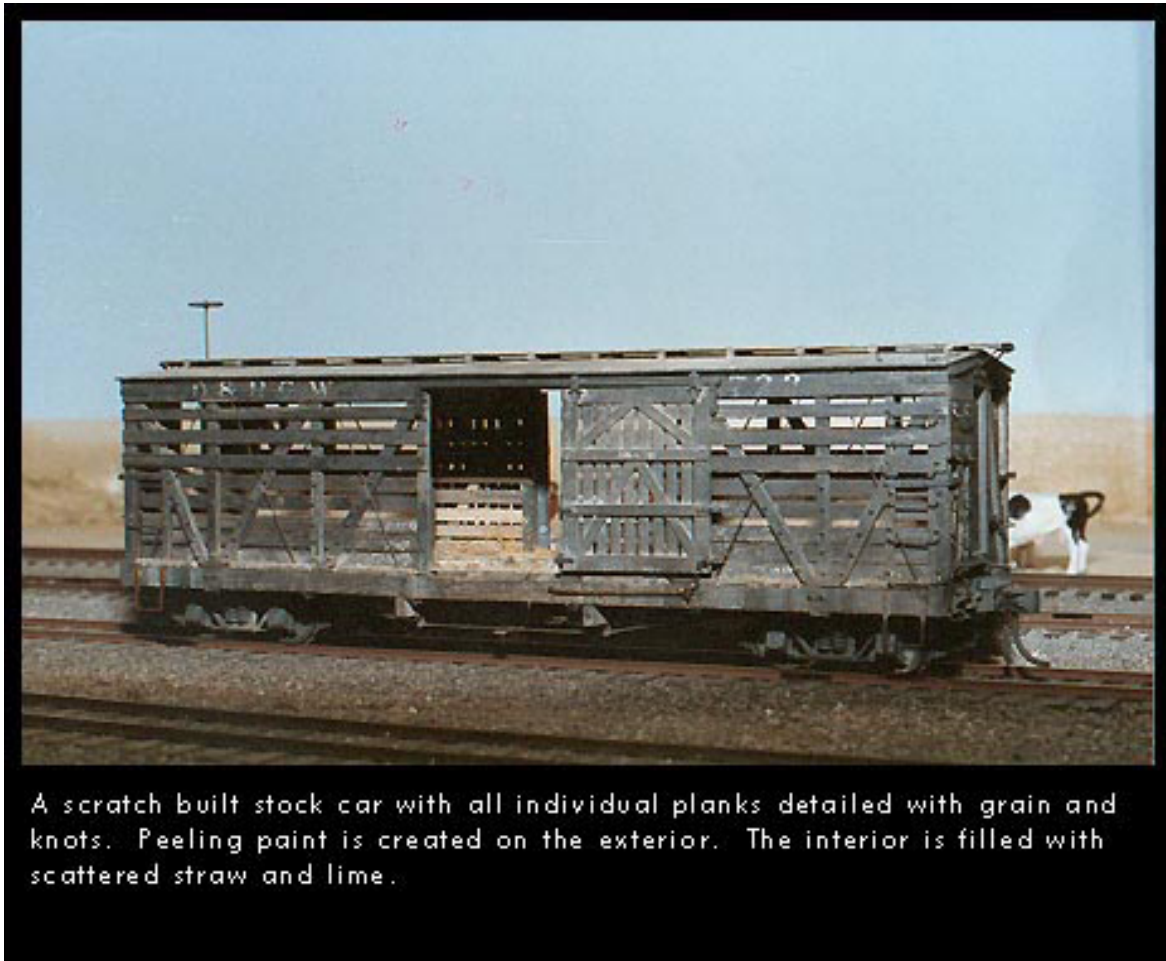


A few years ago I built a set of four Tomalco stock cars. I entered one of them, D&RGW #5509, in the model contest at the Tenth National Narrow Gauge Convention, St. Louis, Missouri in 1990. I won first place in the "Freight Cars" division. I have always admired the Tomalco kits. The On3 kits are now produced under the name of Trout Creek Engineering. These kits are what I call "shake and make" kits. As kits, they provide the basic raw materials, castings of detail parts and instructions. Modifications and finishing are left to the model builder. While I generally followed the directions and used most of the materials, I did replace some of the components. I always recommend that modellers collect and examine photographs of the prototype when modeling a car or structure. Studying details first will help define exactly how much to duplicate in creating a believable model and how to go about weathering and finishing it. I frequently use the Narrow Gauge Pictorials by R. Robb for reference material. You'll find excellent examples of the variations in stock car details, such as side planking and name boards. After examining the stripwood, I decided to replace some of the parts. The floor decking should have been shiplapped boards. I replaced these with planks supplied by Clear Creek Models. The roof consisted of scribed siding that scaled about 2 1/2". I replaced these with 1" scale planks. Although these should have been shiplapped also, I found that a test case was impossible to see clearly when distressed.

