

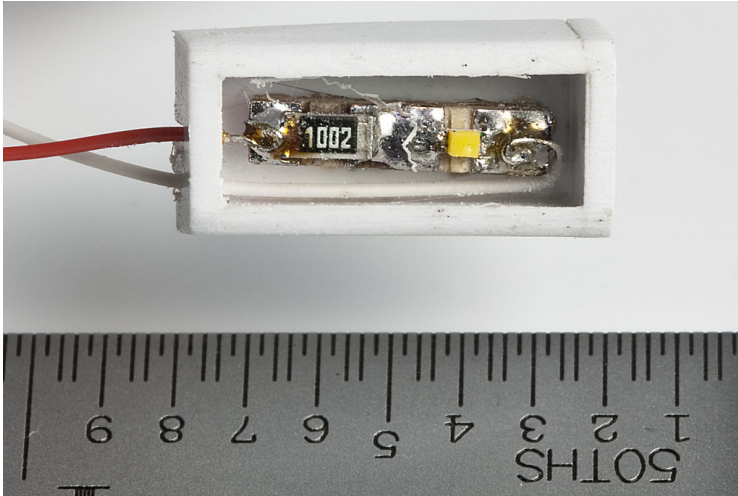
Jackson's Red Caboose GP9 lighting



Bob

Nov 2009 Nov '09

I recently had the pleasure of spending an afternoon with Jackson in his work shop, during which we documented his approach to lighting in his Red Caboose GP9. First up is Jack's fixture for the end walkway lights. This fixture slides into place behind simple stainless steel brackets glued inside the car body.

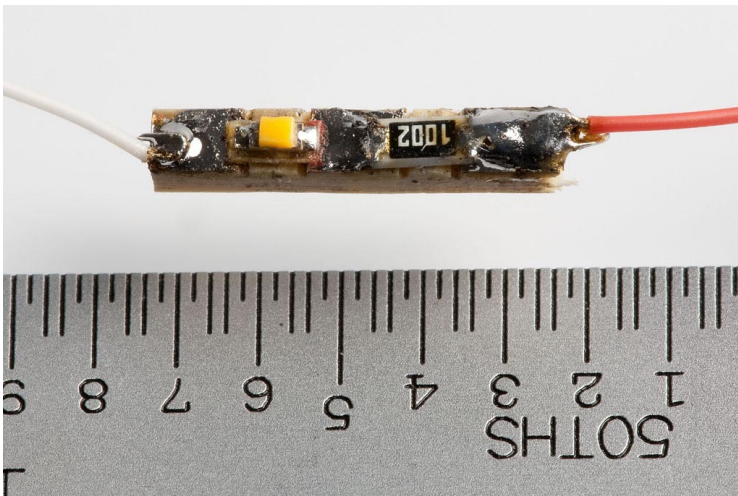


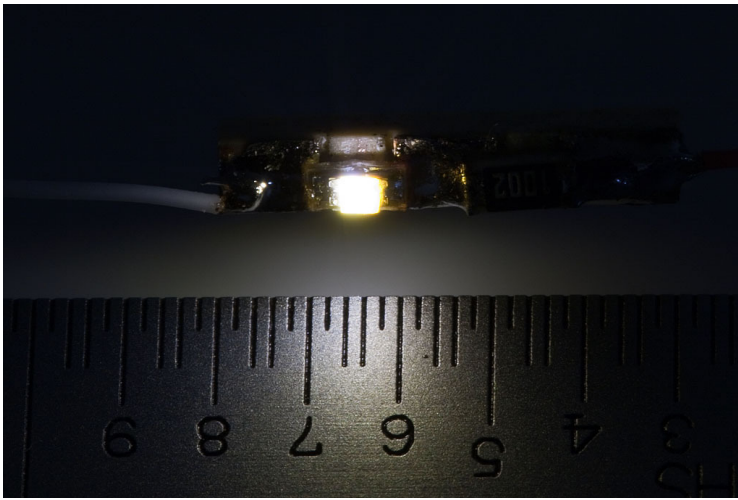
Jan 15



The LED is a sunny white 0603 surface mount part, procured from John Thut at DCC Hobby Supply (the plug is free, John!) It is only 0.060 long and requires steady hands and good soldering skills. When turned-on, my camera sees it at about 3500K, which would be a warmish but not yellowish fluorescent light color. The part marked 1002 is a 10K ohm current limiting resistor.

Next we have small circuit board for the class lights. These use a golden-white LED that came on a snap-apart PC board. The camera sees these LEDs at about 2700K, roughly the same as a 75 watt bulb.





