



Service Bulletin

American Honda Motor Co., Inc.

Battery Preparation and Maintenance

(This supersedes SL #48, dated November 2006.)

Battery preparation and maintenance is *extremely* important for vehicle performance and customer satisfaction. Prolonged storage of activated batteries without periodic charging can result in a deeply discharged battery. Discharged batteries are prone to sulfation, which will eventually make them unrecoverable. Therefore, it is of utmost importance to properly maintain batteries, whether they are in units or in parts inventory.

BATTERY TYPES

DRY-CHARGED (YB and YTX) BATTERIES

All YB (conventional) and YTX (maintenance-free) batteries delivered with Honda powersports products (all years) are "dry-charged" by the manufacturer. Each battery cell is carefully charged, drained, dried, installed, and sealed prior to shipment. This practice enables new batteries to be stored for long periods of time without deterioration. Dry-charged batteries are dealer-activated by installing the specified electrolyte and then charging them with a battery charger.

PRE-FILLED (YTZ/GYZ) MAINTENANCE-FREE BATTERIES

Most Honda motorcycles since model-year 2000 and some 2012 and later ATVs have YTZ/GYZ type batteries. These batteries are completely filled, sealed, and charged at the factory, and therefore require no dealer-activation. Because these batteries are factory-activated, they are subject to discharge while stored in units or in parts inventory. Battery voltage should be checked every three months and the battery charged as necessary.

UNIT INVENTORY BATTERY HANDLING

DRY-CHARGED (YTX) BATTERIES

- Do not activate dry-charged batteries until the vehicle sale and customer delivery time are confirmed. Activated batteries can sulfate if not charged for more than two weeks. If allowed to sit for longer than two weeks before vehicle delivery, this sulfation may destroy the cells soon after the vehicle is first ridden.
- To activate the battery, refer to the *Maintenance-Free Battery Service Procedures* wall poster ([page 3](#)) for detailed instructions.

PRE-FILLED (YTZ/GYZ) BATTERIES

- When new units arrive in your inventory, check the battery voltage using a digital voltmeter.
NEEDS CHARGING: Below 12.4 volts
- If the battery needs charging refer to the *Maintenance-Free Battery Service Procedures* wall poster ([page 3](#)) for detailed instructions.

CUSTOMER INFORMATION: The information in this bulletin is intended for use only by skilled technicians who have the proper tools, equipment, and training to correctly and safely maintain your Honda. These procedures should not be attempted by "do-it-yourselfers," and you should not assume this bulletin applies to your Honda, or that your Honda has the condition described. To determine whether this information applies, contact an authorized Honda dealer.

NEW BATTERY (BEFORE DELIVERY) PREPARATION

DRY-CHARGED CONVENTIONAL (YB, Y50) BATTERIES

Refer to the *Maintenance-Free Battery Service Procedures* wall poster ([page 3](#)) for detailed battery preparation instructions.



Important Notes:

- Do not activate dry-charged batteries until they are ready for customer pickup.
- If the vent tube is kinked, place it in boiling water for a few minutes.
- Never install a filled, but uncharged battery. The battery must receive its initial charge before using the electric starter, otherwise battery life will be significantly shortened.
- When installing the battery, make sure the breather tube is properly routed and not obstructed or kinked, since improper routing can result in the vehicle being damaged by acid. If a new tube was supplied with the battery, discard the old tube and connect the new one.
- Show each customer the location of the battery, and explain proper maintenance procedures. Stress the importance of routinely checking the electrolyte level and recommend that only distilled water be used for topping up.

DRY-CHARGED MAINTENANCE-FREE (YTX) BATTERIES

Refer to the *Maintenance-Free Battery Service Procedures* wall poster ([page 3](#)) for detailed battery preparation instructions.



IMPORTANT NOTES:

- Do not activate dry-charged batteries until they are ready for customer pickup.
- Use only the designated electrolyte pack for the battery model.
- YTX Maintenance-free batteries have a built-in safety relief valve to control internal pressure. They have an external vent, but no vent tube.
- Do not seal the battery until it has been fully charged.
- Never install a filled, but uncharged battery. The battery must receive its initial charge before using the electric starter, otherwise battery life will be significantly shortened.
- It is not necessary to check the electrolyte level of maintenance-free batteries. The Sealing Cap Strip should never be removed once the special electrolyte has been added to the battery.
- Never attempt to remove the Sealing Cap Strip or add any type of fluids to any maintenance-free battery. Any signs of tampering will void the battery's warranty.

PRE-FILLED (YTZ/GYZ) MAINTENANCE-FREE BATTERIES

1. Check the voltage using a digital voltmeter.

NEEDS CHARGING: Below 12.4 volts

2. If the battery needs charging refer to the *Maintenance-Free Battery Service Procedures* wall poster ([page 3](#)) for detailed instructions.



CUSTOMER (IN-SERVICE) BATTERIES

If a Honda comes into your shop with a discharged Yuasa or GS-Yuasa battery, test the battery using the Midtronics Micro 404XL Battery Analyzer according to the instructions on the *Maintenance-Free Battery Service Procedures* wall poster ([page 3](#)).

- The battery analyzer will give further instructions and specific charging information.
- Remind the customer that the battery should be charged every 30 days if the vehicle is not being used. This will help prevent sulfation from forming inside the battery. Recommend the **Pro Honda OptiMate3+** (P/N: 31670-BMS-004) battery charger to your customers who can benefit from a maintenance charger.

BATTERY DOs and DON'Ts

- Due to size, mounting position, and venting requirements, conventional batteries (YB/Y50), YTX, and YTZ/GYZ style batteries should **not** be interchanged. Only use the correct **type and size** of battery when a replacement is necessary.
- Store batteries in a level position in a cool, dry place. Do not remove the sealed breather tube/aluminum sealing strip until battery activation. These preserve the battery's shelf life.
- Any installed battery that will be out of service for longer than two weeks should be placed on a battery charger/maintainer.
- Do not deliver a battery that has not been properly filled and charged.
- Do not reopen a sealed battery for any reason.
- Do not use an automotive-type charger to charge the battery as it may damage the battery.

BATTERY TESTING/CHARGING EQUIPMENT AND RESOURCES

The following required poster and special tools must be in your dealership's battery station. At present, the tools listed are the only ones that meets American Honda's requirements for battery testing and charging:

Maintenance-Free Battery Service Procedures wall poster (Reorder #: S9515.1)

The battery service procedures poster can be ordered from [Helm Inc.](#) at: (888) 292-5393



Midtronics Micro 404XL Battery Analyzer (T/N: MTRMCR404XL)

Christie Battery Charger (Model MC1012/2T) (T/N: CAPMC1012-2T)

The battery analyzer and charger can be ordered through the Honda Tool and Equipment Program at: (888) 424-6857.



BATTERY CARE RESOURCES ON iN

[Battery Care Resources - Home Page](#)

[Midtronics Micro 404XL Quick Start Guide](#)

[Midtronics Micro 404XL Instruction Manual](#)

[The Wrench: Battery Special Edition - July, 2008](#)

[Service Tool Newsletter \(STN\) #17: Christie Battery Charger MC1012/2T](#)