

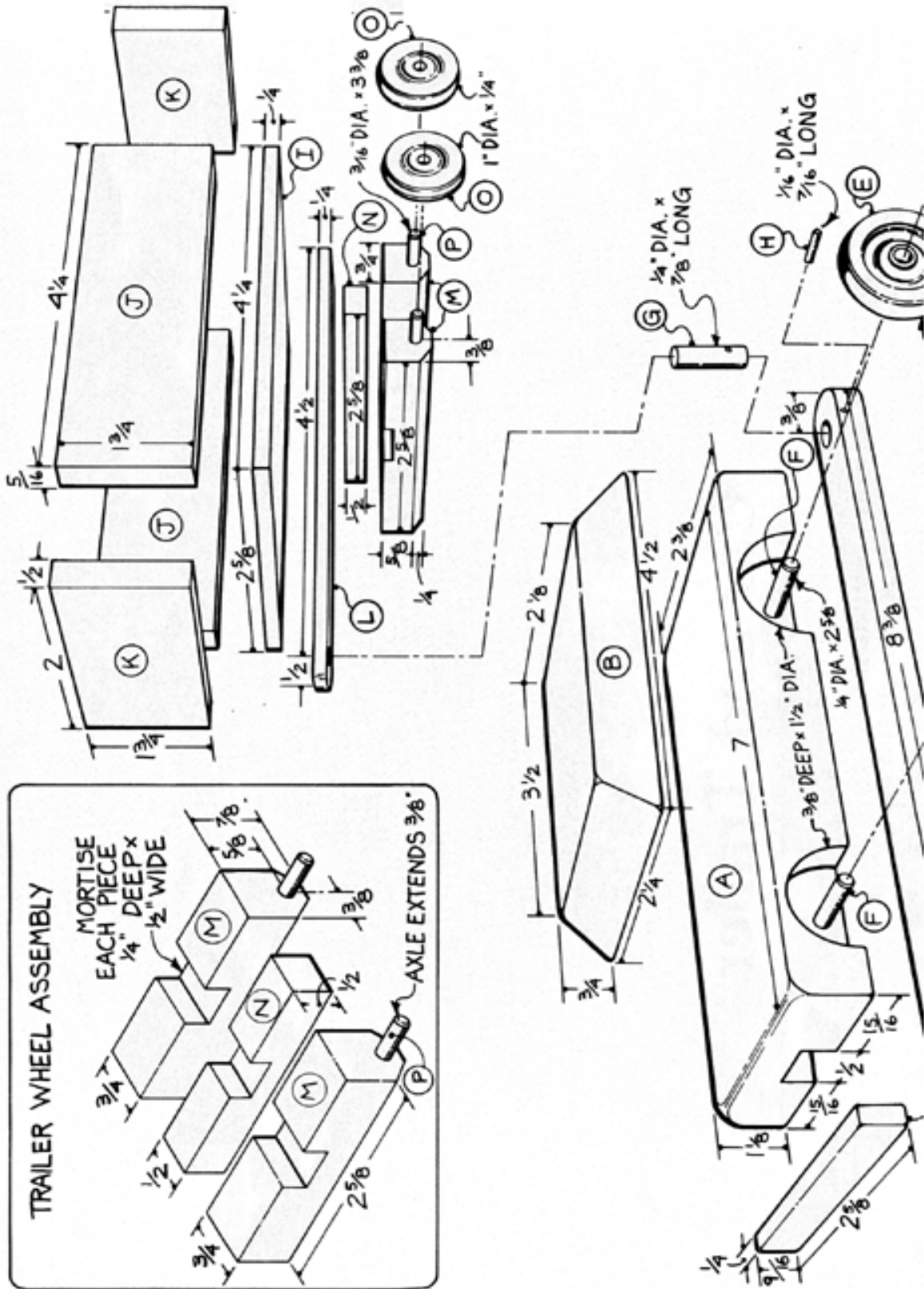
Project 18679EZ: Toy Car and Trailer

A few hours in the workshop is all you'll need to build this nifty combination station wagon and trailer. Just about any wood can be used, even pine, but maple or birch will offer maximum durability.

Toy Car and Trailer Materials List

Part	Description	Size	No. Req'd
A	Body	1-1/8" x 2-3/8" x 7"	1
B	Roof	3/4" x 2-1/4" x 4-1/2"	1
C	Car Hitch	1/2" x 1/2" x 8-3/8"	1
D	Bumper	1/4" x 9/16" x 2-5/8"	1
E	Car Wheel	1-1/4" dia. x 3/8" thick	4
F	Car Axle	1/4" dia. x 2-5/8" long	2
G	Coupler	1/4" dia. x 7/8" long	1
H	Pin	1/16" dia. x 7/16" long	1
I	Bottom	1/4" x 2-5/8" x 4-1/4"	1
J	Side	5/16" x 1-3/4" x 4-1/4"	2
K	End	1/2" x 1-3/4" x 2"	2
L	Trailer Hitch	1/4" x 1/2" x 4-1/2"	1
M	Axle Holder	See detail.	2
N	Spacer	See detail.	1
O	Trailer Wheel	1" dia. x 1/4" thick	4
P	Trailer Axle	3/16" dia. x 3-3/8" long	2

Toy Car and Trailer Complete Schematic



Toy Car and Trailer Step-by-Step Instructions

1. Cut five-quarter stock (which measures 1-3/8" thick) to 2-3/8" long by 7" long (Part A).
2. Use a dado-head cutter to cut a 1/2" wide by 1/2" deep groove down the middle of Part A to accommodate Part C.
3. Lay out the location of the four wheel well holes on Part A.
4. Use a Forstner or spade bit to bore each hole 3/8" deep by 1-1/2" diameter.
5. Use a 5/16" drill bit to bore the two axle holes as shown.
6. Cut 3/4" stock to 2-1/4" wide by 4-1/2" long (Part B).
7. Set the table saw blade set to a 34-degree angle.
8. Hold the stock against the miter gauge to cut the bevel on each end.
9. Mark the angle of the taper on the sides of the stock.
10. Use a sharp hand plane to cut to the marked line.
11. Sand Parts A and B.
12. Use glue to join Parts A and B, clamping firmly.
13. Use a chisel to remove excess glue when dry.
14. Cut Parts C and D to the required dimensions.
15. Use glue to attach Parts C and D. **NOTE: Part C should fit snugly in the groove cut into Part A.**
16. Purchase Parts E and O.
17. Apply a thin coat of glue to the inside of the wheel hole and to Parts F.
18. Assemble Parts E and F as shown.
19. Cut 1/4" diameter dowel stock to 7/8" long (Part G).
20. Glue part G to the 3/8" hole drilled in Part C.
21. Cut 1/16" diameter dowel stock to 7/16" long (Part H).
22. Bore a hole through Part C and into Part G as shown.
23. Glue part H into the hole through Parts C and G.
24. Cut Parts I, J, and K to size, sanding each piece thoroughly.
25. Use glue and clamps to assemble Parts J and K.
26. Use glue and clamps to assemble Part I after Parts J and K have dried.
27. Cut Parts M and N to the dimensions shown.
28. Use glue and clamps to assemble Parts M and N.
29. Use a 1/4" drill bit to bore the two axle holes.
30. Use glue to join the wheels to the axles.

31. Sand all parts, making sure to round all sharp corners and edges. **NOTE:**
Make sure all parts are securely fashioned.
32. Leave unfinished.

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