

**MITER SAW STATION
with integrated drill press & extension wing**



Materials

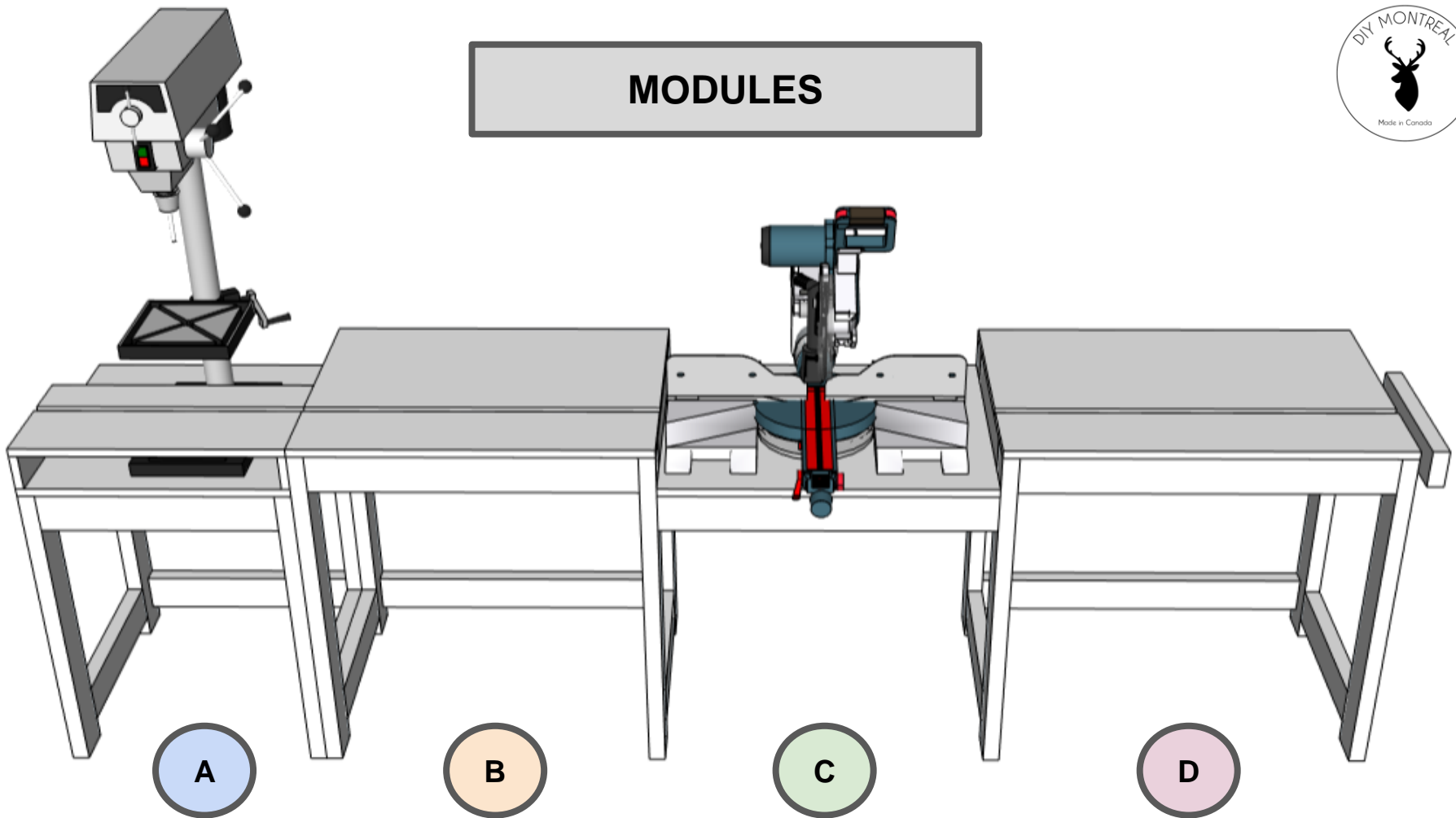
- (13) 2 by 4s
- (1) Full sheet $\frac{3}{4}$ " plywood
- (2) small hardwood blocks
- (2) 36" x $\frac{3}{4}$ " O.D. steel pipe
- (2) 36 inch T-tracks
- (1) 24 inch T-track
- (2) 5/16 Star knobs
- (2) 5/16 T-Bolts
- (2) 5/16 washers
- (1) UHMW runner (or hardwood)
- 2- $\frac{1}{2}$ inch pocket screws
- 1- $\frac{1}{2}$ " #8 flat head wood screws
- 3" #8 flat head wood screws
- 5-minute epoxy
- (12) $\frac{1}{4}$ -20 T-nuts
- (12) 2 inch $\frac{1}{4}$ -20 Carriage bolts

NOTES/CAVEATS

These plans were designed around the Bosch CM10GD miter saw - be sure to check your specific miter saw's overall footprint (in all positions) and adapt the size of miter saw platform (Module C) as needed.

