



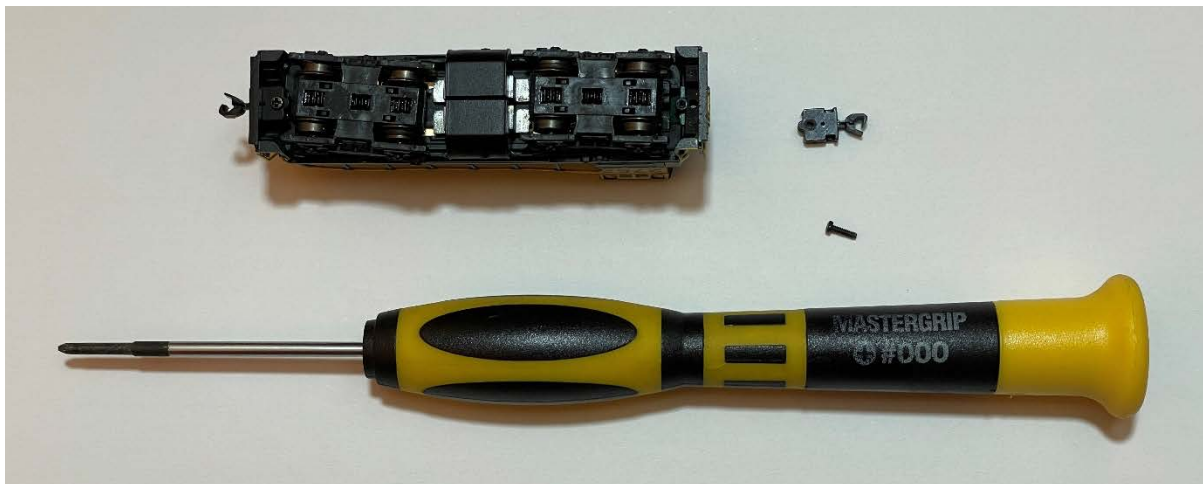
SW1500 Coupler Conversion to Micro-Trains® 905

Included in your new AZL SW1500 switcher are two coupler conversion adaptors that enable the use of Micro-Trains® 905 couplers in place of AZL couplers.

