One BOB-CAT Lane, P.O. Box 469
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(920) 699 2000
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Service Bulletin

Battery Warranty Policy Update

This bulletin supplements bulletin JC-004-07REV1

Date: January 10, 2014

Bulletin No: JC-14-01

Product Type: All Electric Start machines using the new AGM (**A**bsorbent **G**lass **M**at) battery. AGM batteries should not be confused with Gel Cell batteries as they are two different things.

Customer Issue: Battery failure.

Action Required: Batteries as outlined in our warranty policy are not covered by Schiller Grounds Care Inc. In the interest of customer satisfaction we adopted the policy outlined in bulletin JC-004-07REV1. That bulletin explains Schiller Grounds Care Inc. will cover the battery ONLY (no other related charges) on new machines that as the result of extended storage periods, failed at the time the machine was retailed. This policy still applies to all wet cell batteries

Change to policy: Schiller Grounds Care Inc. will now provide a **6 month warranty from the date of sale** on the **AGM** batteries used in BOB-CAT products. Warranty will cover the battery, flat rate labor and Admin Fee (if applicable).

Benefits of the **AGM** battery are:

- Non-Hazardous freight classification (allows shipping via common carrier. MSDS attached). You can order the battery (4167215) just like any other part.
- Spill proof.
- Smaller size than comparable CCA wet cell.
- Longer Shelf life (two years versus 6 months for wet cell). This is due to the matting process that is used in assembly that greatly reduces sulfating (deterioration) of the plates.
- Vibration resistant.
- Faster charge time (5 times faster than a wet cell).
- Endures cold better than a wet cell.
- Greater delivery of reserve energy (80% versus 50% for wet cell).

Negatives:

- **Important!** You have to know how to charge them if they become deeply discharged. (see AGM Battery Charging Facts below)

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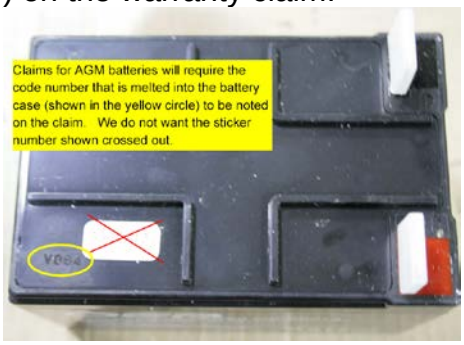
AGM Battery Charging Facts: If your charger does not have an "AGM" setting on it then you'll have to trick your charger into sensing the AGM battery. An AGM battery can discharge over 80% of it charge and still be good. Normal wet cells can not discharge 80% of their charge and still be good. Therefore older chargers are designed to not turn on when a battery is deeply discharged. To make an old charger sense the presence of an AGM battery you will need to hook the AGM battery in series (positive to positive, negative to negative as shown below) with another battery that still has at least 10.5 volts. The charger will now charge both batteries at the same time. Leave it on charge a couple hours and if the AGM battery is still actually good, just deeply discharged, it will come right back to life.

Warranty: AGM Batteries are subject to return. Please hold the battery until the claim has been paid (do not return the battery unless requested).
We will require the following to be done for the AGM battery warranty:

- Test the charge circuit of the engine.
- Try to charge the battery with either a charger that has an AGM setting or use the method described above.
- If battery fails then record the voltage AND the number that is melted into the top of the battery (illustrated below) on the warranty claim.



If you have any questions, please contact our Customer Service Department at 920-699-2000.
This bulletin is relevant to the departments checked below. Please circulate as appropriate.

SERVICE	WARRANTY	SALES	PARTS
X	X		X

Material Safety Data Sheet

Date: Jan 2, 2010

SECTION I. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT IDENTITY:	VRLA Rechargeable Lead Acid Batteries
PRODUCT SERIES:	ALL REMCO product series
MANUFACTURER NAME:	Remco Limited
COMPANY ADDRESS:	9/Floor Cheung Tak Industrial Building, 30 Wong Chuk Hang Road Aberdeen, Hong Kong
TELEPHONE:	(852) 2555 1394
FAX:	(852) 2873 4229

SECTION II. HAZARDOUS INGREDIENTS/ IDENTITY INFORMATION

HARDARDOUS COMPONENTS	CAS#	OSHA PEL	ACGIH TLV	% BY WEIGHT
LEAD	7439-92-1	0.05mg/m^3	0.15mg/m^3	67-71%
TIN	7440-31-5	2.0mg/m^3	2.0mg/m^3	<0.1%
ALUMINUM	7429-90-5	N/A	10.0mg/m^3	<0.01%
SULFURIC ACID	7664-93-9	1.0mg/m^3	1.0mg/m^3	6-7%
NON- HAZARDOUS INGREDIENTS				
WATER	7732-18-5	N/A	N/A	14-16%
CALCIUM	7440-70-2	N/A	N/A	0.01%
INERT COMPONENTS	N/A	N/A	N/A	7-12%

