

# Accurail AC&F 3-Bay Covered Hop or Car (copyright 2006, by Jim MacKnight)

## Tools and Glues

X-acto knife with no. 11 blade, or sprue cutter  
Small screwdriver (for screw-mounted trucks and coupler box covers)  
Sanding stick (nail file)  
Liquid cement for styrene  
Cyanoacrylate "Super Glue"  
Toothpicks (for use with "Super Glue')

1. Carefully cut brake cylinder, air reservoir, and triple valve from sprue. Smooth any roughness from cuts, using sanding stick. Fit brake cylinder and air reservoir into holes in car end and secure, using cement for styrene, on reverse side. Use a small amount of cement. Paint may be scraped from air reservoir's mounting pin to allow it to fit into hole. Fit triple valve into hole in floor, and secure using cement for styrene on reverse side. Cut three outlet gates from sprue and carefully trim tiny cylinder from the middle of each outlet gate. Sand any rough area from the cuts, and test fit onto hopper bottoms on the car floor. **DO NOT FORCE FIT THESE DELICATE PARTS!** The larger mounting peg fits into square hole, and may require having paint scraped off to fit properly.
2. Slide car end with brake details into car body, at the end having a hole for the brake wheel. Slide remaining car end into other end of car body. Make certain that both car ends are properly seated. Do NOT cement.
3. Place car body upside-down on a flat surface. Fit weight inside the small tabs located in car ends. **Do NOT cement.**
4. Fit floor into body, beginning with brake equipment end, making sure that brake lever fits through slot in floor. Bow the floor slightly as you fit other end of car bottom into slots in floor. Snap firmly in place. **Do NOT cement.**
5. Assemble three piece 'Accumate' couplers by first carefully removing the plastic pieces from sprue. Insert flattened end of curved metal hose" into slotted hole in one coupler half. Hose should curve away from the coupler knuckle - see illustration. A very small amount of cyanoacrylate glue may be applied to hold the "hose" securely in the coupler. The two coupler halves have a small pin and hole on one side. Assemble the two halves (without glue) and place into a coupler box on underside of car floor. Make sure that "hose" is pointing away from car floor - see illustration. Install coupler box cover, with the pin to the rear of the box, and with a small screw through the holes in the cover and both coupler halves. When you are sure that coupler is installed correctly (not up-side down) tighten screw until cover fits snugly into place on coupler box. Repeat for other coupler.
6. Remove two coupler box covers from their sprue. Install wheel sets in truck side frames by gently spreading side frames apart with your fingers, allowing pointed ends of each wheel set to slip into holes in side frames. Wheels should rotate freely when spun. You may use either plastic pins or small screws to attach trucks to underframe. Remove two pins for mounting the trucks from their sprue. Place a pin through the hole in one truck, and, after making sure that the truck is not up-side down, push the pin into the hole in the car underframe. Repeat for the other truck. If your kit includes small screws, tighten one until the truck just rotates freely. Tighten screw for other truck the same amount, and then back off 1,2 turn or more, until truck is a bit wobbly. This will provide a stable, three-point suspension for smooth running of your freight car.
7. Cut hatch cover from sprue in two steps. Make cut #1 at end of each latch bar, where it attaches to sprue. Turn cover up-side down, and make cut #2 by trimming the two latch bars to the same thickness as the other latch bars. Install hatch cover on car, starting with the pin in the small square hole, and moving along the hatch cover to both ends. Push hatch cover pins partially in, until all pins are started in holes or slots, then complete installation by pushing pins completely in. Make sure that hatch cover is seated.
8. Cut brake wheel from spue. Using a toothpick, place a small drop of "Super Glue' into hole in brake gear housing, and install brake wheel.

## Your AC&F 3-bay Covered Hopper car is now completed!

The car can now be weathered, and placed in service on your railroad.