

The Railcar Association Bulletin September 2013



Introduction

Firstly, apologies are due for the disruption in the delivery of both the previous News Bulletin and the Preserved section of the website. This has been due to technical issues as a result of the editor's renewal of a PC after the previous one retired after 10 years faithful service. To compound matters, a house move to a temporary residence has been undertaken on September 1st (right on a bulletin release date!) and internet access for the foreseeable future is likely to be affected, so it may be some time before normal service is resumed. I have decided to endeavour to keep bulletins published at the usual times but please forgive a quiet Autumn on the preserved site of the website.

The convention is unaffected by these difficulties and is shaping up nicely. [Speakers are still welcome](#) on any DMU topic, historical or present, to share topics with fellow members. I hope to see you at the event at the GWSR.

Also unaffected is "on the ground" DMU progress around the country. The summer has been a hive of activity with no less than three long term restoration projects launched into passenger service. These are Class 108 M51566, Class 119 W51073 and Class 127 M51616. I am pleased to say that all three are featured in the bulletin in one form or another. Well done to the three groups involved in returning these vehicles to service and raising the number of DMU vehicles that we collectively have in service up and down the UK.



M51566 carries passengers for the first time in many years at the Dean Forest Railway (A.Pace)

News

Great Central Railway: The restoration work on the Class 127 set is now approaching completion. Final wiring faults were resolved and brake blocks bedded in before the 2-car set successfully ran for the first time in July covering three round trips without fault. Internal repairs are progressing well and are almost finished, and some final bodywork is now all that remains to complete the vehicles' revival.

Class 101 E50266 is getting a spruce up too. Unlike buffet car 59575, the job is being done 'in house' by Renaissance Railcars volunteers. The sole bar, bogies and steps have been painted black and a new coat of gloss has been applied over the light green body undercoat. The results look excellent. After almost ten years in service at the GCR the body work on E51427 and E50321 requires attention and current thinking is E50266 will swap into the two car set to allow one of the current pair to be given some attention.



E50266 looking much better in gloss green (A.Noon)

Llangollen Railway: As far as general maintenance has been concerned there have been six FP Exams, eight A Exams and two C Exams carried out to individual vehicles during the period. General jobs have included a starter motor change, fan drive and fan belt changes, horn valve failures, door adjustments and windscreen wiper motor repairs. The Wickham and the 127 have both had alternators swapped or repaired and we did a bit of work to the ex-Arriva bubble when we had it on loan to get it fit for reliable service.

We have continued to improve our depot facilities and have added a radiator top up tank and forward oil store at the end of our siding as well as mains electrical sockets down much of the length. One of the VJX vans used for storage has been undercoated and some bodywork repairs have been done on the second one and we now have a flagged path from the headquarters coach along the length of track where the units are parked.

Class 104 50454 - The seating in the first saloon has been replaced with fully refurbished items. The frames have been shotblasted and powder coated and retrimmed seats, cushions and backs fitted. The saloon has been revarnished and the ceiling repainted. Some of the other seats have been swapped round so that the best ones have remained in the vehicle.

Class 108 56223 - This vehicle, which is on loan from EARM, had its roof scabbled down earlier in the season and is now painted in gloss grey to match Class 127 51618, with which it normally runs. The white fibre glass dome has also been reinstated.

Class 127 51618 - The Bed-Pan unit had a guard's van makeover earlier in the year, including repainting and refurbishment. Currently work is ongoing to improve the saloon and all the wooden window frames are in the process of being rubbed down and revarnished.

There is a weekly update of news on the [Newsfeed Page](#).



Class 127/108 M51618/M56223 in service at Llangollen during August (Llangollen Railcar Group)

Cambrian Railway: Class 101 DMBS 51187 - In traffic from 2007 to 2012 when withdrawn due to poor mechanical and cosmetic condition. Loose rust removed from windows in October 2012 and areas treated, however work was stopped in 2013 to allow the team to concentrate on 51512.

Class 101 DMBS 51205 - Undergoing long term restoration. Was used briefly in 2007 but replaced soon after by 51187. The vehicle has been under sporadic restoration since alongside partner 56055. After electrical faults on the latter vehicle were attended to, 51205's stalling engine was attended to. Refurbished injectors and a fuel pump did not cure the problem which remains to be solved.

