

2011 DO-IT-YOURSELF GUIDE

Pinewood Derby[®]-STYLE RACE CARS

The Unauthorized
Builder's Workbook
for Pinewood Derby[®]
and Awana[®] racers

WOODCARVING
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**Special
Issue**

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189 How-to Photos

9 Ready-to-Cut Patterns

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**Choosing and
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**Expert Race
Day Tips**

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Creating a Custom Finish



Use handpainting or airbrushing techniques to create a unique racer

By Margaret Riley

Adding color, stripes, and patterns can really make your car stand out. There are few rules regarding the decoration of a racer, so this is a good chance for your child to take the lead and let his imagination run wild. Be sure to check your local rules before painting; if they require an unpainted car bottom, cover it with painter's tape before you begin.

Before painting your car, be sure it is sanded perfectly smooth. Wipe the surface with a soft cloth to remove dust.

Cover your workspace with newspaper. To contain overspray, turn a large cardboard box on its side and set the car within the box.

Always wear a mask so you don't breathe paint fumes and spray. If desired, elevate the car on small blocks of wood so it doesn't stick to the paper and to make it easier to paint all the way down the sides.

Have your child practice on a piece of cardboard or scrap wood before painting his car. Teach your child that several thin coats of paint are better than one thick coat. You can use any brand of paint. However, don't mix brands. Mixing brands can cause chemical reactions that ruin your paint job. If this happens to your car, you will need to sand it down to bare wood and start again.

HANDPAINTING



Gather all of your materials, including tracing paper, pencils, scissors, paint, and paintbrushes before starting to paint your car.

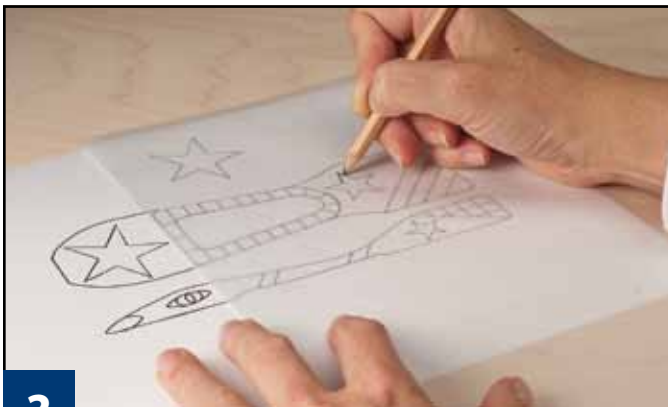
Handpainting your car provides countless options, limited only by your imagination. I use spray paint for the basecoat, but you can hand paint the basecoat. For complete instructions on spray painting the basecoat, refer to page 47. Use quality paintbrushes and apply a white basecoat before painting light colors on top of a dark background. I recommend Testors® brand paint.

HANDPAINTING: PREPARING TO PAINT DETAILS



1

Apply the primer and basecoat. Apply the primer coat using acrylic spray primer or a 1" foam brush and white paint. Cover the car with a thin coat, allow the paint to dry thoroughly, and then lightly sand the primer with 400-grit sandpaper. Wipe the car with a soft cloth. I use metallic deja blue spray paint for the basecoat. Lightly coat the car. Allow the paint to dry for 30 minutes. Repeat coats until the primer no longer shows through. Let the final coat dry for at least 2 hours.



2

Prepare the patterns. Sketch out several options until you are happy with the design. Trace the individual elements of the design onto tracing paper. Carefully cut out each piece. When the paint is dry, trace the pieces onto the car. Do not press too hard when tracing the designs. You don't want to leave an indentation in the car.



3

Basecoat the pattern areas. Using a #12 shader brush, paint all of the pattern areas white. Use light coats and repeat as necessary. Basecoating with white will enhance the brightness of the colors since the background color is dark.

HANDPAINTING: PAINTING THE DESIGN



4

Paint the main elements. Using a #4 round brush for narrow areas, such as the points on the stars, and a #4 shader for larger areas, such as filling the center of the stars, paint the main elements of the design. I added the yellow stripe at this point because I had yellow on my brush and I want the yellow stripe to dry before painting adjoining stripes.



5

Paint the secondary elements. Using a brush appropriate for the size and shape of the design, paint the remaining elements. I use a #4 shader brush to paint black checks around the cockpit edge and along the back edge of the car. I use the same brush to paint the rest of the stripes on the back and side of the car.



