7th Heaven

Aus7 Modellers Group Inc.

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In this Issue:

Aus7 Modellers Group Inc.

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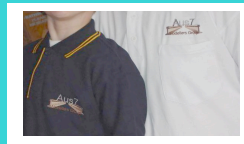

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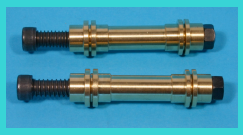

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One Modeller's Opinion

Nitpicking: the ultimate form of admiration

by Chris Harris

A recent model exhibition included a model competition. There were about a dozen entries, some of which were scratchbuilt, some of which were heavily kitbashed, but all of which incorporated a very significant element of creativity, as well as modelling skill. One of the entrants invited me to pick up and have a close look at his mainly-scratchbuilt model and I took the opportunity to ask him how he had gone about developing the plans for the model and then building it. To me, it was a beautiful model: detailed, accurate, realistic and with that gravitas that creates the illusion that you are looking at a shrunken prototype rather than a model.

While we were admiring the model another modeller came up to us and had a close look at the model as well. After a minute or two, he said:

"A very good model, but do you know that the watchamacallits on these were on the opposite sides to the way you have them?"

"Yes", was the reply, "I saw a close-up photo after I had installed them which showed that they were on the wrong sides but by then it was too late to do anything about it – pity I didn't see the photo before I put the watchamacallits on."

"But it's a very good model" repeated the critic as he walked away.

I thought about this little exchange later. At the time it had seemed to me to be a bit churlish of the critic to have said anything at all and I felt a bit awkward and slightly embarrassed for the builder who had to have his one mistake pointed out to him, and in front of a third person (i.e. me, who incidentally would not otherwise have realized that there was anything wrong with the watchamacallits. It would have been just as easy for the critic to keep the comment to himself or, if he really had to say something, to wait until I had gone before pointing out the mistake to the builder.

However I wonder whether people sometimes find themselves confronted with a model which they admire and which they suspect or realise is superior to anything they could build. It might make them feel a bit uncomfortable – even possibly creating vague feelings of jealousy and inadequacy. If they find some inaccuracy in it, no matter how small, then pointing this out to the modeller might be a way of compensating for these feelings: of subconsciously asserting an element of at least equality, if not superiority, over him. It is a way for them to salve their ego in the face of something which makes them feel slightly inadequate. The bigger the audience when they identify the mistake, the better the psychological benefit from doing so.

I am never the subject of such pedantry because, firstly, nobody inspecting any of my models ever feels that he could not do better (quite the contrary) and, secondly, my work normally incorporates so many mistakes that anyone wishing to point them out would find it hard to know where to begin. However should I ever produce a model which prompts someone to point out a mistake, particularly if he does so in front of one or two other people, then I will feel quite chuffed, even flattered, because, when you think about it, nitpicking is the ultimate compliment !

7th HEAVEN

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On The Cover

The KF and its cable reel load sit in the siding at Tylers Crossing. Find out how it was done in this issue.

Hitting the Road

Building and Converting the Austin K8 3-Way Van by Classic Commercials

Trevor Hodges

Background

I'm a railway modeller, right? I'm in this hobby because of the trains, right? So can someone explain to me why it is that the very first kit I ever purchased in 1:43.5 scale was for a Bedford flatbed truck? At the time I made this "fatal" purchase, I had been semi-reluctantly dragged along by my friend Stephen Reynolds to an O-Gauge Modellers Workshop. These events were run annually at Thornleigh, in Sydney.

Over the next couple of years, as I made further O-scale purchases and eventually bought a couple of railway rolling stock kits, I became aware of a kit for a beautiful little Austin van, manufactured by Classic Commercials, that kept turning up for sale on a retailer's table at successive Workshops. I would see the kit, open up the box to examine the contents and then put it back down again, reasoning that it was too "English" for my needs, in addition to it being far too expensive. This went on for a year or so until one day, the retailer, growing heartily sick of seeing me prevaricating, offered a hefty discount off the purchase price. Never one to look a gift horse in the proverbial, I jumped at this bargain. So home I trotted, the proud owner of an Austin K8 Van in 1:43.5 scale. I had no immediate plans for its use on my layout so into the cupboard it went.

An Empty Spot On the Layout

My layout, Queens Wharf, was always going to include a dairy railway siding modeled loosely on the one at Morpeth. The industry for this siding would be a low relief building – or more accurately, a pair of buildings - being about 5cm deep and built hard up against the backdrop in the right hand corner of the layout. Stephen Reynolds comes into the picture again at this point in the story by volunteering to build the main brick, dairy factory warehouse. While I normally like to build the structures on my layouts myself the gift horse principle came into play again because, at the time, I was struggling to get the layout ready for an exhibition so I took him up on his offer.

A couple of years later, as I was getting the layout ready for another exhibition, I finally got around to building the second structure in the dairy factory "complex". The prototype was constructed from fibro and corrugated iron and sat adjacent to the main brick warehouse. The model I built of this second building is a faithful reproduction of the structure which still stands

at Morpeth, the town which has been providing me with my modeling direction for the last nine years; however I altered reality ever so slightly by constructing a paling fence on the rail side, creating a small yard. I felt this provided the building with a more interesting “face” on the viewing side. I now had an empty, fenced yard at the back of my butter factory; what was I going to place in it to provide a little interest? It didn’t take me long to drag the Austin van kit out of the cupboard and decide that a model built from it would make a perfect candidate to fill that empty spot.

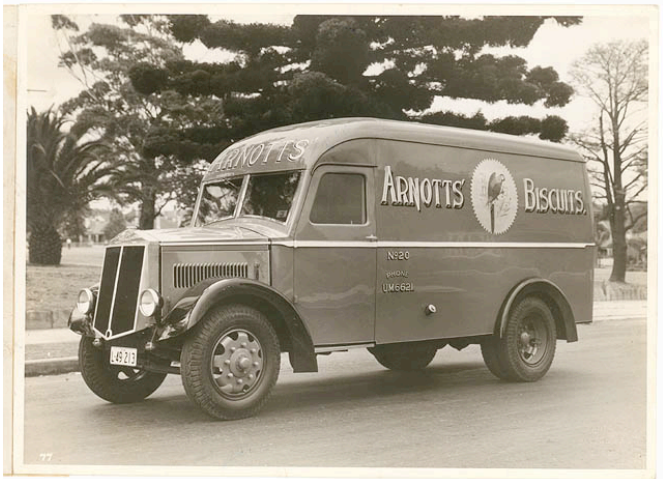
Historical Research

I have childhood memories of daily, home delivered milk. The milk would arrive in one pint glass bottles with tin foil lids. If you were fast enough, and managed to beat your sister and the birds to the punch, you could have a bowl of cereal with a little bit of cream that sat at the top of the bottle. Unfortunately these fond, childhood memories proved inadequate when it came to providing a way of localizing the model I was about to build with an appropriate paint scheme for a milk van. A quick check on the Internet soon filled the void and I’ve included a few of the photos I found through searching the web. We’ve published Internet addresses for quite a few Australian photo sites in past editions of 7th Heaven, so I won’t repeat that information here; each state library has similar facilities and most of these are linked. The Newcastle Regional Library database is particularly good for locations such as Morpeth, which happens to be just north of Newcastle, and is regularly updated. I’ve included the three accompanying black and white photos because they either provided specific information on the paint scheme and markings I used on the model or for more generalized background information on the look and feel of vehicles from the post war era.

The photo of the Arnott’s van provides what I feel is a perfect example of the corporate pride shown by companies in the first half of the 20th century. The fire engine red and black colour scheme, and that corporate logo, qualifies as a true Australian icon. While I needed a milk van, not a biscuit van, I was sorely tempted to paint the Austin van in the Arnott’s scheme and find an alternative milk delivery van.

I’ve included the photo of the two trucks standing outside the Dairy Farmers building for their simple historical interest and their connection to the railways. That Dairy Farmers thought this “event” important enough to mark with specially prepared signs and a photo came as a bit of a surprise to me. However if one stops to consider the crucial role played by fast transport and modern hygiene standards in the delivery of milk then this corporate promotion begins to make more sense. Perhaps what I found intriguing was that a company so reliant on quick and timely delivery would think its use of the railways worth publicizing. How times have changed.

The Dairy Farmers van was more in keeping with what I needed; however there was the issue of Dairy Farmers not being a local Newcastle company. Oak was the dominant local Newcastle dairy company and this made a Dairy Farmers van in the Morpeth area less likely. However I couldn’t find a photo of an Oak van so I thought a little modeler’s license would be ok on this occasion. The markings and numbers shown were just what I needed and I printed a set of decals on my Alps printer to match these. I had to guess at the colour on the wheel hubs, however I decided that a nice shade of “royal” blue would be a pretty fair guess. I didn’t have time to replicate the advertising poster on the door or the bottle shaped object to the left of the door. I may get back to these later.

