

# More on Batteries

By Bill Deibel

As a followup to Marty Ellison's piece on Optima batteries in the Autumn BG, I would like to add my endorsement for the 6-volt Optima battery for 6-volt cars and provide some related information.

At least 5 of my collector cars have called for a BCI Group 2 6-volt battery which had maximum dimensions of L x W x H inches of 10.375 x 7.125 x 9.375. Capacities for two makes of Group 2 batteries (Delco and Interstate) are compared with the two Optima solutions in the following table:

	<i>Delco</i>	<i>(Best) Interstate</i>	<i>One Optima</i>	<i>Two Optimas</i>
<i>Cold Cranking amps @ 32 degrees F:</i>	<i>780 amps</i>	<i>600 amps</i>	<i>800 amps</i>	<i>1,600 amps</i>
<i>Reserve Capacities:</i>	<i>110 amp-hrs</i>	<i>102 amp-hrs</i>	<i>50 amp-hrs</i>	<i>100 amp-hrs</i>

The 6-volt Optima measures L x W x H inches of 10.06 x 3.68 x 8.13. It is rated Cold Cranking amps of 800, but Reserve Capacity of only 50 Amp-hrs. Although the Optima will spin the starter faster because of its lower voltage drop, it will only crank half as long as the Group 2. If your car is in fine shape this should not be an issue.

However, two Optimas will measure 10.06 x 7.26 x 8.13. In all of my Group 2 cars there was space in the battery box for the extra 1/8 inch of width or more. With two Optimas in parallel you will get 1,600 cold cranking amps with 100 Amp-hrs Reserve Capacity and the voltage drop will be even less than with a single Optima. If your battery is hidden this is no problem, but since I don't do any serious showing of Karel's Lincoln Continental (which is notoriously hard to crank hot) I have 2 Optimas as shown and the starter spins great, hot or cold.



1940 Packard 1803 (under seat)



1948 Lincoln Continental (under hood)

## And more . . .

*Since I am on this subject I'd like to point out that if you have to run the starter a long time it may be due to resistance in the ignition switch or the points or both. It is easy to check these.*

Remove the coil wire coming from the ignition switch and measure the voltage. It should be the same as the battery voltage or very close. Now measure the ohms from the other coil terminal to ground with the points closed. There should now be very little ohms if the points are good and clean. (I make it a point to run a corner of my business card between the points with them closed to remove any oily carbon from them after the car has been sitting awhile, before starting on a trip and whenever I do a mini tune up — the corner of a used envelope will also work.)

If your ignition switch is bad (and you can get to the wire to the coil), you can install a 6-volt horn relay operated by the bad switch that will connect the battery directly to the distributor. I used this very successfully on my '40 Packard until I found a source to rebuild the switch.

Another thing that will help in starting a 6-volt car is to replace the battery cables with 00 wire.

