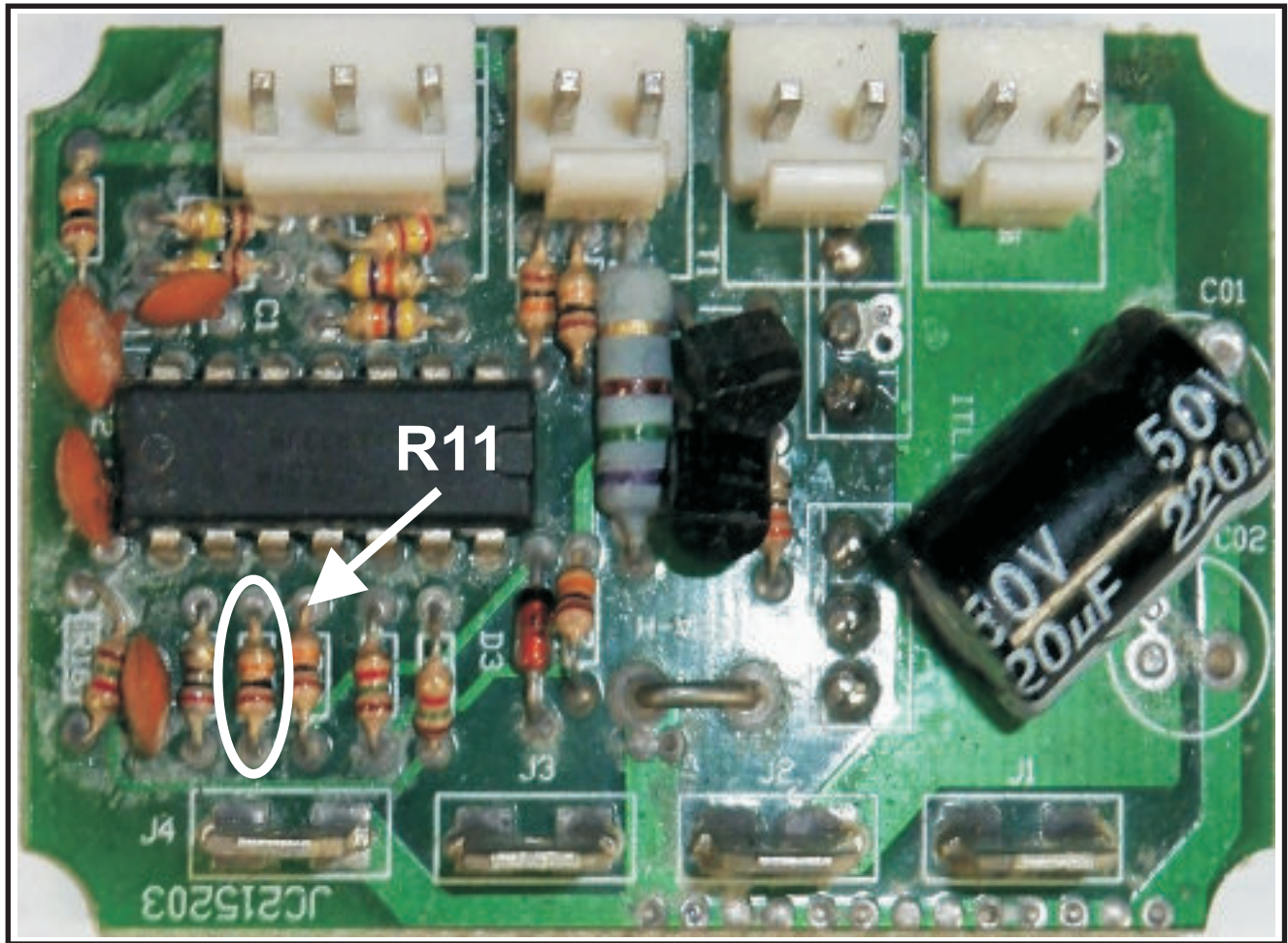


# 150W SPEED CONTROLLER CONVERSION



## Some Technical Info about this module:

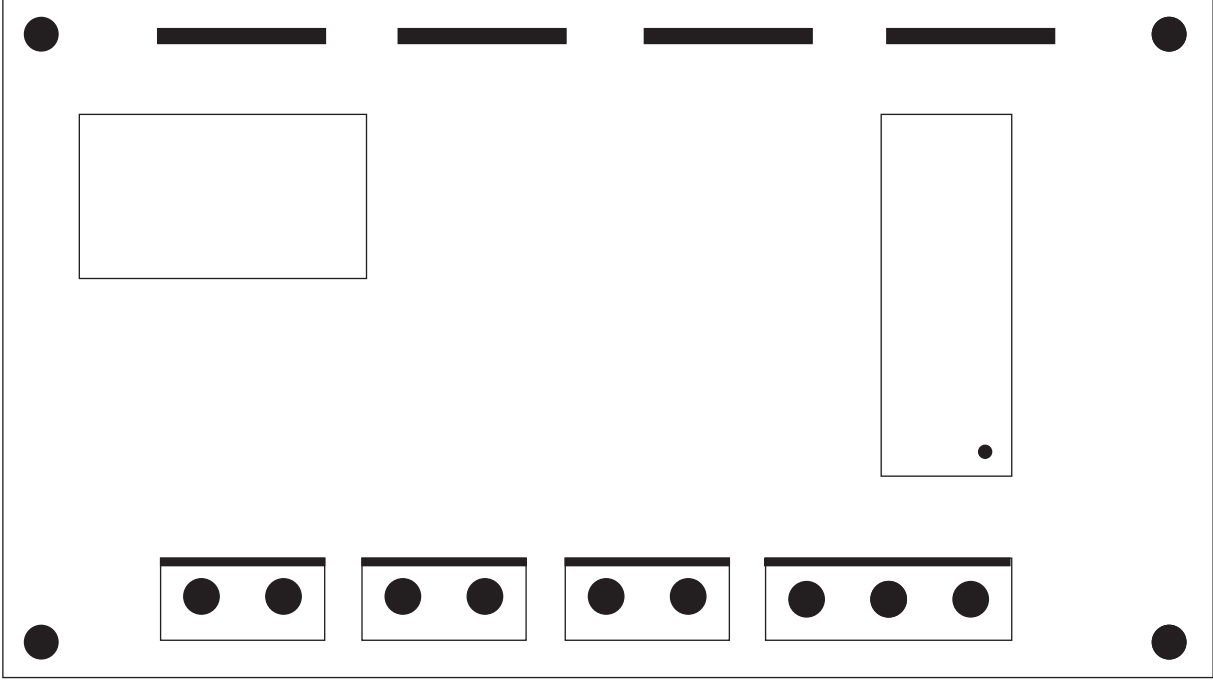
We don't have a schematic diagram for this module. It is based on a switched mode design which uses a LM339 Quad Operational amplifier. The MOSFET used for powering the motor is an IRF50N06 50A MOSFET. The Schottky diode used for suppressing the back EMF is an MBR1545 or its equivalent. The MOSFET and the Diode are heatsinked

by the rear aluminum cover of the module. The rear cover and the PCB can be easily removed (4 screws) to give easy access to the PCB. This makes for easy soldering access to the terminals etc.

## 150W SPEED CONTROLLER MODULE 9-24V (SEE NOTES) [SPC150]

As supplied this is a 24V DC Motor speed controller. To protect the battery the unit

features a 21V low voltage cut-out. However this feature can be disabled by simply changing one resistor value. Replacing R11 (10Kohm) with a 3K9ohm resistor will result in the controller being suitable for 9-24V operation. Alternatively it may be easier to solder a 6K8ohm resistor across R11 as the parallel combination would have a similar value. Note that this modification disables the low voltage cut-out!



**CHARGER**  
POSITIVE  
NEGATIVE

POWER  
SWITCH

BRAKE

**THROTTLE**  
POSITIVE  
NEGATIVE  
SIGNAL

POSITIVE

**MOTOR**

NEGATIVE

POSITIVE

**BATTERY**

NEGATIVE