



# Desktop Stand

## Assembly and Usage



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## Introduction

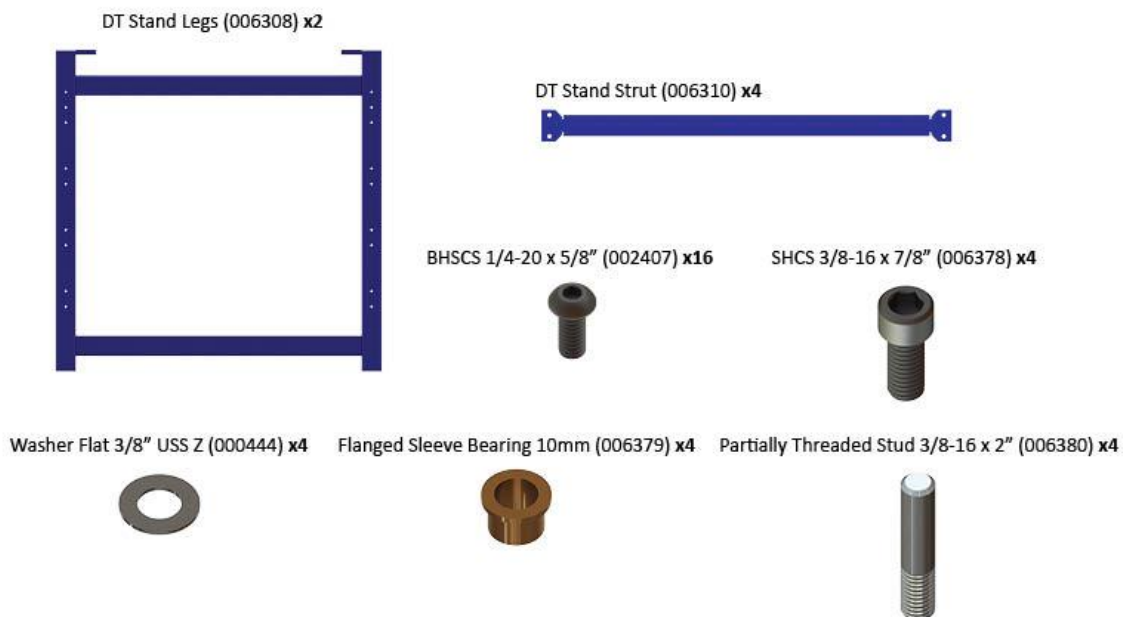
The ShopBot Desktop Stand is designed to serve as a convenient, space-efficient place to mount your ShopBot Desktop tools. By default it is compatible with the D2418 DT3 but provided you have the optional DT Stand DT1 Kit (006385) you can mount a D2418 DT1 instead.

### Recommended Tools (including ones used to install addons):

- 1/2", 9/16", and 5/8" wrenches
- 5/32", 3/16", and 5/16" Allen wrenches
- 9/16" deep socket (if installing caster wheels)
- Deburring tool

### Parts list:

#### 006381 DT Stand



Use caution when lifting heavy tools and components. Having an assistant will make things much easier – particularly when lifting the tool onto the stand. Do not attempt to lift the tool without assistance.

**Part lists for optional accessory kits:**

**006383 DT Stand Enclosure Kit (Optional)**

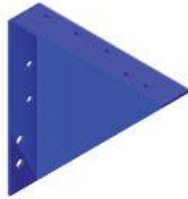
DT Stand Bracket Enclosure Small (006314) x6



DT Stand General Side Enclosure (006311) x2



DT Stand Bracket Enclosure Large (006315) x2



DT Stand Side Enclosure (006313) x2



BHSCS 1/4-20 x 5/8" (002407) x18



BHSCS 5/16-18 x 3/4" (002033) x16



Nut Hex Nylock 5/16-18 (002264) x8



**006317 DT Stand Caster Kit (Optional)**

DT Stand Casters (006316)



Washer Flat 3/8" USS Z (000444) x4



**006385 DT Stand DT1 Kit (Optional)**

DT Stand DT1 Adapter (006371) x4



Nut 5/16-18 Z (001508) x4



Threaded Rod 5/16-18 x 1 1/2" (006389) x4



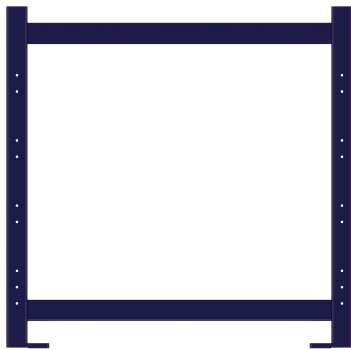


## Stand Assembly

Begin by checking the holes on all parts for burrs and removing them with a deburring tool if necessary.



