



Military Factory Representatives:



Optima Battery NSN List

The only battery with Warfighter proven Spiralcell Technology! Highest power per pound!

All models starting with letter "D" are designed for both deep cycle & engine starting applications. Excellent for vehicle accessories, engine starting, remote power, support equipment, weapon systems, etc.

Model #	Part #	Description	NSN	CCA (amps @ OF)	CA (amps @ 32F)	Ah Capacity (C/20)
Yellow Top - DUAL PURPOSE Deep Cycle & Engine Start Batteries						
D51	8071-167	For Asian vehicles and specialty Mil equipment. (same as D51R, with reversed terminals)	6140015236288	450	575	38
D51R	8073-167	Replacement for 2HN . Also used in 5kW generator, Bradley Turret, and other applications.	6140015297226	450	575	38
D35	8040-218	Slightly smaller than Optma group 34 sized models	tbd	620	770	48
D25/75	8042-218	same as D35 but with dual terminals (automotive posts and side GMC terminals)	tbd	620	770	48
D34	8012-021	Group 34 size, top post only. For support equipment and weapons systems (Alternative to 34 Red Top)	6140014500141	750	870	55
D34/78	8014-045	Dual terminal group 34 size. Top terminals & Chevy side terminals. Used in support equipment and weapons systems (Also an alternative to 34/78 Red Top)	6140014414272	750	870	55
D27F	8037-127	For Toyota trucks/SUVs. Excellent for other equipment needing a larger battery.	6140016005785	830	1,025	66
D31T	8050-160	Group 31 size battery for large commercial and engineering equipment. Specified for 100kW & 200kW generators, Skid Loaders, Back Hoe, etc. Has 3/8" threaded stud terminals.	6140014575469	900	1,125	75
D31A	8051-160	Group 31 size truck battery for commercial and engineering equipment. Automotive terminals.	6140015024973	900	1,125	75
H6 (48)	7048-148	BCI group size 48. Fits many newer Ford, Chevy, GMC trucks & SUVs. Jeeps & Asian vehicles	tbd	800	928	72
Blue Top - DUAL PURPOSE Deep Cycle & Engine Start Batteries Terminals: automotive posts & 5/16" stainless steel threaded studs.						
D34M	8016-103	Group 34 size battery for boats, cars, light trucks, etc. Also M777 Howitzer	6140014759355	750	870	55
D27M	8027-127	Group 27 size marine battery.	6140015890622	800	1,000	66
D31M	8052-161	Group 31 size battery for large commercial and engineering equipment & boats.	6140015024405	900	1,125	75
34M	8006-006	Group 34 size with BLUE top & BLACK case - <u>not for deep cycle use</u> . Used in vehicles & aviation ground support equipment. (can substitute dual purpose model D34M)	6140015262605, 6140014414280	800	1,000	50
Red Top - ENGINE START Batteries						
75/25	8022-091	Smaller battery with both Automotive posts & Chevy side terminals.	6140014759361	720	910	44
25	8025-160	same as 75/25 but top post only	tbd	720	910	44
35	8020-164	Same as model 25 but with reversed polarity	6140015984013	720	910	44
34	8002-002	Group 34 size, top post only. Used in generators, pumps, various other support equipment, a few specialty mil vehicles, and non-tactical vehicles.	6140013788232	800	1,000	50
34/78	8004-003	Dual terminal group 34 size. Has top terminals & Chevy side terminals. Also used in non-tactical vehicles on bases such as GMC & Ford cars and trucks.	6140013742243	800	1,000	50
78	8078-109	same as 34/78 but only has side GMC terminals	tbd	800	1,000	50
34R	8003-151	Top post only group 34 size. Same as model 34 but with reversed terminal polarity.	6140014759357	800	1,000	50
34VX	8008-158	Same as 34/78 with enhancements for added vibration resistance. Used in MRAP M-ATV.	6140015346466	800	1,000	50
6V	8010-044	6-volt battery for specialty applications	6140014759414	850	1,000	50
INSTALLATION ADAPTERS						
6TMF / 6TAGM	242-0038	6T Adapter tray for using group 34 batteries in place of 6TMF & 6TAGM batteries. (verify reserve capacity requirement)			6160014530858	
Group 78	242-0041	Bottom bracket to simplify installing Optima group 34 size battery in to Chevy/GMC commercial vehicles.			No NSNs - contact us for availability	
Group 65	150-28821	A pair of bottom brackets to simplify installing Optima group 34 size battery in Ford vehicles.				
Adapter Kit	15033630	Includes Group 78 adapter, Group 65 adapters (pair), Group 48 "DIN" adapter, Group 24 or 27 height adapter				
TELEDYNE - GILL 3kW GENERATOR BATTERY						
7243-16A		High powered 24-volt battery for 831A & 832A, 3kw tactical generators		6140016106102	300 CCA, 16 Ah capacity	
Smart chargers for Optima, 6T-AGM, & other military batteries. Fully Automatic , pulsing de-sulfation technology. ● ***The 12-Station "Pallet Charger" NSN 6130-01-532-7711. *** World Charger, 12V, 20amp, NSN 6130-01-477-4703. ***ProHD 12V & 24V (includes 24V NATO plug for on-vehicle charging) NSN: 6130-01-500-3401						
● Contact us for info on Gridless Li-Ion Portable Power and DC-AC inverter with NATO Slave plug NSN 6130-01-661-1230						