6

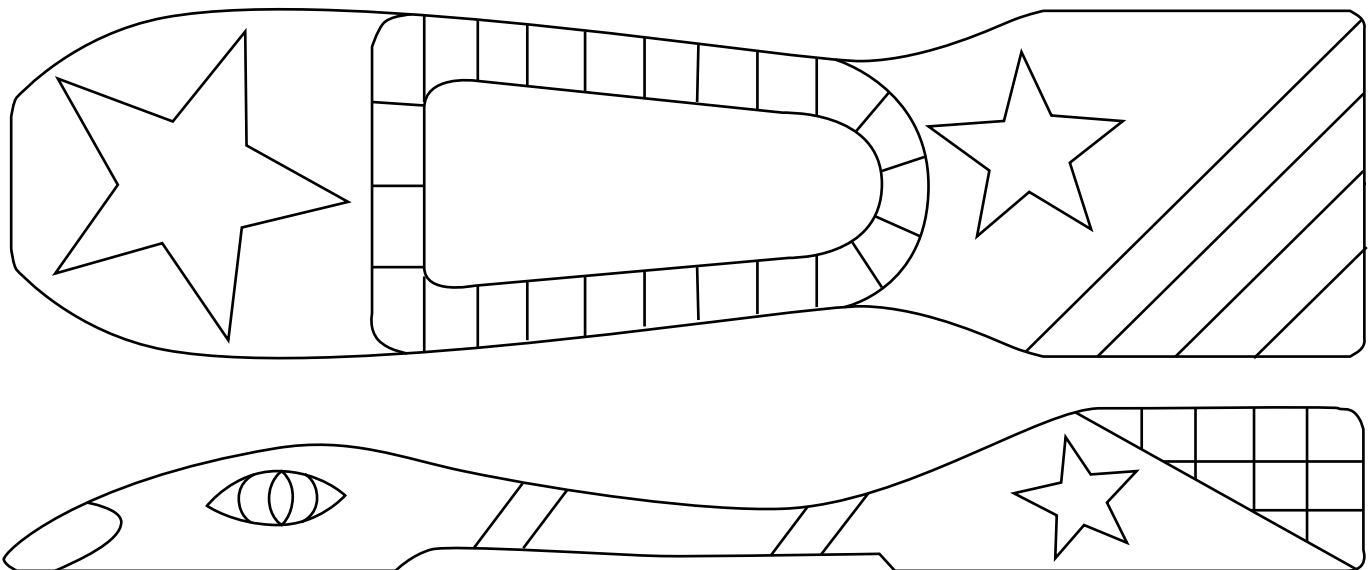
Add the accents. I use a #4 round brush to paint the eyes. Use a liner brush to paint fine details, such as a white line around each star and the green stripes. A liner brush is excellent for adding a number or letters to the car. Use a toothpick to add tiny dots, such as the highlight on the eye.



7

Finish the car. Allow the paint to dry overnight, and then spray a thin layer of clearcoat on all of the surfaces.

Handpainted car patterns



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AIRBRUSHING



To create an airbrushed finish, you will need an airbrushing system, paints, and Frisket Film or some type of masking/stencil system.

An inexpensive airbrushing system and homemade stencils make it simple to create fun and unique patterns on your car. It's easy to fill in shapes and blend colors, and the spray dries quickly so multiple coats are no problem. There are several methods you can use to create airbrush stencils. I use Frisket Film, which is a transparent masking film with an adhesive backing. Frisket Film is easy to peel and leaves no residue on the car.

AIRBRUSHING: PREPARING TO AIRBRUSH



1

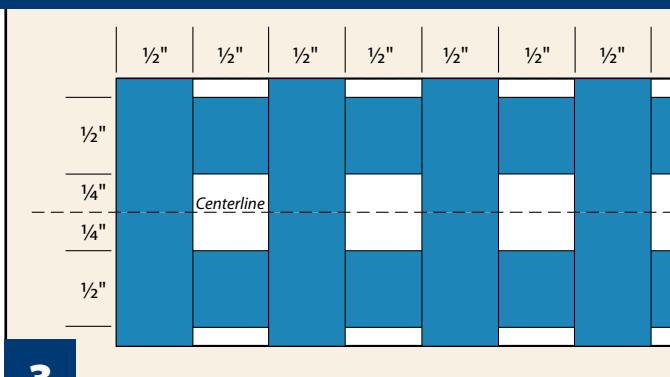
Basecoat the car. Follow the manufacturer's instructions to use the ColorArtz system or your choice of airbrush. Using white wedding (white), spray the car and allow it to dry completely. Lightly sand the paint with sandpaper. Wipe with a soft cloth to remove the sanding dust. Spray the car with white wedding again and let the car dry.