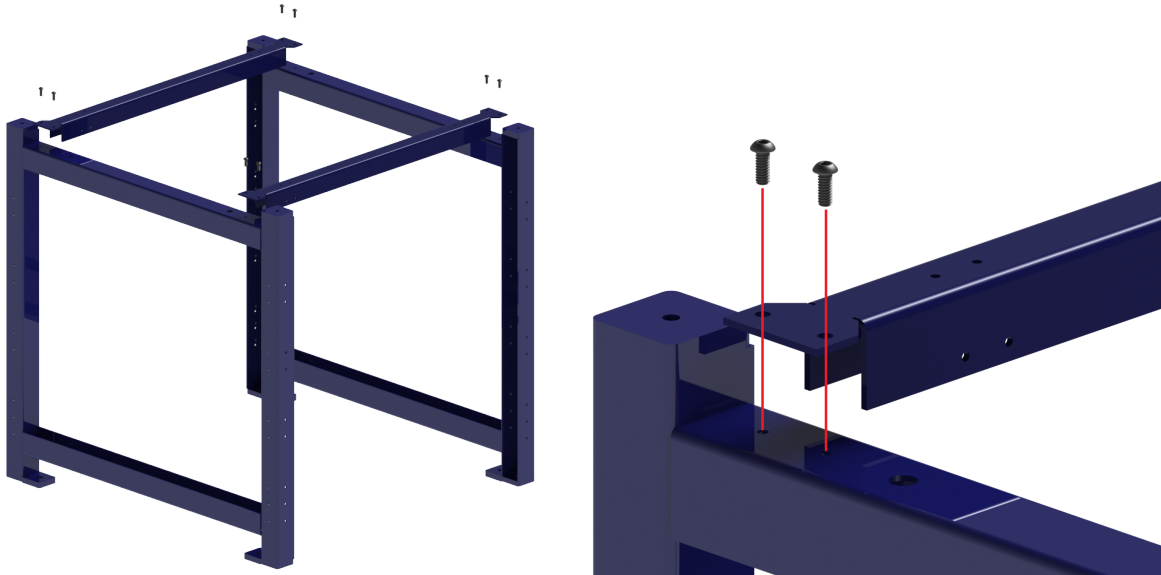
Take both Leg Assemblies (006308) and stand them upside-down with the open part of the legs facing each other as seen below. The distance between them should be roughly equivalent to the length of your stand struts (006309 for D3624 or 006310 for D2418).



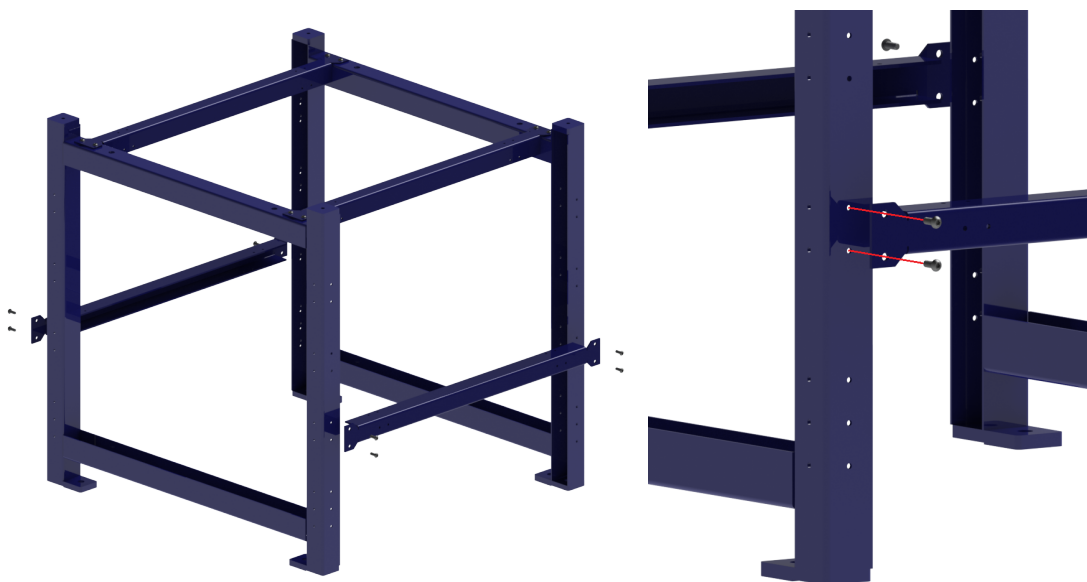
<Overhanging tabs on the bottom



Lay two stand struts (006309 or 006310 depending on your model) across the top of the legs so the holes in the end flanges line up with the threaded holes on parts 006308. Use 8 BHSCS  $\frac{1}{4}$ -20 x  $\frac{5}{8}$ " to secure the struts, but **don't tighten them all the way**.



Hold up the remaining stand struts one at a time to the sides of the stand and use 4 BHSCS  $\frac{1}{4}$ -20 x  $\frac{5}{8}$ " to secure each one. **Do not tighten the side struts all the way**. Now go back and tighten the screws on the first two struts.



