## BR CLASS 117 DRIVING MOTOR BRAKE SECOND 51356

On the 16th October 1958 the British Transport Commission (BTC) placed orders for 168 high density vehicles - 42 Driving Motor Brake Seconds, 57 Driving Motor Seconds and 54 Trailer Composites for the Western Region (WR). The Pressed Steel Company Ltd built 123 of these at their Linwood Plant (near Paisley) in Scotland. At the time 108 were for suburban services from Paddington, 15 for the Bristol-Taunton area.

Delivery commenced in November 1959, with the final Pressed Steel set delivered a year later on the 5/11/60. The vehicles were of a high-density (suburban) layout, built to drawings supplied by the Derby design studios based on their Class 116s. They were delivered in Loco Green (the darker shade commonly called Brunswick). The standard practice at the time was that suburban stock was not lined.

All had white cab roof domes and 'speed whiskers', and 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 WR ATC gear. Yellow panels replaced 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. 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 all the others in the late 1970s / early 1980s

Drivers cab handrails started out as hollow having a dual purpose of acting as the drain for gutters. These were always blocking 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. WR ATC was fitted originally fitted to be joined, in the 1970s, by standard BR AWS equipment. Later the WR ATC kit was removed.

The power train was pretty standard with two Leyland 680 (150 hp) engines coupled to R14 gearboxes and F239 final drives. The exhausts starting out as being the Derby type joining together in a box at roof level. They were later changed to the normal individual style.

Inside, the second class seats began with maroon moquette with tan head rests. The floor covering was green and the partitions were in light tan coloured 'wood grain' Formica with drivers' cab seats in green. During 1975 refurbishments, the wall panels remained the same, but the 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 refurbishment, and the wall panels were now plain and fluorescent lighting 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 high-density vehicles. For the DMBS there was no change in seating capacity, under design diagram 850, when the gangway was added. The DMS would be reduced from 91 to 89 as the sixseater 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 Class 117's 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 June 1961 certain Southern Region services to Reading, Basingstoke, Winchester, Southampton and Portsmouth were noted as being worked by Reading based 117s. 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) underwent a test refurbishment in April 1975. It was given blue linoleum, cream Formica panels and blue moquette seat coverings, but retained incandescent lamps. It also retained it's plain BR Blue livery at that time. The 'production' refurbishment programme got underway properly in January 1977 with 51356 outshopped on 23rd March 1978 in a White with Blue stripe 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. They lasted in passenger use until 2000.

Latterly seeing service around London as part of 2-car set L702, 51356 was then withdrawn and stored for many years before preservation in 2004. The vehicle was purchased by Dorset County Council who wished to obtain three 3-car Class 117 sets for a proposed community rail link between Swanage and Wareham. 51356 was joined by two other vehicles from different sets, TCL 59492 from 117313 and DMS 51392 from set L701.

In 2004 the 3-car unit was moved to a private site at Winfrith in Dorset where all nine of the Class 117 vehicles were being stored in readiness for the Swanage Railway's Wareham extension to bear fruit.

However in March 2007 the site had to be cleared with 51356, 59492 and 51392 being relocated to the Weardale Railway, with the other two sets going to the Midland Railway centre at Butterley, all for storage. 51356 remained in store, with no work being undertaken on the vehicle and thus, after many years out of use, the vehicle had deteriorated in condition. In 2009, the whole set was moved to Allelys yard in Warwickshire, for continued storage.

By 2011 it was understood that Dorset County Council would no longer be proceeding with the plan to operate all nine Class 117 vehicles, and six other vehicles were sold. However, 51356 was not disposed of and remained in store.

In December 2014, 51392 was moved to the Swanage Railway for spares recovery, intended to assist with the mainline registration of DMBS 51346. It was accordingly moved to Eastleigh Works shortly after as that was where the overhaul work was taking place. However a condition assessment was made of 51356 and it was apparently found to be in better condition than 51346, so the decision was made to overhaul the former in preference to the latter.

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 51356 being inside Eastleigh works for several years although, during that time, a modern central Door Locking system was installed to comply with current main line requirements.

In July 2017 the vehicle had progressed to the stage where bodywork and painting was required and 51356 was moved into the paint shop facility at Eastleigh. 51356 was transformed rapidly, emerging in September, sporting a fresh coat of BR Green to match its partners – 59486 and 51388. By late 2017, 51356 was back inside the main workshops at Eastleigh with mechanical overhaul work to the bogies progressing.

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 launch into passenger following in August at the railway's "Rail to Roads" event. This was the first time 51356 had carried fare paying passengers since withdrawal from Network South East over 20 years prior!

During 2021, 51356 operated off-peak services along the Swanage Railway in a 3-car set with 51388 and 59486. 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 19<sup>th</sup> February 2024