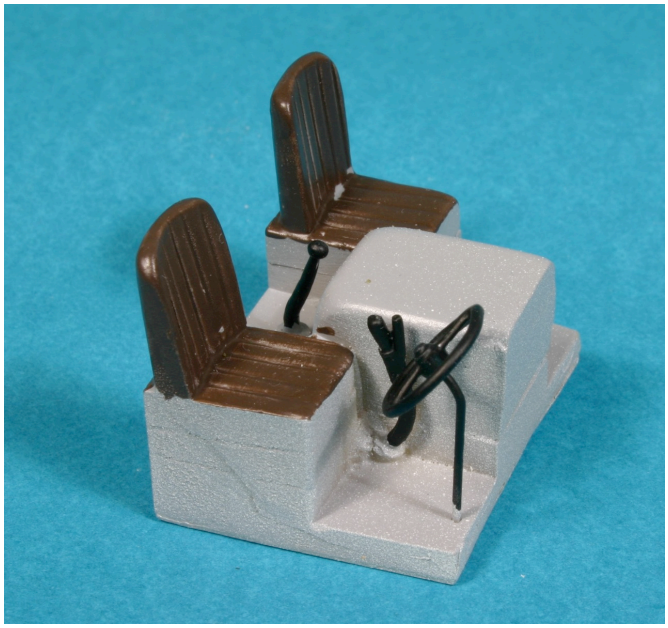


Building the Model

The contents of the box is a collection of nicely detailed castings in resin, white-metal and silver. Yes, I kid you not; the door hinges are cast in silver. There is also a small etch which provides details such as window surrounds, windshield wipers and the engine compartment grill. After familiarizing myself with the instructions, I spread the parts from the box out on my workbench and checked the kit was complete. The body is a beautiful, single resin casting which makes constructing this kit a breeze. I cleaned up the parts with files and some wet and dry paper. This task should be approached carefully when it comes to the body as the resin is quite soft and it would be easy to take off too much material. Once satisfied that the various castings were cleaned of any flash, I washed all the parts in warm soapy water and left them sitting on paper towel to dry.

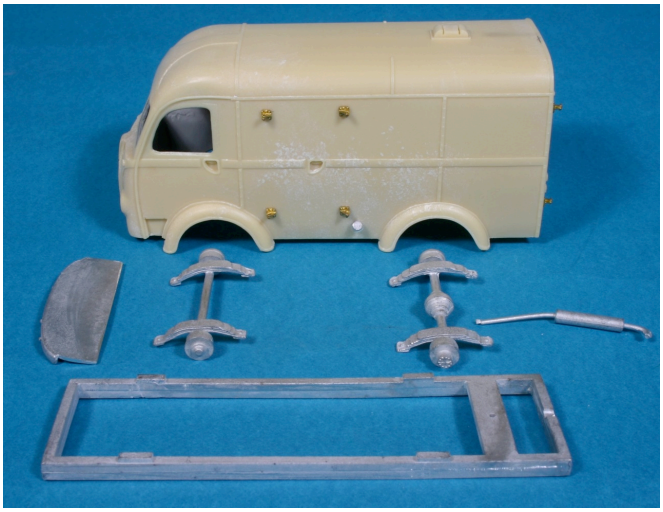
I painted this model as I progressed, especially with regard to the interior details. I wasn't overly concerned about getting interior colours that exactly matched the prototype; all I wanted was a general impression of a credible interior.

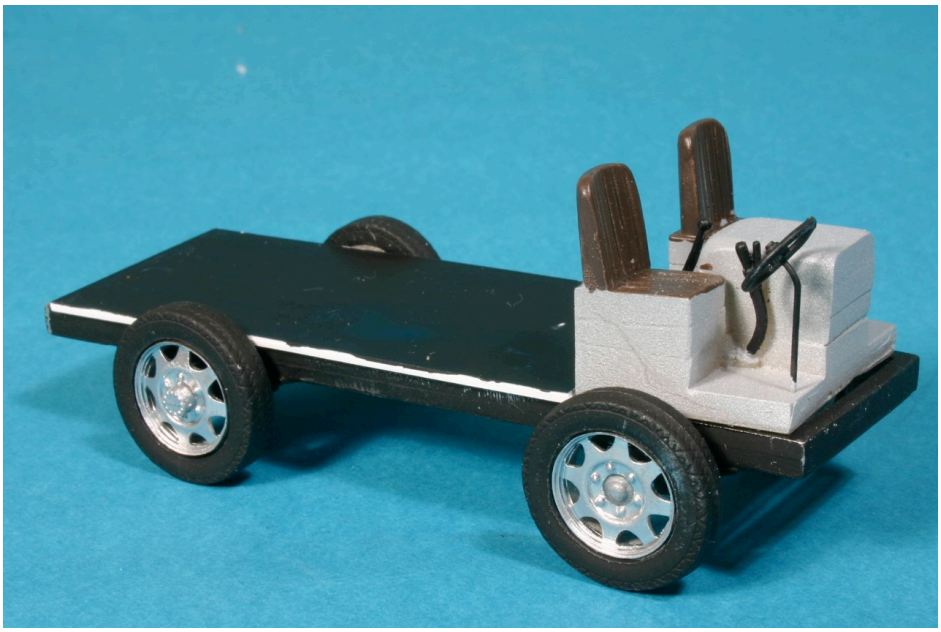
The driving compartment is provided as a casting of the seats with some white-metal details. I assembled these and painted them with some grey primer from an aerosol can. I picked out the seats in a dark brown and the steering wheel, gear lever and brake handle in black. I put this assembly aside ready to be installed later.



I followed the instructions and installed the door hinges and fuel inlet next. The fuel inlet and cap are provided in white metal and the hinges in silver. I don't know the precise reason for the use of silver in this instance, however I do know enough about the manufacture of these types of kits to know that the castings are sometimes done by companies that specialize in castings for jewelry. It's more than likely that the use of this material is explained by the need for a high level of detail combined with strength. Once these parts were fitted I moved on to the chassis.

The chassis and wheels are a set of highly detailed castings in white-metal. I assembled the chassis using low melt solder and then painted this assembly with grey aerosol primer and then black. I sprayed the wheel hubs in silver and the tyres with a suitable tyre black.
I then glued these together and attached them to the axles. I glued the seat assembly to the chassis making sure that it was positioned correctly so that it would fit inside the body shell. I didn't like the fact that there was no "floor" in my van's cargo compartment so I cut a piece of styrene I had on hand to fit the space and painted this black. I then glued this in place. I did not attach the chassis to the body at this stage, I wanted to paint the body first.





Before painting the van's body I cut the window surrounds and grill from the etch and filed these until they fitted neatly into their assigned locations and I then trimmed some glazing material to fit the window openings. I set these aside to be fitted after painting was complete. Next I drilled a hole above the wind shield for the wind shield wiper; there is only one on this van, on the driver's side. I sprayed the van's body in white from an aerosol can and picked out the wheel hubs by hand in an appropriate blue from the Humbrol range. After the paint had dried I assembled the model and applied the details that had been set aside earlier using superglue. I then applied the decals I had generated for the exterior and gave the whole model a coat of clear finish, although I accidentally managed to rub the decals away in a couple of locations before I did this. I finished up by fitting the glazing and then gluing the chassis into the body.

I wanted the van to have NSW style number plates so I purchased a set of etched number plates from Keiran Ryan Models. I understand that the Waratah Model Railway Co also produce etched number plates in 7mm. I don't know much about when the current yellow and black paint scheme for number plates was introduced, however I'm 47 and have no memory of an earlier "standard" colour scheme, so I went with what I know. I chose two suitable plates and soldered two posts onto the rear of one of them using .5mm brass wire. These posts would be used on the front of the van as a support bracket for the plate on top of the bumper. I then sprayed both plates with a suitable yellow colour from the Humbrol range and picked out the numbers with black, felt tipped marker pen. I installed the number plate with support posts onto the casting of the front bumper and the back plate was glued onto a suitable location on the rear of the van after the van was painted.

Conclusion

I'm quite proud of this little van and I feel it adds a visual clue to the viewer that this is a layout set in NSW. The van may not be entirely accurate for its prototype but what are my chances of getting a suitable van in a Dairy Farmers livery off the shelf? What this exercise also goes to show is that you never know what use you may find for a kit. I enjoyed building and adapting this kit and it's an exercise I would recommend to any modeler.

Drumming Up A Storm

Stephen Reynolds

After making the decision to enter a KF in the Waratah Model Railway Co. Modelling Competition I had to come up with a way to make what is basically a flat timber deck with four wheels under it stand out from the rest of its competitors. This was the challenge that drew me to the KF.

Seeing photos of the KF in John Beckhaus' "Railway Freight Wagons of New South Wales" and a very good shot in "Day Of The Goods Train" by R.G. Preston convinced me that while lacking substance it did not lack character. Again, when a photo of a model of Lance Pymble's KF appeared in Seventh Heaven Journal number 18 it also confirmed that it had possibilities.

