

Craig's RC Conversion - C&NW Low Nose GP-9



Craig

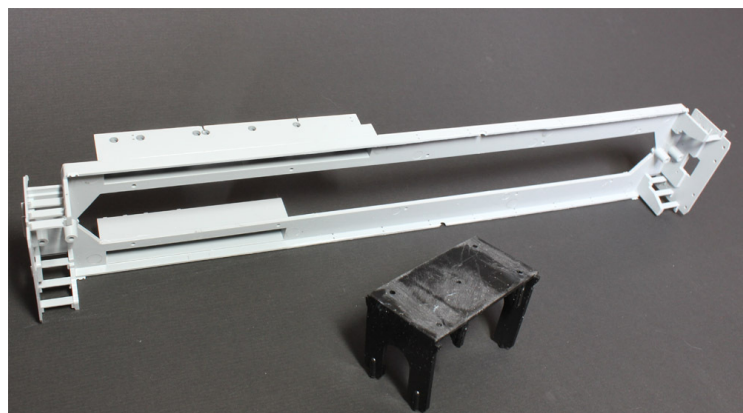
Jan 2011

Jan '11

Hello Everyone,

I thought that I would just start a new post so I could put up my pictures so far of the progress of the work on my engine. I'm still waiting on quite a few parts to show up for work to start on my drive (namely being the drive itself...heheheh) so I figured that I would get started on the walkway frame, dynamic break, engine mount and brass frame work as well. I'm hoping to order the drives this week, along with a few odds and ends for detailing.

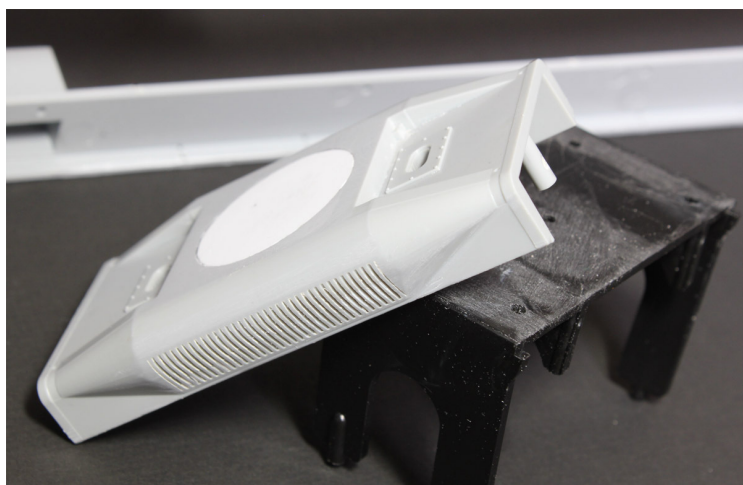
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Dec 2019



Here is the adjusted frame and engine mount. To get correct positioning of the frame and walkway I needed to remove those 5 small 'feet' that were originally on the mount itself. I still need to get the 2/56 screws and nuts to mount this bad boy, but we are getting close. Note the skirt has been completely removed. I will have to add a small wing around the fuel filler port, which I will start on next. I will add it on the walkway frame and I will also fill in the hole as well.



Here is the adjusted mount and Dynamic Brake housing. The Dynamic Brake housing went through quite a bit of changes. In doing a little research I found that the C&NW didn't use the Dynamic Brakes. However when they bought more of the GP-9's from other roads, they had the brakes installed. So instead of redoing the body itself, they just removed the dynamic brake and then patched over the vents and fan port. So that I what I have done here. I removed the grates completely and patched the hole. Now little did I know that I didn't have any putty, so I will have to run to the hobby shop tomorrow and get some. Once I have it I will fill in the grate gaps and then patch any holes present in the top hatch area. I won't really worry about doing a great job on the top hatch as the pictures I have seen clearly shows the plugged hole. So I want folks to realize that it was plugged.

I have done some work on the frame with Bob's guidance and have installed the "I Beams" running the length of the frame. The next step will be to work on the adjusted fuel tank and mount it as well. Once I have the fuel tank done (with the speaker installed) I will post more pictures.

Bob

Jan '11

Craig -

Good job with the photos! 📷

Rick Bacon once told me that a lot of prototype modelers use orange Bondo available in lifetime-supply tubes from the auto parts place. I've primarily been using that on my models. Just be aware that you don't want to have an "oops" with it as the solvent immediately attacks styrene. Leave it and sand it out later.

I'm not quite sure, but in at least one of your photos of 4511 it seemed that a metal plate had been installed over the louvers. If you might try a small rectangle of 0.005 styrene. It could save some filling and sanding.

