

# UNDERGROUND

NUMBER 15

ISBN 1 870324 15 3

ISSN 0306-8609

## “STANDARD” TUBE STOCK

A Photographic History by Brian Hardy



Part 2 — 1945 Onwards

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# **UNDERGROUND**

## **“STANDARD” TUBE STOCK**

**A Photographic History**

**by Brian Hardy**

**Part 2 - 1945 onwards**

## THE POST WAR PERIOD

After hostilities had ceased, work soon resumed on the eastern and western extensions of the Central Line under the deferred 1935-40 New Works Programme. Not so fortunate, however, was the Northern Line, whose extensions (to East Finchley in 1939, High Barnet in 1940 and Mill Hill East in 1941) were to be added to no more (the story of this has been told in Underground No. 9, now out of print).

The first major task as far as the Pre-1938 Tube Stock was concerned was to return to service some 340 cars that had been idle during part or all of the war and complete the modifications planned for these and other members of the class. The partly-completed depots at Hainault and Ruislip were used to accommodate some of the stored cars, but many still had to be stored in open sidings at Edgware, Golders Green, Morden, Highgate, Stanmore and Neasden. A small quantity of stock had been used for miscellaneous duties, including working as temporary Ballast Motors for Engineers trains and stock transfers.

Despite all the bomb damage to LT rolling stock and property during the war years, no cars of Pre-1938 Tube Stock had to be scrapped as a result of this. However, one 1926 MCCW car (3669) was scrapped following serious damage because of a collision near Eastcote on the Piccadilly Line in January 1941, reducing the total fleet by one car to 1,465 vehicles. The situation as at May 1945 was therefore as shown opposite.

Although it wasn't intended when we started production of this photographic history of "standard" stock, we now intend to produce a third part which will contain complete fleet lists, line transfers, renumberings, etc. together with more technical detail and information which cannot be illustrated by photographs. Having already published 250 photographs in parts 1 & 2 there aren't many more suitable ones left so part 3 will be largely unillustrated and will refer to photographs in parts 1 & 2 where necessary. It is hoped that part 3 will be available before the end of 1987.

The following abbreviations have been used in the captions throughout this issue:

### Types of Car

DM	Driving Motor Car
CT	Control Trailer Car
T	Trailer Car

### Car Builders

CL	Cammell Laird & Co. Ltd., Nottingham.
BRCW	Birmingham Railway Carriage & Wagon Co. Ltd.
GRCW	Gloucester Railway Carriage & Wagon Co. Ltd.
UCC	Union Construction & Finance Co. Ltd., Feltham.
MCCW	Metropolitan Carriage, Wagon & Finance Co. (from 1919), changed in 1929 to Metropolitan-Cammell Carriage, Wagon & Finance Co., and in 1934 to Metropolitan-Cammell Carriage & Wagon Co. Now known as Metro-Cammell.

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*Front Cover:* Pre-1938 Tube Stock at Acton Town on 20th September 1948. (B. T. Cooke).

*Back Cover:* Pre-1938 Tube Stock at Ryde Pier Head on 6th August 1985. (B. R. Hardy).

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UNDERGROUND is published by The London Underground Railway Society.

Editor: R. J. Greenaway, 26 Fishery Road, Hemel Hempstead, Herts., HP1 1ND.

Correspondence and material for future issues should be sent to the Editor at the above address. All enquiries regarding membership of the Society should please be sent to The Registrar, T.L.U.R.S., 12 Marlborough Road, Forest Gate, London, E7 8HB, England.

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Printed by Crown Press (Keighley) Limited, Chapel Lane, Keighley, West Yorkshire, BD21 2AJ, England.

## STANDARD STOCK — MAY 1945

1930 Numbering	Date	Builder	Equipment	Totals of Cars	Original Numbering
<b>DRIVING MOTOR CARS:</b>					
3000-3017	1929	Feltham	BTH	18	187-204
3018-3067*(a)	1928	Feltham	BTH	49	205-253
3068-3069	1930	Feltham	BTH	2	183-184
3070-3281*	1931	Metro-Cammell	BTH	145	- -
3284-3311(a)	1928	Feltham	BTH	28	254-281
3312-3341(a)	1927	Met. Carriage	BTH	30	282-311
3342-3363	1930	Met. Carriage	BTH	22	161-182
3364-3380(a)	1927	Met. Carriage	BTH	17	312-328
3381-3443(a)	1927	Met. Carriage	GEC	63	329-391
3444-3445	1923	Cammell Laird	GEC	2	539-540
3446-3484	1923	Cammell Laird	MV	39	500-538
3485-3524	1923	Met. Carriage	MV	40	541-580
3525-3531	1924	Met. Carriage	MV	7	581-587
3532-3576	1924	Met. Carriage	GEC	45	588-632
3577-3624	1925	Cammell Laird	GEC	48	633-680
3625-2688§	1926	Met. Carriage	GEC	63	681-744
3689-3721*	1934	Metro-Cammell	BTH	26	- -
				644	
<b>CONTROL TRAILERS: (some converted to trailers and renumbered 75xxx)</b>					
5000-5100*	1928	Feltham	BTH	51	1974-2024
5102-5136*	1929	Feltham	BTH	18	2025-2042
5137-5152*	1927	Met. Carriage	BTH	15	{1921-1922 1944-1956
5153-5169	1928	Feltham	BTH	17	1957-1973
5190-5209	1930	Met. Carriage	BTH	20	2063-2082
5210-5245*	1923	Met. Carriage	MV	35	721-755 †
5246-5259	1924	Cammell Laird	MV	14	1756-1769
5260-5270	1924	Cammell Laird	GEC	11	1770-1780
5271	1922	Gloucester	MV	1	720 †
5272-5338	1925	Met. Carriage	GEC	67	1782-1848
5339-5359	1927	Met. Carriage	BTH	21	1923-1943
				270	
<b>TRAILERS:</b>					
7000-7016	1927	Met. Carriage	BTH	17	1245-1261
7017-7038	1928	Feltham	BTH	22	{1262-1264 1280-1298
7039-7055	1929	Feltham	BTH	17	1299-1315
7056-7059	1930	Feltham	BTH	4	1336-1339
7060-7149	1931	Birmingham	BTH	90	- -
7150-7189	1931	Birmingham	BTH	40	- -
7190-7214	1927	Met. Carriage	BTH	25	1220-1244
7215-7229	1928	Feltham	BTH	15	1265-1279
7250-7269	1930	Met. Carriage	BTH	20	1340-1359
7270	1922	Gloucester	MV	1	820
7271	1922	Leeds Forge	MV	1	821
7272	1922	Met. Carriage	MV	1	822
7273	1922	Birmingham	MV	1	823
7274	1922	Cammell Laird	MV	1	824
7275-7314	1923	Cammell Laird	MV	40	825-864
7315-7349	1923	Birmingham	MV	35	865-899
7350-7399	1924	Birmingham	GEC	50	900-949
7400-7404	1925	Met. Carriage	GEC	5	950-954
7405-7452	1926	Met. Carriage	GEC	48	1054-1101
7453-7558(b)	1927	Met. Carriage	GEC	106	1103-1208
7559-7569(b)	1927	Met. Carriage	BTH	11	1209-1219
7570 (b)	1927	Met. Carriage	GEC	1	1102
				551	

Note \* Not all numbers in series utilised

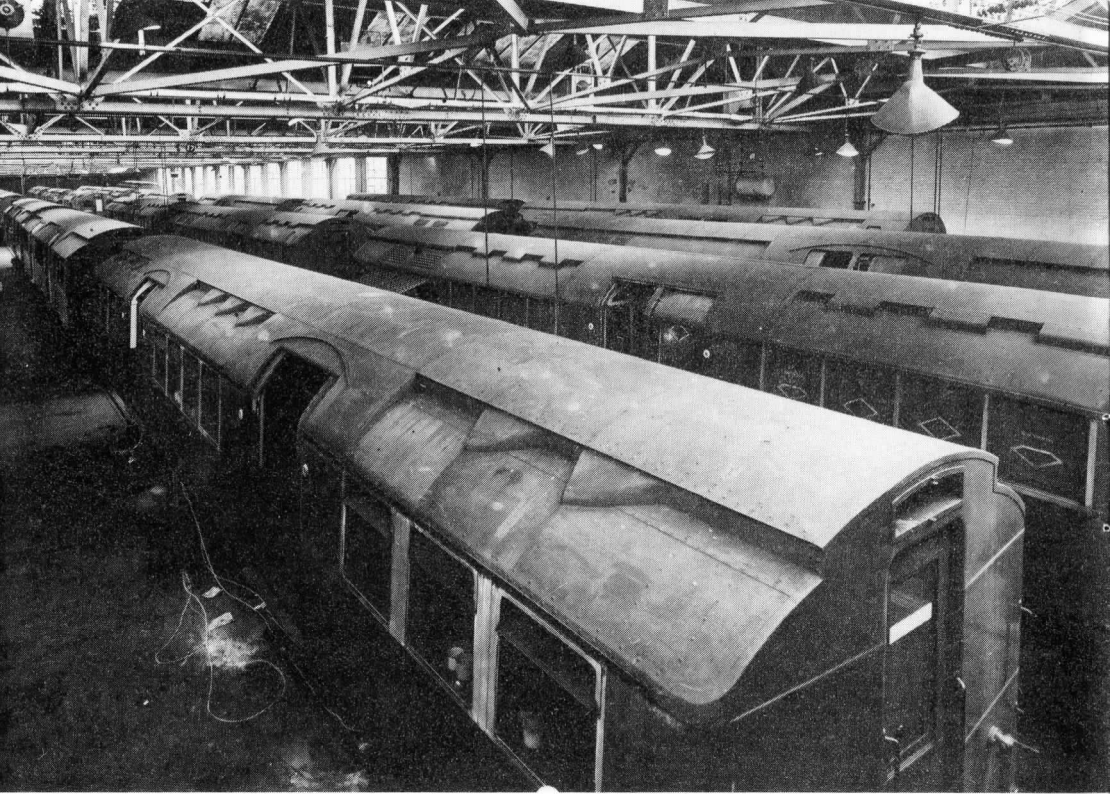
† Numbers later became 1721-1755 in 1926, so as not to clash with 1926 MCCW DMs.

‡ Became 781 in 1924, then 1781 in 1926.

§ 3669 scrapped 1941, collision.

(a) Some cars in the series converted from "A" to "D" and renumbered in 37xx series.

(b) 58 cars converted to run with 1938 Tube Stock and renumbered 70513-70570.



The cars stored during the war were found to be in a deplorable condition. Window frames, for example, were warped, door equipment was rusted and their rubber edges had perished. Gutter drain pipes were blocked and much electrical and mechanical equipment had corroded. The work on rehabilitation also included a complete rewire. By late-spring 1946 rehabilitation work was in full swing — the first train arriving at Wood Lane depot after overhaul in May 1946. The many cars stored at Hainault were removed by the L.N.E.R. using match wagons and after rehabilitation were returned to Hainault and kept under cover until required for service on completion of the extensions. The October 1946 view (*left*) of Acton Works shows the rehabilitation under way and highlights the condition of the stored cars. In the foreground is 1927 MCCW trailer 7505 which was one of nearly 200 cars stored at Hainault. It returned to service on the Central Line on 24 November 1947, having been rehabilitated on 23rd November 1946.

Another Hainault stored car was 1923 Cammell Laird DM3469, seen (*below left*) in ex-works condition after rehabilitation on 27th September 1947. Rehabilitation work was not completed on the Standard Stock until October 1948.