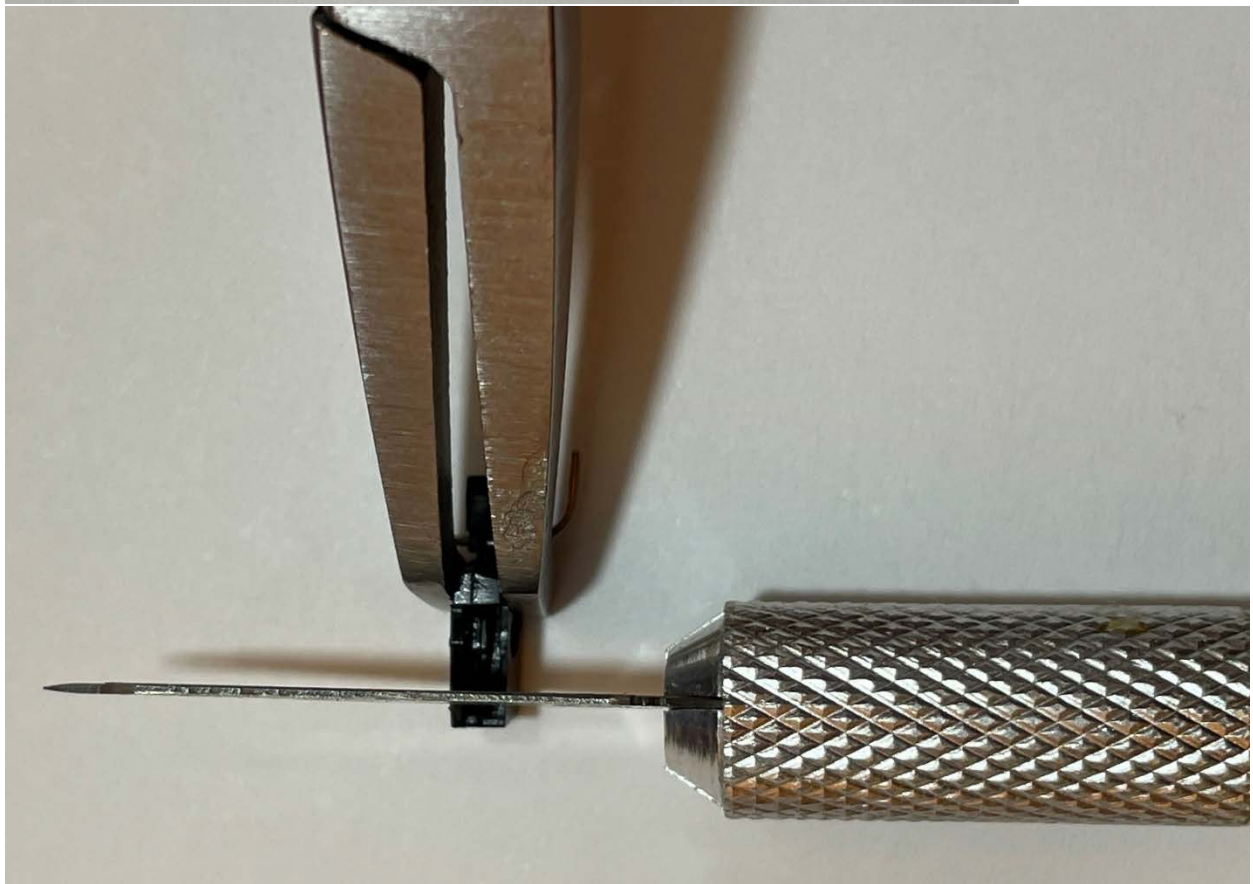
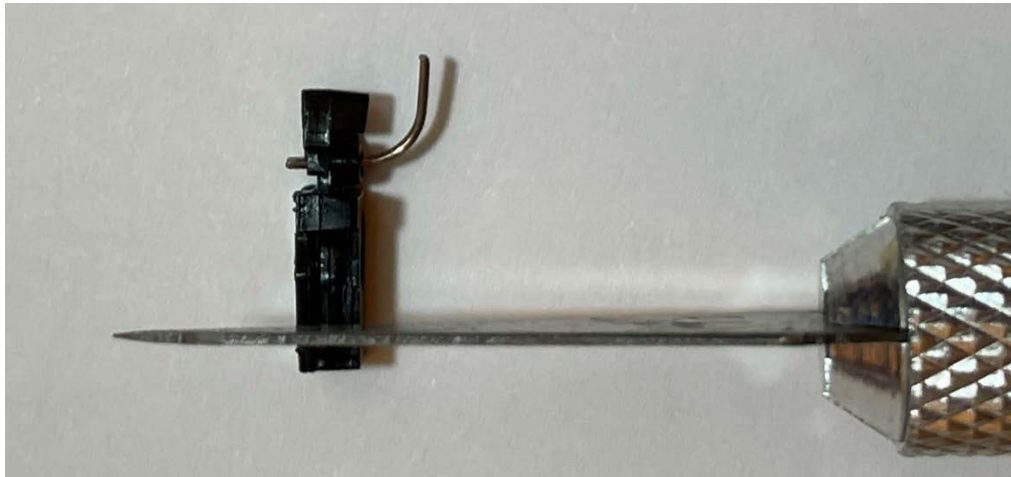
This conversion project is Medium Difficulty, and involves the use of a hobby / xacto knife to modify the Micro-Trains® 905 coupler for use in the AZL SW1500 switcher locomotive. Please do not attempt this project unless you are comfortable working with small parts and a sharp hobby knife.

Please read all steps before beginning the project so you have a complete understanding of the entire process.

