

1.1 BUILDING THE FRAME



TOOLS NEEDED:

Saw
Power Drill
Screwdrivers
Safety goggles

BUILD TIME:

About 5 hours, plus
glue drying time

Difficulty Level



Precision Level



MATERIALS LIST:

(7) 10' long 2x4s
(1) 8' long 2x4
(1) 6' long 2x4
(1) 4X8 sheet .75" plywood
(75-100) 2.25" wood screws
Wood glue
Hardware & parts from kit

CUT LIST:

2x4s
(1) 120" (2) 34"
(1) 88" (2) 30"
(2) 82" (2) 28"
(2) 79" (2) 7"
(2) 60" (4) 3.5"

COST:

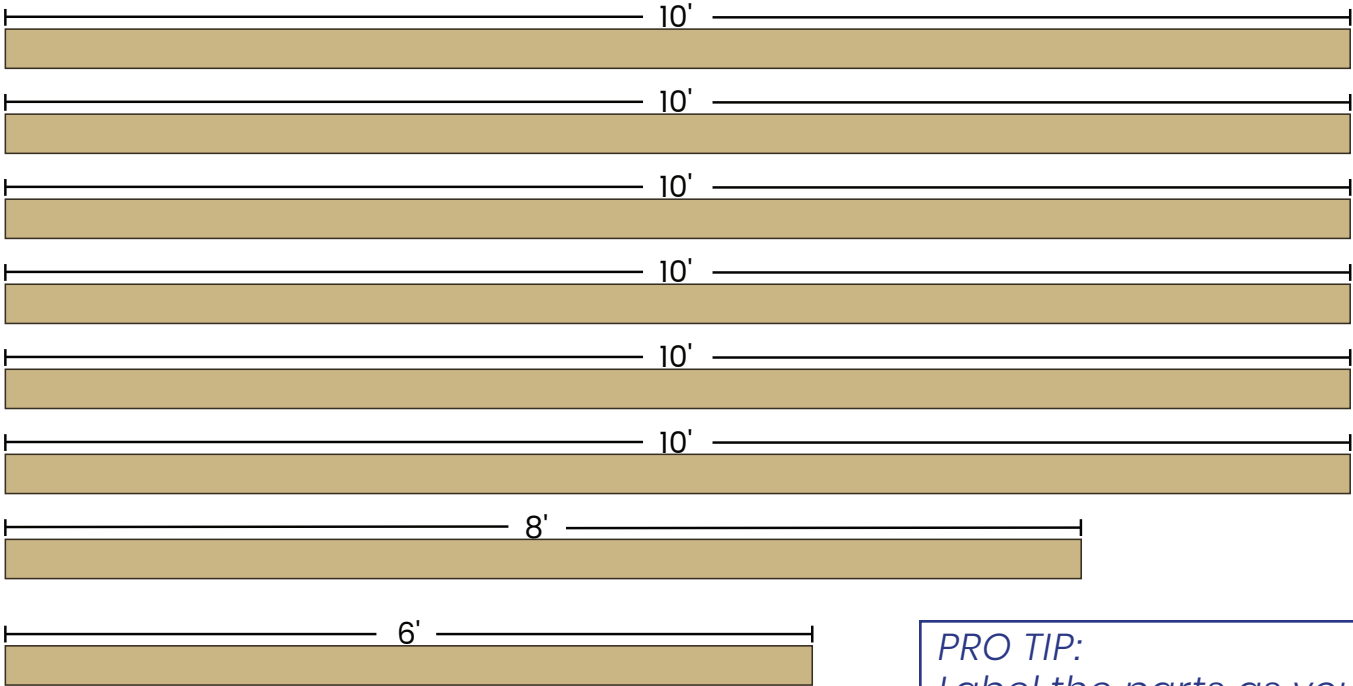
Approximately \$90

BEFORE BEGINNING
Acquaint yourself with
standard practices for
workshop safety.

Note: Lumber dimensions are not critical, if 2x4s are not available in your area the local equivalent will work. When cutting, try to keep the ends as square as possible, but small errors in the lengths of any of the parts will not affect accuracy of the machine.