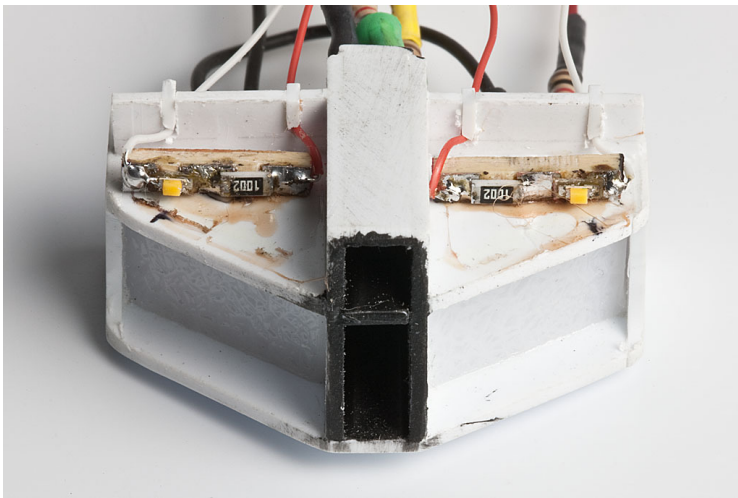
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Bob

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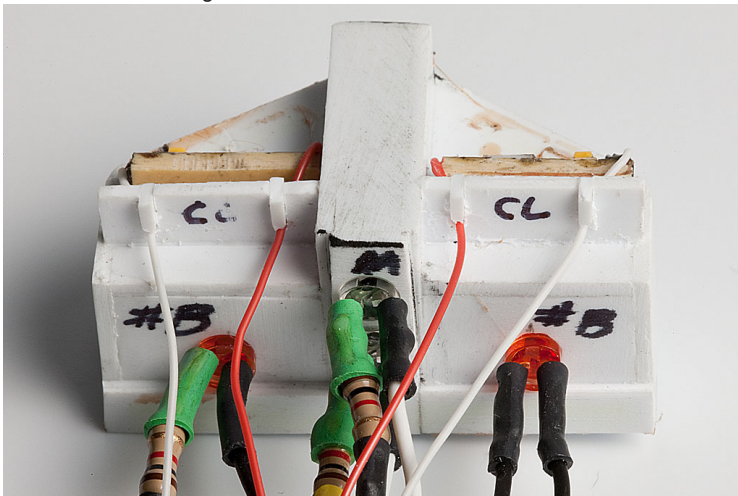
Next up we have Jack's fixture to hold all the lamps in the vicinity of the number boards.



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The number board lights are hidden behind a thin textured translucent diffusing sheet.



The fixture will be extended in the center to hold two more LEDs for the headlights. Shown are the lamps for the Gyalight.

Bob

Nov '09

Jack's operating ground light fixtures are perhaps the most intriguing of the lot. Detail castings for these are not available in O-scale. Jack started with a few photos I emailed to him.



Above: OmniTrax GP7 in Fort Collins North Yard.



Above: Ground light on DRGW GP30 #3111 at the Colorado Railroad Museum.



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Bob

Nov '09

The ground light photos lead to a bit of planning. This sheet reminded me of a DaVinci workbook page.

Above: Ground light on DRGW GP30 #3111 at the Colorado Railroad Museum.



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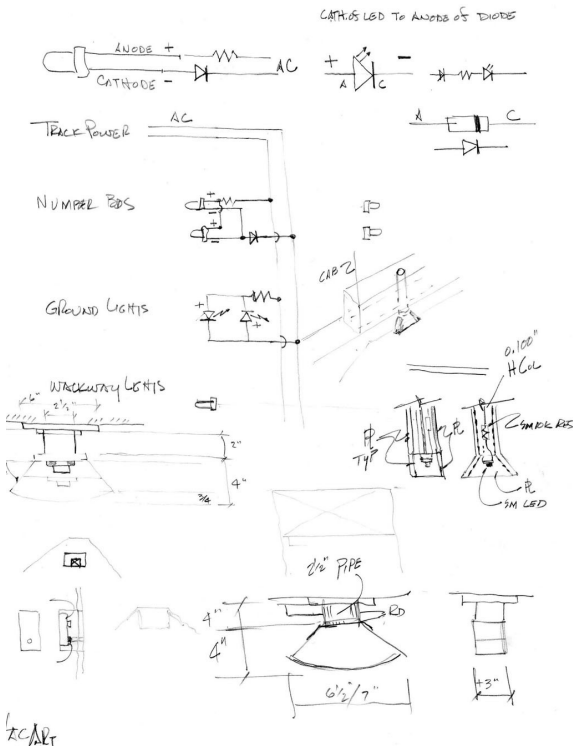
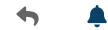
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Bob

Nov '09

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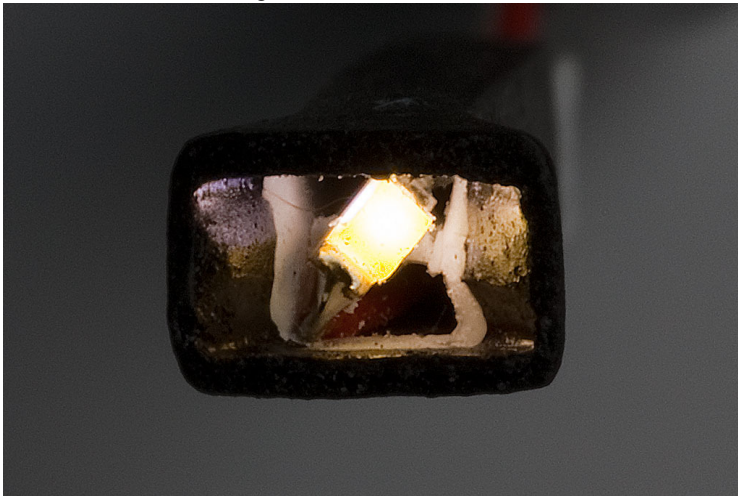
Bob

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Here's a finished ground light, made from an 0.100 H-beam and thin sheet styrene. The fixture is currently a bit too tall and will be shortened.



