

SHOP-Made Grip-N-Rip Cutting & Assembly Instructions

What you will need:

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- 1) Some scrap Hardwood (recommended) or Plywood 3/4", 1/2" & 3/8" thick. (make sure you plane the hardwood before beginning).
- 2) 10 – 1/4" x 20 tpi x 2 inches in length bolts with square nuts.
- 3) 4 – steel threaded 1/4" x 20 tpi dowel plugs
- 4) 1 – piece of Non-Slip Router mat. The kind advertised that you can lay a piece of wood on and route it without it moving. (You will have TONS left over)!
- 5) 1 – piece of 1/8" rubber matting
- 6) Aproximatley 20" of metal T-Track 3/4" wide and mounting screws.
Note: You will have to drill and countersink holes in this for the mounting screws once you have cut it to length.
- 7) Some 2-Part Epoxy Glue. I recommend the quick set type.
- 8) Some Contact Cement.
- 9) I would recommend making a couple of these up at the same time.
Your gonna use them...:)

By looking at the pictures of what I have posted this will all make sense.
Ok let's begin.....

1) Making the MAIN FRAME:

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- a) First glue together 2 pieces of 3/4" hardwood (recommended) or plywood cut at 8-1/4" x 7-1/4". Now your Main Frame will be 1-1/2" thick. Once the glue sets – now trim this block down to 7-3/4" length x 4-3/4" wide. It's important that the Main Frame is square cut. "Keep the long piece that you cut from the side when you trim this. You will be using it to make the Adjustable Middle Gripper."
- b) Depending on the depth of the T-Track you purchased mine was 3/8" deep x 3/4" wide, now route a 3/4" dado (that's the width of the T-Track) into both ends of the main frame "in the CENTER" 3/4" DEEP.
- c) Next route a rabbet completley around the TOP of the main frame on the outside edge 3/8" x 3/8". This will form a 3/8" lip around the entire frame with a 3/8" inset. Try this on a scrap piece first to make sure the cut is accurate.
- d) Now route a 3/4" wide channel 3/8" deep into the "Center" of the top of the Main Frame across the width. This is for the locking T-Track channel for the HANDLE.
- e) Next route two 1/4" x 1/4" channels across the with of the top of the Main Frame one at each end 2" from each end on center. These are for the squaring blocks to slide in for the HANDLE.



f) Now drill 4 mounting holes 3/8" in diameter (for you threaded dowel plugs) into the top of the Main frame two at each end. These will be drilled 1-1/2" x 1-1/2" on CENTER from the ends and sides approximately 3/4" deep (you may have to go a little deeper depending on your dimensions of your steel threaded dowel plugs).

g) Cut a small strip 1/4" wide x 1/2" deep x approximately 9" long. Cut 2 lengths of that at 1-1/2". You will be cutting the rest later to insert into the HANDLE track on the Main Frame as stop blocks for the HANDLE so that it aligns correctly when adjusted from side to side.

h) Now cut your T-Track to length for the slots (one on each end and one in the middle) and EPOXY and screw them into the main frame.

2) Making the SIDES:

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a) Cut 1 piece of 3/4" hardwood 7" long and 3-1/8" wide and 1 piece of 3/8" hardwood – 7" long x 2-3/4" wide.

b) Next – Take the 3/4" piece and route a 3/8" x 3/8" dado along the top edge. This will allow this piece to inset flush into the 3/8" x 3/8" dado that you cut around the top of the Main Frame.

c) Now take a 1/2" forstner bit (or just slightly bigger than the diameter of your Bolt Head) and countersink "about" a 1/8" hole or slightly deeper, (this is to inset the BOLT Head below the surface). Countersink these holes 1-1/8" on center from both ends and 3/8" down from the top edge.

d) Take these pieces to your drill press and assemble one side at a time onto the MAIN FRAME (countersunk holes to the top). Make sure that you SQUARE it flush with the top (under the lip) and flush with both ends. Holding these pieces one at a time "Securley" drill a 3/8" hole about 1-3/4" deep through the center of your countersunk holes into the main frame cross channeling the Steel Dowel Plug holes you cut earlier.

e) Take your 3/4" side now and drill two small pilot 1/16" holes through the side centered 1-3/8" below your other two mounting holes. Once you have done this "ON THE BACKSIDE" using your forstner bit countersink (using your pilot hole as a center point) a 1/8" depth hole. This will bury your metal threaded pronged insert flush with the surface. You may have to go a little bit deeper, just make sure it's not protruding out. Now drill a 3/8" hole right through the center, EPOXY and insert your metal threaded pronged insert into the holes on the backside. I put these in my vice and squeezed them in.

