

## **BR Class 415/1 4-EPB EMU Trailer Second Open No. 15396**

During October 1951 the first of a new type of Southern Region third-rail 750v DC 4-car suburban unit was completed at Eastleigh but still using standard Southern Railway jigs. Unit number 5001 was constructed on reconditioned underframes from Lancing. The building continued until 1957 by which time 213 units had been completed, these being numbered 5001 - 5053 plus 5101 - 5260.

Overall dimensions and internal layout were very similar to contemporary 4 SUB units. However, these 1950s units were fitted with a self-lapping electro-pneumatic brake in addition to the Westinghouse automatic air brake. All earlier electric multiple units had been fitted with just the straight air brake so the fitment of the EP brake led to the new unit designation '4 EPB'. At a later date, BR reclassified these units Class 415.

Externally the units closely resembled the original 4 SUB units, which were still being constructed, except redesigned unit ends where the cab and brake areas were situated. Coaches were close-coupled within each unit using the standard suburban centre-buffer and three-link chain arrangement. This was bolted with shackles underneath the headstock which kept the centre-buffer under compression. The outer ends had BR standard buckeye couplings.

Trailers to BR Design No. 2018 were 62ft long and weighed 28 tons with a 10-bay saloon layout seating one-hundred & two passengers. Interior fittings were accompanied with plywood veneer side panels and white plastic ceilings with hard-wearing linoleum on timber baulks. Luggage racks were modified with an upwards extension to anchor them to the ceilings.

All the 40 vehicles in Order No. HO4172, were ordered on 11<sup>th</sup> February 1955, and utilised reconditioned underframes which had originally run under wooden bodied cars in the 3-car suburban fleet. These latterly having been themselves augmented to 4 SUB by the insertion of an all-steel trailer. Many of these frames were originally newly built at Lancing. However, the batch which had been constructed at Ashford were also utilised with some small dimensional differences between these and the Lancing product being eliminated during their reconditioning at Lancing prior to the 4 EPB bodies being constructed upon them.

Disposal of the wooden bodied vehicles had taken place mostly at Newhaven though some earlier ones were broken-up at either Horley or Lancing Works. Their underframes were then taken to Lancing, partly dismantled, to be overhauled and rebuilt with additional strengthening. Underframes were then moved to Eastleigh where the new 4 EPB bodies were built onto them. A few of the underframes came from 2 NOL units and, in a few instances, former Motor coach frames were used under trailer cars, although the reverse did not happen.

It was outshopped in overall BR (Southern) Green with small yellow ends added on 3<sup>rd</sup> April 1965. Full yellow ends were added on 16<sup>th</sup> April 1968. By November 1970 the unit had received all over Blue livery with full yellow ends.

One Class 415/1, unit 5176, survives. As one of the two "heritage" units (along with 5001), it was repainted in British Rail blue in the early 1990s and survived until the end of EPB operations in 1995. After spending several years in storage at the Mid Norfolk Railway, the unit was split in 1999, with three vehicles going to the Northamptonshire Ironstone Railway Trust and one intermediate trailer vehicle to the Electric Railway Museum, Warwickshire near Coventry.

Class pioneer 5001 had been stored at Ministry of Defence Kineton following withdrawal in 1995 but no buyer could be found and the unit was stripped and sold for scrap in 2004. Only three vehicles remained at the Northamptonshire Ironstone Railway, but Trailer Second Open 15396 was going to be scrapped as it is believed insufficient funds were available to overhaul it.

The chance to obtain it for the Swanage Railway's Carriage Group could not be overlooked. It had many 'Bulleid-style' items for use in the railway's heritage loco hauled coaches. Coach 15396 was moved by road arriving at Arne Road road/rail siding on Thursday 9<sup>th</sup> February 2023. Here it will be dismantled for numerous suitable spare parts to be recovered before scrap contractors are called in to dismantle the remains.

Information collated by Peter Sykes      22<sup>nd</sup> February 2023