In addition to the rehabilitation, other work included the conversion of eight more control trailers to trailers, which was carried out between May 1947 and November 1949, making a total of 90 cars renumbered 75xxx. One vehicle, 75295 of 1925 MCCW origin, was so converted in April 1940 and is seen (*below*) at Acton Town on the Piccadilly Line on 16th February 1952. By the mid-1950's, all this type of car was on the Central Line, apart from those cars which had been scrapped in 1954. Although the driving equipment had been removed from the cabs, destination boxes (albeit empty) and headlight shutters remained fitted. Some of these cars, converted to trailers in 1939–40, were put straight into storage and were not to carry passengers for another seven or eight years.









These three photos show the changes to one of the cars stored at Hainault, 1922 "Sample" car 7273 (ex 823), built by BRCW. It is seen (*above left*) in rehabilitated form in Ruislip depot. The car by now has acquired ribbed doors and tilting quarter lights instead of pull-down vents.

Compared with the view of this car when new on page 16 in Part 1, this particular car (*left*) has been altered to conform with the rest of the Pre-1938 Tube Stock. Gone are the ornate light shades, route maps in the clerestory and waist-level grab rails by the doors. The car floor has also been renewed, the maple wood slats now being in the standard layout of transverse by the doorways and longitudinal elsewhere.

The view (*above*) of BRCW trailer 7273 in rehabilitated form shows the new spring toggle quarter lights, new car lighting and the standard seating moquette with leather armrests. On the Central Line car diagram can just be seen a "patch" for Debden, which was renamed from Chigwell Lane on 25th September 1949.



Other work included the completion of the pre-war plan to convert DMs from “A” to “D”. This was done to five cars during the period 1948–1951. The original proposal to use 3046 (to 3759), 3048 (to 3761), 3054 (to 3767), 3056 (to 3769) and 3060 (to 3773) was not carried out and five other cars that were in need of workshop attention in some way were chosen instead and were renumbered as follows:

3372	to	3775
3432	to	3777
3044	to	3779
3352	to	3781
3296	to	3783

The renumbering also demonstrated the (then) new LT policy of renumbering after the existing highest number, rather than fill in the relevant blank spaces, which were, of course, 3759, 3761, 3767, 3769 and 3773. In the three-vehicle stores train (*above*) which operated between Neasden and Croxley Green depots, the formation is (left to right) 3360 – F303 – 3781. The “D” motor (3781) is one turned and converted from “A” to “D” in 1950 and is seen leaving Croxley Green depot on 24th May 1962. Both 3360 and 3781 became pilot motors in July 1960, for which purpose they were used until scrapped.

Another modification affecting the Central Line Pre-1938 Tube stock was the fitting of Passenger Door Control (PDC) push-buttons, as can be seen (*above right*) on this Central Line train at Bethnal Green. Although most were converted by 1940, PDC was not introduced on the Central Line until 25th October 1948.

The lower picture opposite demonstrates PDC from the inside – and how the notice arrow incorporated the LT bullseye. PDC was not a success, owing to the haphazard way in which it was operated, and was taken out of use from March 1959.



## THE CENTRAL LINE

From 1950, the Pre-1938 Tube Stock could only be found in service on the Central, Piccadilly and Northern City lines, the last train of this stock being transferred away from the Bakerloo Line on 28th June 1949 (cars 3359, 3442, 3682, 5197, 75341, 7264 and 7266). Passenger door control on Pre-1938 Tube Stock was only ever operated on the Central Line, apart from experiments on the Northern.

Stratford, the first stage of the eastern Central Line extensions, was reached on 4th December 1946. A 1923 Cammell Laird DM leads a train into Bethnal Green (*below*), possibly just prior to opening, on a crew training trip.

*The view opposite* of Wood Lane depot, Central Line, shows one of the first two six-car trains of rehabilitated Pre-1938 Tube Stock with 1923 MCCW DM 3516 leading, sporting destination plates for the forthcoming extension from Liverpool Street to Stratford. The formation of Central Line trains at this time was M-T-T-M+T-M, although tube stations had been lengthened to take eight cars before outbreak of war, trains were still limited to 6 cars since Wood Lane Depot could not take 8-car trains. The train shown was the second rehabilitated train to enter service, on 17th August 1946, the first having done so two days earlier.

The second stage, from Stratford to Leytonstone was served by the Central Line from 5th May 1947. Arriving at the latter after reversing, or maybe after a test trip from Woodford, a 1924 MCCW DM leads on a short working to Wood Lane (*opposite lower*). Note that windscreen wipers had still not been fitted to the earliest examples of Pre-1938 Tube Stock. The L.N.E.R. train on the right is bound for Loughton and beyond.





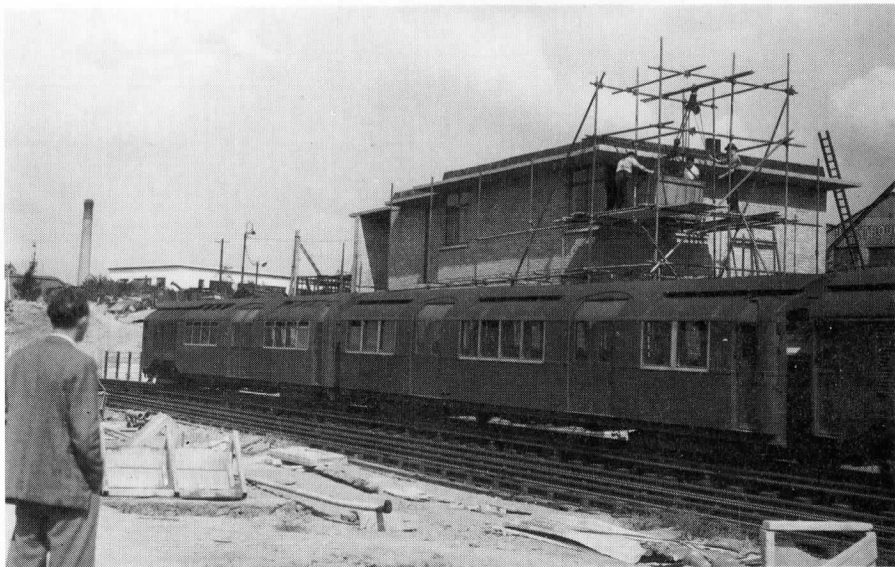


When the Central Line was electrified from Loughton to Epping on 25th September 1949 the through service to and from London east of Debden was relatively sparse and in its early days was supplemented by an equally sparse two-car shuttle between Loughton and Epping, to give a combined off-peak frequency of about 18–24 minutes. 1926 MCCW DMs 3653 and 3650 reverse (*above*) at Epping on this shuttle service on 9th October 1949. The Loughton–Epping shuttle train was lengthened to four cars on Saturdays and Sundays from the summer of 1950. From 3rd November 1952 the shuttle train ceased operating on Mondays to Fridays and after the midday peak on Saturdays, in favour of improved “through” services. It was withdrawn totally when the Epping–Ongar branch was electrified in November 1957.

The same location (*above right*) almost seven years later on 12th June 1956, but before the Epping–Ongar branch had been converted to an electric train service (in November 1957). By now the old livery with cream window surrounds was fast disappearing and this 1930 MCCW DM (built for the Watford service of the Bakerloo) had acquired a windscreen wiper.

Although the Hainault–Woodford branch of the Central Line is operated as an independent shuttle service, some trains from the “main line” service work to and from Hainault depot via this route and thus trains stable “wrong way round”, with the “D” end facing west as illustrated *opposite* by the train on the left and confirmed by its destination. The train on the right, having worked “via Newbury Park” continues to face the correct direction. Detail differences between 1923 MCCW DMs (left) and 1923 Cammell Laird DMs (right) can be observed, as can different equipment layouts between “A” and “D” cars. The patch below the driver’s window on the CL DM is where a pair of headlights used to be situated (see Part 1, pages 24, 58 and 59). It was on these open sidings at Hainault that nearly 200 cars of pre-1938 Tube Stock were stored during the war. Some cars were utilised for A.R.P. work, as advertisement and home guard stores.





At the western end of the Central Line, in addition to the new Ruislip branch, a new station was planned for White City, to replace the old triangular-layout Wood Lane station. Passing the new White City signal box (*above*), then under construction, a train heads for Ealing Broadway. At this location (from west of Shepherds Bush to east of East Acton) Central Line trains travel on the right, necessary because of the awkward location of the original Wood Lane depot. This site is now occupied by White City station, which was opened on 23rd November 1947, from which time, some seven-car trains were introduced on the Central Line.

The first stage of the western extensions opened to Greenford on 30th June 1947 beyond which station a six-car formation is seen (*below*) reversing, before tracks were completed towards West Ruislip. Greenford, however, remained a peak hour reversing point for some trains until May 1960, when a new reversing siding was provided one station further westward, at Northolt.







The extension from Leytonstone to Newbury Park and Woodford from 14th December 1947 saw the abandonment of six-car trains in favour of seven, and the introduction of 12 eight-car trains, although with the unreliability of the Pre-1938 Tube Stock at that time, this was difficult to achieve and only two such trains could be realistically scheduled from the following month. This scene (*above*) at Woodford, just after opening, shows the connecting L.N.E.R. service on the right.

West Ruislip was reached on 21st November 1948, where a train is seen in its early days, as confirmed by the temporary station names, station lighting and incomplete buildings. In the event, these were not completed, along with Ruislip Gardens, South Ruislip and Northolt, until the early-1960's. The track layout at West Ruislip reflects the original plans for the line to continue further west to Denham, but the creation of the "Green Belt" around London caused this to be abandoned at an early stage and certainly before any major construction work started.





One of the features of the Underground lines in the pre-war period was the operation of short-length but frequent trains during off-peak periods. A 1926/27 MCCW DM is at the head of a four-car train at Ealing Broadway in this mid-1950's picture (*above*) which was, and still is, managed by B.R. (Western Region).

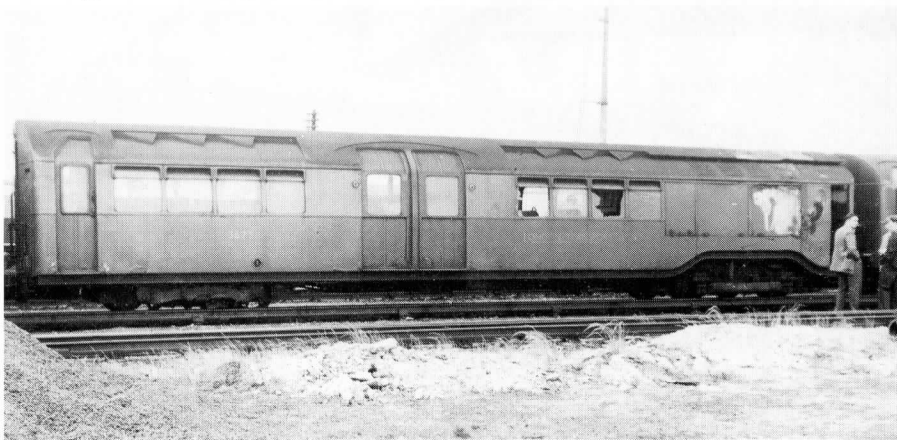
This four-car train at Epping (*below*) on 20th September 1954 shows that the second car has already lost the cream window surrounds with the then latest repainting programme. Uncoupling was reintroduced on the Central Line from 19th February 1951, having been abandoned at the outbreak of the war.