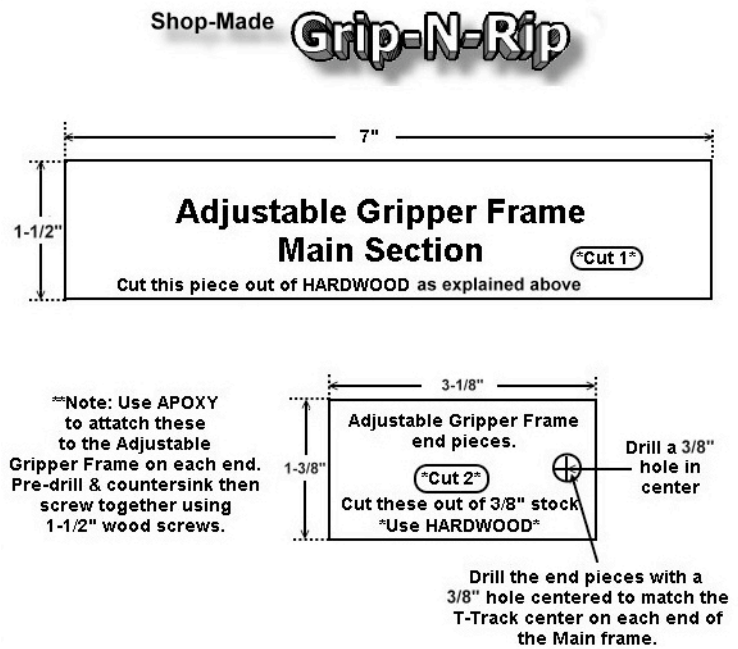
f) Now INSERT your (4) STEEL DOWEL PLUGS into the top of the MAIN FRAME and bolt your sides onto it.

3) Making the Adjustable Middle Gripper:

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a) Cut the 1-1/2" thick block that you saved now from the main frame when you trimmed it down to 7" in length and 1-3/8" wide.

b) Cut 2 end mounting pieces 1-3/8" wide out of 3/8" hardwood 3-1/8" long.



c) With the sides assembled onto the Main Frame and placed on a flat surface (table saw table?) slide the Adjustable Middle Gripper into the center of the frame. Now taking your 2 end mounting pieces place them onto the ends of the Adjustable Middle Gripper and check to make sure that everything aligns properly. They should fit flush underneath the 3/8" top lip of the Main Frame and flush to the table on each end with the Adjustable Middle Gripper block. If you need to make adjustments do it now.

d) Both sides now and the Adjustable Middle Gripper should all sit flush with the table. Once you are happy with the fit while holding the end pieces in place on the Adjustable Middle Gripper underneath the frame mark the center of where the top side centers with the T-Track (where the center of your nut will be) and drill a 3/8" hole through each end piece in the center using your reference mark.

e) Now EPOXY and brad nail the end pieces to your Adjustable Middle Gripper ends.

4) Making the Adjustable Side Support Frame:

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a) Cut 1 piece of 3/8" hardwood 7" x 6" and one piece 7" x 3-1/2"

b) Cut three 45 degree angle support blocks out of 3/8" stock 1-3/4" each. I ripped a piece of 3/8" stock 1-3/4" wide x 8" long and used my Miter Saw to cut out the 45 degree angles. Quick and accurate.

c) Take your 7" x 6" piece now and router or Scrollsaw two sliding bolt channels, one on each side. Note: These channels line up CENTER with two additional mounting holes on the 3/4" side panel. Start 1/2" from the top and go down to 1" from the bottom.

d) Now measure in from the TOP 2" from each side and using your square draw a line down from the top 2-1/4" deep. Now join those two lines with a square and cut out the piece in the center. This leaves you with two arms on each side, like in the picture. You can round the bottom edges when you cut this out, for cosmetic appeal.

e) Now take your 7" x 3-1/2" piece and router or Scrollsaw in two bolt slots 3/8" wide x 1-1/2" in length 1-5/8" on center from each side.

