

Detail



Added Details for the Boiler and Smoke Box

In the 'Detail' section this week we'll add a tiny bit more detail to our model. The details include:

1. Adding rivets to the smoke box sides
2. Adding marker lights to the smoke box front
3. Adding a Dynamo (Steam-Electrical generator)
4. Adding widened pilot deck foot boards.

The work in this section is entirely optional.

Adding Rivets to the Smoke Box.

As per prototype, there is a row of rivets near the rear end of the smoke box. The boiler and smoke box barrels were usually constructed in different thickness iron and as such, the smoke box was usually lapped over the boiler section and riveted in place.

Here our Prototype 8-16-D 2-6-0 shows off her beautiful line of rivets at the boiler/smoke box interface. These are the rivets we shall replicate on our model.



*These rivets are easily added by grabbing hold of the lil,ol' rivet rod.
Our trusty 0.020 x0.030 styrene rod and slicing a number of lil rivet cubes.
Then just go and weld the tiny rivets into a nice evenly spaced line at
the back end of the smoke box just like the above photo.*

You can weld the rivets in place, using the welder cement, however you'll notice the PVC pipe doesn't take to the welder much. The rivets will melt onto the pipe, but the pipe will not melt. The only better glue to use here is super glue, and that is too fast and permanent to get the rivets aligned properly, just work at it with the welder.

Once the rivets are in place, your smoke box should look a little like this:



Rivets along rear end of smoke box.

Adding Marker Lights to the Smoke box Front

Any of you modeling post 1880 version locos might like to add marker lights to the front of the loco. There are many forms in which the marker lights can be added, including style of the lamps and fitting/location on smoke box. If you look at the D&RG Class 40 photo in Chapter 1, taken in the early 1880s on the Utah branch, you'll notice even in those early years the D&RG/RGW had locos fitted with marker lights.

Check the different available castings offered by Ozark or Trackside details and select a type you think is pure style!! You can fit them with working globes or just with reflective paint or jewel lenses. I'll leave that to you. Where and how you fit them is also up to you. Most market light kits come with mounting brackets of various kinds.

Another way to mount them is to make 'L' shaped brackets from thin brass wire, 1.0mm or 0.7mm diameter wire. Drill tiny holes in the smoke box sides close to the boiler front, insert the wire into the holes and attach the marker lights to the other end of the wire.

For my prototype loco, I'm still wading through a ton of funny markers originally made by Atlas Trains for their track switch stands in 'O' scale. Their markers for the switches were too darn big for 'O' scale, so I ripped them all off the track years ago...now I've found they make nice large scale markers!!

Here is a view of my 1:24 scale South Park mogul (not an LGB loco), fitted with marker lights. The Atlas markers are drilled vertically and inserted onto 'L' shaped wire brackets, which are inserted into tiny holes in the smoke box sides. I used aluminum paint in the lens areas. The

lights are non-functional, however reflect the light rather well in an outdoor situation, rather brighter than a small globe could do in daylight. Up to you what you want to do here.



Note the Marker lights mounted to the smoke box sides on 0.7mm brass wire.



Marker lights added to the upper smoke box sides on our 8-16-D 2-6-0.

Adding a Dynamo

Following the use of electric headlights and markers, one needs to fit a dynamo somewhere. The dynamo is literally a steam driven electric generator, for the purposes of providing power to the headlight, marker lights and cab lights. For my prototype 2-6-0 model, as per my drawing, I'm

fitting the dynamo on the boiler top behind the stack, the NCNG #2 wore the dynamo in this location for a time. Other possible locations are:

- Right in front of the cab wall, behind the bell, or move the bell to a location behind the stack.
- Mounted to the sideboards in front of the cab.

The dynamo can be bought as a casting, or use an old Bachmann plastic units, or C-16 unit. You can also make them easily out of plastuct tubing. Use two sizes of tube and insert the larger over the smaller to get the style. The dynamo is typically a dumb bell shape, made up of a thin tube with two larger drums on either end. One drum is the steam driven fan, which connects to the electric turbine in the other drum.