Class 101 DMCL 51512 - In traffic from 2007 to 2012 when withdrawn due to poor mechanical and cosmetic condition. Loose rust removed from windows in October 2012 and areas treated. By May 2013, work on the front end, repairing corrosion, sanding and filling was underway and two new cab window seals were fitted. In November 2012, all seating, panels and luggage racks were removed from the drivers side of the vehicle. Each passenger door has been removed, rebuilt and refitted one at a time. The interior sliding doors were also overhauled and a roof leak repaired. In the cab, the rust and loose paint has been removed from the metalwork and the seat reupholstered, as well as new panels and screws fitted to the desk itself.

Class 101 DTCL 56055 - Undergoing long term restoration. Due to its poor condition, this vehicle was set aside in 2005 for work to progress on other vehicles. Since 2007, work has slowly concentrated on repairing some bizarre electrical faults which were eventually traced to missing components, faulty jumper cables and disconnected wires under the desk, to try and make 56055 "talk" to its partner 51205.

Restoration News

Class 111 59575: Buffet car 59575 made it into Rothley works for a full repaint. This is the latest stage of the vehicle's restoration and while it doesn't quite finish the job, does indicate we have entered the last lap! Freelance carriage and wagon restorer John Robinson has been contracted to complete the paintwork and make good any outstanding body work issues along the way. He has also repaired door hinges and replaced one door which didn't fit properly with a spare. The vehicle was outshopped in dark Brunswick green during August.

W&M Railbus E79963: The extensive body work repairs to the East side centre vestibule of the vehicle continues with much of the corroded material being removed and replaced.



E59575 looking fantastic after its repainting and numbering at Rothley (C.Mate)

Evaluation and a better understanding of the electrical system has been enabled with the production of enhanced drawings, and the charging system has been converted to accommodate alternators.

The degraded nose and buffer rubbers on the centre main sliding doors are under review for replacement by a local extrusion company. However, the cost of the manufacture of the dies is expensive for a limited run, and on that basis we would enquire if other W & M operators would be interested in joining in to enhance the run and reduce the cost.

Class 105 56456: Since the last report nine months ago progress on this restoration has been rapid. The body panels on both sides have been completely replaced below the window line and considerable repairs have also been done to the framework. About a third of the platework and the entire lower frame at the rear end has been replaced while the cab has been completely rebuilt with a new skin, a new working route indicator and a lot of frame repairs. Some of the doors have now been re-skinned/repared and the rear drag box has had to be rebuilt as it was seriously corroded. New glass has been fitted to all windows using the glueing method and the electrics dismantled. New heater trunking (which runs below the floors) has been fabricated and is about two-thirds fitted while a new ply floor is fitted to about a third of the saloon area. On the roof all the ventilators have been removed, blanking plates inserted below them and refitted so that the roof is water tight. The body has received a preliminary coat of green paint.

There is a weekly update of news on the [Newsfeed Page](#).

Class 108 50645: The great news is that the task of fitting the replacement buffer beam has been completed, this has proven to be a major job and taken considerably longer than anticipated. A new wooden plank section has been fabricated and is currently being treated before fitting, following this the re-plating of the front end can be started. Both sides of the vehicle are now stripped to bare metal with preparation under way for the first coats of etch primer.

Class 108 50926: With resources focused on 50645, little work had been carried out on the DMBS until recently. With the brighter weather the opportunity was taken to start looking at the running gear of this unit which is all intact (unlike the interior!). Following a lengthy and thorough inspection of the systems which included checking of the injectors and a boroscope inspection of the cylinders plus the completion of some re-wiring, a set of batteries were attached in preparation for a start. Once the fuel system was bled, both engines fired up with few issues (other than the standard fan drive shaft rattle at idle, does anybody have a reliable fix for this?) for the first time in many years and work can now progress on the ancillaries. Further to this, VAC built very quickly as did air which allowed the horns to be well exercised. Next steps are a full service on the engines and a strip down and clean of the various air components before moving onto checking of final drives and gearboxes.



New flooring lined up for use inside 56456 (Llangollen Railcar Group)

Memories of Multiple Memories

And so we have it! Many weeks of planning and it is all over! The event was a resounding success and the whole team should be proud of their achievements. It was very strange to see passengers actually riding on board the Class 119 after all this time. There were many smiling faces and compliments about the event that will be treasured by all.