Yes, I could complete the Waratah wagon to the best of my ability and perhaps add a little more detail and the timber barrier around the side of the decking but then again so could another modeller. I also knew that my modelling skills in as far as building a piece of rolling stock would not stack up against other modellers' more accurate work. From past experience I have learnt if you want to be competitive in these competitions you need a bit of "showmanship." So how could I make this Plain Jane stand out from the crowd? The answer of course lies in the load that rides on this conveyance.

I remembered a series of articles in the English magazine Model Railway Journal by renowned modeller Martyn Welch titled Wagon Loads. In number 72 of M.R.J. Martyn`s subject for the load was a wooden cable drum. The photo of the prototype that accompanied the article showed the drums loaded in the equivalent of our D/S wagon and no doubt the NSWGR first choice would be to use the same to transport such a load. I also could find no prototype evidence of how these drums were transport on the NSWGR. So using modeller's licence I made the decision that one of these wooden drums would make an ideal load to sexy up the KF.

First a little on the prototype. The only experience I have with these drums has been with their use in the coal mining industry but I am sure they have/are used in other industry as well. The wooden cable drum is like so many other things these days and seems to have fallen victim to the use of recycled plastic. There seem to be fewer and fewer wooden drums around, having been replaced by drums of similar size but manufactured out of plastic. The drums are used to protect and convey high tension electrical cables and a drum the size I have chosen to model would contain a cable that is capable of carrying 11000 volts. One cable would be on each individual drum and could be up to 200 metres long with a large plug on each end, which is attached to the cable at the mines surface before going underground. This is then joined to the next cable as the supply of high tension power is advanced into the mine. The cable is covered in a

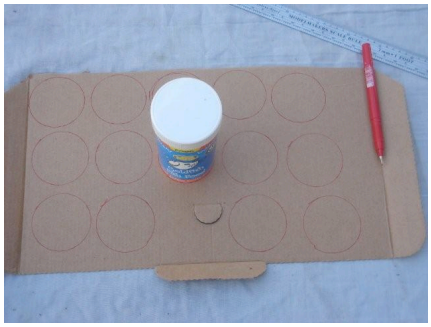
protective coating of plastic that is always red in colour and under this covering is a wire sheath encasing the individual wires. The cable is very heavy, not very flexible and needs to be protected from damage at all times, hence the need for it to be transported on a drum. The end of the cable protrudes through the drum from the inside to the outside so it can be anchored before the cable is rolled on to the drum. This small feature is well worth modelling.

The prototype drum lies at the pit-top

Let's get started on the model. Unlike the model in Martyn's article in which he chose to model the drum out of styrene I decided to use wood i.e. scale timber because nothing looks more like wood than wood. I purchased a packet of Northeastern Scale Lumber # Hoscal41211 which is 12" x 4" in HO that equates to 6" x 2" in 7 mil. I prepared the timber strips by first painting them a light grey. You can use any water based paint for this first step or as I did ordinary household plastic paint. Wait until it dries and then sand to remove some of the grey and expose the natural timber colour underneath. Next stain the timber with a mix to your own liking of metholated spirits or rubbing alcohol and Indian ink. Once dry I lightly painted each strip with Tamiya Acrylic paint J N Green # XF-11 to give a more finished look as I wanted to apply lettering. A weathered look was achieved by sanding each length of timber, taking some of the paint off back to the stain and in some places back to the original timber.

Set the timber to one side while we construct the inner core of the drum. I chose to use cardboard discs laminated together but you could use any material that is compatible with the scale timber. After thinking about the dimensions I chose 7 scale feet in diameter by 4 feet deep but you could choose any size within reason as the prototype came in all sizes but after further investigation I feel 6 feet may have been the maximum diameter, so I could have erred there.

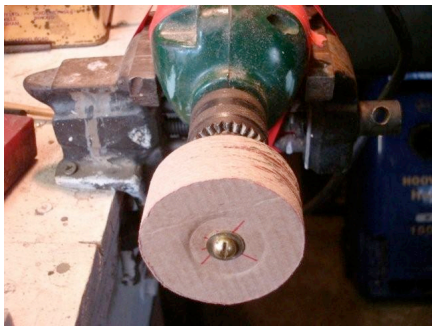
I used cardboard from a shoe box and a fish food container worked out well for the right size radius in 7 mil (it's all high tech here). In all twelve cardboard circles were needed to gain the 4 scale feet in depth. These were cut out then glued together using PVA. Once the PVA has set and the cardboard has become a solid core find the centre and drill a ¼" hole through it. Do not worry if your hole is not exactly centre at this stage, but as close as possible, as the timber covering will hide any anomalies.



Cardboard circles drawn on a shoe box.

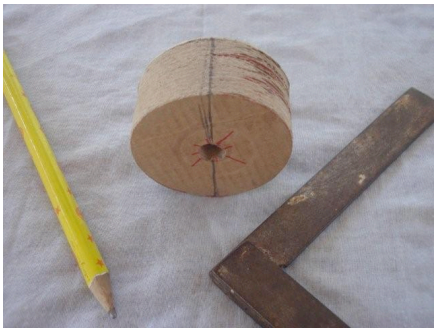
The discs ready to be assembled.

For the next step, if you have a lathe well and good but if you're like me and don't have one and would not know how to use it anyway, use a power hand drill in a vice. Insert a bolt just smaller in diameter than the centre hole, tighten the bolt up in the chuck of the hand drill as you would a steel bit, place the hand drill in the vice and secure. While the core is rotating sand your discs smooth and to an even circumference. Don't forget to wear your safety glasses.



The cardboard core in the drill.

Next apply the timber. First draw a line at 90 degrees intersecting the centre hole on the drum using a set square. Use this line as a guide for your first length of timber to make sure it is perpendicular.

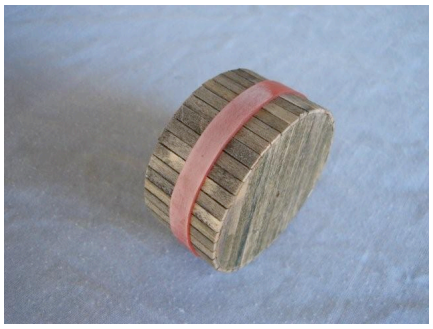


Diameter line drawn through the centre of the hole.

Cut the timber longest length first and work your way out reducing the length as you go but making sure all pieces are longer than the outside of the drum. Use PVA glue to apply the timber as it's slower drying gives you time to adjust each length and the timber adheres to the cardboard very well using PVA. Once dry I sanded smooth to the outside circumference.

Start gluing timber following the centre line.

Next I applied the cross timbers that enclose the drum. These are prepared the same way as the other timber but these were not painted in the finished coat. I used a rubber band to apply pressure to these as the PVA dried.



The cross timbers have been added.

That finishes the timber and we can now move on to the metal hardware. There is a square plate in the middle of these drums and this is represented by a square of styrene. The first one I made was 12 inches square but this seemed a bit small so the next one was 18 scale inches square but this seemed too large so I sanded it down to a size I was happy with. A ¼" hole was drilled in the middle of this and smaller holes to accommodate the four bolt castings

Both sets of square plates. I chose the larger.

were drilled in each corner. Grandt Line detail nut and bolt castings were used. I was going to list the size of the ones I used but looking at many of the prototypes I would use any that you have in your junk-box, the larger the better and the castings with the square washer on the back would do admirably.

Weathering was completed with the application of weathering powders in various rust colours. This part of the project went quickly because I had already weathered the timber at the start.

The same could not be said for the lettering. Winn Colliery signage was made up out of individual decals. Madness, enthusiasm, devotion, competitiveness, call it what you like but it's the only way I know you can achieve a unique individual model.

Once the lettering was done two or three washes of Indian ink thinned with rubbing alcohol about 12 to 1 was applied. Once dry a dusting of talcum powder tied everything in.

Well that about brings us to the end. Next time we may have a go at constructing a model of an empty drum! Until then.

Showcase

There is no Showcase this issue because no one has sent in any photographs! Surely someone out there has just completed a model they are proud of.

Send in a photo so we can all admire it.

Team Efforts Continued

John O'Neill

The last issue related the adventures of the 50 class construction group as they met the challenges of loco construction. Now the saga continues!

Of course, the novices are not aware of the work ahead, yet the master and his offsider, having completed four 50s between them, are only too aware of the struggles 'just down the track'. The master senses danger, with the risk of distraction looming in what is rapidly becoming a marathon project. So, the surprise from the last session is our homework. We are nine months into the project and progress is far too slow – even allowing for the overseas holidays. The phrase 'forcing the pace' is being heard often. This homework can be achieving a specific milestone, or even the sourcing and securing of materials and tools required to complete future aspects of the 50. Either way, the pressure is on and the novices are under the gun.

Novices one and two had to complete the tender assembly. As previously mentioned, pretend novice three has established a record in completing numerous tenders and is resting on his laurels. Novice four missed the last session, undergoing a bearing replacement in the workshops. It is unlikely this excuse will be tolerated for long. But it is not just extracurricular activity that is needed. Our modelling sessions must change and as a result, very specific tasks are now undertaken as a team. To address the instructor - pupil ratio imbalance, the offsider is introduced and there is less time to hide quietly. Gone are the instruction reading sessions in the sun with a coffee!

