

Proposed Honda Insight Booster battery system to allow both grid or solar re-charging of the boost battery, which will feed a continuous 2500W to the stock pack to allow the MIMA equipped car to use the IMA system in the Electric Priority fashion for extended periods.



The 16A boost charge can be continuously applied to the stock battery, to increase the electric drive potential. This 2500W boost can be turned on or off, as needed, with low voltage isolated control.

Booster battery options



Option A four 12V lead acid deep cycle batteries in series. This will run all 10 dc/dc converters in parallel, for a constant 55-60A draw.



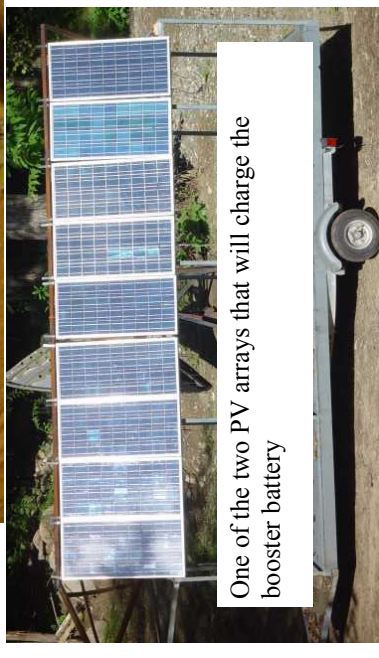
Option B groups of 7 Prius NIMH subpacks will make up a 6.5AH boost pack, one for each dc/dc converter. Total of 70 subpacks, or 420 cells



Option C Multy cell 48V lithium packs, one for each of the dc/dc converters



10 Vidor 250W isolated 48V input 16.7v output DC/DC converters. The converters are in series, and will be configured as a 16A constant current supply. The 48V inputs will each be further isolated with a 600V 25A diode. The 48V inputs can be configured many ways depending on the battery AH capacity. Each converter needs about 6A @48V. The inputs can be connected to individual 48V packs, or to one large 48V pack, or any combination in between. This allows small lithium or NIMH packs of only 5-20AH or a large lead acid 100-200AH pack to run them all.



One of the two PV arrays that will charge the booster battery