There are a lot of searchable C&NW GP9 photos on rppicturearchives.net that may more clearly reveal C&NW "standard practice", if there was such a thing.

Craig

Jan '11

I'll be sure to look over more pictures Bob. The photos I had looked at looked like the yanked complete the grates and then just slapped some sheet metal over the holes. Either way it's done...it's going to be very unique.

Working on the cab detail right now. I FINALLY got my order from Des Plaines for the GP9 Split Windshield for the Paduca (sp?) modified noses. I figured that will be a pretty close start for the cab...the I need to scratch build the light assembly.

Also got the GP-18/19 conversion for the fans, so I will be working up the front fans for replacement to the bigger shell.

I do have a question for you guys. What lift rings should I use? Do you have a Part Number for them?

Thanks and stay warm fellas.

rnb3

Jan '11

It looks like P&D offers them: PN# PDP1027, Lift rings, EMD, Brass (14), \$6.00

I am also aware lift rings by Detail Associates (hard to find, look like bent wire), Atlas (seem oversized) and Precision Scale (both plastic and brass). FWIW, the RC kit should have included plastic ones.

As for the putty that Bob mentioned, I got mine at Wal-Mart for around 5 buck back in the last century and am still using it. It's Bondo brand "spot glazing" in a metal toothpaste type tube. I've had to clean out the tube end a couple times, but I keep squeezing and putty keeps coming out!

I also use an old Tenex bottle that I mixed half and half with Tenex (any plastic solvent will work, i.e. MEK, Testors liquid cement, lacquer thinner...) and styrene shavings to form a plastic paste. It works great to fill small seems and joints and helps make up for miss-fit joints. When I clean off my workbench after a styrene building project, I gather up all the tiny pieces of styrene left over and just drop them in the bottle. I apply the paste with an old paintbrush. To keep the brush clean just dip it back in straight solvent when finished.

Craig

Jan '11

Thanks for the info Rick.

Well...spent a good chunk of the weekend (last night and late today and tonight) working on the engine. I have the new 48" hatch installed in front of the Dynamic Break housing. I have the 5th coating of putty done on the D.B. housing grates as well have the fan port covered on the D.B housing as well.

I was able to "Judo chop" the nose and I have been filling the panel lines on the conductor side of the cab, as well as filling the number boards and other various not needed holes. I will have to re-install the class light holes, but that don't be a big deal to do that. So all in all, she is coming along nicely. Much better then I anticipated that is for sure. Tomorrow I'll try to post some progress pictures for your paroosing.

I did also put in the order to P&D tonight. OUCH 😊 hehehehehe Now I remember why I am in HOn3. With the cost of the detail parts and drive system I could have bought a complete HOn3 engine. (breathes into paper bag...) Seriously though, it isn't as bad as I thought that it would be. Just need to put in an order for a few odds and ends from DCC Hobby Supply for the speaker and the LEDs for the various lighting situations. It definitely won't be as complex as Bob's or Jackson's...but it should still be fun 😊

More to come later...