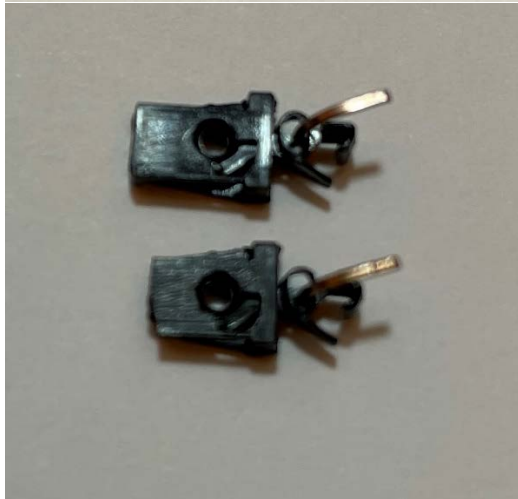
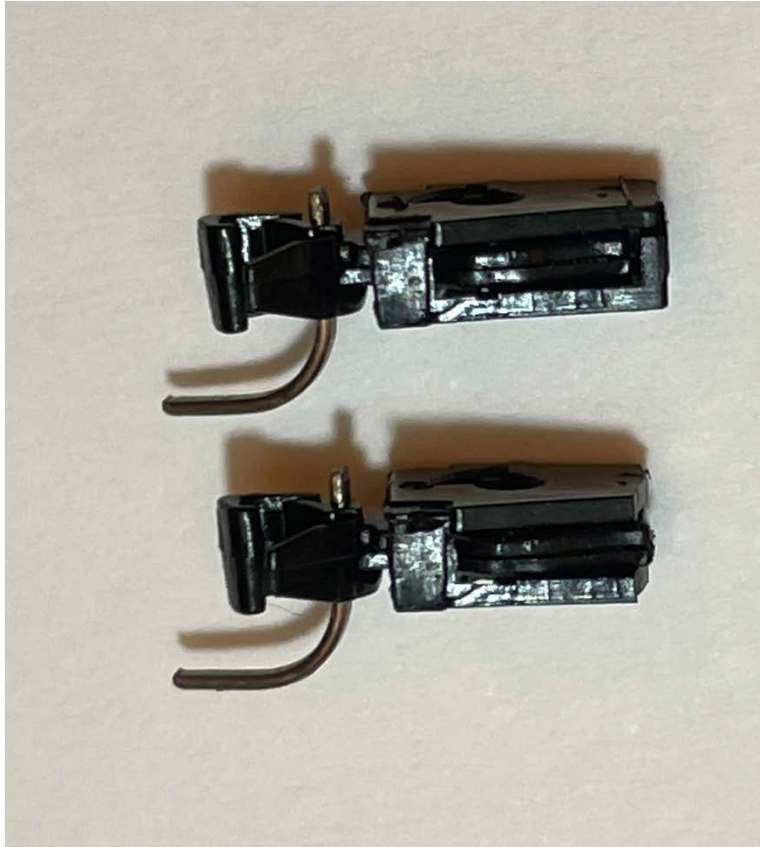
Step 1: Remove the factory supplied coupler from the SW1500 locomotive. Find a careful, soft resting place to flip the locomotive upside down – take care to not damage the delicate horns, handrails, smokestack, bell or any other small parts on top of the locomotive. We suggest inserting the white foam protective strips between the handrails and the locomotive body as they will help prevent damage during this conversion. We suggest a #000 Phillips head screwdriver. Please keep the screw as we will use it later to attach the MTL coupler. Once the screw is removed, the coupler should slide out through the end of the chassis. It is a tight fit, so any manufacturing flash (rough spots) could cause the coupler to stick a bit. Simply wiggle it out if this occurs.



