

# POINTS OF INTEREST

## THE NORTHERN LINE TRAIN FLEET

Further to Michael Allen's letter in the June issue of *Underground News* (page 296), generically the 115 seven-car trains of 1938 Tube Stock on the Northern Line were 'the same' in the 1950s and 1960s. Deep down, however (sorry for the pun!), there was much variety within the 1938 Tube Stock fleet, although much of it wasn't visible and only those 'in the know' had an idea of the variations there were. The Ian Allan ABC books of 'London Transport Railways' of that period helped a little but were not wholly conclusive – they didn't need to be that detailed. Once the 1949 Tube Stock programme had been completed by 1953, the fleet was shared with the Northern (115 trains), Bakerloo (54 trains) and Piccadilly (15 trains). We will look at the Northern Line, although the other two had some variations, but none as many as the Northern Line.

### DRIVING MOTOR CARS

The bulk of the driving motor cars were of one standard, but there were 20 which had been converted from nine-car stock. These had been numbered 90324-90333 and 91324-91333 but when converted to the main fleet and had been fitted with guards' panels (guards panels on the nine-car trains were on NDMs at positions '3' and '7' – see below), they became 10324-10333 and 11324-11333 respectively. As far as your writer knows, there was nothing to distinguish them from the majority of motor cars.



There were also two separate cars which had been given modifications, so with a 100-train peak service, there was a 1 in 100 chance of seeing them (or even less if they were off for maintenance). This included the 'sunshine window' car or 'vista dome' car 10306, where there were circular windows at the door casements, windows extended up into the curve of the roof and passenger door windows extended up into the curve, as seen in Golders Green Depot (*Left*) and its interior (*Below, Left*).

### Both photos: LURS Collection

The second experimentally modified car was 11294, which was fitted experimentally with fluorescent lighting for a short while, prior to the arrival of the 1956 Prototype Tube Stock.

### TRAILERS

Again, most of the trailers were of one standard, but the former nine-car trailers were inserted into the fleet. Here, 092389-092408 had become 012389-012408.

In pre-war plans, three trailer cars (012412-012414) were destined to be inserted in the three streamlined trains of 1935 Experimental Tube Stock. As these trains already had compressors on the 'D'-end

motor cars, the trailers were to be delivered without them. As events turned out, this plan wasn't realised. The three trailers weren't delivered until 1947 and were fitted with compressors and absorbed into the fleet.

Also included in the '1938 Stock trailers' were 21 new cars of 1949 Tube Stock (012495-012515). The most visible difference to the passenger was the end communicating doors. On the 1938 Tube Stock, the tops formed a graceful curve whereas on the 1949 cars the tops were horizontal with a wooden section above.







shows the difference between the prototypes and the main fleet – recessed communicating doors, wing-shaped vents over them and straight-edged draught screens below waist level.

Also becoming part of the 1938 Tube Stock family were the 18 streamlined motor cars of 1935 Experimental Tube Stock (q.v.), which became trailers and renumbered 012477-012494. These were moved to Acton Works between the end of 1948 and 1951 and converted in 1950-51, the streamlined cab end being removed and replaced by a new trailing end. The giveaway with these cars was that the trailing ends had three wider windows rather than the normal four, as seen on the car awaiting scrap (Top). The interior view (Left)

**Both photos: LURS Collection**

As part of plans to resume uncoupling after the Second World War on the tube lines, some uncoupled trains would be formed of either a three- or four-car unit, where both units would stay in service. The four-car units posed no problems, as they had two compressors – one on the non-driving motor car and one on the trailer. On a three-car unit, there was hitherto only one compressor on trailer cars, and the operation of such units in service was banned – two was a requirement, in case one failed<sup>1</sup>. Therefore, the 69 trailers on the three-car M-T-M units on the Northern Line were fitted with two compressors and were identified by a letter 'C' above or below the car number.

<sup>1</sup> If a (short) train with only one compressor failed, it would mean a push-out from the train behind, and a lengthy delay to the service. With two compressors, you had much better odds in getting to a depot in the event of failure.





One trailer oddity on the Northern Line was trailer 012339 (*Left*), which was given additional stand-back areas around the double doors, but at the loss of eight seats. Again, this offered a 1 in 100 chance of it being seen 'on the road' at peak times.

**Photo: LT Museum**

### NON-DRIVING MOTOR CARS

Apart from the 'normal' NDMs, which were in the majority of course, there were also two batches of nine-car NDMs, numbered 92029-92058 and 92447-92466. The latter group will be dealt with below, but apart from two from the first group they were all absorbed into the main fleet, becoming 12029-12054, 12056-12057.

