

MAFES Dawg Tracks



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*Safety Tips:
General Battery
Safety*



Battery safety is a subject that is lightly taken and safety tips are taken for granted in many cases. If you have never witnessed an incident involving battery problems you are at an advantage. I have and it is an ugly site. My Dad was checking a battery with channel lock pliers, crossing from one post to the other trying to determine why the battery would not accept a charge. The battery exploded covering his face with acid. A water hose was close to us, so I grabbed the hose and covered his face continuously for several minutes with clear water, flushed his eyes and got him to an optometrist. We saved his eye sight but he experienced some facial burns.

Lead-acid batteries are chemical machines that produce power on demand. Typical batteries have a number of individual cells containing layers of lead plates immersed in sulfuric acid. The acid contacts the lead plates inside the cell and energy is produced. The main battery terminals have a positive and negative post. The battery may also have vent caps on top of it. The caps serve two purposes; they permit checking and maintenance of water levels and provide a vent for gases to escape when the battery is charging.

DANGER OF EXPLODING BATTERIES-

Scalable Link Interface (S.L.I.) batteries. SLI batteries is the new name for the technology with new automobiles (since 1998) that has to do with linking computer cards for faster and more efficient starting and battery maintenance. These batteries contain sulfuric acid and produce a mixture of hydrogen and oxygen. Because self-discharge action generates hydrogen gas even when the battery is not in operation, be sure the batteries are stored in a well-ventilated area. Always wear (ANSI Z87 1) approved safety glasses or splash proof glasses when working on or near batteries.

- ✓ Always wear proper eye, face and hand protection.
- ✓ Keep all sparks, flames, and cigarettes away from the battery.
- ✓ Do not try to open a battery with non-removable vents.
- ✓ Keep removable vents tight and level except when servicing electrolyte.
- ✓ Be sure that the work area is well ventilated.
- ✓ Never lean over a battery while boosting, testing or charging.
- ✓ Use extreme caution when working with metal tools or conductors to prevent short circuits or sparks.
- ✓ Always read and follow the precautionary labels on the product.

SAFE CHARGING TIPS-

Do not attempt to charge a battery without first reviewing the instructions for the charger that you are using - in addition to the manufacturer's instructions.

Refer to the above safety tips when charging a battery and additionally follow the others listed in the next column.

- Turn the charger and timer to the "OFF" position before connecting the leads to the battery to avoid dangerous sparks.
- Do not attempt to try to charge a damaged or frozen battery.

SAFE BOOSTER CABLE OPERATION-

If we can't start our vehicle we usually refer to the battery as being "dead." Obviously, this is technically incorrect. The battery needs to be recharged, unless the cells are dead. This can be detected with a tester. Normally, recharging or jump starting, the alternator will pump the battery backup in 30 to 45 minutes. If the battery won't accept the charge then the unit will need to be replaced. Following are some tips for safe booster cable operation:

- When jump starting or "jumping-off" a vehicle, be sure to wear the eye and face protection.
- Inspect both batteries before connecting them up with the cables. If the battery is not sound and the vent caps aren't in place and level- don't attempt to jump start it.
- Check the vent caps for tightness and that they are level.
- Be sure that both vehicles aren't touching and the ignition is off in both vehicles.
- Check the owner's manual for other safety tips.

SAFETY TIPS FOR NON-VEHICLE TYPES-

- ✓ Always follow the manufacturer's instructions for the batteries and the product that the battery is intended for.
- ✓ Check the contacts on the battery and the battery-operated product for cleanliness.
- ✓ Be sure that you insert the batteries with the proper polarity positions. (Matching the + & -) in the product.
- ✓ Remove and dispose exhausted batteries properly.
- ✓ When replacing batteries in a product, replace all at the same time.
- ✓ Do not short circuit batteries.
- ✓ When the positive (+) or negative (-) contacts touch each other they can short circuit. As example- loose batteries in a pocket come in contact with keys or coins - they can short circuit causing an explosion or venting.
- ✓ Do not heat batteries.
- ✓ Do not crush, puncture, dismantle, or otherwise damage batteries.
- ✓ Do not attempt to recharge non-rechargeable batteries
- ✓ Keep batteries out of the reach of small kids.

Following these tips for vehicular type batteries and small battery type products will give you hours of untroubled or uninterrupted safe service for both yourself and the particular product being used.

BE A LEADER- FOLLOW THE SAFETY PROCEDURES!
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