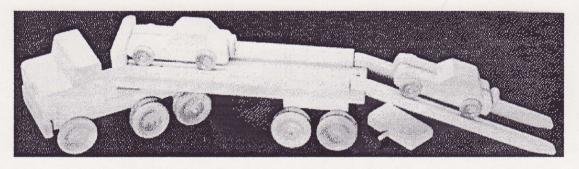
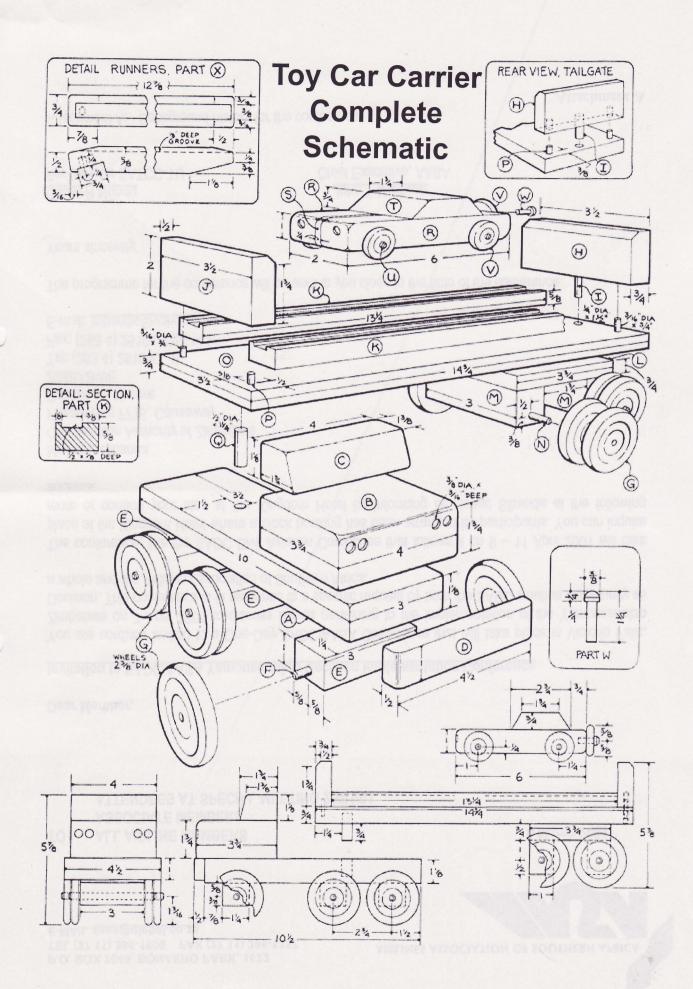
## Project 18687EZ: Toy Car Carrier



Many Christmas toys suffer severe casualties just right after Santa stops by: they bend, crack, leak, pop, spring, and snap in countless numbers. In just a few short weeks they go from store shelves to an unceremonious toss into the trash heap. Perhaps this is why wooden toys are so appealing. A sturdy, well made hardwood toy will last for generations, and provide generations of our children with hours of imaginative play. And as the years of wear begin to show, an hour or two of scraping and sanding will give it an almost new look.

## **Toy Car Carrier Materials List**

Part	Description	Size	No. Req'd	
Α	Chassis	1-1/8" x 3" x 10"	1	
В	Engine	1-3/4" x 4" x 3-3/4"	1	
С	Window	1-1/8" x 1-3/4" x 4"	1	
D	Bumper	1/2" x 1" x 4-1/2"	1	
E	Cab Axle Support	1" x 1-1/4" x 3"	3	
F	Cab Axle	1/4" dia. x 5-1/4"	3	
G	Wheel	2-3/8" dia. x 1/2" thick	18	
Н	Tailgate	3/4" x 2" x 3-1/2"	1	
ards I	Back Pin	1/4" dia. x " x 1-1/2"	1	
J	Front End	3/4" x 2" x 3-1/2"	1	
K	Track	5/8" x 1" x 13-1/4"	2	
L	Spacer	3/4" x 3" x 3-3/4"	1	
M	Trailer Axle Holder	1" x 1-1/2" x 3"	2	
N	Trailer Axle	1/4" dia. x 5-1/4"	2	
0	Trailer Bed	3/4" x 3-1/2" x 14-3/4"	1	
Р	End Pin	3/16" dia. x 1"	1	
Q	Pivot Pin	1/2" dia. x 1-1/4"	1	
R	Car Body	1" x 7/8" x 6"	2 per car	
S	Center Stripe	1/4" x 1" x 6"	1 per car	
T	Car Window	3/4" x 2" x 2-3/4"	1 per car	
Ü	Car Axle	1/4" dia. x 3"	2 per car	
V	Car Wheel	1-1/4" dia. x 3/8" thick	5 per car	
W	Peg	See detail.	1 per car	
X	Runner	See detail.	2 per car	



## Toy Car Carrier Step-by-Step Instructions

- 1. Cut the chassis (A), engine (B), and window (C) to overall width and length.
- 2. Drill 1/2" diameter by 3/4" deep hole for the pivot pin (part Q) at a point 3-1/2" from the back of the chassis.
- 3. Assemble parts A, B, and C as shown.
- 4. Drive two or three small brads into each side of part B.
- 5. Snip the heads off so about 1/16" protrudes.
- 6. Use glue and clamp securely.
- 7. Cut the three cab axle supports to size as shown.
- 8. Drill a 1/4" diameter by 3/4" deep hole for the back pin (part I).
- 9. Cut parts J and H as shown.
- 10. Locate and drill holes for part I and P.
- 11. Glue part I to part H and parts P to part O to make part J permanently glued to part O and part H revovable.
- 12. Lathe-turn or purchase ready-made wheels (parts G).
- 13. Cut the trailer bed (part O) to overall length and width.
- 14. Drill four 3/16" diameter by 1/2" deep holes for the end pins (parts P).
- 15. Drill a 1/4" diameter by 3/4" deep hole for the back pin (part I).
- 16. Cut to length stock at least 2-1/2" wide for the two tracks (parts K).
- 17. Equip the table saw with a dado-head cutter.
- 18. Use the rip-fence to cut the 1/8" deep by 1/2" wide groove.
- 19. Rip the track pieces to their 1" width.
- 20. Resaw the pieces to the 5/8" thickness.
- 21. Glue parts K into place, making them flush with the edges of part O and between parts H and J.
- 22. Follow the same procedures you used to make parts K to make the runners (X).
- 23. Use a sharp chisel to cut the notch in each runner.
- 24. Drill a 1/4" x 1/4" deep hole in each runner to accept part P when the runner are in use.
- 25. Use cut-off brads and glue to assemble parts L, M, and O together.
- 26. Glue the pivot pin (part Q) into a 1/2" deep hole in the bottom of part O.
- 27. Make the cars as shown. NOTE: Parts R and S are glued together and the axle hole drilled through all three pieces.
- 28. Lathe-turn or purchase the 1-1/4" x 3/8" thick wheels.
- 29. Lathe-turn or purchase the peg.
- 30. Assemble all parts with glue and allow to dry overnight.
- 31. Give the entire toy a final sanding, taking special care to round over all sharp edges and corners.
- 32. Leave unfinished.

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