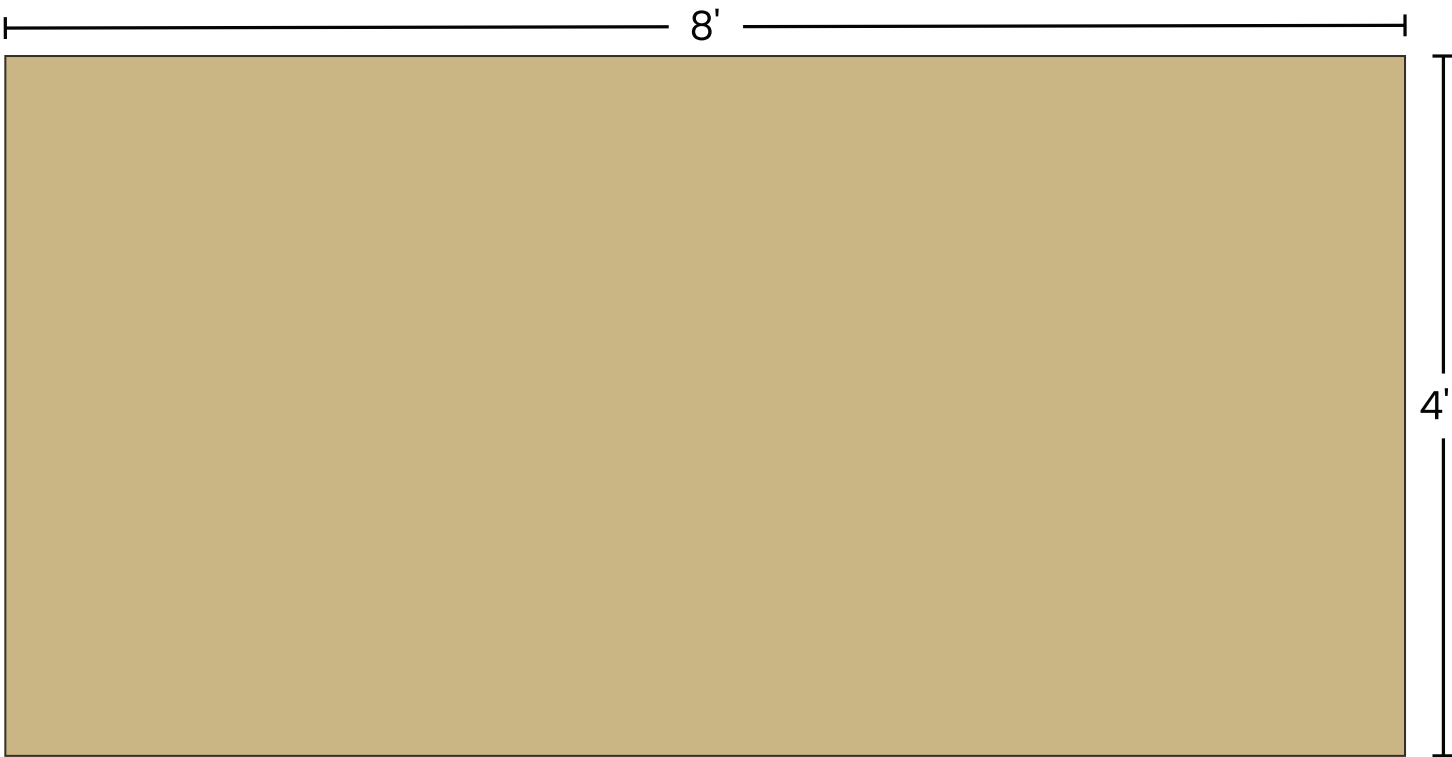
STEP 1: BUY MATERIALS

2X4 (or equivalent lumber)