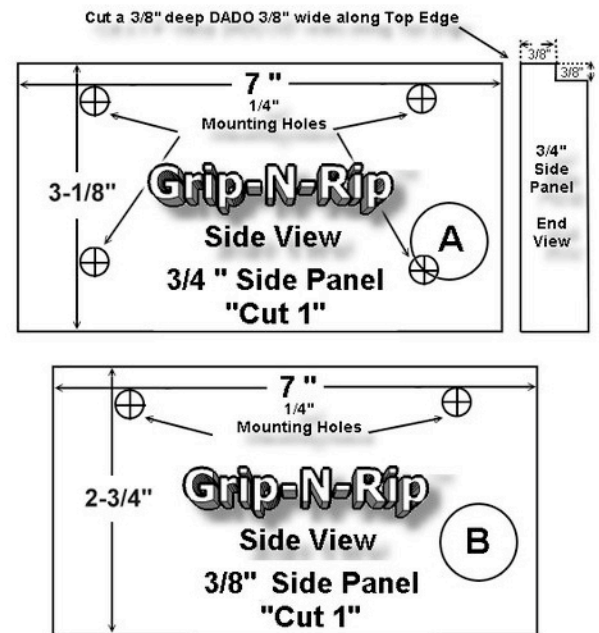
f) OK.. Now assemble the pieces. Stand your 7" x 6" piece up so it's setting flush with the table. EPOXY or glue and Butt the 7" x 3-1/2" piece up to it. Brad nail them together. Next take your 3 45 degree angle supports and glue them flush to each end and one in the center. I "DID NOT" Brad Nail these, I just let them set up, using clamps to hold them and the other pieces at 45 degrees.

5. Making the HANDLE:

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Although I used composite handles that I bought in my examples I have posted (lazy me) I will be making wooden ones for my newest Grip-N-Rips out of Walnut and Maple.

a) So.... Using 1-1/2" thick stock x 6-1/2" long & 1-1/2" wide draw and cut out your handle. You can look at the handle design that's posted and I'm sure you can draw one.



Note: You can cut extra "B" panels for future use!

b) Next take a 3/8" thick piece of stock and cut it to 6-3/4" in length by 3" in width. Center your handle length and width wise onto this piece and EPOXY and screw it together (from the underside, don't forget to pre-drill some small holes).

c) Once the handle is assembled take it to the drill press and drill a 3/8" hole through the center of the handle.

d) Next drill a 3/8" hole directly below it through the plate. I drilled a small hole 1/8" right through the handle and through the plate before I did this so that I could place the holes exact on center to each other.

e) Now router in two 1/4" wide channels x 1/4" deep. (These line up with the channels cut in step (e) of Making the Main Frame.) and Epoxy and insert the two 1-1/2" pieces you cut in step (g) of Making the MAIN FRAME into the CENTER of these channels.

f) Ok... Assemble the handle onto the top frame. First move the handle assembly to the right side until it aligns flush with the side without going over and LOCK it down. Now (and you do the same as this for the other side)

g) Now take the extra small strip 3/8" wide x 1/2" deep strip from step (g) of Making the MAIN FRAME and slide it into the slot until it butts up against the piece apoxied into the handle frame. LEAVE it there.. Remove the HANDLE and mark with a pencil where the insert stops and also the length to the outside of the frame.

h) Now remove it.. cut it to length and apoxy it back into place. Now the handle can never be over adjusted. NOTE: When you are doing this on the 3/4" side when you EPOXY the piece in, "DO NOT" put "EPOXY" onto the 3/8" overhang of the FRAME side. You want to be able to remove the frame side if needed. So just leave that bit of it..un-glued.

