

# ATHEARN GENESIS

# TRINITY 5161CU.FT. COVERED HOPPER

## #178 BODY MOUNTED COUPLER CONVERSION

This model has fine detailed parts so "EXTREME CARE" should be taken while handling it during the conversion. It is best to invert and lay the hopper car in a sponge or padded cradle.

The #178 coupler is a "scale size" HO coupler and using a "standard size" HO coupler (#5 type) would detract from the scale appearance of this model.

Remove both trucks and set them aside with the screws in a secure place (on a magnet).

Very carefully place a hobby knife or small screwdriver blade under the coupler lift bar and gently lift near the pin in the draft gear box. The bar is painted metal wire so try not to chip the paint or bend the bar. Slide the bar out to the eyebolt at the corner of the car, if it will come out, great and if not just leave it hang and be extra careful.

Remove the two tiny screws and the lid of the draft gear box. Note the air hose is connected to the lid and if you choose to use it you'll need to trim it off the lid and attach it to the #178 draft gear box or to the end of the car. This is the modelers choice and up to them as to the method of attachment.

Use a hobby knife or nippers and carefully trim the side wall back 7/16" (.4375") and down flush to the bottom plate of the box. See the illustrations. Trim off both posts and the two small pins (nubs) and file the platform level and smooth.

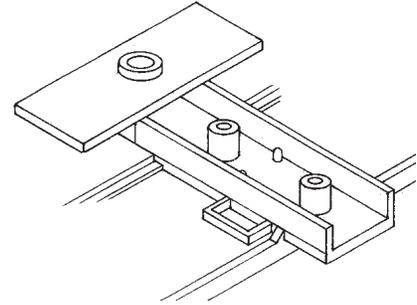
Set the #178 coupler onto the platform where the inside of the striker plate lip is against the front edge of the platform. mark the platform through the two holes in the #178 coupler. Make sure the marks are along the centerline. The rear mark should be on the original rear post location. Drill and tap (#55 drill and 0-80 tap) the holes for an 0-80 screw. (use our #780 0-80 Drill and Tap set.) Note, because of the weakened platform do not press too hard while drilling.

The #178 coupler package includes 0-48 self tapping screws, however, the wide threads of the 0-48 screws may not hold securely enough in the thin platform so we recommend using 0-80 x 1/8" and 1/4" screws that have finer threads. Both are available from Kadee as product #1643 (1/8") and #1646 (1/4").

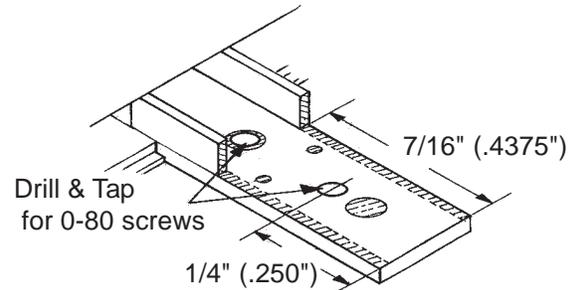
Set the #178 in position and use a 1/8" screw in the back hole and a 1/4" screw in the forward hole. Do not tighten too much or you may "strip" or ruin the threads and if so you'll need to use an 0-80 hex nut on the end of the screw and that would compromise the appearance.

Replace the trucks and check the coupler height with our #205 or #206 height gauge. If the coupler is too low place thin shim washers (our #208 and #209) between the truck and underframe. If it is too high then place a shim between the coupler and platform.

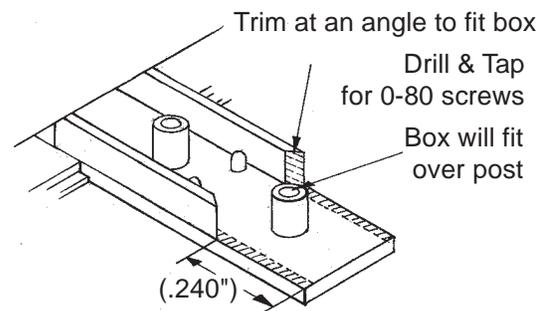
Remove the trucks and cut a small groove in the box for the coupler lift bar to fit into and use a small drop of CA glue to hold it in place. You also can paint the #78 draft gear box a matching color to the hopper. The #178 draft gear box is an engineering type of plastic and most paints will stick to it as long as it is not handled too much.



**Athearn "Genesis"  
Trinity Covered Hopper  
Original Coupler Pocket**



**Athearn "Genesis"  
Trinity Covered Hopper  
Modified Coupler Pocket for #178  
Coupler**



**Athearn "Genesis"  
Trinity Covered Hopper  
Modified Coupler Pocket for #33 Coupler**