

**PRODUCT REGISTRATION CARD**

Thank you for purchasing our GILL LT Technology battery. Please register your battery on line or complete this card and mail to our Redlands, CA office.

DATE OF PURCHASE 6/8/16 DATE OF INSTALLATION 6/8/16  
BATTERY TYPE G-7638LT BATTERY SERIAL NUMBER G 02925387  
AIRCRAFT MAKE Westwind AIRCRAFT MODEL NUMBER 1124A  
AIRCRAFT SERIAL NUMBER 368 AIRCRAFT REGISTRATION NUMBER N835G  
NAME Lancair of Texas, Inc. dba Columbia Aircraft of Texas  
STREET ADDRESS 2757 Roundrock  
CITY Snyder STATE/PROVINCE Tx ZIP CODE 79549  
E-MAIL (optional) tclick@stav.com COUNTRY U.S.A.

ATTN: PRODUCT REGISTRATION

**PRODUCT REGISTRATION CARD**

Thank you for purchasing our GILL LT Technology battery. Please register your battery on line or complete this card and mail to our Redlands, CA office.

DATE OF PURCHASE 6/8/16 DATE OF INSTALLATION 6/8/16  
BATTERY TYPE G-7638LT BATTERY SERIAL NUMBER G 02925460  
AIRCRAFT MAKE Westwind AIRCRAFT MODEL NUMBER 1124A  
AIRCRAFT SERIAL NUMBER 368 AIRCRAFT REGISTRATION NUMBER N835G  
NAME Lancair of Texas, Inc. dba Columbia Aircraft of Texas  
STREET ADDRESS 2757 Roundrock  
CITY Snyder STATE/PROVINCE Tx ZIP CODE 79549  
E-MAIL (optional) tclick@stav.com COUNTRY U.S.A.

ATTN: PRODUCT REGISTRATION

# WORK ORDER

Make <b>IAI</b>	Model <b>1124A</b>	N# <b>83SG</b>	Serial # <b>368</b>	Tach.	<b>WO # WW1505</b>
Warranty Start Date		Left Eng. S/N		Time	
Engine Model		Right Eng. S/N		Time	
Owner's Name <b>Field Tech Aviation</b>					Delivery Date
Address <b>4151 N. Main</b>					Begin <b>6-8-2016</b>
City <b>Fort Worth, TX 76106</b>			Phone		Completed <b>6-8-2016</b>
Pmt. Method <input type="checkbox"/> Cash <input type="checkbox"/> Charge <input type="checkbox"/> Credit Card <input type="checkbox"/> Credit Approved by					Written by <b>W. O'Berg</b>

Work Scope

MAINTENANCE RELEASE
The <u>Aircraft</u> identified above/below was repaired and inspected in accordance with current instructions contained in <u>STC # SA121450</u> , The Maintenance Rules of the Federal Aviation Regulation under which the operator is certificated and is approved for return to service as per those requirements. Pertinent details of the repair are on file at this repair station under Work Order No. <u>WW1505</u> Date <u>6-8-2016</u> Signed <u>Wayne O'Berg</u> <b>OKLAHOMA JET SUPPORT CENTER</b> for Aviation Services Unlimited, Inc., Hangar 6, Wiley Post Airport, Bethany, OK 73008 CRS#X6UR264N

Item	Labor		Total Time	P		S		Removed	Mech	Insp.
	ST	OT		Off	On	Off	On			
1.				N		N		602925387/602925460	BW	CS
Discrepancy								Repaired		
Remove Ni-Cad Batteries and install two each new Gill 7638-44 Sealed Lead Acid Batteries with Field Approval.								Reinstalled	BW	CS
Corrective Action								Functional Test	BW	CS
Removal NIXAD batteries, install new Gill batteries, put my planned as batt temp loggel + 3 failed temp plugs, pulled breaker + tyewrap.								Date Completed	6-8-16	CS

