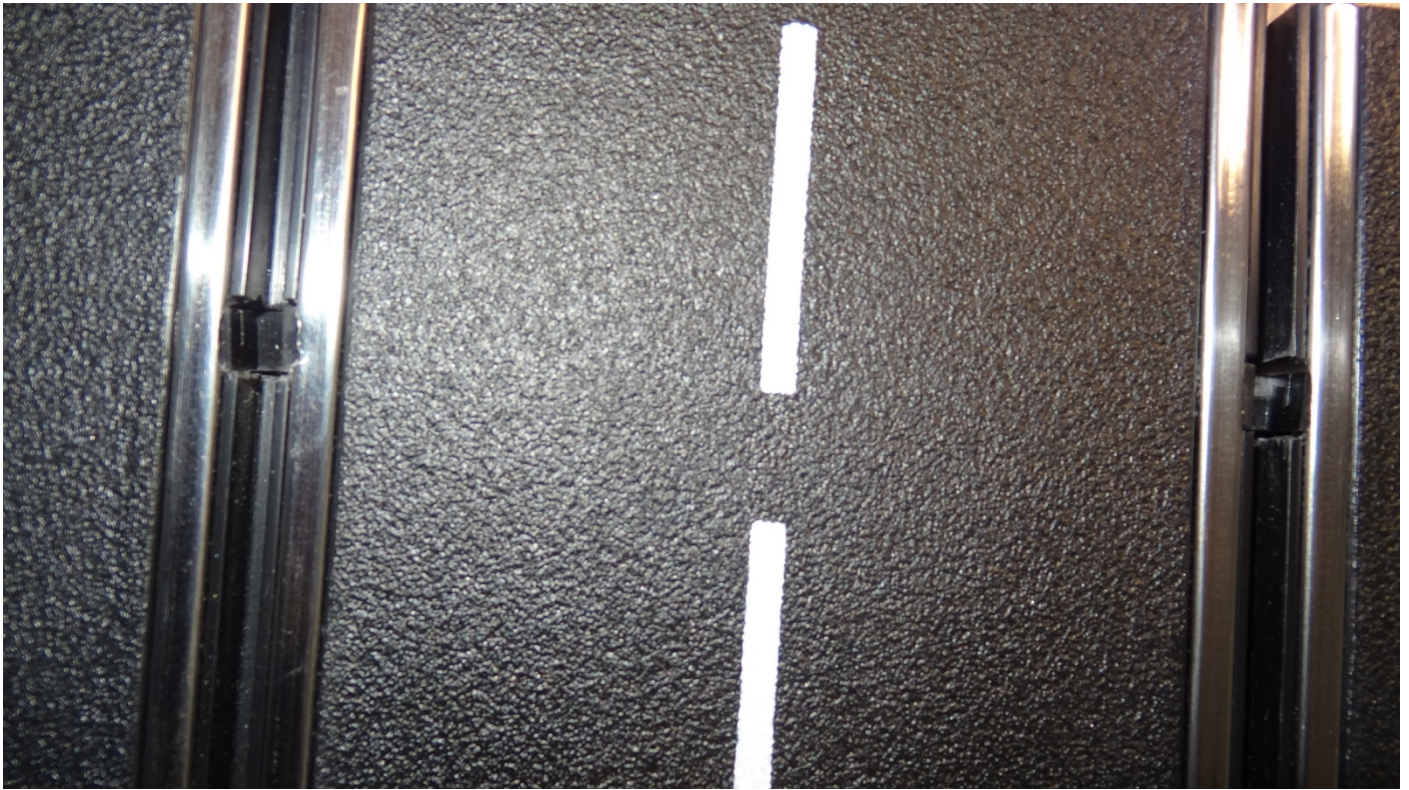


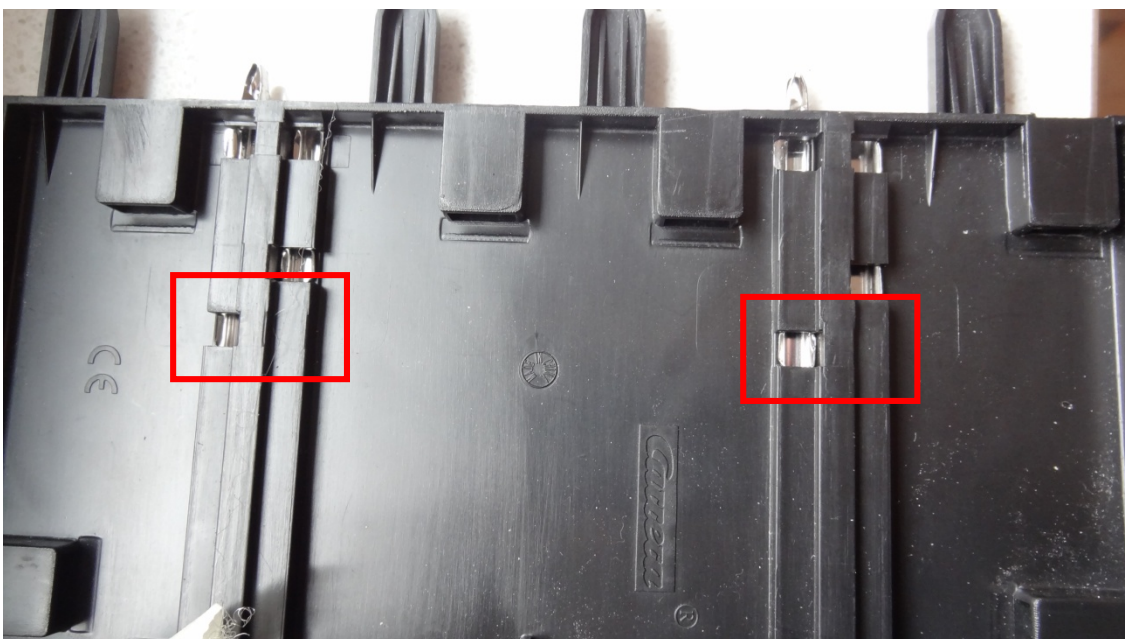
Installing a Slot Sensor

Description for installing sensors for analog racetracks

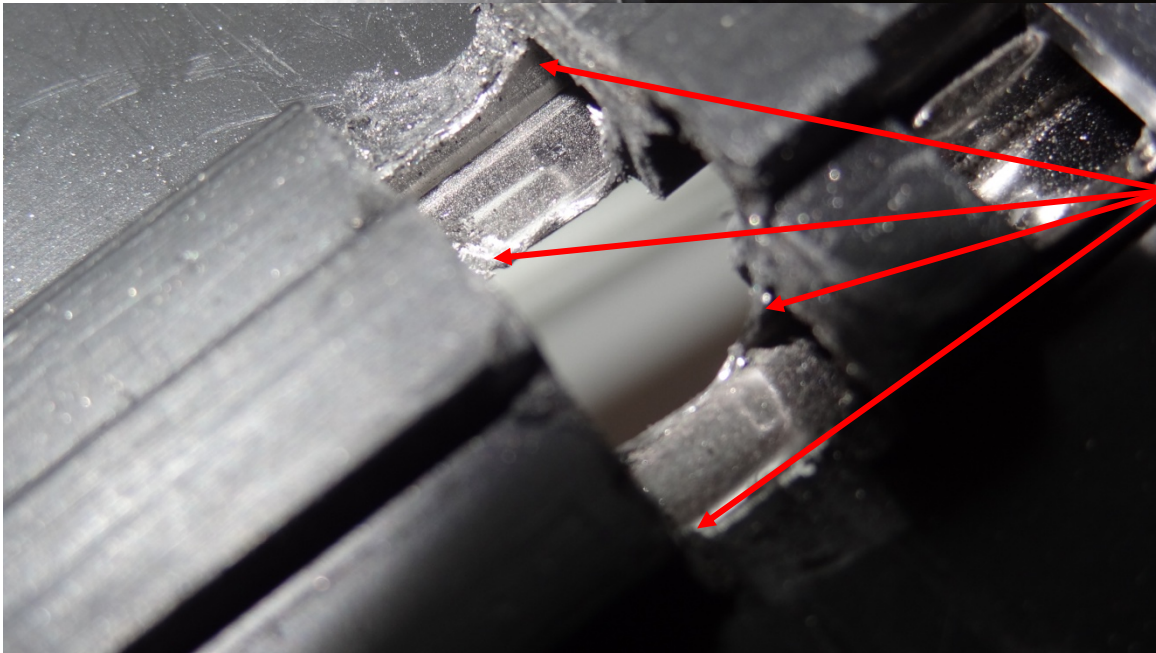