North Acton (*above*) on 5th September 1959, just before uncoupling on tube lines was abandoned permanently, with a 1930 MCCW DM leading. Uncoupled four-car portions took the 100 number higher – e.g. in this picture, train 107 had been uncoupled from train 7. Note the stopping marks on the eastbound line, showing 6, 7 and 8-car marks.

During a fire near Holland Park on 28th July 1958, problems occurred due to loss of the Drico (Driver to Controller) communications system. This was due to a peculiarity in the wiring of standard stock fitted with PDC whereby Drico was lost if the guard removed his key as he is required to do when leaving his position. This, combined with the fact that PDC had not been an unqualified success, led to PDC being abandoned on all lines from March 1959. A further fire of a similar nature at Redbridge on 11th August 1960 resulted in receptacle boxes (which are used to supply current to trains in depots and in which both fires originated) being removed from middle DM cars, such cars being identified by a letter "M" stencilled over the car number. Car 3673 of 1926 MCCW origin (*below*) was the one involved in the Redbridge fire and was scrapped on 28th September 1961.





Once uncoupling had been abandoned, the Central Line's Standard M-T-T-M+M-T-T-M formation could be changed to remove the large doorless portion in the middle of the train. Where the two motor cars met, there was a doorless section of more than a car's length. This caused delays in loading at peak times so the eight-car train formations were changed to become M-T+M-T-T-M+T-M as illustrated *opposite* on this train stabled at West Ruislip, with a 1959 Tube Stock train in the background. Although the end was in sight for this stock, overhauls continued as DM 3415 nearest the camera shows an overhaul date of 3/61.

*Lower left:* 1927 MCCW DM 3413 at Epping, being one of the G.E.C. type, recognisable by having door ribs. From 2nd January 1949, the Pre-1938 Tube Stock on the Central Line was divided into "Hainault" and "Ruislip"-based stock, for maintenance purposes.

*Below:* A B.T.H. example of a 1927 MCCW DM — 3337 — without door ribbing, at Leytonstone at the rear of a departing westbound train.





It will be recalled that the 1924 BRCW trailers differed during the build in that the earliest examples had "two-way" ventilator scoops, as seen on 7365 at East Acton on 31st March 1962, (*above*).

On the same day at the same location (*below*), 7390 shows that the later cars in the same batch had ventilator scoops facing the same way, giving a much neater appearance.





Although the 1929 UCC Feltham-built stock was mostly at home on the Piccadilly Line, a few strayed to the Central Line as 3010 demonstrates at East Acton on 31st March 1962 (*above*). This car was transferred to the Northern City Line in July 1962 and was one of the cars selected for possible service on the Isle of Wight, and in the event became S22 and was still in service until 1986.

Apart from the last few years of service with LT the 1931/34 DMs never worked off the Piccadilly Line. Migration to the Central Line began in 1960 after the initial deliveries of new 1959 Tube Stock, and eventually allowed all Central Line trains to be formed of eight cars. 1931 MCCWDM 3104 (*below*) is at the rear of a Newbury Park train, short workings to which are confined to peak fringes, at East Acton on 31st March 1962. The Pre-1938 Tube Stock was withdrawn from the Central (main) line at the end of 1962 and from the shuttle services by mid-1963.



## THE PICCADILLY LINE



*Above:* A view of Northfields depot in 1949 with a seven-car Pre-1938 Tube Stock train approaching Boston Manor on a working to Hounslow West. When the Piccadilly Line first served Hounslow, both Boston Manor and South Ealing stations were non-stopped during the peaks, with the midday period, local services being provided by District trains. All off-peak Piccadilly Line trains stopped at both stations from 29th April 1935.



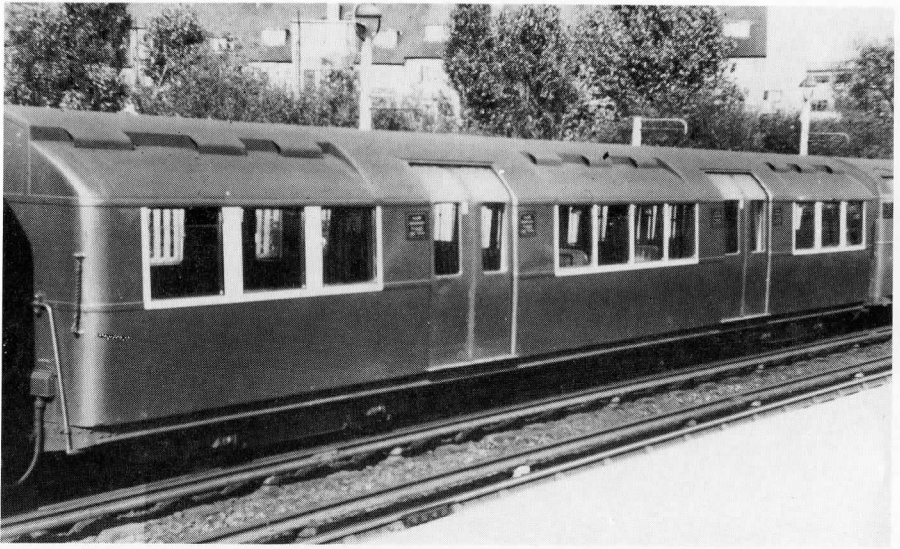
*Above:* Trailer 7057 of the 1930 UCC (Feltham) experimental train. This was one of two trailer cars with wider double doors than normal.

*Above right:* Acton Town on 15th April 1952, with 1931 DM 3083 leading, having been recently overhauled and repainted as confirmed by the date 1/52 on the car end.

*Below right:* The same location on 21st October 1961 with yet another ex-works condition car, 3251, leading. The lack of cream window surrounds somehow makes the finished product look less attractive.







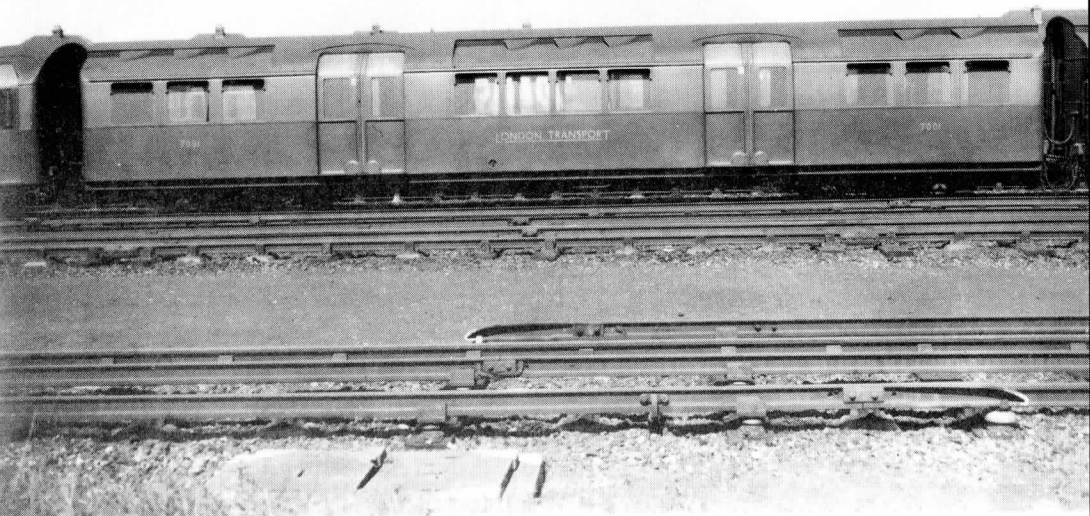
*Above:* 1923 Cammell Laird trailer 7288 in an early post-war view at Rayners Lane. The car still carries end chains which were a feature of the 1922/3 built cars only, although some were later replaced with grab rails. This car was one of 53 withdrawn in 1954. From the mid-1950's it was usual, although there were some exceptions, for the newer cars of Pre-1938 Tube Stock to work on the Piccadilly, with older cars on the Central and Northern City.

*Above right:* B.T.H. 1927 MCCW trailer 7001 (without door ribs) in Northfields depot after the abolition of cream window surrounds in 1952. Shortly after this, the application of London Transport transfers to trailers and CTs was also discontinued.

*Below right:* South Harrow on 27th May 1956, when pointwork in the area was still controlled by mechanical levers from the old District Railway signal box just behind the leading car of the departing train. Until 1943 South Harrow was the normal reversing point for short working trains on the Uxbridge branch after which regular use was made of Rayners Lane. Small numbers of South Harrow reversers, however, continued until June 1961. This photograph shows the arrangement of train formation; i.e. the three-car at the east end (with a CT in the middle facing west) and four-car at the west end (with a DM in the middle facing east).

During 1957, four more Pre-1938 Tube Stock DMs were "turned" and converted to opposite end types. This resulted from the delivery of the three trains of 1956 Prototype Tube Stock to the Piccadilly which released nine Pre-1938 DMs to the Central (3 x "A" and 6 x "D"), enabling more eight-car trains to be operated on that line. The Central at that time needed "A" cars fitted with PDC, which most Piccadilly cars did not have. Therefore, some cars which had PDC on the Northern City Line (where it was not used) were transferred to the Central Line and replaced by cars from the Piccadilly Line (see page 29). The involvement of cars fitted with PDC also necessitated the conversion of one car from "D" to "A" and this one conversion bore the highest number ever used by the Pre-1938 Tube Stock DMs. The other three conversions reverted to former numbers and the whole four were thus:

"D" 3775	(originally "A" 3372)	to "A" 3372
"D" 3779	(originally "A" 3044)	to "A" 3044
"D" 3783	(originally "A" 3296)	to "A" 3296
"D" 3421		to "A" 3784





Seven-car trains of Pre-1938 Tube Stock *above*, passing at Hillingdon on 6th June 1959, with the Metropolitan goods yard in the background. The eastbound train (right) demonstrates the different arrangement of ventilator scoops on each side of the clerestory. Three months earlier the midday Monday to Friday service of Piccadilly Line trains to Uxbridge was withdrawn, the section west of Rayners Lane being left to the Metropolitan Line service and therefore Uxbridge branch uncoupling was transferred to be performed at South Harrow. Piccadilly Line trains to and from Uxbridge are now confined to Monday to Friday peak periods only.

*Above right:* A seven-car train of Pre-1938 Tube Stock passing the site of the old District Railway station of Osterley & Spring Grove on 2nd May 1959, used for the storage of hydraulic buffers. Unusually, this train has a four-car unit at the east end of the train rather than at the west end. The DM cars of new Metropolitan Line A60/62 surface stock, delivered from February 1961, bore numbers in the 5xxx series, conflicting with Pre-1938 CT numbers. Therefore, the Pre-1938 CTs that remained were prefixed "7", being renumbered 75xxx. Some 50 CTs on the Piccadilly Line were so numbered during March and April 1961, but were not to be confused with Central Line CTs (also numbered 75xxx) converted to trailers in the period 1938-49 which had equipment removed.

