

## USA TRAINS

## NW-2 Diesel Locomotive

This locomotive can be converted to Kadee® couplers using one of two methods:

Option 1 (#787 packet) is for larger radius track and requires only drilling a hole in the gear box shank.

Option 2 is for smaller radius track and requires some cutting of the USA's pivot arm and the Kadee® gear box shank and lid. Note: for G scale use #831 & #1 scale use #1831 for Option 2.

Please read thoroughly before proceeding.

For both options on the front and rear: Remove the original couplers. Loosen pivot arm mounting screw, disconnect spring from floor, and then remove the screw and pivot arm.

Fig. 1  
Modified

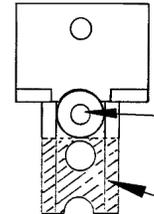
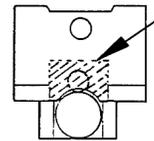


Fig. 2

For #831(#1831)  
trim slot in  
lid 11/32"  
(.344" wide  
and 5/32"  
(.156") deep  
to match  
sides of pivot  
arm

For #836  
(#1836)  
Coupler  
mounting  
drill 1/8"  
(.125) hole  
centered in  
the boss  
clearance  
hole

For #831  
(#1831) trim  
7/16"  
(.438") off of  
#831  
(#1831) gear  
box shank

OPTION 2: Is for smaller (tight) radius track, even down to 1100, depending on the coupler mounting and length of car coupled to the locomotive. Trim 5/8" (.625") off the end of the original pivot arm (see FIG. 3).

Trim 7/16" (.4375") off the end of the shank of the #831 draft gear box (see FIG. 2). Cut a slot in the lid 11/32" (.344") wide and 5/32" (.156") deep to match the sides of the pivot arm (see FIG. 1). This also exposes the mounting hole.

For #831  
(#1831)  
pivot  
mounting  
trim 5/8"  
(.625")  
off of end

U.S.A. pivot  
arm

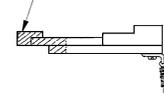


Fig. 3

Assemble the #831 coupler. Check fit to the pivot arm matching the mounting holes. Trim and adjust until holes match and fit is even. Reinstall pivot arm to mounting block. Use a graphite lubricant (Kadee® #231) on mounting surfaces for best performance. Leave the original screw a little loose and hook the spring to the floor. Note: the centering action of the pivot arm performs better when the spring's hook is pointing up (see FIG. 4). Attach the coupler to the pivot arm with a #4 x 1/2" screw (see FIG. 4).

#4 x 1/2"  
screw

Hook on  
spring should  
point up

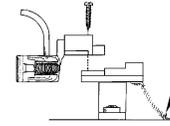


Fig. 4  
Inverted  
coupler  
mounting  
with  
trimmed  
pivot arm

Check for correct coupler height, function, and clearance and make any adjustments necessary. If too high, loosen pivot arm screw slightly.