At this point you need to remove the levelers from your Desktop tool. Lift up each end of the tool and prop it up with a block of some sort to give enough clearance to unscrew the levelers.



Replace the levelers with 4 Partially Threaded Studs  $\frac{3}{8}$ -16 x 2" (006380) (*Do not do this if you have a DT1 tool and the DT1 Mounting Kit*). These will be used to help line up the tool to the stand. Remove the nuts on the levelers, then screw the levelers into the threaded holes on the bottom of each leg as far as they will go. Reattach the nuts to the end of the threaded studs inside the legs.





If you **do not have** the caster wheel set, you can take the  $\frac{3}{8}$ " Flat Washers (000444) and place one around the leveler rod going through each leg. This isn't necessary but gives you a place to keep the washers if you ever add the optional casters in the future.



## Caster Wheel Kit 006317 (Optional)

### Parts list:

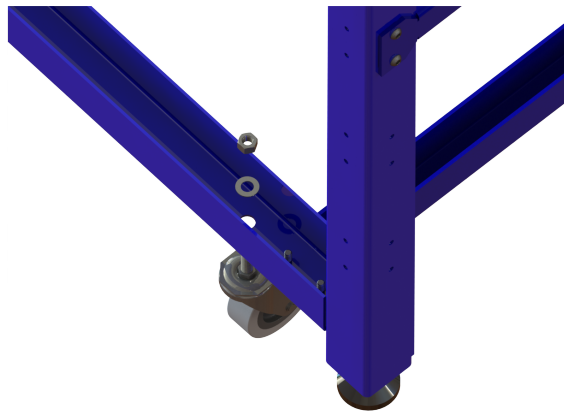
DT Stand Casters (006316)



Washer Flat  $\frac{3}{8}$ " USS Z (000444) x4

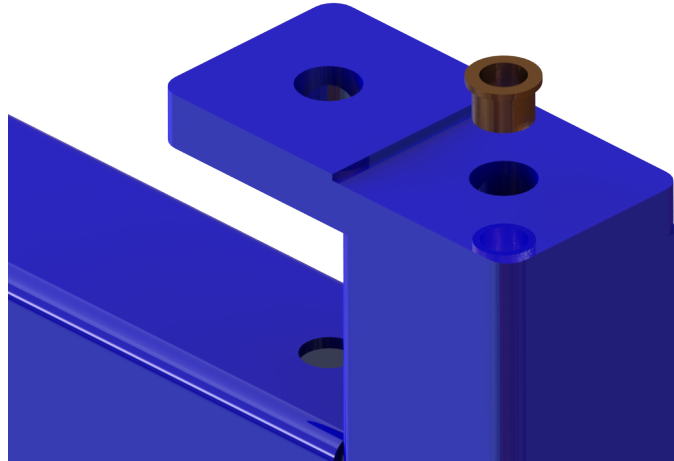


Attach the caster wheels into the holes next to the stand struts. Use a  $\frac{3}{8}$ " Flat Washer (000444) and the included nut to secure them. You will need to use a  $\frac{9}{16}$ " deep socket to reach the nut.

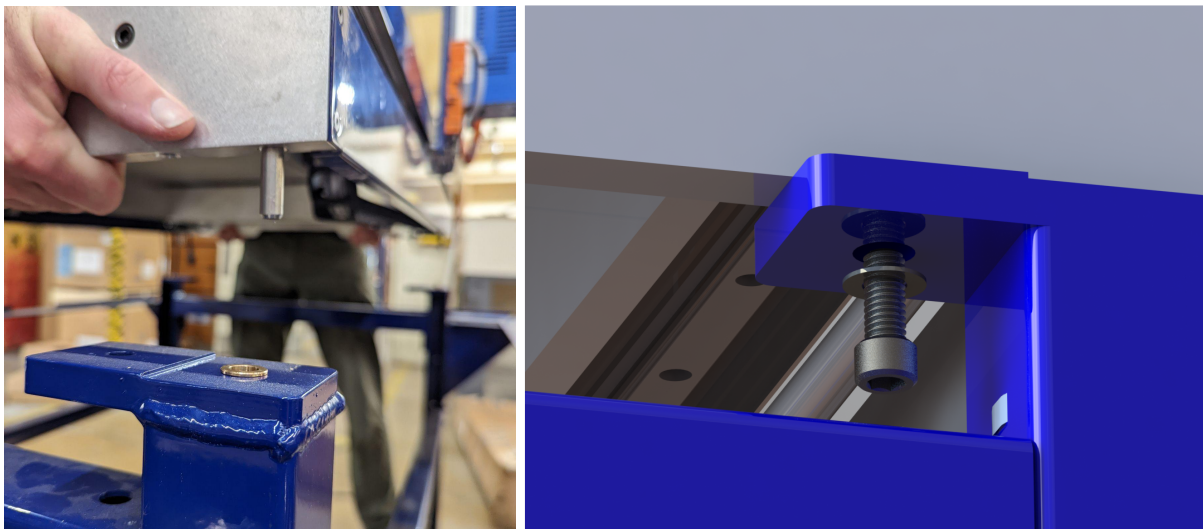


At this point you can flip the stand right-side up so it is sitting on the levelers/casters. Place 4 Flanged Sleeve Bearing 10mm (006379) in the outermost holes on top of each leg. The pins you attached to the Desktop tool will slide into these.

