Battery Model: **34/78 (formerly known as "800U")**
Part Number: 8004-003
NSN: 6140-01-374-2243

Nominal Voltage: 12 volts
Description: High power, sealed (VRLA), lead acid engine starting battery.
Highest power per pound!

Physical Characteristics:

Plate Design: High purity lead-tin alloy. Wound cell configuration utilizing propriety *SPIRAL CELL TECHNOLOGY.*®
Electrolyte: Sulfuric acid, H2SO4. Specific gravity: 1.286
Case: Polypropylene
Color: Case: Dark Gray Cover: "OPTIMA Red"

	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:	38.8 lb.	17.6 kg
Terminals:	Automotive posts + GMC/Chevy side terminals (3/8" – 16UNC-2B, threaded nut)	
BCI Group Size	34	

MILITARY CUSTOMERS & OEMs:
Please contact us for assistance regarding alternator charger settings, shop charging, CAD Drawings, etc.

Performance Data:

Open Circuit Voltage (fully charged): 12.8 volts
Internal Resistance (fully charged): .0030 ohms
Capacity: 50 Ah (C/20)
Reserve Capacity: BCI: 100 minutes
(25 amp discharge, 80°F (26.7°C), to 10.5 volts cut off)

Power:

CCA (BCI O°F): 800 amps
MCA (BCI 32°F): 1,000 amps

Cycle Life:

Cycle Life – Deep Cycle (BCI) ~50 cycles (for deep cycle use or applications with heavy accessory loads use an Optima Yellow Top)

J240 Life Cycles (BCI): 10,000 – 12,000 cycles

OPTIMA BATTERIES, Inc.
Milwaukee, WI 53209
www.optimabateries.com

Military Factory Reps:
(970) 586-0660,
www.milbatteries.com

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Recommended Charging Information:

Alternator	Recommended charge voltage setting: 14.2 to 14.8 volts (measured at the battery). For best results we also recommend use of an alternator/regulator with temperature compensation that adjusts charge voltage relative to battery temperature.
Battery Charger	Constant voltage type charger. Max charge voltage regulated between 14.4 to 15.0 volts. Typical charge current 10 to 20 amps . Higher amperage is OK with proper voltage regulation. Always monitor battery during charging for signs of overheating.
For questions or assistance contact the Optima Military Rep group: www.milbatteries.com	

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

Current	Approximate time to 90% charge
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.

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.