



**Battery Model:** 25  
**Part Number:** 8025-160  
**Nominal Voltage:** 12 volts  
**NSN:** Number applied for, product currently available  
**Description:** High power, sealed lead acid, engine starting battery



**Battery Model:** 35  
**Part Number:** 8020-164  
**Nominal Voltage:** 12 volts  
**NSN:** Number applied for, product currently available  
**Description:** High power, sealed lead acid, engine starting battery

### Physical Characteristics:

**Plate Design:** High purity lead-tin alloy. Wound cell configuration utilizing proprietary SPIRALCELL® technology.  
**Electrolyte:** Sulfuric acid, H<sub>2</sub>SO<sub>4</sub>  
**Case:** Polypropylene  
**Color:** Case: Dark Gray  
Cover: "OPTIMA" Red  
**Group Size:** BCI: 25 & 35

	Standard	Metric
<b>Length:</b>	9.340"	237.24 mm
<b>Width:</b>	6.700"	170.18 mm
<b>Height:</b>	7.685"	195.20 mm (Height at the top of terminals)
<b>Weight:</b>	31.7 lb	14.4 kg

Terminal Configuration: SAE / BCI automotive.

### Performance Data:

**Open Circuit Voltage (Fully charged):** 12.8 volts  
**Internal Resistance (Fully charged):** .0030 ohms  
**Capacity:** 44 Ah (C/20)  
**Reserve Capacity:** BCI: 90 minutes  
(25 amp discharge, 80°F (26.7°C), to 10.5 volts cut-off)

### Power:

**CCA (BCI 0°F):** 720 amps  
**MCA (BCI 32°F):** 910 amps

## **Recommended Charging:**

The following charging methods are recommended to ensure a long battery life: (Always use a voltage regulated charger with voltage limits set as described below.)

### **Model: 25 and 35**

These batteries are designed for engine starting applications. They are not recommended or warranted for use in deep cycle applications.

## **Recommended Charging Information:**

<b>Alternator:</b>	13.3 to 15.0 volts
<b>Battery Charger (Constant Voltage):</b>	13.8 to 15.0 volts; 10 amps maximum; 6-12 hours approximate
<b>Float Charge:</b>	13.2 to 13.8 volts; 1 amp maximum; (indefinite time at lower voltages)
<b>Rapid Recharge:</b> <b>(Constant voltage charger)</b>	Maximum voltage 15.6 volts. No current limit as long as battery temperature remains below 125°F (51.7°C). Charge until current drops below 1 amp. <b>All limits must be strictly adhered to.</b>

**Recharge Time:** (example assuming 100% discharge – 10.5 volts)

<b>Current</b>	<b>Approximate time to 90% charge</b>
100 amps	35 minutes
50 amps	75 minutes
25 amps	140 minutes

Recharge time will vary according to temperature and charger characteristics. When using Constant Voltage chargers, amperage will taper down as the battery becomes recharged. When amperage drops below 1 amp, the battery will be close to a full state of charge.

(All charge recommendations assume an average room temperature of 77°F (25°C).

Always wear safety glasses when working with batteries.

Always use a voltage regulated battery charger with limits set to the above ratings. Overcharging can cause the safety valves to open and battery gases to escape, causing premature end of life. These gases are flammable! You cannot replace water in sealed batteries that have been overcharged. Any battery that becomes very hot while charging should be disconnected immediately.

Not fully charging a battery can result in poor performance and a reduction in capacity.