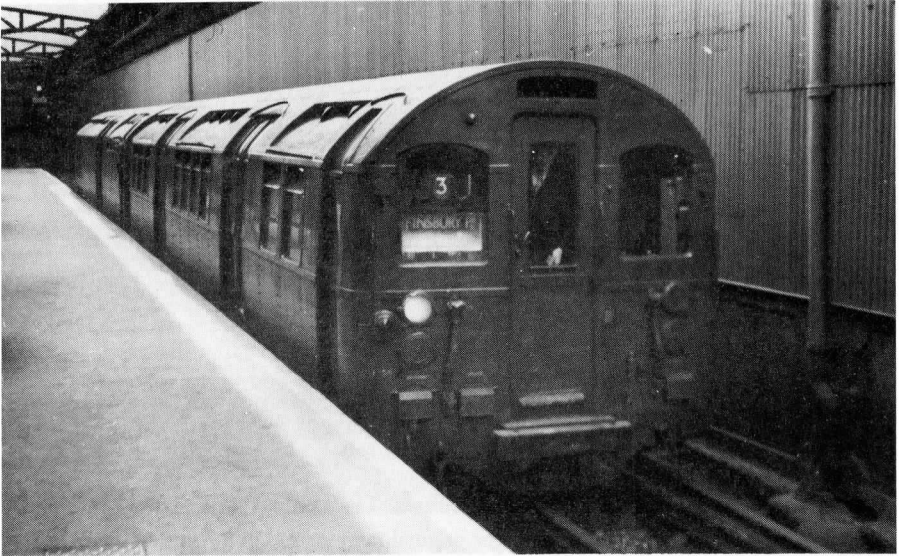
The operation of off peak short trains was reintroduced to the Piccadilly Line from 12th May 1952, as this view of a four-car train between Eastcote and Rayners Lane shows.





*Above:* The last Pre-1938 Tube Stock to operate on the Piccadilly main line was on 17th June 1964 (comprising cars 3071, 3380, 3697, 7061, 7063, 7162 and 7169) by which time no CTs were in service on this line, the last having been withdrawn by mid-1962. However, the Holborn–Aldwych branch of the Piccadilly Line operated Pre-1938 Tube Stock in two-car motor formations until July 1964, when three-car 1959/62 stocks took over, the final serviceable cars on this line being five of the 1931/34 type (numbers 3197, 3702, 3703, 3705 and 3706), which were officially withdrawn on 30th July 1964. DM 3700 of the 1934 batch is nearest the camera in this earlier picture.

## THE NORTHERN CITY LINE



With the delivery of new 1938 Tube Stock, enough displaced Pre-1938 cars were available to equip the Northern City Line from May 1939. These normally operated in two-car formations (M—CT) to which was added four more cars at peak times (CT—T—T—M) to form six car trains. Coupling and uncoupling was carried out at Finsbury Park, the northern terminus of this short branch line. This line, therefore, operated control trailers in their own right as shown on this two-car train leaving Drayton Park for Finsbury Park (*above*). The 1923–25 CTs always retained headlights on both sides of the cab, unlike their DM fellows.

1927 MCCWDM 3402 in Drayton Park depot (*below*) on 29th May 1949 showing that this car was fitted with PDC. This car was transferred to the Piccadilly Line in 1954 and to the Central in 1957, when its PDC equipment was at last put to use. The Northern City Line stock comprised the 1923–27 type of cars, although some 1928–29 Feltham cars were drafted in from 1962.



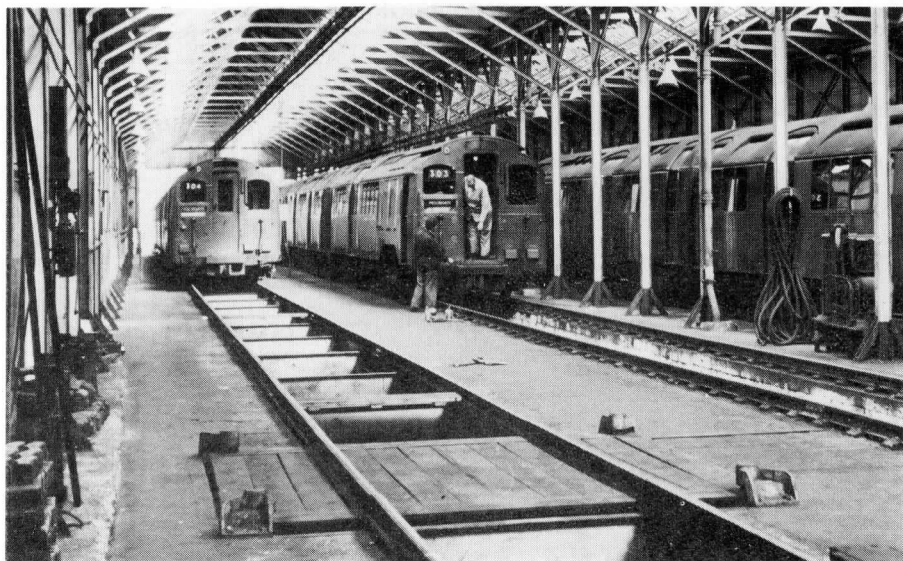


Control trailer 5283 stands (*above*) on the original ramp connection between the Northern City Line and L.N.E.R. at Drayton Park, which was severed in favour of a direct connection with the southbound line. This CT is still in use on the Isle of Wight – as the railway's sole de-icing trailer.

A two-car train departing from Drayton Park (*below*) in November 1958, with a 1927 MCCW DM at the rear. In 1962, most of the 1927 MCCW DMs were replaced by 1928–29 Feltham DMs. The new connecting ramp can be seen in the far right of the picture, which was originally to have been the southbound line from Alexandra Palace. With Victoria Line construction work necessary at Finsbury Park, Northern City services were cut back to terminate at Drayton Park in October 1964 and thus coupling and uncoupling facilities were lost due to the lack of suitable signalling. The complete 1923–29 stock (61 cars) was therefore changed over, utilising available permanent four-car sets of 1931/34 stock from the Piccadilly Line.





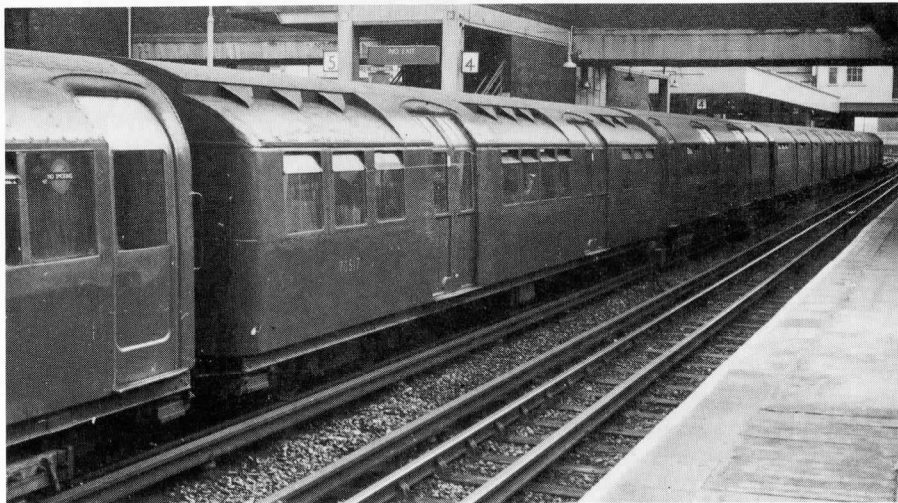


*Above:* Four-car trains of 1931/34 stock in Drayton Park depot. This depot dated back to the opening of the line in 1904, which then operated “surface” size stock until 1939.

The four-car trains of 1931/34 stock lasted in service on the Northern City line until 8th November 1966, by which date they had been replaced by 1938 Tube Stock. Some of the driving motor cars subsequently made their way to the Isle of Wight, where most are still at work. After the line closed to Finsbury Park it became the practice to stable one train in the little-used southbound platform at Drayton Park for spare and changeover purposes. This train, *below*, sports a battery-powered flashing tail lamp — an experiment tried out from August 1964.



## CONVERSION



One of the earliest conversions affecting the Pre-1938 Tube Stock was during 1938–40, when 58 trailers of the 1927 MCCW type were adapted to run with the new 1938 Tube Stock. The work included the fitting of compressors, altering the lighting supply to 50V and providing semi-permanent bar couplings to adjacent cars. The 58 cars (which, not surprisingly, became known as “58 Trailers”) were renumbered from 7513–7570 to 70513–70570 and all were on the Bakerloo Line by 1941 where they remained until withdrawal. Trailer 70517 is seen (*above*) at Wembley Park on 27th February 1967.

Most of the 58 Trailers converted for working with the 1938 Tube Stock were originally built to run with G.E.C.-equipped motor cars and were recognisable by having door ribbing. However, eleven cars (70559–70569) were originally with B.T.H.-equipped DMs and had non-ribbed doors as illustrated by 70561 at Wembley Park (*below*). A modification of later days, as seen here, was the fitting of exterior mouldings at gutter level to reduce corrosion. The bulk of the 58 Trailers were withdrawn during 1972 and 1973, the last car in service being 70534 in September 1973.

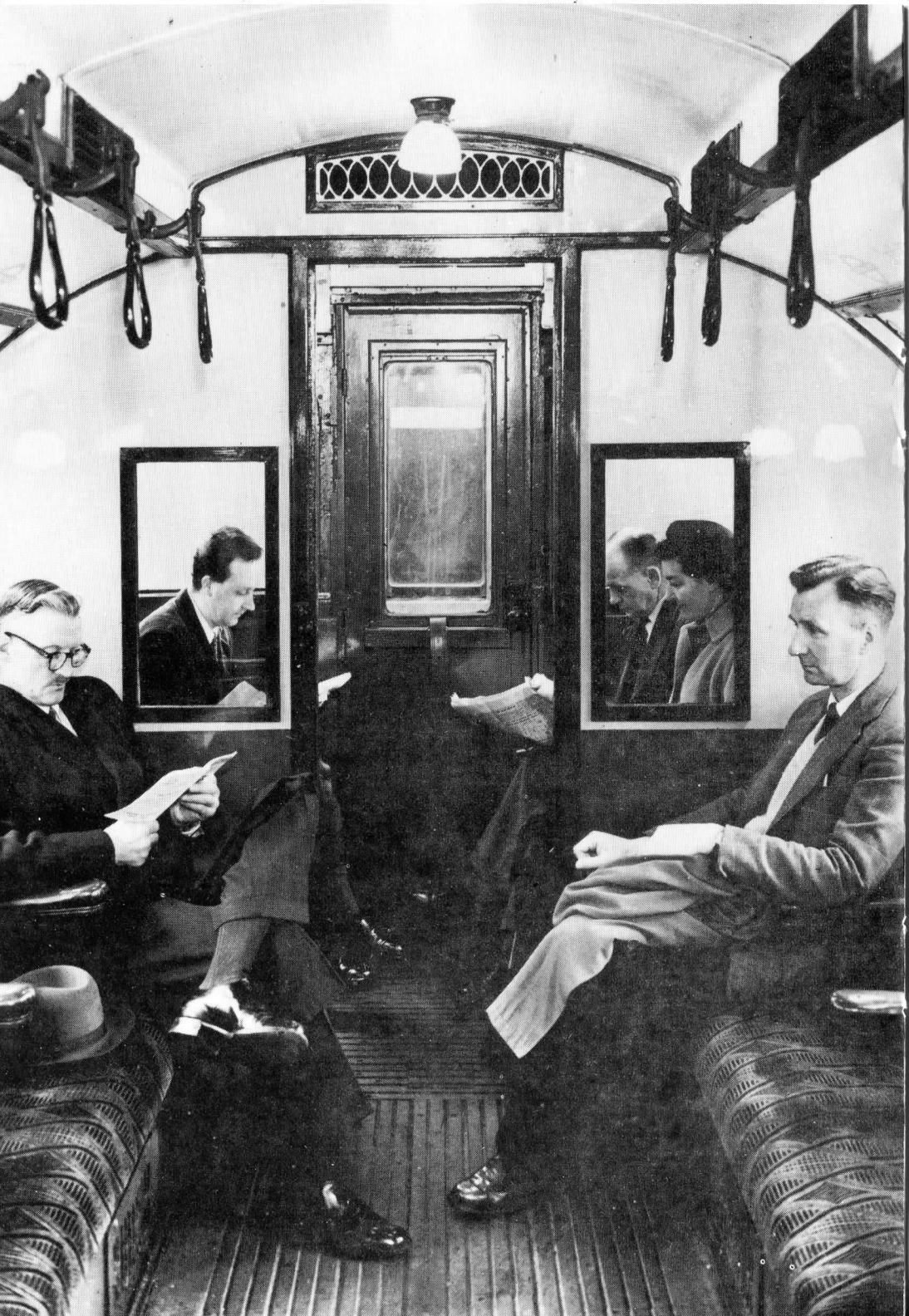




Two of the 58 Trailers were modified with additional end single doors during 1957/58 to test the possibility of converting further 1927 trailers intended to run with future 1960 Tube Stock driving motor cars. The two trailers were 70518 and 70545 and the former is seen *above* in Neasden depot on 18th April 1970.