2

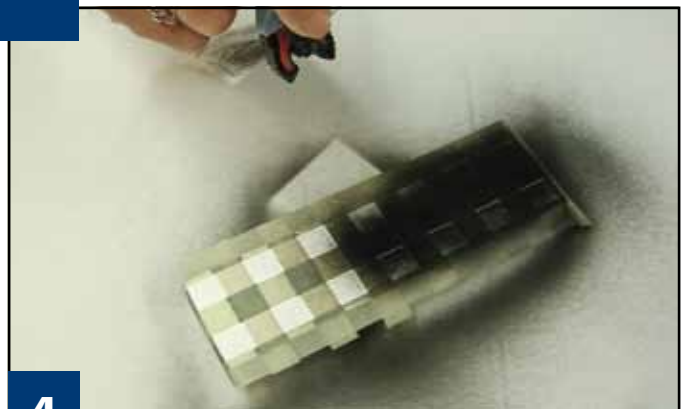
Make the stencils. Sketch out several designs and decide on your final painting pattern. Lay a piece of Frisket Film over the pattern. Using a fine-tip permanent marker, trace each airbrush pattern separately. Allow enough space between designs to prevent overspray. Use a hobby knife to cut the openings of the individual pattern elements on the Frisket Film.

AIRBRUSHING: PAINTING THE TOP



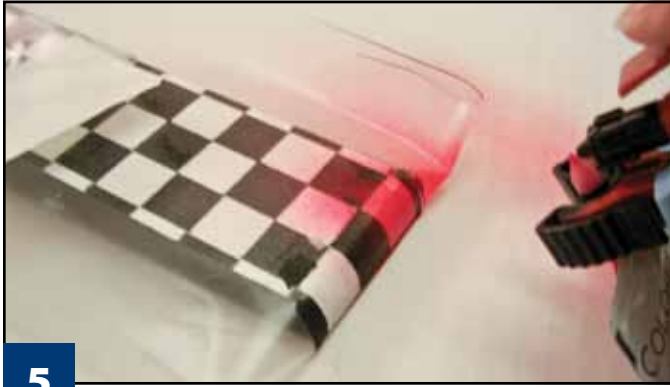
3

Paint the first checks. Locate the centerline of the car. Apply two 1/2"-wide strips of masking tape lengthwise down the car. Position the strips 1/4" out from either side of the centerline. Place a strip of 1/2"-wide masking tape across the width of the car closest to the front. Continue running strips across the car in 1/2" intervals. Spray the top of the car with black tie (black). Let the paint dry and remove the masking tape.

