

Tube & Tunnel



The newsletter about the 7¼" gauge models of the 1938 'tube' stock and the "Ginny" 'sub-surface' stock, built by Fred Blois, now owned by Adrian Allum and Daniel Hill.

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Introduction.

Welcome to the first “*new*” edition of “Tube & Tunnel,” the journal about the “Little Red Train.” The main train itself is a miniature, London Underground, 1938 Stock, tube train. It is approximately 1/8 scale and runs on 7 1/4” gauge track.

Built by Fred Blois in the mid 80s and bought in 2003 by Daniel Hill and Adrian Allum, it is currently undergoing a thorough mechanical, electrical and cosmetic overhaul after spending six years out of use. When this is complete, it will run at both permanent miniature railways and on portable track at events such as fetes and exhibitions, and there is some 350’ of track available.

Also bought by Daniel and Adrian is the “Ginny,” a single car of District Railway “G” / “Q23” stock. Built by Fred, but never completed, it will require a significant amount of work to get it running.

The 1938 Prototype.

The 1938 stock design was a result of London Underground’s need to provide modern and efficient trains to handle increasing passenger numbers. It was the first tube design to have most equipment mounted underneath the car, giving it a greater passenger capacity than the earlier ‘standard’ stock. Trains ran as three or four car sets comprising a Driving-Motor car at each end, with an unpowered trailer car (and in four car sets a Non-Driving-Motor car also) in between. These sets were often coupled together to make longer trains. During their lifetime, the 1938 stock trains worked the Bakerloo, Central, East London, Northern and Piccadilly lines. All were withdrawn from London Underground service by 1988, but a number were overhauled and transferred to the Isle of Wight where they still work the Ryde Pier Head to Shanklin service. A number of 1938 stock cars have been preserved and London’s Transport Museum maintains a four car set in working order.

The Model.

The 7¼" gauge 1938 stock was built by Fred Blois and first ran in 1987. Between then and 1995 it attended 136 events and carried over 46,000 passengers, as well as paying visits to permanent miniature railways. After its last run in 1996, it was put into long-term storage at a motor museum in Sussex. In 2003, Fred offered to sell the two driving cars (of the three car set) to Adrian Allum. Adrian had driven the train many times and was eager to acquire it and get it operational again. However, during April, the storage space that was earmarked for the train was to be no longer available and consequently, Adrian was not able to buy the train.



After hearing about these problems, Daniel Hill, a good friend of Adrian's (and a member of the club that operates his model railway), approached his parents to ask about storing the train at their house in Farnham, Surrey. To his delight, they were more than happy about the idea and a co-ownership deal was agreed between Daniel and Adrian. Because of the extra storage available, it was agreed that Daniel and Adrian would

also buy the third car of the train as well as the track, the trailer that it is all transported in and the “Ginny!”

At present, the train requires a mechanical, electrical and cosmetic overhaul after spending six years out of use. Everything appears to be mechanically sound and the train has operated under its own power. Work in hand includes:

- Fitting continuous (Air) brakes,
- Providing driving at both ends,
- Fitting head and tail lamps and possibly destination boards,
- Fitting a whistle (Air or electronic),
- Cosmetic repair or replacement and repainting,
- Revision of power supply.

The model represents cars ‘D’ 11231 (powered), 012314 (centre) and ‘A’ 10231 (unpowered). It is fitted with two ex-C5 motors, powered by four 110Ah leisure batteries, with the controller powered by a 26Ah sealed battery.

The “Ginny” Prototype.

The “Ginny” is based on one of the two “G” or “Q23” stock cars (numbers 4167 and 4176) converted in 1938/9 to allow driving from both ends. These operated on the District rail-



The Ginny is seen on display at an exhibition at Bracknell.

way shuttle service between Acton Town and South Acton until the closure of the latter in 1959, when both cars were scrapped. The service was known as the “Ginny,” the “Tea Run” or the “There and back while the kettle boils.” The short journey time and tight turn around at South Acton meant you could put a kettle on the fire when leaving Acton Town and be back just as it came to the boil!

The Model.

Also built by Fred Blois, the 7¼” gauge “Ginny” was bought by Daniel and Adrian at the same time as the 1938 stock. However, this unit was never completed and at present consists of only a bodyshell, chassis and bogie frames. It will require wheels, motors, brakes, batteries, a control panel and wiring up before it runs. The eventual aim is to make it powerful enough to haul carriages as well as operating on its own. The model represents car 4176.



Blow-by-blow Diary.

Having secured the purchase with the presentation of a cheque, Daniel and Adrian, along with Daniel’s brother Martin and father Kelvin, went to meet Fred at the motor museum in Sussex (where the train had been in store) on May 17th.



Unpacking and taking stock of everything.

It ran under its own power for the first time in just over six years on July 10th, as just the ‘D’ end power car, along six panels of track in the driveway at Daniel’s home. Its next run was at a modelling day of the Alton Model Railway Group, where almost 30

metres of track was laid on very uneven ground, though supported (packed) where necessary. Nevertheless, a derailment caused parts of the suspension to break and the train ran out of power before the end of the day. The suspension was repaired by friends at the Great Cockcrow Railway, and the power was upgraded with new batteries; since when there have been no supply problems!



Waiting at a signal on the miniature railway in Farnham...

In August, the two-car train was taken to a private railway in Farnham for a jolly good run-in, and a chance to monitor its performance. Things did not go too well. The train wouldn't make the 1:30 climb on the branch line there, nor would it carry more than three people! Acceleration was slow, but top speed high! The trip switch blew a number

of times and eventually overheated, causing the main controller to pop! Thus the train was taken away for more serious work than had been anticipated!

There are a number of key issues to be addressed:

- The gearing has a 2:1 reduction, whereas 5:1 would be more appropriate.
- There is evidence of the belts slipping on the gears and the final belt drive is vertical to the leading axle. This impairs the effectiveness of the suspension.
- Only one axle in each of the two bogies is powered.

To overcome these problems, we are considering following this course of action:

- Using bevelled gears, running a prop-shaft down from the spindle on the motor to the midway between the two axles, but still to the side of the bogie.
- Using another set of gears, running either a toothed

belt or another prop-shaft to both axles — horizontally, thus freeing up the movement of the suspension.

- By calculation of the gearing, bringing the drive back to as near to 5:1 reduction as possible.
- Fitting motors to the other ('A' end) car.

As this is quite a big job, we are considering using the Ginny as a test-bed for this work, which if successful, will mean that this will be in service before the Tube is. But there will be a lot of discussion with trusted third parties beforehand! Watch this space — and our website, of course.



Running the LRT.

It is hoped to revisit the railway in Farnham, (especially as the owner there are pledged to assist with the electrical work if needed,) and the Great Cockcrow Railway, where Adrian and Daniel are both members. Additionally, there would be a small number of portable track events, for the purpose of fund raising for good causes. Further, Adrian and Daniel have pledged to donate any surplus cash to their two charities; The National Autistic Society and The Albinism Fellowship.



