

A Tutorial on Installing Switch Stands

I was asked to write a quick tutorial on installing Switch Stands.

Start at the Switch. Replace the ties on either side of the switch control bar with 42" ties.... on the right side of the track....



The tie without a notch located farthest from the switch stand. One with a notch located on the Switch Stand side..... so the control tube can run toward the Switch Stand. The 42" ties are positioned so the Grey Metal Box just fits between the 42" ties. Cut a hole in the plastic and dig a hole so the Grey Box will sit with its top at the level of the top of the tie.

Then dig a 40' ditch in the Ballast.... paralleling the track.... exposing the black plastic.

Assemble the 40' tube and rod.



We use metal conduit for the tube. The 3/4" metal conduit connector (right in the photo) connects 5 feet of 3/4" metal conduit to the Grey Metal Boxes. A 3/4" to 1/2" conduit connector (center in photo) connects a 10' piece of 1/2" conduit. Then 2 more 10' pieces of 1/2" conduit are connected with 1/2" conduit connectors (left in the photo). Then step back to a final 5 feet of 3/4" conduit. So the order of assembly is 5'(3/4), 10'(1/2), 10'(1/2), 10'(1/2), 5'(3/4). I take care to make all the

set screws on the conduit connectors point to the sky for easy maintenance. Then we put the rod through the tube. One end of our rods has a 1" bolt welded to it. I connect the rods with a coupler nut connecting those 2 bolt ends.

Then we use 3/4" set screw connectors to connect the grey boxes to the conduit ends. The box with 2 holes goes on the switch end. The box with one hole goes on the Switch Stand end. I take care to make the set screws be horizontal and point away from the track so you can get to them in the future. The box ends of the rods has a 2.5" threaded stud. I install a nut, lock washer, and clevis fork on each end... leaving the nuts loose for a moment.



Then adjust the rod/clevis forks or rod length so the clevis pin lines up with the holes in the center of the top of both the boxes.



In the Switch Stand box install the socket with its wing in the clevis fork with a clevis pin and cotter pin.

In the Switch box install the crank.



Crank rests on
PVC Coupler
on 1/2" Washer

Starting from the bottom of the box install a 1/2"+ washer that will rest on the bottom brass bushing and hold up the spacer. The spacer is a PVC grey plastic 1/2" conduit connector.... just to hold the crank up so that it lines up with the holes in the box.... arms opposite the center of the holes. Use a clevis pin and cotter pin to install the crank.

Check that the Clevis pins still line up with the holes in the top edge of both the Grey Metal boxes. Adjust if needed. Tighten the nuts and lock washers against the clevis forks.

Install the spring linkage to the switch and approximately adjust.

Then put in the Switch Stand. Check that the Clevis pins still line up with the holes in the top edge of the box. I move the lever to the center of its throw and align the base screw holes with the holes in the top edges of the Grey Metal Box while standing over the switch stand. Usually it drops right into the socket and quickly finds the bushing to drop all the way down. Screw down the Switch Stand.... first screw the box on, then screw the switch stand to the 42" ties. Get the ties tight against the Grey Metal box.

Screw down the cover plate at the switch end.. the wide part of the bushing goes on the bottom of the cover plate.

Make the final adjustments on the spring linkage.

The switch stand should now work correctly.

Install the Yellow and Green Disks.