

## Tips & Tech #03

# ROLLING STOCK

## Bowser Hoppers

Always drill and tap the coupler boxes for a 2/56 screw. The supplied screw never holds for a long period of time and will cause the coupler to droop after a while. The cover to the coupler box tends to distort and allows the coupler to droop down. Using the supplied coupler box cover, bend the narrow end of the cover about 1/16" back from the edge at a slight angle. Then install the cover over the coupler as usual but make sure that the bent side of the cover is up towards the coupler. This way the cover is exerting pressure on the end of the box and will tend to hold the coupler and keep it from drooping down as the screw is tightened. Another method is to use the Kadee thin cover. Remove the two ears on the side and the center pivot. The lip on the one end also has to be removed, which then makes a flat cover. Again bend the end as above and install with the bend lip up.

## Concor Hoppers

When using the #5 Kadee coupler, the factory box can be used, but needs modification to the back wall of the box (away from opening). It seems that the Kadee flat brass spring ends drag on the back wall of the box. When the coupler is moved from the center position the spring ends bind up on the wall of the box allowing the coupler move around loosely and not stay centered. To eliminate this problem, use a Dremel with a milling bit grind the rear inside of the coupler box pocket making it thinner. This needs to be done in the corners only. Check your work by installing the Kadee flat brass spring and the coupler temporarily and move the coupler to its extremes. The coupler should spring back to the center position and hold. If the coupler is loose and flops around then more material will have to be removed until the ends of the flat brass spring move freely. Be sure to remove any plastic shavings from the box before reassembly.

**Update:** Using the new Kadee #148 Whisker spring coupler eliminates the coupler box modification needed above as the spring is build right into the coupler shank itself and eliminated the old flat brass spring of the #5 coupler!

The wheel sets may need the hole for truck mounting enlarged some if the trucks do not pivot freely. And always check the wheel gauge with a NMRA gauge as the wheels supplied from the factory vary greatly!

If you decide to install metal wheels a new problem presents itself. The car just seems to not roll freely. The wheels on the 100 ton hopper should be the 36 inch wheels. You can use the 33 inch wheels but 36 inch wheels is per prototype. When installed they tend to drag on the x bracing from the bolster to the outside corners of the car. You can either shim up the truck and then adjust the coupler height or just use a hobby knife and remove a small amount of material from the bracing that is touching the wheels. To find the area that needs to be touched up just take the

wheel set by hand and twist it back and forth a number of times and you can then see a shiny spot on the x brace that will need to be removed.

## **Stewart hoppers**

When using the coupler box supplied with the kit it requires an up shank coupler (lower the knuckle) to get the coupler height proper.

A way around this problem is to use the Kadee coupler box and standard #5 coupler. Just tap the hole on the end of the car with a 2/56 tap and then using the Kadee box install the box right on top of the existing mounting plate with a 2/56 x 1/4" screw. It will set the coupler down to the proper height.

## **Kadee Couplers**

Ever have a Kadee coupler that the knuckle just wants to stay open even though there is a new coil spring in the coupler? Is there a way to salvage this coupler without using some type of lubricant on it? Well there is. What I have done for a while now is to heat up the Kadee metal air hose with a soldering gun. This should only be used on the all metal couplers mostly the #5 Kadee. Once that the hose is hot begin working the knuckle back and forth. You may have to put the heat on the air hose more than once, but be careful not to get the coupler too hot as it might begin melting the coupler pocket. But soon you will have worked out the dirt, corrosion/rust or old oil and the knuckle will free up. And if it does not free up, or the coupler melts nothing is lost as you would have to replace the coupler anyway

## **Car Weight**

Getting the cars up to NMRA weight specs can sometimes be a problem. Where to put the weight! Inside a covered hopper is no problem unless it can not be taken apart. Just about anything can be used for weight. Some of the more popular items are pieces of steel, pennies, steel BB's and lead shot.

Fastening down extra weight on the factory metal weights inside of box cars can be a problem with most glues, either the glue does not hold, dries out or gets brittle and eventually the weight comes loose. But there is hope, try using Shoe Goo, available at most Wal-Marts, K-marts and hardware stores. This is a silicone silastic similar to the RTV silicone gasket material but does not seem to have any problems as has been reported with the RTV silicone.