

ACDelco AGM PowerSports Batteries Charging Instructions (New Batteries):

New Battery Testing:

When checking the condition of a new battery prior to installation, ACDelco recommends only measuring open circuit voltage (OCV). ACDelco recommends a minimum installation OCV of 12.4volts.

1. Batteries that fall below 12.4 volts should be recharged, prior to installation.
2. The battery should be tested with a known, good Digital Volt Ohm Meter (DVOM).
3. When testing side terminal or top stud batteries, always use Lead (Pb) terminal adapters. Make sure the terminal adapter makes good contact with the Lead pad of the battery or inaccurate readings will result. Basic hand tools may be needed to ensure the terminal is tight.
4. Never use steal bolts/nuts/washers, etc., when testing a side terminal battery.
5. Never clamp the tester's leads directly to the threads when testing a top stud battery with a conductance tester.

Charging Instructions:

1. Battery Preparation
 - a. Let the battery stand on level surface. Remove the sealing sheet.
2. Preparing the Electrolyte
 - a. Take the electrolyte container out of the inner box.
NOTE: Do not peel or pierce the sealed areas.
3. Procedure for filling battery with acid
 - a. Place electrolyte container upside down with the six sealed areas in line with the six filler ports of the battery. Push the container down strongly enough to break the seals. Now the electrolyte should start to flow out.

NOTE: Do not tilt the container as the electrolyte flow may be interrupted and stop flowing.

4. Checking the Electrolyte flow

- a. Make sure air bubbles are coming up from the six filler ports. Leave the container in this state for 20 minutes or longer until all electrolyte has flowed into the battery.

NOTE: If no air bubbles are coming up from filler port, tap the bottom of the bottle two or three times. NEVER remove the container from the battery.

5. Pulling out the container

- a. Be certain that all the electrolyte has flowed out. Tap the bottom if there is any electrolyte left in the container. Now pull the container gently out of the battery being careful not to drip any amount of remaining electrolyte.

6. Sealing the battery

- a. Fit the strip of caps tightly into the filler ports. Make sure the strip is the same level as the top of the battery. The fill-up procedure is not complete. This is a permanent seal, never remove the strip of caps, or add any water or electrolyte. The battery is maintenance free under normal operating conditions.

7. Standby 1 hour

8. Charging instructions for Maintenance-free batteries

- a. These Batteries are of sealed maintenance-free construction which means:
 - i. Never add water
 - ii. Use a 12 volt 0.5~1.5 amp motorcycle battery charger.
WARNING! Do not exceed charging guidelines that are listed on the chart.

9. Installation

- a. Position the battery in holder and fasten firmly to vehicle.
- b. Connect terminals:
 - i. Positive (+) red cable from ignition to Positive Post.
 - ii. Negative (-) black cable from engine or chassis to Negative Post.

Charging Guidelines:

Using a charger with an output of 1.0amps the initial charge of the battery will be approximately 1/2 to 1x the amp hour rating for that battery. Full charge voltage for a Maintenance Free battery is approximately 12.8V to 13.0V.

Checking Open Circuit Voltage:

OCV may be used to estimate the Lawn and Garden battery state-of-charge. Observe the following guidelines:

- Use a voltmeter that has been verified as accurate. An inaccurate meter will give inaccurate results. The meter should read to the nearest 0.01 volts.
- When checking OCV, the vehicle engine and all current drains must be OFF. Any current flow into or out of the battery will cause an incorrect voltage reading.
- The battery must be stabilized before reading the OCV. If the battery has been charged or used in a vehicle in the past 12 hours, remove the surface charge (apply a 300amp load for 15 seconds). If the battery has just been discharged, allow at least 15 seconds for the voltage to stabilize, then read the OCV.
- Use the following table to estimate the state-of-charge based on the battery temperature:

Stabilized OCV (Volts)	% Charge* at 0°C (32°F)	% Charge* at 25°C (75°F)
12.75	100%	100%
12.70	100%	90%
12.60	90%	75%
12.45	75%	65%
12.20	65%	45%

*Estimates Only. Batteries vary $\pm 10\%$ by model.

- Keep batteries at 65% of full charge or higher. If the OCV falls below 12.4V, recharge the battery.
- **IMPORTANT:** When a battery needs charging, always charge it fully. If you don't:
 - Retests with electronic testers may be inaccurate.
 - Full shelf life will not be available if returned to storage.