Electronic Tool Tip #7 – Static-Free Tweezers

When handling electronic components, it is necessary to get into the habit of ensuring that the devices are protected from the discharge of static electricity. Static discharge can immediately destroy many components, especially any semiconductor devices of the CMOS type. With the miniaturization of electronics devices and components, it becomes necessary to use tools to lift, handle, and manipulate many components, particularly SMD components. This is where a good set of anti-static tweezers comes into play.

The tweezer set shown here includes high-quality non-magnetic stainless-steel tweezers that are anti-static and non-corroding. This particular set offers nine different tweezer types plus a pair of fine cutters, a wiping cloth, and a carrying pouch to keep everything together, and is called their *nine-piece* set. Also available are two seven-piece sets and individual tweezer models. I use my ESD-11 tweezer from this set literally on a daily basis, and I have found them to be quite durable.

The tweezers aid greatly in the placement of SMD parts onto the printed circuit board (PCB), and the back end of the tweezer is useful for holding the device in place while soldering is being done. Just a little bit of downward pressure on the chip keeps it from walking away while the soldering process occurs.

Tweezers like these are a tool item that any electronics hobbyist should not be without. They are useful for a wide array of tasks, like plucking one particular resistor out of a container or pile of components, or for aligning the holes in a PCB with the mounting holes in an enclosure. A favorite trick of mine is placing washers onto screw threads in poorly accessible locations, and then starting a hex nut on the threads. This is done by inserting the long narrow tip of the ESD-11 tweezer into the center of the hex nut, and then letting the tweezer open to hold the nut on the end of the tweezer. Next, bring the tip of the tweezer into alignment with the end of the screw, and then squeeze the tweezer to allow the hex nut to slide down onto the end of the screw. Then simply reach in there with the tip of a screwdriver, with the tweezer still in place to serve as an axle, and turn the hex nut to begin the thread engagement. A lock washer, for example, can be placed onto the screw threads in the same manner before the hex nut is put into place.

This set is available online from Amazon, at a price of $13.49 (USD) plus shipping if you are not an Amazon Prime member. Of course, the governor has to get his share, so tax will also be applied.

Go to https://www.amazon.com/dp/B07JMBGL3W to investigate this item and its companion sets and individual pieces for yourself.