Craig

Jan '11

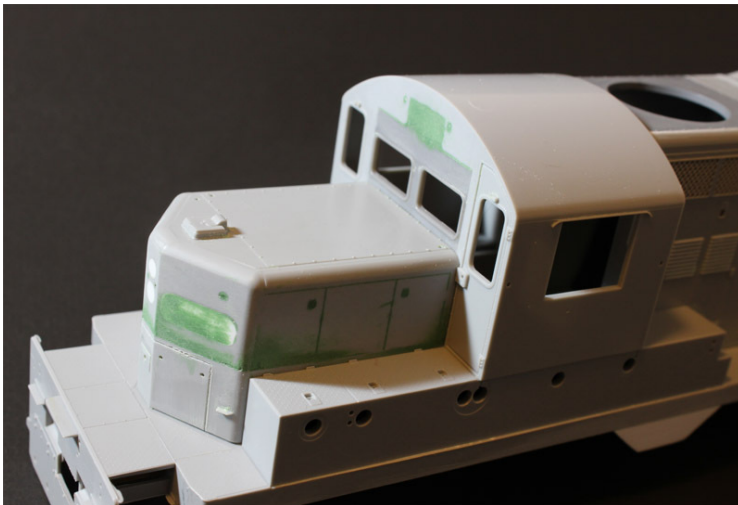
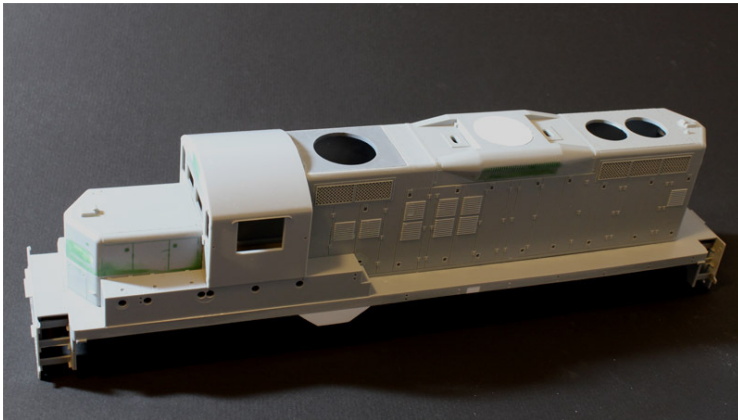
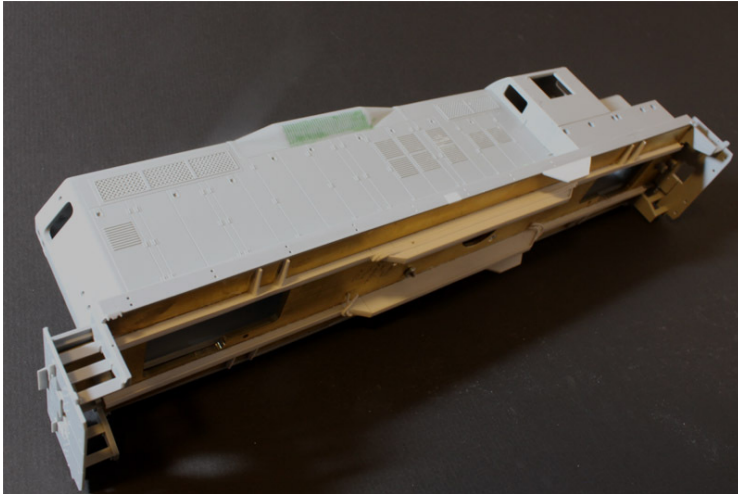
As promised...here are a few pictures for your paroosing enjoyment 😊



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Craig

Jan '11

And one more...



Jan 2011

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Craig

Jan '11

Well...the parts have shown up. So now we should start to see some movement on the assembly.

I just finished up re-mounting the new sprockets on my truck assemblies. Looks like I am going to need to pin my upper sprocket assembly, but the lower one seemed to fit a bit more snug and should be OK without the pinning. Once the pinning on the upper assembly is complete I will be ready to re-assemble the trucks and get them ready for mounting 😊

Dec 2010

The motor is mounted in the housing and will need a few screws to anchor it down.



I did mount my speaker enclosure as well. Got it all sanded and stuffed with speaker grade insulation. I'll be very interested in hearing how this rounds.

Got a few more odds and ends on order (more LED's from Digikey) and will need to put in a small order to P&D for a plastic number board (if they have it) and a newer set of decals.

All in all however...things are starting to move 😊 Like I told Bob tonight, I must be getting anxious to run this engine. I'm starting to make diesel sounds while I am working on this. hehehehehe

Craig

Jan '11

Things have started to come to a screeching halt this week. Did a parts order to Digikey and they shipped the wrong parts. And I'm finding that I can find a decent solution for a number board setup (well...tried scratch building one and it didn't look really good)...so I know have another shell for bashing on order 😊 heheheheheh

I guess I'll start to wire up some of the lights. I ended up getting a 408SR from DCCHobbySupply for my drive control and a Tsunami for my sound control, so now I can start to work on my lighting and know how many functions that I have to 'play with' 😊 Looks like 7, so I will try to light and control as much as I can for this little endeavor.

More to come when I actually have something to show off 😊

Bob

Jan '11

Craig -
We can't wait to see your recent progress, especially how the new fuel tank and speaker came out.

Bob

Jan '11

Jan 2011

Craig -

We can't wait to see your recent progress, especially how the new fuel tank and speaker came out.

As for planning decoder functions, a good place to start is with your handheld throttle. How many unique functions can you easily access from your throttle? You will run out of buttons before you run out of available functions! 😞

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Feb 2011

Next read through the Soundtraxx decoder manual (available online) and decide how many functions you want to devote to sound. Note that the Tsunami really wants 2 functions for the horn (long and short.) Some less-used features such as coupler clank may need to be retired. Since your locomotive has no dynamic brake, you can recycle that function as well.

All this may serve as motivation to power as many lights as possible from the rails. Good candidates might be number boards, ground lights and walkway lights.

Cheers

Dec 2019

**Craig**

Jan '11

Very good points Bob. I hadn't even thought of the sounds 😊 hehehehehe

I think you're right on the lights. Probably would be a good way to configure them.

