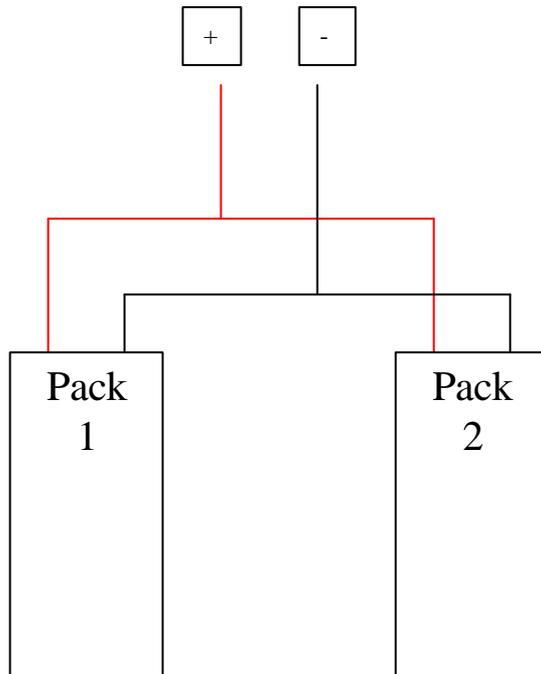


## Battery packs in parallel



Both packs must be closely matched (the same type, manufacturer, capacity and voltage) and contain the same amount of charge. If one pack has a higher voltage than the other, it will try to charge the weaker pack, which will waste power and could cause large circulating currents to exist within the connecting harness. A defective cell in one pack could also cause a circulating current high enough to cause overheating of the cells and a possible fire. For this reason, I do not recommend this arrangement, but there are a number of people who have used it successfully. The main advantage is the additional run time and current two packs can provide.

Here are some safety tips

1. Only use identical battery packs.
2. Charge each pack individually.
3. Only connect the packs together just before you are about to use them.
4. Do not use old or damaged cell packs.
5. Consider fitting a fuse in the positive lead of each pack as insurance against burn-out.
6. Feel each pack just after connecting them together to see if they are getting hot.
7. Check the pack voltages are the same before connecting them together.
8. If the connector sparks when both packs are connected to the harness, disconnect immediately and check for faults.

The information in this document is presented in good faith. The author cannot accept any responsibility for loss, damage or injury resulting from this advice. You should take all reasonable safety precautions before attempting any work.