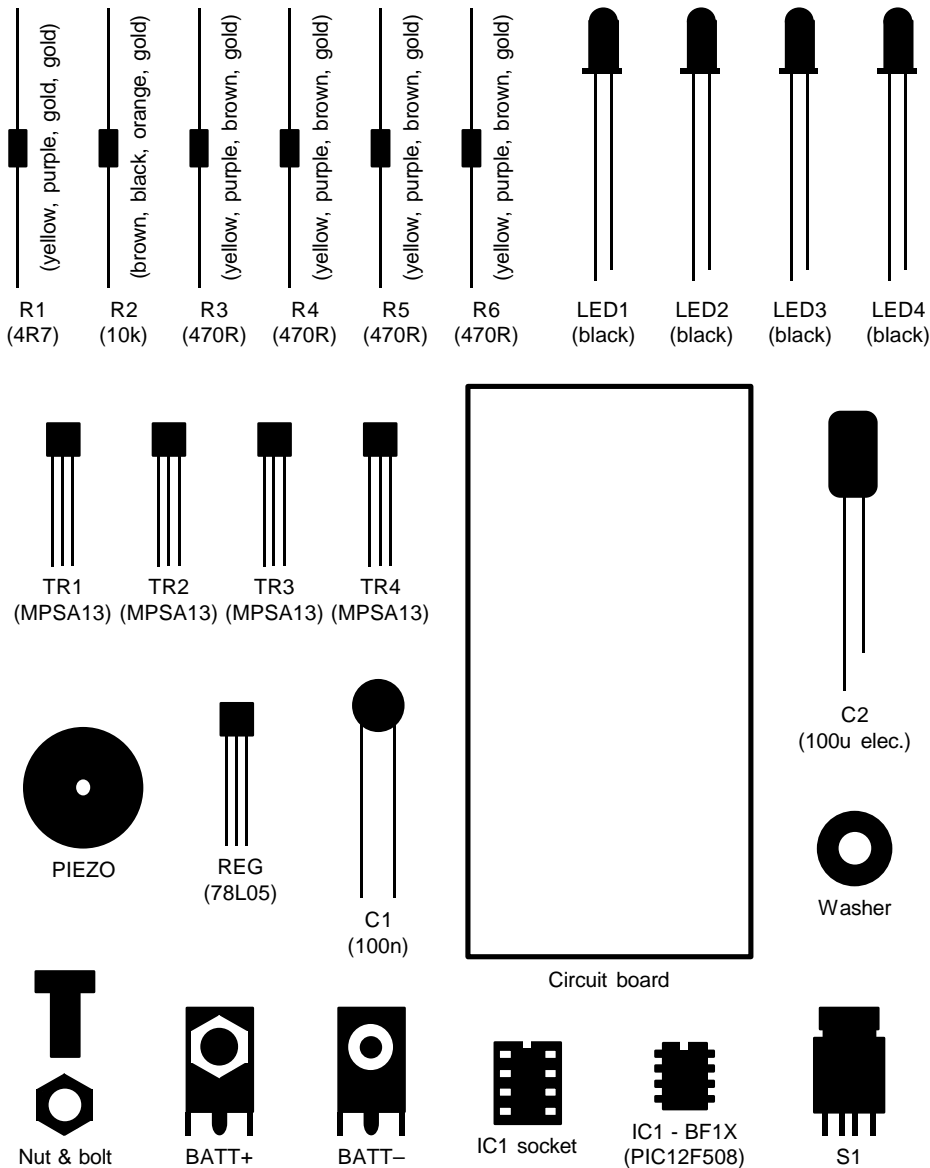


SHARPSHOOTER - GUN



CONSTRUCTION

1. Identify the different components using the spotter chart.
2. Fit and solder all the resistors (R1 to R6) to the circuit board. Identify the resistors by the coloured stripes on the body.
3. Fit and solder the electrolytic capacitor (C2) to the board putting the shorter leg (the leg nearer the stripe on the body) into the hole with the – sign. Fit and solder the other capacitor (C1) either way around.
4. Solder the transistors (TR1 to TR4) matching the half-circle shape of the transistor to the half-circle shape on the board (flat side against flat side). Be careful not to mistake the regulator for a transistor.
5. Solder the regulator (REG) matching the half-circle shape of the regulator to the half-circle shape on the board (flat side against flat side).
6. Place the washer against the large hole in the board on the component side using the nut & bolt to temporarily hold it in place. Solder the infra-red LEDs (LED1 to LED4) to the board putting the shorter leg (the leg by the flattened edge on the rim) into the hole with the line, such that one edge of each LED rests on the board and the other rests on the washer. The four LEDs must point outwards from the hole (see diagram). Remove and discard the nut & bolt.
7. Solder the pushbutton (S1) to the board.
8. Solder the chip socket (IC1) matching the notch in the socket to the notch on the board. Do not solder the chip directly to the board.
9. Solder the piezo (PIEZO) either way around.
10. Solder the battery connectors (BATT+ and BATT-) matching the shape to the symbol on the board (the hexagonal connector is positive, the circular negative). Make sure the connectors are pushed fully into the board, and all the holes are well soldered.
11. Carefully bend the legs of the chip inwards a little with your fingers. Fit the chip into its socket matching the small notch in the chip to the notch in the socket.
12. Connect a 9V PP3 battery to the battery connectors.
13. If *Sharpshooter - gun* is working properly it should beep twice.

