEMENT - SUMP
[✓]	1 TLP3039-06-115	INDICATOR LIGHT - 8MM LED
[✓]	1 TP02770-115	PLUG - SHORE POWER (INLET)
[✓]	4 TTP2771-115/50	THREADED HEAT ELEMENT - 1 EACH CYLINDER
[✓]	1 TU02615-115	PLACARD
[✓]	8 TU02846	SPACER - 0.25 ALUMINUM
[✓]	40 TU02847	CABLE TIE
[✓]	1 TWC0001	REGISTRATION / WARRANTY CARD

RELATED DOCUMENTS:

AVAILABLE AT WWW.TANISAIRCRAFT.COM OR CONTACT TANIS AIRCRAFT PRODUCTS.

DOCUMENT NUMBER	DESCRIPTION
TNP2925	INSTRUCTION - PREHEAT KIT INSTALLATION
TNG1000	INSTALLATION GUIDE - STANDARDS REFERENCE
* TCA1000	INSTRUCTIONS FOR CONTINUED AIRWORTHINESS
* TPG1000	OPERATING GUIDE
02859	DRAWING - CABLE KIT WIRE DIAGRAM
TN02771	INSTRUCTION - THREADED ELEMENT
TN02788	INSTRUCTION - BONDING PAD ELEMENT
TN03039	INSTRUCTION - INDICATOR LIGHT
* REFER TO DOCUMENT RECORD AND RETAIN AS INDICATED	

INFORMATION CONTAINED IN THIS DOCUMENT AND ALL OTHER ASSOCIATED DOCUMENTS IS PROPRIETARY AND SHALL NOT BE REPRODUCED OR DISCLOSED IN WHOLE OR IN PART OR USED FOR ANY DESIGN OR MANUFACTURE WITHOUT DIRECT WRITTEN AUTHORIZATION FROM TANIS AIRCRAFT PRODUCTS.

CHANGE	REV	INIT	DATE
ADD TNG1000 AND UPDATE OPERATING GUIDE TO TPG1000	E	DNE	APR-12-2019
ADD OPTIONS REFERENCE	D	GDO	JAN-10-2017
UPDATE WITH 3039 8MM INDICATOR LIGHT AND INSTRUCTIONS	C	DNE	SEP-10-2014
REPLACE AFMS WITH TPG0001 OPERATING GUIDE	B	PGT	MAR-06-2014

CURRENT REV APPROVAL: *Dink Lee*

DRAWN BY:	DNE	APR-25-2013
CHECKED BY:	GDO	APR-25-2013
SCALE:	N/A	(.xlsx format E)



TANIS AIRCRAFT PRODUCTS
GLENWOOD MUNICIPAL AIRPORT
GLENWOOD, MN 56334 USA
+1.952.224.4425

TITLE: ENGINE PREHEAT KIT		
TOP LEVEL DRAWING		
SPEC: N/A		
SUPERSEDES: N/A		
SHEET	1 OF 1	DWG: 02925-115



Date: Oct. 20, 2020

This letter serves as an official authorization that Tanis Aircraft Products allows the single installation of the preheat system part number: TSP4CYL-2925- 115 , serial number: 55878 per STC AML SE03232CH on one applicable engine.

This letter is also for refrence to:

- TCCA accpetance of FAA-STC
- EASA-STC: 10054417

Retain a copy of this authorization for your records.

For any questions please contact Tanis Aircraft Products.

Regards,

Douglas J. Evink
President & CEO

You can obtain an optional copy of the STC cover letter and AML on our Website:

<http://www.tanisaircraft.com/tsp4cyl-2925-115.html>

or on the the FAA RGL website:

http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgstc.nsf/0/2F44B9522631AA9986257CCC005ADA78?OpenDocument&Highlight=tanis

United States of America
Department of Transportation -- Federal Aviation Administration
Supplemental Type Certificate

Number SE03232CH

This certificate issued to

Tanis Aircraft Products
2951 100th Court NE Suite 150
Blaine, MN 55449-5126

*certifies that the change in the type design for the following product with the limitations and conditions therefor as specified herein meets the airworthiness requirements of Part * of the * Regulations.*

Original Product - Type Certificate Number:

*See attached FAA Approved Model List (AML)

Make:

*No. SE03232CH for list of approved engine models and

Model:

*applicable airworthiness regulations

Description of Type Design Change:

Installation of Tanis Engine Preheat Kit, p/n TSP4CYL-2925-115 for 115 volt application in accordance with Engine Preheat Kit drawing # 02925-115, Revision E, dated April 12, 2019, and Tanis Instruction - Preheat Kit Installation, TNP2925 Rev. E, dated April 12, 2019 or later FAA approved revisions or
Installation of Tanis Engine Preheat Kit, p/n TSP4CYL-2925-230 for 230 volt application in accordance with Engine Preheat Kit drawing # 02925-230, Revision E, dated April 12, 2019, and Tanis Instruction - Preheat Kit Installation, TNP2925 Rev. E, dated April 12, 2019 or later FAA approved revisions or
Installation of Tanis Engine Preheat Kit, p/n TSP4CYL-3001-115 for 115 volt application in accordance with Engine Preheat Kit drawing # 03001-115, Revision D, dated April 18, 2019, and Tanis Instruction - Preheat Kit Installation, TNP3001 Rev. D, dated May 23, 2019 or later FAA approved revisions or
Installation of Tanis Engine Preheat Kit, p/n TSP4CYL-3001-230 for 230 volt application in accordance with Engine Preheat Kit drawing # 03001-230, Revision D, dated April 18, 2019, and Tanis Instruction - Preheat Kit Installation, TNP3001 Rev. D, dated May 23, 2019 or later FAA approved revisions

Limitations and Conditions:

1. Compatibility of this design change with previous modifications must be determined by the installer.
2. FAA accepted Instructions for Continued Airworthiness (ICA), TCA1000, Revision A, dated December 11, 2017 and Operating Guide TPG1000, Rev. C, dated April 6, 2019 or later FAA accepted revisions are required.
3. A copy of this certificate must be maintained as part of the permanent records for the modified engine.
4. If the holder agrees to permit another person to use this certificate to alter the product, the holder shall give the other person written evidence of that permission.

This certificate and the supporting data which is the basis for approval shall remain in effect until surrendered, suspended, revoked or a termination date is otherwise established by the Administrator of the Federal Aviation Administration.

Date of application: April 29, 2013

Date issued:

Date of issuance: June 26, 2013

Date amended: April 23, 2014; December 2, 2014;
November 21, 2019



By direction of the Administrator

John M. Tallaro

(Signature)

FOR

Roy E. Boffo
Manager, Propulsion and Program Management Section
Chicago ACO Branch

(Title)

Any alteration of this certificate is punishable by a fine of not exceeding \$1,000, or imprisonment not exceeding 3 years, or both.