The overall workbench height is intended to be 34". That being said, the plans show a height of 33- $\frac{1}{2}$ " - this was to allow the use of leveling feet (or in my case, T-nuts and carriage bolts).

MODULES



See cutting diagram on next slide



2x4 CUT LIST

MODULE A (drill press)

- A** (4) @ 28 $\frac{3}{4}$ " - legs
- B** (3) @ 21" - front facing stretchers *
- C** (4) @ 17" - side stretchers *
- D** (1) @ 21" - center support *

MODULE B (basic module)

- E** (4) @ 32 $\frac{3}{4}$ " - legs
- F** (3) @ 29" - front facing stretchers *
- G** (4) @ 17" - side stretchers *

MODULE C (miter saw platform)

- H** (2) @ 30" - front/back
- I** (3) @ 21" - sides & center support *

MODULE D (with extension wing)

- J** (4) @ 32 $\frac{3}{4}$ " - legs
- K** (3) @ 33" - front facing stretchers *
- L** (4) @ 17" - side stretchers *
- M** (2) @ 36" - under side supports
- N** (2) @ 15" - extension wing blocks

All parts with a * require pocket holes:
Drill 2 pocket holes on each end of the board
board using the 2- $\frac{1}{2}$ " pocket screw setting



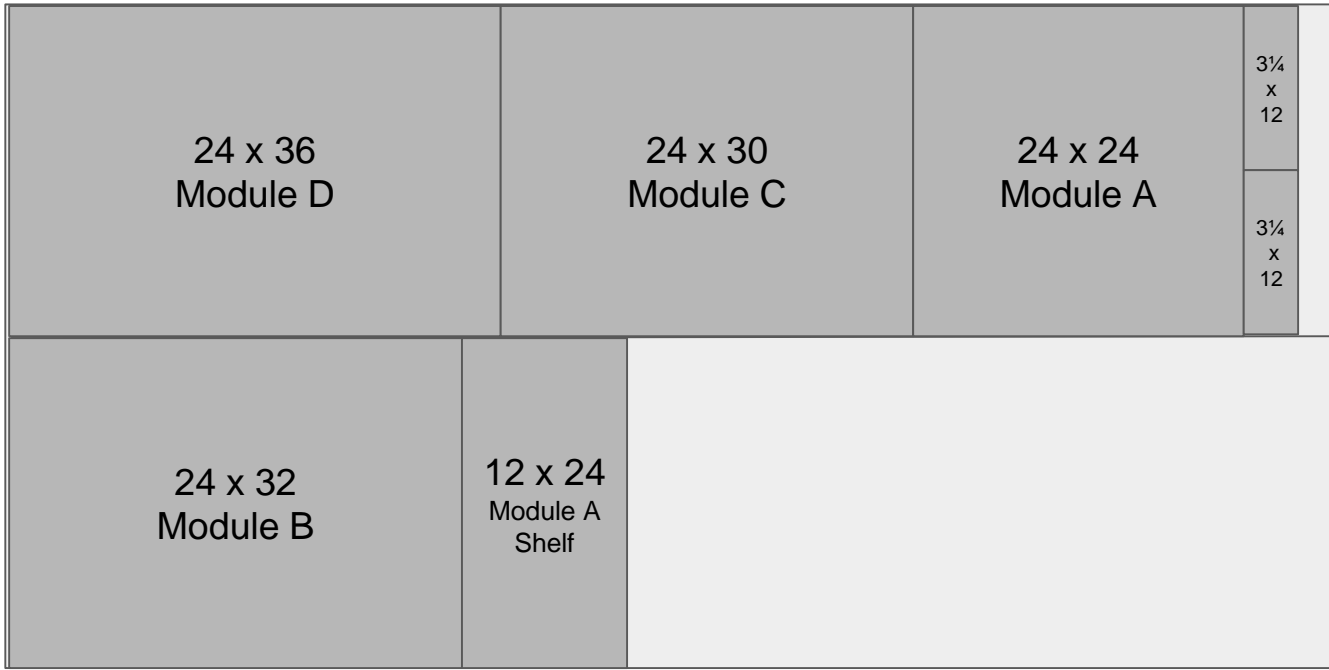
2x4 CUTTING DIAGRAM

See cut list on previous slide



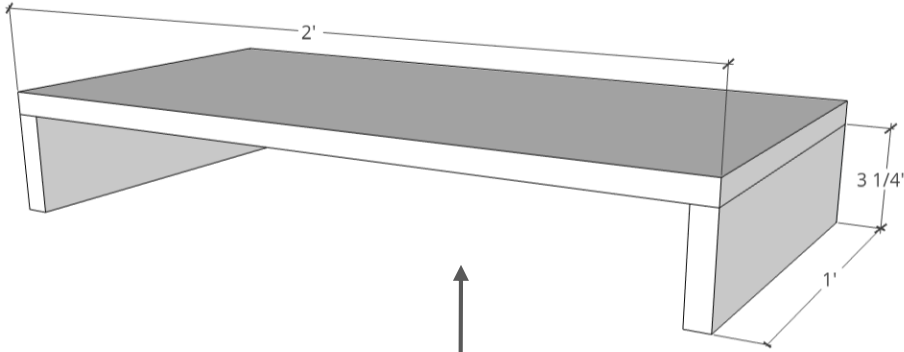
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J	K	N		
J	L	N	L	
M	M			