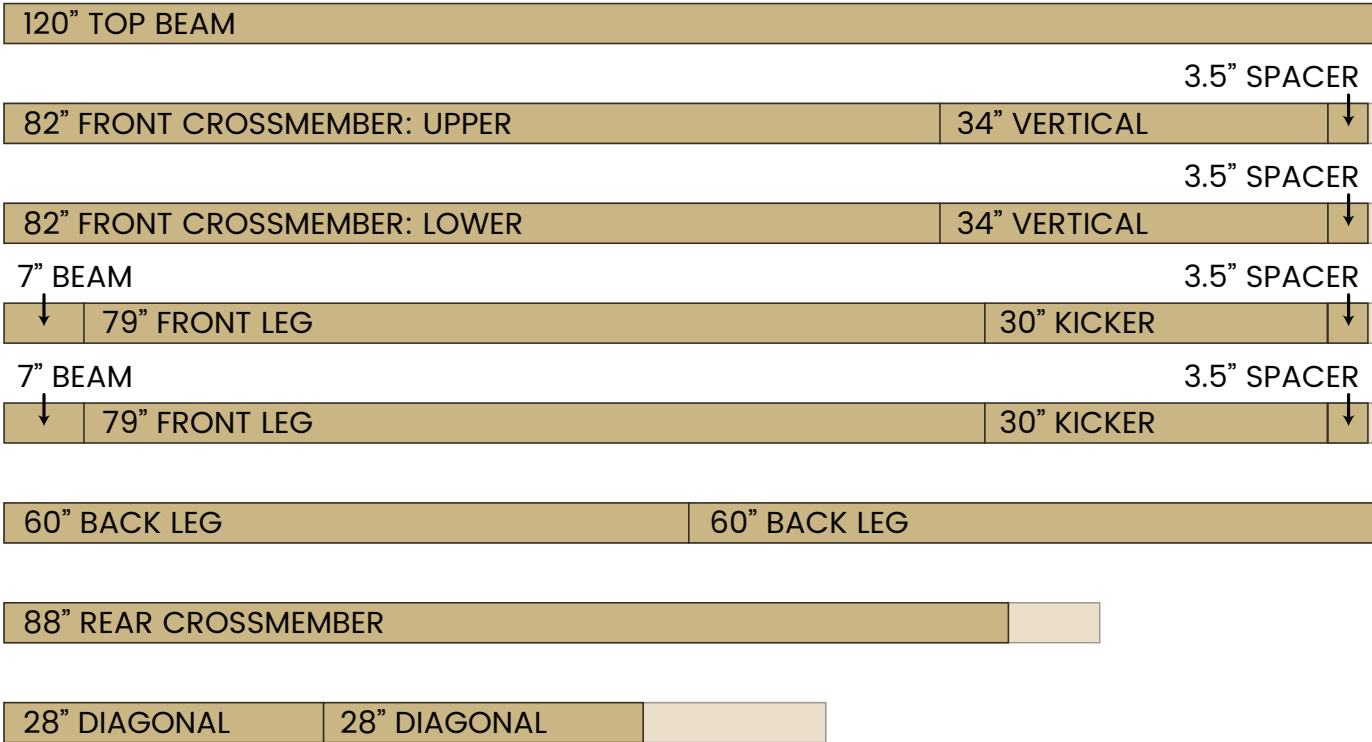


PRO TIP:
Label the parts as you
cut them, you'll be glad
you did.

