

# Modelling Cane Railways

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Coolum  
B-B DH in  
7mm Scale

CaneSIG: <http://www.zelmeroz.com/canesig>

## Jay Kershaw Models Coolum (Moreton Mill's B-B DH) in 7mm Scale

### Introduction

Jay wrote about his use of 'scrapbook' paper punches for modelling in *Narrow Gauge Down Under* (NGDU 38: July 2010, pp 28-9). Now he uses these techniques to build a 7mm model of Moreton Mill's *Coolum* for his grandchildren.

While perhaps not built to 'competition' standards, they have a well running locomotive that is instantly recognised as being from the Queensland cane fields. Jay is currently building a 1/4" version using techniques that are applicable to styrene construction in almost any scale.



Jay's almost completed 7mm Coolum model. Note how square and even the window and bonnet holes are, the result of careful planning and Jay's use of scrapbooking punches.

### The inspiration

The desire to build Coolum came from seeing David Axup's inspirational layout that he affectionately calls 'The Inlet'. My youngest grandchildren fell in love with the "bright yellow diesel" and wanted one for their layout.

I didn't know then that it was named Coolum, nor did I know anything about the locomotive, being fairly new to this hobby. However I contacted David and

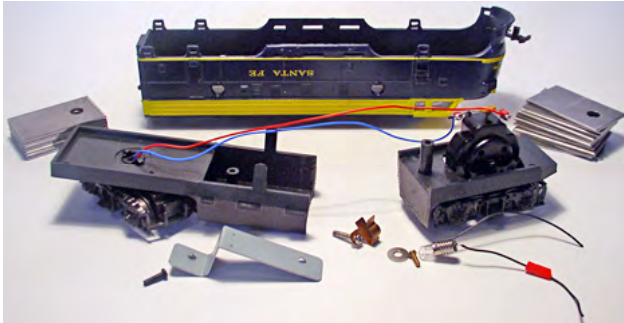
he kindly provided us with the information, help and advice I needed to build our Coolum.

### The mechanism

We searched for a low cost chassis with bogies that looked correct in size to ones on Coolum. The bogies on a *Life-Like* model looked to be the answer and it was purchased. After removing its 'Santa Fe' body I considered how to reduce the chassis to the scale size required... brainstorming began.

We came up with an almost perfect answer, perfect because the bogies and the base/deck height and length would all be in scale position once I had:

Cut away the middle box section of the chassis and built a joining platform that would produce the correct scale length chassis, and at the same time carry some of the original metal weights required for good track adhesion.



The Life-Like model with the shell removed and one bogie section cut free.

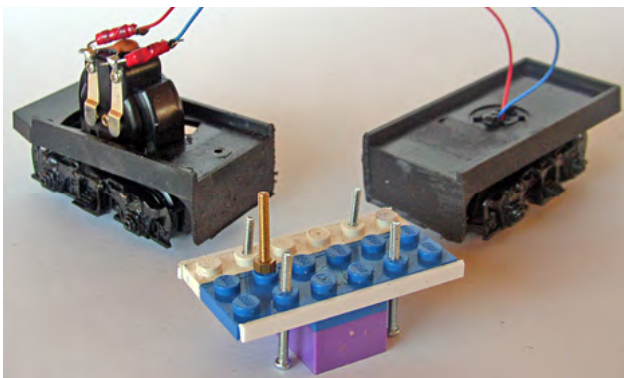
First I removed the light and all the metal weights, and then I cut through the chassis in two places, leaving the two flat centre chassis walls attached to the bogie sections.

### Now, how do I make the new joining platform?

Lego came to my aid with the ideal joining platform. The platform was made with two flat 6-pin parts glued together edge on.

The platform was short in width so a 1mm strip of styrene was glued onto each side edge.

A flat 3-pin piece and then a 3-pin double block were glued under the centre of the platform, these blocks also created the perfect size filler between the two chassis walls.



Lego blocks used to lengthen the frame and fill the section between the bogies.

I hollowed out the double block with a hot knife so I could fill it with lead, providing lower body weight distribution. Lead fishing weights were melted in a metal spoon and cast into a wooden surround made to the size required. When cold the lead was glued in place.