SECTION III. PHYSICAL/ CHEMICAL CHARACTERISTICS

Appearance and Odor: N/A	Solubility in Water: N/A
Vapor Pressure: N/A	Specific Gravity: 1.308
Vapor Density: N/A	Evaporation Rate: N/A
Boiling Point: N/A	Melting Point: N/A

SECTION IV: FIRE AND EXPLOSION HAZARD DATA

Flash Point (Test Method):	N/A
Oxygen Index:	>32_
Flammable Limits In Air:	Lower: N/A, Upper: N/A
Flammability:	UL 94HB or UL94V0
Extinguishing Media:	Dry Chemical, Halon, or Carbon Dioxide
Special Fire Fighting Procedures:	N/A
Unusual Fire and Explosion Hazard	Hydrogen gas may be present. Hydrogen gas and acid mist is generated upon overcharge or in fires.
Special Firefighting Procedures:	Ventilate the area well. Wear SCBA and acid protective clothing

SECTION V: REACTIVITY DATA

Stability:	Stable
Condition to Avoid:	Prolonged overcharging, sources of ignition
Compatibility (Materials to Avoid): Sulfuric Acid:Contact with combustibles and organic materials any cause fire and explosion. Also reacts violently with strong reducing agents, metals, strong oxidizers and water. Contact with metals may produce toxic sulfur dioxide fumes and may release flammable hydrogen gas.	
Lead Compounds: Contact with strong acid or base or presence of nascent hydrogen may generate highly toxic arsine gas	

SECTION VI HEALTH HAZARD DATA

Routes of Entry:	Eyes, In Eyes, inhalation, Skin and Ingestion (Not Applicable under normal use.)
Health Hazards (Acute & Chronic):	Severe burns and eye damage from sulfuric acid electrolyte.Illness from sulfur oxide fumes. Contains lead which is known to cause birth defects or reproductive harm.
Carcinogen: N/A	NTP: No
IARC: NO	OSHA Regulated: No
Signs & Symptoms of Exposure:	Irritation and acid burns
Medical Conditions Generally Aggravated by Exposure: N/A	
Medical Emergency and First Aid Procedures:	
For Sulfur Oxide Fumes:	Disconnect batteries, evacuated and ventilate
External:	Flush areas contaminated by sulfuric acid electrolyte with water
Internal:	Drink large quantities of water or milk, followed by milk of magnesia, beaten eggs or vegetable oil.

SECTION VII PRECAUTIONS FOR HANDLING

Steps to be taken in case material is released or spilled:
Avoid contact with sulfuric acid electrolyte from battery. Flush with water.
Waste Disposal Method:
Neutralize with solution of baking soda in water. Do not incinerate. Dispose with automotive battery scrap in accordance with local and federal regulations.

Precautions to be taken in handling and storing:
Keep batteries and the spilled material away from children
Batteries with released electrolyte shall be sealed in polyethylene bags or non-metallic container.
Allow adequate ventilation, hydrogen gas may be given off during neutralization

SECTION VIII HANDLING AND STORAGE

Store in a cool, dry area and away from combustibles. Do not store in sealed, unventilated areas. Avoid overheating and overcharging. Do not use organic solvents or other than recommended chemical cleaners on the batteries.

Other Precautions: Do not crack battery cases. Do not overcharge. Do not short circuit battery terminals. Keep lighted cigarettes, sparks, and filenames away from charging batteries

SECTION IX CONTROL MEASURES

Respiratory	Protection: NIOSH approved acid mist respirator, if OSHA PEL is exceeded.
Ventilation:	Natural ventilation is sufficient under normal use and handling. To prevent buildup of hydrogen gas, 2-3 room air changes per hour is recommended.
Protective Gloves:	Rubber or Neoprene
Eye Protection:	Chemical goggles or safety glasses with side shields and a full face shield is recommended
Other Protective Equipment and Clothing:	Acid resistant apron or clothes.
Work/ Hygienic Practices:	Do not wear metallic jewelry when working with batteries. Use non-conductive tools only. Discharge static electricity prior to working on a battery. Maintain an eyewash, fire extinguisher and emergency communication device in the work area.

SECTION X TRANSPORTATION INFORMATION

- Battery, Non-spillable, electric storage
- REMCO batteries are not regulated as Hazardous Material for transportation.
- REMCO batteries complies with the D.O.T. provisions listed in CFR 49, 173.159(d), therefore is not subject to hazardous shipping requirements.
- REMCO batteries meet the conditions in IATA / ICAO Special provision A67 for air transportation.
- REMCO batteries meet the conditions of IMDG special provision 238 for vessel transportation.