

Tips for handling small parts

The popular Kadee & Micro-Trains couplers, and many other model railroad items, have some very small parts. Many are too small for our fingers to hold well, and some are too small to be seen well without magnification. As we get older, our hands get less steady, and our eyesight deteriorates. When tiny parts fall, or fly, off the workbench they can be nearly impossible to find.

Here are some tips that can help keep parts from disappearing and help you handle them, more easily.

- 1) Set up a dedicated workbench if at all possible. If you don't have space for a full-time workbench, you might build a smaller, stowable, workbench that can sit atop the dining table when you can work on your trains, and be stored in a closet, or on a shelf, between work sessions. Such a stowable work bench should have as many of the same features as a full-size permanent workbench as possible.
- 2) Have plenty of light on your work area. I have two 4' long LED shop light fixtures over my workbench. A small stowable bench might use a bright LED desk lamp.

- 3) Use an Optivisor. This type of magnifier fits on your head, leaving both hands free. It fits over eyeglasses, and can be tilted up out of the way when you don't need the extra magnification.

- 4) Install a "parts catcher" across the front of your workbench. Mine is made of cloth suspended in a trough shape, on a frame made of wood dowels. The back end of my cloth parts catcher is securely fastened to the front edge of my bench. The sides, and front, are attached to the frame. My dowel frame is able to retract into a pair of $\frac{3}{4}$ " conduit pieces fixed just below the work surface. This lets the parts catcher slide in when my belly bumps into it. Two springs push it back out. This feature is quite handy, but entirely optional.

- 5) Wall in the sides, and back, of your workbench so that parts can't escape.

- 6) Lay a light-colored terrycloth bath towel over your work surface and secure it with weights, tacks, or clamps in the four corners. The light color makes it easier to see the small parts. The rough surface of the towel tends to catch parts before they can travel far. The weights or tacks prevent the disaster of having a towel full of tiny parts slip off the bench and spray parts all over the place!

7) Use the right tools for the job. Kadee/Micro-Trains offer several special tools that make assembly, and mounting, of their couplers easier. These tools include a “spring pic” tool that is specifically designed to hold the tiny springs used in couplers. It has projecting dimples on both sides of the working tip, that slide between coils and inside the spring, to hold it firmly. There are “assembly fixtures” for holding coupler parts while the coupler is being assembled. Kadee also makes special slotted tweezers for holding an assembled coupler while fitting it onto a car. They also sell a drill and 00/90 tap set for making mounting holes for couplers. Last, but equally important is Kadee’s coupler height gage. It sits on the track and has a correct height coupler at one end and a floor height ramp at the other. With this one tool, you can check the car floors to make sure they are at the right height for mounting couplers, measure the height of installed couplers, measure trip pin height, and measure the “track gage” (the distance between the rails) and the wheel gage as well. Some other essential tools for any model railroad are a multimeter, an NMRA standards gage, small jeweler’s screwdrivers, tweezers, small clamps, miniature needle-nose pliers, miniature diagonal cutting pliers, a “screw starter” or “mechanical fingers” tool, a pin vise and set of miniature drill bits, a small vise (Panavise is an excellent brand) and any other tools that you find will

make your hobby work easier. www.micromark.com is a good source for hobby tools of all sorts.

- 8) Have a comfortable, rolling office chair in front of your workbench. You will be spending a lot of time there, so you will want to be comfortable.

Have fun!

Traction Fan