

# Rechargeable 12 Volt Battery

## Geotech Modular Battery Pack

This sealed lead acid battery will provide unequalled rechargeable performance. Its unique design provides a long service life, allowing the battery to be recharged up to 1,000 times. The high impact polycarbonate case takes punishing use. The case design incorporates molded corrosion resistant connectors to lock out water yet allow for easy charging. The battery is a 12 volt, 7.5 Ampere hour (at the 20-hour rate) rechargeable lead-acid dioxide battery. These units contain immobilized acid electrolyte that never requires maintenance. It is recommended to charge the batteries in an upright position for optimum life and capacity. Each battery is equipped with a polarized cigarette lighter type receptacle for operating numerous types of electrical appliances.

The Geotech modular battery pack will supply many hours of carefree service if charged properly. Most problems that occur with batteries are because they are not charged at sufficient intervals or allowed to remain in a discharged condition. It is recommended for optimum service that the following procedure is adhered to: **BEFORE USING BATTERY, RECHARGE FOR A PERIOD OF 18 TO 24 HOURS.**

### CHARGING RECOMMENDATIONS

To obtain maximum operating efficiency, life, and to maintain the warranty of the Geotech Modular Battery, the following should be observed:

Discharge Use	Recharge Time	Frequency
When using all available battery capacity	24-30 hours	Immediately
After intermittent use	18-24 hours	Every 12 days
When stored and not used	18-24 hours	Every 3 months

**Note:** If battery operating time is diminishing in use, extend the charge time to 36-48 hours periodically.



### CHARGING THE BATTERY

The tip of the receptacle is positive and the shell negative. When charging, simply remove the appliance plug and insert the charger plug for recharging the battery. When the battery requires recharging use only the PNP-694A charger. This charger is a constant potential, limited current silicon diode unit specifically designed and manufactured for charging the Geotech Modular Battery Pack. The charger is completely automatic and self regulating to prevent excessive charge voltages and current that would damage the battery. The charger has a cigarette lighter type plug for mating with the battery receptacle and plugs directly into a standard 115 volt AC source wall receptacle. To charge the battery, disconnect the appliance from the battery

receptacle and insert the charger plug into the battery. Then connect the 115 volt AC supply. To terminate the charge, remove the charger from the 115 volt source first and then remove the cigarette lighter plug from the battery.

Generally 18-24 hours is adequate to return battery to full charge. Should a decay in performance be observed, improvement may result by periodically extending the charge time to 48 hours. For stand-by applications the Geotech Modular Battery is to be charged at a constant potential of 2.28-2.32 volts per cell and will, without maintenance, sustain continuous float charging for periods measured in years. Charging in the inverted position is not recommended.

### PLACING THE GEOTECH MODULAR BATTERY INTO SERVICE

Before placing the battery into service it must be inspected to make sure that the battery has not been damaged by rough handling. If the unit has been damaged, there is a possibility of a loss of a small amount of sulfuric acid electrolyte and possible corrosion of adjacent components. Any sulfuric acid can cause severe burns to the skin and

eyes. If contact is made with a damaged battery, immediately wash the contact area with water for at least 15 minutes. If battery is damaged in shipment, file claim with freight carrier. The batteries are shipped in a fully charged condition. Before placing in service after storage, batteries should be charged for 18 to 24 hours.

**CALL GEOTECH TODAY (800) 833-7958**

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### WARNINGS

1. Battery contains toxic material (lead electrodes).
2. Do not charge in gas tight enclosures.
3. The battery compartment must have adequate ventilation away from sparks, flames or smoking. Under overcharge conditions, hydrogen and oxygen gases may be liberated and, if ignited, could result in an explosion.
4. Battery contains sulfuric acid electrolyte. If an accident occurs and the case is cracked or ruptured or if leakage is observed for any reason, flush the affected area with water and household baking soda until the acid is neutralized. If personal contact is made, flush skin or eyes with running water for at least 15 minutes. Seek immediate medical attention if eyes are affected.
5. Do not short-circuit battery terminals as this can cause an explosion or fire.
6. Keep batteries and chargers away from children.
7. Do not puncture, disassemble, mutilate or incinerate.
8. Dispose of battery with automotive battery scrap at an E.P.A. registered reclaimer.
9. It is unlawful to dispose of battery in landfill.
10. Do not discharge above 10 amperes or apply a short circuit to the battery.
11. Never connect with reverse polarity.
12. Do not charge in temperatures below 30°F or charge when connected to a discharge circuit.
13. Never store in temperatures above 100°F or in direct sunlight.
14. Do not use in temperatures above 130°F or below -65°F.
15. Do not discharge the battery below 9.0 volts.
16. Always keep battery in fully charged condition when not in use.
17. Exposure to extreme temperatures may cause damage to the battery or even explosion of the battery.
18. Mounting the battery pack upside down may cause damage or explosion of the battery.
19. Use the charger designed for the battery pack.
20. Premature battery pack failure may occur if the battery pack sits uncharged for too long.
21. Use only non-wax chemicals to clean battery case. Wax may cause case to degrade.
22. Return all repairs to Geotech for service. Do not attempt to service any electrical circuits to avoid potential for injury.

### STORAGE

Lead-acid batteries must not be allowed to remain in a discharged state and should be recharged as soon as possible after each use. Batteries stored at 65°F or less should be charged every six months. Units stored at room temperature or above should be charged every four months. Batteries should not be stored above 100°F.

Operational Temperatures – Lead-acid batteries will deliver energy at temperatures as low as -70°F, but cannot be efficiently recharged and discharged over a prolonged period below an ambient temperature of 32°F.

### IMPORTANT

Remember: All lead-acid batteries are recyclable. Proper disposal of batteries is very important to protecting the environment. Please do your part by disposing of lead-acid batteries with an E.P.A. certified battery recycler.

### LIMITED WARRANTY

The Geotech modular battery pack and the PNP-694A charger are guaranteed against any defects in material and workmanship for a period of 90 days from the date of purchase. In the event the battery and/or charger becomes inoperative within 90 days of purchase, both the battery and charger should be returned to Geotech. Proof of date of purchase is the responsibility of the customer. The bill of sale should be retained, and presented when returning the unit. Geotech will test the battery and charger and if that test reveals a defect in workmanship or material, the defective part will be replaced at no charge to the customer. The dealer test shall consist of a full 36 hour recharge by a serviceable charger followed by a discharge and recharge. The provisions of the warranty shall not apply to any battery or charger which has been subjected to abuse, neglect, fire, wreckage, explosion, water, freezing, breakage or distortion of container, or operation or storage of battery in an undercharged condition. The provisions of the warranty do not apply if other than the type PNP-694A charger is used to recharge the battery. The provisions of the warranty do not apply if the battery or charger has been repaired or altered by other than an authorized dealer. No other warranty, written or verbal, is authorized on this product.

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