



1). INTRODUCTION – A DAY ON THE COACH – No.23189:

With the recently repaired Class 12AR No.1535 ‘Susan’ out on a Beer-Tasting jaunt, romping along with just a few coaches and a certain nervous candidate driver * on board, the 15M shop spanner-benders concentrated on working on the Gold Class Sleeper Coach No. 23189. The fellows quite enjoyed themselves, as they could see actual progress being made, rather than just repetitive maintenance and repair-type tasks.

Lessons have been learned from the mistakes made in the installation work of the now-closed Setimela Rail Tours company. One lesson was that you shouldn’t just change things just for the sake of changing them. They came up with initially interesting-looking different compartment layouts that were actually LESS efficient than those from the old railways. Union Carriage and Wagon knew what they were doing!

The other important lesson learned is that domestic-type installation techniques and materials don’t last long on a railway coach, being subjected to vibration and the temperature extremes. Oddly enough, durability in terms of physical wear isn’t such a factor as the coaches wouldn’t have a busy duty cycle. But the fittings used need to resist damage, such as clinkers lodged in shoe soles, and they need to be water proof.

We have also learned that colour schemes should be muted and that PVA paint has no business being on a coach!. (Especially on top of laminates – rough lion-tongue special!) Not even the pastels hold up well. The bathrooms were done in gloss green for the Dave Rogers Tour of 2007 – in an attempt to match the green coloured corner moulds and water stands. That paint was at least water proof! The bathrooms will be done ‘silk’ or ‘egg shell’ type paints for washability, while the showers will be backed in tiles rather than laminates.

Class 15F No.3046 awaits boiler hydraulic testing but we are confident she’ll pass. Class 15F 2914 has had her new drawings officially passed and materials approved for the firebox foundation ring conversion project. George Hoddinott is busy trying to find a certified welder for the materials and joints to be used, as well as a competent company that can perform induction welding to make the corners of the proposed firebox trough.

So the 15M shop was all hands on the coach deck on Sat, 26th May.

We still urgently need volunteers for the coach work, especially as the bathrooms near completion over the next few weeks and there are lots of small tasks that need doing. The running gear needs to be serviced as well. Don’t forget that the workshop team will also be involved in preparing the Depot for the Annual Open Day as well, which will be difficult with coach work to do at the same time.

(*) The ‘certain nervous candidate driver’ received his driver’s certificate – well done, Johann Breydenbach!

2). PROJECT – GOLD CLASS COACH VESTIBULE FLOOR:



F01 – Simon Bennett is busy working at chipping away the aged vinyl sheets. SAR steel coaches do not have rubber seals on their doors, relying on the protruding lipped frames to channel the rain water at the sides, and the walkway lip as a dam. This area is quite prone to water damage.



F02 – Over the years of the doors being left partially open, many of our coaches now have rotted flooring. The aged vinyl later cracks in the weather extremes. A domestic vinyl sheet had been laid over this aged floor, without skirting or sealing, so the water was still able to penetrate the timbers.



F03 – Most of our still-unrepaired coaches have wood-rot problems in this area where the rain gets in through open gangways and through failed gangways bellows. The vertical bellows often don't meet in a straight line. The biggest issue is the perishing of the drip strips above the head bellows.

The circular hole in the cutaway floor section is the access hole for the coupler's draw-pin. There is normally a cast iron access plate protecting the hole.



F04 – The vinyl chippings have to go somewhere – tossed over shoulders and out of the doors! Dennis Edgar has a contact who will arrange replacement original specification material for us for free, and we just have pay to install it. (They currently install the material on coaches anyway.)

The material has to be evenly and gently heated up upon installation and rolled into the adhesives as well as rising up into the skirting areas. It is actually quite a specialized job but the floors will last for another few decades if it is done properly.



F05 – The steel coaches don't have skirting boards as the coverings wrap up the wall in hospital style. (It is softened in situ with a heat gun.) The joints rising up into the corners can sometimes be welded together and thus not reliant upon adhesives.

The coach floors are continuous under the walls and partitions. The water damage here is from the toilet to the left. The visible cupboard, once a linen cupboard, now houses the vertically-installed hot water geyser, which makes this area another 'hot spot *' for water spills if things go wrong.

(* Pun purely intentional)



F06 – The marine-grade plywood is laid on top of heavy steel sheeting, under which are the stringers. ('Joists') The stringers themselves are under-plated with a square profile corrugated sheet as a coach body under-pan. (Think : High density IBR sheet.) Nearly all this water damage is from above and through the doors n' gangways.

Pictured here is the original bathroom door for the old communal bathroom. It is now out of service since each compartment has their own ensuite facility.

