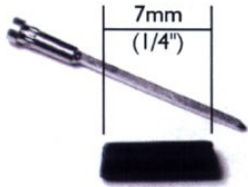


PhotoPopper Touch-Sensor Construction

These PhotoPopper-style touch-sensors are unlike almost any other switch you may have seen. These are *omni-directional* switches, which have a unique ability in that they activate when touched from almost any direction. They are also very robust and sturdy, unlike regular switches that snap and break when they are flexed from the single direction for which they are designed. Did I mention that they were also inexpensive and relatively easy to make? Just wait and see how simple they are...



1. Augat Socket Pin and Heat-Shrink Tubing



2. Slip Tubing onto Socket Pin

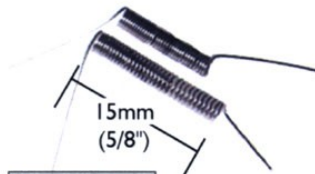


3. Shrink Tubing with match

First find the plastic heat-shrink tube that came in your kit and clip off only 7mm (1/4") and slip it onto the Augat socket (picture 1). Make sure that it doesn't completely cover the end, as you will be soldering to that later (picture 2). Then shrink the tubing by applying heat to it (match works fine), but don't bath it in the flame (picture 3). Gently heating will make it snug down onto the pin. If you see smoke, that's too much heat!



4. Cut tubing below neck (leave in place)

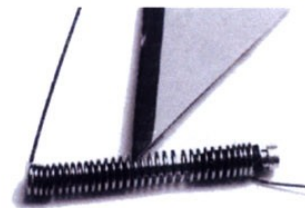


5. Stretch Spring



6. Push Spring onto Pin

After the tubing is shrunk, carefully cut the tubing below the neck of the socket pin and leave it in place (picture 4). This new segment will be used to tune the sensitivity of the touch-sensor. Take a spring wire, and stretch it out to about 15mm so you can just see between the coils (picture 5). Then push the spring onto the pin up to the tubing, but not over the end. If this causes some problems, try twisting the spring while pushing it on so it threads onto the tubing.



7. Slide Tuning Segment Down

Lastly, reach between the spring coils with your knife and slide the cut tubing segment down the pin to about 1/3 the pin's length.

