



Battery Model: D34/78
Part Number: 8014-045
Nominal Voltage: 12 volts
NSN: 6140-01-457-4341
Description: High power, sealed, lead acid deep cycle battery.

Physical Characteristics:

Plate Design: High purity lead-tin alloy. Wound cell configuration utilizing proprietary *SPIRALCELL TECHNOLOGY*.[®]

Electrolyte: Sulfuric acid, H₂SO₄

Case: Polypropylene

Color: Case: Light Gray
Cover: "OPTIMA" Yellow

Group Size: BCI: 34

	Standard	Metric
Length:	10"	254 mm
Width:	6.8"	172.2 mm
Height:	7.8"	198.1 mm (height at the top of the terminals)
Minimum Weight:	43.8 lb.	19.89 kg

Terminal Configuration: SAE / BCI automotive and GM style side terminal (3/8" - 16 UNC - 2B, threaded nut).

Performance Data:

Open Circuit Voltage (fully charged): 13.2 volts
Internal Resistance (fully charged): .0028 ohms
Capacity: 55 Ah (C/20)
Reserve Capacity: BCI: 120 minutes
(25 amp discharge, 80°F (26.7°C), to 10.5 volts cut-off)

Power:

CCA (BCI 0°F): 650 amps
MCA (BCI 32°F): 870 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.)

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These batteries are designed for cyclic applications and for use in vehicles with large accessory loads.

Recommended Charging Information:

Alternator:	13.8 to 15.0 volts
Battery Charger:	13.8 to 15.0 volts; 20 amps maximum
Float Charge:	13.2 to 13.8 volts; 1 amp maximum
Rapid Recharge: (Constant voltage charger)	Maximum voltage 15.6 volts. No current limit as long as battery temperature remains below 125°F. Charge until current drops below 1 amp.
Cyclic or Series String Applications:	14.7 volts; temperature <125°F; no current limits. When current falls below amp, finish with 2 amp constant current for 1 hour.

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 failure. 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.

Shipping and Transportation Information:

OPTIMA batteries can be shipped by AIR. The battery is nonspillable and is tested according to ICAO Technical Instructions DOC. 9284-AN/905 to meet the requirements of Packing Instructions No. 806 and is classified as non-regulated by IATA Special Provision A-48 and A-67 for UN2800. Terminals must be protected from short circuit.

BCI = Battery Council International
EN = European Norm

OPTIMA Batteries
Product Specifications: Model D34/78
July 2002