CUTTING DIAGRAM- 3/4 plywood



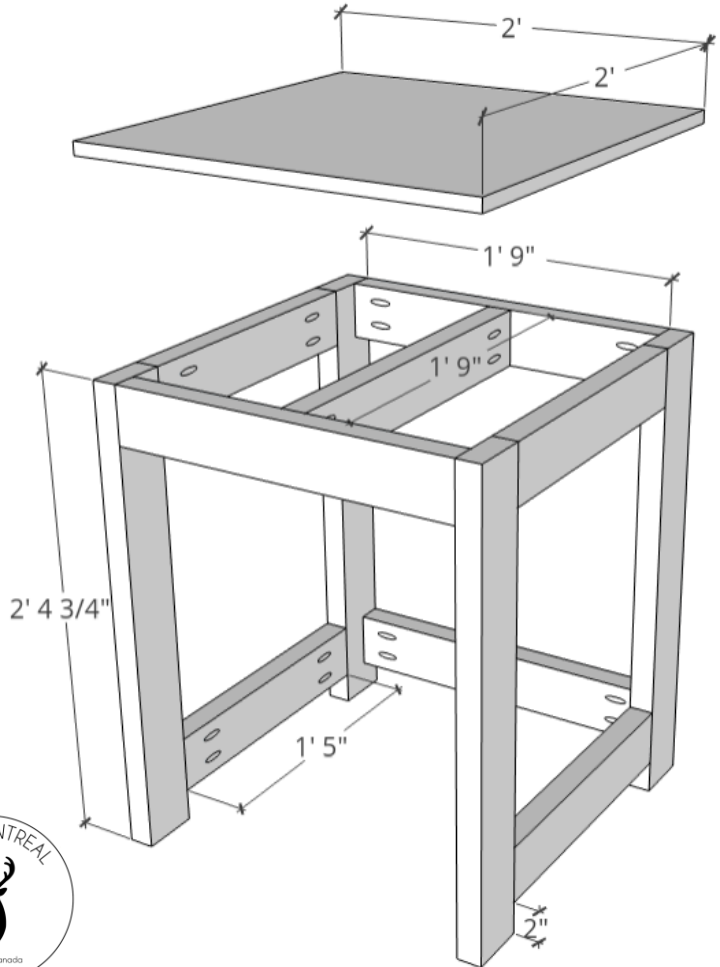
Start by cutting the plywood sheet in half lengthwise. Each half will measure 23-15/16". I have rounded up to 24" in the diagram above

MODULE A (drill press)

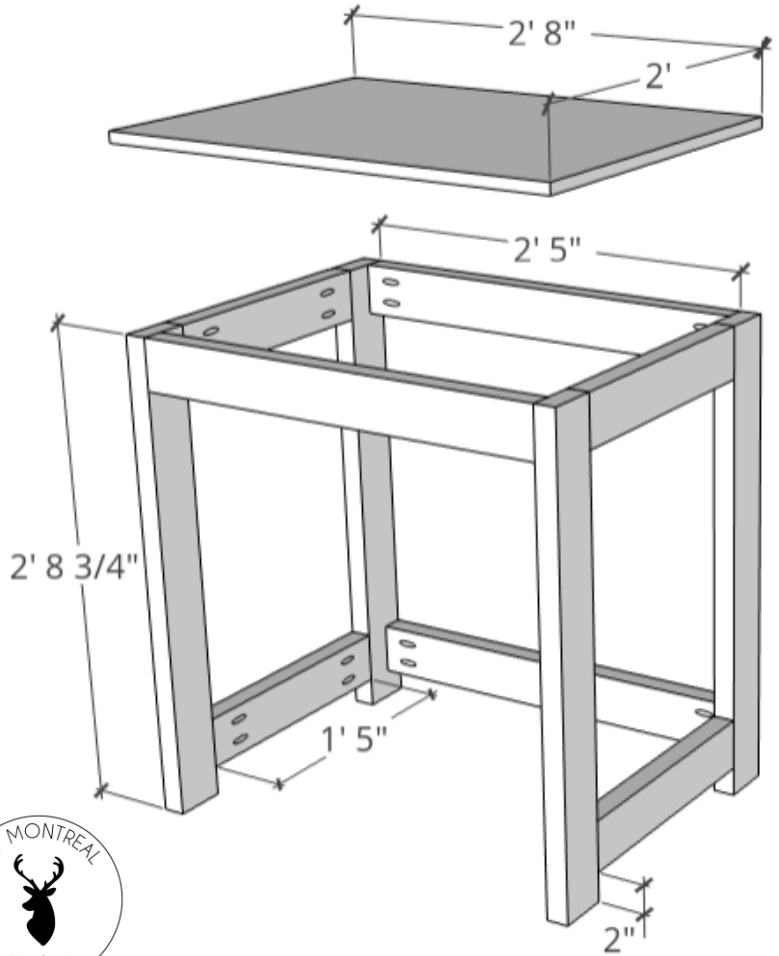


Assemble plywood shelf using 1-1/2" wood screws (pre-drill pilot holes). Place on top of Module on left - do not attach.

