

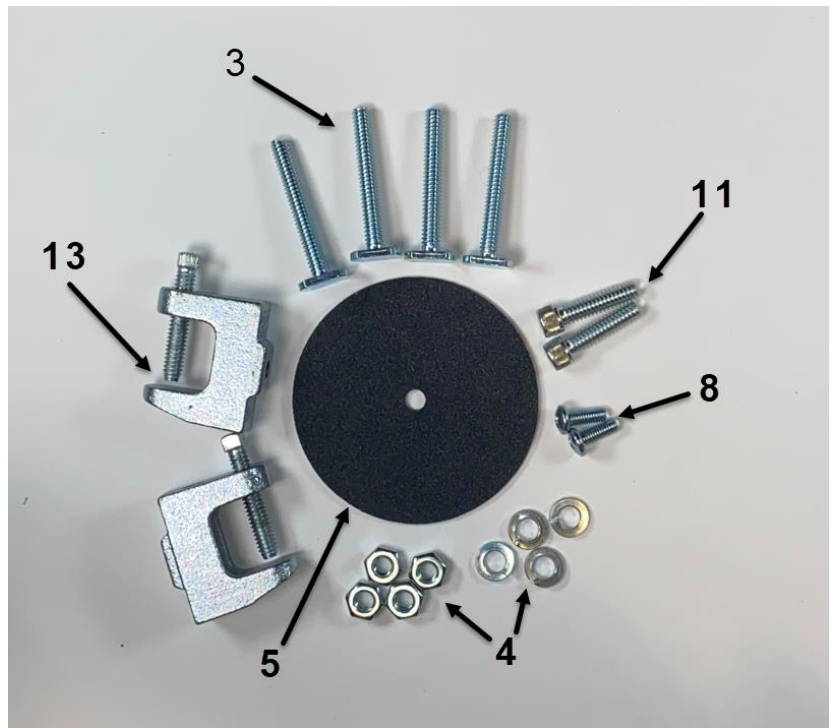
# BLACK HOLE DUST CATCHER

## Assembly and Installation Instructions

### Contents

1. Aluminum track – 1 each
2. Large heavy-duty knobs – 2 each
3. 1/4" x 20 x 1 3/4" T bolts – 4 each
4. 1/4" x 20 nuts and lock washers – 4 each
5. Two-sided sandpaper disk with center hole – 1 each
6. Metal hose hanger for 4" Hose – 1 each
7. Swivel head – 1 each
8. 1/2" x 10-32, machine screws to hold hose hanger – 2 each
9. Sliding base unit – 1 each
10. Fixed arm to attach to sliding base unit – 1 each
11. 1/4" x 20 x 1" Allen head cap bolt – 2 each
12. Telescopic mechanism with fixed upper head and adjustable base – 1 each
13. Beam Clamps-2 each

**(Dust Port, Swivel Adapter and 8' Super Flexible Hose are included but not shown below.)**



Thank you for purchasing our product. We hope that its use will make sanding a less dusty and much healthier process for you. Before installation, please read these instructions fully. It will make installation easier and its use safer and more effective. As with any tool used on a lathe, safety is most important. **Never use this system unless it is tight and secure. Failure to do so, may allow the system to fall towards your spinning project. Always use the double-sided sandpaper disk as shown. Never adjust the position of the port when the lathe is on.** Before turning the power on, always rotate the turned object by hand to verify clearance with the port.

## **Tips and Suggestions**

- To get the maximum benefit from this system, use with the included super flexible (very easy to bend!) 4" diameter hose. This will make adjustment in all directions easier and you will get more satisfaction from this product. Do not replace it with a stiff hose.
- The included dust port has a plastic grid running across the port opening. It is optional, but recommended to snip away this plastic grid. It's easily done with a wire cutter. This will increase the airflow a bit, but increase the slight risk of losing handheld sandpaper or other light objects.
- Initially, it is recommended that the position of the lower telescoping tube be located at a very low position, almost all the way down. If you prefer to reposition it in the future, you can fine tune the height based on the size of your lathe and the installed height of the track.
- Sanding closer to the port side, when possible, will get you even closer to the source when collecting dust.

