



# Table Top Hockey Game

Your entire family will enjoy using this woodworking project. Use inexpensive materials like pine or poplar to build it.



## Steps to Take:

- Cut the sides (A), ends (B) and cleats (C) to the dimensions given on the Bill of Materials.
- On the table saw set the distance from fence to blade at 3/4" and the blade height to 3/8". Cut a 1/8" wide groove the full length of each of the side and end pieces to accommodate the playing area board (D). Make sure the tempered hardboard will fit into the groove.
- Reset the saw fence so it is 3/4" from the outside of the blade and cut a 3/4" wide by 3/8" deep rabbet on the same side of each end of the two side pieces (see Figure 1).
- On the inside of each of the end pieces (Part B), measure in 16" and 20" to mark with the width for the 1" high goal holes and use a saber saw to cut them out. The bottom of this opening should be level with the top edge of the groove.
- Use 1/8" tempered hardboard and cut the playing area (D) to size.
- Cut the corner braces (E) to the size indicated on the Bill of Materials with mirrored 45 degree miters on each end (see Figure 1).
- Refer to Figure 2 and dry assemble the pieces to check for fit. Make any adjustments necessary.

## Tools Needed:

Saber saw, table saw, router, chamfering bit, screw driver

**Materials Needed:** #6 flat head screws, 3/4" pine or poplar wood, 1/8" hardboard, hardwood for pucks and strikers, glue, goggles and safety glasses, ear plugs, lacquer, sanding sealer, small brushes, green enamel paint, steel wool, paste wax

## Bill of Materials

Quantity	Part	Finished Size			Piece
		T	W	L	
2	A	3/4"	3"	48"	sides
2	B	3/4"	3"	36"	ends
4	C	3/4"	3"	35-1/4"	cleats
1	D	1/8"	36"	47-1/4"	play area
4	E	3/4"	2-1/8"	4"	corner braces
2	F	2"	2"	2"	goal blocks
3	G	1/2"	2" diameter		pucks
4	H	1"	3-1/4" diameter		striker bases
4	I	1-1/4" diameter	4"		striker handles

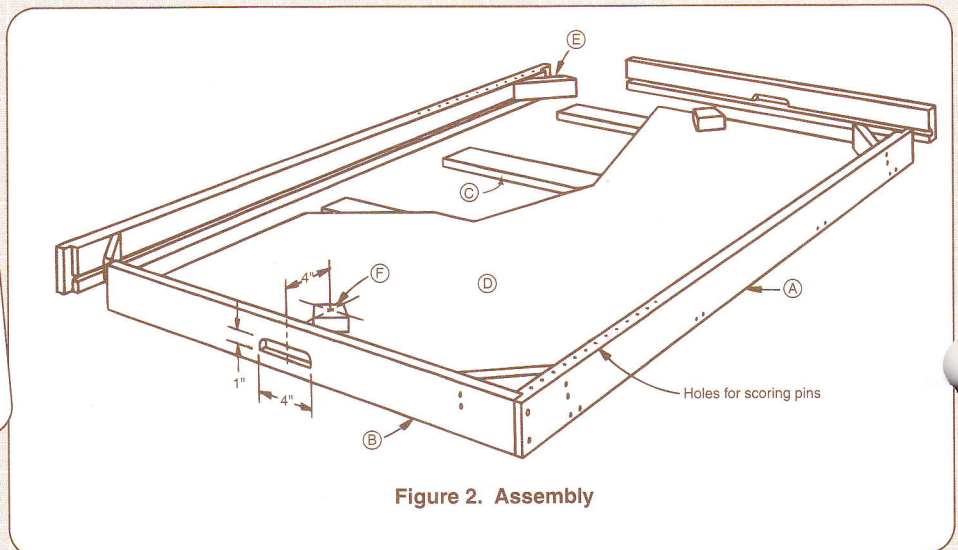
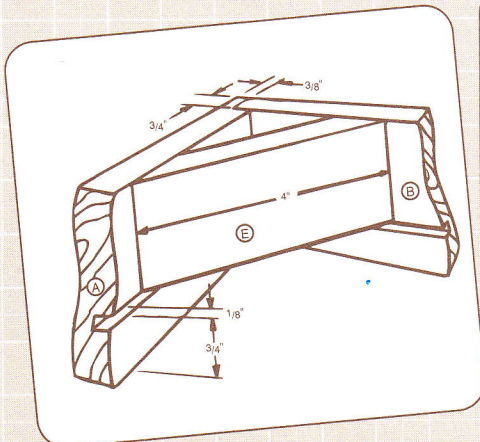
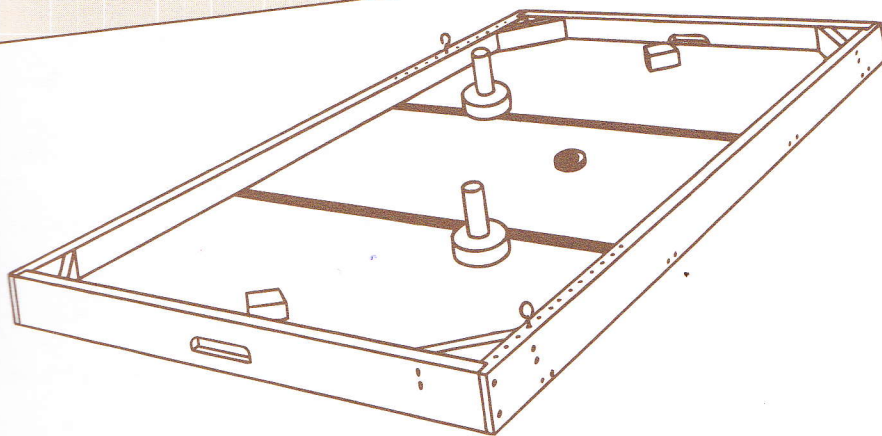