To lengthen the three two-car shuttle trains of 1935 Experimental Tube Stock operating on the Epping-Ongar branch, three 1927 MCCW trailers (7510-7512) were converted in 1958 to operate between them, becoming 70510-70512. Seen *below* between 1935 DMs 10010 and 11010 is converted trailer 70511 at Hainault. Being based at Hainault depot for maintenance purposes, it was not uncommon for the 1935 shuttle units to work the Hainault-Woodford service as well as the Epping-Ongar one. Between 1963 and 1965 the three trains were repainted silver to match the aluminium-finish of the 1962 Tube Stock on the Central main line, while in 1964 the three trailers were fitted with de-icing equipment. Because of their unreliability in service, the three units were withdrawn by the end of 1966, there being enough 1962 Tube Stock to replace them. The three trailers were scrapped in October 1971 along with four of the 1935 DMs.





*Left:* The conversion of some 90 control trailers into trailers between 1938 and 1949 involved the removal of the control equipment but retention of the cab, thus rendering it useless as far as the travelling public was concerned. It was thus decided to put these redundant cabs to use for passenger accommodation, by removing the cab door separating the cab from the saloon, fitting the screens with glass and installing two pairs of longitudinal seats, thus increasing seating capacity from 44 to 48 as on conventional trailers. This work was done on 71 cars between 1955 and 1958, the remainder being scrapped in 1954. In modified form, all 71 cars operated on the Central Line.

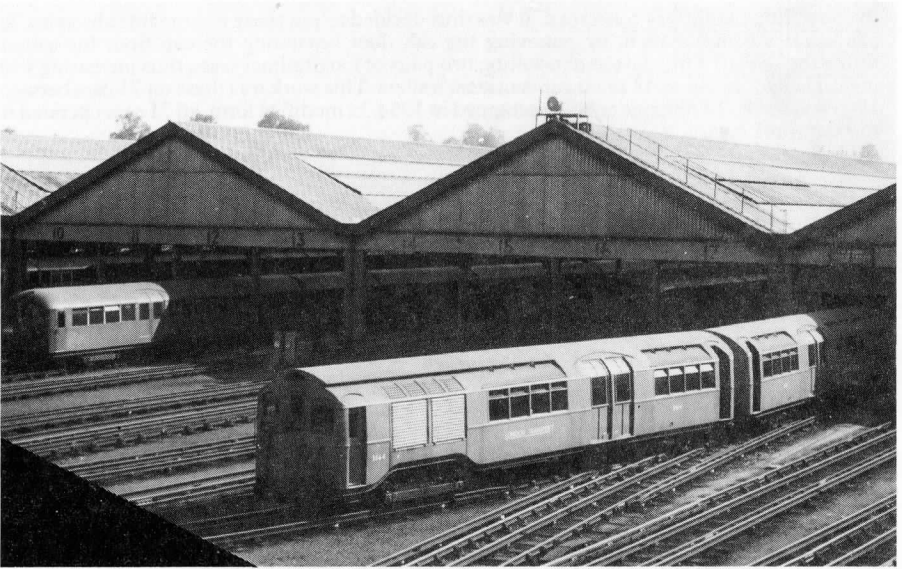


*Above:* "De-mobbed" control trailer 75321 of 1925 MCCW type at North Acton on 31st March 1962, showing the destination box and door closure plungers removed and the "D" end identification plate painted over. The headlight shutters, however, remain in position, but inoperative.

*Below:* 1928 UCC Feltham "de-mobbed" control trailer 75168 at Epping, showing the curved panels below waist level, common to "Feltham" stock.



## SERVICE DUTIES



The Pre-1938 Tube Stock, being operated and formed as individual “car” stock and fitted with “Ward” couplers, readily lent itself to assist with works train duties where necessary. On 16th May 1948 MCCW DMs 3564 and 3555 are seen in Morden depot in grey livery (*above*), having served as Northern Line Ballast Motor cars since September 1938. After rehabilitation and repainting, they re-entered service on the Central Line on 11th October 1948.

A 1925 Cammell Laird DM (*below*) is at the rear of a wheel transfer train passing Ealing Common, on its way probably from Ruislip depot to Acton Works via Ealing Broadway.





The first withdrawals of Pre-1938 Tube Stock took place in 1954 after the delivery and entry into service of the 1949 Tube Stock. This allowed 15 trains of 1938 Tube Stock to be transferred to the Piccadilly Line and some cars of Pre-1938 Tube Stock to the Central making more eight-car formations on that line. The surplus cars thus comprised 39 trailers (which included 20 75xxx cars and all six "Sample" trailers) and 14 DMs — all from the 1922/23 batches. Some 37 trailers were thus scrapped — at Ruislip depot (32 cars), Hainault (3) and Acton Works (2). The two remaining trailers were converted to railgrinders. The 14 DM cars were converted during 1954–55 into Ballast Motor cars replacing Gate Stock Ballast Motors. Of the 14 cars, four were of the Cammell Laird type. L62 and L65 in the then service stock livery of grey are seen *above* in Lillie Bridge depot on 25th August 1956.

Cammell Laird Ballast Motor L66 (ex3476) seen *below* at Ruislip depot, had the double doors and centre door pillar panelled over rather than having them sealed up. By the mid-1960's the livery of service stock locomotives had changed from grey to unlined lake (maroon).





The other ten Ballast Motor conversions were taken from the 1923 MCCW build, L64 being ex-3500, one of the cars badly damaged in the Stratford collision on the Central Line on 8th April 1953. One such type is seen *above* at the rear of an Engineers' train at Barons Court early on Sunday morning, 2nd August 1970.

The differences between the Cammell Laird and MCCW types are seen *below* on L64 (ex-3500) and L65 (ex-3453) at Lillie Bridge depot. As these cars have to operate on any line they are fitted with high-lift shoe gear specifically for the ex-Central London Railway tunnel sections between Wood Lane and Liverpool Street which have positive conductor rails  $1\frac{1}{2}$  inches higher than the rest of the system due to the slightly smaller size of the tunnels.



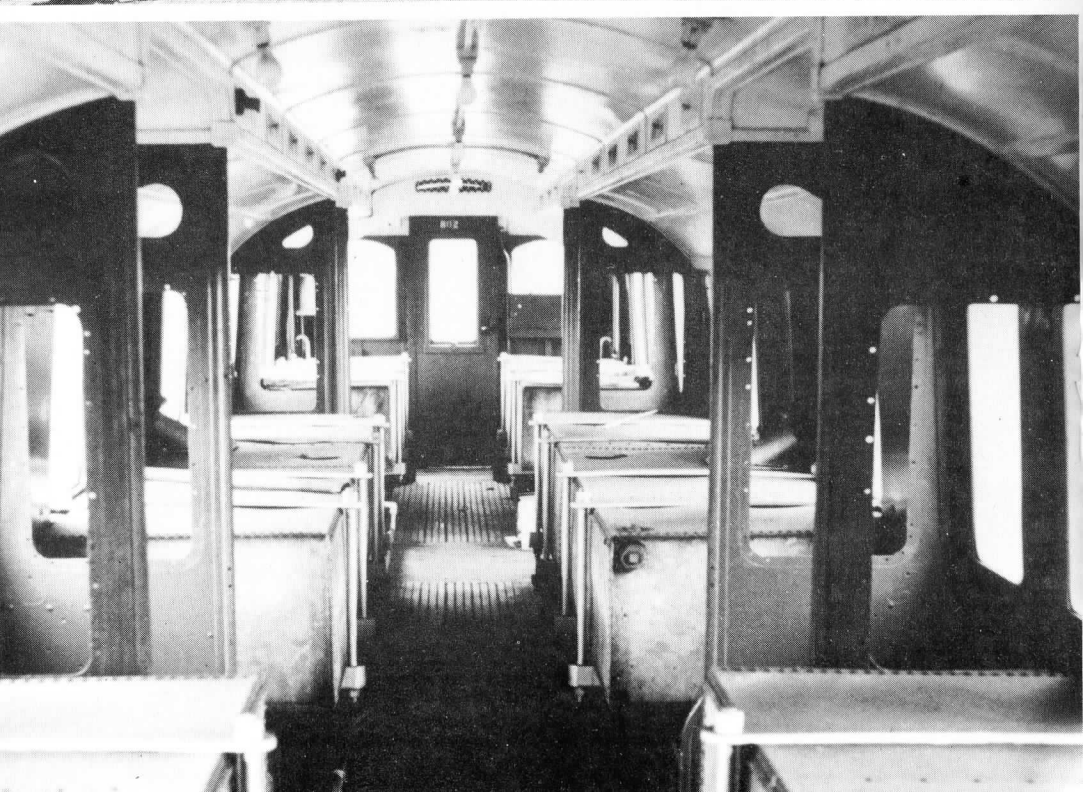




To replace collision damaged L72 (ex-3498), a replacement L72 was converted in 1964 from 1927 MCCW DM 3376. However, this itself was damaged and replaced by L77, so converted in 1967. L72 (the second), on which can be seen a different type of ventilator scoop arrangement, is seen *above* at Acton Works on 10th August 1970 awaiting scrap, standing on the Acton Works spare sleet loco bogie. It was cut up at Acton Works on 25th June 1971 by Cashmores.

The replacement for the second L72 was L77 (ex-3183), the only Ballast Motor car to be converted from the 1931 type, and is seen *below* in Golders Green depot. It entered Acton Works for conversion on 28th April 1967 and became L77 on 3rd November 1967.