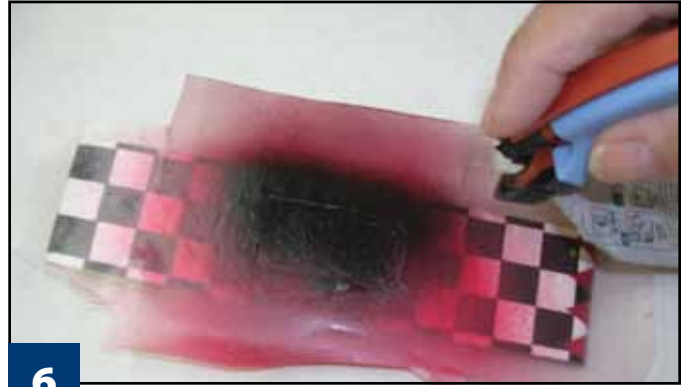


4

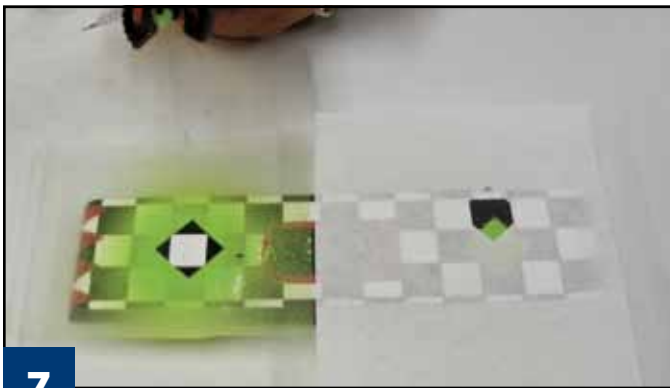
Paint the remaining checks. Apply 1/2"-wide strips of masking tape in a criss-cross pattern, covering the opposite areas from Step 3. Spray the top of the car with black tie to create the checkerboard effect. Cover the stripe areas on the sides of the car with masking tape. Turn the car over and paint the sides, back, and bottom (if allowed) with black tie. When the paint is dry, remove the masking tape.



5 **Paint the zigzag.** Apply the zigzag design cut out of the Frisket Film to the car front and press firmly. Use Frisket Film or a paper towel to cover the rest of the car and prevent overspray. Spray the zigzag with atomic atomique (red). Let the paint dry. You may need multiple coats to cover the black checks. Remove the masking and stencil. If the paint bleeds under the Frisket Film, squeeze some paint out of the pouch and touch up with a small brush.

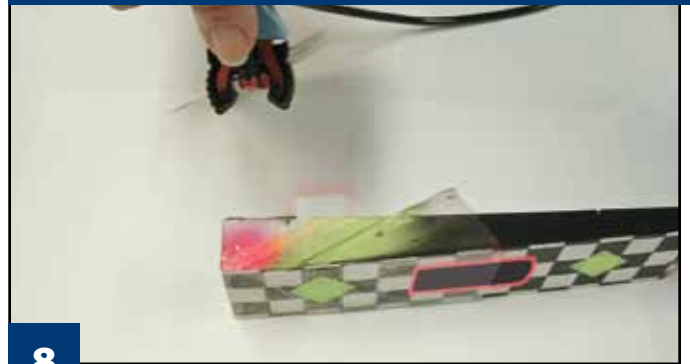


6 **Paint the cockpit.** Position the larger cockpit stencil on the car and press the film firmly in place. Spray with red and let dry. Position the smaller cockpit stencil in the center of the red cockpit you just painted and press it firmly in place. Spray with black, let the paint dry, and remove the stencil and any covering you used to protect against overspray.

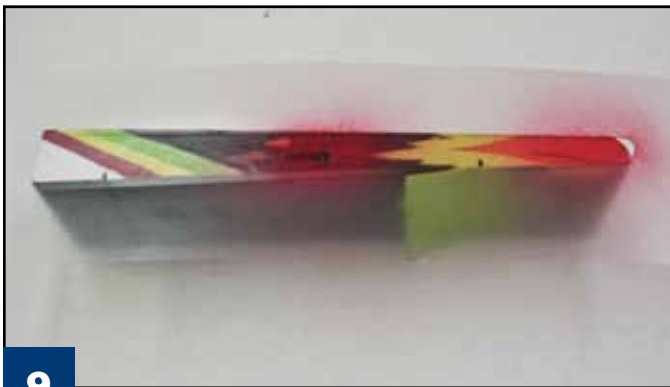


7 **Paint the diamonds.** Position the Frisket Film with the diamond cut-outs on the car and press firmly. Spray with gremlin (green). Several coats may be required; let the paint dry between coats. Repeat the process for the second diamond, and then remove the stencils. Use a small paintbrush to touch up the checkerboard pattern if necessary.

AIRBRUSHING: PAINTING THE SIDES



8 **Paint the stripes.** Cover the top of the car with a paper towel or Frisket Film. Cover the black areas of the sides with Frisket Film. Spray the stripe area with blonde ambition (yellow). Let the paint dry. Apply Frisket Film so only the red stripe area shows. Spray with red and let the paint dry. Carefully remove the Frisket Film from the green stripe area and cover the yellow and red stripes. Spray with green. When dry, remove the masking from the sides only.



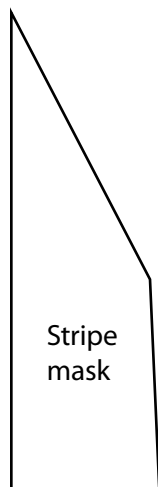
9 **Paint the flames.** Position the stencil for the yellow flame on the side of the car and press it firmly in place. Spray, using numerous light coats of paint and drying between coats. Press the stencil for the orange flame in place, paint with mango tango (orange), and then press the stencil for the red flame in place and paint the red. Allow a little of each previous color to show through so the flame colors blend together.



