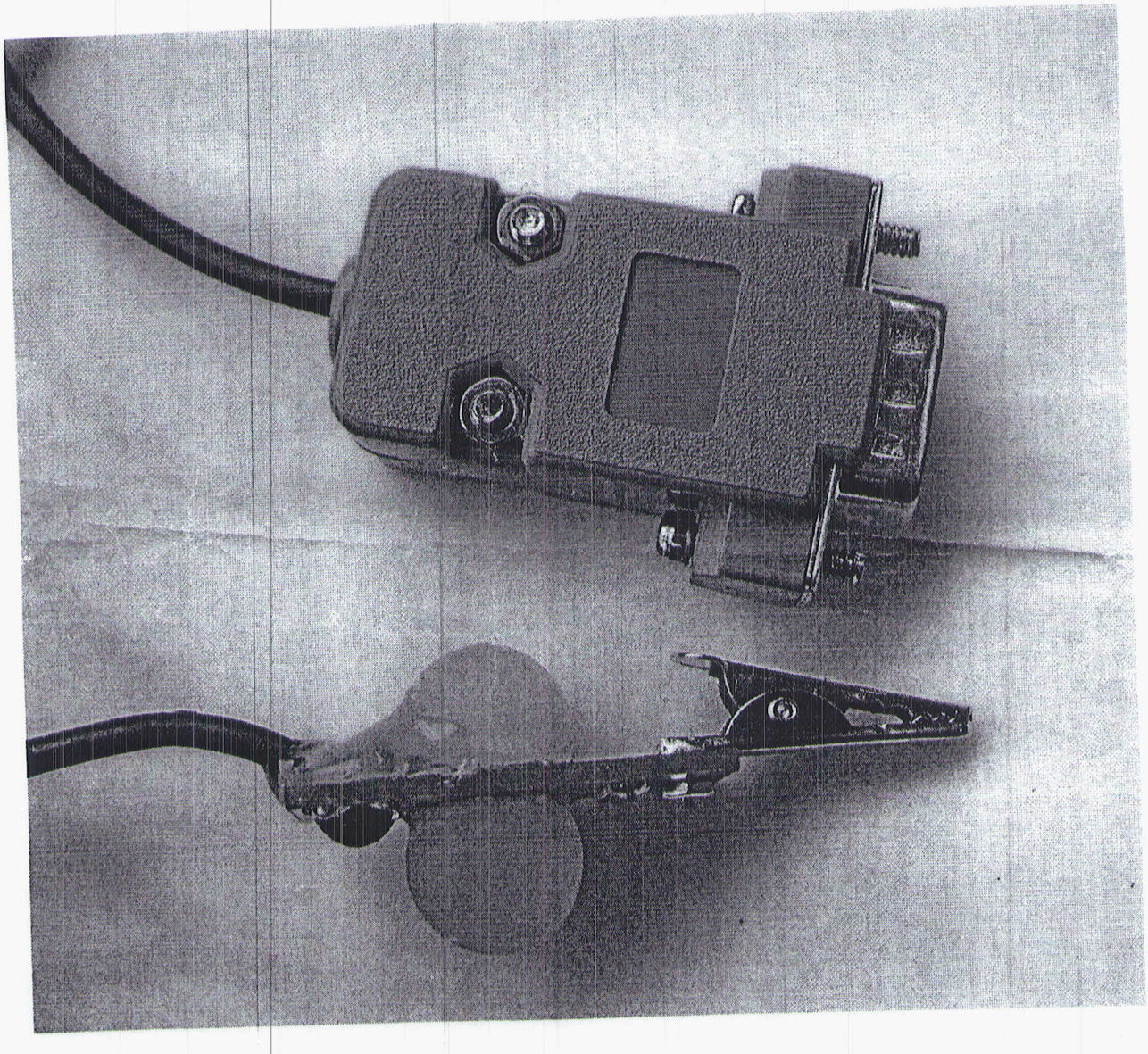
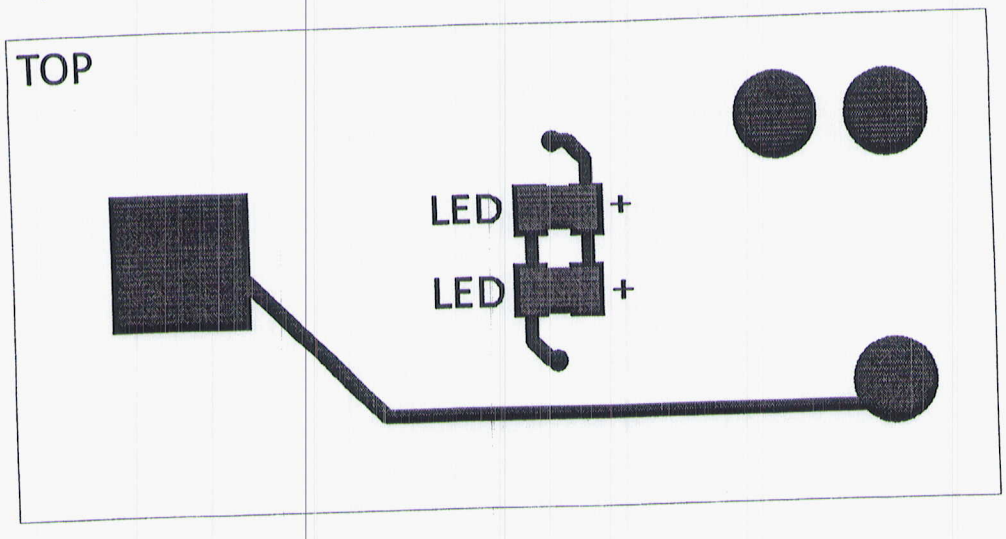
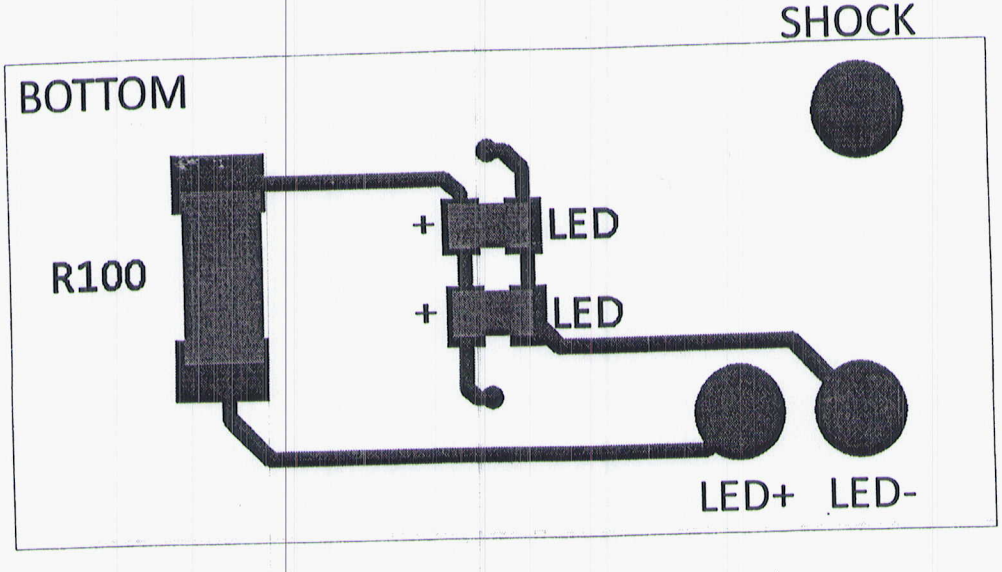
Shocking Cable Assembly