Item	Labor		Total Time	P		S		Removed	Mech	Insp.
	ST	OT		Off	On	Off	On			
Discrepancy								Repaired		
Corrective Action								Reinstalled		
Functional Test										
Date Completed										

Item	Labor		Total Time	P		S		Removed	Mech	Insp.
	ST	OT		Off	On	Off	On			
Discrepancy								Repaired		
Corrective Action								Reinstalled		
Functional Test										
Date Completed										

CONDITIONS OF REPAIR ORDER. I hereby authorize the repair work to be done along with necessary materials, and hereby grant you and/or your employees and agents permission to operate the aircraft or part herein described for the purpose of testing and/or inspection. I further agree to indemnify and hold you harmless from any and all claims, damages, loss or liability which may occur directly or indirectly from this work, testing and/or inspection, and I further agree that you will not be responsible for any loss or damage to any articles of personal property of any kind or character in case of loss by fire, theft, accident or other cause beyond your control. The labor and materials are ordered by me, for which I have authority to pay, to be listed at your regular prices. I agree to pay cash when the work is completed or on terms satisfactory to you, and until paid, such obligation shall constitute a lien on the aircraft described herein. I agree to pay legal interest upon any past due, delinquent account for the work provided for herein, as well as collection costs including reasonable attorney's fees, and I hereby waive all rights to claim exemption under any state laws.

Owner or Owner's Authorized Agent (signed)

OVERTIME (if needed)  
 Approved  
 Not Approved

**Battery Part #**      **Serial #**      **Date Installed**      **Tachometer Time**  
**Removed**      **In**      **Out**

**REMOVE LABEL FROM BATTERY AND AFFIX HERE**

Service Period Hours		Date	Battery Voltage	
			Before	After
Maintenance Log				
MAINTENANCE PERFORMED (Be Specific)				
50	3			
100				
150	6			
200				
250	9			
300				
350	12			
400				

Battery Capacity Check      First \_\_\_\_\_      Second \_\_\_\_\_

## TELEDYNE BATTERY PRODUCTS GILL BATTERY WARRANTY

Applicable **GILL<sub>LT</sub> 7000** series batteries manufactured by Teledyne Battery Products (TBP) installed after November 15, 2014 are warranted as follows:

1. For a period of twelve months or 600 hours of operation, whichever occurs first after the date of installation, **TBP** will replace, at no charge, any battery manufactured or supplied by it which within the applicable twelve months or 600-hour period is found to the satisfaction of **TBP** to be defective in material or workmanship.
  2. After the expiration of the applicable twelve months or 600-hour period described above and before the expiration of the total number of months or number of hours of warranty period applicable to the battery type in question, as shown on the chart (see Exhibit A), **TBP** will replace any battery manufactured or supplied by it which is found to be defective in material or workmanship. When replacement is made under this paragraph, the owner will pay a net price for a new battery which will equal the greater of:
    - i) the purchase price of the replacement battery divided by the total number of months included in the warranty period and then multiplied by the number of months the battery has been in service or
    - ii) the purchase price of the replacement battery divided by the total number of hours included in the warranty period and then multiplied by the number of hours the battery has been in service. In applying the above formula, the number of hours on the replaced battery will be actual logbook hours or recorded tachometer hours from the date of commencement of the warranty period as specified above. See Exhibit A.
  3. **TBP** will not assume any responsibility for labor or transportation costs incurred in connection with the replacement of any battery under this warranty.
  4. This warranty applies only to batteries on which the applicable manufacturer's inspection, maintenance and operating instructions and recommendations have been complied with.
- PERFORMANCE OF RECOMMENDED INSPECTION AND MAINTENANCE MUST BE DOCUMENTED BY APPROPRIATE LOGBOOK ENTRIES.**
5. This warranty does not apply to any battery manufactured or supplied by **TBP** which has been subject to misuse, neglect or accident or which has been installed, repaired, maintained, or altered in any way that in the judgement of **TBP** has adversely affected the condition of the battery or which has been operated beyond factory recommendations.
  6. This warranty does not apply if the manufacturer's code markings have been destroyed; or if the battery is of smaller size than that specified by the aircraft manufacturer.
  7. **TBP** reserves the right to change any battery specifications or prices without incurring any responsibility with regard to batteries previously sold.
  8. THE SOLE AND EXCLUSIVE REMEDY UNDER THIS WARRANTY IS LIMITED TO REPLACEMENT AS SPECIFIED ABOVE. THERE ARE NO OTHER WARRANTIES EXPRESSED OR IMPLIED. SPECIFICALLY, BUT WITHOUT LIMITATION, THERE ARE NO IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT WILL **TBP** BE RESPONSIBLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF ANY DEFECT IN ANY BATTERY, ARISING OUT OF THE FAILURE OF ANY BATTERY TO OPERATE PROPERLY, OR ARISING OUT OF ANY BREACH OF THE WARRANTY MADE HEREIN.
  - No person is authorized to give any other warranty or to assume any additional obligation or liability on behalf of **TBP**.
  9. This warranty is limited to replacement of the Gill<sub>LT</sub> 7000 Series Battery only.
  10. This warranty is limited to the original battery installed in original aircraft from the date of installation.
  11. This warranty is not transferable.