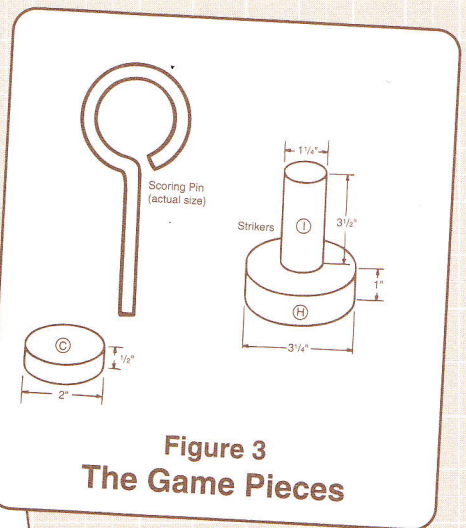
Figure 2. Assembly



- Assemble the two end walls to one side wall using 1-1/4" x #6 flat head wood screws and glue. To keep the wood from splitting drill pilot holes with a tapered drill bit and counter-sink.
- Slide the playing board into the groove and attach the final side wall.
- On the underside of the board, attach the cleats on center at 4" and 17-1/2" from each end; then flip the game over and glue and screw the four corner braces into place.
- Using a hardwood (for its durability), cut out the goal blocks (F) to the dimensions indicated on the Bill of Materials. Before you install these pieces, use a router with a chamfering bit to roll the edges of the top of each of the goal blocks. Do the same to any exposed edges of the assembled game.
- Glue and carefully center the goal blocks 4" in from the outside edge of the game and right in front of the goal slots as shown in Figure 2. When they are dry, flip the board over and, with supports under the goal blocks, drill and screw them in place through the end cleats.
- Make the pucks and strikers. Use hardwood for these pieces as there will be less give in the wood. Cut the pucks to size; sand and taper the edges out from the center (creating a convex shape on each side) for better sliding ability. Make several to replace lost ones.
- For the striker bases (H) (see Figure 3), cut out four disks and drill a 1-1/8" hole 3/4" deep in the center of one side. Cut four pieces of 1-1/4" dowel for the striker handles (I). Slightly taper 3/4" of one end of each handle till they fit securely in the bases. Again, using the router with chamfering bit, roll the top and bottom edges of the disk. Glue the handles into place, and when they're dry, sand the strikers down so they feel comfortable and slide easily.
- Go over everything with a fine sandpaper and get all the edges and accessories as smooth as possible. Brush or, preferably, spray a lacquer sanding sealer over the entire game. One coat is sufficient, but two may give it a better playing surface.
- Finish the board by applying one or more coats of clean lacquer to the entire game.
- Use green enamel for the 1/2" wide field lines (16" from the inside of each end) and goal lines. Mark each line with masking tape before painting so lines are straight.
- After the enamel has dried use a very fine steel wool to apply several coats of paste wax on the inside walls, and playing area (carnauba wax works well). The puck should be given several coats and rubbed out between coats.
- With everything dry, spray the entire playing area and puck with a silicone slip spray.
- As a final touch cut the feet out of a new pair of white athletic socks and staple them onto each goal slot to catch the puck.



**Completed Hockey Table**



**Figure 3  
The Game Pieces**

#### Rules

- Players cannot hit the puck when it's behind the green goal lines at each end. Otherwise follow the general rules of hockey.