With assembly line precision frame assembly becomes the focus for session six. Frame spacers appear from everywhere, are adjusted – front one has a large section removed (to establish clearance for the cylinder retaining nuts on the inside of the frames), middle is notched along the top (to clear the air pipe between internal air cylinders) and the rear spacer is used as

supplied. Presto, three frames assembled. HINT – get yourself a gas torch and watch with delight as the solder runs into place setting the frames rock solid. It also helps to have more than two hands available.

All necessary holes were drilled, covering both the brass and stainless steel style frames – note to those with SS frames, use new drills, reasonably high speed and pressure whilst drilling and do not let the drill bit stop whilst drilling. The holes for pickups also are enlarged accordingly. A drill press should be considered mandatory.

Internal smokebox enlarging was also completed, to house the speaker – yes we ARE all having sound. This allows work to commence on the boiler assembly etc. You will need a mental break from the frame work, and this helps by having a variety of tasks ready, as working on the motion can be laborious and challenging.

Progress on rods was inspected. The lamination process is time consuming, but with six to assemble, they get easier and faster. Use skewers and compression tweezers to hold the layers in place. If you're not happy with alignment, do it again. Get yourself a set of cutting broaches as the rod holes need to be cleaned out (solder) and enlarged slightly for the crankpins. Enjoy the result of cleaning up the rods using a fibreglass brush. Remember to run solder into the top and file even, to hide the layers from view.

If you made it this far, cross your fingers and assemble the centre axles and wheels, fitting the rods. When it binds, put the assembly aside and take a deep breath as the master advises you are close to a significant milestone and patience and perseverance is required. Getting this aspect right will mean a reliable loco.

Session five ends with four frames assembled. Axles and wheels are in place for novices two and three (pretend) but both having interesting binding issues with their 0-4-0s. Novice one is smirking in the corner. He arrived with an 0-8-0 complete with rods and was given the thumbs up by both master and offsider for 'close to perfect'. There is always one in every class!
By the way, it is critical that every hornblock, axle and wheel goes into a marked separate container – and is returned to its correct position in the frame. You WILL remove and replace them many times, best not to mix them up.

Homework from this session is to get the rods on, work out the binding issues and get the cylinders assembled and ready for fixing to the frame, i.e. 'get on with it'.

CONTRIBUTIONS

All members are invited to submit articles, reviews and other items for publication in 7th Heaven.

We are short of material for future issues so if you have something to contribute please contact the editor.

O scale Health and Safety

Paul Chisholm

Model railways probably don't rank highly in the scale of hazardous pastimes but many of the processes we undertake and materials we handle regularly as part of our hobby have the potential for injury or ill health. What follows is not a long essay on all the likely hazards, as that would fill the whole mag, but a few reminders that might make you think twice about some of your current practices and consider the possible dangers in many.

- Wear safety goggles when drilling, grinding or any process that could fling loose objects or materials into your eyes.
- Secure objects being drilled or sanded.
- Use sharp blades not blunt ones.
- Cut on a firm non-slip surface and keep fingers away from the path of the blade.
- Wear eye protection when using superglues.
- Use a face mask and eye protection when sanding or cutting brass parts from sprues or cleaning up eurethane castings. The dust created can be inhaled or irritate the eyes.
- Use a proper filter mask when spray painting and do so in a well ventilated area.
- Use MEK in a well ventilated area or set up a small fan to direct fumes away. It is not highly toxic but the vapours can cause dizziness, headache or nausea. It is an eye irritant and the vapour can be explosive.
- Treat all soldering irons as potentially hot until you have checked otherwise.
- Cover all electrical outlets with a blank plug to prevent wire or tools entering the active pin.
- Cover power outlets, transformers etc. when using water in the vicinity, such as for scenery work.
- Don't smoke while using flammable substances.
- Use tools correctly e.g. screwdrivers are not small chisels.

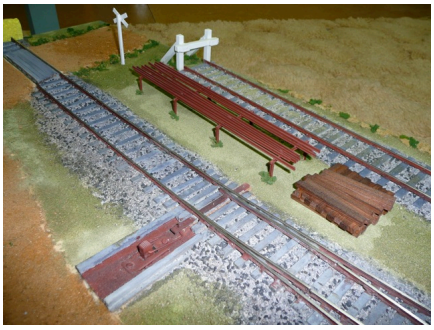
These are just a few examples. Try to adopt a safety mindset and consider the potential harm that could come from your hobby activities. There aren't enough 7mm modellers around now so we want to preserve as many of us as possible!

So You Don't Have Room For A Layout!

Bruce Lovett Continued from issue 19

At this stage control of the points (or turnouts) should be undertaken. If you are using Peco track and points you can get away without point motors and rely on hand operating the points, or you can go the whole hog and cut holes in the plywood to clear the point motors before you lay the points and have the motors underneath. This method would require a small control panel for mounting the switches, but think of the looks on your non model railway friends faces when you change the points without touching them!

For other brands of track or hand laid, double pole double throw slide switches (DPDT) are ideal for this purpose. Drill a small hole through the handle of the switch and use a piece of springy brass wire to connect from the handle to a hole in the slide bar of the point. Moving the switch handle back and forth changes the point. The point can be "back wired" using the contacts underneath the switch which not only ensures that a loco will not stall on the point through lack of current, it also directs current to the straight or curved track when you throw the point.



At long last you can run a loco after hooking up a controller. And run it you should to test not only the track, but your locos and rolling stock and how they fit into the layout. Now is the time to fine tune the track and electrical system before progressing to the next stage.

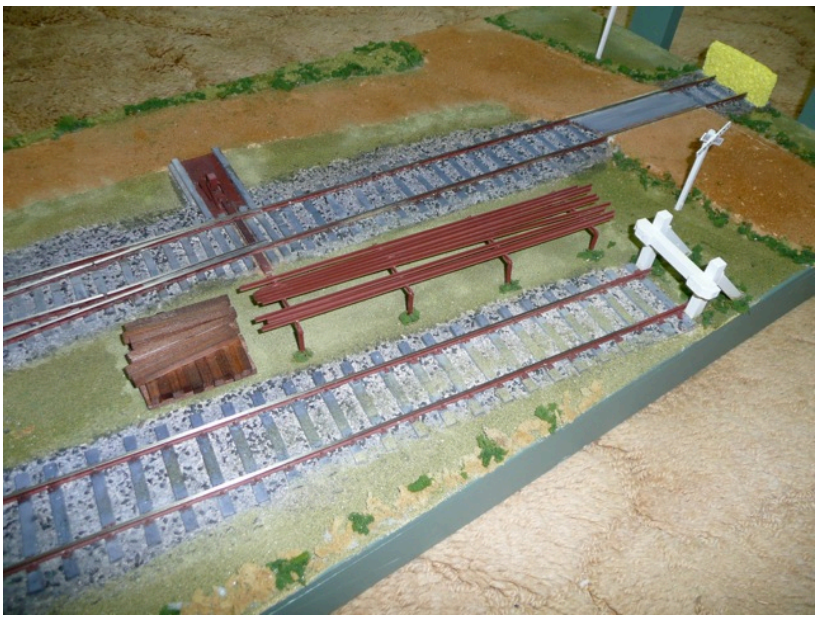
All timber ages when exposed to the elements, losing it's original colour and turning different shades of grey. This is very noticeable with wooden sleepers, the colours differing between mainlines, branch lines and sidings,. However, they are basically still grey. If you have used flexible track with plastic sleepers or hand laid wooden sleepers I would recommend painting them with a light to medium grey flat solvent based undercoat slightly thinned with mineral turps. The solvent based undercoat, apart from drying dead flat, tends to adhere better to plastic sleepers due to it's solvent content.

After the undercoat is dry, to give the rail a more realistic look, paint both sides with a rust coloured paint. I use Red Oxide Metal Primer slightly thinned with mineral turps which really has a rusty used look. Be careful that you do not get any paint on the contact surfaces of the point blades and stock rails. Clean off the tops of the rails when the paint is dry.

Ballasting is by the tried and true method of pouring on the ballast with a spoon, levelling it with a brush, then using a piece of 3" by 1" timber about 6" long on the flat tapping along the track. This tapping consolidates or settles the ballast slightly below the tops of the sleepers. Saturate the ballast with a fine mist of water with some liquid detergent added. The detergent actually "wets" or coats every piece of ballast with water so that the glue will adhere. Mix two parts acrylic glue to one part water and carefully pour down the centre of the track and both sides. If you have thoroughly "wet" the ballast the glue can be seen spreading right through from side to side. Be VERY VERY careful around points! Allow 24 to 48 hours to dry depending on the weather.