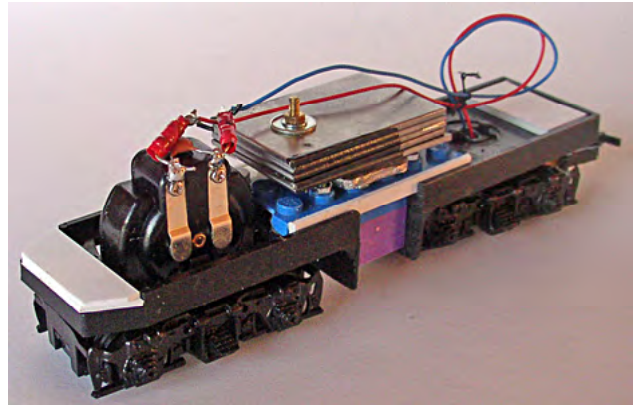
**Editor's Health & Safety note:** Use extreme care and appropriate equipment when melting metals, even those

that melt at low temperatures. It would often be easier, and safer, to superglue or epoxy lead shot in the cavity.

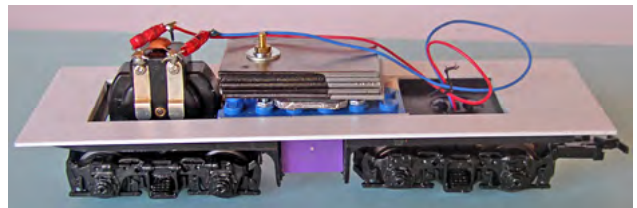
Holes were drilled in the platform for four tiny bolts to fix the platform to the chassis.

### Making & fixing the base/deck.

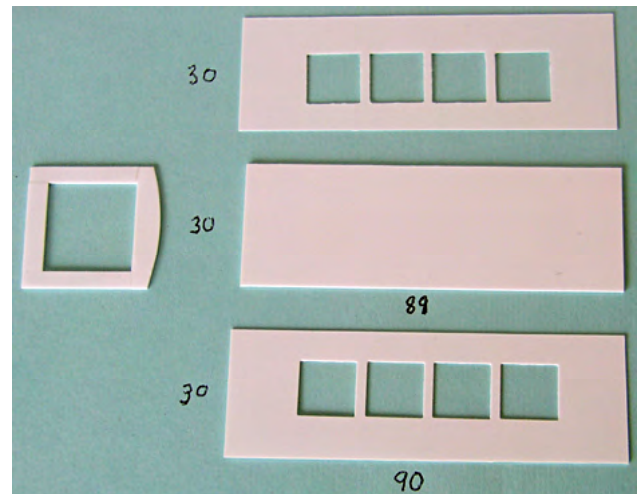
To support the base/deck I needed to glue front and rear filling pieces in place. These were made level with the chassis side walls.



To make the actual base/deck I cut two long side parts and a front and a rear end piece. Once assembled the oblong base was glued squarely on top of the chassis.

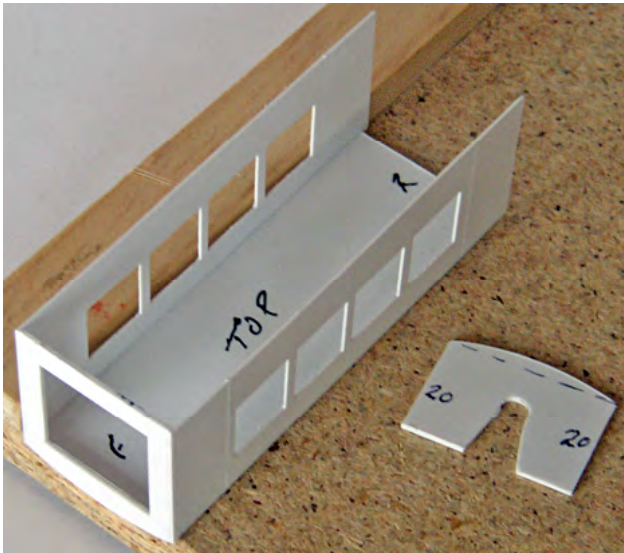


### The body section.



Flat inner top, front grill and two sides for the body (hood) components

- A flat inner top was cut from 1mm styrene.
- The front grill section was made with 4 strips of 1mm styrene then given a curved top.
- The two side sections were cut from 0.5mm styrene, each had 4 spaces punched out using the paper punch method I describe in detail in NGDU 38.