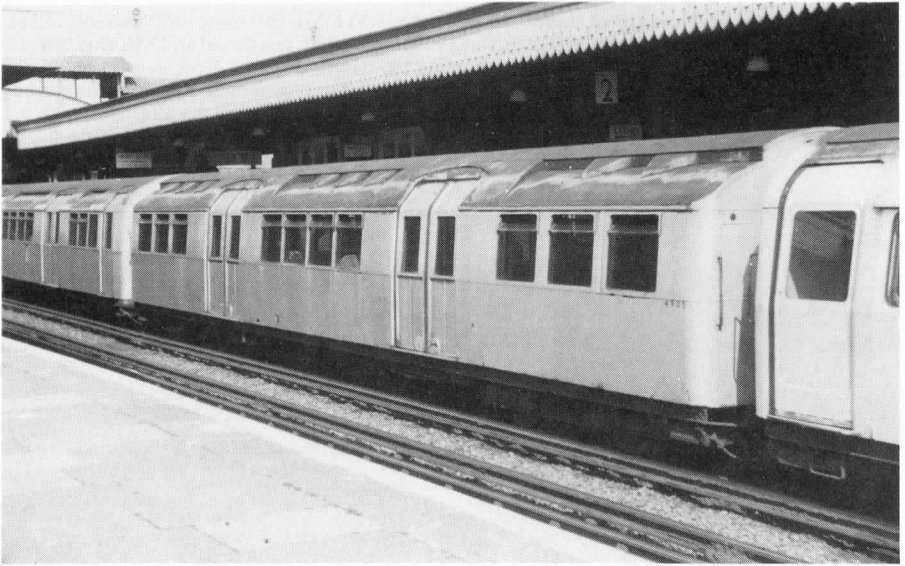


In addition to the 37 scrapped trailers and 14 converted DMs, two ex-control trailers (75241 and 75245 which were converted to trailers in 1939) were again converted in 1956, this time to Rail Grinding cars (RG802 and RG803) replacing two similar cars of 1906 Gate Tube Stock. This made a total of 53 cars of Pre-1938 Tube Stock taken out of passenger stock at this period, reducing the fleet to 1,412 cars. RG802 is seen, *above left*, at Acton Works after conversion.

The interior of RG802 (*below left*) in September 1973 shows the large water tanks fitted in the stripped interior which was painted Cerulean “blue” and white.

During the autumn of 1977 one of the Rail Grinding cars was utilised in the experimental Leaf Clearing train on the Metropolitan Line, which comprised a variety of vehicles, including Ballast Motor cars, a Flat Wagon and Metropolitan Electric Locomotive No. 12 “Sarah Siddons”. Part of this strange stock combination is seen *below* at Amersham. Both Rail Grinding cars have now been disposed of without replacement.





To operate with twelve new 1960 Prototype Tube Stock DMs, twelve Pre-1938 trailers were converted and modified at Acton Works during 1959–60. Four of the trailers were of 1927 MCCW vintage and 4905 (ex-7467) is seen *above* at Woodford on 7th August 1969 on the Hainault–Woodford branch of the Central Line, to which service they had been relegated since April 1964.

Two of the 1927 trailer conversions included the provision of end single doors similar to the two “58 Trailers” on the Bakerloo Line (see page 33). Trailer 4903 (ex-7457) so converted is seen *below* at Ealing Broadway, working with the 1960 Tube Stock Craven DMs (3910 and 3911) that were used for many years as a test train.





The use of these converted trailers on the lightly-used but “exposed” Hainault–Woodford section of the Central Line, took its toll with the general condition of the cars. On trailer 4901 (ex-7469) (*above*) the rotting ventilator scoops have been removed and their spaces patched over, and the gutters have been panelled over.

In late-1981/early-1982 the four remaining converted trailers were given a mini-refurbishment, which included an interior and exterior repaint as well as new seating moquette. However, by mid-1983 all were withdrawn and were scrapped in August, being taken by road from Hainault depot to Booths of Rotherham. Nearest the camera, *below*, is 1927 trailer 4901, adjacent to which is 1931 trailer 4900. There were eight 1931 trailers converted, five taken from the BRCW batch and three from the GRCW batch, the two types being indistinguishable.

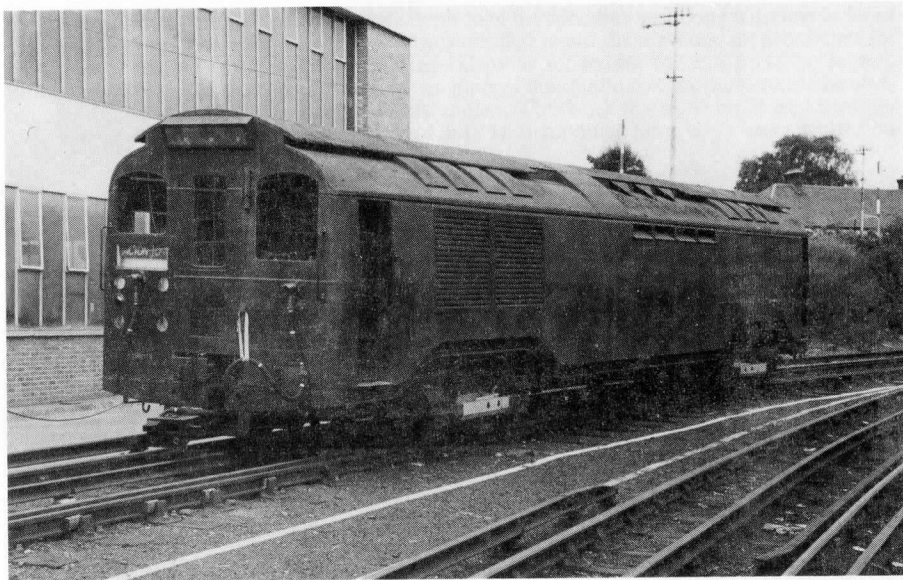




In 1963 BRCW trailer 7131 was converted to a tube stock gauging car and became G663. It is seen *above* in Ruislip depot formed between 1938 Tube Stock Ballast Motors.

In 1981 G663 was repainted yellow to conform with the present policy of painting service locomotives and miscellaneous vehicles. It was also adapted at the same time for gauging sub-surface lines as the surface stock gauging car of 1906 origin (G662) had been scrapped in 1980.





In 1964 a pair of 1931 MCCW ex-Piccadilly Line DMs (3080 and 3109) were converted at Acton Works into an additional double-ended shunting locomotive, to supplement L10 of 1906 origin, which was converted in 1930. Unlike its predecessor, which had an adjustable coupler, L11 had two Ward couplers – a lower one at Tube Stock height and one other at Surface Stock height. Also unlike its predecessor, which had the adjustable coupler at both ends, L11 had the dual couplers at the east (Works) end only.

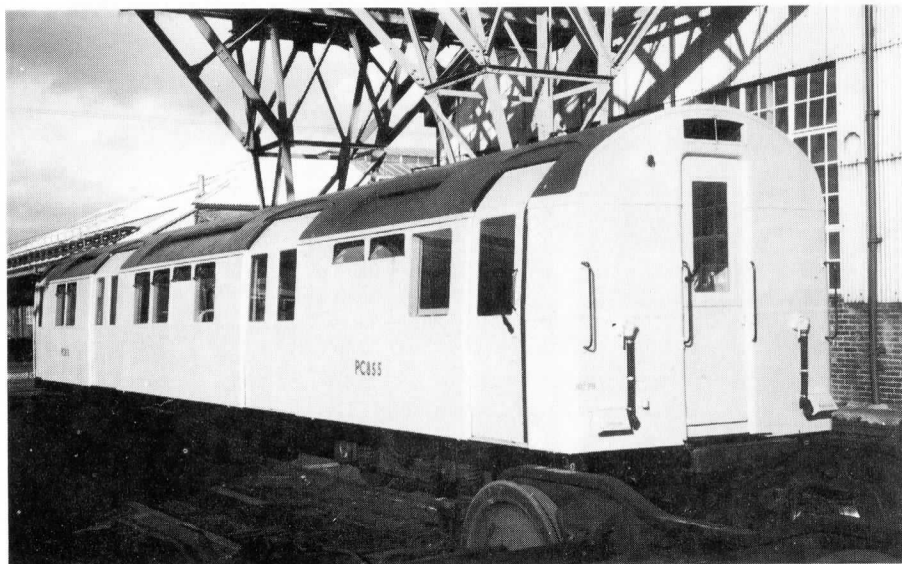
In time for the Acton Works Gala weekend of 2/3 July 1983, which was part of London Transport's Golden Jubilee celebrations, L11 was repainted yellow. The east end of the locomotive is seen *below* at Ealing Common Depot during repainting on 22nd June 1983.





After withdrawal from Piccadilly Line service, six 1931 trailers were put to use in 1965–66 as Personnel Carriers for working Engineers' trains and were renumbered PC850–855. The first of these (ex-7061) is seen *above* in Lillie Bridge depot in the then service stock livery of unlined lake. At the beginning, some cars retained their red livery, until they could be repainted.

The first Personnel Carrier to sport the new yellow livery was PC855 (ex-7071) in 1979 as illustrated *below* in this form in Acton Works. Access to the car is via a single sliding door nearest the camera, others being sealed up. It can be seen that car windows which have become broken are not replaced, merely panelled over.

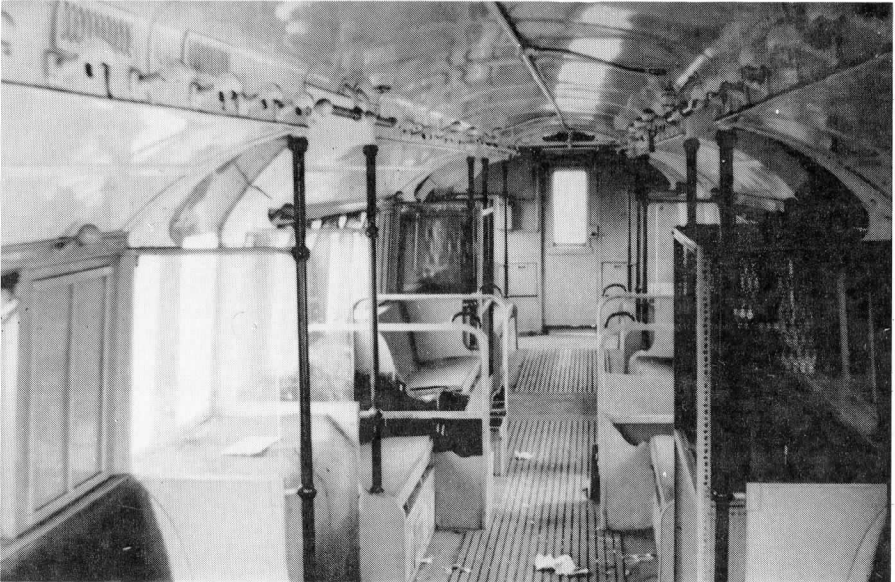






When 70518, one of the Bakerloo Line “58 trailers” with extra doors, was withdrawn from passenger service in 1972, it was converted to Personnel Carrier PC856 (*above*), replacing PC853 that had been damaged beyond repair in Northumberland Park depot. (See also photo of 70518 on page 33). Note the shoebeam and collector shoe, fitted to supply current to interior storage heaters.

The interior, *below*, of the Pre-1938 Tube Stock Personnel Carriers was pretty basic. All the upholstered seats were removed and replaced with solid wooden seats. Large storage heaters were fitted in the double doorways since the vehicles were generally only in use when the power was switched off the track.