The weekend started early with Driver Experiences on Friday 9th. Seven return runs to Duffield were scheduled to allow as many people as possible to get a chance to drive either the Class 119 or unique Derby Lightweight Iris. Needless to say that all the turns were full, despite a last minute drop out. Some of the Railcar Association stalwarts were present

and expressed their gratitude at having an opportunity to drive a Class 119 and we even had an ex-Longsight driver who clearly remembers some of our other vehicles being in their care. Ironically, the train clocked up 119 miles on the Friday. There were one or two minor issues with the other vehicles in the train which were dealt with swiftly by a back-up team at Warksworth. All in all a very successful day of Driver Experiences were held and we hope to repeat this in the future.



W51073 during the Friday driver experiences

On to the main event. Saturday morning saw our Metro-Cammell 3-car set depart for Duffield with the 'bubble car' on the back at 10:20 to be greeted at Duffield by an enormous queue at Duffield Booking Office. The 'bubble car' was disconnected and stabled in Duffield Loop and the 3-car set came back with some 110 passengers.

Meanwhile, at Wirksworth, nerves were building as the train including the Class 119 was prepared for service. Finishing touches were being added, including the grand opening ribbon across the passenger door. Upon arrival of the Duffield train at 11:43, the Class 119 was let the train into a platform where an army of photographers and well-wishers were waiting to eagerly board the train. A short speech was made and the ribbon was cut before passengers were allowed to board. The First Class area was free during this weekend to allow people to fully enjoy the vehicle.

Along came 12:20 and, to the sound of two buzzes, the Class 119 rasped out of Wirksworth Station with passengers comfortably enjoying their complementary Bucks Fizz inside, for the first time. The 30-minute journey along the valley passed in a flash as soon the crew found themselves waving at the crew on the 'bubble car' who were waiting at the north end of Duffield Loop. At Duffield, passengers were detrained and the vehicles shuffled once again so that the Class 119 found itself stabled in Duffield Loop and the two single units were operating the 13:10 return.

The arrival back at Wirksworth at 13:43 saw all change once again as a swift change over meant that the 117/108 2-car which had been working Ravenstor services all morning was now boarding for Duffield and the two single cars in multiple were in Platform 3 ready to climb the 1 in 27. Off went the 2-car at 14:20 to be greeted by the Class 119 and it's partner waiting at the north end of Duffield Loop for a 4-car to be created for the 15:10.

The 3-car once again performed a round trip at 16:20 to allow for preparations for the evening special. Up on the return at 17:43 the team sprung into action stations to create the longest passenger train to run along the valley. The train was constructed along the line at Wash Green, the previously coupled 4-car on the south end of the 3-car and the two single units on the north to create a 9-car train. A small amount of time was waited until entering the station to allow people to congregate on the platform, as the train is so long it blocks the foot crossing at Wirksworth.

More irony as 119 passengers boarded for the fish and chip run at 18:20, however some 30 extra



W51073 during the Friday driver experiences



M79900 "Iris" during the Friday driver experiences



Classes 101 and 117 line up for service at Wirksworth on The Saturday morning



W51360 & E50599 having arrived at Duffield during the event

people also boarded using it as a single journey back to the main line. All had a great evening as the sun was shining, the food was delicious and the drink was flowing.

Into Sunday and the timetable was slightly simpler. The Class 119 and its partner did the first return, followed by the other 2-car at 12:20. The 3-car did a round trip at 14:20 also. Meanwhile, a 6-car end of event special for the 16:20 wearing the 'Wirksworth Thunderbolt' headboard was being constructed. This train comprised of the two single units at the north end and the two 2-cars. A great crescendo to a great weekend!



W55006 leads the 9-car formation into Wirksworth

Blue is the Colour...