- A rear end piece was made with a curved top.
- A pre-curved top.



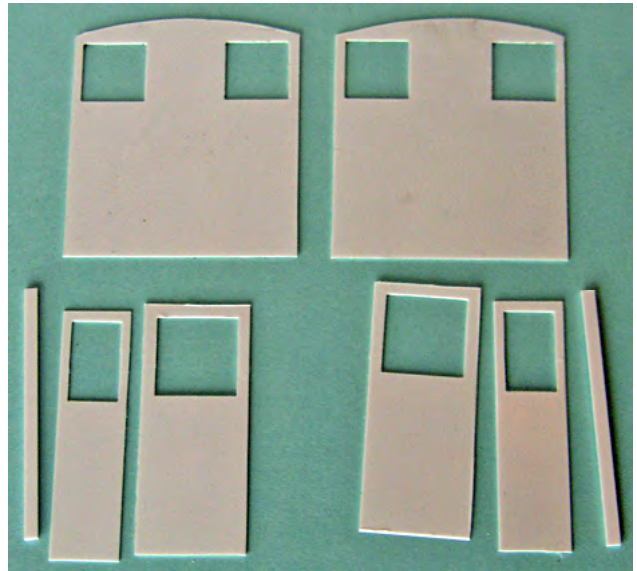
### Cab parts

All the outer Cab parts were made from 0.5mm styrene. The sides were made in 3 sections.

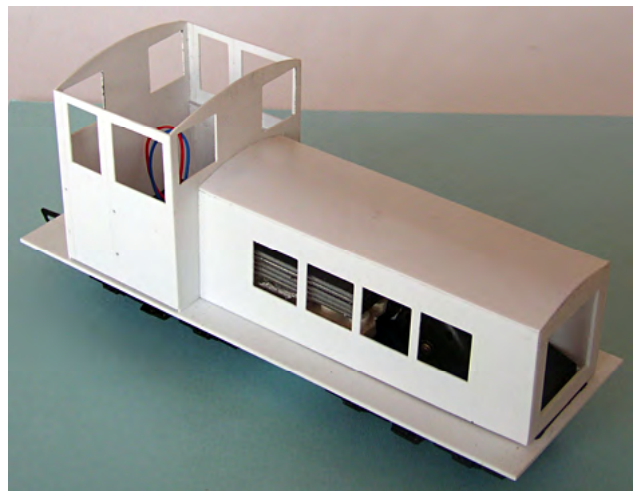
Window spaces were punched out in the cab's front and back panels, side panels and doors.

A 'V' shape was cut out of the cab's front panel to allow the wires from the motor bogie to pass to the rear bogie.

The 3 sections of the cab sides were glued together. Holes were drilled for the cab's handrails. The fragile sides were carefully glued onto the side edges of the front and rear parts of the cab.

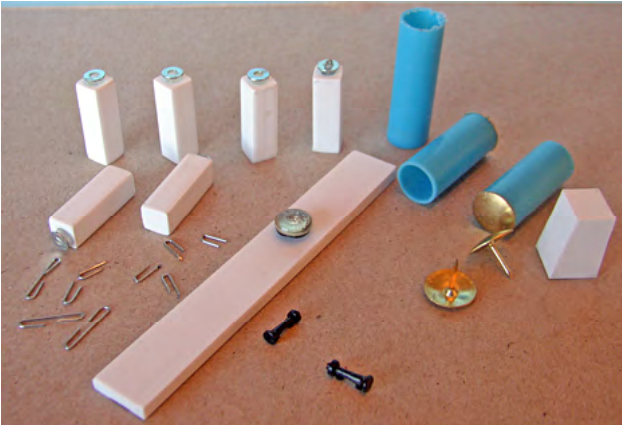


Pieces of 1mm clear-ridged plastic were glued inside the side and rear walls close to the floor (see photo below) for added strength and, after painting an upper piece was glued in place that doubled for the windows.