Last update March 30, 2010

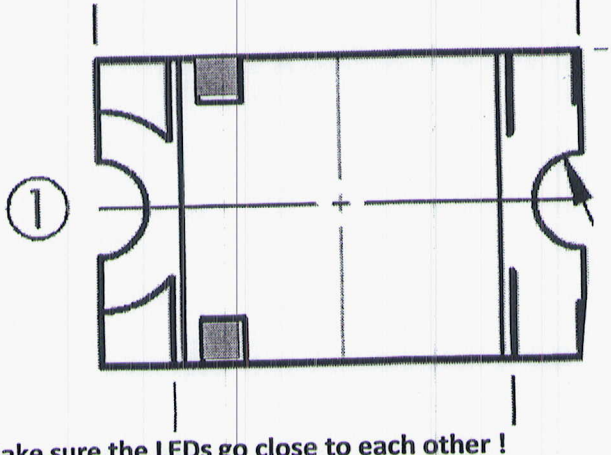


Step 1) – assemble LEDs and 100 Ohm resistor





The positive (+, Anode) pole of the LED is marked by tir·· green bars:



Shield – 1. Shock

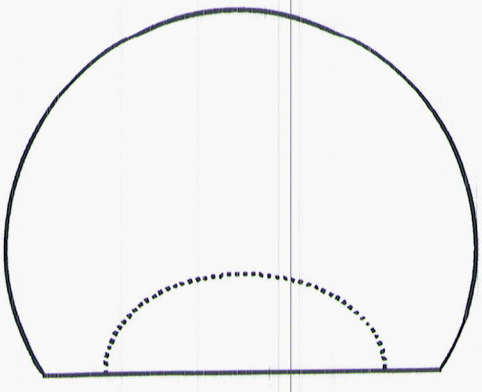
white – 6. LED

Red – 3-LED

Make sure the LEDs go close to each other !