As a final touch I brush over the entire track, rail, sleepers and ballast, a coat of weathering solution. This is a brew I make by dissolving Black Raven Shoe Dye in Rubbing Alcohol, or if you can't buy any, Methylated Spirits will do, adding the shoe dye to the alcohol until it won't absorb any more. As the level drops when you use it , just add more alcohol BUT DO NOT STIR. I have had the same screw cap jar for years and just keep adding more alcohol and maybe a little dye occasionally. This weathering solution makes the track, ballast etc. look as if it has been in use for many years with a slightly dirty look. It dries very quickly with a very thin film, but still give the track a rub over with a rail cleaning block.

Well, there you have it. Your own model railway empire in the only gauge; O GAUGE. Scenery, buildings, signals, fences etc. is a matter of your own choice. Enjoy!



Building the O-Aust NSWGR C32 class locomotive

John R B Parker

The information provided with this kit represents a departure from the more common detailed written instructions which often result in a large multi-page document. There are some brief written instructions, but all the essential information is contained in a series of diagrams with individual parts numbered in the suggested assembly sequence. It's a great idea, just start at Part 1 and you are on your way.

I did follow the suggested sequence, deviating only by deciding to build the model in a number of component parts at essentially the same time. As an example, I completed the basic chassis, and then changed direction by next fabricating the connecting rods so they could be used to ensure correct location of the axle bushes. These drawings are so easy to follow that it would be a waste of space to provide further detailed information; instead I will concentrate on filling in the gaps by adding the information that is not included.

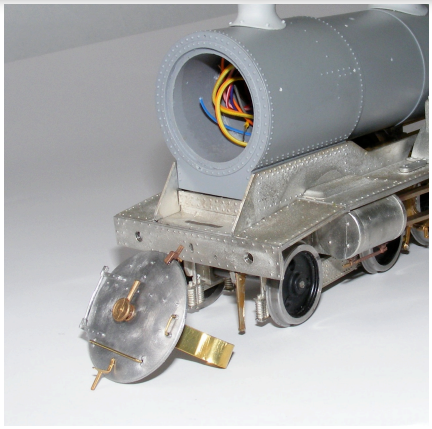
There were also a couple of areas where I departed slightly from the suggested instructions.
1. I was a little unsure how well the bearing surfaces on the cast bogie pony truck would last, so I opened up the axle holes slightly and inserted short lengths of brass tube to provide the bearings for the steel axles. The instructions also suggest assembling the truck so that the two axles pivot providing some slight up and down movement to assist in tracking. This is good idea but you may find that the tolerances are so tight that movement is not possible. It is a simple matter to ease the tolerances by removing a little of the casting with a file or emery board.

It is now about 8 months since I took delivery of my eagerly awaited O-Aust kit for the C32 locomotive.
Of course it should now be completed and in operation, but unfortunately a number of other priorities and a house move has delayed its completion by about 4 months. Well that's my excuse, what's yours? This is such a great kit that hopefully the following will assist anyone who has not yet commenced their model.

2. As provided the etched chassis in its flat form appears quite flimsy, but you will find that when folded and soldered with the appropriate spacers it is fine. The two sides are etched as one piece joined by short spacing pieces; these ensure that after folding the chassis remains square. After the assembly is completed it is suggested that these are removed, but I found that they do not interfere with any other parts and are not visible in the finished model, so I left them in place. They do add to the strength of the chassis.

If you only want to build either a static model or a DC powered version you could turn the page and move on to the next article as we will now concentrate on adding the lights and sounds to your DCC model.

The most obvious location for the decoders (two are required in this model) is in the boiler.



This location greatly simplifies the wiring which can mostly be completed outside the model, before finally pushing in place in the boiler. To permit this the firebox door should be made removable. The photographs show how it's done with the addition of a short piece of brass strip from your scrap box.

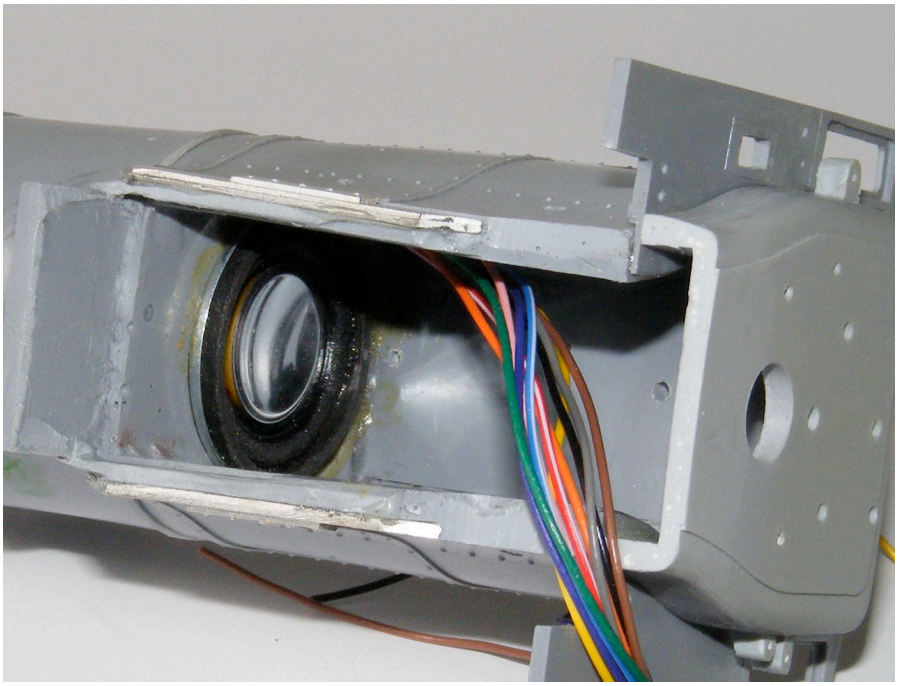
Since the advent of DCC sound, I have found that one of the first tasks to be undertaken before commencing the assembly of a locomotive is the decision on the type and location of the speaker. If this was an HO model then the speaker and decoder would be mounted in the tender, you can follow the same principle, but in 7mm models I always put the sound

in the locomotive to provide the flexibility of changing tenders and also to ensure better sound 'focus'. Provided the space is available my preferred choice is two inexpensive but very good 40mm 4 ohm Mylar speakers available from Jaycar, (Part # AS3028). These speakers, when mounted in an appropriate enclosure provide a response vastly superior to any others that I have used. They are ideal for diesel bodies such as the 48 class but unless you mount them in the tender they are regretfully too large for the 32 class. Previous installations in 19 and 50 class locomotives have used a medium sized rectangular speaker to good effect, but for this model I settled on a new 27mm round High Bass 8 ohm speaker which also has a Mylar cone. (The similar sized round MRC speaker could also be used.)

A suitable sized hole was made in the back of the firebox. A hole was also made for slightly flattened piece of brass tube which will be used as a conduit for the wiring through the speaker enclosure which is formed by also inserting a circular piece of 1mm styrene about the middle of the boiler. This disc also includes two holes, one for the other end of the previously mention 'conduit' and a second smaller one for the speaker wires.

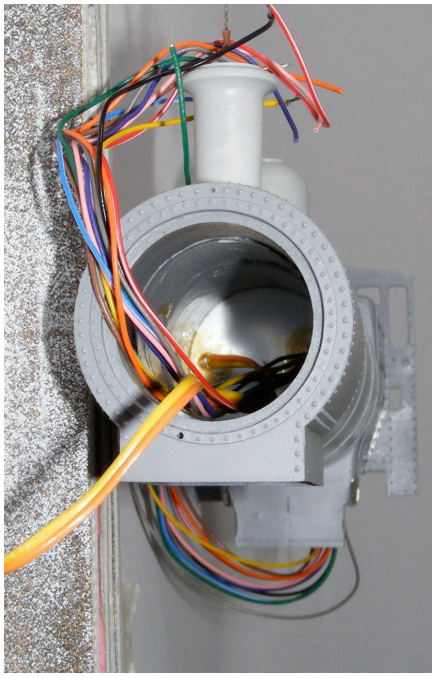
After permanently attaching the boiler to the firebox the speaker was glued in place ensuring an airtight seal to the speaker enclosure, (the rear half of the boiler). Don't forget to thread the previously attached speaker wires through the hole in the front end of the enclosure inside the boiler; these should then be made 'airtight' with suitable glue or sealant. The following photographs should help explain the method used.