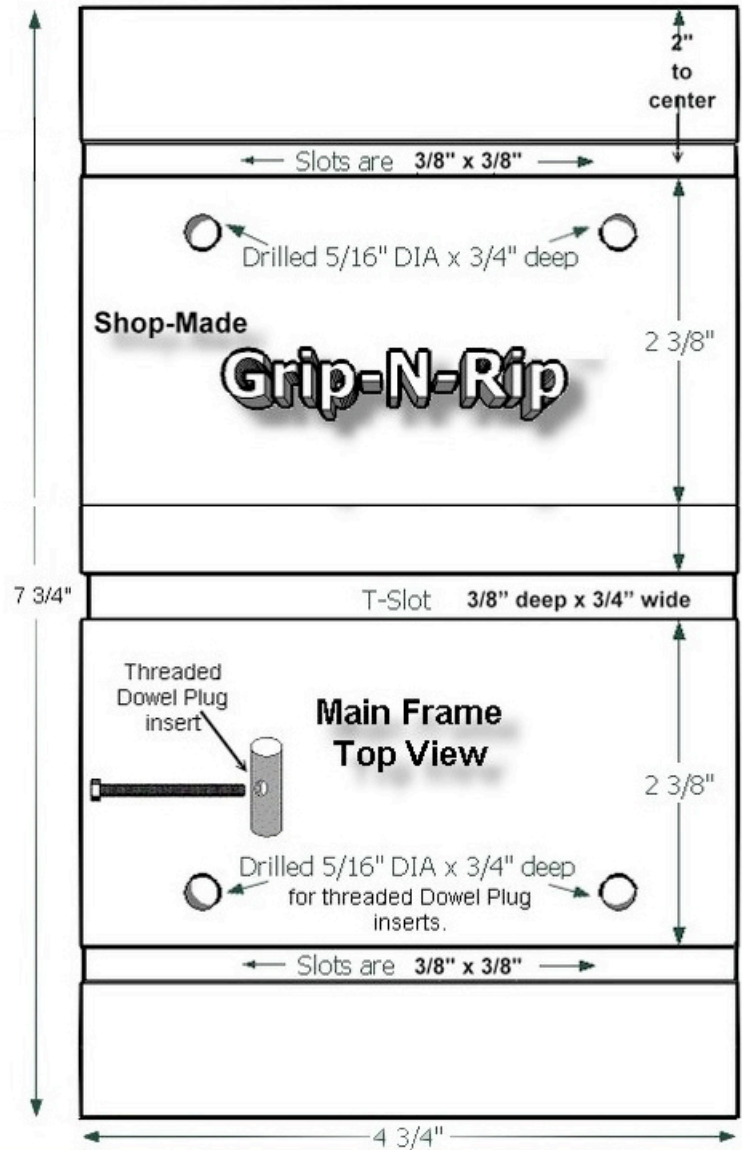
6. Gluing on the Gripper Pads:

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Your almost done..)

a) First take some contact cement and apply it to the edges of both sides and the bottom surface of the middle gripper. Make sure that you spread it evenly over the whole surface.

