



GENUINE MOTOR PARTS AND MOTOR ACCESSORIES BULLETIN



PAB1088

2020-01-31

PAB1088: LITHIUM LIFE BATTERIES APPLICATION & OPERATION INFORMATION

Purpose for Parts and Accessories Bulletin

NOTE

- **Important:** Verify that all departments of the dealership receive and read this bulletin.
- **Note:** Some on-line, digital content has been temporarily removed pending updates. The content will be reposted once the updates are completed.

To explain the benefits and clarify the usage of the Lithium LiFe batteries. Dealers should also inform customers of this information prior to or at time of sale.

Markets Affected

All markets are affected.

Receiving a Lithium ion Battery

- Due to some shipping regulations the Li-ion (Lithium-Ion) batteries are shipped at a low state-of-charge, voltage will vary. Dealers should perform the following:
 - Verify battery voltage is equal to or greater than 8 V before accepting delivery of the battery.
 - Dealer must fully charge the battery to 13.4 V prior to sales or installation. Refer to Table 1.

NOTE

A low state-of-charge Li-ion battery may take up to 5–9 h to fully charge to 13.4 V.

Summary of Lithium ion Battery

- Must be fully charged to 13.4 V prior to sales/installation.
- The battery status indicator gives a general state of charge of the battery. Voltage should be checked with DVOM (Digital Volt Ohm Meter) to verify that it is fully charged before delivering to customer or installing in a vehicle.
- Use the appropriate Harley-Davidson lithium ion mode changer (or equivalent) to fully charge battery to 13.4 V. Refer to Table 1.
 - Standard chargers used on any AGM (Absorbed Glass Mat) battery **will not** fully charge the Li-ion battery to 13.4 V. For this reason Harley-Davidson recommends using a charger with Li-ion mode to fully charge the Li-ion battery.
 - Li-ion chargers (when in Li-ion mode) are not to be used on AGM batteries. These chargers will overcharge and damage an AGM battery.
- All vehicles use a small amount of power even when stored. A Harley-Davidson constant monitoring battery charger or tender is recommended to maintain a full charge between rides or when a motorcycle will not be ridden for more than two weeks. The Lithium LiFe battery should be on an appropriate battery tender to verify that the battery does not drop below 8 V.

Improved applications for the Lithium ion battery:

- **Weight:** Customers will notice a weight saving compared to the AGM batteries.



- **CA:** The Li-ion battery supplies extra CA (Cranking Amps) for starting the vehicle compared to the AGM batteries.
- **Cold Temperatures:** The Li-ion battery can be safely stored down to -29 °C (-20 °F). The Li-ion battery will lose performance at colder temperatures. Once the battery warms up battery will have its full capacity.
- **Maintain Charge:** If the batteries are not connected to a vehicle, the Li-ion battery maintains a charge longer than AGM battery.

Lithium ion batteries are not suited for all applications:

- **Accessory Mode Usage:** Li-ion technology provides upgrades, but with these upgrades come a reduced Ah (Ampere-hour) rating. Due to the reduced Ah rating, the battery has less overall capacity. As a result, the vehicle will need to be placed on the battery tender sooner than an AGM battery or a higher Ah capacity.

Suspected lithium ion battery failure:

- Verify battery voltage with a DVOM.
 - **Equal to or greater than 8 V:** Fully charge battery to 13.4 V with a recommended Li-ion battery charger. Refer to Table 1.
 - **Less than 8 V:** Do not charge battery. If within the applicable warranty period, submit a warranty claim.

NOTE

Enter the state-of-charge (voltage) found when battery was tested into comment section of claim.

- Further updates regarding the Li-ion batteries will be available on TT453: Battery Best Practice Information.

Table 1. Harley-Davidson 800 mA Charger

Country	Part No.	Charging Time
U.S., Canada, Mexico, South America	66000181	5–9 h
Europe	66000182	
United Kingdom	66000183	
Australia	66000184	
Japan	66000185	

Questions

Contact Technical Service with any concerns regarding application. Direct all other questions to the Dealer Services Representative.