A day on the Battlefield line enjoying Class 122 M55005 on scheduled services, 17/7/13



Departing Market Bosworth heading for Shackerstone on the first train of the day



Crossing a B Road between Market Bosworth and Shackerstone



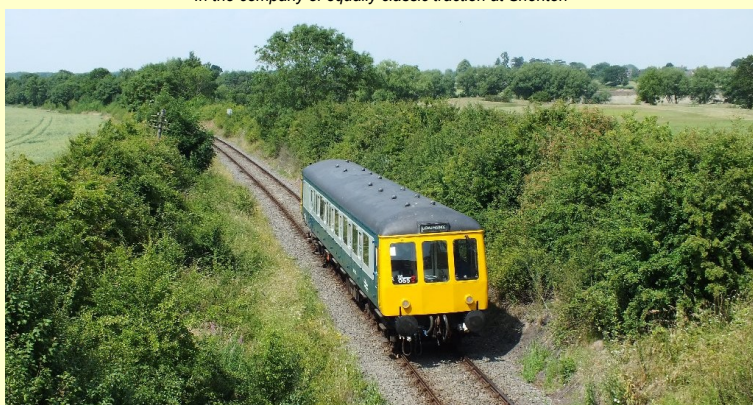
Pausing at Shenton during the turn-around time



In the company of equally classic traction at Shenton



On Shenton bank returning to Shackerstone



Passing King's Bridge, north of Market Bosworth



Passing Congerstone, south of Shackerstone, on the final service of the day



A view of the No2 end approaching Lineage Farm foot crossing on the final service of the day

Dean Forest Railway DMU Day

Featuring the launch of Class 108 DMCL M51566 and the realisation of the DMU group's long term aim to have two sets in traffic (one 2-car & one 3-car) able to form a five coach set in multiple. 27/7/13



The 5-car north of Norchard, M51566 closest (C. Walker)



M56492 & M51566 alongside each other at Parkend (C. Walker)



2-car with 3-car at Parkend (A. Pace)



The 5-car set at Parkend, M50619 leading (D. Brixey)



The 3-car set at Lydney, M51914 leading (D. Brixey)



Previous owner, Mike Hancock, stands alongside M51566 at Lydney Junction (C. Walker)

Time Traveller

A regular feature: ten external links to images taken of DMUs on British Railways

Green Era

[Derby Lightweight E79025 - Cransley - 21/6/1970](#)

[Class 100 - Peterborough - 5/1969](#)

Blue Era

[Class 101 - Lambley - 27/6/1974](#)

[Class 103 - Earlestown - 1975](#)

[Class 108 - Whitehaven - 13/5/1974](#)

[Class 126 SC59400 - Ayr MPD - 27/3/1976](#)

Blue/Grey & Later

[Class 115 - Liverpool Lime Street - 1980](#)

[Class 117 W51382 - Droitwich - 28/4/1984](#)

[Class 117 117305](#)

[Class 124 - York Dringhouses - 1/6/1977](#)

Class 119 Images

As it's issue 119, below are online links to some images reminiscing of the days when these vehicles were an everyday sight on the mainline

Green

[51077 - London Paddington - 7/1967](#)

[Port Sunlight - 1966](#)

Blue & Grey

[51059 - Birmingham New Street](#)

[51073 - Ashford - 15/8/1988](#)

[51083 - Gatwick - 24/10/1987](#)

Network SouthEast

[51079 - Reading - 1989](#)

[51086 - Ashford Works Yard - 18/8/1989](#)

[L595 - Winnersh - 31/7/1991](#)

Wanted

- Vacuum gauge from the guards compartment and the copper pipe that connects the gauge to the emergency brake valve.
- Duplex gauge from the drivers desk which has two needles on it.

For Sale

Class 121

Ex Departmental Class 121 55025 (Pandora). Contact [Tractionads](#).

Bogie

Class 117/121 Power Bogie

Contact [Bob Faulkner](#)

Mechanical Spares

- 3 Leyland 680 engines
- 2 R14 gearboxes
- 2 radiators
- 4 heaters
- Final drives
- Misc cab parts
- AWS parts
- Oil bath
- Alternators

Items located in Barry (Wales). Contact [Carl Hookings](#) 07863777388

Vacuum Spares

- DMU Vacuum Feed Valve
- DMU Automatic Isolation Valve
- Gresham and Craven Vacuum non return valve
- DMU Vacuum Reservoir (believed to be ex 107 or 118)

Contact [Andrew Briddon](#)

Mechanical Spares

Exhauster Pullys (second hand) (2 off)

Spare Power Bogie (1 off)