# THE GILL<sub>LT</sub> BATTERY LOG

**THE GILL<sub>LT</sub> BATTERY LOG CONTAINS  
OUR RECOMMENDED PRACTICES FOR  
TAKING THE BEST POSSIBLE CARE OF  
YOUR AIRCRAFT BATTERIES**

Battery Serial Number

G02925460



MODELS  
7000 SERIES

**TELEDYNE BATTERY PRODUCTS**  
**840 W. BROCKTON AVENUE**  
**REDLANDS, CA 92374**  
[www.gillbatteries.com](http://www.gillbatteries.com)

## CHARGING BASICS

Correct charging is very important and will affect the overall life of the battery. The charging process is not 100% efficient and will typically be 10% to 20% higher than the amount of capacity removed during discharge. Review charging instruction provided with the battery.

Undercharging a battery occurs when the required 105% to 115% of the removed capacity is not returned during recharge. If this were to occur repeatedly, residual uncharged lead sulfate will eventually increase in the plates, making it very difficult to recover. In this case the battery will suffer a permanent loss of capacity.

Overcharging a battery will corrode the positive grids and break the water down to hydrogen and oxygen (electrolysis). This is quite detrimental to the life of VRLA batteries.

Charging efficiency is affected by temperature. Lower temperatures will require higher charging voltages and vice versa for higher temperatures.

### Constant Current (CC)

This method uses a constant current throughout the charging period. Voltage will be as high as 2.67 volts per cell.

MUST have a functional timer to end charging.

Excessive charging with this method will overcharge battery.

Useful in recovering deeply discharged batteries.

### Constant Voltage (CV)

This is the preferred method of charging.

Charger output voltage is constant - typically around 2.36 volts per cell.

Starting charge rates could be variable (3A to 10A). Charge current will drop down to less than 0.5A when complete.

## CONTINUED AIRWORTHINESS TESTING

If the user cannot discharge a battery at the recommended discharge rate, call Teledyne Tech Support for the appropriate discharge curve for that battery. This curve can be used to determine the discharge time to the appropriate end voltage (1.67 volts per cell).

## MANAGING PERIODS OF NON-USE/LIMITED USE

To maximize the life of your **GILLLT** battery, Teledyne recommends that the battery be checked every 6 months if aircraft is maintained at temperatures over 90°F or 12 months if less than 90°F.