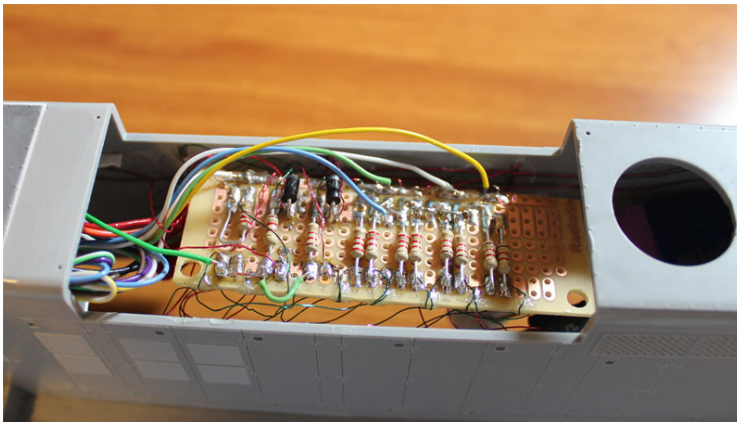
Craig

Feb '11

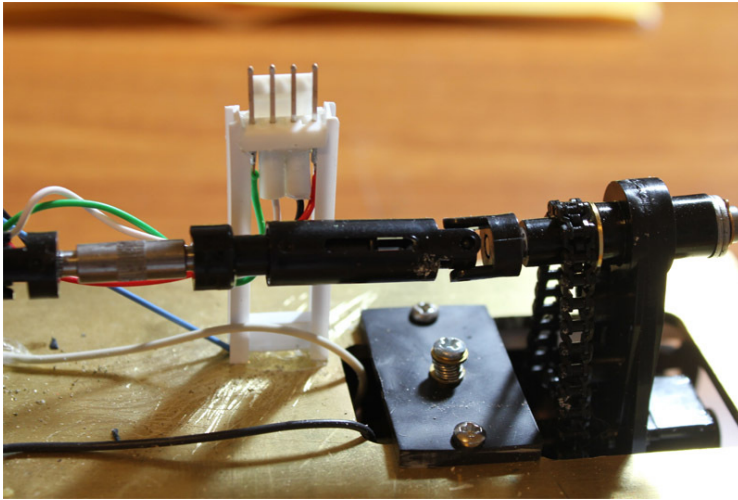
Greetings Everyone,

Well...I figured I'd get off my backside and get another update out on my engine. It looks like tomorrow I should be able to get this engine powered up with DCC for the first time. I have my 408SR installed and configured...and I have my Tsunami ready as well. My thought is that I will use two different short addresses and the same long addresses on the decoders. That way control on the engines should be OK when running normally, but then when I program I should be able to call up each decoder separately. That's the plan anyway...we'll see if it works. heheheheh

Anywho...here are a couple of shots of what the guts look like.



Here is my "PCBA" which houses all of my LED connections. In retrospect I should have done the board a bit different, but I was having a bit of a brain fart at the time I wired everything up so I had to do things this way. I'm keeping my fingers crossed that I kept my connections right. Anyway, on the left of the board is my track power LEDs (walkway lights and number boards). In the middle will be my class lights and on the right are my head lights. I still need to do my beacon, but I will probably do that at a later date (need to find one first).

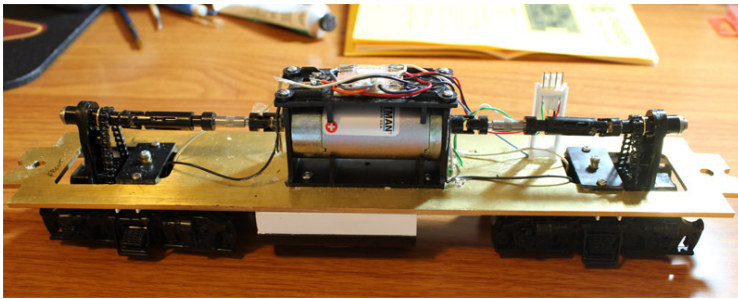


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Here is my rear gear assembly and 'tower' that I have built to connect to my Tsunami. I am using a small IDC connector, for quick disconnect and ease of installation. So far looks like a winner for connections. I have a similar connector for my 408SR too, making it so that with those two connections I can completely remove the shell from the chassis.

Dec 2010



Here is the chassis assembly. You can see my other 'interconnect board' on top of the motor. You can also note the gear towers installed ready for action. I did a power up using DC once I got the trucks installed and everything worked like a champ. The gear ratio is going to make these engines great low speed runners, great for switching.