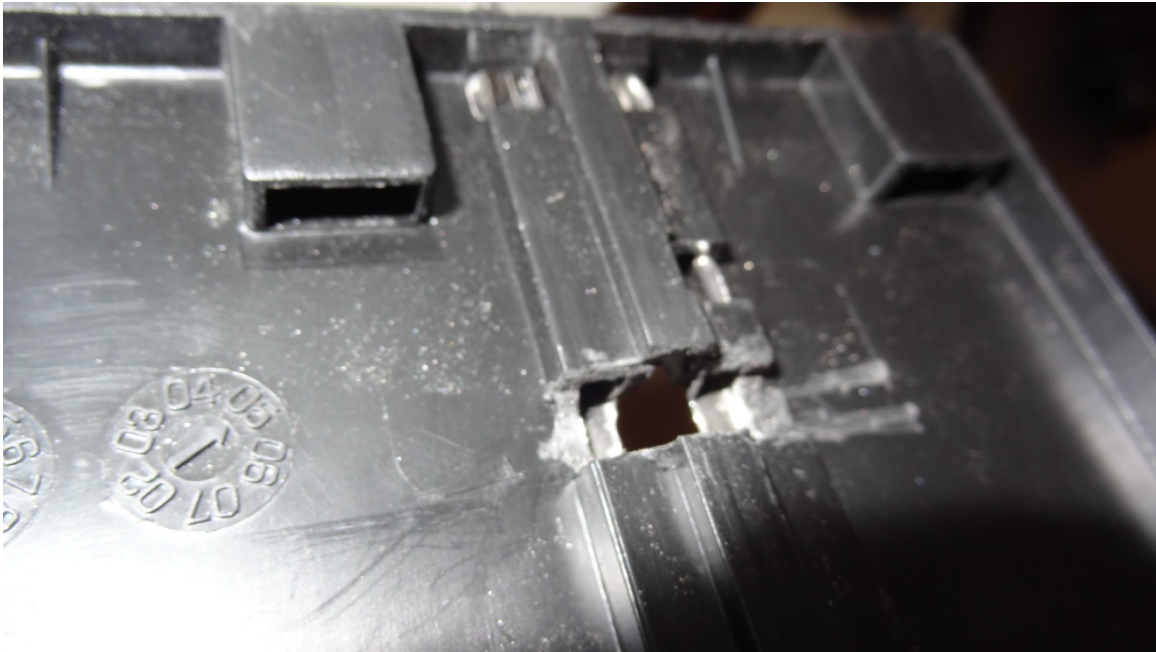


This is how it looks when it's finished.

First step: determining the placement. Choose the position at the end where a partial recess is already present.



