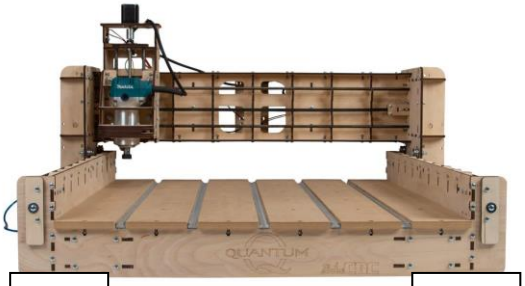
BobsCNC Quantum series
CNC Router Engraver
Bearing and Rail Dust Kit



LEFT Right

Thank you for the purchase of the BobsCNC rod and bearing cleaner kit. The following is the instructions to put the product together. If you don't currently own a wiper kit, they are available from the Old Country Woodworker on Etsy: **Rail and Bearing Wiper Kit** (https://www.etsy.com/listing/1433745866/new-quantum-rail-wiper-kit-wipes-sawdust?click_key=b4085fc043ee7c01530b16d5a0776ee723498e43%3A1433745866&click_sum=c2c89aa3&ref=shop_home_active_1&frs=1).

Procedure:

This is a kit for the top bearings and rods for the top X and Y-axis bearing and rods. Each bag is labeled on the bag for that axis kit. Refer to the above picture to show which is left and right sides for the parts assembly.

X-axis' Parts

Photo 1 Front X Parts

First thing to do is to thoroughly clean both the rod and bearing on the top X-axis of all dust.

Gather the X-axis bag containing the X-axis parts. The X-axis front bag (photo 1) will contain, 3 each plywood parts FRX1 FRX3, and FRX4 (Front Right) and FLX1, FLX3 and FLX4 (Front Left), 1 each FRX2 (Front Right) and FLX2 (Front Left) felt pads, 4 each flat washer and 4 each 4mm X 35mm screws.

The X-Axis Right Rear bag will contain (photo 2), 1 each plywood part RRX1, RRX3 and RRX4 (Rear Right) and 1 each plywood part RLX1, RLX3 and RLX4 (Rear Left), 1 each felt part RRX2 (Rear Right) and RLX2 (Rear Left), 2 cable ties, and 4 each 4mm x 35mm long screws.

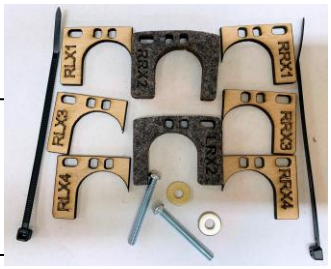
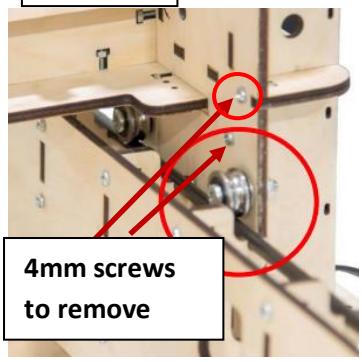


Photo 2 Rear X Parts

Front X-axis' Assembly

Photo 3



We will start on the front right X-Axis bearing and rod. First remove the 2 - 4mm X 16mm screws just above and just below to the left of the front bearing (see picture 3) and leave the nut in place using masking tape, so they don't fall out (see photo 4). Keep these screws, since you will use them on the Y-axis assembly.

Photo 4

Get the 2 longer 4mm X 35mm screws from the rear X-axis kit bag. Place a washer on the longer 4 mm X 35mm screws, then through part FRX1, with the number facing the head of the screw, then through felt pad part FRX2, then part FRX3, and FRX4 then insert the screw back into the frame and into the existing nut. Don't tighten the screws yet fully until, the felt parts FRX2 is adjustable. Push the felt pad down until it is touching the bearing and the rails. When the felt is touching then tighten the screws. Photo 5 shows the front X parts mounting on the assembly.

<u>Now repeat the above step for the left side x-axis parts starting with the letters FLX</u>. When completed with the front left x-axis, the front x-axis is complete. Proceed to the rear x-axis assemble, next page.

<u>Rear X-axis' Assembly</u>

Now we will start the rear right of the X-axis (see Photo 6) for the top bearings and rods using Rear X parts, refer to photo 5. First cut and remove the cable tie just above the bearing carefully, not to cut the wires on the back. Then remove the 4mm X 10mm screw just above and left of the bearing. NOTE: This is a tight fit to get into this area, so may be best to put on one part at a time. For the rear parts assembly you will only use one (1) 4mm X 35mm screw with flat washer through the top hole. Assemble the parts in this order: place the locking washer and flat washer on the screw, then through the top hole of RRX1, then through RRX2 felt pad, then RRX3 and RRX4, and then install assembly above the bearing and screw into the existing nut, loosely. Adjust the felt pad so that it touches the bearing and rail. Then lightly tighten the screw. Make sure the felt pad is touching the bearing and rails. Take a cable tie and route it through the top of the two holes through all parts and on the mainframe over the wires on the back and back through the bottom of the hole, then tighten the cable tie and then the screw. This now completes the right rear X axis assembly, repeat the above steps for the left rear axis using the parts starting with RLX. See Photo 7 & 8 for what the assembly should look like when installed as looking at the bearing.

