Stock Genesis Cab-Unit LED Conversion Kit Assembly & Installation

www.ScalesoundSystems.com

This guide covers the assembly and installation of the Scale Sound Systems Stock Genesis Cab-Unit LED Conversion Kits. These kits are for Genesis Cab-Units that come stock with twin-beam headlight and/or action+UDE mounts already installed using 1.5V bulbs.

Shown here are the parts for this particular kit and a Genesis Amtrak FP7 with a stock lower, door-mount twin-beam headlight and an upper, nose-mount three-bulb UDE+action light. We will replace the bulbs on the left with the LED lenses assemblies on the right.

www.scalesoundsystems.com
Next, place a small drop of glue on the 0402 LED and glue the red UDE lens to the 0402 LED. After the glue has set, run some CA around the back of LED/Lens to bond the wires and create a durable sub-assembly.

Begin by removing the stock bulbs. These usually pull-out with some wiggling. If the housing also pull from the shell, reinstall and secure with a little glue from behind.

www.scalesoundsystems.com
The assemblies are ready to be installed in the locomotive.

Note that the lower, twin-beam headlight assembly should have the heat-shrink installed round the lens base/LED at this time. Use a clean soldering-iron tip to shrink the tubing. Do not use a heat-gun; you will melt the parts!

Similarly, glue the headlight and action light lenses to the 1206 LEDs. Again, once the lenses are secure, run some CA around the back to secure the wires.
With a small drop of CA on the bottom of the UDE lens, glue the black styrene divider in place, being sure it’s snug to the back of the housing. We want to block any light from bleeding between the UDE and action lights.

Install the top UDE lens first. Secure either with Kristal Kleer or very carefully with medium-CA. Be sure you do not get glue in the action-light holes below the UDE lens or glue running out onto the front of the lens/housing.

[Image of a model car with UDE and action lights installed]
Grab the headlight assembly, place a tiny bit of glue around the base of the lenses and position it in the headlight housing.

As you can see, the heat-shrink was installed on this light assembly. I failed to photograph the sub-assembly with the heat-shrink on. Be sure to install the heat-shrink before installing the assembly in the housing.

Add a small touch of glue to the top-side of the action-light lens and slide it into the holes, secured to the black divider.
Finally, I dress all the wires with bits of heat-shrink, route them through the cab and solder the wires to the decoder.

I don’t like light bleeding into the cab or on the roadbed, so I use thick, black, dimensional writer’s paint to seal up the back-side of the assemblies.
The finished installation makes a huge improvement in the quality and output of light. The LEDs are long-lasting and reliable as well. This process took less than 30 minutes and is well worth the effort in my opinion.