The test hopefully will go smooth, then I will work on mounting the frame and body and will then finish up my other details. Then on to painting, where I will have a nice surprise to show you all once it is done.

Sorry these aren't better pictures. I got lazy and didn't setup my photo rig.

Have a great rest of your week guys.



Jan 2011

Bob

Feb '11

It is looking mighty fine, Craig! The 4-pin plug is a very nice addition. Is the female epoxied to the shell, or does it float loose? Either way it's a winner.

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Feb 2011

I see wires to the 408 but it isn't clear where it lives. Is it under the front set of radiator fans? Where does the Tsunami go, and how do the speaker wires get to it? More photos, please!

For individual programming you might consider using the decoder lock CVs. With two decoders drawing current the decoders may not read back on the programming track, even with a Soundtraxx programming booster. If so, DecoderPro might help in keeping "track" of decoder programming.

Any chance you can show it off at this week's NCMRC meeting?

Dec 2019

**Craig**

Feb '11

Hey Bob,

The 408 lives under the large 48" fan just behind the cab. I figured that when I install the fan and grates this should give enough air flow to keep things cooler. The Tsunami lives under the two rear fans (and just below my lighting fixture for the back of the engine). The LED's drop resistors are probably over kill, but I wanted to ensure that I wasn't over driving each LED (so I won't have to replace it. heheheheh

I did just try powering it up and I did do some simple programming in Decoder Pro on it. Right now I have the engine labeled as A&O #714. Can you and David provide me feedback as if that number is taken?

Tomorrow I will start playing with the two decoders together 😊 (wanted to tonight, but Jamie is feeling a little under the weather so I don't want to blast her out of the house with my killed bass. heheheheheh) Anywho I would love to hear more of the decoder lock. I did see that you can do this in Decoder Pro so I think that I will probably do that (seems a lot simpler then what I was planning on doing). How do I program with it (what CV's do I have to set) and can I do all of the programming in Decoder Pro?

OH yea...all of the IDC connectors are mated to a free wires female connector. I didn't mount it to the side of the chassis on this go around. I couldn't figure out where to get all of my wiring to fit for the motor area, so I have it sitting horizontal. The Tsunami is sitting vertical (as seen on the small tower in the above pictures).

As to showing it off - if I can get my sounds setup I think that I will bring it for demo on Thursday. I had hoped to enter it in the contest this month, but I guess I'll need to wait until next year. But as far as just showing it off...well...I always like to do that 😊 hehehehehe

Craig

Mar '11

Well...took a little 'mental' day today and am doing some airbrushing on my engine. Started off with a good primer coat and couched up any bad spots with CA. I also noted on those spots I can use the CA as a start for some rust spots, so I am pretty happy with the results.

So far I have around 4 coats on the yellow (not Ziti or High Vis Yellow - but the standard orangish yellow). Probably will try to shoot a few more coats tonight before I put it up for a day so that the paint will cure and harden. Then start the masking to prep for the green (which should go a lot easier vs the yellow).

All of the detail parts have been put on, aside of the windshield wipers, grabs, and MU and Air Hoses. Those will be hand painted and will go on last. Then the plan is to do a bit of weathering, from the posts here I think that I should be able to come up with a just, grim balance.

Jan 2011

Eric - any suggestions on how best to do my dullcoat layer for the C&NW Yellow and Green? Was thinking of putting a drop of white in with the dullcoat as you had suggested in your thread, as that should pop the green, but I don't think that it will do much to the yellow.

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Feb 2011

Craig

Apr '11

Got the green shot last night. Still need to paint up the grabs with the green, but we are getting close.

On the weathering - I'm thinking that I will do something similar to this engine (and as well on the #712 - which I am modeling my #714 after).

rrpicturearchives.net/showPi ... id=1828102

Dec 2019

I looks like the top will be some nice burnt umber and raw umber with a fair amount of light weathering. Just wanted to see if your suggestions may be as well on it Eric.

Craig

BluefieldRR

Apr '11

Craig- yes a couple of drops of white will fade the green and yellow. But if the yellow needs some more made do a thinned white mix with some ammonia and take a cosmetic sponge to dab on a little more fade in random areas.

Test this first on something else so you get an idea of how much the fade will show as it dries.

thx
Eric

BluefieldRR

Apr '11

for the roof I would do a thin wash of raw umber, let it dry and then apply another if needed to get the overall basic look. Then you can go in and focus on some of the dirtier areas with dry brushing or using pigment powders. To get the powders to stay once applied you can airbrush a very light coat of pigment fixer then after it dries apply dullcote to seal.