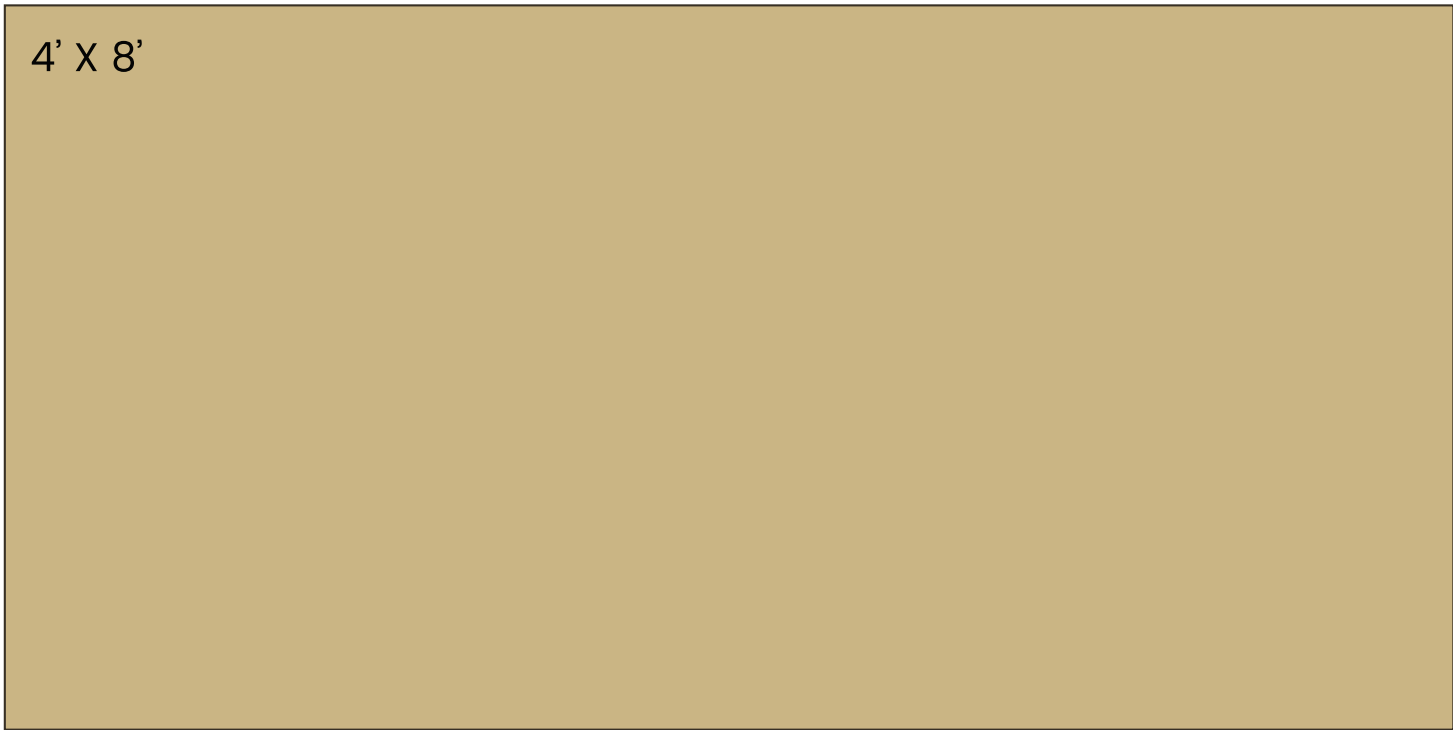
PLYWOOD

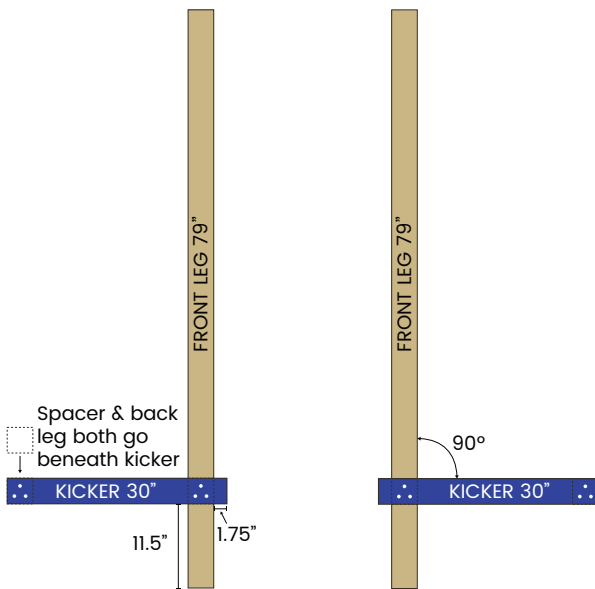


STEP 2: CUT OUT PIECES AS SHOWN
2X4 (or equivalent lumber)



