Altering car lengths.

By Bob Parrish

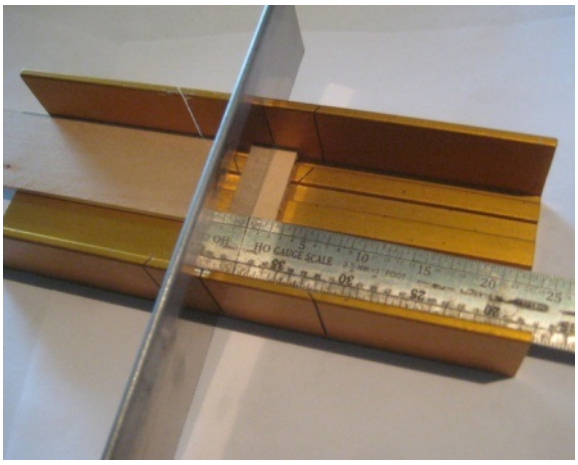
The Labelle Woodworking Company offers a wide selection of pre USRA kits. Most are from specific prototypes but the basic designs are also common to many railroads. Recently the company has released existing kit offerings with alternate lettering sets. An example of their catalog numbers would be: HO-40-1 which is from the parent kit offering of HO-40. Labelle kit number HO-41 is a great model of a 40 foot boxcar that roamed widely around the country. Further, the kit number 42 is a fifty foot car that can easily be modified to shorter length cars and lettered to your choice. This is a short article on how to shorten standard kit dimensions to your specific interests.

When choosing a Labelle kit you should be aware that the car heights are vary between a # 40 kit and a #41 kit. The number 40 kit and related sub numbers comes with an overall height of just under 8 feet when completed as measured from the lower car side to the top of the roof sheathing on the drip rail (not the center line peak of the car). The overall height of the #41kit is very close to nine feet at the drip rail and the #42 kit is just a shade less than ten feet.

Regardless of your choice of kit number, certain things are consistent across the Labelle product line. The thickness of the scribed wood panels for the car ends seems not to change. They scale out at three inches. Thus the inner floor and roof boards for all kits are cut six scale inches short. All of Labelle's car lengths are counted as overall to the outside ends of the cars but do not count roof over hangs or nut-bolt-washer castings or related end beams if you choose to use them. Thus a forty foot kit will come with the inner boards cut to thirty nine and a half scale feet long.

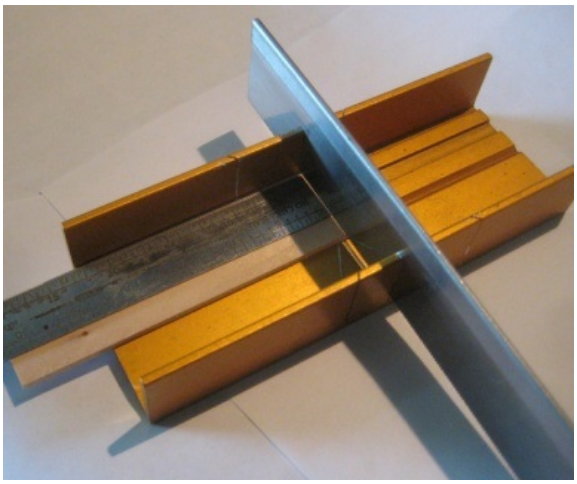
To begin then, let's consider the shortening of an example car. A simple shortening of two feet of a car as provided from the manufacturer would be as simple as removing two scale feet from one end of each, the floor and roof board. If you choose to use a different overall length this is not a problem. Simply remove enough of the floor and roof boards to give you the length you choose less the thickness of the scribed end panels. If you count the car length from the end sill boards that dimension that thickness would also need to be removed when making your cuts.

What is absolutely imperative is that your cuts are perfectly square. Use one of two methods of cutting as shown below. First is a small miter box.

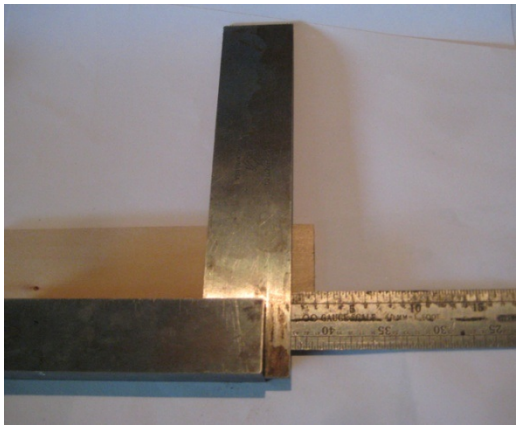


When measuring for the cut be sure to count the thickness of your saw blade if you are measuring the material to be removed.

A better method is to measure the floor board length you have chosen. The roof and floor boards must be cut to the exact same length; an error here will produce an out of square model.

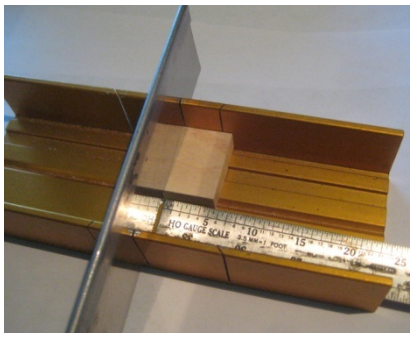


A second cutting method is to use a machinist's square and cut with slow repeated strokes of an X-acto blade.



A method least recommended would be to measure down both sides of the board and mark with a pencil. The chance of error is very great as pencil marks are notoriously fat.

To lower the height of a car a similar cutting process must be performed on the small end blocks that are supplied with the kit. This is a much harder cut to make accurately as the block is very small and difficult to hang on to. A miter box is the only recommended tool for this. However you measure the height you desire, roof peak or drip rail, that amount must be removed from the spacer block. Again the two blocks must finish absolutely square and exactly the same dimensions.



All other assembly would be the same as building any wood kit. The door would need to be centered and the placement of the lettering sets would also have to be relocated. Additionally the locations of the truss rods would need careful calculations so as to clear the wheel sets. In most cases the truck bolster would be located as the plans show from each end and allow all of the shortening to be taken out in the middle area of the car.

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