

NEW GENERATION BATTERY TECHNOLOGY

1. There are important differences in activating a sealed VRLA battery. **Be sure to follow the instructions in this section.**
2. While Yuasa sealed VRLA batteries *dramatically reduce the need for maintenance*, they do need periodic charging. It is important to remember this and to know how to go about it.

ACTIVATION AND INSTALLATION

1. Fill battery up with electrolyte, following the procedure shown in the instructions found inside the box.
2. Remove the container. For batteries 3 AH – 12 AH, ***let the battery stand for at least 30 minutes.***
3. Newly activated sealed VRLA batteries require an initial charge. Follow instructions on battery

After charging is completed, ***press down firmly with both hands to seat the caps (do not pound with a hammer).***

The battery is then sealed. There is no need to remove the strip of sealing caps or add electrolyte for the life of the battery.

Charging a Newly Activated Sealed VRLA Battery

Sealed VRLA batteries require an initial charge. If you are using a constant current charger, refer to the standard (STD) charging method printed on the battery. If you are using an automatic type taper charger, check to make sure that the charger current (amps) is equal to or greater than the standard (STD) charging method listed on top of the battery.

These batteries are a sealed VRLA construction – which means:

NEVER REMOVE THE SEALING STRIP AFTER CHARGING IS COMPLETED!!
If the battery gets very hot to the touch, cease charging and allow battery to cool down.

Check voltage using a voltmeter. Readings for a charged, newly activated battery should be 12.8v or higher after the battery is charged and sits for at least 1-2 hours. If reading is less, it needs an additional charge.

Routine Charging

The single most important thing to maintaining a sealed VRLA battery is: **don't let it sit discharged: keep it fully charged.** A sealed VRLA motorcycle battery should be kept to near fully charged for peak performance. In fact, it can need charging more often than a car battery *because it's probably not used routinely* and, therefore, not "automatically" charged.

Use the following guidelines for boost charge. Always verify battery condition before charging and 30 minutes after charging.

A fully charged battery should read 12.8v or higher **after battery has been off the charger 1-2 hours.**

OVERCHARGING CAN HARM YOUR BATTERY BEYOND RECOVERY.

A word on overcharging: *don't!* Because of the characteristics of a sealed VRLA battery, too much of a boost charge will decrease the volume of electrolyte. The longer the overcharge time, the greater the drop in electrolyte – and starting power.

Water can't be added to the sealed VRLA battery to make up the difference. Overcharging can warp plates, making future charging difficult or impossible. Watch charging times carefully, or ideally, use a Yuasa Automatic Charger. Always stop charging if the battery becomes really warm to the touch. Let it cool down 6 – 12 hours and resume charging.

State of Charge	Voltage	Action	Charge Time*
100%	12.8V – 13.0V	None – check at 3 months from date of manufacture	None required
75% - 100%	12.5v – 12.8v	May need slight charge If no charge given, check in 3 months	3 – 6 hours
50% - 75%	12.0v – 12.5v	Needs charge	5 – 11 hours
25% - 50%	11.5v – 12.0v	Needs charge	At least 13 hours Verify state of charge
0% - 25%	11.5v or less	Needs charge	20 hours

* Using a constant current charger at std. Amps specified on the battery.

Charging Instruction for Sealed VRLA Batteries with Voltage of 11.5 or Less

Batteries with voltage fallen below 11.5v may require special equipment and procedures to recharge.

In charging an overly discharged battery having a terminal voltage of 11.5v or lower, its internal resistance may be too high to charge at a normal charge voltage. Therefore, it may be necessary to raise the voltage of the battery initially (25v maximum) and charge for approximately 5 minutes. If the ammeter shows no change in current after 5 minutes, you need a new battery.

Current flowing into the battery at high voltage can become excessive. Monitor amperage and adjust voltage as necessary to keep current at the battery's standard amp rating. Charge for approximately 20 hours.

Routine Maintenance for Sealed VRLA Batteries

Check voltage periodically using a voltmeter.

- Recommended each month from date of activation. Keep in mind, higher storage temperatures cause faster self-discharge and require checking more often.
- If you plan to store your vehicle for an extended time, make sure your battery is fully charged.
- Fully charged should read 12.8v – 13.0v after standing 1 –2 hours.
- When a battery is in storage, check and charge it if the voltage drops below 12.5v for YTX batteries.

Beyond that, maintenance is the same as for any battery, except you don't have to worry about electrolyte:

- Keep the battery top free of grime.
- Check cable, clamps and case for obvious damage or loose connections
- Clean terminals and connectors as necessary.
- For storage, pull battery or disconnect battery cable.