*If you have the DT Stand DT1 Kit, see page 10 for further instructions.*



With two people, carefully lift up the Desktop tool and place it on the stand, making sure to line up each corner using the pins. Use 4 SHCS  $\frac{3}{8}$ -16 x  $\frac{7}{8}$ " (006378) and 4 Washer Flat  $\frac{3}{8}$ " USS Z (000444) underneath to secure the tool. Screw them in one at a time. If one corner is misaligned you may need to remove the partially threaded rod from that corner to move the leg into place.



Go back and tighten the screws on the side struts.

The stand is now complete. If you have the caster wheel accessory set, make sure to lower the levelers so that the stand is fully propped up on them before running the tool. If you also purchased an Invision Enclosure Mounting Set, go to page 12 for installation instructions.

## DT1 Mounting Kit 006385 (Optional)

If you have a DT1 D2418 you can use the additional DT Stand DT1 Kit (006385) to attach your tool to the Stand.

### Parts List:

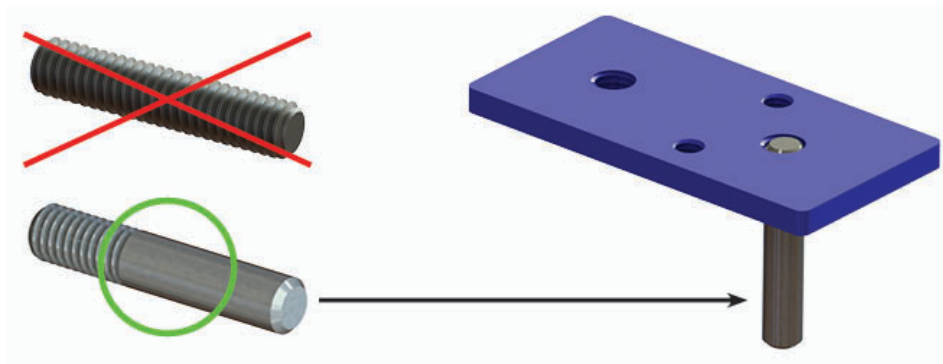
DT Stand DT1 Adapter (006371) x4

Nut 5/16-18 Z (001508) x4

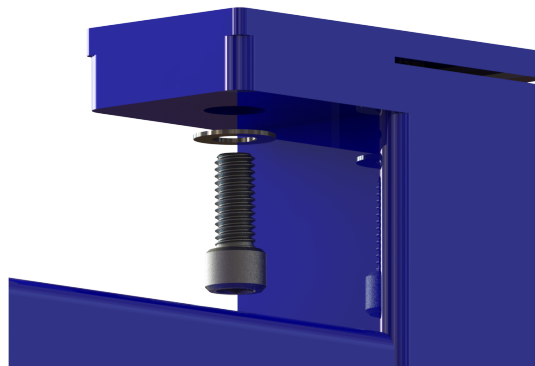
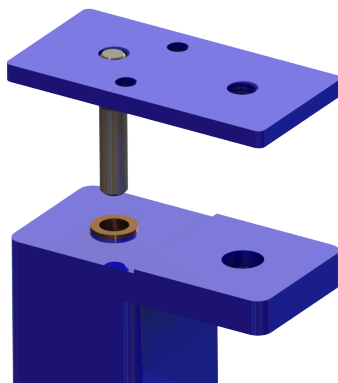
Threaded Rod 5/16-18 x 1 1/2" (006389) x4