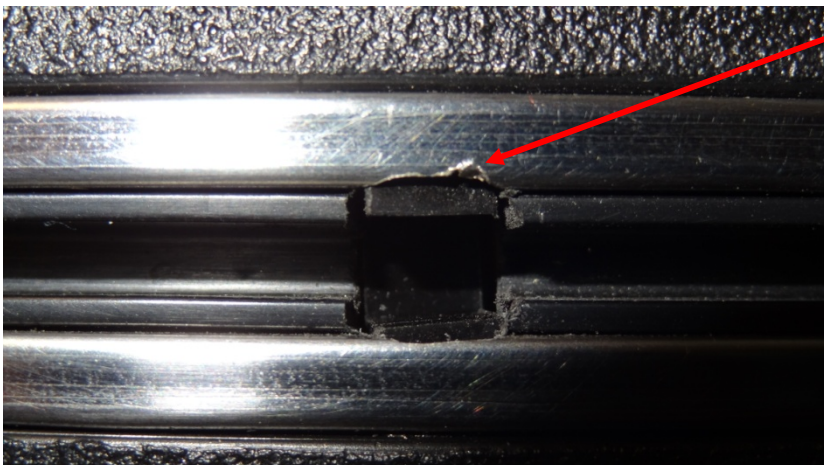
Using a "Dremel", enlarge the recess slightly, extending it across the full width of the track. This will create a recess that looks like this.