### UNCOUPLING NON-DRIVING MOTOR CARS

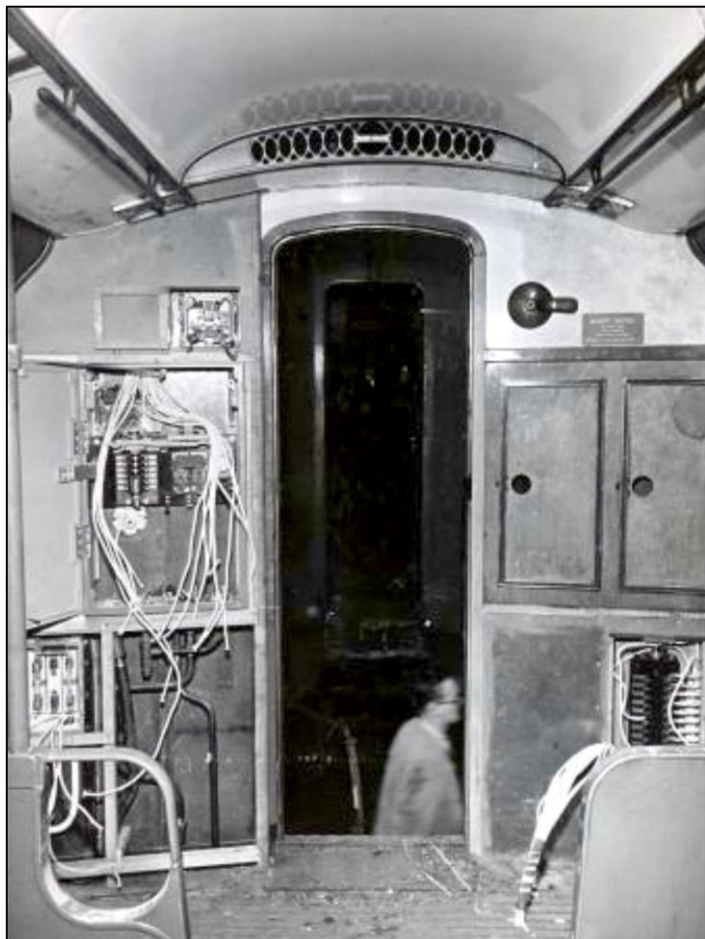
The Uncoupling Non-Driving Motor Car was a post-war concept and was seen as an economical way of operating short trains in off-peak periods, in that the uncoupled three-car portion didn't have a costly full cab at one end – a simple shunting control panel was sufficient. There were 92 of these, of which the Northern Line had 46 'A'-end UNDMs. The remaining 46 were shared between the Bakerloo (31 cars) and Piccadilly (15 cars) and all 46 on these two lines were 1949 Tube Stock.

On the Northern Line, however, the 46 UNDMs comprised 22 converted from 1938 Tube Stock nine-car NDMs (30000-30021) and 26 new 1949 Tube Stock, the latter having the same differences on the communicating doors as on the 1949 trailers.



**Above:** 1938 Tube Stock UNDM 30016, converted from a nine-car NDM in Golders Green Depot (*Left*). Interior of a 1949 Tube Stock UNDM (*Right*). The shunting control panel can be seen in the distance to the left of the communicating door.

**Photos: LURS Collection (Left) and LT Museum (Right)**



Converting the 1938 NDMs to UNDMs involved all 20 of the series 92447-92466 (which became 30002-30021). These 20 nine-car NDMs had been provided with guards control panels and handbrakes and were planned to work at positions '3' and '7' on a nine-car train. These had to be removed and a shunting control panel was fitted. The other two NDMs (30000 and 30001) were made up from NDMs 92055 and 92058 which only had to be equipped with a shunting control panel. The photo (Left) shows a 1938 Tube Stock former NDM under conversion to an UNDM.

**Photo: LT Museum**

### IN SUMMARY

One thing with the Northern Line was that it was impossible to see the whole fleet in the peaks because of the geography of the line. You could, for example, see all northbound trains in the rush hour at Kennington but missed those trains on the southbound 'that didn't come back'<sup>2</sup>. The same principle applied if you stood on the southbound at Kennington. So, far from being a standard fleet of 115 seven-car trains of 1938 Tube Stock, the Northern Line offered a variety of stock within the family name.

So, if you were in the know about the many variations, you never knew what might turn up in your '1938 Tube Stock' train formation – variety was the spice of life!

For example –

#### FOUR-CAR UNITS:

10282 – **012515** – 12145 – 11282  
F

10312 – **012504** – 12042 – 11312  
F A

**10324** – **012514** – 12156 – **11324**  
A F A

10308 – **012414** – 12091 – 11308  
G

**10327** – **012506** – 12041 – **11327**  
A F A A

#### THREE-CAR UNITS:

10169 – **012256** – 11169  
C

**30019** – **012489** – 11081  
D B

**30012** – **012402** – 11037  
D A

**30028** – **012485** – 11049  
E B

**30036** – **012395** – 11101  
E A

#### NOTES:

A – Former 9-car DM, trailer or NDM

B – Former 1935 Stock streamlined DM

C – Trailer with second compressor

D – 1938 Stock converted to UNDM

E – 1949 Stock new UNDM

F – 1949 Stock new trailer

G – Intended non-compressor trailer for 1935  
Experimental Stock

### AND FINALLY

Of course, in the 1970s, the Northern Line had an even more interesting fleet, with the addition of the 1956/59 Tube Stock and the two types of 1972 Tube Stock, but these were easily visible to distinguish between them.

But all of that is for another time ...

<sup>2</sup> Explaining the term 'didn't come back' – the Northern Line (and some others, too) had a small number of 'push-in' trains in rush hours, which did just one journey, from depot to depot, for example from Golders Green Depot direct to Hampstead, passenger to Morden and thence to depot and stable.