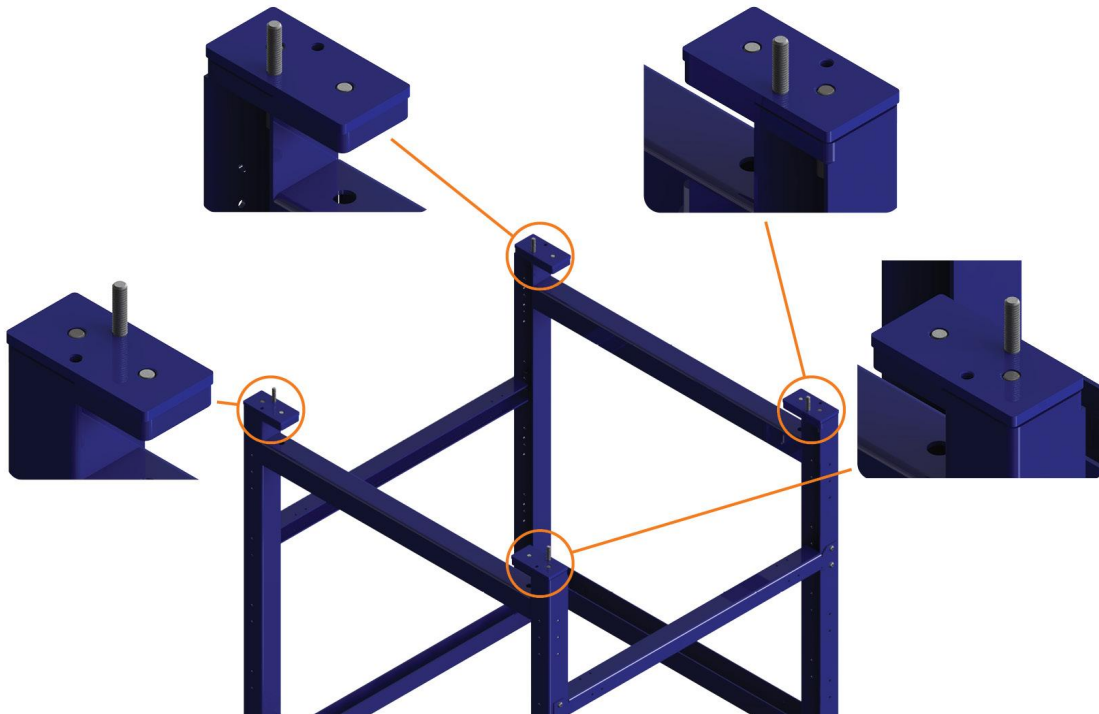
Follow the standard table assembly instructions but do not install the Partially Threaded Stud  $\frac{3}{8}$ -16 x 2" (006380) after removing the levelers. Instead, screw the studs into the four DT Stand DT1 Adapters (006371) so that the end of the threaded side is flush with the surface of the plate. Remember, these are the studs from the stand kit, not the threaded rods.



Slide the studs on the adapter plates into the flanged sleeve bearings on the legs. Secure the plates with a Washer Flat  $\frac{3}{8}$ " USS Z (000444) and SHCS  $\frac{3}{8}$ -16 x  $\frac{7}{8}$ " (006378) from underneath. Do not tighten all the way.

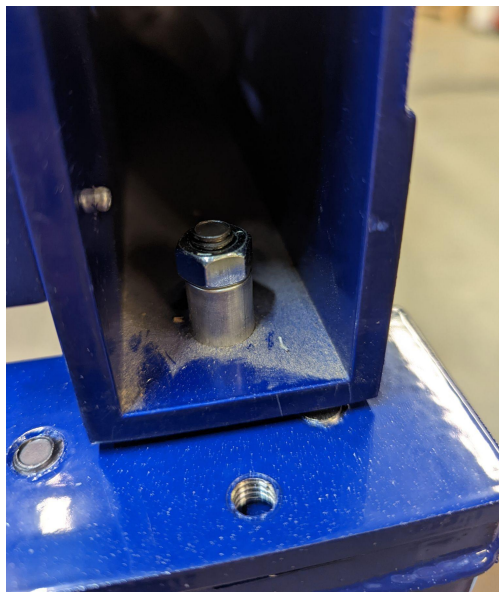


Screw Threaded Rods 5/16-18 x 1½" (006389) into the inner-facing holes on the DT1 Adapters.



With two people, lift the tool and place it onto the stand, making sure that the inserts the levelers were attached to slip over the threaded rods on the stand.

In the open ends of the tool's sides, screw a 5/16-18 Nut (001508) over the ends of the threaded rods.



## Invision Enclosure Mounting Kit 006383 (Optional)

If you have an Invision Enclosure 005976 and a DT Stand Enclosure Kit 006383, follow these instructions to properly install them.

### Parts List:

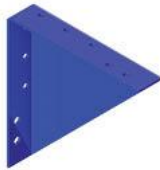
DT Stand Bracket Enclosure Small (006314) x6