The instructions were really quite clear and easy to follow. I began by preparing the stripwood. I used a well-worn file card to create the grain. I could vary the pressure and twist the card about to produce a realistic appearance. I don't like razor saws or stacked blades for scribing wood because the grain is too uniform and structured. I rubbed down all wood with 0000 steel wool in one direction. This accomplished two things. It removed all fuzz from the wood and gently radiused the corners so that the joints of stacked boards were more evident.

Since I wanted to have a weathered and peeling paint effect, I needed to stain all wood first. Even if the car was to be freshly painted, the interior would need to be stained. It is easier to simply stain all the wood than to paint the exterior and leave the interior with the exposed stain finish. I used a mixture of Floquil "Driftwood" and "Pine" stain, followed by a light wash of black shoe dye. Sometimes to create a dirty wash, I use a bottle of dirty solvent that I have accumulated from cleaning brushes. The floor boards would have had some additional distressing from hooves and numerous stains. In the case of a stock car, all boards are visible from all sides. I painted the exterior face, top and bottom of each plank black while the interior face was naturally weathered. I used the rubber cement technique previously described in earlier issues, applying it to one face and two edges.

I have found the best applicator to be a torn piece of foam sponge that will deposit small dots of cement randomly, depending on the pressure I apply and the number of repeated applications. At this point only the roof and floor planks remained stained as they retained very little paint finish.



I never use straight "Engine Black" and rarely use "Grimy Black" straight from a bottle. The lighting in most model layout rooms never reaches the light levels of the outdoors and details are often lost to the eye because the blacks are too dark. Using Floquil paints, I combined "Grimy Black" with approximately 20% "Grime" and 10% "Dust" because the paint will be thin and faded. "Dust" will slightly grey the finish and ensure a dead flat finish. The ratios are only approximate and you shouldn't get hung up on exact ratios...you're not baking a cake! I then airbrushed the stripwood on three sides and removed the rubber cement with a rubber cement pick-up or masking tape after about thirty minutes. If you leave it to dry for too long, the paint will be more difficult to separate. I often use masking tape, wiping it firmly across the face of the wood. This will sometimes pick up more paint, leaving a gentler peeling effect. At this stage you can randomly add

paint in a similar method used to apply the rubber cement. This time I mixed a slightly darker shade of black that will appear as newer paint.

The roof would have most of the paint worn off. In this case I used the sponge foam to lightly apply the paint very sparingly. I increased the paint coverage along the end of the boards that would be protected by the roof walks. When the paint was completely dry, I again lightly wiped down the wood with the fine steel wool. This left the model with a very smooth and professional looking finish with no fuzz.

I now painted the hardware and ironwork. While they could be weathered in shades of rust, I have noticed that the majority of the ironwork tends to hold the paint layers for years. In fact you can have a wood car that has virtually no paint left on the wood, yet all ironwork remains painted. I painted all exterior details in a similar black as was applied to the wood. If you want a little rust, just lightly dab a piece of sponge into the cap of the bottle of rust and lightly touch the details as desired. Areas like grab irons that take much wear from boots may be bare to the metal. These can be dry brushed with a metalized paint. I have found paints for model aircraft to be excellent for metalized finishes, such as those from 'Model Master.'

From this point on I basically followed the instructions for assembly. However, I did replace the nylon line for the truss rods with brass wire, formed and soldered to the brass turnbuckles so that the turnbuckles were open through the sides. When I glued the floor decking in place, I did not push the boards up tight to each other. I gently tapped the odd one on the end to push it out of line. This made it apparent that the boards were shiplapped. During the construction of the underbody, I prepared the sills and end beams to accept Kadee couplers. When all the planking was in place, I added nail heads by using a sharp HB pencil, punching the wood along a straight edge with a turn of the pencil.