Sorry I just got around to catching up on reading the posts.

thx
Eric

Craig

Apr '11

Thanks for the info Eric!! Pigment fixer? Where do I pick that up at? Any art supply store?

Craig

BluefieldRR

Apr '11

It could be actually mineral spirits aibushed very lightly to not lose anything you have done with the pigments.

Mig does make a pigment fixer though and that works pretty well:

[migproductions-usa.com/pigments/ ... fixer.html](http://migproductions-usa.com/pigments/...fixer.html)

thx
Eric



Jan 2011

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Feb 2011

Craig

May '11

Well...decaling started today. So far so good. I do think that the decals I got must have been sitting for a while, because some of the decals ripped. So I guess I'll have to cover that with some weathering 😊

Tried a different approach with the number boards which are drying as we speak. We'll see if they work out (keeping fingers crossed). Will work on the truck detail this week. Will try to post some pictures of that work when it starts.

Dec 2019



Craig

May '11

Well...weathering is underway big time. I have found a picture of an engine that I really like and am using that for my base (see the previous posts for the one that I decided to 'base' off of).

I have been following Eric's EXCELLENT instructions and advice for this weathering and I must say that I am VERY pleased with the effects. The roof has progressed beyond my dreams and has a, what I think, perfect fading effect between rust patches and faded green.

So far so good.

AND...I had every intention of uploading some pictures, but I don't have a program yet on my Mac to edit my photos. So I decided that I would hold off, so you guys wouldn't have to view a 5MB file 😊 eheheheheh Once I get a program I'll upload some shots.

Eric—THANK YOU for showing us the ways for weathering 😊 What would your recommendations be on the trucks? I have done a bit of stippling with Burnt/Raw Umber, Indian Red, and some Black/White mixtures for highlights. Do you think it would be worth to do a texturing on the trucks? I don't recall the trucks getting a lot of build up on them, but I do remember them getting really dirty. What are your thoughts?

Thanks,

BluefieldRR

May '11

Craig

I would start with lighter colors first to give an overal base coat. Then build up the dirt and grind with darker oil mixes. You can apply this kind of thick, thenright after take a sponge and dab over the areas to tone them doen and apply a small amount of texture. Always go lite to dark and then let that sit and dry really for a couple of days. At thatpoint compare them to your reference photod and see where you are at

thx

Eric



Jan 2011

BluefieldRR

May '11

Craig,

How goes it? 😊

Eric

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May 2011

Craig

May '11

Funny you should ask Eric...she is DONE 😊 (for the most part - still need to program some stuff, and put a beacon on it when I find one).

Dec 2019

Here are some pictures that I just took outside in the beautiful Colorado sun 😊 (Thanks for the reference for Gimp Bob. Once I worked out the quirks, she worked like a champ).



Thanks again for showing us the ropes on this technique Eric. It was a LOT of fun weathering this just like I remember as a kid. I'm definitely going to be using this process on my HO3 cars, to get that nice beat up look on the wood cars 😊

Here we go...without further adu 😊





Jan 2011

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Dec 2019



Craig

May '11

And one more ...



I can say that I have learned a lot on this engine and I can't wait to see it run on David's A&O, doing a switching job 😊 But I will say, despite the size...I'm looking forward to getting back to my HOn3 empire 😊 hehehehehe

Thanks again for all of the help guys (everyone on the boards - Bob, Eric, and David especially) for the motivation on this engine as well as all of the help moving forward. I couldn't have done it without you all.



Jan 2011

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May 2011

BluefieldRR

May '11

Craig,

It looks GREAT! Excellent job!! 😊

thx
Eric

Dec 2019



David

May '11

Craig-
Looks super. Not sure what I did to be of help, other than provide it a future home to display its beauty. So which switch job do you have in mind? Perhaps the Fillmore Hts job where it's all in-your-face? Among others. Or we could just stick in a several unit lash-up with other layout misfits. Just kidding! So when do you start on an CNW caboose?
David

Craig

May '11

I think that Fillmore would be a great job for this engine, or any other 'local' job David. I think whatever you have it doing will be awesome.
As for the caboose...It might be a while. I'm knee deep in working through contract stuff on a house, then we are full tilt on getting the wedding planning done. I'm going to say it will be a while 😊 heheheheh
Can't wait to see her rolling through Fillmore or any other area of the layout. Will need to get some other stuff adjusted as well on the decoders (need to get the max speed set, etc).

c-and-s-fan

May '11

Hey bro,

Looking good. Those old Geeps often looked like rust buckets out here in the arid mountain west. I can only imagine what one would look like in the humid environs of the coal belt. Makes me glad I didn't have to compete against this model in the NCMRC locomotive contest!

