

ADVANTAGES



The Flush Cover Advantage

A visible distinction of the SUPER START battery is that it features a flush cover design for a more secure fit. The flush top battery fits into the vehicle with no hold-down problems, no filler cap interference problems and no heat shield or battery box fit problems.

The flush cover also eliminates the danger of harmful acid spills and lost vent plugs. It is not accessible and not serviceable preventing the consumer from prying open the filler plugs. Open batteries allow hydrogen and oxygen gasses to leak and can explode. With this safer design, foreign material and polluted water cannot enter the battery preventing life-shortening contamination.

When testing is required, use a voltmeter for non-accessible batteries (a much safer and easier way to test the state of charge than a hydrometer). The best way to test the state of health of a battery is with a load tester or conductance tester. To obtain dependable results, use only SUPER START approved equipment and methods.

The Calcium-Calcium Advantage

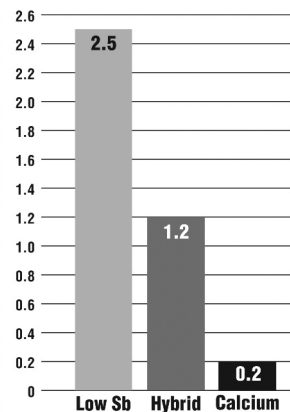
SUPER START batteries are manufactured using pure calcium-calcium alloy for both the positive and negative grids. Because the lead is almost 100% pure, the voltage is not suppressed. This means the battery voltage truly rises as it is charged, dramatically reducing grid corrosion and increasing battery life.

With antimony, the impurities actually suppress the normal voltage of the battery. The charging system keeps sending current to the battery causing grid corrosion, high water loss and shorter battery life. Also, pure lead has lower resistance, so SUPER START calcium batteries produce more cranking amps. After a twelve month stand without charging, a calcium alloy battery actually gains cold cranking power while the hybrid and low antimony loses power.

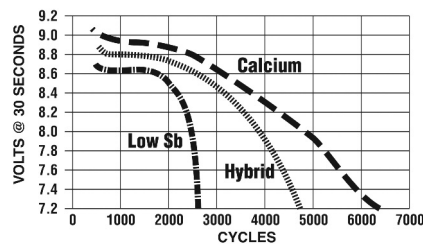
With calcium-calcium alloy, there is very little gassing which results in minimal water loss. Calcium batteries gas at a 600% lower rate than the hybrid alloy battery and 1200% less than the antimony battery. SUPER START flush cover calcium-calcium batteries are truly maintenance free with no need to add water.

On Charge Gassing

Cubic Centimeters per Minute
14.1V @ 125°F



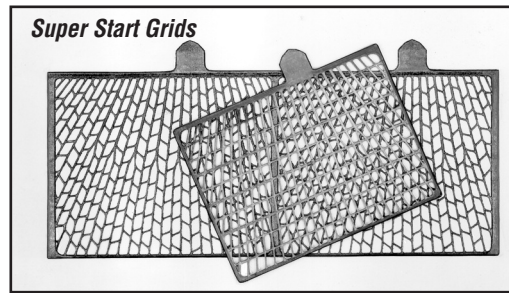
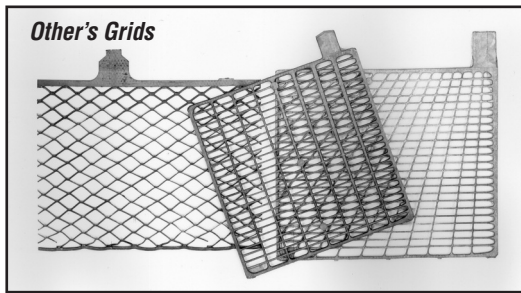
J240b Life Testing on Group 26 Batteries



The Full-Frame Grid Advantage

All SUPER START batteries are produced using a full-frame grid. Grid design is important because a poorly designed grid can expand, distort and fail, causing short life and warranty problems.

Some manufacturers use a less expensive, expanded metal grid. Their process results in sharp wire edges that can poke through separators to cause short circuits. These expanded grids continue to expand, or grow, inside the battery...another cause of short circuits and short life.



SUPER START batteries' full-frame power path reinforced grids have no sharp wires to cause shorts, resulting in superior battery performance. The side frames dramatically retard grid growth and won't tear through the envelope separators, thereby extending battery life. The power path grid delivers power directly to the center lug for low resistance and higher cold cranking amps.

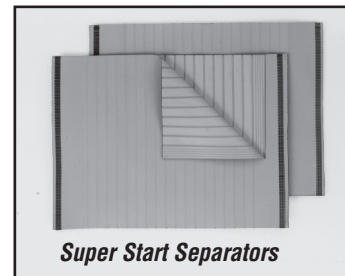
Additional Advantages

Deep Pocket Envelope Separators: Cured plates are inserted into durable, insulated, narrow-ribbed, deep-pocket envelope separators. These top-quality separators, which completely surround the plate, are specially reinforced, flexible and extremely strong. Designed for ultra-low electrical resistance,

they help deliver higher cranking amps and improve the life and performance of SUPER START batteries.

Forged Terminals and Bushings: SUPER START batteries are produced using the highest quality, forged terminal post bushing. The solid forged bushing is heavier than the light cast bushings others use, which can be porous, allowing terminal leakage, black posts and corrosion.

Demineralized Electrolyte: SUPER START batteries use pure, demineralized water in the electrolyte. Demineralized electrolyte assures the internal purity of the battery. Reduced contaminants mean less internal corrosion making them truly maintenance-free.



www.superstartbatteries.net