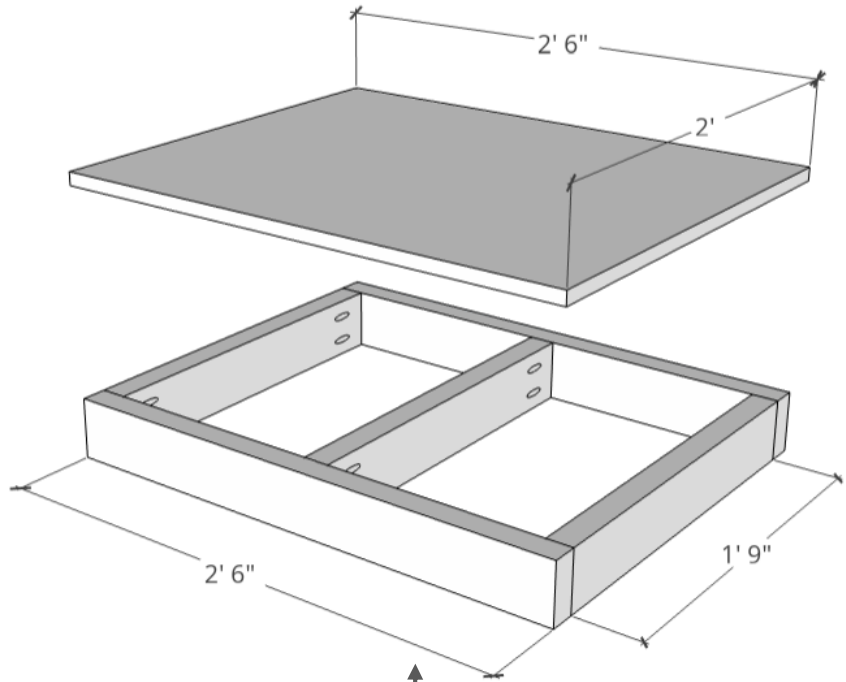
Assemble base using 2-1/2" pocket screws. Screw down plywood top to base using 1-1/2 wood screws (pre-drill pilot holes).



MODULE B (basic module)



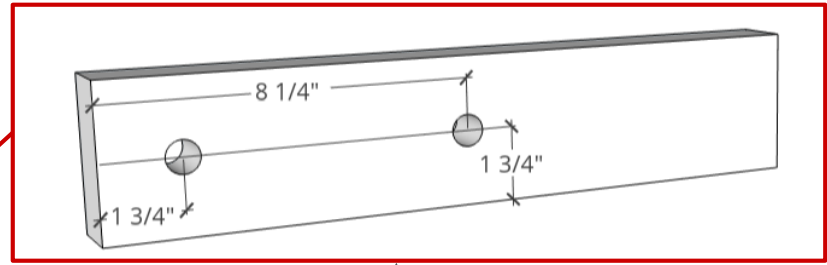
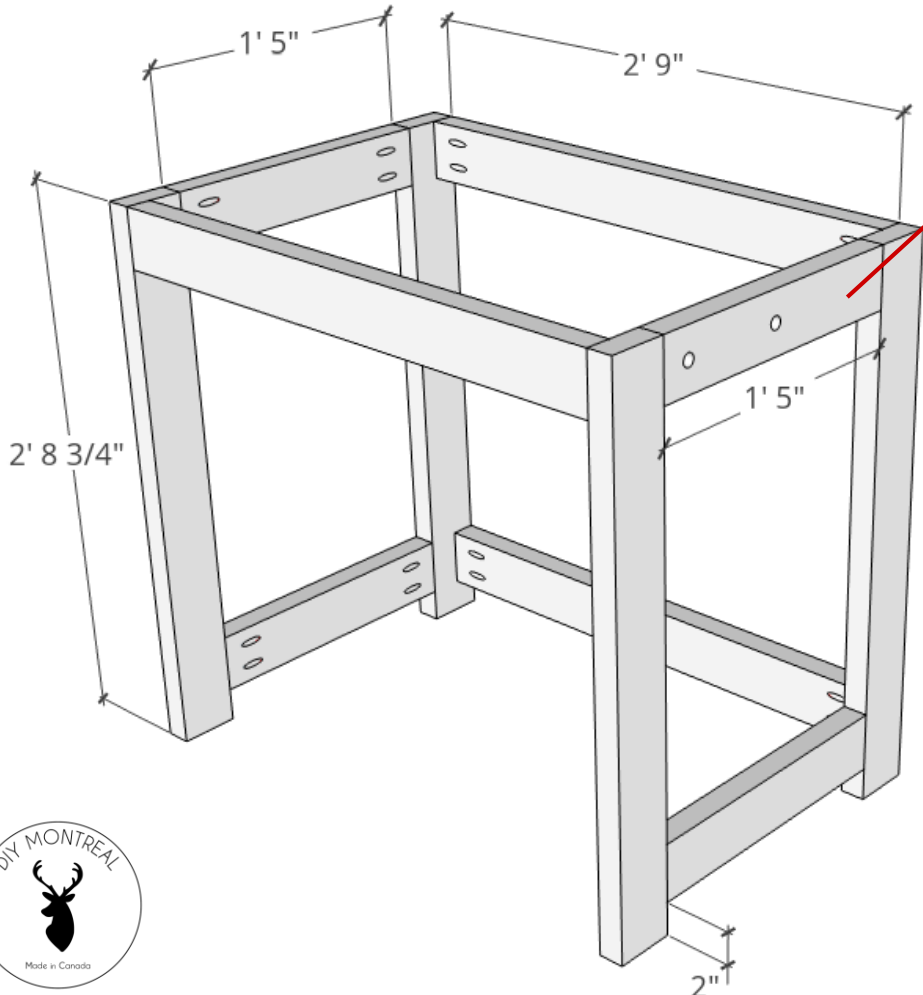
MODULE C (miter saw platform)