Discounted pricing for Mil/Gov customers, and Mil/Gov suppliers

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electrolyte like a
sponge to eliminate
acid spilling

**Tightly Compressed
Cells** for added vibration
resistance

**Solid Cast Cell
Connections** for
increased durability and
maximum plate height

99.99% Pure Lead
Spiralcell design allows for lead
to be used in its purest form

Basic Battery Care

On receipt of new battery:

Batteries can be stored in warehouses for a long time. **If voltage is less than 12.7 volts recharge before installation.**

Stored or infrequently used equipment:

Electronics and high temperatures accelerate battery discharge on equipment. If possible check battery voltage every 3 to 6 months. Recharge when volts drop below 12.6 (25.2 volts for a 24V pack).

NOTE: A maintenance charger (Solar or AC power) can keep your batteries fully charged, & ready to work. They also extend battery life. We have a list of solutions with NSNs.

Optima batteries can often be recovered from deep-discharge and sulfation conditions that kill flat plate batteries. Contact us for info and charger recommendations.



Maintenance

- 1. Inspect:** Check battery terminals, sides, top, & bottom for damage, cracks, etc. Do not charge a damaged battery.
- 2. Voltage:** Recharge if voltage is < 12.65 volts
- 3. Charging:** Use a charger designed for sealed, AGM batteries. Voltage should peak and then hold between 14.4 to 15.0 VDC. Charge for 1 hour after current drops below 3 amps.
- 4. Check voltage** after re-charge. Let battery rest for at least 8 hours. A fully charged Optima will have an open circuit voltage of:
Red Top ≥ 12.85 volts, Yellow Top ≥ 13.0 volts
- 5. Test:** Use your organizations approved tester.

Load Test: Discharge at approximately ½ battery rated CCA for 15 seconds. On a good battery, volts at 15 seconds should be ≥ 9.6 V.

Conductance: Digital conductance type testers calculate theoretical CCA & health readings. On a good Optima the CCA value is typically 10% to 20% higher than the battery's actual CCA label rating. We always recommend you charge before any testing.

******WHEN TESTING ANY BATTERY HAVING THREADED STUD TERMINALS, NEVER CONNECT A DIGITAL CONDUCTANCE TESTERS' CLAMPS TO THE THREADED STUDS! YOU MUST USE SCREW-ON LEAD ADAPTERS. FAILURE TO DO SO WILL RESULT IN BAD TEST RESULTS (usually a very low CCA reading)**