### BATTERY SAFETY

**ALWAYS WEAR GLOVES AND SAFETY GOGGLES WHEN WORKING WITH BATTERIES**

Batteries generate explosive gases. Keep sparks, flames, burning cigarettes or other ignition sources away at all times. **MAKE SURE THERE IS ADEQUATE VENTILATION WHEREVER A BATTERY IS USED.**

**FOLLOW THE MANUFACTURER'S INSTRUCTIONS AT ALL TIMES.**

**RECYCLE YOUR SPENT BATTERIES RESPONSIBLY. CHECK YOUR LOCAL STATE/FEDERAL GOVERNMENT FOR PROPER DISPOSAL INSTRUCTIONS.**

Please keep the GILLLT Battery log with aircraft/logbooks.

Keeping it Simple - A Guide to process your Warranty

Please fill form out completely. Battery failure must be reported within 7 days of failure or it will be date reported. **Incomplete forms will be rejected/returned.** User must obtain GILL Warranty Authorization Number from manufacturer. GILL Tech Support can be contacted through our website listed below or at: Within USA (800) 456 0070, or Outside USA (909) 793-3131, press option 3, between 7 am. to 4 pm. PST, Monday through Friday. Do not dispose of battery until Tech Support evaluation is completed. Complete documentation for the GILL Battery including the **New GILLLT** Serial Number where indicated. Once warranty is authorized, submit the GILL Battery Log to any authorized Dealer/ Distributor **within 30 days of GILL authorization. GILL authorization remains in effect for 90 days, void thereafter.** Remove Serial Number sticker from battery and affix to form in box above the Maintenance Log. Please make a copy for yourself and submit original form to Dealer/Distributor.

Please allow 30 to 45 days for processing. See website for Dealer/Distributor near you.

**Our website address is: [www.gillbatteries.com](http://www.gillbatteries.com)**

**CALIFORNIA PROPOSITION 65 WARNING**  
**WARNING:** Battery posts, terminals and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer and reproductive harm. **Wash hands after handling.**

## EXHIBIT A

Battery Type	Warranty Period	Full Coverage Period	Pro-rate Coverage Period
7000 Series	24 Months or 1,200 Hours	First 12 Months or 600 Hours, whichever occurs first	Reminder of 24 Months or 1,200 Hours, whichever occurs first*

**\*PRO-RATE CALCULATION IS BASED ON ACTUAL MONTHS OR ACTUAL HOURS, WHICHEVER IS GREATER**

Date: \_\_\_\_\_

Owner: \_\_\_\_\_

Phone Number: \_\_\_\_\_

E-mail: \_\_\_\_\_

Distributor: \_\_\_\_\_

Dealer/Installer: \_\_\_\_\_

Aircraft Make/Model: \_\_\_\_\_

Aircraft Registration No.: \_\_\_\_\_

Aircraft Serial No.: \_\_\_\_\_

New Battery Serial No.: \_\_\_\_\_

Reason for Claim (please Describe.) \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Gill contact: \_\_\_\_\_

Warranty Authorization No. : \_\_\_\_\_

**Battery Part #** \_\_\_\_\_ **Serial #** \_\_\_\_\_ **Date Installed** \_\_\_\_\_ **Tachometer Time**  
**Removed** \_\_\_\_\_ **In** \_\_\_\_\_ **Out** \_\_\_\_\_

**REMOVE LABEL FROM BATTERY AND AFFIX HERE**

Service Period		Date	Maintenance Log		Battery Voltage	
Hours	Mths		MAINTENANCE PERFORMED (Be Specific)		Before	After
50	3					
100						
150	6					
200						
250	9					
300						
350	12					
400						

Battery Capacity Check \_\_\_\_\_ First \_\_\_\_\_ Second \_\_\_\_\_

### TELEDYNE BATTERY PRODUCTS GILL BATTERY WARRANTY

Applicable **GILLT 7000** series batteries manufactured by Teledyne Battery Products (**TBP**) installed after November 15, 2014 are warranted as follows:

- For a period of twelve months or 600 hours of operation, whichever occurs first after the date of installation, **TBP** will replace, at no charge, any battery manufactured or supplied by it which within the applicable twelve months or 600-hour period is found to the satisfaction of **TBP** to be defective in material or workmanship.
  - After the expiration of the applicable twelve months or 600-hour period described above and before the expiration of the total number of months or number of hours of warranty period applicable to the battery type in question, as shown on the chart (see Exhibit A), **TBP** will replace any battery manufactured or supplied by it which is found to be defective in material or workmanship. When replacement is made under this paragraph, the owner will pay a net price for a new battery which will equal the greater of:
    - the purchase price of the replacement battery divided by the total number of months included in the warranty period and then multiplied by the number of months the battery has been in service or
    - the purchase price of the replacement battery divided by the total number of hours included in the warranty period and then multiplied by the number of hours the battery has been in service. In applying the above formula, the number of hours on the replaced battery will be actual logbook hours or recorded tachometer hours from the date of commencement of the warranty period as specified above. See Exhibit A.
  - TBP** will not assume any responsibility for labor or transportation costs incurred in connection with the replacement of any battery under this warranty.
  - This warranty applies only to batteries on which the applicable manufacturer's inspection, maintenance and operating instructions and recommendations have been complied with.
- PERFORMANCE OF RECOMMENDED INSPECTION AND MAINTENANCE MUST BE DOCUMENTED BY APPROPRIATE LOGBOOK ENTRIES.**
- This warranty does not apply to any battery manufactured or supplied by **TBP** which has been subject to misuse, neglect or accident or which has been installed, repaired, maintained, or altered in any way that in the judgement of **TBP** has adversely affected the condition of the battery or which has been operated beyond factory recommendations.
  - This warranty does not apply if the manufacturer's code markings have been destroyed; or if the battery is of smaller size than that specified by the aircraft manufacturer.
  - TBP** reserves the right to change any battery specifications or prices without incurring any responsibility with regard to batteries previously sold.
  - THE SOLE AND EXCLUSIVE REMEDY UNDER THIS WARRANTY IS LIMITED TO REPLACEMENT AS SPECIFIED ABOVE. THERE ARE NO OTHER WARRANTIES EXPRESSED OR IMPLIED. SPECIFICALLY, BUT WITHOUT LIMITATION, THERE ARE NO IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT WILL **TBP** BE RESPONSIBLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF ANY DEFECT IN ANY BATTERY, ARISING OUT OF THE FAILURE OF ANY BATTERY TO OPERATE PROPERLY, OR ARISING OUT OF ANY BREACH OF THE WARRANTY MADE HEREIN.
- No person is authorized to give any other warranty or to assume any additional obligation or liability on behalf of **TBP**.
- This warranty is limited to replacement of the GillLT 7000 Series Battery only.
  - This warranty is limited to the original battery installed in original aircraft from the date of installation.
  - This warranty is not transferable.

## THE GILLT BATTERY LOG

THE GILLT BATTERY LOG CONTAINS OUR RECOMMENDED PRACTICES FOR TAKING THE BEST POSSIBLE CARE OF YOUR AIRCRAFT BATTERIES

Battery Serial Number



G02925387




MODELS  
7000 SERIES

TELEDYNE BATTERY PRODUCTS  
840 W. BROCKTON AVENUE  
REDLANDS, CA 92374  
www.gillbatteries.com

## CHARGING BASICS

Correct charging is very important and will affect the overall life of the battery. The charging process is not 100% efficient and will typically be 10% to 20% higher than the amount of capacity removed during discharge. Review charging instruction provided with the battery.

Undercharging a battery occurs when the required 105% to 115% of the removed capacity is not returned during recharge. If this were to occur repeatedly, residual uncharged lead sulfate will eventually increase in the plates, making it very difficult to recover. In this case the battery will suffer a permanent loss of capacity.

Overcharging a battery will corrode the positive grids and break the water down to hydrogen and oxygen (electrolysis). This is quite detrimental to the life of VRLA batteries.

Charging efficiency is affected by temperature. Lower temperatures will require higher charging voltages and vice versa for higher temperatures.

### Constant Current (CC)

This method uses a constant current throughout the charging period. Voltage will be as high as 2.67 volts per cell.