3). PROJECT – GOLD CLASS COACH BATHROOM WORK:



S01 – One of the 'Setimela Showers' shows the weak design. The moulded shower base is circular in outline with the straight side wings poorly braced. They were flexible and tended to leak at the walls and the floor where they had been accidentally kicked. (Breaking the silicone beads.)



S02 – The old showers also used cheap concertina drain pipes. The ridges impede the drainage and trap the hair and dirt. The pipes also contracted in service, shifting the outlets. The pipes, designed for side exit, were bent 90 degrees just beyond the head, collapsing the waterway.



S03 – One of the new shower pans being tested for fit. Mr. Maurer chose a rigid straight-wall design with a deeper base. The shower walls are going to be tiled with the shower base skirts being 'siliconed-in' as well as beaded.



S04 – This view shows how the floor planks proceed under the shower base, which has adjustable feet. We need to exaggerate the drain-fall slightly as sometimes the coaches stand unevenly and the showers form foot wash basins.



S05 – Gordon uses a barrow to brace both ends of the floor plank that he is trimming for a sink. These prefab T&G planks are labelled as 'laminated,' but they are closer to a 'veneer' with a solid wooden core and laminated coatings.



S06 – Gordon fitted the notched plank that custom-fits around the pipes even though we will have a pedestal under the sink. The little gaps around the pipes, especially the drain, will be filled with puddled silicone to floor height.



S07 – In Comp C bathroom, Alan scrapes away the stingy single strip of silicone beading from the laminated backing. This floor is in poor state with many extra holes. The triangular-ended hole in the corner is original – it used to be for the Coupe’s compartment’s sink



S08 – This roughly cut hole shows the complex floor construction. First the vinyl, then the laminated marine ply floor boards, then the steel backing, then the joist space and then the under-floor covering. The visible pipes are out-of-service parts of the original plumbing system.



S09 – Gordon vacuums up Alan’s mess. From the time of this photo, the drum type vacuum cleaner is going to block up in just three...two...one... @\$%&@ !



S10 – After a time-wasting battle to remove a door handle in another compartment, this one was simply let into the door panels to allow an extra few inches of opening. The handles and bed bunks were blocking the relocated doors.



S11 – Gordon zaps in yet another self-drilling screw – these were even able to go through the fireproofing steel sheet in the middle of the bulkhead walls. The floor bowed upwards a bit in the middle and is now under compression.



S12 – The poor quality floor had the holes patched in and then was sheeted over with 7-Ply wood sheets. The piping holes are covered up as well, but they will be re-drilled by using pilot holes up from underneath the coach.



S13 – Panelling also started on the splash wall. This area, as well as the ‘woody’ laminate on the right side, is to be tiled with 150mm tiles. The tiles will be attached with silicone-based adhesive for some flexibility on a moving coach. The laminates will first be scarified with a coarse flapper wheel to enhance the grip of the adhesive.



S14 – The center splash board goes in. The laminated area in front of the chaps is where the coupe’s compartment’s door was. The panels will go straight over the sliding window hatch. (This hatch was still functional in the original installation!) The hatches will be either plated in or covered with pwettie-pics on the corridor side.



S15 – The day’s beer tasting train had come and gone (The repaired 12AR went like a champ!), the loco crews and train staff gone home and the 15M workshop schmucks still working on into the night! Here Gordon is marking out what is to become the top splash panel for Comp C’s shower.



S16 – When doing sheet work, the lack of clear workbench-space became a problem. The fellows are cutting out the final full-sized splash board while being very careful of that blade. The day staff will be tasked with clearing that bench during the week. (The S.Ack. Anti-Sukkelaar policy.)



S17 – Tsk! Tsk! Using flush-cut electronic side-cutters, Gordon pulls out nails that were driven into the ENDS of that plywood sheet. It must be good stuff, as there was no evidence of splitting at the nails as you would expect.



S18 – The plywood boards were sourced from a dismantled model train layout, so it is kinda appropriate that they find a new home on a REAL train! Any items going onto a Cape Gauge passenger coach has to fit through narrow corridors and doorways, or through the windows. Mr. Maurer has already taken note of this restriction for the new furniture!



S19 – The fellows were tired and debating about whether to bother cutting a narrow board to fit to finish off the job. They decided to do the job properly. The light specks in the photo are sawdust motes!



S20 – The fit-board is in place. See the colour schemes? Grey laminate = Original. Institutional green = Dave Rogers Tour 2007. Pink = Setimela. To eliminate the circus-train colour combos we currently have, the coach will be painted in neutral colours based on browns and beiges, with each Gold Class compartment done in a different tone.



S21 – Dr. Smudge tries out the battery-powered screw driver and was quite impressed! (It's a very high-tech tool for a man who uses hammers and slogging spanners on the locomotives.)