DT Stand General Side Enclosure (006311) x2



DT Stand Bracket Enclosure Large (006315) x2



DT Stand Side Enclosure (006313) x2



BHSCS 1/4-20 x 5/8" (002407) x18



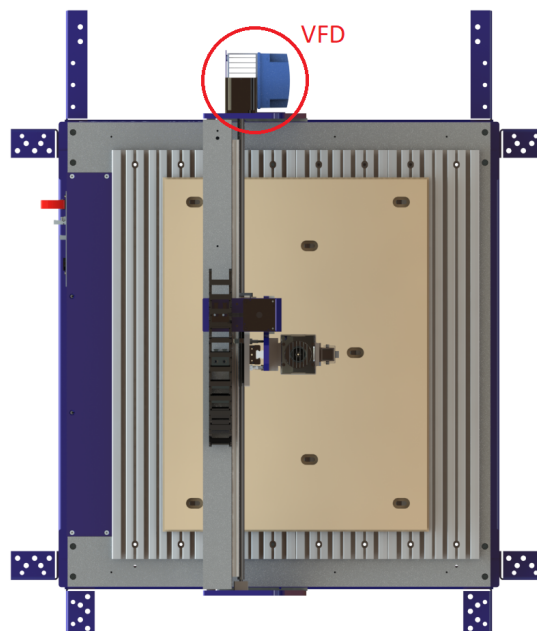
BHSCS 5/16-18 x 3/4" (002033) x16



Nut Hex Nylock 5/16-18 (002264) x8

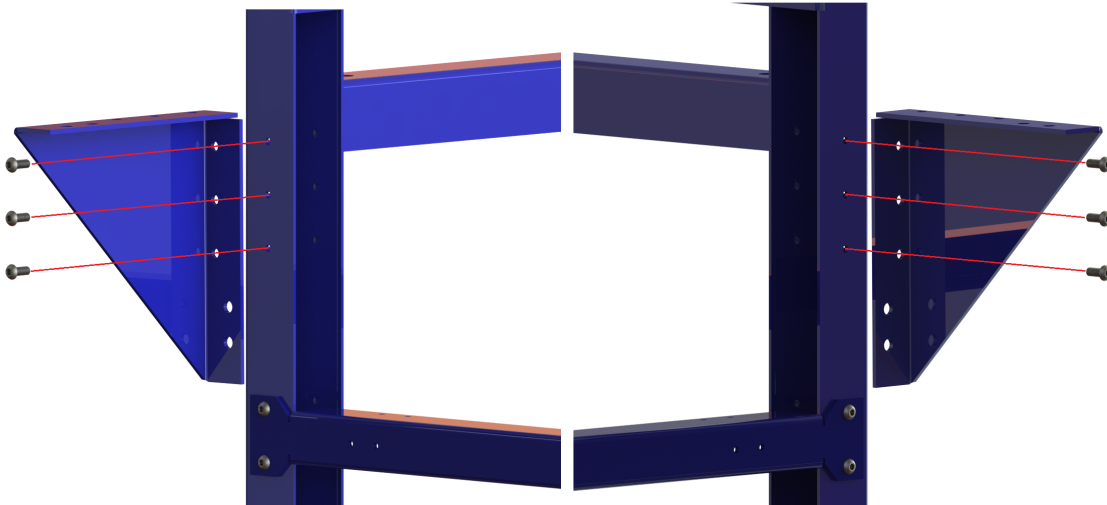


There are two different types of support brackets for the Invision Enclosure, small (006314) and large (006315). They will be attached to the corners of the stand as shown with the two larger brackets being located on the same side as the VFD.





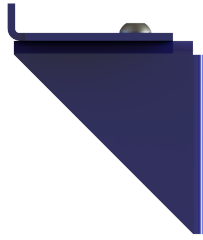
Attach the two large brackets using 6 BHSCS  $\frac{1}{4}$ -20 x  $\frac{5}{8}$ " (002407). The three smaller holes on the bracket line up with the three threaded holes on top of each leg. Attach them so that the flanges are facing towards each other. **Do not tighten all the way.**



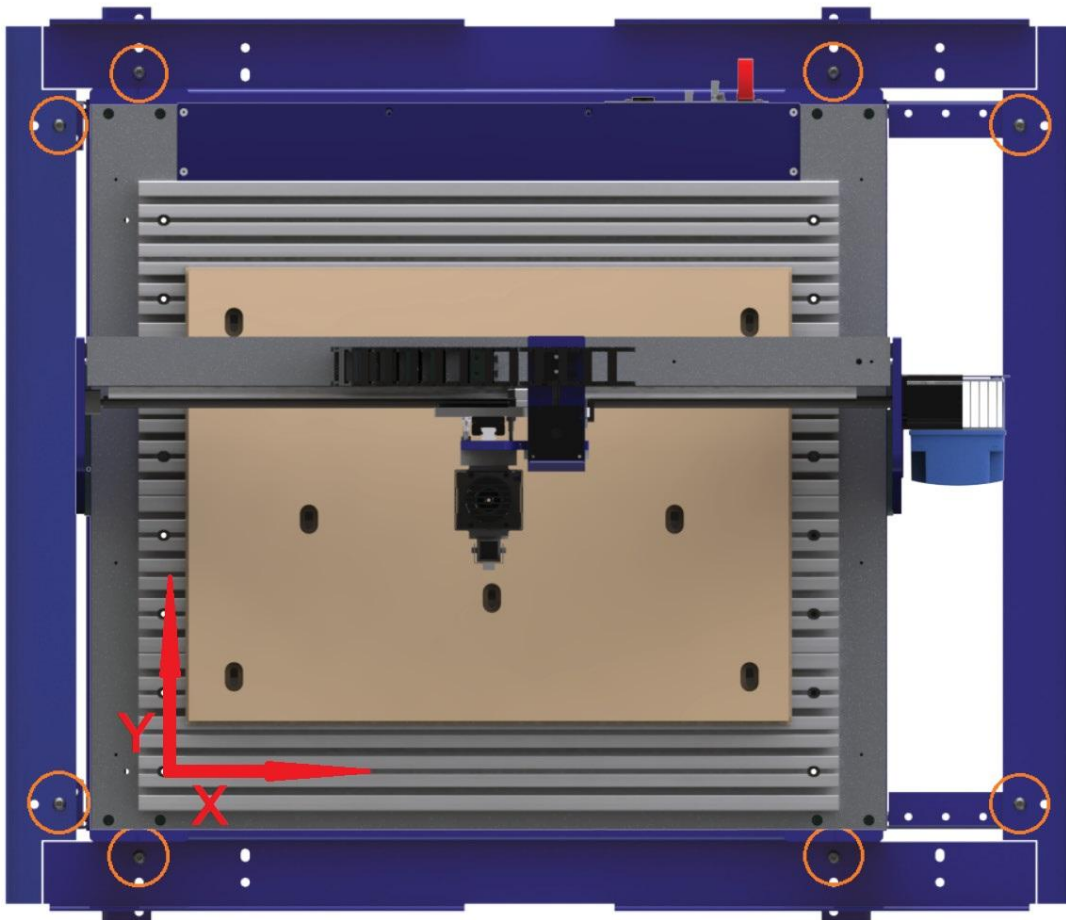
Attach the 6 smaller brackets to the other outward facing sides of the legs using 2 BHSCS  $\frac{1}{4}$ -20 x  $\frac{5}{8}$ " each. Make sure they are attached to the upper two of the three holes on each leg, using the two smaller holes on the bracket. Just like with the large brackets, the flanges on each side should be facing each other. **Do not tighten all the way.**



