

A Method for Starting Old 6V Marine Engines With 12V

I have found that my 50 year old engines (a Buchanan Rocket and a Buchanan Midget) were difficult to start with the 6V system. The starter would turn the engine over slowly and eventually it would fire. Once running they quite happily ran with no problems. But I found that if I could get the engines to turn over smartly with not quite full choke, they'd start in less than one turn.

I thought about converting the whole system to 12V but that was costly and as it's turned out, not necessary.

What I did was to run everything except the starter on 6V but the starter was connected to a 12V arrangement using a second 6V battery. Some folks might be worried about burning out the starter, but after 10 years of this kind of use, the starters are just fine. If you engine doesn't start quickly, for gosh sake's – find and fix the problem- don't just crank and crank the engine.

The only penalty is that you have to charge up the second 6V battery from time to time. I find that if I charge it for about 12 hours once a month, it's OK. And once per season, I swap the batteries. The second battery is idle most of the time (and yes, there is a way of connecting a DPDT switch to make the engine charge the second battery after starting the engine, but that a complication that is unnecessary)

Here's the diagram. The cables that connect the batteries to the ground, to the starter and to each other need to be hefty- they're carrying a lot of current. Also, make sure you have a good ground connection to the block and starter.