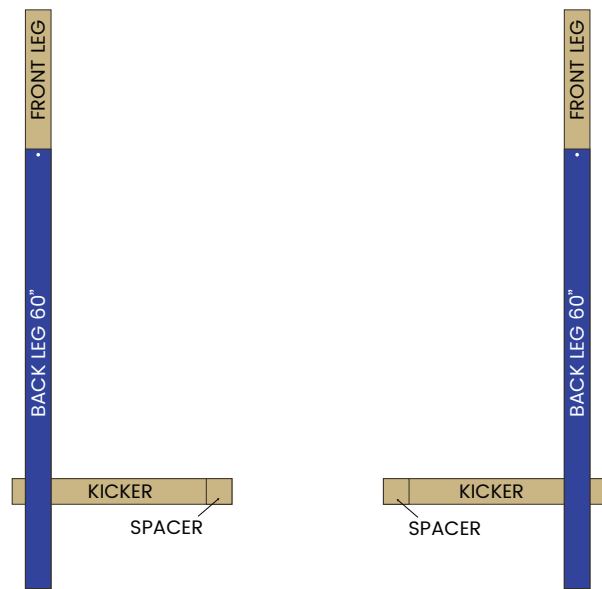
PLYWOOD





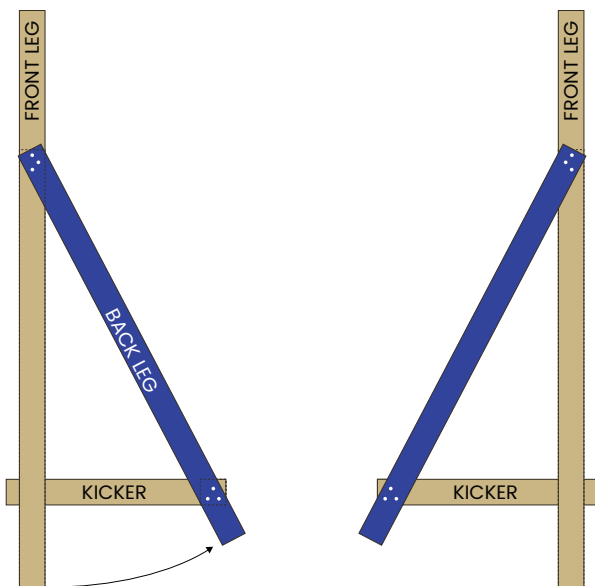
STEP 3/4A ATTACH KICKERS TO FRONT LEGS

- Kickers at 90° angle to front legs
- Kickers 11.5" from bottom of front legs, and overhanging by 1.75"
- Screw through top of kickers into front legs
- Screw through top of kickers into spacers
- Flip each assembly over for next step



STEP 3/4B ADD BACK LEGS

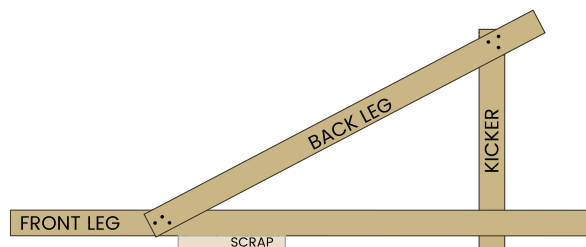
- Place back legs on top of front legs, aligning bottom ends
- Mark center of back legs 1" from top end
- Screw through top center of back legs into front legs at marked spot
- Only 1 screw per leg, NO GLUE



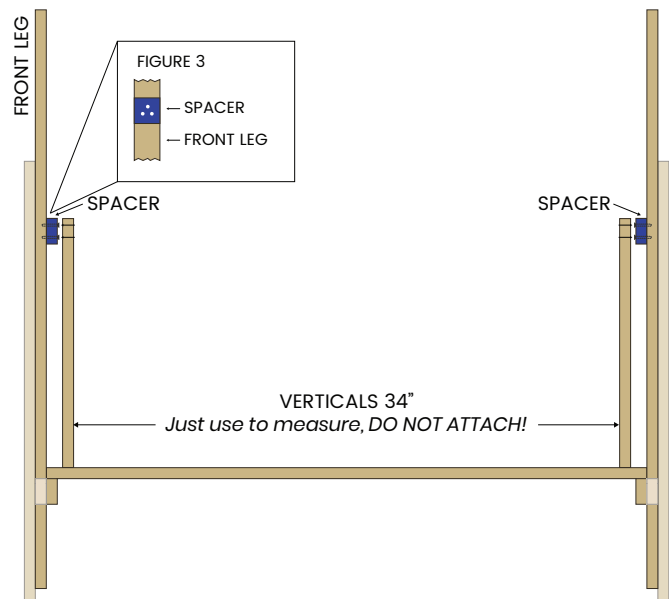
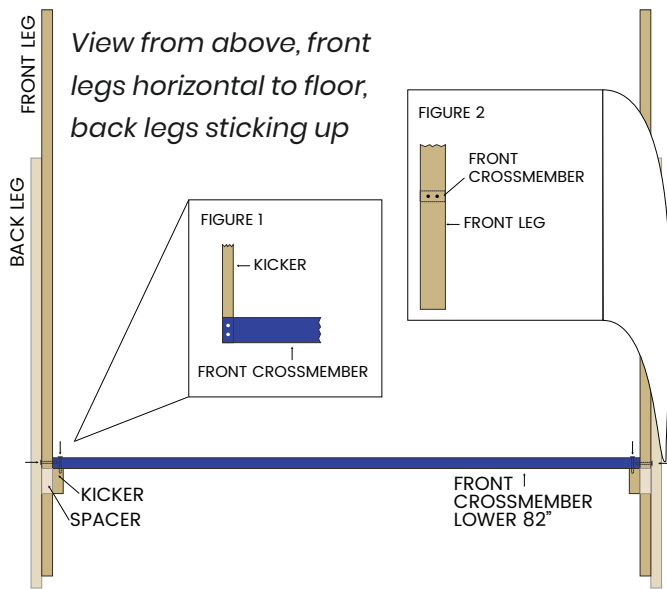
STEP 3/4C POSITION BACK LEGS

- Rotate back legs out to end of kickers
- Screw bottom of back legs to kickers
- Add more screws to top of back legs

LEGS ARE NOW COMPLETE!