The business end of the light hosts one of the 0603 LEDs.



The fixture attaches to a stock Red Caboose chassis and quite nicely lights up the ties as would the prototype. Once trimmed to length, the portion above the frame fits into the cavity under the cab. Obviously another coat of paint will be applied.



Great job, Jack! I can't wait to see it all buttoned-up. And thanks again for all the craftsman tips, and the 5 pairs of ground light fixtures!



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Chester

Nov '09

Bob,
The ground lights are available in O scale. I have a set of Cal-Scale part number 3028. They are brass castings. I've heard the Bowser won't be making them any more but I got mine from either P&D Hobbies or Des Plaines.

Chester

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Craig

Nov '09



Looks good Jack. Thanks for sharing these too Bob.

Hummmm...I can see that I will have a VERY high standard to meet on my GP-7 😊

And Jack - do you need me to come over and teach you how to solder. Looks a little messy 😊

(Runs for the hills...)

Bob

Nov '09

Jack didn't let the tiny size of the 0603 LEDs stop him. I still have some old 'yeller 0603s in their factory package, afraid that I would sneeze! 😊 Guess it is time to dig them out of inventory and start practicing. I have some catching-up to do!

It has been rumored that Jackson's dealer made an observation about the large number of LEDs requested for a single locomotive—something to the effect of "Man, that thing will light up like a Christmas tree!" Of course, **we do this because we can in O-scale!** By my count he will have 20 individual LEDs in that locomotive!

Thanks, Chester. I was not aware of the Cal-scale parts.

David

Nov '09

Wow, Jack. Very impressive. The future nights ops on 2.0 are getting better by the bulb (or LED). You're raising the bar for us all. It will be fun to have that unit ridin' the rails on head end. Any thought yet as to the road name and paint scheme??

David

antlor

Dec '19

Though you have completed with this project , and i hope this is ok, i wanted to share what i found under 3D printed 1/4" scale items.

AS3Dsolutions.com has printed step lights. They look pretty good and the material used is really good.

Nov 2009

Anyways i thought i would just share this, i just ordered some so hopefully by the end of the week i will have these in hand.



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Bob

Dec '19

Anthony -

Although Jackson has retired from O-scale, I'm quite interested in the light fixtures. I see the photo or simulated photo shows 1:87 parts, in O scale the striations from the printer should be less obvious.

I have a number of engines to build including plastic Red Caboose GP9s and P&D F units. These might be just what I need. Do they have open passageways so an 0402 LED and fine wires could be threaded through them? I have given "root canals" in soldered brass O-scale locomotive lights but on a delicate plastic sprue that may not be possible.

Advice?

antlor

Dec '19

Bob, if you go to the website and look under the 1/48 he has other stuff also. The pic was just for reference, i saw the 1/87 after i posted it... i believe they are cored for a LED. i just ordered some and he has shipped so as soon as i get them in hand i will be able to groove a better answer.

Anthony

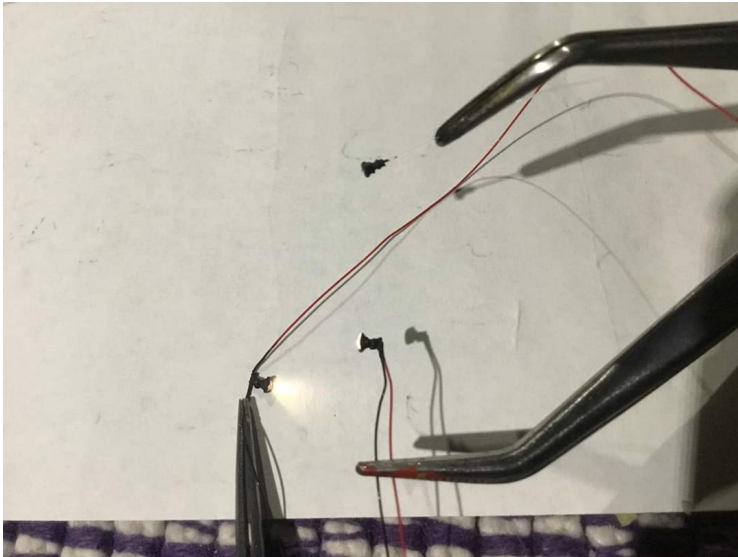


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Dec '19

Bob, here is a picture of the step/ground lights with LEDs in them.



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Bob

Jan 15

Looks like a winner. Rick Bacon got them for his A&D SW9, and he was pleased with the parts.

I just ordered a set.

Thanks for the pix!