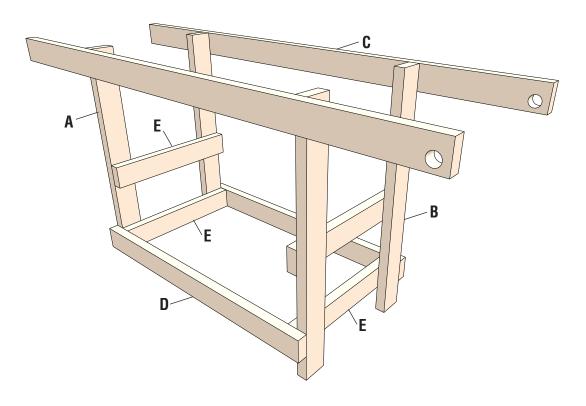
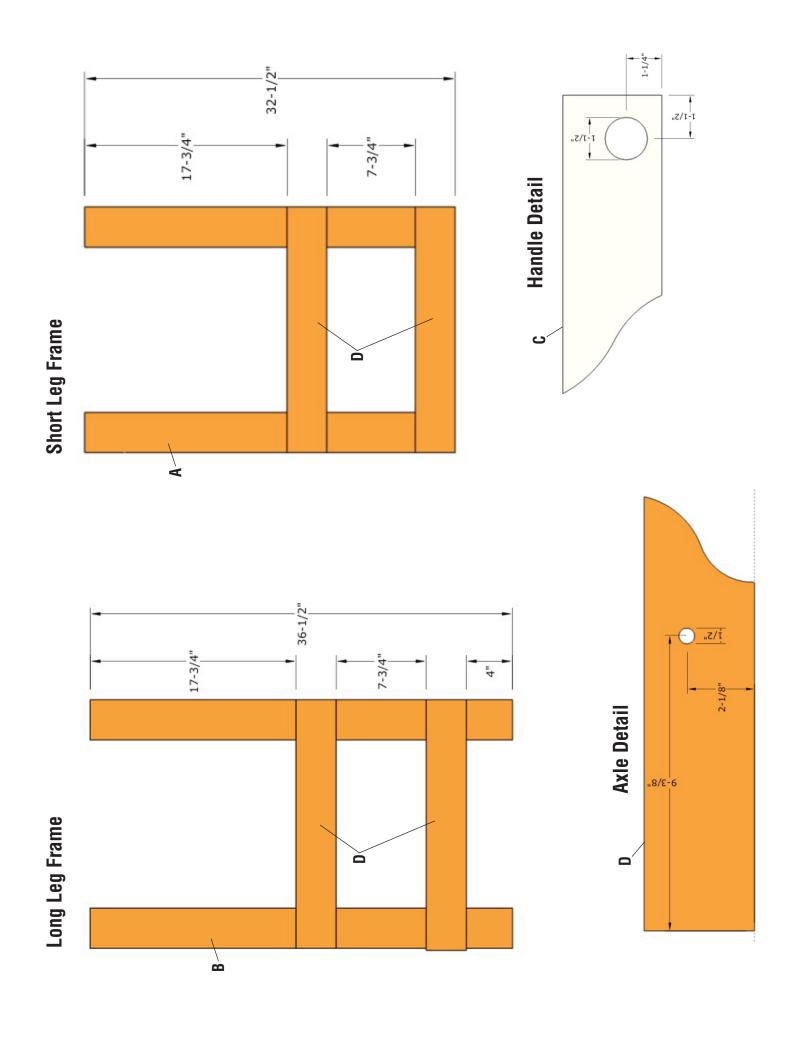


Simple Cart Frame







The Beginner Party Station

Time to complete: About 10 hours

Tools Used: Tape measure, combination square, drill bits, countersink and driver bits, jigsaw, circular saw or miter saw, drill/driver and impact driver (optional)

Materials:

1x4x8 ft. (14)

2x4x8 ft. (7)

1-1/4-in.-dia. x 24-in. hardwood dowel

12-in.-dia. wheels (2)

1/2-in.-dia. x 24-in. aluminum rod

1/2-in. push nuts w/ plastic hubs (2)

1/2-in. nylon washers (4)

2-1/2-in, stainless or coated deck screws

1-5/8-in. stainless or coated deck screws

Cutting list:

 $A - Short legs - 2x4 \times 32-1/2$ (2)

 $B - Long leg - 2x4 \times 36-1/2$ (2)

C - Top rails - 2x4 x 72 (2)

D - Bottom rail - 2x4 x 42 (2)

E - Crosspieces - 2x4 x 20-3/4 (4)

F - Top shelf boards - 1x4 x 23-3/4 (10)

G - Side cladding $- 1x4 \times 43-1/2$ (8)

H - End cladding $- 1x4 \times 20-3/4$ (10)

I – Interior and bottom shelf boards – 1x4 x 39 (10)

J - Handle

Construction Steps:

ASSEMBLE THE FRAME

Step 1: Measure and crosscut the frame pieces (parts A-E) from 2x4s (see the Material List for part lengths).

Step 2: Refer to the Short and Long Leg Frame detail drawings to position the crosspieces on the short and long legs. Clamp the parts and then drill a 1/8-in.-dia. countersunk pilot hole in each screw location. Fasten the crosspieces to the short and long legs with 2-1/2-in. deck screws.

Step 3: Clamp together the top rail pieces and mark the location of the handle hole on one of the top rail pieces. Refer to the Handle Detail drawing for location

dimensions. Bore a 1-1/4-in.-dia. hole through both top rail pieces at the handle location.

Step 4: Clamp together the bottom rail pieces and mark the location of the axle hole on one of the bottom rail pieces. Refer to the Axle Detail drawing for location dimensions. Bore a 1/2-in.-dia. hole through both top rail pieces at the handle location.

Step 5: Clamp one top rail and one bottom rail to the leg frame assemblies. Fasten the rails to the leg assemblies with 2-1/2-in. screws. Clamp the parts together and drill 1/8-in.-dia. countersunk pilot holes before driving each screw. Attach the second top and bottom rails to the other side of the leg frame assemblies.

ATTACH THE SHELF BOARDS

Step 6: Crosscut the interior and bottom shelf boards to length. Space the bottom shelf boards on top of the bottom crosspieces. Fasten the shelf boards to the bottom crosspieces with 1-5/8-in. deck screws. Drill a 1/8-in.-dia. countersunk pilot hole for each screw.

Step 7: Space the interior shelf boards evenly on the top crosspieces. Fasten the shelf boards to the crosspieces with 1-5/8-in. deck screws. Drill 1/8-in.-dia. a countersunk pilot hole for each screw.

Step 8: Crosscut the top shelf boards to length. Starting from the ends of the top rails, position five shelf boards on each end of the top rails. Leave a slight gap between each board. Fasten the top shelf boards to the top rails with 1-5/8-in. deck screws. Drill a 1/8-in.-dia. countersunk pilot hole for each screw.

ATTACH THE CLADDING

Step 9: Cut the side and end cladding pieces to length. Starting at the top of the legs, fasten the end cladding to the outside of the legs with 1-5/8-in. deck screws. The end cladding should be flush with the outside edges of the legs. Drill a 1/8-in.-dia. countersunk pilot hole for each screw.

Step 10: Fasten the side cladding to the legs with 1-5/8-in. deck screws. The of the side cladding pieces should be flush with the end cladding. Drill a countersunk pilot hole for each screw.

INSTALL THE WHEELS AND HANDLE

Step 11: Slide a length of axle rod into place in the two axle holes. Install the wheels on the axle temporarily with a nylon washer on each side of the wheels to act as spacers. Press the wheels and washers against the cart sides. Shift the axle as needed to leave 1/2 in. protruding past one wheel, and mark the axle's final length on the other end (allow for a 1/2-in. protrusion here, too). Remove the wheels and washers. Wrap a strip of tape around the axle at your layout mark to

act as a cutting guide. Use a hacksaw to saw the axle to length, following the edge of the tape as you cut (See Photo 8). File the cut edge smooth, if needed.

Step 12: Re-install the wheels and washers on the axle, and tap push nuts in place on the ends of the axle with a soft-faced mallet or a hammer and block of wood to secure the wheel assembly (See Photo 9).

Step 13: Slide the handle dowel through the handle holes and drive a single 1-5/8-in. countersunk screw through the bottom of the top rail and into each end of the handle. Bore a 1/8-in.-dia. pilot hole for each screw.