

#### If you have Low Battery Indication:

1. Inspect the battery contacts on the battery , are they physically damaged? If yes replace the battery.

2. Is the battery fully charged? If yes continue, if not, does the battery show a full charge on another system? If the battery doesn't show a full charge on another system then recharge the battery. This is to rule out either a bad battery or a bad charger.

3. Repeat the process with the first system with another battery to determine if the system is defective, if yes contact the FSR's for assistance.

#### WARNING

If you believe you have an issue with the VMR-2 Batteries please contact your local FSR's listed in this document and get guidance on the proper procedures for handling, turn in and disposition of the batteries.

**DO NOT** heat, incinerate, short circuit, puncture, mutilate or attempt to disassemble any battery.

<u>DO NOT USE</u> any battery which shows signs of damage, such as bulging, swelling, disfigurement, leaking or staining inside the plastic packaging. If the battery becomes hot and stays hot after recharging or if the battery gives off an odor, continues to generates heat or smoke, becomes discolored, or in any way appears abnormal during use, recharging or storage remove the battery from the area and secure it in a empty vessel or ammo box to prevent harm to you or anyone in the area in case of an explosion. Return the battery to the FSR's and they will get you a new one.

Keep all batteries in their original packaging until ready for use.

#### WARNING

**<u>DO NOT</u>** store batteries in unused equipment for more than 30 days .

<u>DO NOT</u> place Lithium batteries in ordinary trash; turn them in for disposal in accordance with local regulations.

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**DO NOT** disassemble the battery in any manner.

<u>DO NOT</u> short – circuit the battery terminals.

**<u>DO NOT</u>** strike, or throw the battery against a hard surface.

Use only the charger specified that comes with the equipment. After using the VMR-2 and its battery or batteries in a mission remove and let the battery cool for approximately 30 minutes to 2 hours depending on how warm the battery has become. Remember the longer you use it the hotter it will become and the longer it takes too cool down before recharging. **DO NOT WRAP THE BATTERY IN A COOLWET CLOTH!** Let them cool on their own or in and air-conditioned environment or a shaded area at least.

#### WARNING

Allow the battery to cool after recharging before use if possible; this alone will increase the number of times you may recharge the battery leading to a longer use of life index. Also the Lithium Ion Polymer batteries do not require draining down before recharging like other batteries might...this would also shorten the life of the battery. Storing these batteries for extended periods of time does not require them to be fully charged. **KEEP THE BATTERIES COOL AND DRY AT ALL TIMES WHEN IN STORAGE WHEN POSSIBLE.** 

If the battery is needed right away then recharge it using an AC outlet, this provide a more steady form of power when recharging than say an MRAP or other vehicle charging methods.

Keep the battery dry at all times, if the battery becomes wet it may cause the safety device in the battery to be damaged and may cause a fire or cause a harmful situation to you and others, return it to the FSR's for a replacement.

#### WARNING

Do not use or leave the battery in a hot environment IE: (Do not leave the batteries on the hood of a vehicle or in strong direct sunlight, next to a fire or other heat source). **The cooler the battery is the better it will perform**. The batteries along with the detector are exposed to the harsh environment and neither will work properly for a period of time. The temperatures in the case can reach in excess of 140 degrees or more. This will only serve to shorten the life of the equipment and the battery and may render the equipment for a time unusable for a mission.

If the battery terminals become dirty or contaminated, clean them with a dry cloth, poor contact or improper contact will cause the detector to operate poorly or intermittently. **Putting the operator at risk!** 

Do not transport or carry on you person the batteries together with dog tag chains, metal necklaces, or other metal objects, this could result in the battery short circuiting.

#### WARNING

Lithium Non-Rechargeable Batteries contain a great deal of energy. They must never be charged or abused. Attempting to do so could result in leakage, fire or even an explosion.

Lithium-Sulfur Dioxide (Li-SO2) batteries contain a toxic, pressurized, and liquefied gas. It has a strong pungent odor. Lithium-Manganese Dioxide (Li-MnO2) batteries contain a flammable electrolyte. Both batteries contain pure Lithium which reacts violently with water.