Assemble Module B and Module C bases using 2-1/2" pocket screws. Screw down plywood top to base using 1-1/2" wood screws (pre-drill pilot holes).



MODULE D (with extension wing)

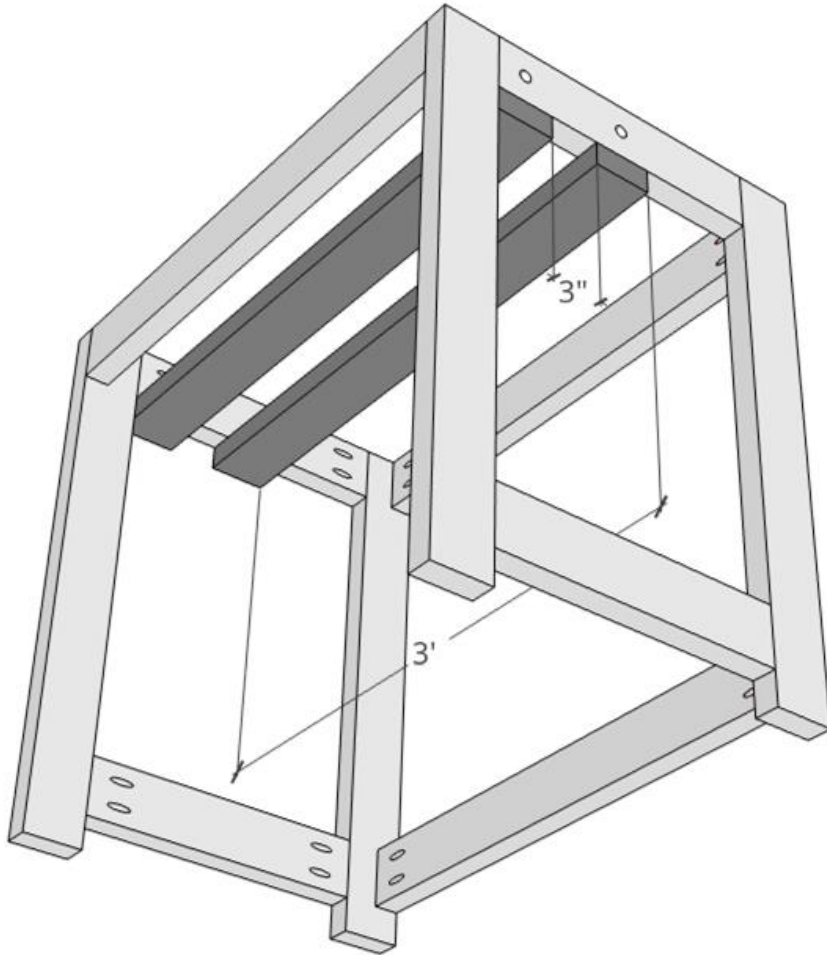


Before assembling module D, drill 2 holes all the way through the right side stretcher using a 3/4 inch Forstner bit. The holes should be 3/4 inch on center from the bottom, and respectively 1-3/4" and 8-1/4" on center from the left.

Assemble Module D base using 2-1/2" pocket screws.