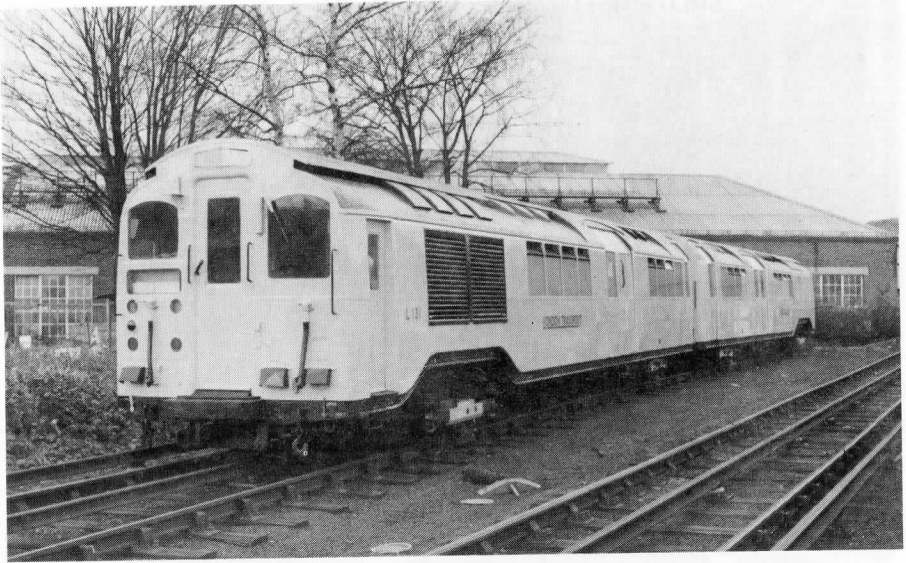




From 1965 four pairs of Tube Stock DMs were transferred into the service stock fleet from the 1927/31/34 MCCW types. Two pairs were renumbered into the "L" series, while the other two became surplus to requirements and were eventually disposed of (one car actually going to the Isle of Wight). L134 and L135 in Acton Works, *above*, are prepared to transfer Battery Locomotive L30 to Ruislip after collision repairs.

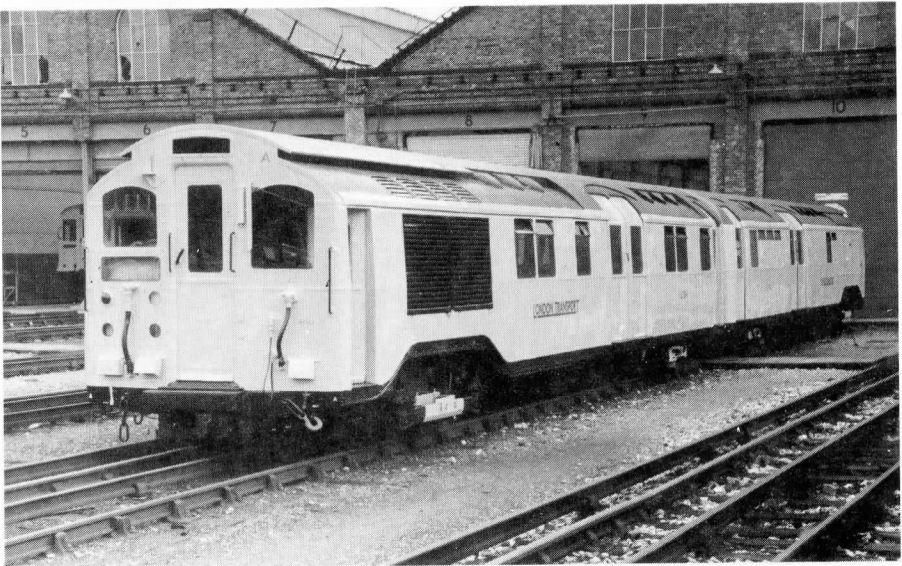
On 16th July 1981, L130, L131 and RG803 were loaned to the Southern Region of British Rail for rail adhesion tests and worked trips between Kingston and Shepperton. The three-car formation is seen *below* at Shepperton.



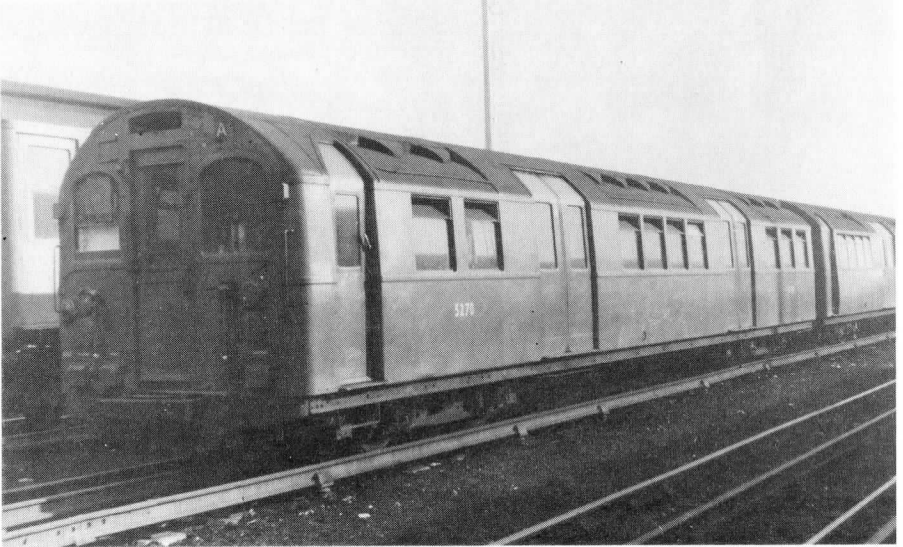


One of the two remaining pairs of Pre-1938 Tube Stock Pilot Motors was repainted into yellow livery in 1982. L130 and L131 both comprise 1934 DMs (ex-3690 and 3693) and are seen *above* in Acton Works in January 1983.

The only active 1927 MCCW DM is now Pilot Motor L134, repainted in yellow in April 1983 and seen *below* at Ealing Common depot on 22nd April 1983.



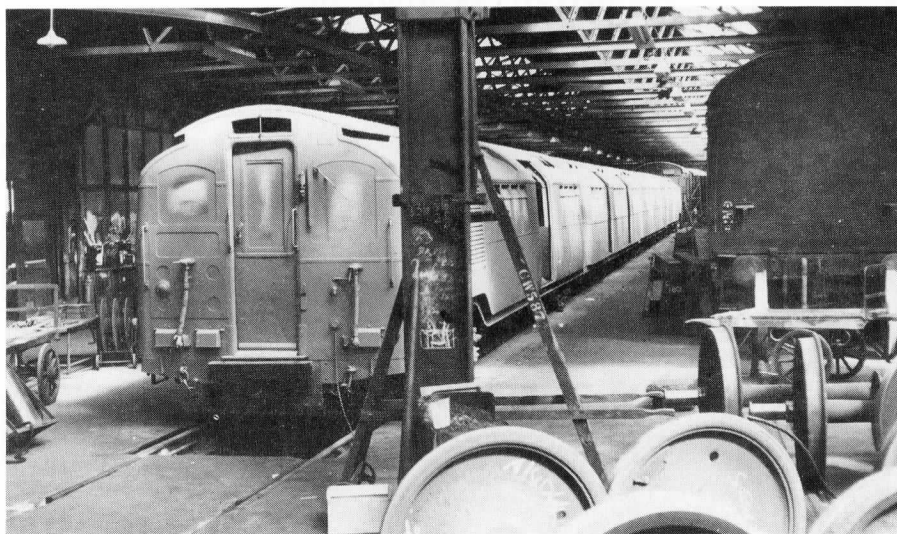
## SOLD FOR FURTHER SERVICE – ISLE OF WIGHT



The story of the Pre-1938 Tube Stock on the Isle of Wight has already been told by the Society in UndergrounD No. 11 (now out of print) and only a brief mention is therefore necessary in these pages. Among the 73 cars inspected by the Southern Region, 61 were of 1923–29 vintage withdrawn from the Northern City Line in October 1964 and stored initially at Ruislip depot. One such car, *above*, was 1924 Cammell Laird CT 5270 which was one of seven cars considered for the extension to Ventnor. In the event, this did not materialize and the car made its way from Micheldever to Bird's of Long Marston on 11th August 1970 for scrap.

Some 44 cars were transferred from Ruislip depot to Micheldever for storage, where, *below*, a 1925 MCCW CT stands next to S.R. 4-COR unit 3137.

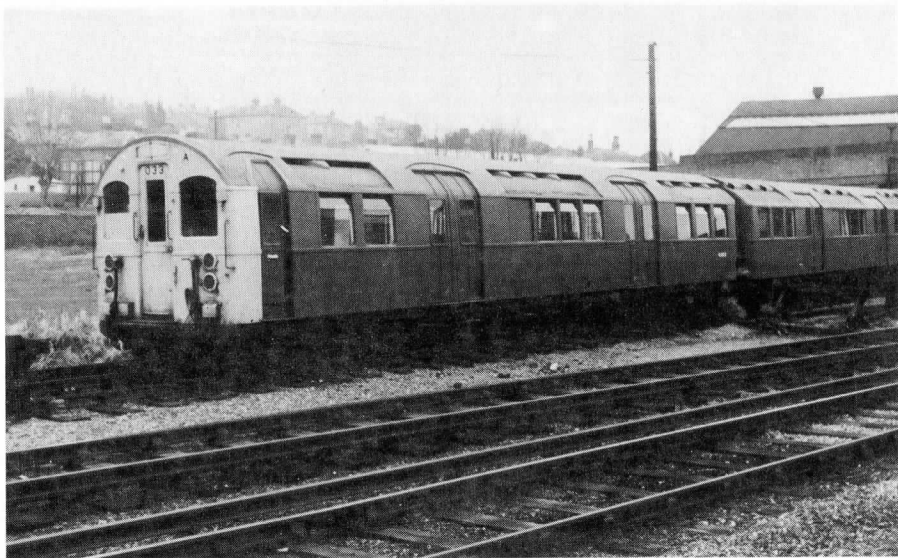




The first four-car train converted for Isle of Wight service left Acton Works unpainted on 13th May 1966 for repainting at Stewarts Lane. This photograph, *above*, taken on 4th June 1966, shows, in the earliest stages of repainting, cars 3010 (front), 3313 (rear) and trailers 7283 and 7296. 1929 UCC DM 3010 became S22S. (See also photo on page 21.)

The Carriage & Wagon Works at Ryde St. John's Road was adapted to become the depot for the Pre-1938 Tube Stock. 1934 MCCW DM S10S (ex-3696) which became the spare car, stands (*below*) in isolation outside the depot on newly laid track.





*Above:* 1925 MCCW control trailer S30 (ex-5312) shows that the original headlight positions were retained, although CTs are not used in their own right on short trains, such services being worked by four-car trains each with two DMs. This car is now withdrawn and is used as a store at the back of Ryde depot (see page 59).

*Below:* The interior of the small two-road shed at Ryde St. John's Road, with 1931 MCCW DM S8 (ex-3074) in the earliest stages of a repaint.





*Above:* The first livery adopted was all-blue, with yellow driving ends on DM and CT cars. Electric services on the Isle of Wight commenced on 20th March 1967. DM S6S (ex-3084) leads on a seven-car train to Ryde, between Shanklin and Sandown on 17th July 1971..

*Below:* Primitive train washing arrangements on the Isle of Wight — bucket, hose and brush! DM S15S in original livery is the second to bear that number, replacing the original in 1971.





*Above:* A four-car formation arrives at Ryde St. John's Road, still in its original livery style and in need of cosmetic attention. Leading DM S19 has since become a permanent way stores car at Sandown (see page 58).

*Below:* Grey passenger doors on exterior repaints appeared for the first time in 1976 and at the same time the "S" suffix was dropped from car numbering. The Inter City blue and grey livery was introduced from 1981. A four-car train departs Ryde St. John's Road with S1 (ex-3703) leading on 18th October 1982. The depot and sidings can be seen in the background.