## **Assembly and Installation**

There are so many different types and brands of lathes, therefore these instructions will not apply to every machine. Most configurations are covered below, but some creativity may be required for installation on some lathes. Installation requires that the supplied aluminum track be securely attached to the back of the lathe. This can be done using two T bolts at virtually any height along the back of the lathe as long as the track is mounted below the lathe bed. Positioning the aluminum track as high as possible will allow for full functionality of the system from the front of the lathe.

There is a slot on the back of the aluminum track which will accept the included ¼" x 20 T bolts.

Drilling holes into the body of the lathe body, lathe stand or legs will provide the most solid support and rigidity of the installation.

Choose a method outlined below which best suits your lathe configuration.

### **Step One-Installing Aluminum Track to Lathe**

Method 1: Powermatic, Jet, Nova, Woodfast, Rikon and similar models

Preferred method- Install two T bolts on the lathe body, frame or stand. (Figure 1).

Determine where you will mount the aluminum track and drill two 17/64" or 9/32" diameter holes approximately 24" apart. Make sure you have sufficient access and clearance to tighten the nuts from the opposite side inside the lathe. The position of these holes is not critical and can be located so that access to tighten the nuts is maximized. If your lathe is on a wooden base/stand and there is no stretcher/skirt along the back, it might be necessary to add one to securely attach the track. The two holes should be approximately at the same height. Insert the two T bolts from the back (Figure 1) and thread a nut and lock washer on from the opposite side. Do not tighten the nuts until the aluminum track is in the desired location.



Figure 1

Once the T bolts have been loosely installed, slide the aluminum track onto the “T” bolts with the angled edge on the top to help deflect dust and shavings (Figure 2), and slide to the desired location. Tighten the nuts to hold the track in the desired location.



Figure 2

Method 2: Oneway lathes or lathes with rear mounted swinging controls or rear mounted light stand

It may be necessary to have the aluminum track mounted in such a way to leave clearance for existing rear mounted hardware/components. A standoff can be made by using a 3” aluminum “U” channel as pictured in Figure 3. Only two “U” channels are required. This standoff adapter is available as a separate accessory if needed. Oneway lathes have 10 mm x 1.0 threads. Two bolts are included with the Oneway standoff accessory.

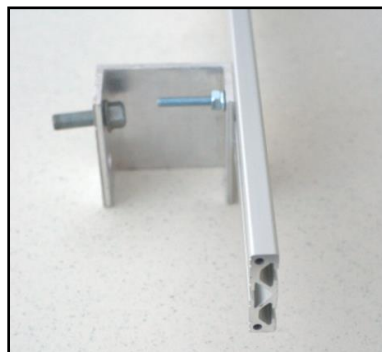


Figure 3

Method 3: Beam Clamp Attachment- Robust Lathes, Oneway lathes without a rear controller and lathes where it is undesirable to drill a hole in the lathe body.

The included beam clamps can be set up and used in two different orientations. Determine which orientation you will be using and attach the washers, nuts and T bolts as shown onto the beam clamps.

Figures 4a and 4b show the set up for attaching to a Robust lathe style lathe body.



Figure 4a



Figure 4b

Figures 5a, 5b and 5c show the set up for attaching to lathes like Powermatic, Jet etc. where the back of the lathe body is parallel to the bed/aluminum track.



Figure 5a

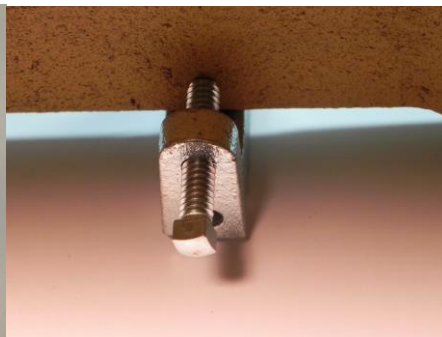


Figure 5b



Figure 5c

After the clamps are tightened on the lathe in the desired position and the aluminum track is in the correct position, use the nuts to secure to both the T nut and the track.

### **Step 2-Sliding Base Assembly**

Assemble the sliding base to the fixed arm with two 1/4" x 20 bolts, using a 3/16" Allen wrench (not included) (Figure 6). Slide this assembly into the upper track of the installed aluminum track (Figure 7).