Stock car interiors are usually a mess of 'muck, guck, goo and garbage'. They are dusted frequently with lime for disinfecting. Since stock cars are so open, it is important to show some interior detailing. My stock car interior was finished before the roofing was installed. First I lightly brushed the areas with a mixture of carpenter's glue and water to receive the 'straw' and to hold the initial application. I chopped up some sisal and yellow hemp that had the texture and colour of straw and sprinkled it around the interior. I mounded the 'straw' in some areas as if kicked around by hooves and laid it up against the walls and corners. I also applied some adhesive and fine bits of 'straw' on the top of the floor boards that projected through the sides. Next, I used an old technique call 'zip-texturing' to add the look of mud and dung mixed into the straw. I used ochre and brown or charcoal dry tempera pigment. I added about a half teaspoon of each to about a tablespoon of plaster powder, loosely mixed it together and poured the mix into a fine strainer. I mixed water

and glue with a little soap as a wetting agent and lightly sprayed it over the entire floor to secure everything. Holding the strainer a couple of inches above the car, I gently tapped the strainer, sprinkling the mix onto the damp floor. I was careful not to overdo it because I could always go back and add more. Then taking an old paint brush, I gently tapped various areas and pushed the mix around into the straw. I did not do the entire floor this way. I left some areas as applied and also left a lot of the floor boards exposed. The moisture wicked into the plaster mix securing everything. Where there was any puddling of too much water, I picked it up with a tissue. I didn't want to overdo the water because the joints would let go and some warping might occur. I then set the car aside until it was completely dry.

The lime dusting could be achieved in a couple of ways or a combination of them. One would be to air brush with white paint. This would give the greatest control. Another would be to apply white chalk dust with a brush. I combined both methods.

A SIDE NOTE ON WEIGHTING

These cars were not originally weighted and are extremely light. In fact, I have had them pull over on their sides when they were located in the middle of a string of cars with drag behind them. As a result, I am now using the NMRA guidelines for weighting all my cars. For example; I take 1 1/2 ounces for the car plus 1/2 ounces per inch. I set the car and all its components including the trucks and couplers on a postal scale to establish the weight and then added the required weights until the required weight was achieved. A thirty foot car should then have a finished weight of 5 1/4 ounces. This has worked well for my trains, because the cars track better, run more smoothly and the engines have to work a little more. This certainly shows up on grades.

So how do you weight cars? I use drapery weights, generally concealed within the car's body. I glue them in place using silicone, locating half the weights over each bolster, centred between the sides, and on the floor to keep the centre of gravity as low as possible. Drapery weights are soft, malleable metal and can be shaped to fit the curve of tank cars. I have installed them in my Grandtline tank cars prior to gluing the ends in place. In other cars that were built prior to weighting and that I can't open up, I have used a low melting point metal such as zamac or equal. I melt the metal in a Pyrex container filled with water by increasing the temperature of the water until the metal becomes molten. Using a glass eye dropper, not a plastic one, I siphon the metal up and quickly release it onto the model

where desired. I have installed it between the two centre sills and flush with the bottom of them. In this way, I cannot see it from the side profile. It is low and centred. I have also achieved weighting by filling the space in a false floor. If cars have loads, such as gondolas, the weight can be inside the load. Just remember to include the load with the car when first weighing it. Other suggestions for materials that can be used for weights are fishing weights and lead shot. Just make sure the weights are not magnetic and don't move around.

Weighting stock cars is another challenge. You can use lead figures, if you can find them! You could also use a false floor or end wall if you plan it ahead of time. I thought hay bales would make an ideal camouflaged weight. I poured the molten metal into a mold made to the size of a bale. I painted the cooled block with a flat dark ochre paint. When it was completely dry, I applied glue to the sides and pressed in the chopped up 'straw' used for the interior floor. I trimmed it with scissors when dry, wrapped it with the appropriate scale baling twine and glued the bales inside to the floor. Check out your local hobby shop for twine used in ship building. This makes some of the best cables. They are free from fuzz and come in numerous sizes and colours. If there is a little unwanted fuzz on any twine that you intend using, try running it through a block of bees wax.

Finally, I applied Thinfilm Decals. Sometimes old ones tend to fall apart. I use these for extremely weathered cases. I set them with decal set and, when they were dry, I lightly buffed them with 0000 steel wool. This removed the plastic carrier film and some of the white lettering. I removed as much as I wanted and then sealed the remaining decal with a flat finish sealer. The underside of the car was then lightly airbrushed with grime and dust.

I like to model these rugged stock cars because the heavy weathering and the earthy detail add realism to my layout. In particular, I like the exposed structure of the cars. The stock car represents the spirit of the American high country and reminds me of the massive cattle drives of the old west.