ChipsFly Router Table Assembly Instructions

1) Survey the frame parts for the base before assembling

The frame parts should consist o

- (1) top
- (2) side rails
- (2) sides

Assembly parts should include:

- (4) leveling feet
- (12) large washers
- (4) 3/8-20 nuts
- (4) 1/4-20 x 1-3/4″ bolt
- (8) 1/4-20 x 2″ bolt
- (1) 4mm Allen key

Optional casters (to replace the four leveling feet shown above

- (4) locking casters
- (1) open wrench to tighten the casters.

2) Assemble the base

a) If you're working by yourself, you can place one end of the top against a side on the floor to prevent the top from sliding around as you attach the other side.

b) Slip a washer onto a 2″ 1/4-20 bolt, and insert it through the top end of one of the side legs. Screw it into the end of the top piece. Do not tighten.

c) Do the same to the other side of the side leg. Now lift the top away from the side you've used as a brace and, using two more of the 2″ bolts & washers, attach the other side. Do not tighten yet.

d) Now take the two side rails, and using the last four 2" bolts and washers, insert them through the bottom holes in the sides and into the ends of the rails.

e) Finally, take the completed frame and place it flat on the floor. Now, rotating from location to location, tighten all the screws with the Allen key.

f) Use the supplied leveling feet if you do not plan to move the router table from location to location in your shop. Add a 3/8" nut to each leveling foot, then thread the feet about 2/3rds into the stand base.

g) Place the router table stand at the location you want, and by rotating the adjusting feet, make sure the table does not rock. Now, tighten the nut against the bottom of each foot to lock it into place.

h) If you're using the optional casters to make the router table mobile, the steps are the same as above. The 3/8-20 locking nuts used with the leveling feet will also fit the casters' threads.

3) Attach the top to the base

When installing the top, note that four nuts are embedded into the top's underside, as shown in the photo on the right. Also, note the miter and T-track grooves running the entire width of the top. Those indicate the front of the top and should be facing the same side as the two holes on the right front leg (the holes are for the Start/Stop switch.)
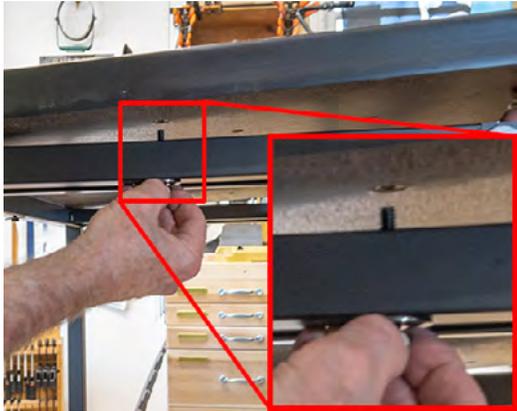

By sight, place one 1-3/4' bolt through the frame and into one of the embedded nuts, leaving the bolt very loose. Now, lift the other side of the top to find a nut on that side and place a loose bolt into it to center the top. Then insert the other two bolts and tighten all four to secure the top to the stand.

4) Attach the router motor to the router lift

Review the parts of the router lift. They should include five red insert rings, a router lift crank, an open-end wrench, two Allen keys, four screws, a starter pin, a wire wrench (to install and remove insert rings), and the router lift.

This router lift is compatible with various manufacturers' 3.5-inch diameter router motors (see list on ChipsFly.com). It is best to opt for a router with variable speed, especially for bits over 2" in diameter.
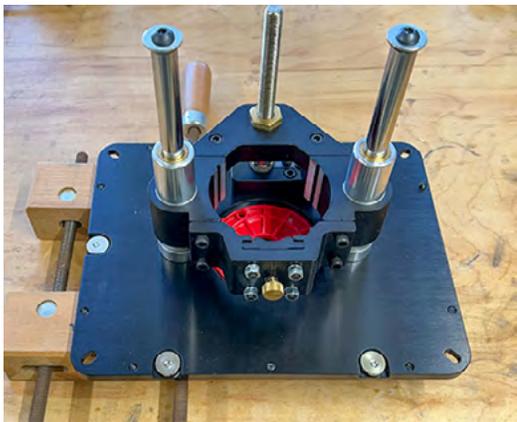
a) Before installing the router, unlock the carriage with the lift crank and raise the carriage to the lift's top.
b) Place the router lift upside-down on a raised surface; here, we used a wooden clamp.
c) Loosen the four set screws with the 3mm Allen key and retract them
d) Rotate the brass knob CCW and pull the attached clamp block back to make room for the router motor.
e) Now lower the router motor into the lift until the top of the motor is resting on the insert ring. Select a ring with a hole large enough for the router's collet to extend through. Rotate the motor so that the side with the switch and speed control is facing away from you.
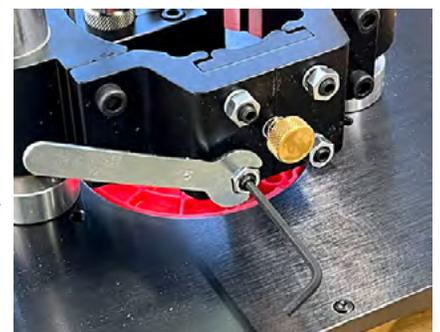**f)** Tighten the brass knob to snug the clamp block against the motor (note the brass knob does not apply enough pressure to secure the motor.)
g) Now tighten the set screws until they make firm contact with the clamp block locking it in place and securing the motor. Do not over-tighten and damage the router motor.
h) Using the Allen key and the open-end wrench, tighten the locking nuts on the set screws to prevent the set screws from losing due to vibration from the router motor.