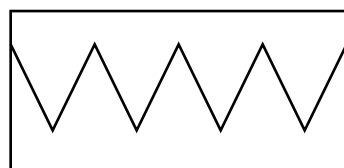
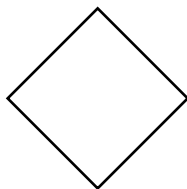
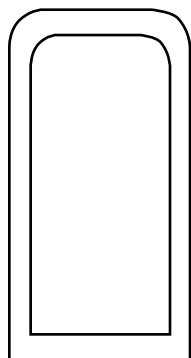
10 **Finish the car.** Remove all of the tape and masking materials. Spray the entire car lightly with clearcoat.

Airbrushed car patterns

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Cut 2 cockpit stencils, one larger and one smaller



materials & tools

HANDPAINTING MATERIALS:

- 400-grit sandpaper
- Tracing paper and pencil
- Testors One Coat Lacquer: 1836M deja blue or your choice of color
- Model Master Custom Lacquer System: ultra gloss clearcoat
- Testors Acrylic Project Paint: white, black, green, orange, red, yellow
- Toothpick
- Optional: Acrylic spray primer

HANDPAINTING TOOLS:

- Soft cloth
- Scissors
- Brushes (Loew-Cornell, La Corneille, or similar): 7300 Shader 4, 12; 7040 Round Stroke 4; 7050C Script Liner 10/0; 1" foam brush

AIRBRUSHING MATERIALS:

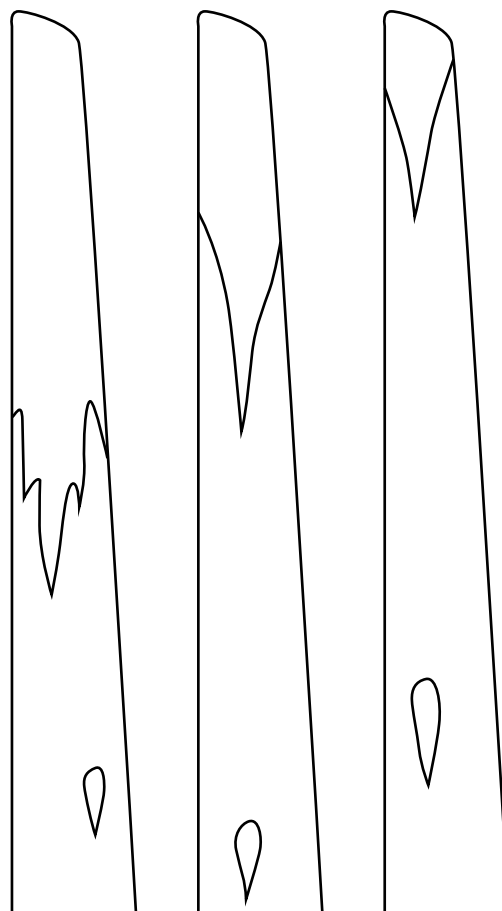
- ColorArtz Paint Pouches: atomic atomique (red),

black tie (black), blonde ambition (yellow), gremlin (green), mango tango (orange), white wedding (white), or your choice of paints for use with your airbrush

- 400-grit sandpaper
- Model Master ½"-wide masking tape
- All-purpose matte Frisket Film (lightweight adhesive stencil plastic)
- Paper or paper towel
- Fine-point permanent marker
- Model Master Custom Lacquer ultra gloss clearcoat

AIRBRUSHING TOOLS:

- Ruler
- Scissors
- ColorArtz Airbrush and Aerosource (canned air or propellant) or your choice of airbrush system
- Soft cloth
- Hobby knife
- Small paintbrush



Yellow

Orange

Red



About the Author

The author of many books and magazine articles about crafting, Margaret Riley has also owned two craft and hobby stores; designed, demonstrated, and taught for numerous craft companies; and assisted with the filming of craft-related television shows. A resident of Tallahassee, Fla., Margaret enjoys cooking, gardening, and camping. Contact her at designs.by.margaret@comcast.net.