Use protection on your eyes and fingers !

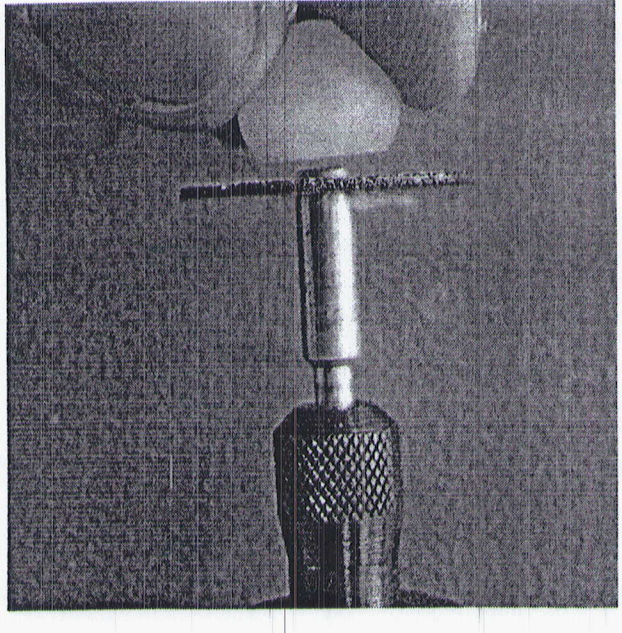
Step 2) Prepare poly propylene balls. They need to have this shape:



Put the polypropylene ball into gripper and drill small diameter hole (drill bit diameter 3mm) towards the center – depth 2mm.

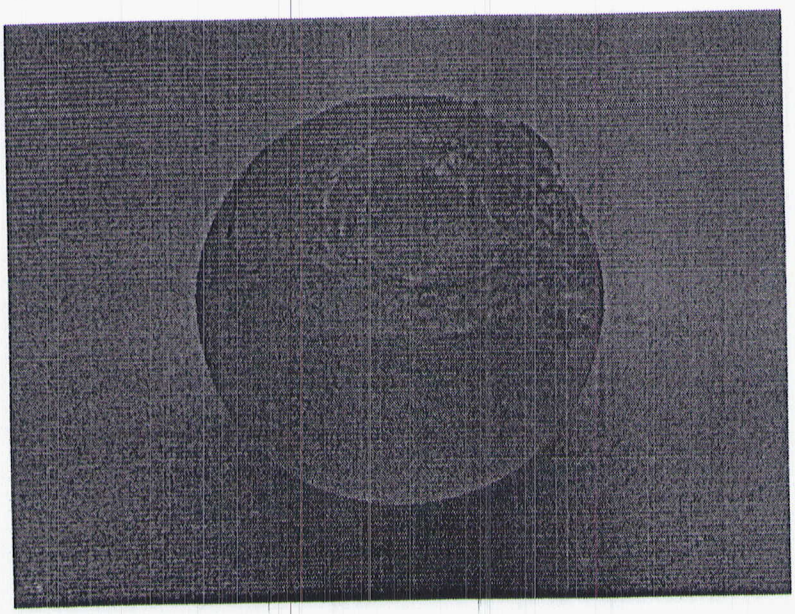
Take bigger drill bit (diameter 1/16) and drill bigger hole about 4mm deep.

Start the Dremmel tool and put the ball on it from a side directly on the hole you've just made. Let the Dremmel cut about 1/3 of the diameter (as shown on the image below)



Put the ball back to the gripper, facing up with the skewed side, take 1/4 drill bit and adjust the hole so both LEDs fit into it.

Final ball should look little better than this:



Step 3) attach the cable to all pins, the cable should exit at the oposite side than then where the resistor is placed.

Step 4) glue balls from both sides using plastic adhesive.

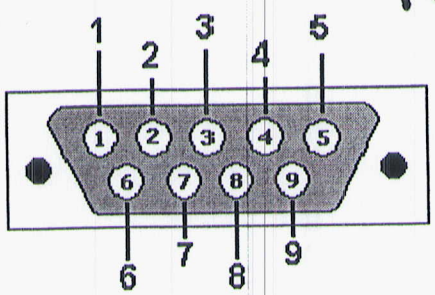
Step 5) attach protective spring

Step 6) Attach DB9 MALE connector to the end of cable + **cable restrain** + hood

Pinout:

Pin3 - LED
Pin6 - LED GND
Pin1 - SHOCK

Shield - 1 - Shock
White - 6 - LED - (⏚)
Red - 3 - LED +



Step 6) Cut crimping part from the aligator, add some solder on the bottom of the aligator around the hole. Attach it with the screw, solder around the aligator.

Step 7) protect wires on the board with hot glue.