FAQS

The following are the most frequently asked questions.

What type of Electrolyte to use for a dry Conventional battery?

For dry Conventional batteries, 1.280 standard gravity electrolyte is recommended and can be found at your local auto store.

How long should a battery last?

Many factors affect the life of a battery:

- **Climate**: Colder climates tend to be hard on batteries from a starting standpoint, and for the fact that many people put their bikes away for the season when not using. Sometimes without charging properly. Hotter climates tend to discharge batteries quicker, and dry out batteries quicker. “Average” climates are the best for long battery life.
- **Usage**: A battery that is used every day has the most chance of living a long life. Batteries that sit a lot, many times are neglected. This shortens overall life. Periodic charging is the best defense.
- **Application**: How well is the battery charged in the vehicle? Some vehicles have better charging systems than others. Older bikes have worse charging systems than new ones. Are there a lot of extra accessories on your vehicle? Sometimes a battery has a hard time keeping up with additional electrical drains, thus wearing it out quicker.

Negative Factors:

- **Sulfation**: A build up of crystals on the plates of a battery. This comes from not charging a battery properly. The more sulfation that builds up, the harder the battery is to charge, until finally it does not charge at all.
- **Water Loss**: Can come from overcharging, or just simple evaporation over time. This only happens with conventional batteries. This does not happen with sealed AGM batteries. Once the plates of a battery are left open to the air, above the fluid level, they can corrode very quickly. Corrosion can cause an internal short, and very quickly destroy the battery. Keeping proper water levels maintained is very important.
- **Lack of Charging**: As mentioned previously, lack of proper charging is the main reason that a battery will not last as long as it should. At the very minimum, a battery should be charged once a month if left unused.
- **Complete Drain**: Have you ever left your key on, and totally killed the battery? If recovered in a short time period, the battery should charge back to 100%. But every time this happens, it is similar to the battery having a “heart attack”, and shortening its overall life. Always turn your vehicle off with the keyed ignition switch, not the “kill switch”.

Better Battery Choice:

- **AGM:** Sealed AGM batteries typically last 3 to 5 years on average. 6 to 8 years is easily obtainable with proper maintenance. Typically sealed AGM batteries will give warning before completely dying. They will start slower, and require more charging. This is your clue to replace the battery. Typically they do not fail all of a sudden.
- **Conventional:** Conventional “acid-filled” batteries have a harder life, for many of the reasons listed above. Conventional batteries typically only last 2 to 3 years on average. Although, 4 to 5 years is possible, in the best environments, and with excellent maintenance.

What is the warranty policy for a Yuasa Battery?

Yuasa Battery, Inc. does not handle warranty issues directly. All inquiries should be directed to the dealer where the battery was purchased. The dealer's distributor sets the warranty period and handles all warranty claims. The warranty time frame and terms are not specified by Yuasa.

How should I maintain my Yuasa battery?

- **Always keep** the acid level between lower and upper lines on front side of the container (conventional type batteries)
- **Do not** let the battery stand in a discharged condition.
- **Charge battery** once a month
- When your motorcycle is stored over 30 days, plug in a Yuasa automatic battery charger to maintain a proper storage charge
- **Keep battery** top clean, dry and free of dirt
- **Clean battery terminals** to prevent corrosion. Inspect vent tube, ensuring that it is not bent, twisted or clogged.
- **Protect** the battery from strong impacts or shocks

What can cause a new battery to fail after installation?

If a new battery becomes unserviceable within a few days or weeks after its installation it may be due to one or more of the following reasons:

- A faulty charging system
- A short circuit in the electrical system
- Battery terminals are dirty or not properly connected
- Excessive ignition off drains or high parasitic drains
- Electrical capacity of the battery is insufficient for size of the vehicle
- The battery has been inadequately activated, dissipating its strength from the outset
- The battery, after being filled with acid has been left too long without initial charging, and has been allowed to become sulfated

Contact a qualified technician if condition remains the same.

Why doesn't my Yuasa battery hold a charge?

When a battery is in an excessively discharged state, it does not readily accept a standard charge. The battery may appear to be accepting a charge, but charging is occurring only at the surface of the plates.

With an AGM (sealed lead-acid) battery, higher voltage is required to get the job done. Charge the battery using a charger that can consistently supply between 18 and 20 volts. Typically a charger like this is only found in the service department of a motorcycle shop. The service technician should test the battery prior to charging, and again after charging is complete. Charge time will vary based on how bad the battery is discharged. Final testing will tell you if the battery has been recovered, and to what extent.

With a conventional (flooded) lead-acid battery, slightly higher than normal charging amps are required to recover the battery from an excessively discharged state. This higher rate could be up to 10 amps, but no more. The battery may get warm during charging, but this is a good sign. It means the battery is charging. Make sure the battery's water level is up to the top line before charging, and

monitor throughout the charging process to make sure no additional water is lost. If so, replace water as needed.