Figure 6



Figure 7

### **Step 3-Positioning the Telescopic Tube Assembly**

Slide the larger diameter tube of the telescopic assembly through the adjustable base to access the through hole. Insert a T bolt as shown in Figure 8. Push the T bolt through the hole and seat the T bolt in the slot. Slide the telescopic tube back over the T bolt. Tighten the two Allen head screws on the clamp head to hold the tube securely in place. (Figure 9). Do not over-tighten. The tube position may be changed to fine tune the height adjustment as needed.



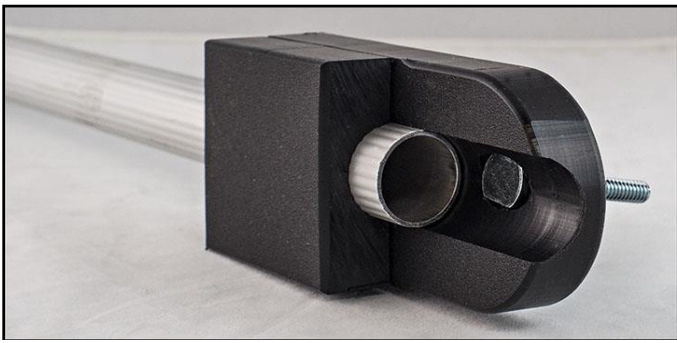


Figure 8

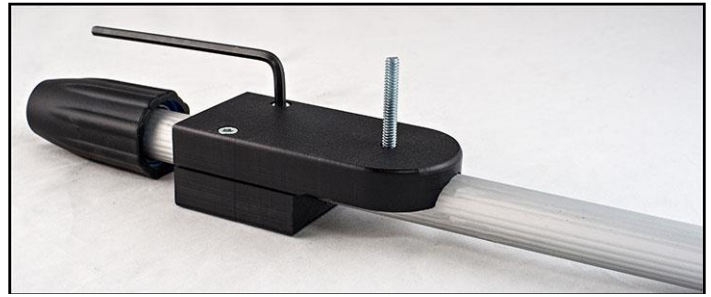


Figure 9

#### **Step 4- Install the Telescopic Tube Assembly**

Place the double-sided sandpaper disk over the T bolt inserted in Step 3. Slide the T bolt through the hole in the Fixed Arm and attach a knob to the bolt. (Figure 10). Tighten the knob to hold the assembly in the upright position.

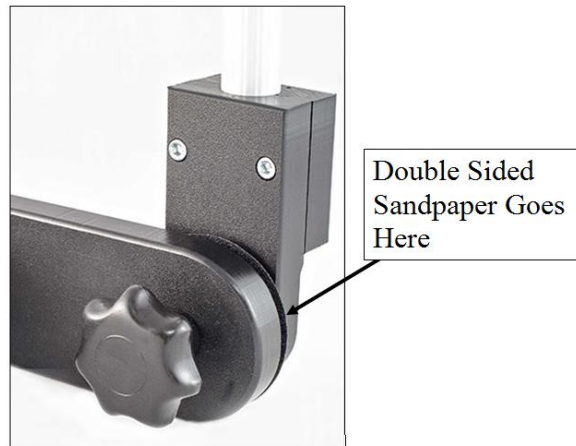


Figure 10

#### **Step 5-Assembling the Swivel Head, Swivel Adapter, Hose and Port**

Place a T bolt through the center hole of the swivel head and seat the head of the bolt in the recess. While not required, it will be helpful to support the part across two 2" X 4"s or similar for stability as shown in Figure 11.



Figure 11

Slide the 4" dust collection hose onto the smaller side of the swivel adapter as shown in Figure 12.



Figure 12

Using the provided hose hanger, secure the swivel adapter/hose assembly to the swivel head using the two 10-32 machine screws provided (Figure 13). Do not over-tighten. The unclamped portion of the swivel adapter should spin.



Figure 13

#### **Step 6-Attach Swivel Head Assembly and Port**

Place the threaded end of the T bolt coming out of the swivel head, through the hole in the upper block of the telescopic tube assembly. Hold in place with one of the supplied knobs. The angle can easily be adjusted as desired. (Figure 14 and 15) Note: Hose, swivel adapter and port have been omitted for clarity.



Figure 14



Figure 15: Assembled Dust Catcher

Press fit the port into the swivel adapter and attached the open end of the hose to a dust collection source. Enjoy your Black Hole Dust catcher system!

There are endless potential positions of the system to capture sanding dust....Congratulations on a nice upgrade to your shop.