This is an ideal location for the speaker, it is invisible in the completed model and there is a fairly open air path from the front of the speaker downwards around the motor/gearbox assembly through the 'ash pan' area. Ten individual wires have been passed through the 'conduit' to provide all the connections to the two decoders which will finally reside in the front portion of the boiler, we only need

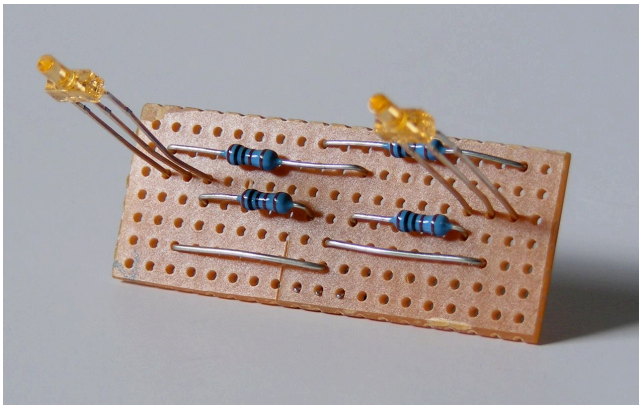


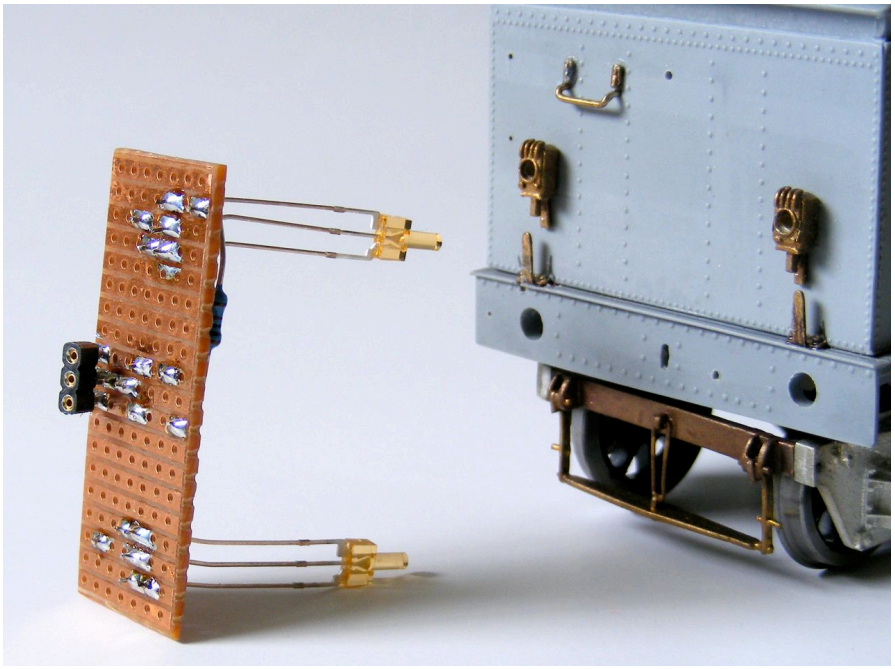
nine connections and the tenth is included as a spare.

The wire was sourced by recycling an old discarded computer printer cable. Just cut off the plugs and strip off the outer covering, you will find all the thin flexible cables you need, in the correct colours.
The continuing development of the many forms of Light Emitting Diodes, (LED's) now make it possible to not only provide operating and dimmable headlights but also fully operable red and white marker lights. The key component is the 2mm Tower or Lighthouse LED now available from DCCconcepts in a dual red and 'prototype white' 3 lead package with a common positive lead. These work well in our scale and so much easier to handle than my previous installations which used two 0.8mm x 1.6mm surface mount chips!



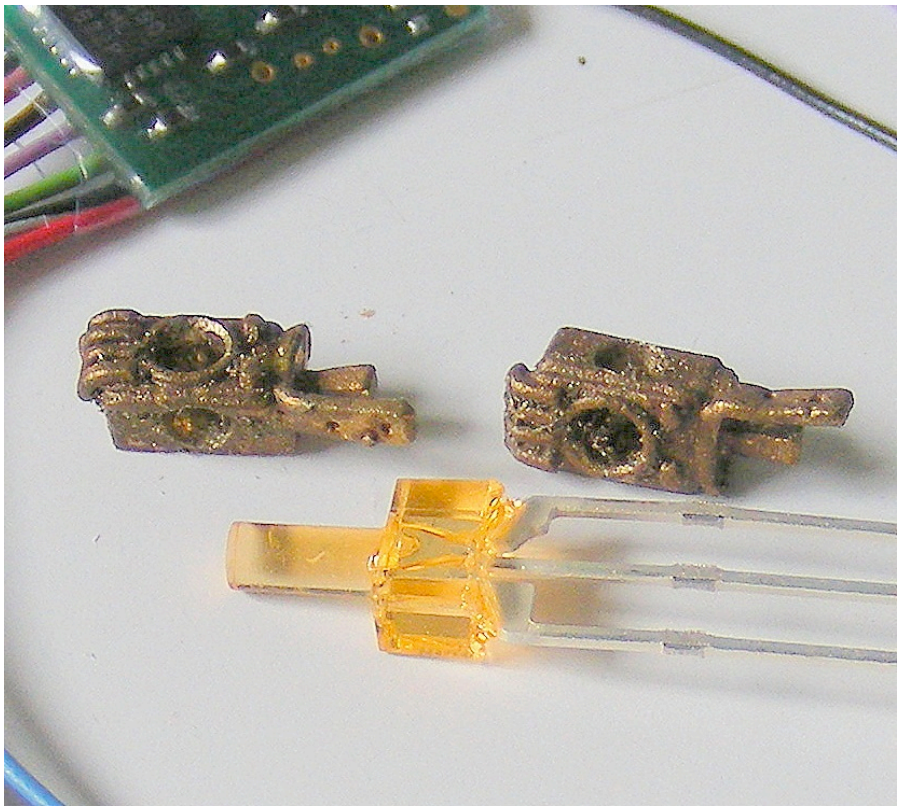
The tender is the simplest installation and all the components including 4 x 1000ohm resistors, wire links and a 3way connector are mounted on a suitable piece of PCB matrix board.

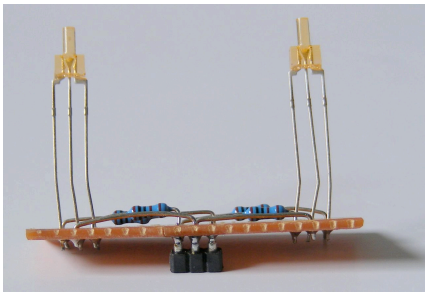




Prior to placing the cast brass marker lights to the rear wall of the tender a 2mm diameter drill can be used to make a hole through the rear wall of the castings. When the marker light electronics assembly is inserted inside the tender the front face of the lighthouse LED should align with the front face of the marker light casting. The actual intensity of the scale marker light 'lamps' will be adjusted as part of the decoder programming which will covered in Part 2 .

The installation of two bi-colour marker lights to the front of the locomotive is slightly more challenging, I have previously placed surface mount chips with connected wires inside the marker lamp castings, however this method is not recommended as it very fiddly and the modified surface mount LED's have a high casualty rate. It is necessary to make a 2mm diameter hole in the side of the marker light brass casting; don't forget you need a left hand and a right hand version, not two identical versions.





The 2mm extended 'tower' portion of the LED will be cut approximately halfway at 45 degrees with a fine saw and the angled faces polished with fine emery paper. The front portion of the cut moulding will be glued in the marker lamp casting with the front aligning as before with the tender mounted LED's. The LED's now with their shortened 45 degree 'lighthouses' will be mounted on the inside of the boiler, one on each side. The marker lights will then glued in position. The point of all this is to overcome the difficulty of getting the light to turn through 90 degrees. If it fails it will be necessary to revert to the fiddly version mentioned earlier.

I am afraid you are going to have to wait for Part 2 to see how it all worked out…

Additional Components

1 x Soundtraxx Tsunami K27 Steam Decoder
(Light Steam can also be used)
Provides motor control and dimmable headlight and rear tender light (if fitted)
Model Railroad Craftsman

1 x TCS FL4 4 Function lights only decoder
Provides for the control of both red & white marker lights independent of locomotive direction and headlight operation.
Model Railroad Craftsman – Litchfield Station

1 x Speaker round High Bass 27mm 8 ohm
Part # SP-27RHB-08
Litchfield Station

4 x 2mm Lighthouse type Bi Colour LED
(Red & Prototype White with common positive lead)
DCCconcepts

1 x 32way Socket strip Part # PI-6470
Cut to length to provide both plug and sockets.
Jaycar

Fitting Slaters Plunger Pickups to the O Aust 48

Roger Porter

This is the second in a series of articles on enhancements to the O-Aust 48/930 locomotive. The first, in issue 18, showed how to fit sprung buffing plates. More articles on this topic will be in coming issues.

INTRODUCTION....

The following notes relate ONLY to the O-Aust 48 Class loco kits provided with the mechanism having the single central motor and the chain drive gear towers, sometimes referred to as the "N.Z. Mechanism". These notes do NOT apply to the mechanism with the motor contained within the bogie, or the "K&M Mechanism".

The chain drive N.Z. mechanism is very well engineered, and robustly constructed. It operates smoothly and quietly, however its weak point is with the "backscratcher" wire pickups provided. These wire pickups are in a vulnerable position, and are very prone to damage, even with careful handling. Even a minor derailment can cause the wires to snag on a point blade or ballast and become bent out of shape. I have also managed to snag the wires on a workbench tablecloth, and once bent are almost impossible to bend back into shape without major dismantling of the bogie. When bent out of position, the wires will either fail to pickup, or cause a short circuit.