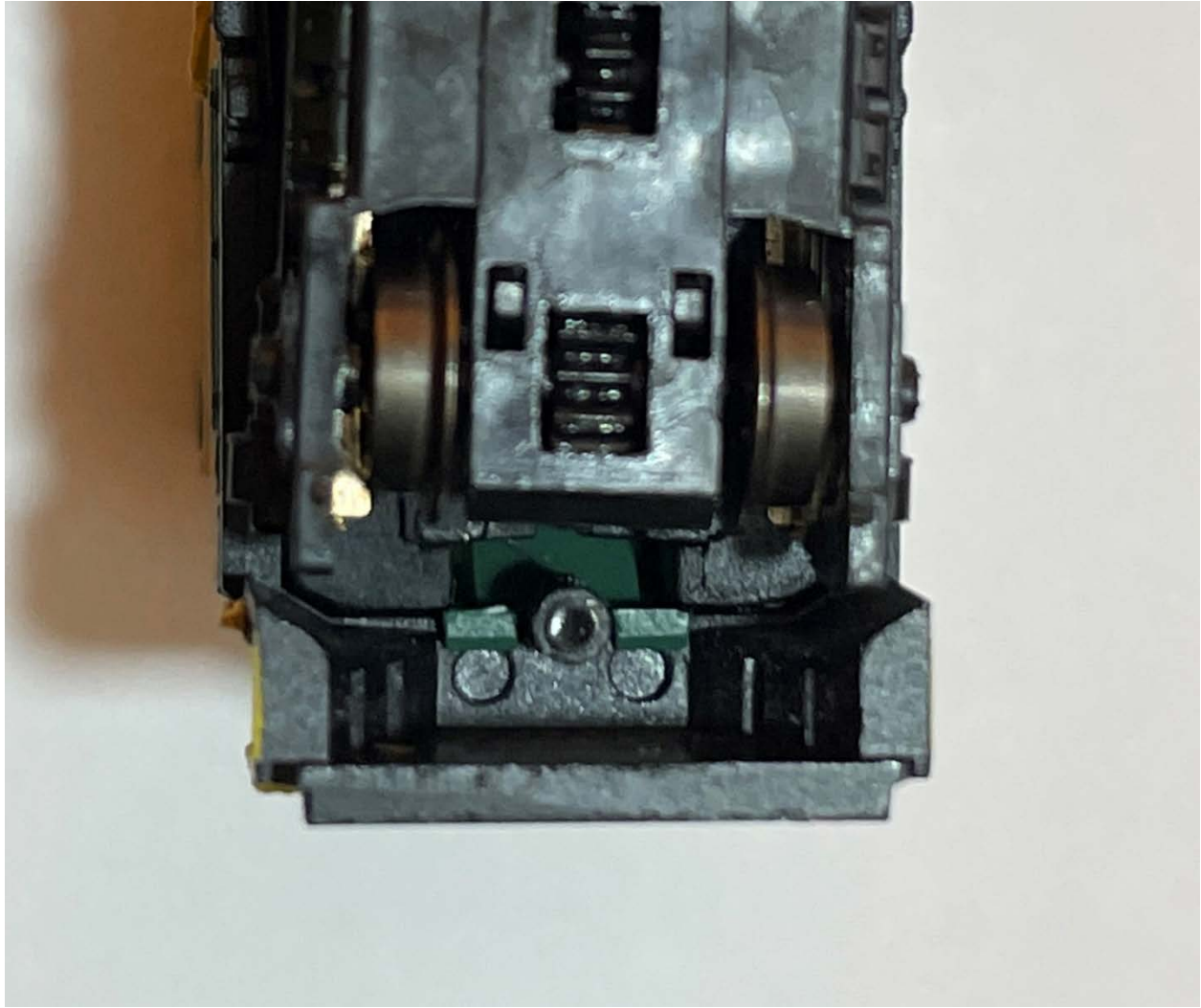
Step 2: Cut off the back end of the Micro-Trains® (MTL) 905 coupler box. We need to shorten the MTL 905 coupler box a bit to enable free movement of the locomotive trucks. This is done by removing the back of the coupler box, but not cutting any of the internal components of the coupler. The easiest way to do this is to lay the coupler on its side, and grip the front of the coupler box with tweezers or small pliers. Use the hobby knife to then slice down and across the box. Since the coupler is on its side, this makes the top and bottom of the box act as a brace and allows a smooth cut.