When mounting the unit, always mount it to a small platform. Don't mount the dynamo straight onto the boiler. I made the platform out of 1mm styrene and added four 3mm tall styrene legs. I then araldited the platform to the boiler top. I detailed the legs with four 0.5mm styrene patches welded directly to the boiler. These simulate the cleats holding the platform legs to the boiler. Using my trusty rivet rod, I cut 4 rivets and welded them to the cleats to simulate the bolt heads. I added the steam outlet pipe to the steam fan end of the dynamo and ran the outlet up along side the smoke stack.

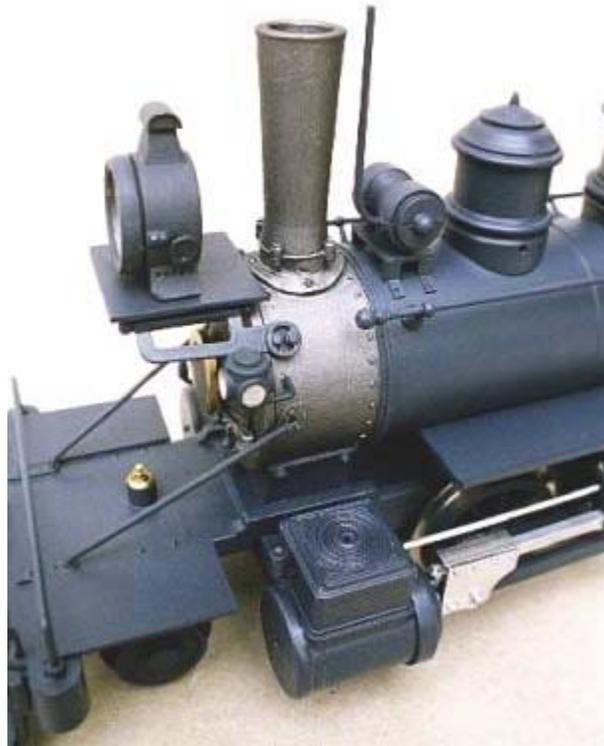


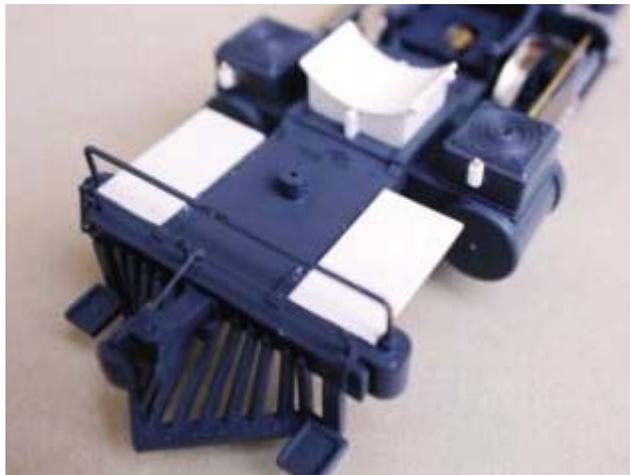
Photo indicating the dynamo mounted on its own platform, with cleat detail at the boiler top mounting. Also note the marker lights.



In Chapter 6, we'll be making all the boiler pipe fittings and cab interior. At that time we'll add the steam pipe to the dynamo and the electric line from the dynamo to the headlight and marker lights.

Adding Widened Pilot Deck Foot Boards

Probably more appropriately discussed under the 'detail' work of chapter 3, some of the later era post 1900 versions of these narrow gauge locos, had added metal decking to the pilot deck to make the old narrow decks safer for the crew. The added decking was very thin pressed metal sheeting with little added support. To add this decking to your model, all you have to do is glue some rectangular patches of 1mm styrene directly to the existing pilot deck. Run the added decking sheet forward right to the flag stanchions to get as much bonding to the existing deck as possible. There will be little other support for these decks other than that found at the leading edge. Weld the new decks in place and paint.



*View of the added deck plating to the existing pilot deck.
Check other photos of the model in this chapter to see the decking painted.*

Here endeth the Lesson, see you in Chapter 5.

Please enjoy a picture of our MasterClass 2-6-0 as photographed at the conclusion of the next chapter. Something to look forward to.....



Fletch.