### If a battery compartment becomes hot to the touch, if it hisses or makes a burping sound, or if you smell an irritating gas:

1) Turn off the equipment immediately and clear the area if you smell the pungent Sulfur Dioxide.

- 2) Let the equipment cool for at least an hour.
- 3) After the equipment is cool and the odor has cleared, remove the battery or batteries.
- 4) Install new battery or batteries and resume operation.

5) If the equipment again becomes hot to the touch, <u>do not</u> install new batteries and contact your FSR's to seek professional advice.

If equipment utilizes more than one lithium battery at a time such as the D-Cell battery adaptor kit, always replace all of the batteries at the same time using only fresh batteries. Replace with batteries from the same contract number, manufacturer, and similar date code only. Never mix batteries and never use a non-rechargeable and a rechargeable version of the batteries at the same time.

# **Charging the Battery**



<u>The vehicle must be turned off before connecting and remain off until rechargeable battery</u> <u>is fully charged.</u>

<u>Do not unplug the battery charger or remove the battery from the charger while it is</u> charging from the vehicle.

#### Error Codes:

<u>Yellow LED</u> – not active

<u>*Red LED*</u> – not active (after inserting battery)

Check power supply Change power cable Defective battery charger/Bad battery Charging time for new battery – 5 hrs. Lithium-Polymer Cell Battery Block

- -In MD only 12hrs
- -In GPR only 10hrs
- -In *Combined MD and GPR 8hrs*

# Minehound & Gizmo FSR's

Any question pertaining to batteries for VMR-2 and VMC-1can be directed to the following:

For the RC East you may contact in BAf:

Daniel Starrett or Robert Ortiz CECOM HHI Training Lanes/System Repair Minehound/GIZMO Team Bagram, Afghanistan DSN:318 481-8875 or 6491 Roshan: 011 93 079 377-5776 AKO: daniel.starrett@us.army.mil GMAIL: daniel.starrett@gmail.com SWA: daniel.c.starrett@afghan.swa.army.mil or

Roshan: 011 93 079 972-1241 AKO: <u>Robert.Ortiz9@us.army.mil</u> SWA: <u>Robert.Ortiz1@afghan.swa.army.mil</u>

# Minehound & Gizmo FSR's

Any question pertaining to batteries for VMR-2 and VMC-1can be directed to the following:

For the RC South you may contact in KAF:

Glen Starnes (EPS) GIZMO Team Kandahar Team Lead/Instructor/Technician CECOM TSD TDB PM CM-EOD AKO: <u>glen.starnes@us.army.mil</u> NIPR: <u>Glen.a.starnes@afghan.swa.army.mil</u> SIPR: <u>Glen.a.starnes@afghan.swa.army.smil.mil</u> Phone DSN:318- 421-6014 Rohsan: 079-812-8965 /079-084-0946 *or* AKO: <u>Jermaine.t.holloway1@us.army.mil</u>

SWA: <u>dennis.l.chavez@afghan.swa.army.mil</u>

# Minehound & Gizmo FSR's

At Camp Leatherneck & Dwyer USMC: Bernard Bilgri Team Lead, Training & Development Branch US ARMY, CECOM LCMC TSD Camp Leatherneck, Afghanistan DSN: 357-6227 NIPR: <u>bernard.bilgri@afg.usmc.mil</u> AKO: <u>bernard.bilgri@us.army.mil</u> <u>evans.brownsr@us.army.mil</u> <u>carlos.ramos2@afghan.swa.army.mil</u> <u>daristide@gmail.com</u>

### **Minehound & Gizmo Theater Lead**

Rory Calhoun CECOM LCMC TSD TDB Theater/Bagram Lead HHI DSN:318 481-1216 SIPR: 308 431-4667 Roshan: 011 93 079 689-6766 Roshan #2 011 93 079 957 6078 AKO: <u>Rory.Calhoun1@us.army.mil</u> SWA: <u>Rory.Calhoun@afghan.swa.army.mil</u> CENTRIXS: <u>Rory.Calhoun@afghan.swa.army.mil</u> SIPR: <u>Rory.Calhoun@afghan.swa.army.smil.mil</u>