MUST have a functional timer to end charging.

Excessive charging with this method will overcharge battery.

Useful in recovering deeply discharged batteries.

### Constant Voltage (CV)

This is the preferred method of charging.

Charger output voltage is constant - typically around 2.36 volts per cell.

Starting charge rates could be variable (3A to 10A). Charge current will drop down to less than 0.5A when complete.

## CONTINUED AIRWORTHINESS TESTING

If the user cannot discharge a battery at the recommended discharge rate, call Teledyne Tech Support for the appropriate discharge curve for that battery. This curve can be used to determine the discharge time to the appropriate end voltage (1.67 volts per cell).

## MANAGING PERIODS OF NON-USE/LIMITED USE

To maximize the life of your GILLT battery, Teledyne recommends that the battery be checked every 6 months if aircraft is maintained at temperatures over 90°F or 12 months if less than 90°F.

### BATTERY SAFETY

ALWAYS WEAR GLOVES AND SAFETY GOGGLES WHEN WORKING WITH BATTERIES

Batteries generate explosive gases. Keep sparks, flames, burning cigarettes or other ignition sources away at all times. MAKE SURE THERE IS ADEQUATE VENTILATION WHEREVER A BATTERY IS USED.

FOLLOW THE MANUFACTURER'S INSTRUCTIONS AT ALL TIMES.

RECYCLE YOUR SPENT BATTERIES RESPONSIBLY. CHECK YOUR LOCAL STATE/FEDERAL GOVERNMENT FOR PROPER DISPOSAL INSTRUCTIONS.

Please keep the GILLT Battery log with aircraft/logbooks.

Keeping it Simple - A Guide to process your Warranty

Please fill form out completely. Battery failure must be reported within 7 days of failure or it will be date reported. **Incomplete forms will be rejected/returned.** User must obtain GILL Warranty Authorization Number from manufacturer. GILL Tech Support can be contacted through our website listed below or at: Within USA (800) 456 0070, or Outside USA (909) 793-3131, press option 3, between 7 am. to 4 pm. PST, Monday through Friday. Do not dispose of battery until Tech Support evaluation is completed. Complete documentation for the GILL Battery including the **New GILLT** Serial Number where indicated. Once warranty is authorized, submit the GILL Battery Log to any authorized Dealer/ Distributor **within 30 days of GILL authorization. GILL authorization remains in effect for 90 days, void thereafter.** Remove Serial Number sticker from battery and affix to form in box above the Maintenance Log. Please make a copy for yourself and submit original form to Dealer/Distributor.

Please allow 30 to 45 days for processing. See website for Dealer/Distributor near you.

Our website address is: [www.gillbatteries.com](http://www.gillbatteries.com)

**CALIFORNIA PROPOSITION 65 WARNING**  
**WARNING:** Battery posts, terminals and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer and reproductive harm. **Wash hands after handling.**

## EXHIBIT A

Battery Type	Warranty Period	Full Coverage Period	Pro-rate Coverage Period
7000 Series	24 Months or 1,200 Hours	First 12 Months or 600 Hours, whichever occurs first	Reminder of 24 Months or 1,200 Hours, whichever occurs first*

\*PRO-RATE CALCULATION IS BASED ON ACTUAL MONTHS OR ACTUAL HOURS, WHICHEVER IS GREATER

Date: \_\_\_\_\_

Owner: \_\_\_\_\_

Phone Number: \_\_\_\_\_

E-mail: \_\_\_\_\_

Distributor: \_\_\_\_\_

Dealer/Installer: \_\_\_\_\_

Aircraft Make/Model: \_\_\_\_\_

Aircraft Registration No.: \_\_\_\_\_

Aircraft Serial No.: \_\_\_\_\_

New Battery Serial No.: \_\_\_\_\_

Reason for Claim (please Describe.) \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Gill contact: \_\_\_\_\_

Warranty Authorization No. : \_\_\_\_\_