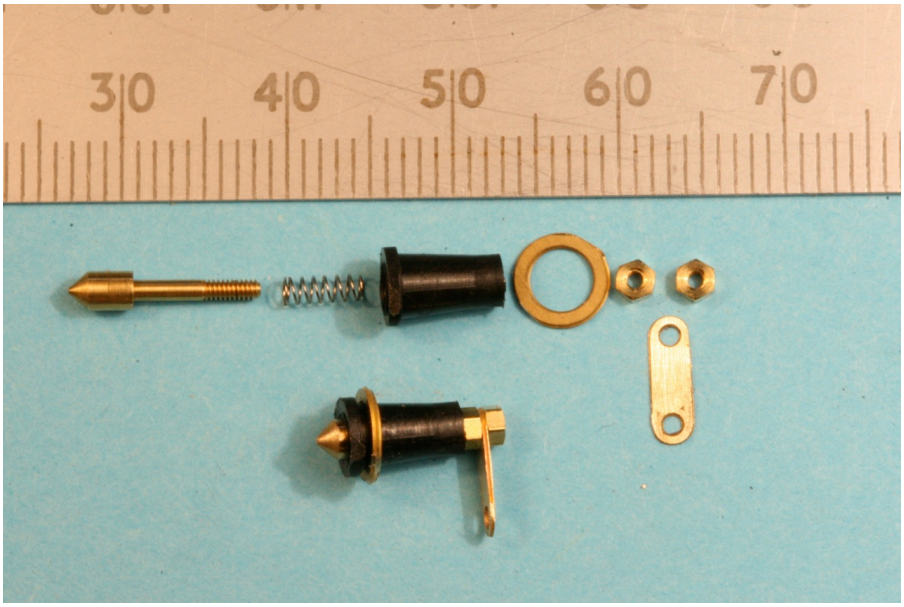
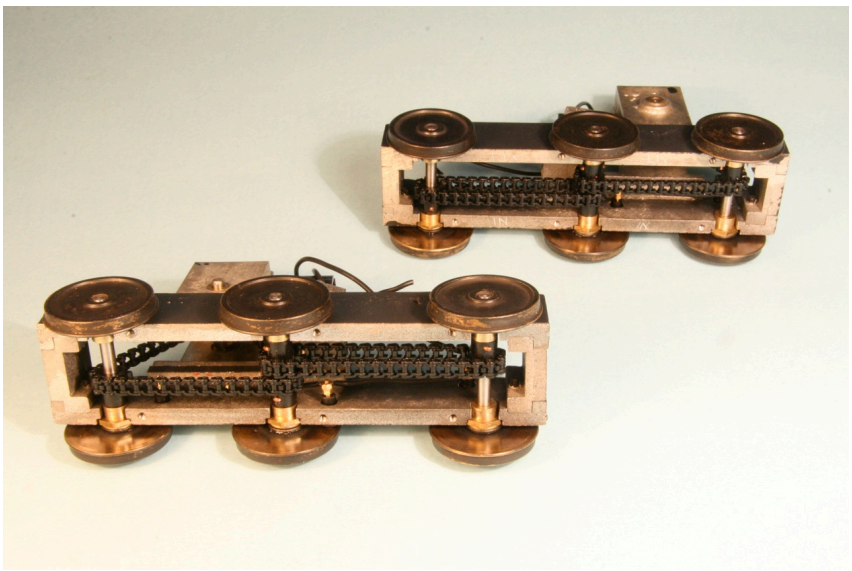


Photo 1

A solution to this is to install Slater's Plunger Pickups. There are some in the loftier modelling circles that frown upon plunger pickups, preferring split axles and so on. With that in mind, I've taken the following simple precautions, with the result that my loco's have run continuously at 3 day exhibitions without any wheel cleaning, stalling due to poor pickup, or without any visible wear of the pickups.

- The wheel backs must be deburred smooth and finely polished.
- The plunger points must be very slightly rounded to remove the sharp burr.
- The plastic housings must be internally smooth and deburred to ensure that the plungers can plunge freely.
- The connecting wires must be arranged such that they don't exert any side pressure on the plungers, hence restricting their free movement.
- There must be clearance between the back of the housing and the brass nut to ensure that the plunger has enough travel to follow minor wheel irregularities.
- Sometimes the spring pressure seems too great, so a turn or two can be lopped off the spring. Only slight spring pressure should be required.

Photo 2



INSTALLING THE PLUNGERS...

Whilst the bogies may appear identical, they are in fact "handed". This is because the bogies are installed in the loco facing in opposite directions, so that the insulated wheels are all on one side of the loco, and the non-insulated wheels are all on the other side of the loco. This explains why the plungers are installed in subtly different positions on each bogie, to avoid fouling the chains. Refer to Photo 3.

Dismantle the bogies to the extent shown in photo's 3 and 4, clearly marking the bogie frame so that the insulated and non-insulated wheels can be re-installed where they came from. Discard the strip of pcb with it's attached backscratchers, but retain the connecting wire for future use as shown on Sketch 1 and Photo's 3 & 4.

Refer to Sketch 1, and drill six 4 mm holes in the positions shown. These holes will be drilled on the INSULATED WHEEL side of each bogie.

Assemble the Slater's pickups as shown on Photo 1, taking heed of the conditions noted in the introduction.

Mount the plungers in the bogie frames as shown in Photo's 3 and 4, securing them with a tiny dab of ACC. Note the polished wheel backs in Photo 2.

Make up and install the connecting wires as shown in Sketch 1, and Photo 3.

Install the 0.7 wire staples to prevent the connecting wire from fouling the chain. Photo's 3 and 4 show the staples in position.

Re-assemble the bogies and gear towers as shown in Photo 2. For the photo only, the bottom keeper plate has not yet been fitted.

And that's all there is to it ! The Slater's Plunger pickups will provide reliable pickup, they are inherently robust and are positioned such that they can't be disturbed. Slater's Plunger Pickups, Part No. 7157, are available from your hobby shop, or David Peterson Modelling Services , dwpeterson@optusnet.com.au

