



OPTIMA Yellow 51R

Specifications

OPTIMA® YELLOWTOP® D51R Ultra high-performance SPIRALCELL TECHNOLOGY® AGM (absorbent glass mat) dual-purpose deep-cycle and starting battery. OPTIMA® YELLOWTOP® batteries have three times the cycling capability (rechargeability) with ultimate cranking power for your auto, car or truck to outperform traditional batteries. Perfect for powering heavy electrical loads, including winches, audio systems, inverters, and other demanding vehicle accessories and electronics. Lower internal resistance provides more efficient power output and faster recharges.

The OPTIMA® model number for this battery is D51R. If you are replacing an OPTIMA® battery you already have, this model is the same as batteries marked 8073-167, 9073-167, 27952, YEL51R, 256735, SC51RDA, or N9951RYEL.

Battery Model:	D51R
Part Number:	8073-167
NSN:	Number applied for, product currently available
UPC Code:	8 11405 00008 9

Performance Data	
Cold Cranking Amps:	450
Cranking Amps:	575
Nominal Voltage:	12 volts
Open Circuit Voltage (fully charged):	13.1 volts
Internal Resistance (fully charged):	0.0046 ohms
Capacity:	38 Ah (C/20)
Reserve Capacity:	BCI: 66 minutes (25 amp discharge, 80°F (26.7°C), to 10.5 volts cutoff)

Physical Characteristics

Plate Design:	High purity lead-tin alloy. Wound cell configuration utilizing proprietary SPIRALCELL TECHNOLOGY®.
Electrolyte:	Sulfuric acid, H ₂ SO ₄
Case:	Polypropylene
Case Color:	Light Gray
Cover Color:	“OPTIMA“ Yellow
Group Size:	BCI: 51
Post Type:	SAE Post
Weight:	26 lb
Length:	9.31 in
Width:	5.06 in
Height:	8.94 in

Power

CCA (BCI 0°F):	450 amps
MCA (BCI 32°F):	575 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: D51 and D51R

These batteries are designed for starting and deep cycling applications and for use in vehicles with large accessory loads.

Recommended Charging Information

Alternator:	13.65 to 15.0 volts
Battery Charger:	13.8 to 15.0 volts; 10 amps maximum; 6-12 hours approximate
Float Charge:	13.2 to 13.8 volts; 1 amp maximum (indefinite time at lower voltages)
Rapid Recharge (Constant voltage charger):	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. All limits must be strictly adhered to.
Cyclic or Series String Applications::	14.7 volts. No current limit as long as battery temperature remains below 125°F (51.7°C). When current falls below 1 amp, finish with 2 amp constant current for 1 hour.