The cab was glued onto the rear of the body section and trial fitting onto the base was undertaken.

## Fixtures & fittings required for Coolum

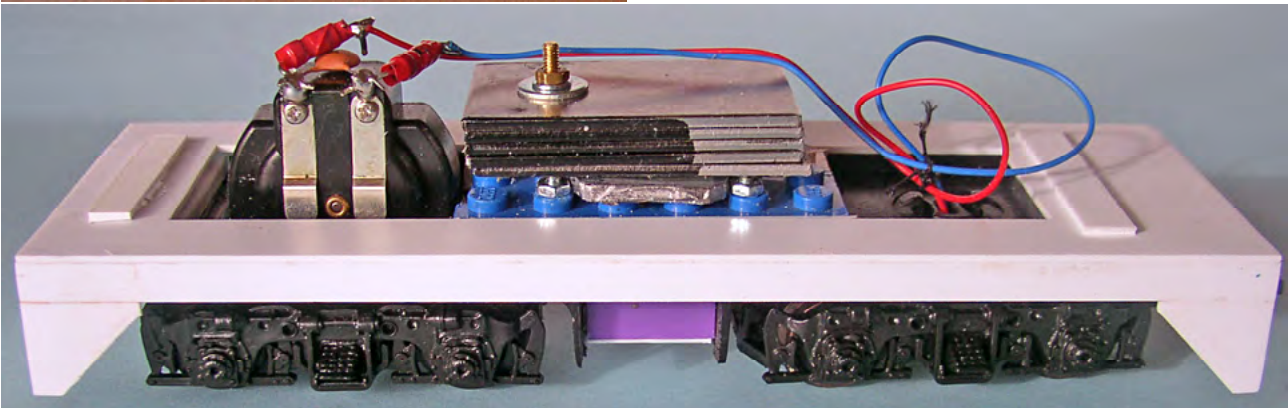


6 side box sections - square plastic tubing, washers and bent staples [Ed: sandboxes]

Side tanks - round plastic tubes cut in half length-ways so they could be fixed under the base/deck without coming in contact with the chassis or the bogies.

Front and rear headlights: jewellery fittings, diamonds (\$2 type) were used for the glass. My local \$2 shop also provided the 4 brass corner eyelets.

Styrene was used to make the long top-body section, the deck's side skirts, front and rear buffer boards, and the sunshades over the side windows.



I used staples for the cab handrails and card for the cab roof with a flashing top light fitted. The horns were from the original HO Santa Fe loco.

There are more bits and pieces for the enthusiastic modeller to add, but I feel I have achieved my goal of making a look alike Coolum for my grandchildren's layout.

Coolum, the 7mm model, has had a long baptism of fire and has received only small amounts of collateral damage, and a number of repaints from

my now wobbly hands keeps it in service for my grandchildren's ongoing pleasure. And for my own pleasure I am in the process of making a 1/4 inch to the foot Coolum.

### Acknowledgements and References

Text and photographs by Jay Kershaw unless otherwise indicated. Should you need more details on his modelling please contact Jay direct:

[jay.kershaw@optusnet.com.au](mailto:jay.kershaw@optusnet.com.au)

Additional information on Coolum can be found in the image collection accessible from CaneSIG. Use Coolum as a search term and click through to the images or drawings required.

[http://ZelmerOz.com/albumquery/\\_search.php](http://ZelmerOz.com/albumquery/_search.php)

