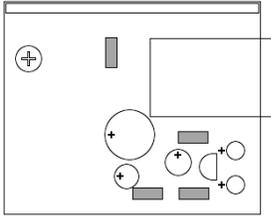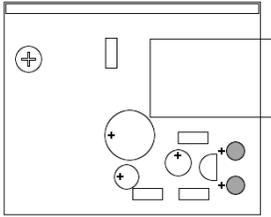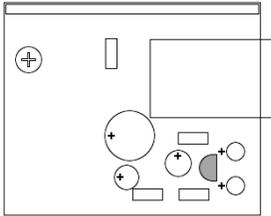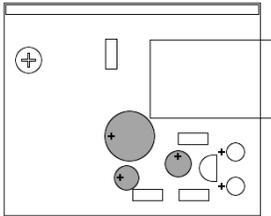# 6.270 RF Board Construction

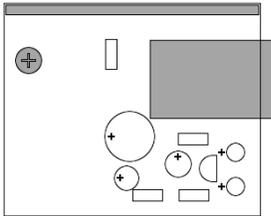*6.270 2005*

1.

Start by soldering the 4 resistors. Resistor placement is as follows:
1KOhm – R1 (bottom right) – brown-black-red
10Ohm – R3 (bottom middle) – brown-black-black
2.2KOhm – R2 (under telephone socket) – red-red-red
47KOhm – R4 (top middle) – yellow-purple-orange

2

Next, insert and solder the 2 LEDs. Be sure to insert the LEDs correctly, since they are polarised. The LED's long lead is positive and goes into the hole away from the edge of the board. The red led is the power LED (PWR). The green LED is for data.

3

Now insert and solder the voltage regulator. The flat side of the regulator faces towards the LEDs.

4

Now solder in the 3 capacitors. These capacitors are electrolytic and are polarised so make sure insert them in the correct orientation. Their negative lead is marked by a striped grey band on the capacitor body. Capacitor placement follows:
0.1uF – C3 (bottom middle)
0.33uF – C1 (bottom right)
33uF – C2 (top middle)

5

Finally, insert and solder the telephone socket and the RF module. The RF module is inserted with all its compenents facing inwards. Lastly, attach the antenna to the board with the small screw.

RF Board parts list:

Qty	Name	Info
1	1K resistor	Colour code : brown-black-red
1	10 ohm resistor	Colour code : brown-black-black
1	2.2K resistor	Colour code : Red-red-red
1	47K resistor	Colour code : yellow-purple-orange
1	0.33uF capacitor	
1	0.1uF capacitor	
1	33uF capacitor	
1	5V regulator	
1	Red LED	
1	Green LED	
1	Phone Socket	
1	RF Module	
1	Antenna and Screw	