MODULE D (with extension wing)

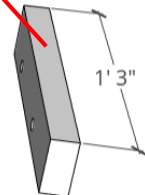
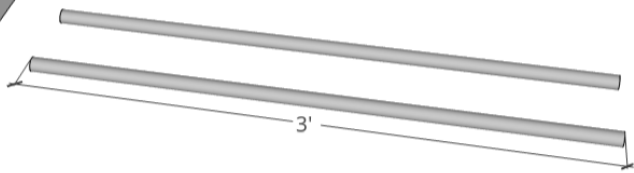
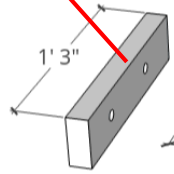
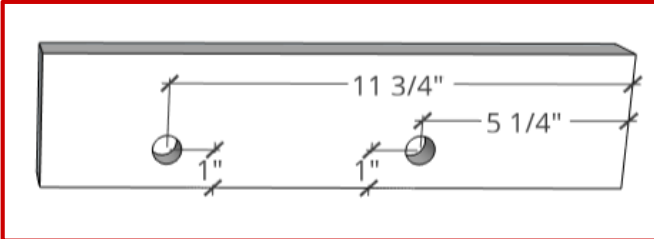
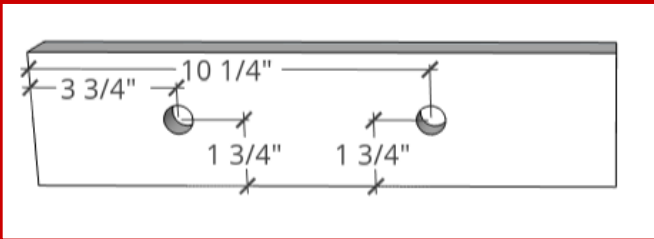
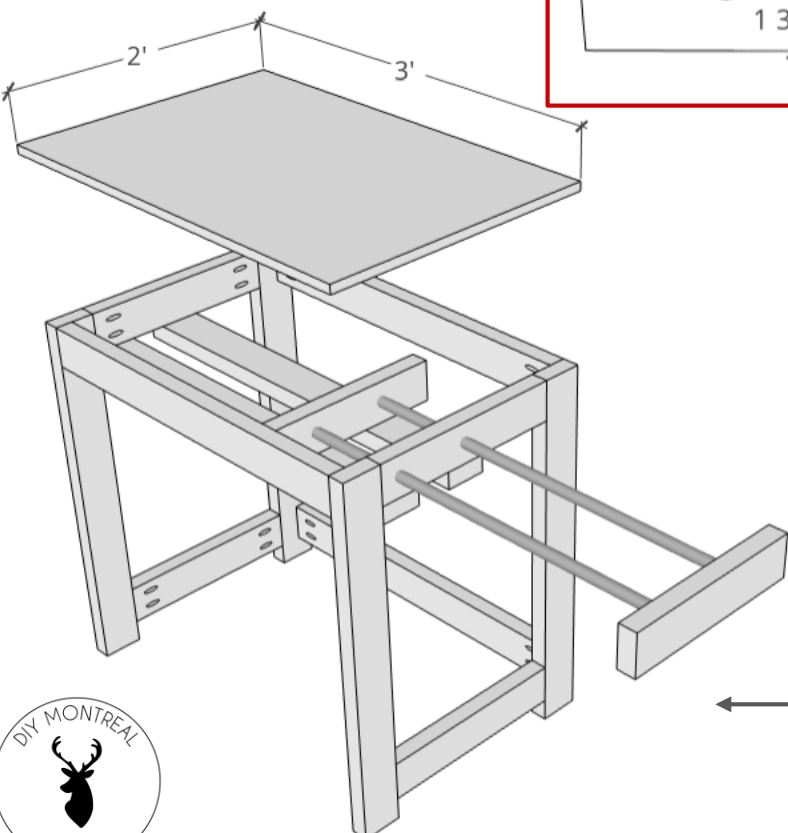


← Attach the (2) 36" cross support pieces from underneath using 3" wood screws.

The front support should touch the front legs, and both ends should be flush with the sides.

The second support should be spaced approx. 3" away from the front support.

MODULE D (with extension wing)



