CONSTRUCTION–GRADE DUMP WITH A HANKERIN' FOR HAULIN'

This rugged little hauler will carry an imaginary load across a sandbox as well as the playroom floor. And, to make your young foreman feel at ease in the driver's seat, the truck includes a sturdy hoist, gas tanks, ribbed box, and tread tires.

Note: *You'll need some thin stock for this project. You can plane or resaw thicker stock to the thicknesses stated in the Bill of Materials.*

Begin with the cherry cab and hood

1 Cut a piece of ¾" cherry to 2¾×12" long for the cab blank (A).

2 Fit your tablesaw or radial-arm saw with a dado blade, and cut a 1⅛" dado ½" deep ½" from each end of the cab blank where shown in the photo *at right*.

3 Crosscut the cherry cab blank into two equal lengths. Mark the windshield location on one piece where shown on the Chassis and Cab drawing. (This piece is extra long, so mark the top of the windshield flush with the top of the dado.) Drill a blade start hole inside the marked windshield, and cut the opening to shape with a scrollsaw or coping saw. Sand or file the edges of the opening.

4 Apply glue to the mating surfaces, align the dadoes, and clamp the cab parts together face-to-face. Before the glue completely dries, use a sharp chisel to remove the excess from inside the cab opening. To finish forming the cab (A), trim the top and bottom of the cab lamination to length (3¼"), leaving ¼" of stock above the opening where dimensioned on the Chassis and Cab drawing.

Continued

Cut a dado ½" from each end of the cab blank. A long piece of stock (12" or more) is safer to machine than two shorter ones.

TRUCK

Bill of Materials

Part	Finished Size T	W	L	Matl.	Qty.
CAB/CHASSIS ASSEMBLY					
A* cab	1½"	2¾"	3¼"	LC	1
B* hood	2¼"	2"	3¼"	LC	1
C chassis	¾"	2¼"	11"	C	1
D hoist support	¾"	1¾"	7¼"	C	1
E running board	¼"	1½"	3¾"	C	1
F fenders	¾"	1⅞"	2⅞"	C	2
G bumper	¾"	⅜"	3¾"	M	1
BOX					
H bottom	¼"	4½"	6¾"	M	1
I front	¼"	4½"	3"	M	1
J sides	¼"	2"	6¾"	M	2
K lip	¼"	1¼"	4½"	M	1
L support	⅜"	⅜"	4½"	M	1
M hoist	31/32"	1"	2¼"	M	1
N alignment bar	½"	½"	2¾"	M	1
O trim	¼"	½"	6¾"	M	2
P trim	¼"	¼"	2"	M	8