In the bottom photo you can clearly see that the recess in the corners is insufficient!

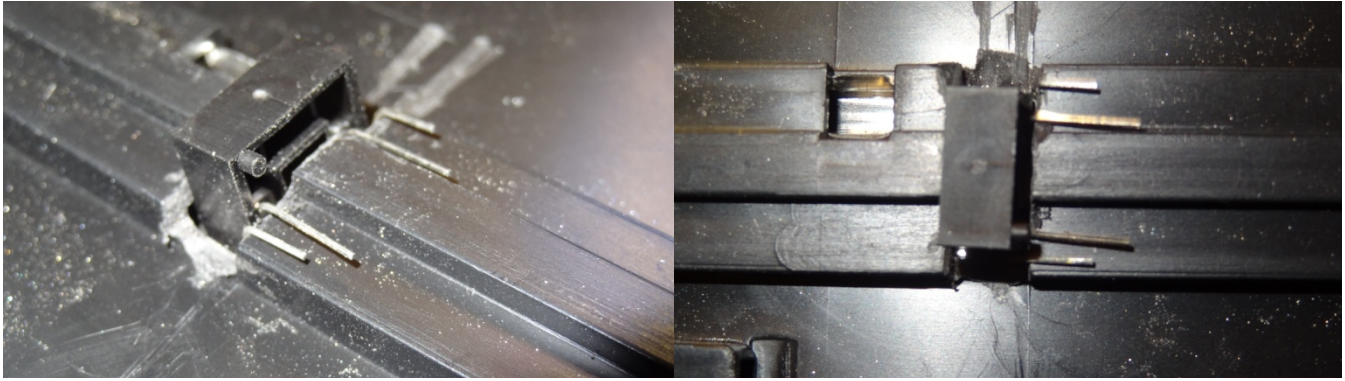


Recess should be approximately 5mm for the sensor + 1mm for the connecting wires.



You can see here that the top of the rails is damaged. Not a big deal, but not pretty.

The sensor is then deployed as such.



Installing the sensor:

Bend the bottom connections outward and the top connections upward. Press the sensor into the recess and then bend the bottom connections (that were facing outward) back up. Bend the top connections downward.

The sensor should look like this:

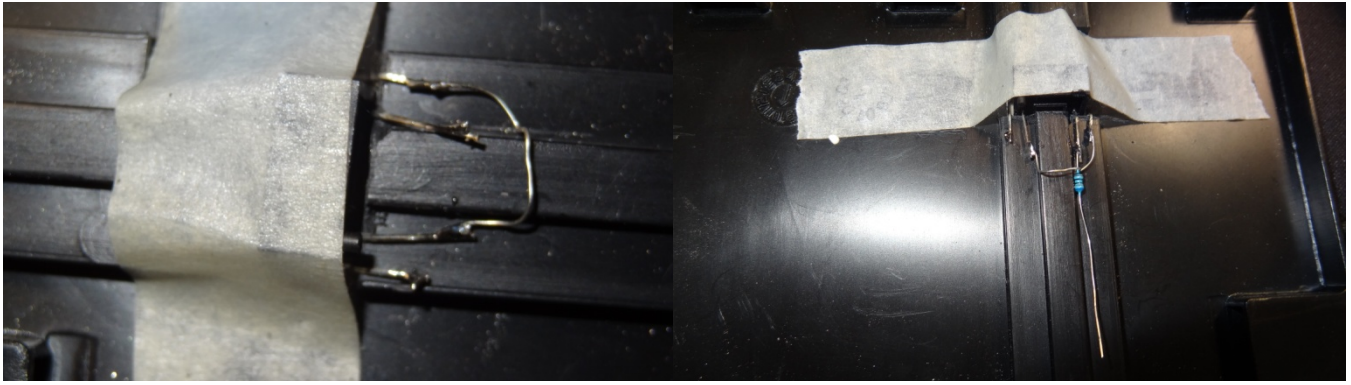


Connecting the sensor:

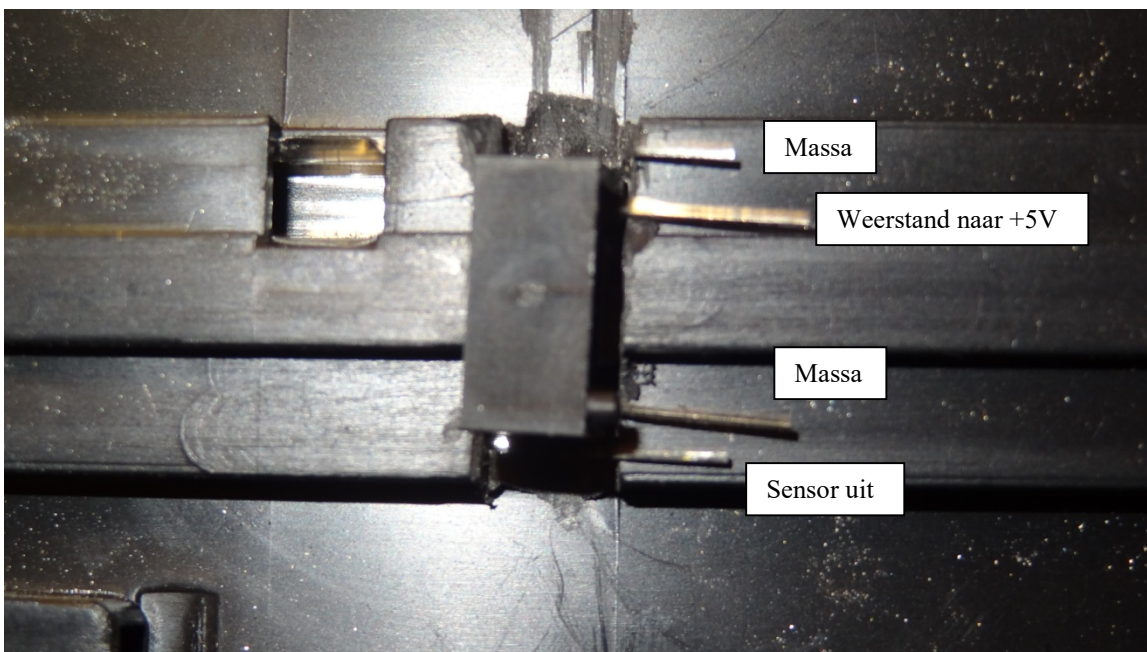
Before permanently securing the sensor with hot melt adhesive, first solder the wiring to it.



Temporarily secure the sensor with tape.



Make a jumper between the bottom right and top left wires.
Solder a resistor to the top right wire.



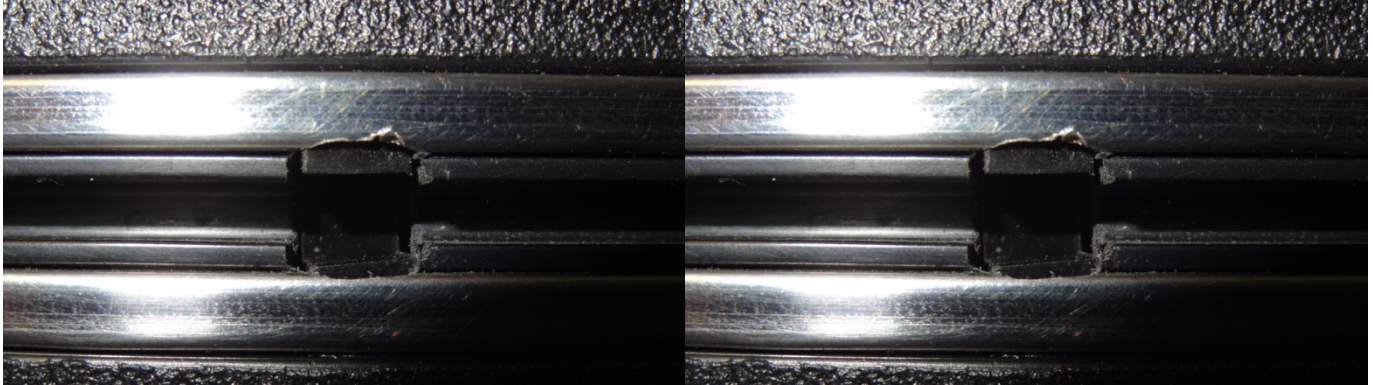
Connections

Checking for functionality:

