

RIVAROSSI (POST 1993)

## Pilot: #33 Coupler or "scale" #58 in a 30 series draft gear box, Tender: #33 Coupler or "scale" #78.

Read entire instructions and review the illustrations before you begin. The above listed coupler options require the same conversion procedures and modifications. You will need a small piece of .060" and .080" or .100" styrene shim stock, liquid styrene cement, hobby knife, small files, 0-80 tap and drills (our #780), coupler height gauge (#205), and 2 ea. 0-80 x 3/8" screws and one 0-80 washer.

**PILOT:** The dummy coupler is glued into the pocket and it might be easier to break it off in order to work. Trim out the entire pocket below the upper lip down to the top of the grating (cow catcher) leaving the upper lip in place. Widen the opening of the upper lip enough for the 30 series draft gear box to slip through (see the illustrations). Modify a piece of .060" thick styrene shim stock to fit between the frame just behind the platform of the upper lip. File or trim the end to fit the rounded end piece of the platform. You should now have a level platform even with the lip. Assemble the coupler with the spring side of the draft gear box on the bottom and the "thicker" (.025") lid on the top. Slide the assembly into the opening far enough where the front is just under the lip, check that the pilot wheels will clear the back of the box, you can trim a little from the back of the box if needed. The coupler should be secure enough to check the coupler height to see if you need to file a little more from the platform. Mark the platform through the hole of the box, it should be just behind the rounded part and a little over the seam. Carefully drill (#55 drill) and tap a hole through the platform and upper deck for an 0-80 screw. It should come out behind the center stanchion of the upper deck. Insert the coupler and secure it with a 0-80 x 3/8" screw and washer, pull the coupler forward before tightening the screw. Check the coupler height and clearance. The end of the screw will protrude through the upper deck, snip off the end flush with the deck and touch it up with black paint. If you can not get around the stanchion to snip the end off you can carefully pull the stanchion out, pull out one of the end stanchions first to keep from tweaking the lift bar.

**TENDER:** Pull out the original coupler and remove the rear truck. Remove the floor from the body of the tender by prying back the draw bar pivot pin until the floor comes up from that end. Trim out the entire center area of the coupler mounting back to the opening behind the post. Trim it down to the level of the floor. The screw hole for the coupler will be on the seam of the floor and body so you need to glue a shim block against the end of the inside of the body for the screw. Make the shim from .080" or .100" thick styrene stock about 1/2" square. Measure the thickness of the floor and mark that depth on the inside of the end of the body. Use liquid styrene cement and cement the shim against the inside of the body, centered below the measured depth so the floor will fit right on top of it. Replace the floor and set the pre-assembled #78 coupler (or the #33 coupler assembled with the thin lid on top and spring side on the bottom) into the coupler pocket where the lip of the box is against the end sill. Mark the screw hole location, it should be at the floor and body seam. Drill and tap a hole (#55 drill and 0-80 tap) on the centerline through the floor and into the shim block deep enough for a 3/8" 0-80 screw. If you use a #33 coupler you can use a 2-56 screw. Secure the #78 coupler and check it for the correct coupler height, clearance, and function.

Pilot #58 in a 30 series draft gear box tender #78 0-80 hole behind or #33 standard size stanchion coupler Leave upper lip in place Remove entire pocket down to the top of the grating Remove entire Tender center section down to the floor level Thickness of floor Tender .080" to .100" thick 1/2" x 1/2" shim block Inside body



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