Next steps are most easily done with front legs horizontal to floor, as shown. Prop with scraps to keep things level.

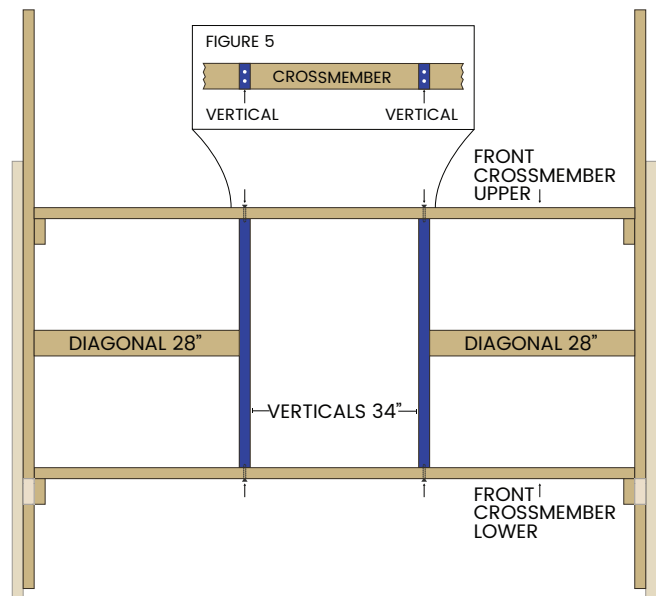
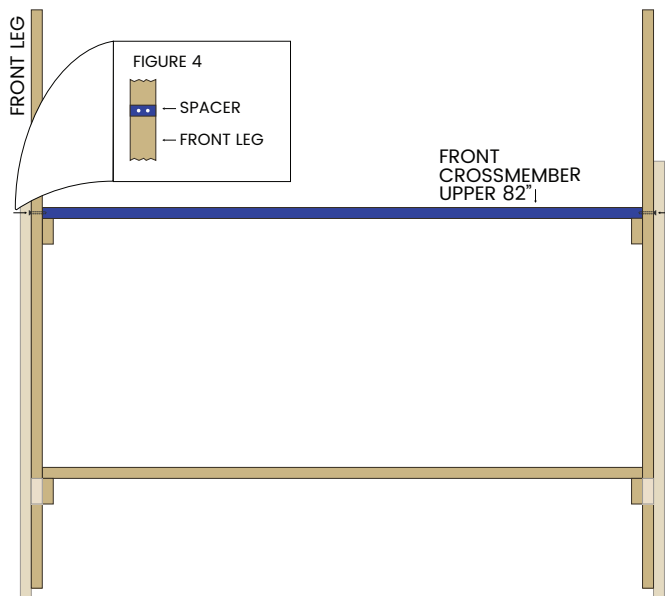


STEP 5A ATTACH LOWER FRONT CROSSMEMBER

- Rest lower front crossmember on kickers
- Screw from top of crossmember into each kicker- see Figure 1
- Screw from side of each front leg into crossmember- see Figure 2

STEP 5B ADD SPACERS

- Use verticals to measure placement of spacers on inside of front legs
- DO NOT ATTACH VERTICALS IN THIS STEP
- Screw through spacers into front legs

