

Battery Part # _____ Serial # _____ Date Installed _____ Date Removed _____ Tachometer Time 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 **GILL_{LT} 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 Gill_{LT} 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 GILL_{LT} BATTERY LOG

THE GILL_{LT} BATTERY LOG CONTAINS OUR RECOMMENDED PRACTICES FOR TAKING THE BEST POSSIBLE CARE OF YOUR AIRCRAFT BATTERIES

Battery Serial Number _____



MODELS
7000 SERIES

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

Gill Maintenance Log Form QA-002W

November 2014

TBP DWG. NO. 1576 REV F

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 _____ DATE OF INSTALLATION _____

BATTERY TYPE _____ BATTERY SERIAL NUMBER G _____

AIRCRAFT MAKE _____ AIRCRAFT MODEL NUMBER _____

AIRCRAFT SERIAL NUMBER _____ AIRCRAFT REGISTRATION NUMBER _____

NAME _____

STREET ADDRESS _____

CITY _____ STATE/PROVINCE _____ ZIP CODE _____

E-MAIL (optional) _____ COUNTRY _____

ATTN: PRODUCT REGISTRATION

PLEASE
PLACE
STAMP
HERE

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

ATTN: PLACE STAMP AND MAIL OR PLACE IT INSIDE ENVELOPE AND MAIL

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

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. : _____

From