

## U.S.A. TRAINS GP-30 DIESEL LOCOMOTIVE Large Scale Coupler Conversion #831 or #787 "G" scale (for closer more secure coupling) #1831 or #1787 #1 scale

This locomotive has a new type of swing/swivel coupler mount on their pedestal. It still has the common mounting arm with the round boss on the end.

#831 (#1831 #1 scale) Coupler: Assemble the coupler per its' instructions. Remove the USA Trains coupler, place the assembled coupler on to the swivel mounting arm, drill a new screw hole in the arm through the couplers hole for the #4 screw, and secure the coupler.

For a closer coupling shorten the mounting arm by trimming it off just behind the round boss. Place the assembled coupler on the arm and use the original screw hole.

This coupler mounting may be slightly low and the swivel mount might be rather loose or flexible. This may cause unwanted uncoupling while pulling a heavy load. You can tighten the swivel mounting by placing a thin washer under the screw that has a large enough hole to fit over the top of the post. This will take up the gap in the mounting but also keep the swivel from moving. This may be alright because you might not need the extra swing because of the swing of the coupler in its' own box.

#787 (#1787 #1 scale) Coupler for a much more secure coupler mounting that's a little closer: Assemble the coupler per the instructions. Remove the swivel mounting and the entire pedestal from the underneath of the loco. Carefully drill (use a #43 drill) and tap the pedestal mounting holes through the deck for 4-40 screws. The holes will come out just in front of the body where you can use a little gray touch up paint on the tips of the screws. Also, drill and tap the post hole in the pedestal for a 4-40 screw. Replace the pedestal and secure it with 4-40 x 1/2" screws with washers, you may need to use extra washers to keep the ends of the screws from protruding too far out of the deck.

Make a .040" thick shim the size of the top of the pedestal and drill or cut a hole to fit over the post. Enlarge the hole in the shank of the couplers draft gear box so it will also fit over the post. Place the shim then the coupler over the post and onto the top of the pedestal secure it with a  $4-40 \times 1/2$ " screw and washer.

The 4-40 screws will help keep the pedestal from moving too much while pulling a heavy load. The original screws are rather short and do not hold secure enough and will eventually work loose under the flex of the mounting.

Check the coupler height and if it's too low use a thinner shim under the coupler and if too high use a thicker shim. The coupler box should be level and there should be a paper thin gap between the box and the edge of the sill. However, there are variations in the manufacturing process that you may have to compensate for in adjusting the mounting to achieve the correct coupler height.