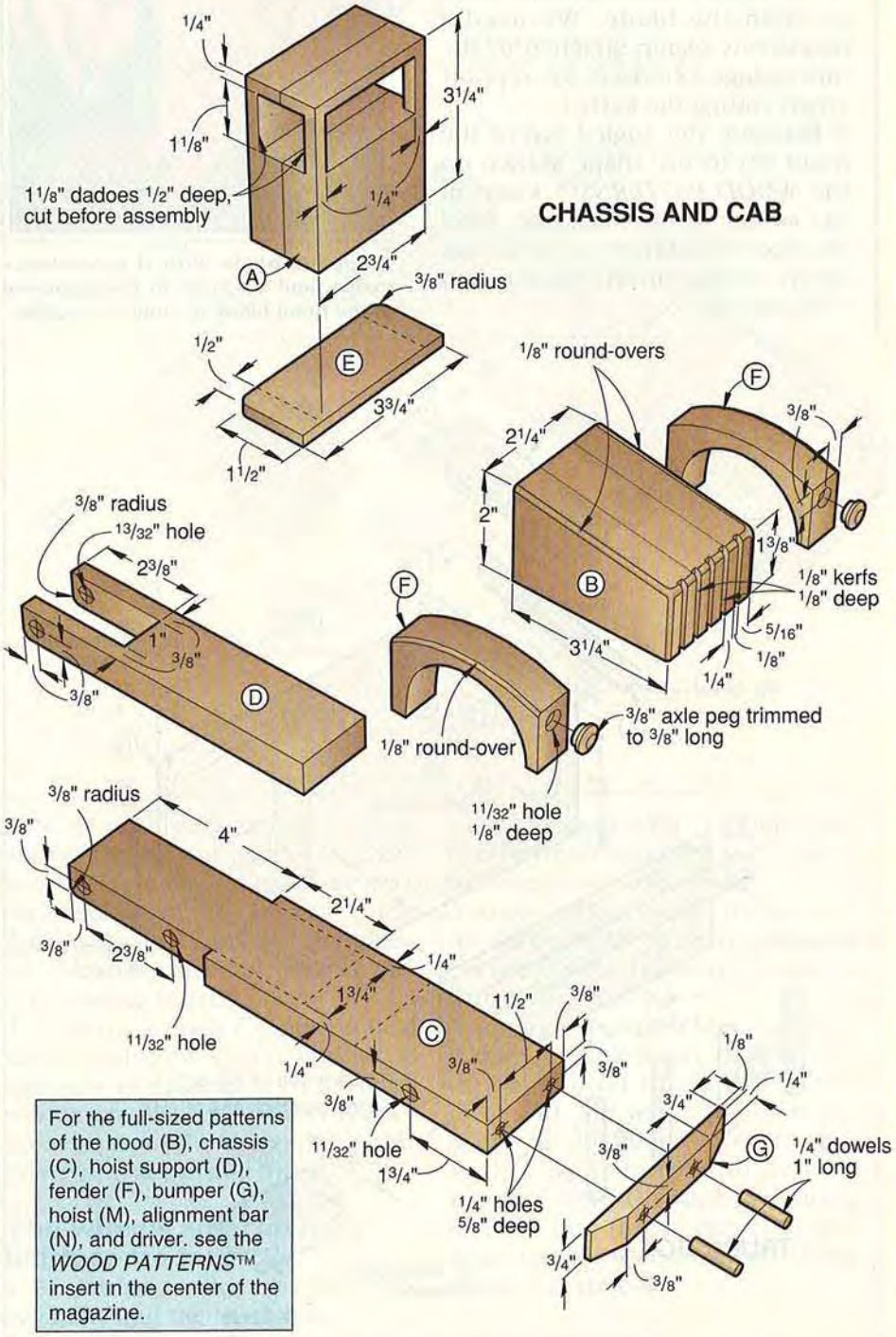
*Initially cut parts marked with an * oversized. Then, trim each to finished size according to the how-to instructions.

Materials Key: LC–laminated cherry, C–cherry, M–maple.

Supplies: ¼", ⅜", and 1" dowel stock; 2–#6x¾" flathead wood screws, #18x½" brad, clear finish.

Buying Guide

Toy parts. Ten 2" grooved, single wheels with ⅜" holes; 8–⅜" and 2–¼" axle pegs; and one toy person. Part no. 1245, $5.95 per kit, plus $3.50 shipping per order. Meisel Hardware Specialties, P.O. Box 70W, Mound, MN 55364 or call 800-441-9870 to order.