The top of the panel will be capped with a silicone-backed aluminium angle when the tiles are done.



S22 – Coach work continuing on into the Saturday night. As we are in winter season it gets dark at 6:15pm, so it wasn't actually that late.

We left the skunk works at 7:45 after a last cup of tea and chasing down the odd Russian sausage..

4). PROJECT – UNDERBODY CLEARANCE ON GOLD CLASS COACH NO.23189:



U01 – Alan snips away a cheap green nylon garden hose that ran the full length of the coach. It was used to transfer water along a coupled train and serves no purpose since the pumps are all functional.



U02 – Gold Class Coach No.23189 in all her Gulf Red and Quaker Grey glory. If this coach's compartments sell well on the steam tours, there is an unused coach in our yard that would be ideal for conversion to a 2nd Gold Class unit.



U03 – Some of the obsolete equipment that had been cut away from the coach – no sense in burning good coal to haul this dead stuff around. The green machine to the left is the hydraulic pump-pack for the loco wheel lift jacks.



U04 – The Smudge-Meister cutting away some lighter stuff from the coach underbody. (The insulated steam heating line is already gone.) The torch is starting its way through the cold water line for the original under-slung geyser.



U05 – Now a whole mess of piping had to be pulled out. This is the old geyser plumbing. We do have a coach using the original geyser but this coach already has a 100 litre unit fitted inside – so the existing unit is in for the chop.



U06 – The Sanderson was present too, so there was no escape from the cameras this day. The underbody clearing is also to facilitate later installation of cess-tanks and additional water tanks for later upgrades.

5). SOME EXTRA PICS:



X01 - Gold Class A's shower was fitted with LED type down-lighters during the week. The ceiling is so low that the more conventional halogen down-lighters were heating up people's craniums and certain hairless domes.



X02 - Looking up at the illuminated gangway above the buffer plates and draft gear. All this hardware (and the bogies) will need to be serviced before the train runs. Time to purchase shares in graphite grease, methinks.



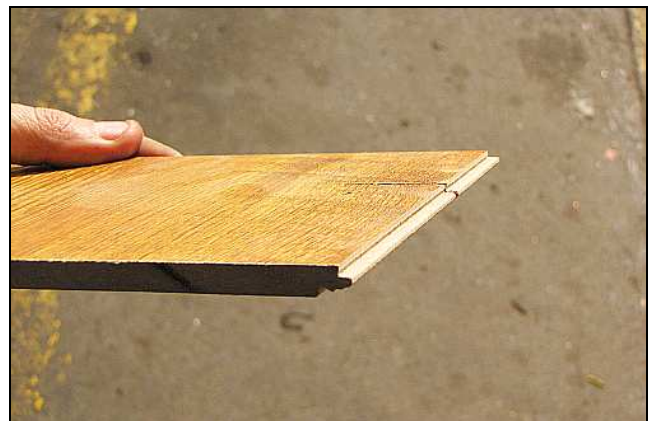
X03 - Some of the crazy plumbing visible above the handbrake. It is a mixture of copper and synthetic. We are gradually converting to the synthetic as it has no scrap metal scrap value (theft) and it is able to withstand sub-zero temps. Because it is semi-flexible, it reduces the number of fittings. Unfortunately, it does perish with hot water, but the duty cycle is so low it will serve for years with no problems.



X04 - Looking into one of the wiring chambers above the geyser cupboard. The copper pipes are capped with vacuum breakers, which is good, but they are in direct contact with the live wiring, which is bad news. Shaun Ackerman was happily investigating and poking around with his hand in the semi-darkness, but he withdrew rather quickly as soon as Alan shone a torch in there!



X05 - Another little glitch - a rubber coupling on a riser pipe. It is the cold water line for the geyser, so it isn't so bad, but it will be replaced with a modified bushing.



X06 - Here's a close up of the prefabricated tongue-and-groove planking that is being fitted. Notice the design of the tongue to facilitate the slide-and-click action.



X07 – The recently re-discovered vacuum pump was bench tested and it works a treat. It give about 25kPa worth of vacuum.

We are planning to mount this contraption on an wheel barrow frame as a portable vacuum pump. (We have plenty of barrow frames.) A portable pump will be handy for pre-testing of locomotive and rolling stock brakes within the workshops and during pre-trip inspection.



X08 – The bees that have made their home in the turntable of Sandstone's Steam Crane No.578 are doing well as a built-in anti-intruder system with integral buzzer apparatus.

They were buzzing around in the neighbouring track all day (15M Road 3) – they didn't bother us and we didn't bother them. You just have to watch that you don't breath in too deeply and check the contents of your tea cup for any sharp-ended little surprises.



This Depot Report was compiled by Mr. Lee D. Gates on behalf of Reefsteamers Association NPC.
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