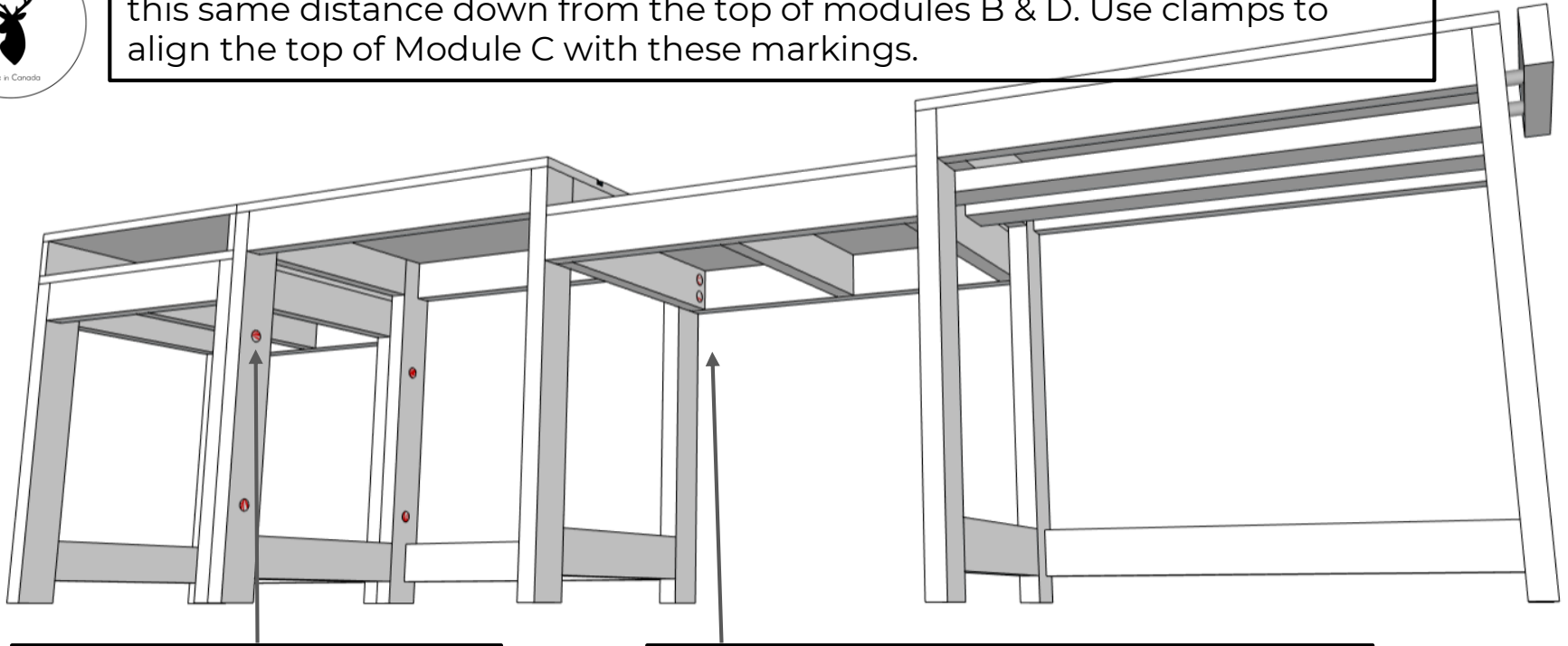
Pre-drill 1 inch deep holes in the extension wing blocks as per the diagrams above using a 3/4 inch Forstner bit.

Slide the steel pipes through the holes in the base. Use 5-minute epoxy to secure the pipes into the pre-drilled holes of the extension wing blocks. Screw down plywood top to base using 1-1/2 wood screws (pre-drill pilot holes).



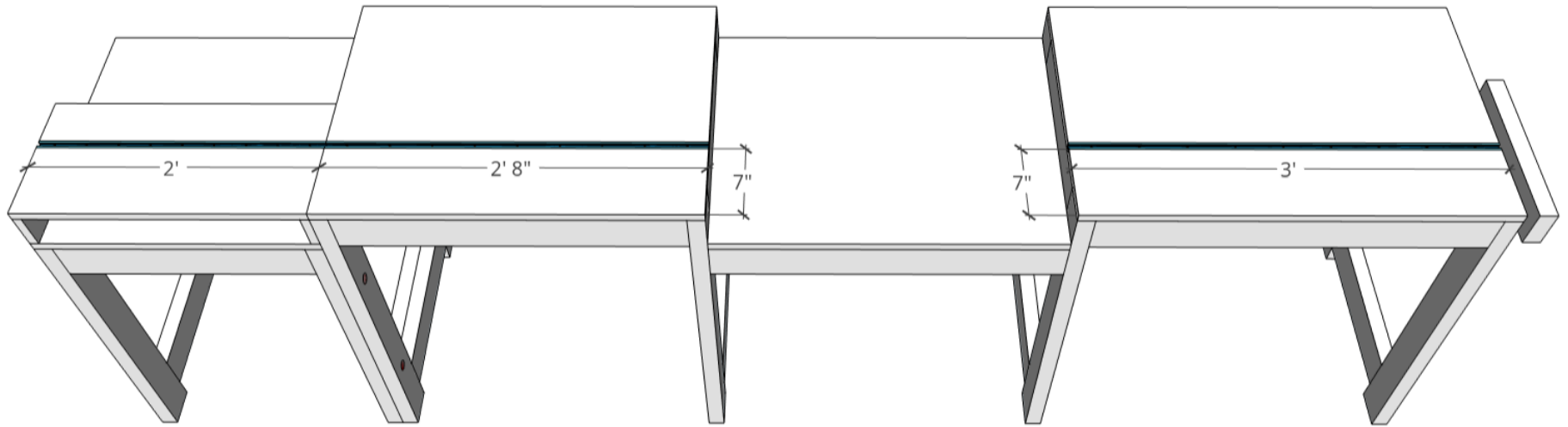


Measure the height of your miter saw's base (Bosch CM10GD = $3\text{-}\frac{7}{8}$). Mark this same distance down from the top of modules B & D. Use clamps to align the top of Module C with these markings.