Lay the 2 DT Stand General Side Enclosure (006311) and 2 DT Stand Side Enclosure (006313) across the brackets. Parts 006311 should go across the tool's X-axis and parts 006313 should go across the Y-axis. The flanges on the ends of each part should be facing upward as shown.



Place 8 BHSCS 5/16-18 x 3/4" (002033) into the tops of the stand side enclosure parts based on the circled locations shown below. Make sure that the corners of the sides line up properly, and that both 006311 parts (the ones with the slotted holes) are slid out as far as they can go. When all screws have been placed, secure them underneath with 8 Nut Hex Nylock 5/16-18 (002264). Now go back and tighten the screws attaching the brackets to the legs.



Lift up and place the Invision Enclosure on the supports, making sure it is oriented correctly. The doors should line up with the gaps in the flange at the edge of the supports. Make sure that the bottom of the extrusions at the base of the enclosure are flat against the top of the supports.

Use 8 BHSCS 5/16-18 x 3/4" (002033) to secure the enclosure from underneath each bracket. They should thread up and into the T-slot on the bottom of the enclosure's frame. They do not need to go in all the way as long as the enclosure is secure.

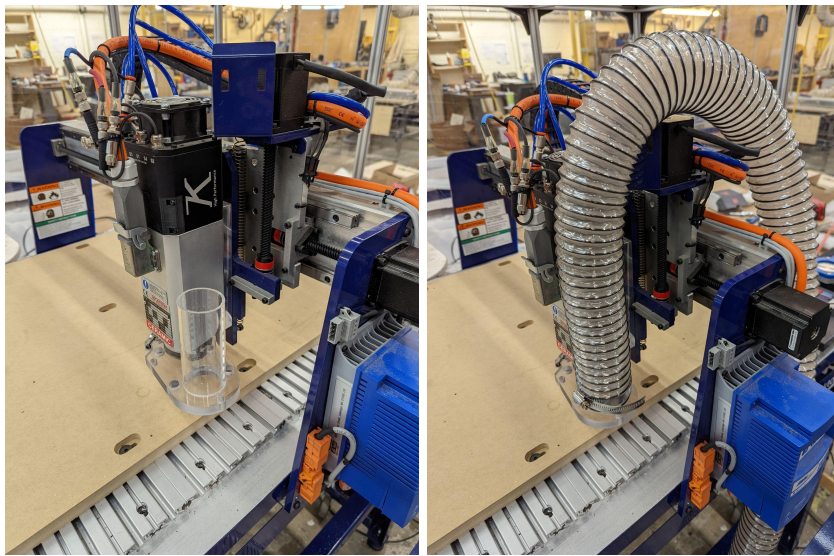


## Routing the Dust Hose

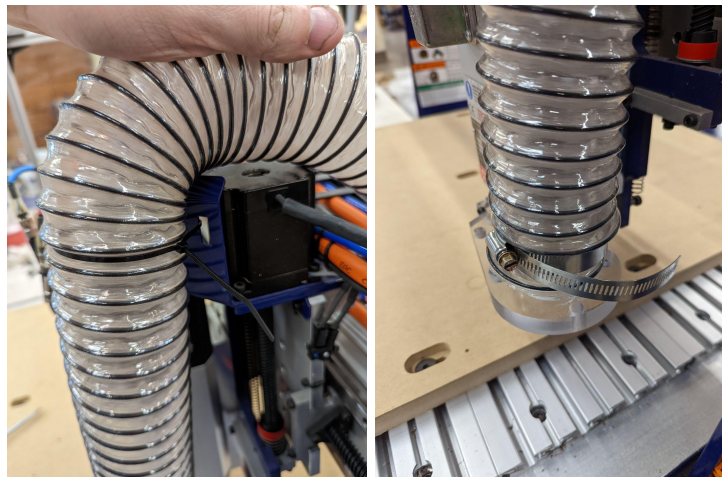
You will need to route the dust hose differently than instructed in the Invision Enclosure manual due to some slight height differences. The hose will go over the back of the gantry, run along it towards the end plate where the VFD is mounted, then go down and loop underneath the tool.

*Note that these instructions are primarily for D3624 tools. If you have a D2418 tool you can follow a similar procedure but some of the connection points will be in slightly different locations.*

Lower the spindle as far as it will go. Fit one end of the vacuum hose over the dust foot tube and drape it over the top of the Z-axis motor.