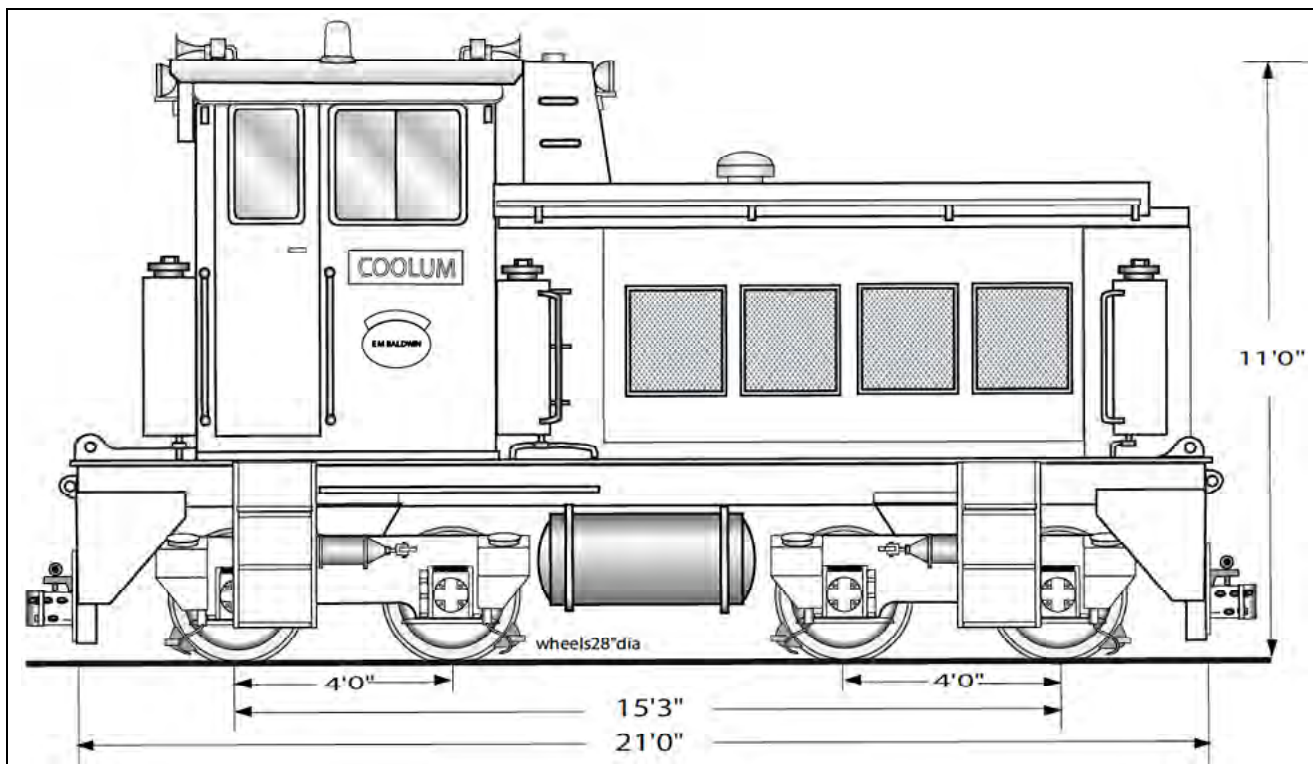
### Coolum the locomotive



Coolum (bogied Baldwin) when new at Moreton Sugar Mill. Photo from Bill Blannin Collection (bbc\_23).



Coolum in its safety livery aka 'Lorry' the Safety Loco, at the Moreton Mill (Nambour) 26 Sep 2003 prior, shortly before the mill's closure. Another face appears on the front of the loco. Lynn Zelmer photographer.



Coolum (aka 'Lorry' the Safety Loco, EM Baldwin B-B DH of 1974), Ex-Moreton Sugar Mill (Nambour). Drawn by Jim Fainges 1997 and digitised 2005. Note: drawing is not to scale as it has been reduced to fit the page. A more accurately scaled drawing and other views are available from the CaneSIG web site.

### Editor's Note

Two of the earlier Handbook articles describe the building of smaller diesels using styrene, one in HOn30 scale and the other On30.

- 8 Modelling the Bundaberg Jenbach 0-6-0 Diesel
- 15 Comeng "G" Inspired On30 Loco

Jay takes the techniques in those articles to a new level with the accuracy of his square/rectangular cutouts, and shows us how to build a reasonable representation of a specific prototype locomotive at

minimal cost and effort. The 'boxy' design of a Baldwin may make it easier to break each component into parts for modelling but the same techniques will work for any diesel locomotive in any scale/gauge.

Jay is not a fine scale modeller but his work provides a challenge for us all.