## **BR CLASS 117 DRIVING MOTOR SECOND 51388**

On the 16th October 1958 the British Transport Commission (BTC) placed orders for 168 high density vehicles - 57 Driving Motor Brake Seconds, 57 Driving Motor Seconds and 42 Trailer Composites for the Western Region. The Pressed Steel Company was to build 123 of these at their Linwood Plant (near Paisley) under Lot Number 30548 to design diagram 535. At the time 108 were for suburban services from Paddington and 15 for the Bristol-Taunton area.

Delivery commenced in November 1959, with the final Pressed Steel set delivered a year later on the 5<sup>th</sup> November 1960. DMS 51388 was outshopped earlier in 1960. The vehicles were of a high-density (suburban) layout, built to drawings supplied by Derby design office based on their Class 116's. They were delivered in Loco Green (the darker shade usually called Brunswick). The standard practice at the time was that suburban stock did not have a lined livery. All had white roof domes and 'speed whiskers' on the cab fronts. At least the first set had some of the underframe equipment picked out in silver. Writing could often be seen on the buffer beams to the left of the coupling hook, this referred to them being fitted with with Western Region ATC gear.

In June 1961 certain Southern Region services from Reading, Basingstoke, Winchester, Southampton and Portsmouth were noted as being worked by Reading based 117s. Yellow panels replaced 'speed whiskers' from around 1964.

Most were delivered without marker lights, giving the front a rather plain appearance particularly when the yellow end was added with rail blue livery. It seems (based on notes on the Diagrams) that the last three pairs of power cars were delivered with marker lights. They were added later to remaining Class 117 vehicles in the late 1970s / early 1980s

Drivers cab handrails started out hollow having the dual purpose of acting as the drain for gutters. These were always getting blocked so a normal handrail was fitted later. Originally they had 'square' (or 'cut') buffers - large circular ones that appeared to have the top and bottom cut off. Later, other types could be found such as oval or large round ones.

WR ATC was originally fitted and, in the 1970s, they were dual fitted with standard BR AWS. Later, the ATC equipment was removed. The power train was pretty standard with Leyland 680 (150 hp) engines coupled to R14 gearboxes and F239 final drives. Exhaust pipes started out as the Derby type - joining together in a box at roof level – but these were changed later to the normal individual style.

Inside, the second class seats began with maroon moquette and tan headrests. The floor covering was green, the partitions were in light tan coloured 'wood grain' Formica panels and the drivers cab seats were green. In 1975 refurbishment, the wall panels remained the same although seats were re-trimmed in trojan moquette with black head rests. Other seat coverings were used over the years, such as a blue check design which was added during later refurbishments. Wall panels became plainer and fluorescent lighting was fitted. In their final years a horizontal stripe pattern was used in some vehicles.

The sets were not gangwayed when new. However there was always through access inside the individual vehicles - the interior partitions having doors - unlike some other high-

density vehicles.

For the DMBS there was no change in seating capacity when the gangway was added. The DMS, under design diagram 852, would be reduced from 91 to 89 as the six-seater on the back wall was replaced by a two plus two to allow the gangway in between. The TCL would be reduced from 24 first / 50 second to 22 first / 48 second.

All were delivered to the Western Region and the early years saw the vehicles working suburban services out of Paddington based at Reading and Southall. In 1964 they began to spread out in the Region reaching Cardiff and Plymouth in 1968 and Bristol in 1971. In the mid/late 1970s some vehicles appeared on the London Midland Region with centre cars being allocated to Newton Heath and Cricklewood.

All refurbishments for the Class were done at Swindon Works. Set L430 (51368 + 59520 + 51410) apparently underwent a test refurbishment in April 1975. It was given blue linoleum, cream Formica panels and blue seat coverings, but incandescent lamps were retained. It also retained it's plain blue livery at that time. The 'production' refurbishment programme got underway in January 1977 with 51388 being outshopped on 17<sup>th</sup> June 1980 in BR Blue/Pearl Grey livery.

In the late 1980s sets went to Tyseley for Birmingham Cross-City services. The 1990s saw sets reach Bletchley, Haymarket (for the Fife Circle) and Penzance.

Class 117's lasted in passenger use until 2000 but 51388 was withdrawn from British Rail service in July 1993. It was preserved the following year by the North Norfolk Railway. From 1994 to 1996 the vehicle received restoration work, and it moved for the first time in February 1995 on a test run, albeit on only one engine.

May 1996 saw 51388 outshopped in BR Green livery. Also during that year, the redundant head code box was opened and photo copies of numbers taped inside to return it to its original appearance. 51388 (with 51346) made their first runs at the June 1996 Diesel Gala event, as a 2-car set.

From 1996, 51388 operated much of the NNR's off peak diesel requirements, such as low-season work, mid season running alongside steam and high season running in the form of the first and last trains of the day.

Winter 1997 saw the heaters repaired on the vehicle allowing it to provide heat for passengers and, in Spring 1998, new batteries were fitted which resolved a number of problems, exacerbated by the winter weather, essentially caused by poor capacity.

In 2000 the roof was repainted but 51388 was suffering due to continuing problems with batteries. The set was also dogged with mechanical issues and was regularly out of traffic. This, along with the realisation that long term the vehicles would require much work to the numerous doors, lead to the set being put up for sale.

It remained on the NNR until December 2003 when it was purchased by a member of the Swanage Railway. In January 2007 it moved from Swanage to the Midland Railway Centre at Butterley for overhaul to operational condition from where it returned in July 2007.

At Swanage 51388 & 51346 entered traffic becoming the railway's main DMU set, replacing Class 108 51933 and 56504 which were in need of refurbishment. On 9th February 2009 51388 and 51346 became the first train to run passengers from Platform I (bay) at Swanage since 1966 following the completion of resignalling work.

In 2010, 51388 was removed from traffic and stored awaiting overhaul, its duties being covered by refurbished Class 108 set 51933 and 56504. A four year period of inactivity followed whilst the vehicle awaited restoration.

In September 2014, 51388 was removed from store and sent to Eastleigh Works for a further overhaul and mainline registration. The overhaul work, particularly the mainline specifications, took far longer than originally hoped for or planned. The vehicles involved in the project were the subject of several setbacks concerning the mechanical components such as freewheel units and wheel sets. Combined, these issues led to 51388 being inside Eastleigh works for several years where modern Central Door Locking was fitted to the remaining doors. By late 2017, 51388 was receiving mechanical overhaul work to the bogies.

It was to be February 2020 before the hugely expensive and heavily delayed overhaul to mainline standard was completed. 51356, 59486 and 51388 finally returned to the Swanage Railway, by road transport provided by S A Smith of Biggleswade, where they were stored operational to await the completion of paperwork to allow them to operate on Network Rail.

The Covid-19 pandemic further delayed the entry into passenger service however, during the summer of 2021, the 3-car set finally started running driver training trips along the line, with the long awaited relaunch into passenger following in August at the railway's "Rail to Roads" event. It had been over ten years since 51388 had carried passengers.

During 2021, 51388 operated off-peak services along the Swanage Railway in a 3-car set with 59486 and 51356. The railway's services were severely impacted by COVID-19,

In due course, it formed part of the DMU fleet used to run stage 2 trial services to and from Wareham mainline station in 2023. These were, once again, operated under the West Coast Railway Company's Safety Case and Train Operating Company licence using their Drivers and Guards. The Swanage Railway used specially trained staff to 'conduct' WCRC crews as well as drive/guard the trains between Swanage and Norden.

Information compiled by Peter Sykes 19th February 2024