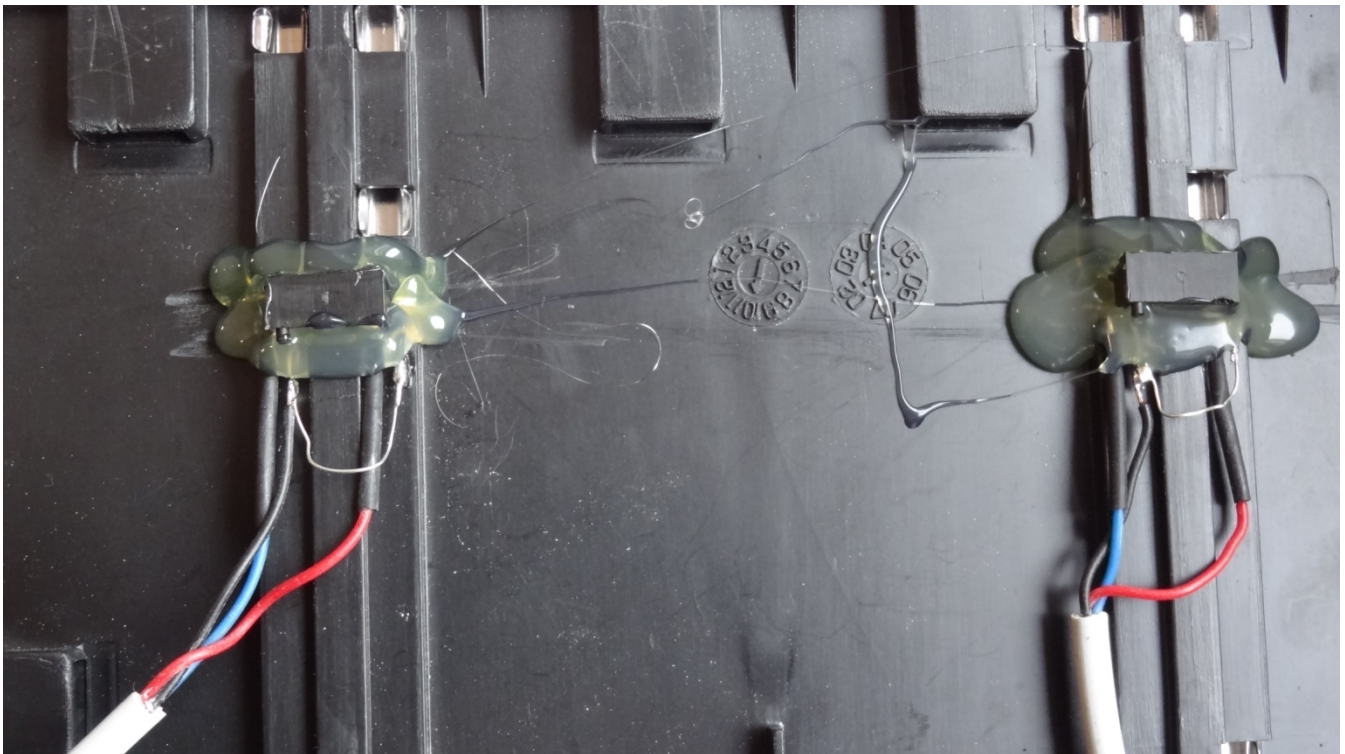
Check that the sensors are working, **but also that the connections are not touching the rails in the track section!**

Finalize with hot melt adhesive:

Cover half of the sensor and check that it is properly seated at the top!



Because this type of sensor has a larger opening of 5 mm than others, the passage through the lock is not narrowed.



The sensor ears look like this after being glued in place.

As you can see, the height has increased slightly, but you can't mount the sensor any deeper, as the slot would be too shallow.

The photo shows two cables, but a better solution is a 6-wire cable.

Note: This cable must be shielded (metal sheathed); it is connected to ground at the other end.

