| | | Battery Voltage | Before After | | | | 2 | |
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| | | 1 | Date | | | | | - |
| | | Period | Hours OR Months | | | | | |
| | | Service Period | Hours OF | | | | | |

TELEDYNE BATTERY PRODUCTS

GILL BATTERY WARRANTY Applicable GILLLT 7000 series batteries manufactured by Teledyne Battery Products (TBP) installed after March 21, 2017 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 INSPECTIONS 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 judgment 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 a smaller size than that specified by the aircraft manufacturer.
- 7. TBP reserves the right to change any battery specifications or price 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 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 O F T H E 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 a Gill 7000 Series Batteries only.
- 10. This warranty is limited to the original battery installed in original aircraft from date of installation.

11. This warranty is not transferable.

THE GILL_{LT} BATTERY

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



MODELS

7000 SERIES

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

Gill Maintenance Log

Serial Number

Battery

March 2017

CODI ZIP REGISTRATION NUMBER O MODEL NUMBER BATTERY SERIAL NUMBER **OF INSTALLATION** COM COUNTRY site: www.gillbatteries AIRCRAFT AIRCRAFT DATE STATE/PROVINCE web our G register (and new product information, NUMBER DATE OF PURCHASE E-MAIL (optional) AIRCRAFT SERIAL STREET ADDRESS AIRCRAFT MAKE BATTERY TYPE NAME CITY

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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)

ENVELOPE AND MAIL

PLACE STAMP AND MAIL OR PLACE INSIDE

ATTN:]

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 **GILL**_{LT} 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 A T ALL TIMES.

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

Please keep the **GILL**_{LT} 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 GILL_{LT} 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 is: <u>www.gillbatteries.com</u>

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**.

Gill Maintenance Log

March 2017

EXHIBIT A

| Battery | Warranty | Full Coverage | Pro-rate Coverage |
|----------------|-----------------------------|---|---|
| Type | Period | Period | Period |
| 7000 Series | 24 Months or 1,200 Hours | First 12 Months or 600 Hours, whichever occurs first | Remainder 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 GILL _{LT} Battery Serial No.: | | | | | |
| Reason for Claim (please Describe): | | | | | |
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| | | | | | |
| Gill contact: | | | | | |
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| Warranty Authorization Number: | | | | | |

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