

U.S.A. TRAINS SD-70 MAC DIESEL LOCOMOTIVE
Large Scale Coupler Conversion
#831 or #836 "G" scale (for closer more secure coupling)
#1831 or #1836 #1 scale, #787 (#1787 #1 scale) with the plow

This locomotive has two pedestal, one with the USA Trains "knuckle" coupler and one with the "hook and loop" coupler. Both are simple to convert to Kadee couplers.

#836 (#1836 #1 scale) Coupler: Use this coupler for the closest coupling and best overall looks. This limits the locomotive to 10 foot diameter curves. The coupler mount onto the pedestal used for the USA Trains "knuckle" coupler. Our locomotive sample Had the knuckle coupler installed and the hook and loop coupler and pedestal in a separate bag.

Remove the original coupler by removing the two cover screws giving you access to the center mounting screw. Remove the coupler and center screw then lift off the bottom portion of the box, you may wish to set the center screw back into its' original hole then reassemble the original coupler.

Tap the hole in the pedestal for a 4-40 screw. Assemble the coupler according to the instructions. Carefully set it onto the pedestal and secure it with a 4-40 x 1/2" screw through the back hole. You can use a 2-56 x 1/2" flat head screw with a hex nut in the forward hole to hold the coupler together. This is a solid mount without any extra swing to the coupler. If the coupler pivots during operation you may need to make a couple of spacers to fit between the box and the sides of the opening to keep the box from turning. Or you could use a screw through the forward hole from the underside but it might take away from the looks and damage the paint on the opening.

If you use the plow on the front and you can not adjust it so the #836 trip pin will not hit the tip then you can use a #787 (#1787 #1 scale) coupler. Mount it as above but use the screw hole in the shank, this will extend the coupler enough to use the plow and the insert.

#831 (#1831 #1 scale) This coupler is for 8 foot diameter curves, which is the limit for this locomotive. It uses the pedestal with the swiveling top made for the "hook and loop" coupler. Assemble the coupler per the instructions. Remove the USA Trains coupler from the swivel arm, place the assembled coupler onto 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 bit closer coupling shorten the mounting arm by trimming it off just in front of the block step down a bit father back than the nob (boss). Place the assembled coupler on the arm and fasten the coupler to the arm using the screw from the coupler package in the original screw hole of the arm. Install the pedestal assembly per USA Trains instructions with the wire centering spring that will allow the extra coupler swing necessary for the tighter curves. This swivel coupler mounting may be slightly loose or flexible and may not be as dependable as the above #836 coupler mounting.

For "all" coupler conversions, always check the coupler height with our #880 "G" scale or #829 #1 scale coupler height gauges and make any necessary adjustments.

USA TRAINS SD-70 MAC

- #836 (#1836 #1 scale) close coupling 10 foot diameter
- #831 (#1831 #1 scale) ON 8 foot diameter
- #787 (#1787 #1 scale) if needed for plow clearance