If the battery still does not hold a charge after going through these procedures, best bet is to purchase a new battery. In order to ensure that the new battery does not suffer the same fate, make sure battery is charged properly and frequently enough to keep it from draining to an excessively discharged state. Charging once a month is recommended in most cases. More frequent charging may be required on today's vehicles that tend to have a constant electrical drain. Typically, electrical drain can come from a radio, clock, alarm system, or other computer memory.

How to determine whether or not my Yuasa battery has been fully charged?

The following characteristics will tell you if a battery has been properly charged:

- The specific gravity of the acid is over 1.275 (conventional type batteries only)
- Maximum voltage output across battery terminals can be maintained at constant level for two hours
- Open circuit voltage is stabilized at 12.7 volt or higher at 6.3 volt or higher for 6 volt batteries

What is the normal charge rate for my Yuasa battery?

Naturally, batteries of different capacities require different charge rates. Generally, a battery should be charged at a slow charge rate of 1/10 its given 10 hr. capacity.

What are the benefits of charging my Yuasa battery once a month?

When not in use, a battery discharges on a daily basis sometimes up to 0.5-1%. This rate of discharge increases when the climate is warm. To make up for this loss from disuse, a boosting charge should be given once a month.

What is sulfation?

Discoloration of plates with white lead sulfate crystalline deposits may occur when the battery has been left for a considerable time in a discharged condition. It can also occur as a result of the plates being exposed to air due to low electrolyte level, or when a new battery is filled with acid and stored without being charged. This phenomenon is called sulfation. Once plates have been sulfated, the activity of the affected area is permanently impaired, and the battery may not be restored to its original capacity.

Can an AGM battery be installed in any position?

In most applications, batteries are installed in an upright position, but in some situations there is a need to tilt them (sometimes at very extreme angles) or lay them completely flat on their backs.

Conventional "wet" style batteries should never be mounted in any orientation other than upright since there is liquid electrolyte that could escape the battery.

Maintenance-free, absorbed glass mat (AGM) style batteries offer more flexibility regarding mounting angles because the electrolyte is absorbed, not flowing freely.

Different battery models have different limitations regarding mounting angles.

What does "VRLA", "MF", "AGM", and "SLA" stand for?

All 4 of these terms basically refer to the same type of battery. An example of this would be the Yuasa YTX series. These batteries are typically all black in color:

- **VRLA:** Valve Regulated Lead Acid
- **MF:** Maintenance-Free "
- **AGM**: Absorbed Glass Mat
- **SLA**: Sealed Lead Acid.

This battery would be Yuasa's 12N-series or YB-series (Yumicron) type batteries.These batteries are typically white with a black top, and with yellow or green acid filling caps:

- **Standard SLI** (Starting, Lighting and Ignition) refers to any standard, non-sealed battery. In this case SLI refers to older style batteries used for powersports type vehicles.

What is the battery exhaust vent tube?

When a battery is charged and discharged, water contained in the electrolyte is decomposed, generating hydrogen and oxygen gases. These gases are vented out of the battery through the exhaust vent tube to prevent potentially damaging high pressure gas accumulation. Every exhaust tube comes with a small slit at each end. The reason for this slit is to release the gas, in the event that the bottom of the tube gets clogged by road debris. For this reason, it is most important to make sure the slit at the top near the battery is functioning properly.

Always be sure to remove the small red sealed tube when installing the battery. Never put this red tube back on to the battery after it is activated. Gases built up in a battery that is not allowed to vent can cause serious damage, and possible injury, if the battery bursts.

Why won't my Conventional ATV/Watercraft battery not fill with acid?

This condition is normal for special "high top" batteries. It is the same for all of the following batteries:

- 12N7D-3B
- YB7C-A
- YB9A-A
- YB10A-A2
- YB12C-A
- YB14A-A1
- YB14A-A2
- YB16CL-B
- YB30CL-B

All 9 of these battery types are what is referred to as "**Spill Resistant**". They all have 6 individual valves per cell. The red seal tube really does not hold the air in, the yellow filler cap does. These batteries are all used in applications where the battery could be exposed to a roll-over (ATV and PWC). You will notice that all 9 of these batteries have higher (taller) black covers than a standard battery. This is where the extra venting/valving is housed. The key to filling is allowing air to get in the filling hole, while filling the acid through the hole as well. If you try to seal the hole tight, and pour the acid, it will not go anywhere, because there is nowhere for the air to dissipate.

How do I eliminate my acid level sensor when switching to a sealed battery?

After installing the sealed battery, retain the original sensor, including diode if so equipped.

- Cut off plastic battery sensor, as close to end of wire as possible.
- Obtain crimp-on type 1/4" diameter ring connector.
- Strip end of sensor wire and crimp on ring terminal.
- With vehicle's ignition on, low acid indicator will be illuminated.
- While watching indicator, touch ring terminal to positive battery terminal, then to negative battery terminal.
- One of the two terminals (depending on bike type / model) will make the indicator go out.
- This is the battery terminal that you want to bolt your ring connector to.
- Installation is then complete.

The other option would be to remove the bulb, that lights up the indicator, on the dash board.