Make sure that the vacuum hose reaches from the top of the Z-motor all the way down to the base of the spindle. Secure the top of the hose with zip-ties. Tighten the band around the base of the hose. It does not need to be tightened all the way, it's okay for the hose to move up and down the vacuum tube a little.

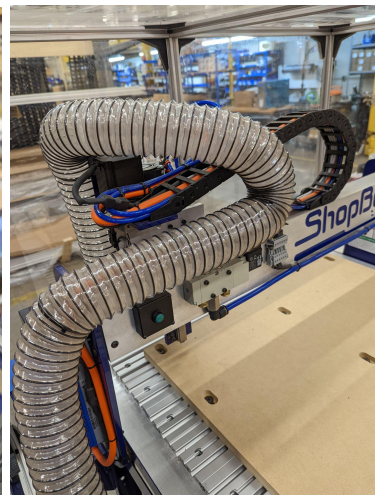
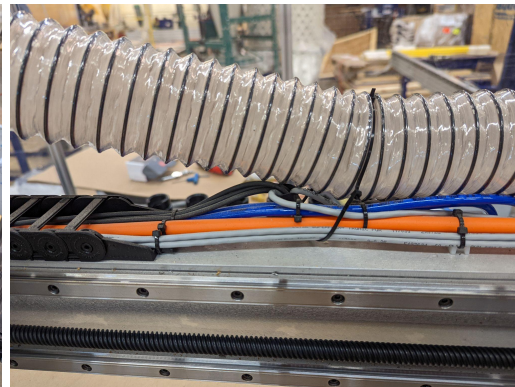
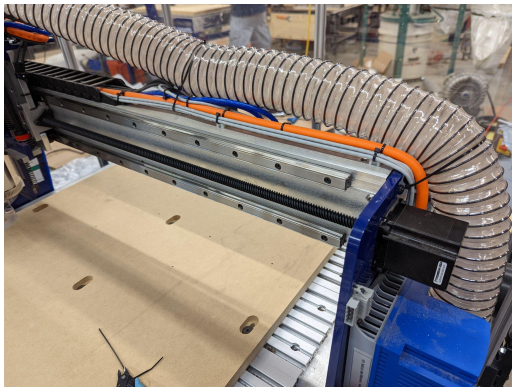




Move the YZ car as far away from the VFD as possible. Position the hose so that it stretches down to the end plate where the VFD is mounted.



Secure the hose with zip-ties at two points along the top of the gantry. The first should be a little bit past the end of the e-chain and the second is right at the end of the gantry. The first connection should be somewhat loose, try moving the YZ-car back and forth to make sure that the hose routes accordingly.



Drop the hose down the side of the tool. Attach the end into the enclosure's dust hose socket. To ensure that the hose stays straight, rotate it a few times in the opposite direction before twisting it into the socket.

Move the gantry as far in the positive X direction as it can go. The hose will stretch back towards the origin then loop back on itself to the hose socket. The bottom length of the hose should be attached to the table at roughly the two points shown. Once in place, move the gantry back towards the origin to make sure the hose routes accordingly.



The dust hose has now been installed properly. Make sure to run the squaring routine and home the tool with C3 before using it. Any crashes that occurred while moving each axis to its extremes may have thrown off the tool's calibration.

You have now finished setting up your ShopBot Desktop Stand. If you have any questions or issues with the product, feel free to contact us through one of the methods below. If your question pertains to a missing or damaged part, please include the relevant part number in your message.

**ShopBot Tools, Inc.**

**Toll Free: 1-888-680-4466**

**Phone: 919-680-4800**

**Fax: 919-680-4900**

**Or contact us through our website at <https://www.shopbottools.com/support>**