Complete engine units (2 off)

Contact [Andrew Goodman](#)

Cylinder Head Spares

<u>Part No</u>	<u>Description</u>
015-0350-38	Plug
015-0400-37	Rocker Lever
015-0400-19	Stud
015-0400-39	Bush
015-0400-12	Cylinder Head Nut
015-0399-94	Valve cap
015-0400-20	Stud
015-0400-54	(Rocker Cover) Gasket
015-0001-15	Head Gasket
015-0011-22	Rocker Shaft
015-0016-62	Rocker Shaft Pedestal
015-0350-30	Camshaft Bush
015-0400-45	Rocker Lever Spring
015-0353-16	Shim (Crankshaft Drive Gear)
015-0353-30	Thrust Washer
015-0399-95	Nozzle Clamp
118-0052-93	Rocker Bush

Contact [Andrew Goodman](#)

Crankcase/Block Spares

<u>Part No</u>	<u>Description</u>
015-0350-37	Dowel (Crankcase to Crankshaft)
015-0350-84	(Phosphor Bronze Plug) Bearing
015-0042-79	Nut
015-0015-50	Adaptor
015-0320-16	(Metallic Bush) Front Support Housing

Contact [Andrew Goodman](#)

Gearbox Spares

<u>Part No</u>	<u>Description</u>
015-0375-79	Input Shaft (Right Angle Drive)
015-0375-80	Output Shaft (Right Angle Drive)
015-0375-88	Tube (Right Angle Drive)
015-0375-92	Bevel Gear (Pair)
015-0376-23	Pin
015-0375-36	Cap
015-0375-40	End Cap (Right Angle Drive)
015-0376-29	Spindle Bracket
015-0375-64	Gasket
015-0431-25	Rubbing Washer (Fluid Coupling)
015-0430-32	Oil Seal Fluid Coupling
015-0431-10	Fluid Coupling
015-0812-80	Locking Washer (Alternator Gearbox)
015-0375-35	Breather

Contact [Andrew Goodman](#)

Compressor Spares

<u>Part No</u>	<u>Description</u>
015-0015-88	Adapter

Contact [Andrew Goodman](#)

Rotor Assembly Spares

<u>Part No</u>	<u>Description</u>
015-0113-92	Nozzle

Contact [Andrew Goodman](#)

Crankshaft/Flywheel Spares

<u>Part No</u>	<u>Description</u>
015-0305-45	Key
015-0305-81	Flywheel Bolt
015-0308-45	Pully Boss
015-0305-63	Oil Thrower
	Big End Main Bearings

Contact [Andrew Goodman](#)

Heat Exchanger Spares

<u>Part No</u>	<u>Description</u>
015-0330-42	Adapter

Contact [Andrew Goodman](#)

Exhaust Spares

<u>Part No</u>	<u>Description</u>
015-0405-78	Manifold
015-0010-70	Exhaust Manifold Gasket

Contact [Andrew Goodman](#)

Starter Motor Spares

<u>Part No</u>	<u>Description</u>
015-0754-98	Strap (Long)
043-1063-10	Bearing
015-0754-96	Spindle

Contact [Andrew Goodman](#)

Fuel / Injector System Spares

<u>Part No</u>	<u>Description</u>
015-0417-70	Seating Washer (Fuel Injector to Head)
015-0420-11	Drive Plate
015-0420-12	Coupling Sleeve
015-0421-55	End Jaw Solenoid
015-0850-47	Clamping Piece
015-0420-20	Bearing Housing (Fuel Injector Pump)
015-0420-19	Fuel pump Drive Gear
015-0850-62	Clip (Injector)
015-0016-69	Banjo Bolt (Fuel Injector Pump to Lube Oil Feed Pipe)
015-0850-73	Banjo (Fuel Filter)
015-0016-04	Nut (Fuel Pump to Oil Return Pipe)
015-0467-27	Nipple (Injector)
015-0420-31	Joint (Fuel Pump Bracket)
015-0847-49	Banjo Bolt (Fuel Filter)
	Fuel Pipe Sets (12) 680/1595
	Overhauled Injectors

Contact [Andrew Goodman](#)

Oil System Spares

<u>Part No</u>	<u>Description</u>
118-050-86	Screw On Oil Filters (HAJ 8423)