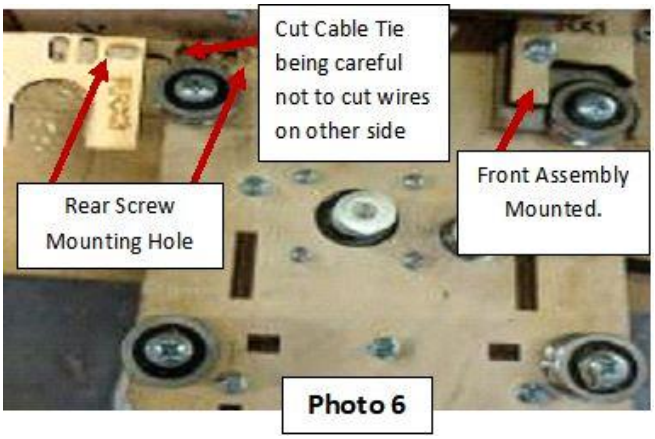


Photo 6

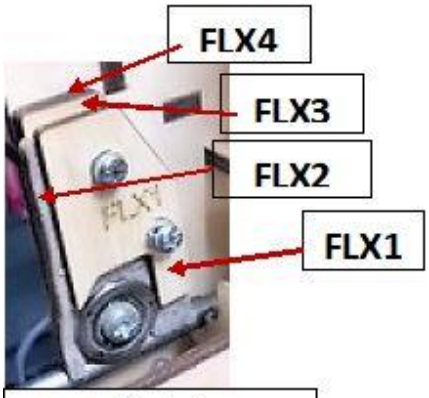


Photo 5
Left Front X Axis Final Assembly
Bearing Side View

Once installed, they will brush clean both the bearing and rails while the X axis moves, keeping both clean. **Once every few projects are completed on your CNC, best to blow air over the felt pads, so the dust will not clog them over time.** This completes the X-axis.

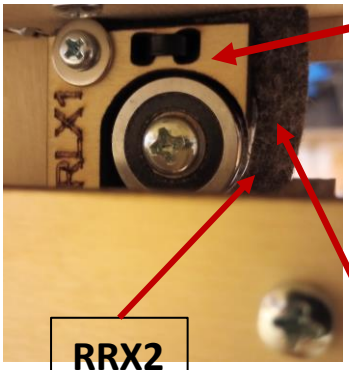


Photo 8
Rear X axis
Installed

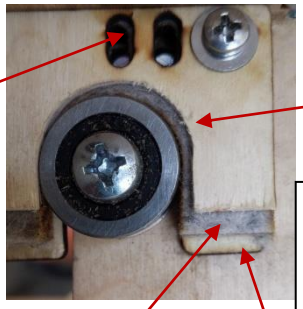


Photo 7
Rear X axis
Installed

Y-Axis Installation

The first thing to do is to thoroughly clean both the rod and bearing on the top Y-axis of all dust.

Left
Side

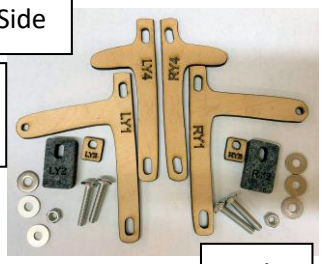


Photo 9
Y axis parts

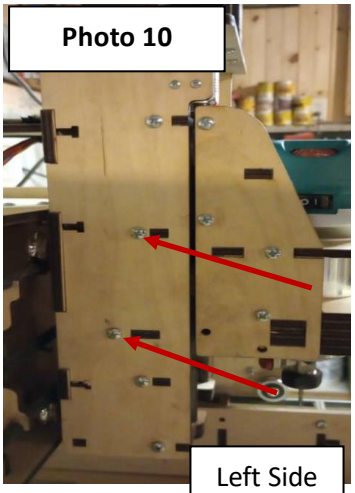
Right
Side

The Y-axis bag contains the Y-axis parts, see photo 9. It will contain, 1 each plywood part RY1 and LY1, 1 each felt part RY2 and LY2, 1 each plywood part RY3 and LY3, 1 each plywood part RY4 and LY4, 2 each 4mm nut, 6 each flat washer, and 4mm x 22mm long screws, see photo 9 showing each part in order as described. The third smaller screw used in assembly, that is not in the picture, is the one taken out of the X-axis previously.

Start by removing the 2 - 4mm X 16mm screw just above and just below of the left bearing (see picture 10 red arrow for location) and leave the nut in place. It is best to place masking tape over the nuts to hold them in place before removing the screws as shown for the X-axis.

Start on the right side of the frame. Then using the 2 - 4mm X 22mm screw from the Y-axis kit, mount part RY1 and RY4 by inserting the 2 screws through part RY1 and RY4 into the frame and into the existing nuts and tightening the screws. Then using the 1 - 4mm 16mm screw that you took off previously from the x -axis, insert it through part RY1 from the back of RY1. Then through the felt parts RY2, then add plywood part RY3 and install 4 mm washer and nut, as shown in Photo 10 and Photo 11. Don't tighten the screw yet. Adjust the felt pad so that it is rubbing on the rail, then tighten the screw.

Photo 10



Left Side

Then repeat the above steps on the left side using the LY parts. Lastly, remove the masking tape you put on to hold the nuts from all axes. Once installed, the pads will brush clean both of the rails while the Y-axis moves, keeping both clean.

This now completes the installation. You should no longer have a problem with the dust getting under your bearings and rails. Remember, after every few projects are completed on your CNC, best to blow air over the felt pads so the dust is removed off of the felt pads to stop them from clogging then over time.

I hope you enjoy having your bearing and rods clean while the CNC is running. Please let your friend, with the same Bob CNC, know where they may get a set for themselves or order another to give away as a gift to someone you know.

Thank you for supporting my small business.

Old Country Woodworker

Please contact us with any questions at oldcountrywoodworker@gmail.com

Photo 11
Y-axis Finished Installation