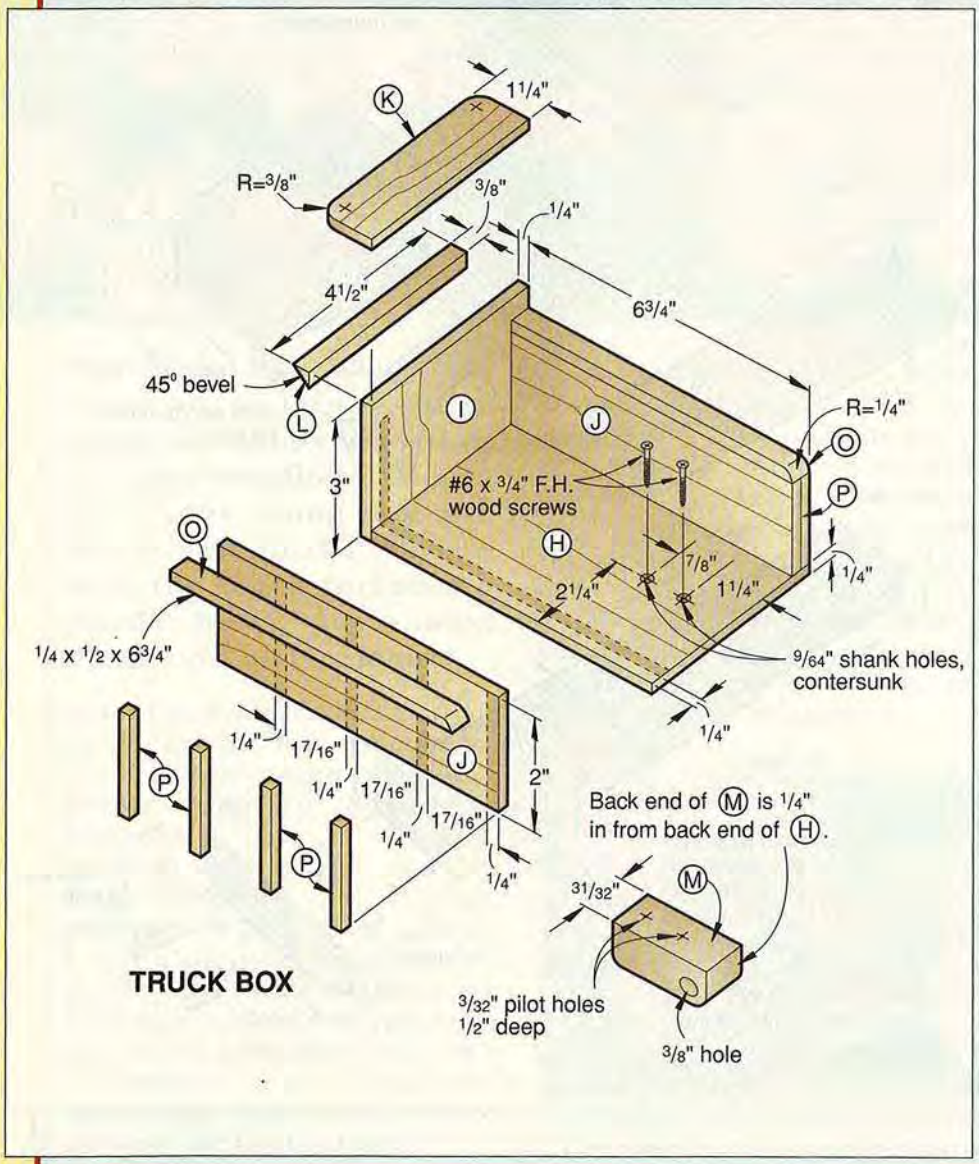
For the full-sized patterns of the hood (B), chassis (C), hoist support (D), fender (F), bumper (G), hoist (M), alignment bar (N), and driver. see the *WOOD PATTERNS*™ insert in the center of the magazine.

DUMP TRUCK

5 Laminate ¾" stock to form a hood blank measuring 2¼×2×3¼". Cut ⅛" kerfs ⅛" deep in the front end of the lamination. (As shown in the photo *at right*, we marked reference lines on the top surface of the hood blank, and used these to align the blade. We used a handscrew clamp attached to the miter-gauge extension for support when cutting the kerfs.)

6 Bandsaw the angled top of the hood (B) to the shape shown on the *WOOD PATTERNS*™ insert in the center of the magazine. Sand the hood, sanding ⅛" round-overs where shown on the Chassis and Cab drawing.

Align the blade with the reference marks, and cut kerfs in the front end of the hood blank to simulate a grille.



Next, add the chassis assembly and fenders

1 Cut the chassis (C) to 2¼×11" from ¾" stock.

2 Lay out the notches and axle hole centerpoints where shown on the Chassis and Cab drawing and on the full-sized drawings on pattern insert in the center of the magazine. Drill three 11/32" axle holes through the chassis where marked. Cut the notches to shape.