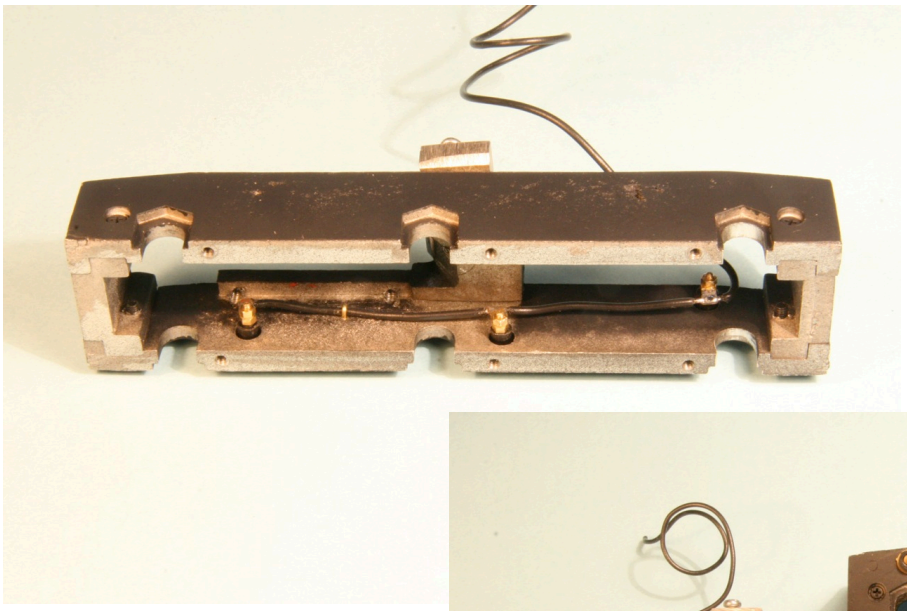


Photo 4

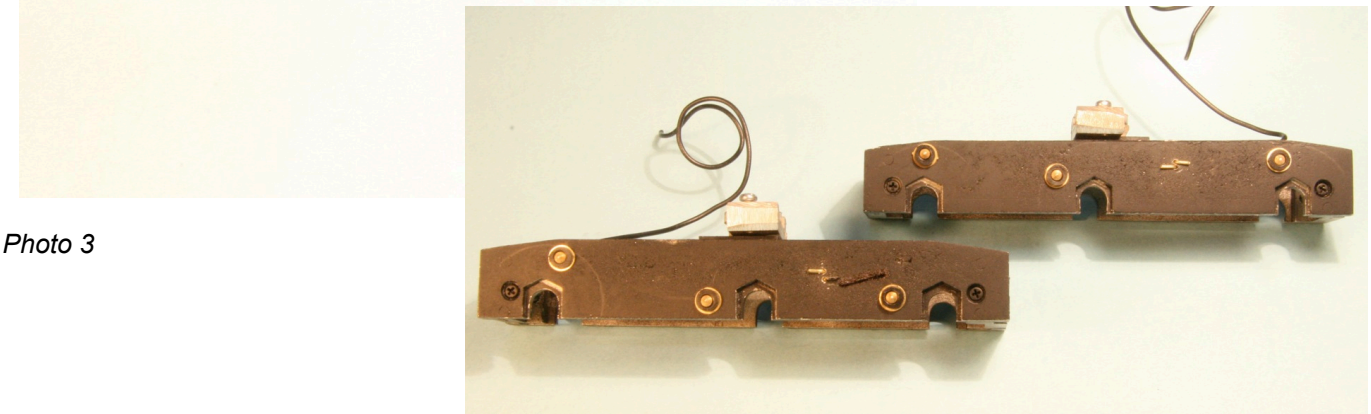
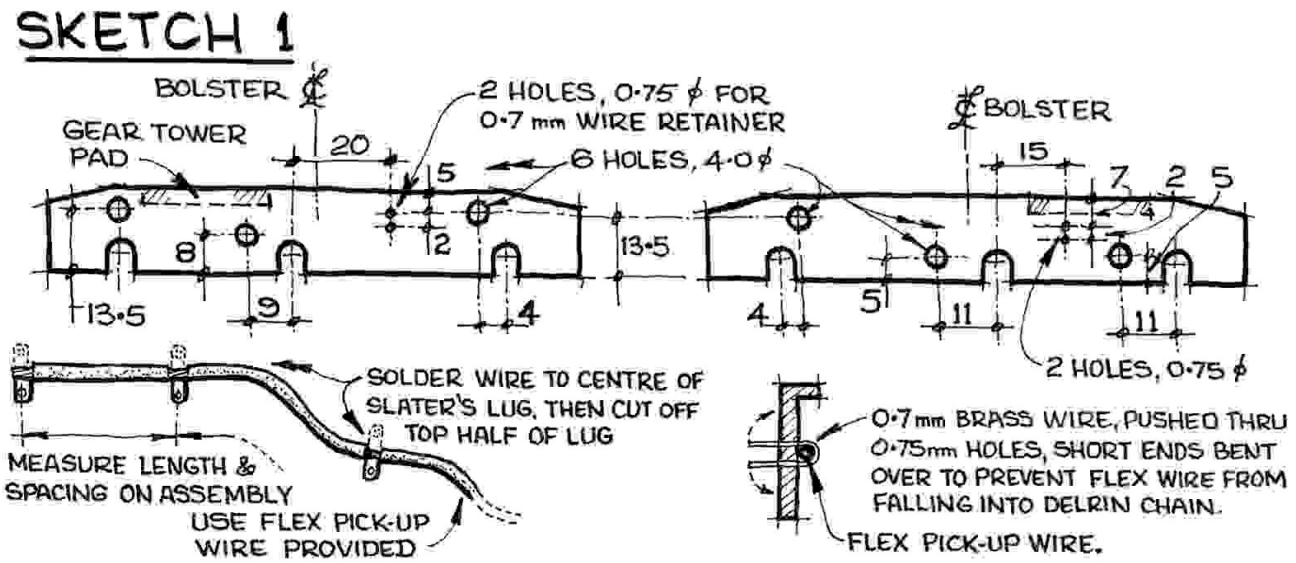


Photo 3



Commercial News

Trevor Hodges

Bergs Hobbies
Berg's Hobbies, 181 Church St Parramatta, NSW, 2150, (02) 9635 8618, http://www.bergshobbies.com/ has passed on the news that work on the NSWR 41 class in 1:43.5 scale is progressing satisfactorily. It is hoped that a pilot sample should be available for the upcoming April Forum. Work for this kit is being undertaken by the Model Company in New Zealand and the aim is to retail it for under $1000.00.

David Peterson Modelling Services
David Peterson Modelling Services, PO Box 644 St Ives, NSW 2075, Tel 61 2 9144 1521, Mob 0402 156 048, Email dwpeterson@optusnet.com.au. has advised that the (Z)12 class 4-4-0 in 1:43.5 is ready to be manufactured. Those who indicated an interest in purchasing the kit will be contacted shortly to request deposits and a decision about whether the kit will be produced will then be made. The kit will include builders' plates, wheels, motor/gearbox and comprehensive instructions. The aim is to produce the kit at the previously advertised price of $1750.00. Built up, but not painted, models can be supplied.

David wanted customers to know that, for the moment, the (C)38 and (AD)60 projects are on hold. He also wanted to pass on the news that a lot of interest has been shown in the possibility of a (Z)13 4-4-2T kit and the possibility of producing this locomotive as a kit is also being evaluated.

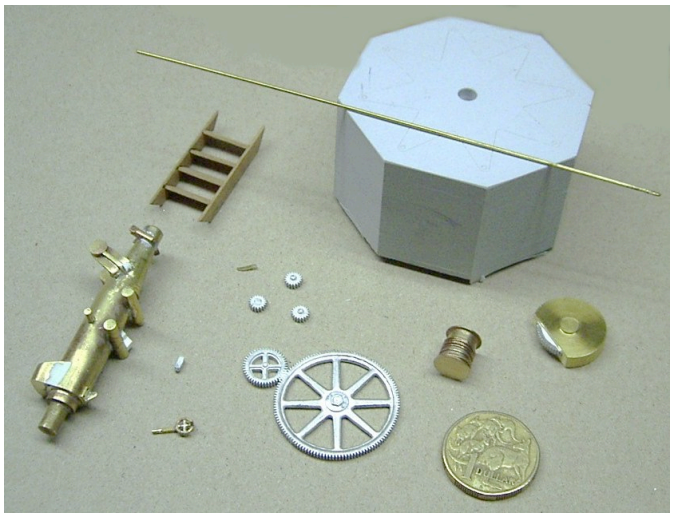
David has in stock kits for "fabricated" (installed on the majority of NSWGR 4 wheel wagons) sprung W-irons. The kits include etched W-irons, spring wire and axle bushes to suit Slaters wheels. Finally David wanted to let customers know that anyone interested in purchasing a built up Mort's Dock tender should contact him.

O-Aust
O-Aust Kits pa_rl_krause@bigpond.com, and via the web site at www.oaustkits.com.au, at PO Box 743, Albany Creek, Qld, 4035, mob 0419680584 anytime or on (07) 3298 6283 between 7 and 9 pm have announced the production of a 1:43.5 scale kit of the NSWR 44 class diesel locomotive. Development work on this kit will commence after the release of the (C)30 4-6-4T. The kit will have a cast urethane nose, roof and B end and an assessment is being made as to whether the sides will be either a brass etch or cast urethane. The mechanism will be similar to the centre mounted version released with the 48 class. Following on from experience with the 48, provision will be made in this locomotive for easier fitting of a DCC sound decoder. The 44 is slated for release in 2010.

The (C)30 project is progressing to schedule and this kit should be available in time for the AMRA Sydney exhibition in October. Construction methods, components and chassis are comparable with the (C) 32. The FR independent car is ready for release with only the decals outstanding. The kits should be available by the time you read this, priced at $450.00. O-Aust is aiming to have both the 3,000 and 5,000 gallon tank cars available for sale in time for the April 2009 O-Scale Modellers Forum. Both kits will be supplied with cast urethane tanks with domes integral to the casting. The 3,000 gal tanker (estimated price should be just under $200) will have its underframe cast in pewter and the 5,000 gal tanker (estimated price just over $200) will have a cast urethane underframe.

Waratah Model Railway Co
Waratah Model Railway Company, PO Box 509, Revesby, NSW, 2212 (02) 97851166 charris@nigelbowen.com.au and waratahmrc@optusnet.com.au have announced that kits for both the brass "diamond" and white metal 2SE or G bogies are now in stock. These bogie kits have been developed to accompany a range of Waratah wagons that are planned for release and are priced at $45 per set and $75 if wheels are included.

Waratah are hoping to have their kits for the NSWGR BWF wagon available for sale at the next NSW O-scale Modellers Forum in April. This wagon will be produced in limited numbers so modellers should contact Waratah for details. Components for the NSWGR 5 ton yard crane kit are also being finalised and this kit is also hoped to be released in time for the next Forum.



Announcing The O-Aust Trophy

O-Aust Kits is proud to announce that they will be sponsoring a modelling competition at the next O Scale Forum on Saturday 4th April 2008

Trophies will be awarded for the best scratchbuilt and the best kitbuilt model.

The rules are as follows

- winners will be selected from models on display at the forum and the modeller must be in attendance
- models must be to 7mm or 1/4" scale
- models must be of Australian prototype, any system or state.
- kits may be from any manufacturer, not limited to O-Aust.
- prize winning models will not be eligible for entry in any future competition
- models may be a locomotive, rolling stock or structure
- competition to be judged by Peter Krause or his nominee

The Aus7 Modellers Group invites you to the

NSW O-Scale Modellers Forum

Saturday 4th of April 2009

Seminar topics will be announced when finalised.

- Modelling Competition (O-Aust Trophy)
- Manufacturers' Reports
- Traders who specialise in O scale

Everyone welcome!

North Sydney Leagues Club
Kamaraigal Room, 12 Abbot St Cammeray
8:30 a.m. sign in for a 9:30 a.m. start

For details ring Keiran Ryan
0409952874 or 02 46772462

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