Keep up the good work.



Jan 2011

Craig

May '11

Next year Dave...next year 😊

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May 2011

Bob

May '11

Looks great, Craig!

Dec 2019



Craig

May '11

Thanks Bob 😊 Can't wait to see her run.

Hope you are feeling better soon my friend 😊

Jeff

May '11

[quote="c-and-s-fan"]Hey bro,

Looking good. Those old Geeps often looked like rust buckets out here in the arid mountain west. I can only imagine what one would look like in the humid environs of the coal belt. Makes me glad I didn't have to compete against this model in the NCMRC locomotive contest!

Keep up the good work.[/quote]

[trainboard.com/railimages/da ... O_5828.jpg](http://trainboard.com/railimages/da...O_5828.jpg) Since you were asking

antlor

Dec '19

Craig, do you remember where you got the spark arrestors from?

Bob

Dec '19

antlor

Dec '19

Craig, do you remember where you got the spark arrestors from?



Jan 2011

Bob

Dec '19

He got them from me. I don't remember where I got them, but they were brass castings. They would not be very difficult to scratch build with a little fine brass screen. Here's a closeup of Great Western GP7 #2233 as it was being scrapped. The screens are missing.



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Dec 2019

Dec 2019



Bob

antlor

Dec '19

Bob, I have been looking for them lately, nothing except i did find some that can be printed by Shapeways (different company/person from the one i shated about the step lights). I will see if I can find them again.

Who has mess that is pretty small?

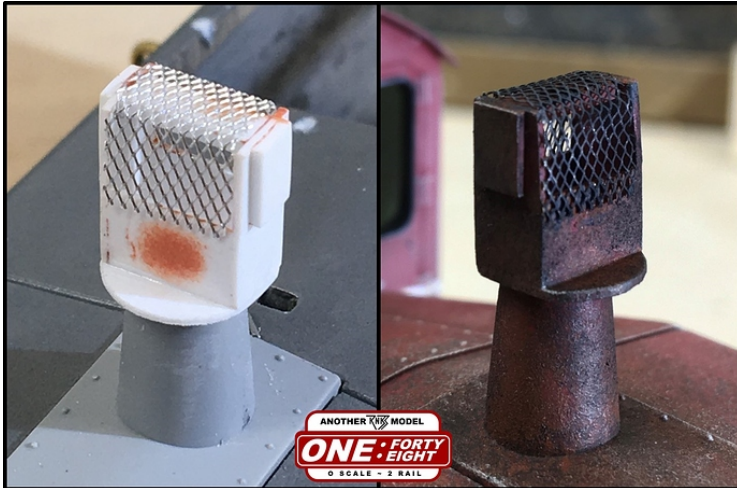
Anthony

rnb3

Dec '19

For my locomotive fleet, I have chosen a very similar arrestor, the box version instead of the triangle one.

They were pretty easy to scratch build. I made them out of styrene and some very fine mesh. Unfortunately, I don't know where I got the mesh, it was in my scrap box. The mesh is too large, but the closest thing I had, and I think it works OK. I scaled mine up using an H.O. detail casting.



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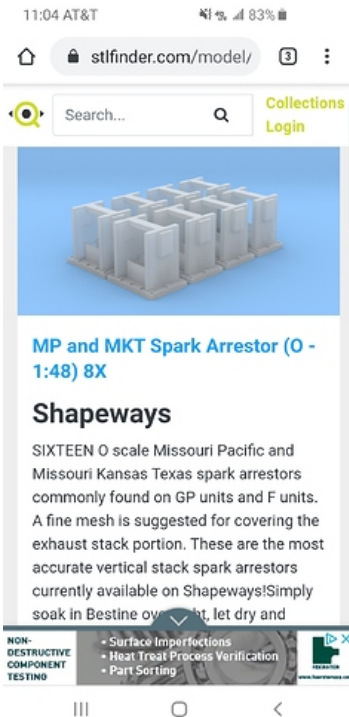


antlor

Dec '19

Rick, those look great, even if the mesh is a little over size.

Here is a picture of what i found on Shapeways.



I am searching for mesh also but i think i am going to order these to see how they are...

Anthony



Jan 2011

Bob

Dec '19

Anthony -

The Shapeways parts look to me like the ones that were on the ex-ATSF GP7 with liberated exhaust, minus the screen in both cases. The screen would have been triangular in shape as we can see the welded bits that originally kept it wrapped around the upper tube.

Two industrial sources of metal screen in various materials:

1. McMaster-Carr on the web. If I recall they sell smaller pieces of filter screen for specific applications.
2. Grainger's, also on the web. I bought a big sheet of stainless mesh to simulate O-scale chicken wire from one of their vendors whose product was listed on Grainger's web site. Think sold by Grainger's, fulfilled by X, as on so many Amazon "products."