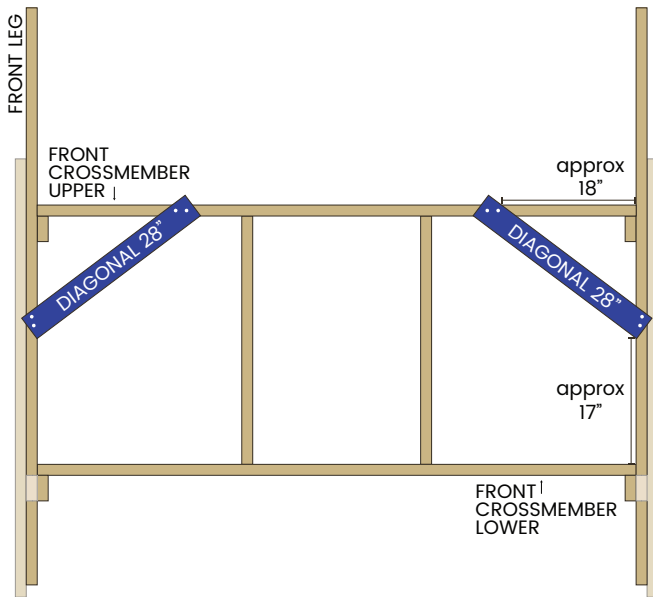


STEP 5C ATTACH UPPER FRONT CROSSMEMBER

- Rest upper front crossmember on spacers
- Screw through sides of front legs into crossmember

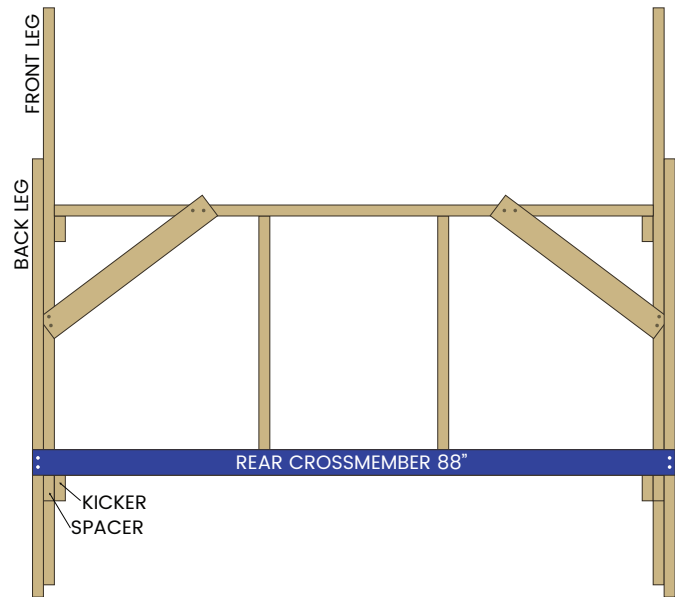
STEP 6 ATTACH VERTICALS

- Use diagonals to place verticals
- DO NOT ATTACH DIAGONALS IN THIS STEP
- Screw through top crossmember into verticals
- Screw through bottom crossmember into verticals



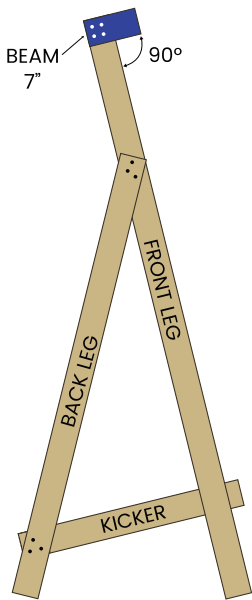
STEP 7 ATTACH DIAGONAL BRACING

- Rest diagonals with one end on front leg, one end on upper crossmember
- Screw diagonals in place on each end
- Placement of diagonals need not be exact



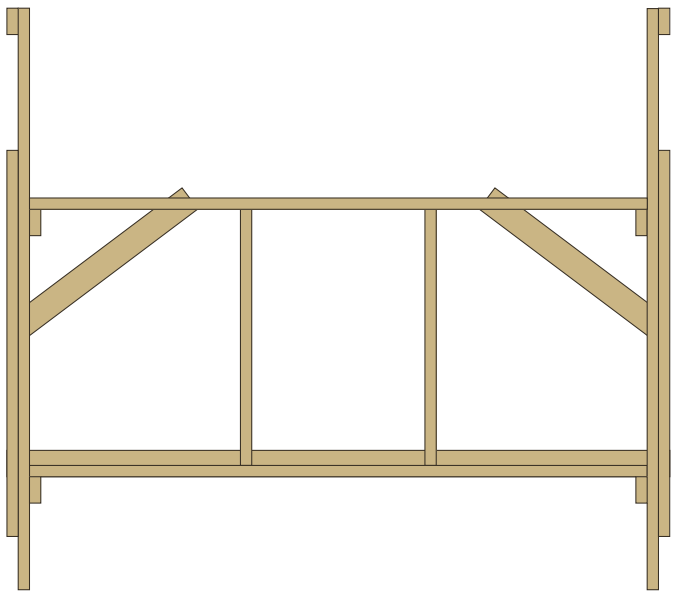
STEP 8 ATTACH REAR CROSSMEMBER

- Rest rear crossmember on top of kickers where they protrude from back legs
- Screw through rear crossmember into back legs