Screw a few 3" screws through the legs to secure module A to B.

Attach Module C (miter saw platform) to Modules B & D by securing with 3" wood screws from underneath. Secure all 4 corners to adjacent module legs.



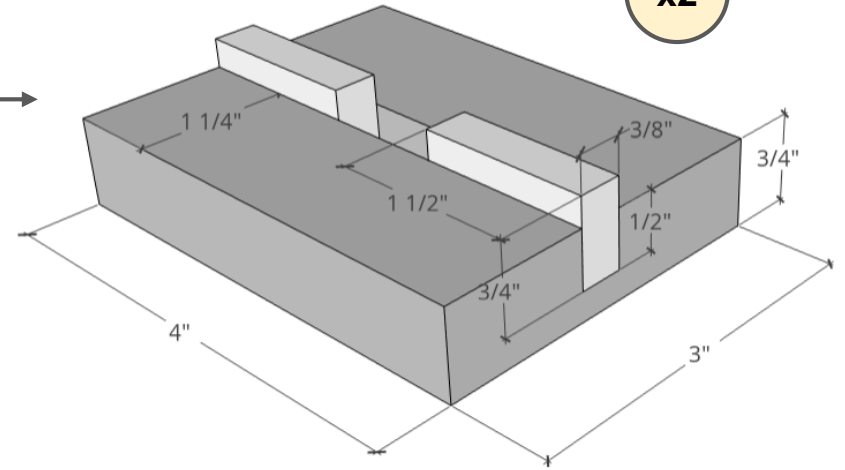
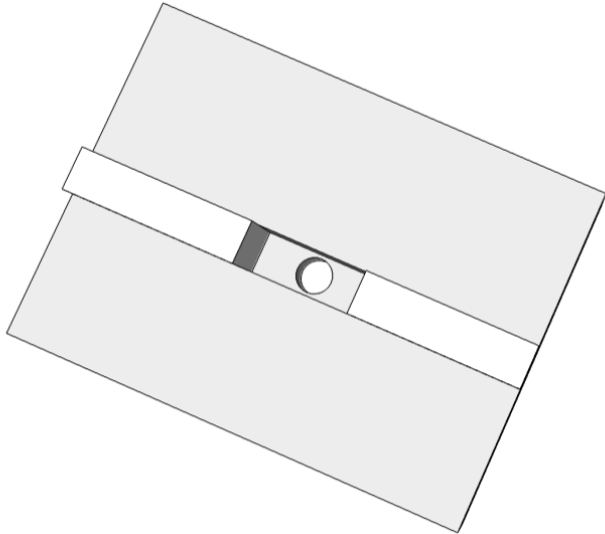
With the help of a guide, use a router with a $\frac{3}{4}$ inch double flute straight bit to route out a channel $\frac{3}{8}$ " deep by $\frac{3}{4}$ " wide. The channel should be approx. 7" from the front edge of the workbench (adjust as needed for your miter saw).

Cut the miter tracks to length using a miter saw. Secure in channel using screws or glue (the T-tracks should sit flush with top or just below the surface).



Stop Blocks

Cut out 2 blocks of hardwood 4" x 3" x $\frac{3}{4}$ ".
Cut out a dado $\frac{3}{8}$ " wide by $\frac{1}{2}$ " deep.
Cut small blocks to fit the T-tracks measuring 1- $\frac{1}{2}$ " x $\frac{3}{4}$ " x $\frac{3}{8}$ " (or use UHMW runners - see materials list).
Glue small blocks into dado, flush with the outer edges, leaving a gap in between.



Drill a hole through center of the dado using a $\frac{5}{16}$ bit.
Place a $\frac{5}{16}$ T-bolt in your T-track and slip the assembled block onto the bolt.
Thread a washer and $\frac{5}{16}$ star knob onto the T-bolt.



YouTube Video https://youtu.be/5y6_GD61eKI

Materials used

**CLICK FOR
PRODUCT LINKS**

- (13) 2 by 4s
- (1) Full sheet ¾" plywood
- (2) small hardwood blocks
- (2) 36" x ¾" O.D. steel pipe
- (2) 36 inch T-tracks
- (1) 24 inch T-track
- (2) 5/16 Star knobs
- (2) 5/16 T-Bolts
- (2) 5/16 washers
- (1) UHMW runner (or hardwood)
- 2-½ inch pocket screws
- 1-½" #8 flat head wood screws
- 3" #8 flat head wood screws
- 5-minute epoxy
- (12) ¼-20 T-nuts
- (12) 2 inch ¼-20 Carriage bolts

Tool used

- Bosch CM10GD Miter saw
- K4 pocket hole jig
- Drill/driver
- Mini palm driver
- ¾" Forstner bit
- 4 foot level
- Router
- ¾" double flute straight bit
- Pocket hole clamp
- Quick clamps
- Combination square
- Super glue
- Weldbond
- Shellac
- Paste wax