Before and after pictures of the MTL 905 coupler box as shown below

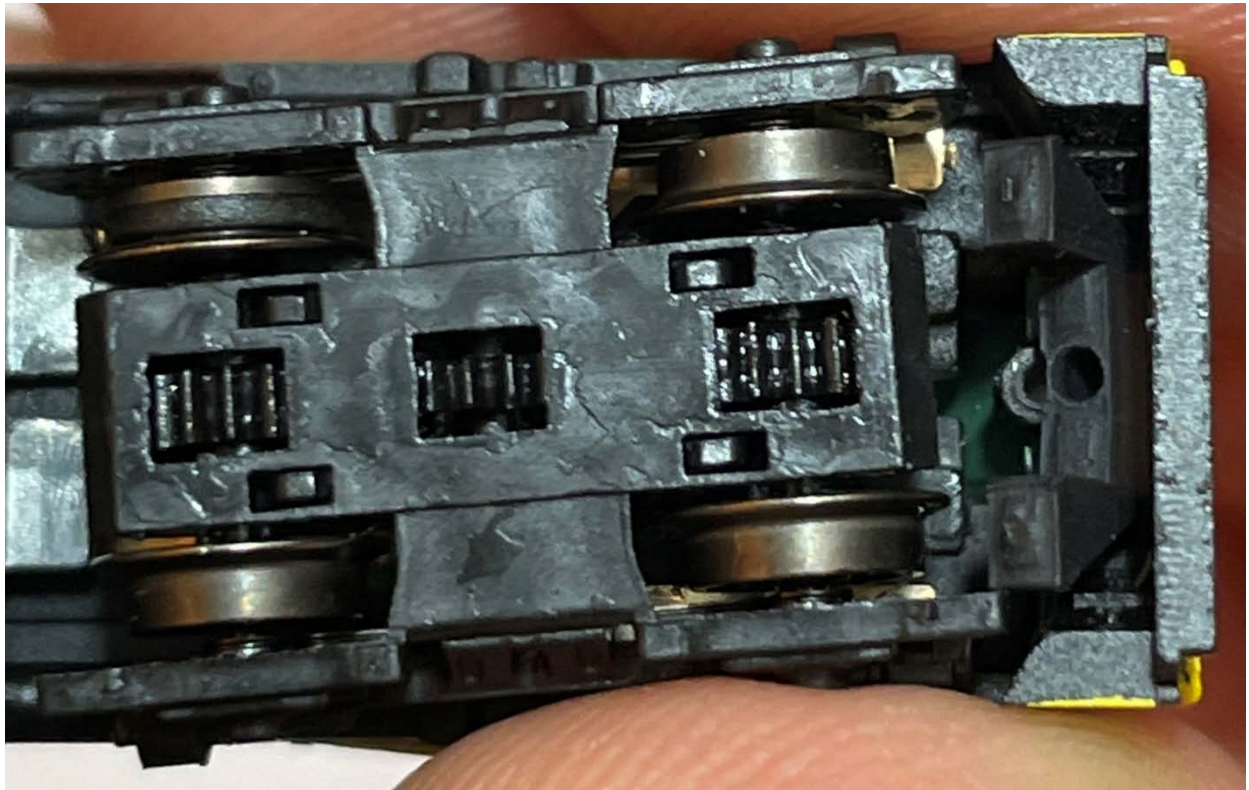


Step 3: Insert the AZL to MTL coupler adaptor into the SW1500 locomotive chassis. Familiarize yourself with the included coupler adaptors.