5) Place the router lift into the table top.

a) Drop the power cord through the hole in the tabletop and carefully lay the router lift into the recess.

b) There are ten leveling screws (three each on the front and back, two each on the left and right sides. Using the 3mm Allen key, rotate them CW to raise the router lift and CCW to lower it. The lift base has to be level with the tabletop to prevent snags as the wood passes over. The best way to do this is to take a small flat block of hardwood with sharp corners (not rounded off). As you rotate each screw to raise or lower the plate, slide the wood block over the lift edges. Any click or stoppage indicates that more leveling is needed. Since there are ten screws, each potentially affecting its neighbor, going back and forth is required.

c) Once the lift is level, it's time to use the cams to prevent any movement of the plate. There is one cam on the left side and two on the back. Rotate each cam using the 4mm Allen key until you feel some resistance; you do not need to crank down on this.

d) Lastly, you should bolt the lift to the top using the four 1/4-20 button head bolts at each corner. Do not over-tighten these screws; there's no need. However, you need to re-check that the plate is still level at every corner and make any appropriate adjustments.
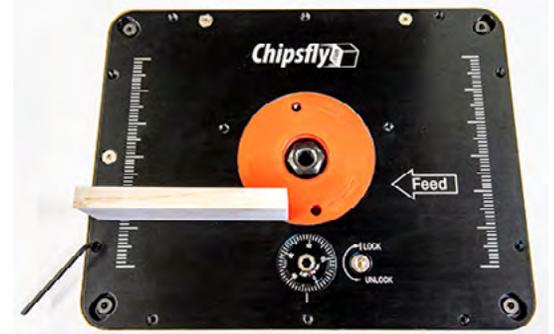
6) Add the Start/Stop switch.

a) The right front leg has two holes toward the top to attach the Start/Stop Switch. You will need the included two screws, two washers, and two nylon lock nuts (to prevent the nut from vibrating loose).

b) Insert the screws with washers through the switch's side plate and the holes in the stand's front leg. Insert the lock nuts from behind and tighten them as needed.

c) Notice that there are two outlets on the back of the Start/Stop switch; you can plug in both the router motor and your shop vacuum. When you use the switch, both will turn on and off together.

7) Assemble the fence

Parts needed for the fence assembly:

- The extruded aluminum fence
- Two MDF fence faces and a Zero Clearance Insert
- Four button-head 1/4-20 bolts and round knobs for attaching the fence faces
- Two tall knobs, two hex-head 1/4-20 bolts, and washers for securing the fence's location on the tabletop
- A dust collection port for the fence and an M4-0.7 screw for securing the port to the aluminum fence
- An adhesive tape measure for the top of the fence
- Two long square rods that slide behind the outfeed fence when using the router table as a jointer
- A flip stop kit that mounts on the fence's top T-track
- An orange safety shield, two hex-head 1/4-20 bolts, two small knobs, and two plastic washers for attaching the safety shield to the front T-tracks of the fence

To assemble the fence:

Slip the dust collection port into the back side of the aluminum fence extrusion and slide it to the middle. Then secure the dust port to the fence with the M4-0.7 screw.

Slip a hex-head 1/4-20 bolt into each side T-tracks from the back side of the router table and through the elongated slots in the bottom of the aluminum fence. Then, slip the two metal washers onto the bolts and loosely screw the two tall knobs onto the bolts.

Place a button-head 1/4-20 bolt through each countersunk front hole in one fence face and the front slots in the aluminum fence. On the back side of the fence, screw two of the round knobs onto these bolts. Repeat for the other fence face.

Strip about 5″ off the measuring tape's backing and adhere the tape's end to the slot in the top edge of the aluminum fence. Continue to strip more of the backing off as you apply the measuring tape across the top of the fence.

The router table operating instructions discuss the safety shield and flip-stop usage.

8) Make sacrificial Zero Clearance Inserts

A sacrificial Zero Clearance Insert (ZCI) fits between the two fence faces to help prevent splintering and tear-out, but since the bit profile cuts into the ZCI, it's usage is limited to a single bit and requires replacement when you switch bits. Fortunately, it is easy to make extras, but they must be the same thickness as the router fence faces and cut from the same or similar material.

The good news is that the router table fence package includes a sample ZCI plus measured drawings for making your own. All you need is a table saw whose blade can tilt to 45° and the material from which to cut them.

For more information on router table setup, view the video demonstration on ChipsFly.com.