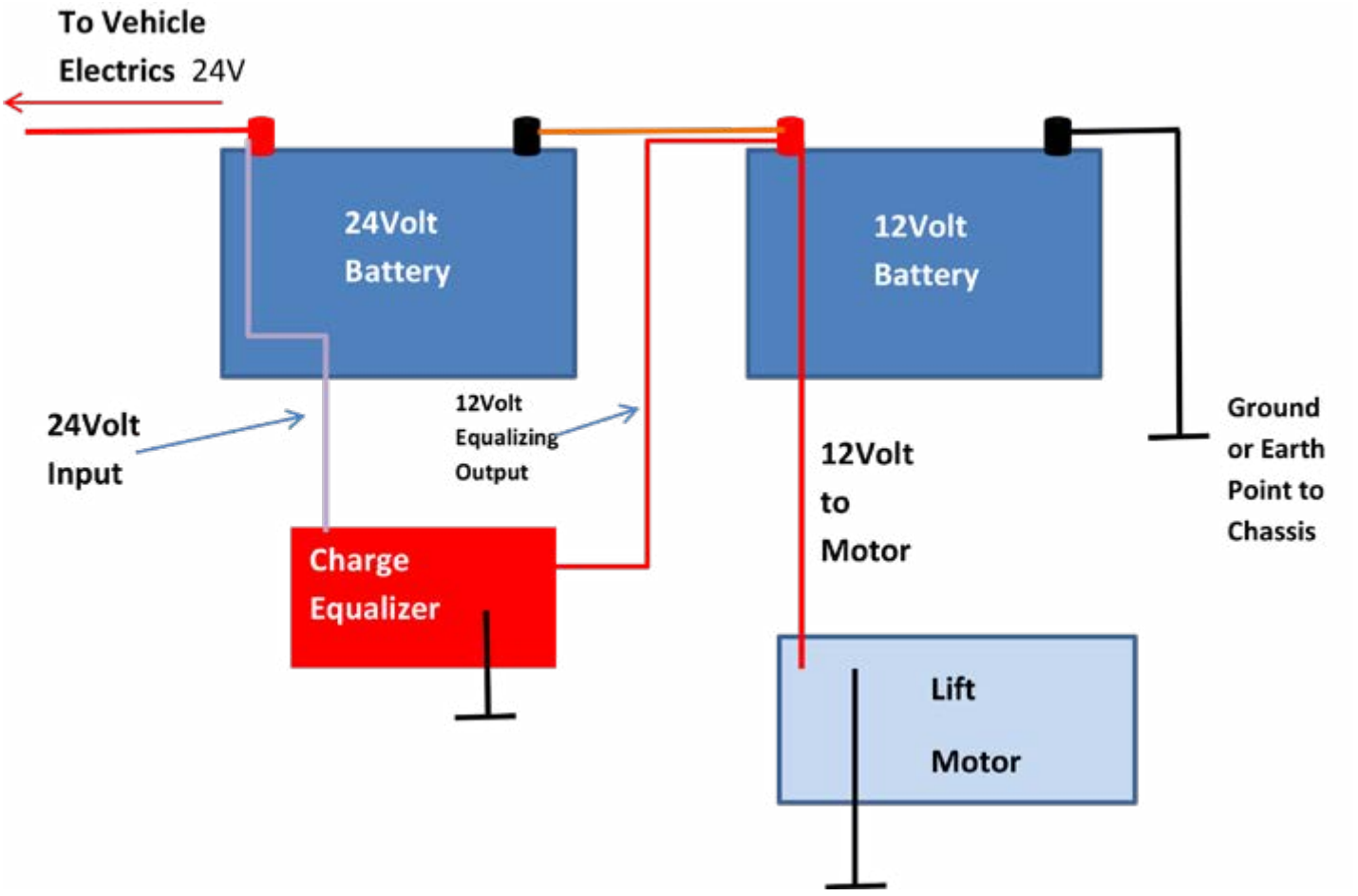
# When do we recommend a Charge Equaliser?

There are many situations where a vehicle with a 24V electrical system will benefit from a charge Equaliser rather than a voltage reducer. A voltage reducer will be fine where there is a fairly constant amount of 12V power required for an accessory that is also not a high load or amperage dependant device on a 24V system.

A two way radio for example is able to be supplied from a voltage reducer due to its known low and reasonably constant power requirements. Where a charge equaliser excels is when the current draw is higher than a voltage reducer would normally supply for a short period of time for example a winch or hydraulic lift motor.

The peak power is supplied from the 12V battery in the 24V pair and only limited by the battery and cables connecting it to the winch or hydraulic motor and the charge Equaliser then has the ability over time to balance the power between the 2 batteries. The average amount of total power consumed over a period of time in amps is worked out to determine the size of the charge Equaliser required to replace that power over the same time period.

For example If we look at a winch which draws 150 Amps maximum while operating for a total of 1 hour in a 24 hour period is 6.25 Amps per hour so a 10 amp charge Equaliser (24 Hours by 10 Amps = 240 Amps ) can supply enough power over that 24 hour period to “equalise the batteries”.



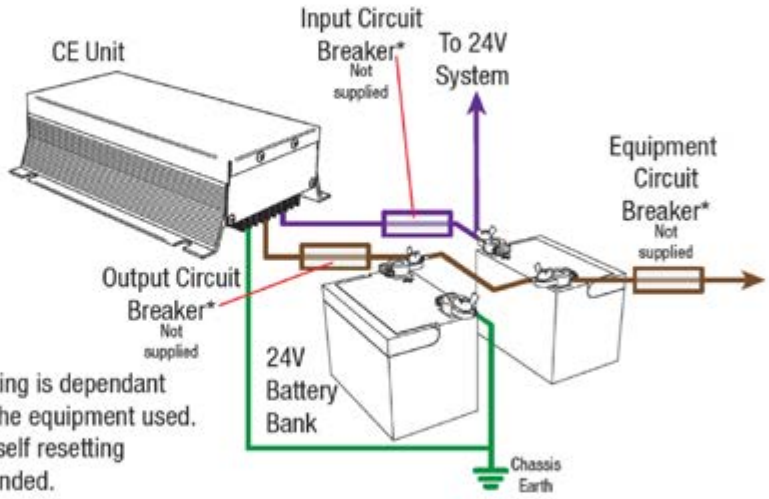
# Redarc CE40 Charge Equaliser


THE POWER OF REDARC

***CE Fuse Ratings**

| | I/P Fuse | O/P Fuse |
|---|---|---|
| CE3 | 5A | 5A |
| CE10 | 15A | 15A |
| CE20 | 20A | 20A |
| CE30 | 35A | 50A |
| CE40 | 50A | 50A |
| CE60 | 60A | 80A |

Equipment Circuit Breaker rating is dependant on the total load rating of all the equipment used. Fuses may be used however self resetting circuit breakers are recommended.




# WIRING DIAGRAM

Wiring Diagram Kindly Supplied by Redarc.