Contact [Andrew Goodman](#)

Coolant System Spares

<u>Part No</u>	<u>Description</u>
015-0352-19	Stud (Radiator)
015-0015-25	Collared Stud (Water Jacket)
015-0014-11	Top Cover (Water Jacket)
015-0630-17	Cooler Pipe (Water Pump to Heat Exchanger)
015-1081-57	'V' belt

Contact [Andrew Goodman](#)

Roller Bearings

<u>Part No</u>	<u>Description</u>
0043-1063-10	Starter Motor
0043-0052-79	?)
0043-0306-56	?))
0043-0312-65	?))) Water or Fuel Pump possibly?
6304/QE6/SKF	?))
109-3160-10	?)

Contact [Andrew Goodman](#)

Oil Seals

<u>Part No</u>	<u>Description</u>
118-0052-85	?
015-0582-70	Speedometer Generator
015-0420-25	?
015-0431-25	?

118-0056-00

'O' Ring(?)

Contact [Andrew Goodman](#)

Gaskets

<u>Part No</u>	<u>Description</u>
002-1210-50	?
015-0431-10	Fluid Coupling
015-0016-56	Cylinder Block
015-0813-47	Heat Exchanger
015-0352-27	Crankcase
015-0012-15	Oil Pump Assembly
002-1240-08	?
015-0375-64	Radiator
002-1227-10	?
015-0343-47	Compressor
015-0014-43	?
015-0014-22	Transfer Block
015-0113-90	Rotor Assembly
015-0813-48	Heat Exchanger
002-1306-06	?
002-1207-45	?
002-1225-02	?
002-1267-25	?
002-1277-10	?
002-1207-58	?
002-1275-07	?
002-1297-63	?

Contact [Andrew Goodman](#)

Movements

Class 117 59515 has relocated from the **West Somerset Railway** to the **Yeovil Railway Centre** by rail in July. The move is the latest in a series spanning a few years which has seen the West Somerset's hauled rake of Class 117 TCL vehicles disbanded and relocated to other lines. Whilst some have been returned to DMU sets, others remain in use as useful vacuum braked hauled coaching stock, and it is the latter use that Yeovil Railway Centre envisage. The line have launched an appeal to cover movement and restoration costs and wish to see the vehicle in passenger use as soon as possible. It latterly saw little if any use at the WSR.

Gallery



The Churnet Valley's 104 set posed at Cheddleton, 6/7/13



The Churnet Valley's 104 set posed at Cheddleton, 6/7/13



The Churnet Valley's 104 set posed at Cheddleton, 6/7/13



The Churnet Valley's 104 set posed at Cheddleton, 6/7/13



The Churnet Valley's 104 set posed at Cheddleton, 6/7/13



The Churnet Valley's 104 set posed at Cheddleton, 6/7/13



W51363 leads the Class 117 set at Gotherington during the July Diesel Gala (L. Pacey)



W51363 leads the Class 117 set at Winchcombe during the July Diesel Gala (L. Pacey)



Class 108 meets 105 at Llangollen during the Railcar Gala (P. Dickenson)



M55005 leading the 9-car at Berwyn during the Railcar Gala (P. Dickenson)



SC 51367 & SC 51402 at Boat of Garten on the Strathspey Railway, 3/8/13 (J. Gray)



121032 at Berwyn during the Llangollen Railcar Gala (P. Dickenson)



121032 at Berwyn during the Llangollen Railcar Gala (P. Dickenson)



M50454/M50528 at Llangollen during the Railcar Gala (P. Dickenson)



Forthcoming Events

Date	Railway	Expected Traction
October 4th-6th	Gloucestershire Warwickshire Railway (18th Convention)	117 & 122

Submissions

Hopefully the contents of this bulletin was both interesting and informative. If you know anyone who could provide similar material found in this issue for future bulletins, please make yourself or them known to railcar@live.co.uk The following types of submission would be most welcome:

- Photographs of vehicles in service
- Restoration articles
- Reports on special events
- Requests for information
- News & images of recent DMU activity
- Anything that featured in the pre 2004 bulletins
- Anything that may be of interest to readers

Feel free to send submissions at any time to railcar@live.co.uk but no later than October 30th for Issue 120 (due out November)