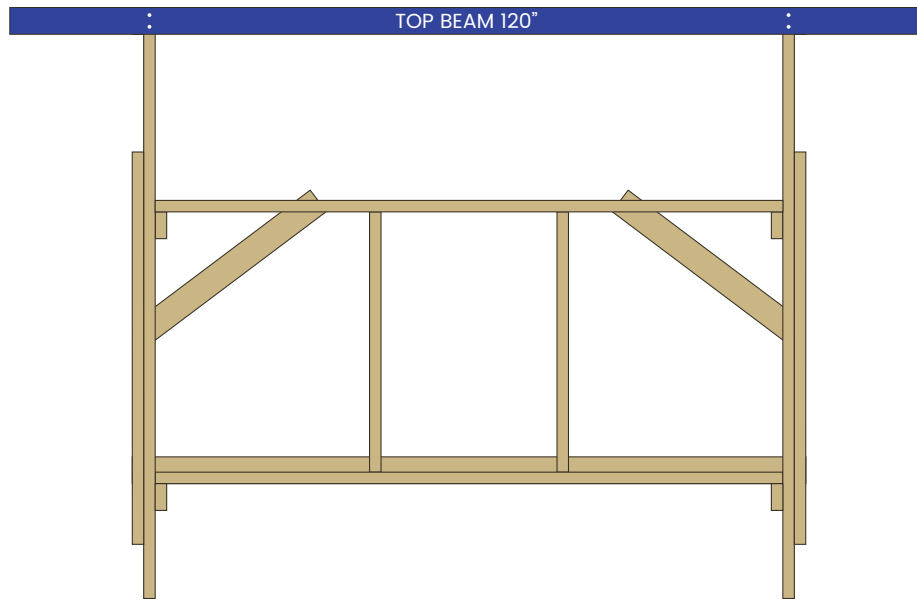


STEP 9 ATTACH SIDE BEAMS

- Beams were placed on cut list to have one factory end, this end should face out so top beam has a flat surface to rest on
- Place beams at 90° angles to each front leg
- Screw through beams into front legs

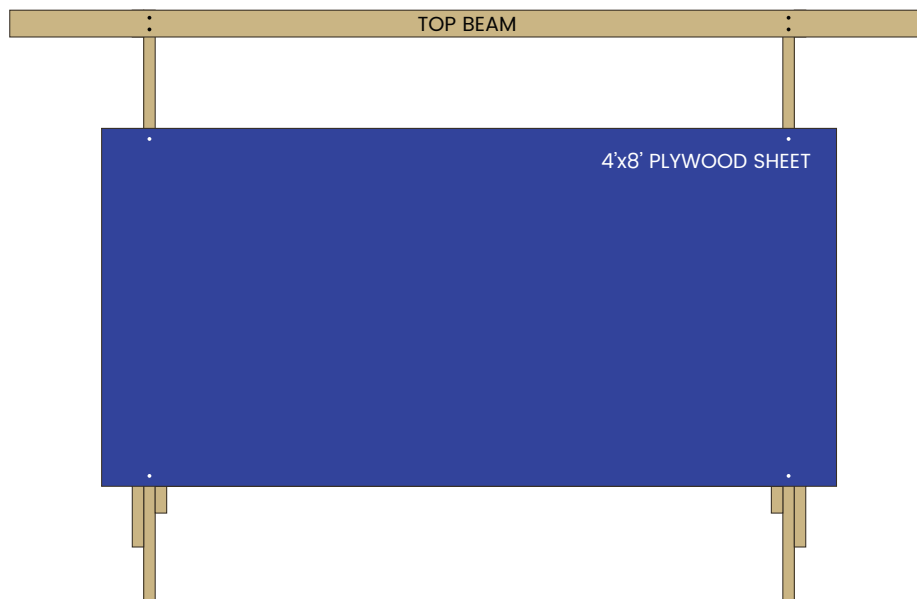


ALMOST FINISHED!



STEP 10 ATTACH TOP BEAM

- Center top beam across front
- Screw through top beam into 7" beams on each side



STEP 11 STAND UP FRAME & ATTACH PLYWOOD

- Rest plywood on kickers
- Attach with screws through front of plywood into each front leg

You now have a complete frame!
NEXT STEP: ATTACHING THE ELECTRONICS