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Dec 2019

I have *no* idea where you live, but you might also find small round discs of screen wire at a tobacco or pot shop (I live in "Rocky Mountain High Colorado.") There might be something that keeps ashes from entering the stem of a tobacco pipe. Frankly I've never been inside either one as I don't smoke anything. I'm just trying to think outside the box.

Dec 2019



antlor

Dec '19

Bob

I think I will order some to see how well they look. I found what I think is fine mesh screen on ebay. It says it is (stainless steel 30 mesh 600 micron filtration fine wire filter). I will also look into what you suggested.

I live in just outside San Antonio, TX, No pot shops here lol, maybe a tobacco or cigar shop around but nothing close. I was thinking I have seen fine mesh in old cell phones but I don't know if the pieces are big enough to cover the arrestor.

I do like the ones Rick did. I guess coming from HO where almost everything is available to O where not much is is the challenge. It was harder when I was a kid in N trying to do details, nothing hardly at all available... I know there are some parts available and at least those help out. The guy, (his name is Chris) that has the 3D company AS3D is willing to do almost anything just needs measurements.

I am thinking these will work for my freelance road (Kansas Pacific) GP9's for now. Thanks for all the feedback.

Anthony

Bob

Dec '19

Anthony -

Please stay in touch and share with us photos of your final build. We'd love to see how they look.

All the best!

Bob



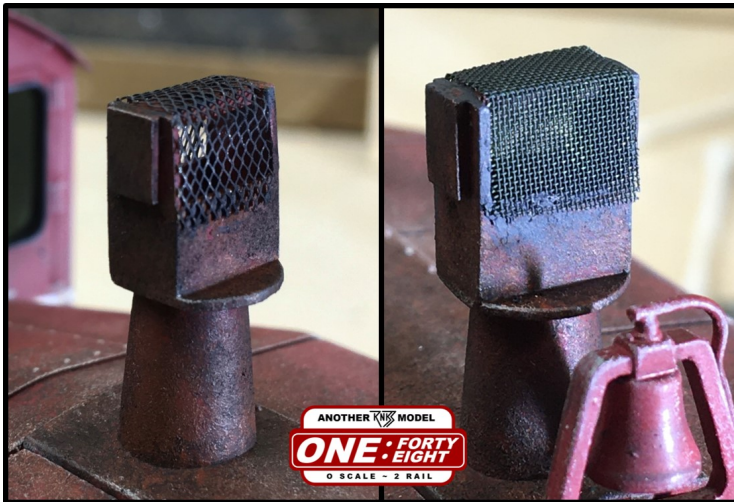
rnb3

Jan 2011

Dec '19

Ok, last night I re-did mine! I scrounged around the shop here at work and found something that I think is a little better. Basically, I found a throw away, unused fuel filter insert. It has a very fine mesh. I cut it apart and replaced they larger mesh already on my arrestors.

Here is the before and after...



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Dec 2019

Dec 2019



rnb3

Dec '19

I also did a little more research. I started by looking for fluid filter material. I found a company Utah Biodiesel Supply.

<utahbiodieselsupply.com> Look under filters; stainless steel. They supply specialty products suited to the biodiesel production, coffee brewing, beer brewing, and (good call Bob!) marijuana production!

They have a lot of very small mesh options with pictures and some good tutorials on what is what. Fun fact; the smaller the micron number the smaller the mesh! Looks like the fuel filter mesh I found is about 150 to 100 micron in a straight weave.

Looks like 6 x 6 sample sheets and standard 12 x 12 sheets. They are out of Clinton, Utah and their website has a standard shopping cart; major credit cards and PayPal.

antlor

Dec '19

Very cool, I like the way the fine mesh looks, though the other one looked good too. Thanks for the link... and knowledge on the size difference...



emdalco01

Jan 2011

Dec '19

Hi Craig,
Did you power this loco with the standard P&D Hobby GP9 repower mech kit?
If so did you choose brass or plastic trucks?
Is the brass chassis a commercial item or did you custom make it?
Regards Daryl Blake

44 / 47
Dec 2019



It's been a while since we've seen Craig — their last post was 10 months ago.

Dec 2019

Craig



Dec '19

Hi Daryl.
Yes it was the standard repower kit. It was the brass truck option if memory serves me correctly.
The frame was the brass frame that P&D (or was it a Des Plains frame) did many moons ago...that is no longer available.
I hear the Proto 48 guys may have new repower kits out there...but I haven't found those yet.