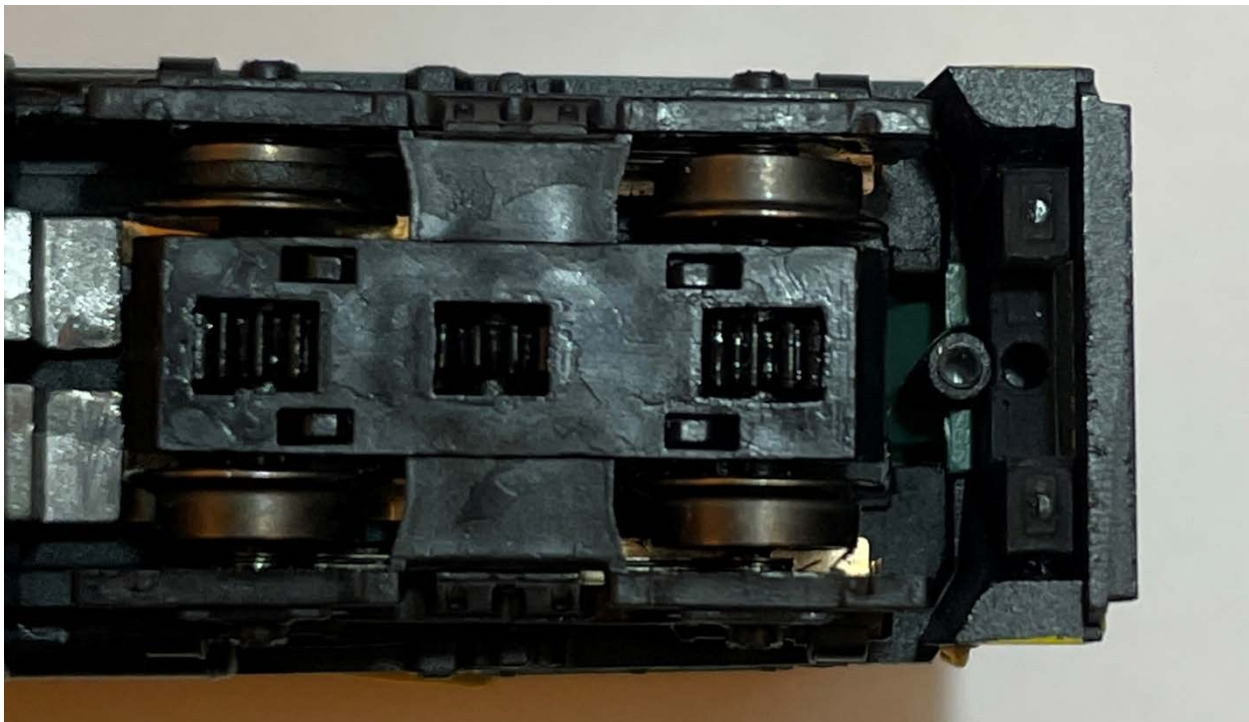


The purpose of this piece is to provide a new coupler mounting hole for the MTL 905 that is further away from the locomotive wheels. This is a press to fit piece that does not require glue or adhesive – you may glue it in place if you wish, but glue is not required as the geometry of the pieces will hold it in place once the coupler is screwed in. This piece has a tight fit. The adaptor has a notch in one side. This

aligns with the existing coupler post in the chassis. We recommend inserting the piece at a slight angle to get it started.



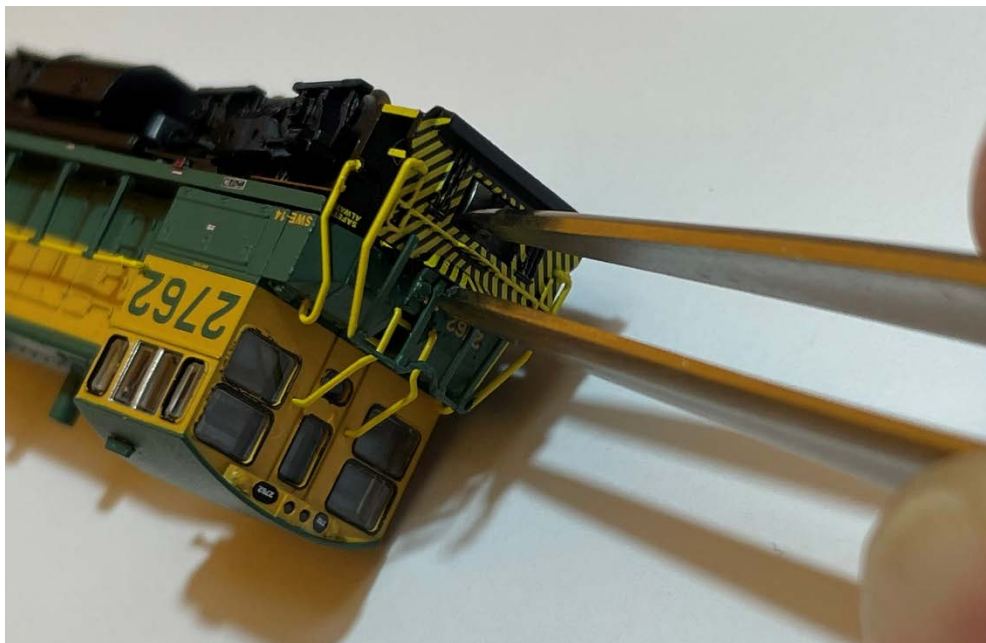
Make sure the existing post and the notch are aligned! Simply press in to fit.



Look in through the end of the chassis at the coupler box hole. You will be able to see if the adaptor is fully seated this way.



You may need to use some tweezers to press the adaptor all the way down. This can be done as shown in the photo.



It should look like this when the adaptor is fully seated and in the correct location:



Step 4: Insert the cut MicroTrains 905 coupler box into the AZL SW1500 locomotive. Align the hole in the MTL coupler box with the coupler adaptor. Use the original screw from the locomotive to attach the coupler. Insert the screw until you feel some resistance. Check to see that the coupler operates freely with good spring action. If the coupler is stiff, back the screw out – normally $\frac{1}{2}$ to $\frac{3}{4}$ turn is enough, but you may need to experiment. The screw head should be almost flush with the coupler box, and not significantly protruding down towards the rails.



You may need to adjust the MTL trip pin height after conversion. Please see the MTL instructions on how to do this.

Enjoy your new switcher! ... and thank you for supporting AZL.



WARNING – DO NOT ATTEMPT TO REMOVE THE LOCOMOTIVE SHELL. THE SHELL MAY BE DAMAGED IN THE PROCESS.

SW1500 - 2021 Release. Copyright American Z Lines. All rights reserved. AZL assumes no responsibility for damages incurred in the process of swapping couplers and using the supplied upgrade parts.