3 Sand a ⅜" radius on the back bottom edge of the chassis (C) where shown on the Chassis and Cab drawing.

4 Cut the hoist support (D) to 1¾×7¼". Mark a centerpoint and drill a 13/32" hole through the support where located on the drawing. Cut the notch in the rear of the support to shape.

5 Cut the running board (E) to the size listed in the Bill of Materials. Scrollsaw or sand a ⅜" radius on the back corners of the part E.

6 Transfer the full-sized fender patterns to ¾" stock, and cut the fenders (F) to shape. (To ensure identically shaped fenders, we used double-faced tape to adhere the two fender blanks together face-to-face. We bandsawed the pieces to shape, drum-sanded the curved surfaces to remove the saw marks, and then pried the two fender pieces apart with a wooden wedge.)

7 Holding one fender steady with a handscrew clamp, use your drill press fitted with a 11/32" brad-point bit to drill a hole for the headlight. Repeat for the opposite fender. Trim ⅜" axle pegs to length, and glue them in place for use as headlights.

8 Transfer the bumper pattern to ¾" stock, and cut the bumper (G) to shape.

Assemble the cherry pieces

1 With the front ends flush, glue and clamp the hood (B) to the chassis (C). The outside edges of the hood must be flush with the outside edges of the chassis.

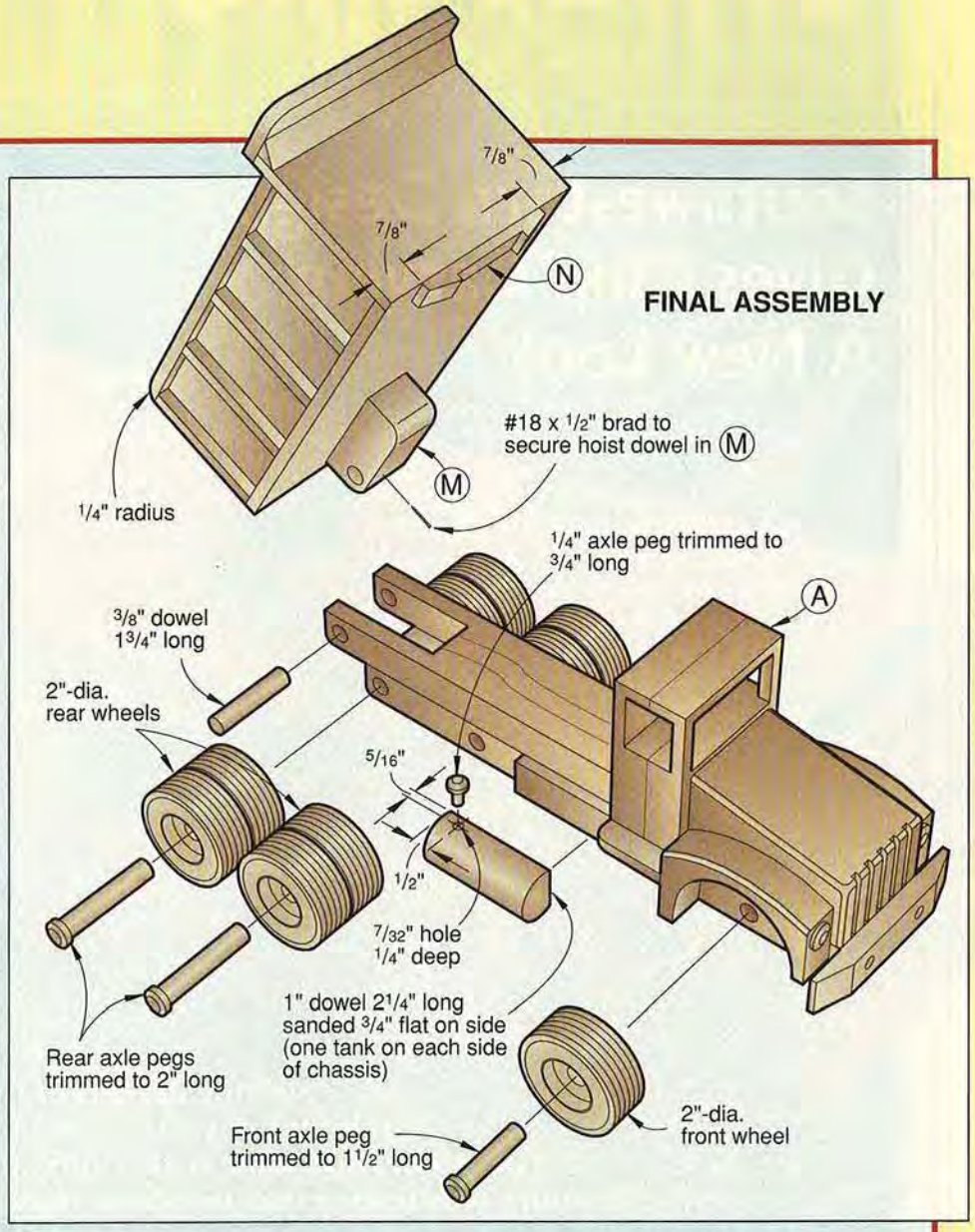
2 Right behind the hood, glue and clamp the running board (E) and cab (A) in place. Directly behind that, glue and clamp the hoist support (D) in place.
3 Glue and clamp the bumper (G) to the front of the chassis. Then, drill a pair of ¼" holes through the bumper and ⅝" into the chassis front. Glue a ¼" dowel into each hole, and trim and sand the front of each dowel flush with the front surface of the bumper.
4 Glue and clamp the fenders (F) to the outside surfaces of the chassis and hood.