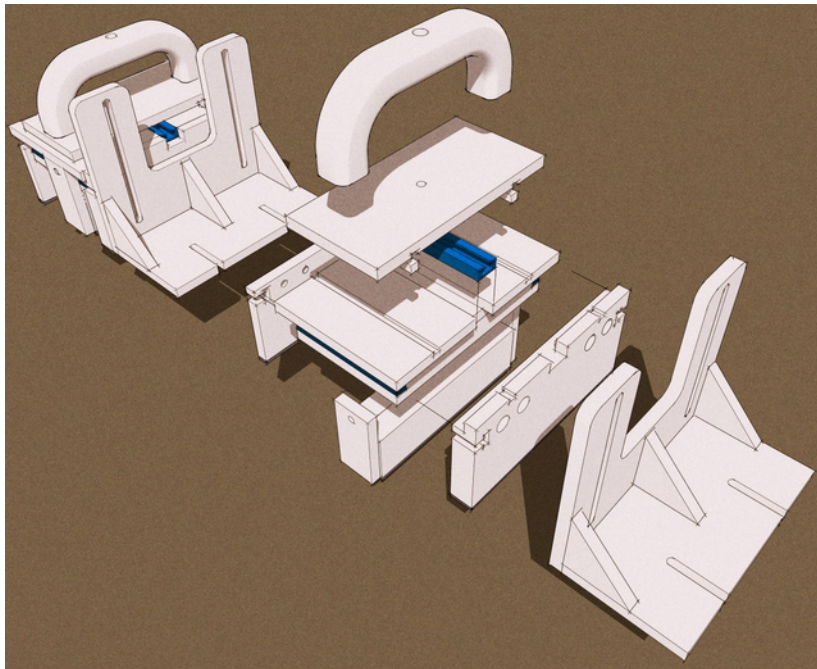
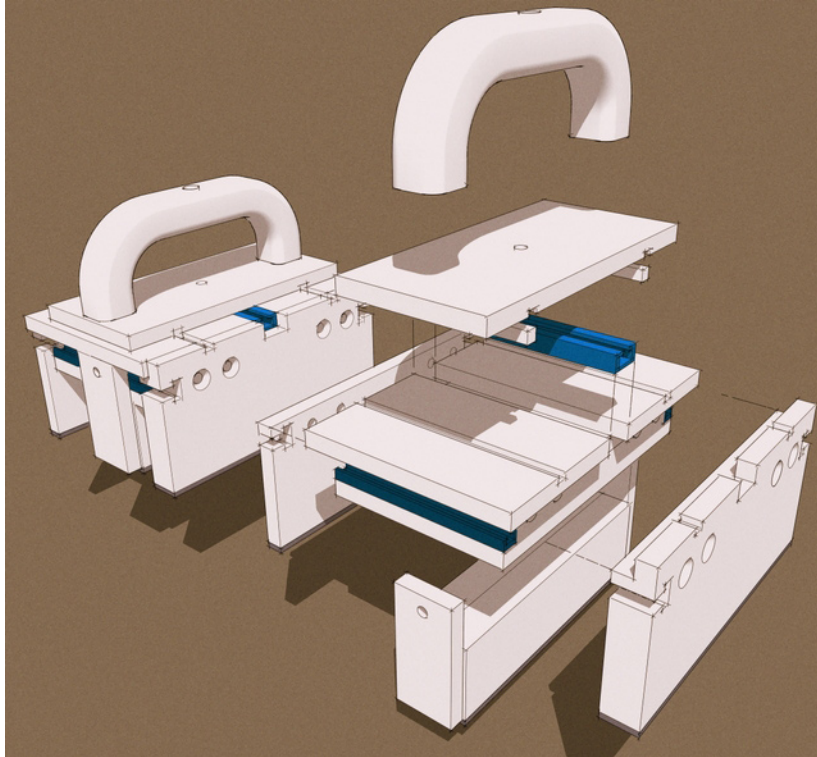
b) Now cut a square of your Non-Slip Router pad, maybe 8" x 8", you want something to work with here is all. Apply Contact Cement to the surface of 1 side of it.



c) Now take another piece of your rubber matting 8" x 8" if that's what you used for the Non-Slip Router pad piece and coat one side of it with contact cement. Let them dry.

d) Now join them together (maybe use a rolling pin) and press them together firmly. When you are happy that they are bonded well together flip it over with the rubber matting up and apply a coat of contact cement to this side of it now. Let it dry.

e) OK... Dis-assemble your Grip-N-Rip and start with whatever piece you want. I started with the side pieces. Align the outside edge of your side piece with the edge of your pad..be careful to align it flush and press them together firmly. Take an exacto knife or sharp cutter and while holding the two together trim off the waste. Repeat these steps for the other side and your Adjustable Middle Gripper bottom.



f) Now re-assemble the jig and ENJOY!.

One final Note:

===== If you wanted one side to be 1/4" instead of 3/8" it's simple. With the sides mounted and BEFORE you put the router pads on, set your fence to 1/4" on your table saw and the blade depth NO HIGHER than the bottom of your main frame. Hold the Grip-N-Rip tight to the fence and run it through the saw. Voila! a 1/4" side. Maybe make one of each if you wanted..

"DISCLAIMER:"These plans are posted free of charge (for reference only) , and only because some people requested to know how I built mine. I do not guarantee the accuracy or responsibility for anyone who uses these plans to make a jig like I have done. If you decide to make this Jig you do it totally at your own discretion and risk.

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