Build the box for plenty of payload

1 From ¼"-thick maple, cut the box bottom (H), front (I), sides (J), and lip (K). Now, cut the lip support (L), hoist (M), and alignment bar (N) to size. See the *WOOD PATTERNS*™ insert for the shapes of parts M and N.
2 Drill a ⅜" hole through the hoist block (M), and cut and sand a ⅜" radius on the bottom front and back edges.
3 Glue and clamp box pieces H, I, and J together, checking for square. Later, add the lip pieces (K, L) and alignment bar (N) to the box. Drill countersunk holes, and glue and screw the hoist (M) to the bottom side of the box bottom (H). The back end of the hoist sits in ¼" from the back end of the box bottom.
4 Cut ¼"-thick trim pieces (O, P) to size. (We planed thicker stock to ¼", and ripped the trim strips from it.) Glue and clamp the strips to the sides of the box where shown on the Truck Box drawing.

Now, add the fuel tanks and driver

1 From 1" dowel stock, crosscut two pieces to 2¼" long for each fuel tank. See the Final Assembly drawing *above right* for reference.
2 On a stationary sander, sand a ¾"-wide flat spot along one edge of each fuel tank. Drill a ¼"-deep hole in each tank where shown *above*. Crosscut a pair of ¼" axle pegs to ½" long, and glue one into each tank to act as a gas cap.
3 Glue the fuel tanks to the chassis sides (C) directly behind the cab/running boards.
4 Clamp a 2"-high toy person in a small handscrew clamp, and use a bandsaw to make two cuts where shown on the *WOOD PATTERNS* insert to form the driver. Glue the driver in place inside the cab.



The wheels and clear finish come last

1 Finish-sand the chassis/cab assembly and the truck box.
2 Trim the ⅜" axle pegs so the wheels have just enough free play to turn freely. Secure the wheels to the chassis with the pegs. See the Buying Guide for our source for wheels and axle pegs.
3 Apply a clear finish (we sprayed on three coats of satin polyurethane; it's easier than trying to brush on a finish).
4 Using a ⅜" dowel 1¾" long, secure the box to the chassis. The dowel should fit tightly in the hoist (M) and move freely in the holes in the hoist support (D). Drill a pilot hole, and drive a #18×½" brad through the hoist (M) and into the ⅜" dowel to prevent the dowel from working loose over time.

Written by Marlen Kemmet
Project Design: Thomas Smith; Jim Boelling
Illustrations: Jamie Downing; Roxanne LeMoine
Photographs: King Au; John Hetherington