To meet the needs of present day traffic on the Isle of Wight, the fleet was drastically altered in 1985 to form 5 x 5-car and 2 x 2-car trains, plus four spare trailers, reducing the stock from 37 to 33 cars. The four withdrawn cars (S13, S21, S36 and S96) were dumped by the lineside south of Ryde St. John's Road in June 1985, where they were still in March 1987 awaiting disposal. The revised formations required only DMs and trailers and thus CTs were absorbed and utilised as trailers, most having their remaining equipment removed. The revised formations were as follows:

Unit No.	DM	T	T	T	DM
485041	S2	S26	S92	S27	S1
485042	S4	S28	S42	S29	S3
485043	S6	S32	S43	S31	S5
485044	S8	S49	S44	S33	S7
485045	S10	S34	S94	S93	S9

Unit No.	DM	DM
486031	S20	S11
486032	S22	S15

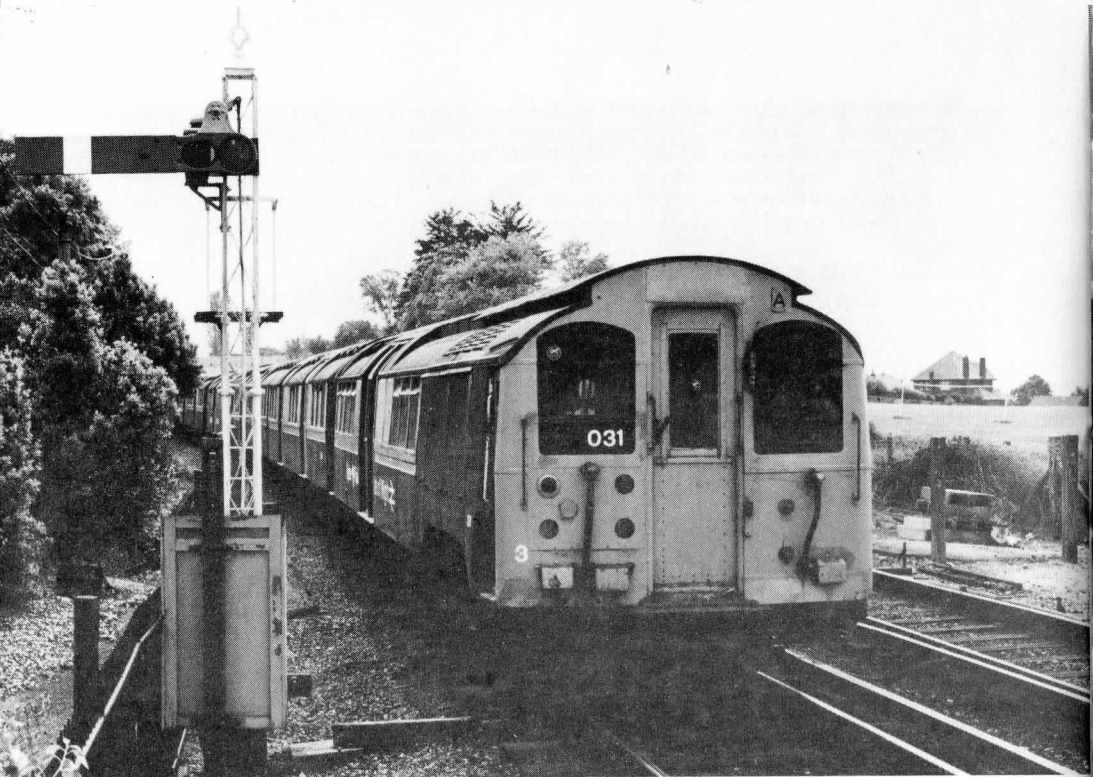
Spare trailers S41, S46, S47, S95.

The revised formations and the temporary formations caused during the interim period meant that examples of mixed livery trains continued. DM S22, now out of service, is seen, *below*, at the rear of a five-car train departing Ryde St. John's Road, with one trailer car in an older livery on 21st June 1986.



During the summer of 1985, when cars were being reformed into the new units, most DMs could be seen with temporary numbers just above solebar level as seen (*overleaf, top*) on S20 leaving Sandown.

In 1984, work commenced on rewiring the lighting circuits and to simplify the job, the existing fittings were transferred to a new position along the centre of the ceiling — having an affinity to wartime lighting, although much brighter! The interior of S10 (*overleaf, lower*) shows that the original opening quarterlights have been replaced at the trailing end of the saloon by plain, non-opening windows.

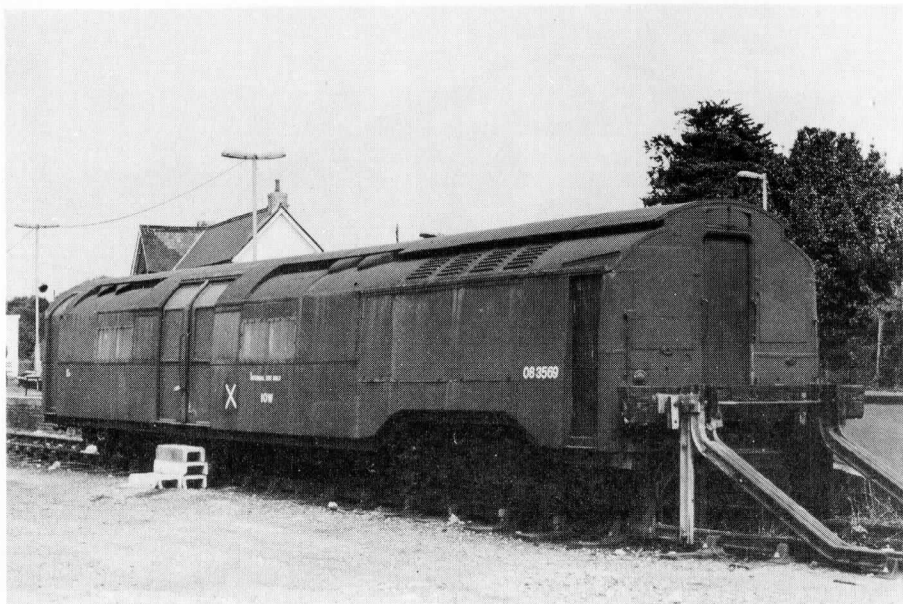




To improve the working environment for train drivers, a start was made in 1985 on modifying DM cars, by removing the driving end communicating door and repositioning some switches and buttons in the cab for easier access and operation. The first DM to be completed was S5 (ex 3185) which re-entered service in June 1985. It is seen (*above*) at Ryde St. John's Road.

By 1st March 1987, six DMs had modified front ends and DM S1, in ex-works condition, is seen (*below*) at Ryde Esplanade.





With the reorganisation of stock in 1985, the original fleet of 43 cars was reduced to 33 cars, inclusive of four spare trailers. One DM car withdrawn in 1982 however, was S19 (ex-3045) — a 1928 UCC Feltham car — and since March 1984 has found a home in the bay platform of Sandown station as a Permanent Way store, numbered 083569. It has recently been removed from its bogies and placed on the spare land in the foreground.

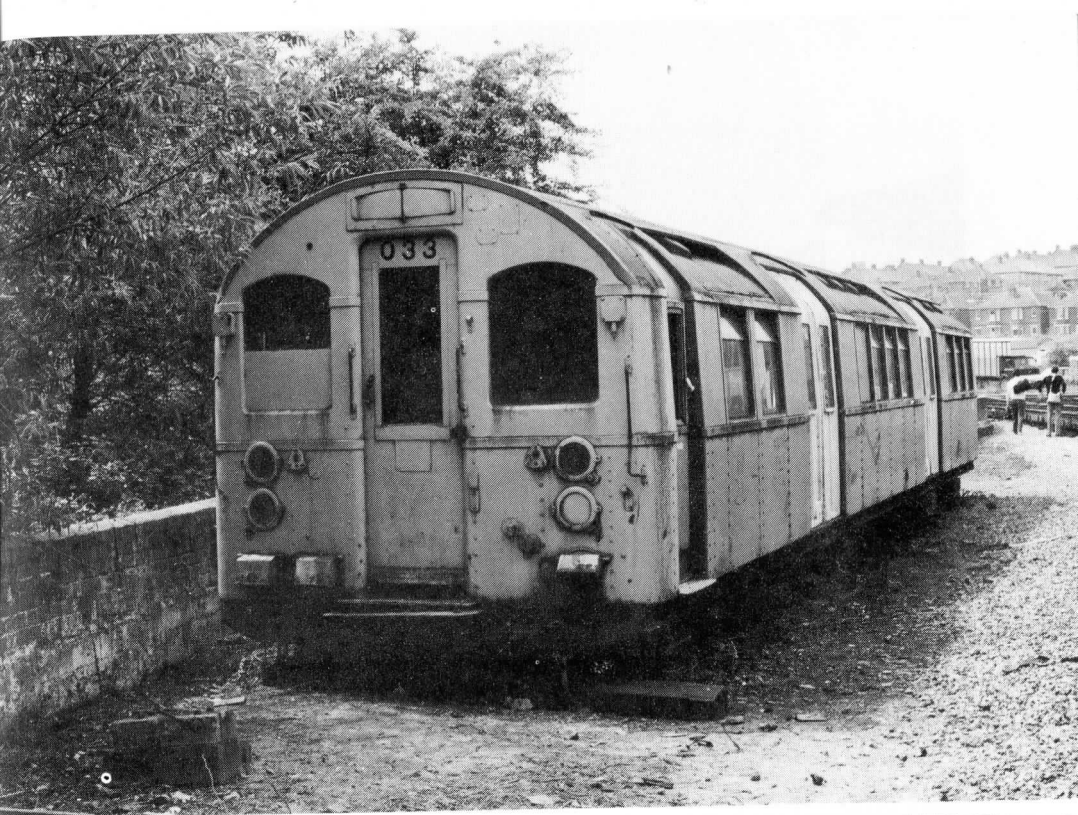
Withdrawn control trailer S30 is now located at the back of Ryde St. John's Road depot and retains many of its London Underground features, e.g. headlight positions and remains of door close plungers (*top right*). The lower picture shows the trailing end and depicts the rivets standing proud of the panels.

In early 1987, it was decided to reduce the operational spare stock on the Isle of Wight which would reduce the fleet from 33 cars (5 x 5, 2 x 2 and 4 spare trailers) to 27 cars (5 x 5 and 1 x 2). The six cars ultimately to be withdrawn are DMs S15 and S20 (running on 4th March 1987) and S22 plus trailers S41, S42 and S46. The position at 4th March 1987 can be summarized as follows:

Unit No.	"A" CT	"D" DM			
486031	S28†§	S11§			
Unit No.	"A" DM	Trailer	Trailer	Trailer	"D" DM
485041	S2*†	S26*†§	S92*†§	S27*†	S1*†
485042	S4	S47*†§	S95§	S29*†	S3
485043	S6*†	S32*†§	S43*†§	S31(d)*†	S5*†
485044	S8*§	S49*†§	S44*†§	S33*†§	S7*
485045	10††	S34*†	S94*†§	93††§	9††

Spare DMs: S15\*, S20\*, S22\*. Spare trailers: S41\*, S42\*§, S46\* — all scheduled for early withdrawal.

- \* Blue & Grey livery
- † Lighting & ventilation mods (all cars) and modified cab ends (DMs)
- †† Network SouthEast livery of red, white, blue, grey & yellow
- § Lino flooring, orange or black.
- (d) De-icing trailer.



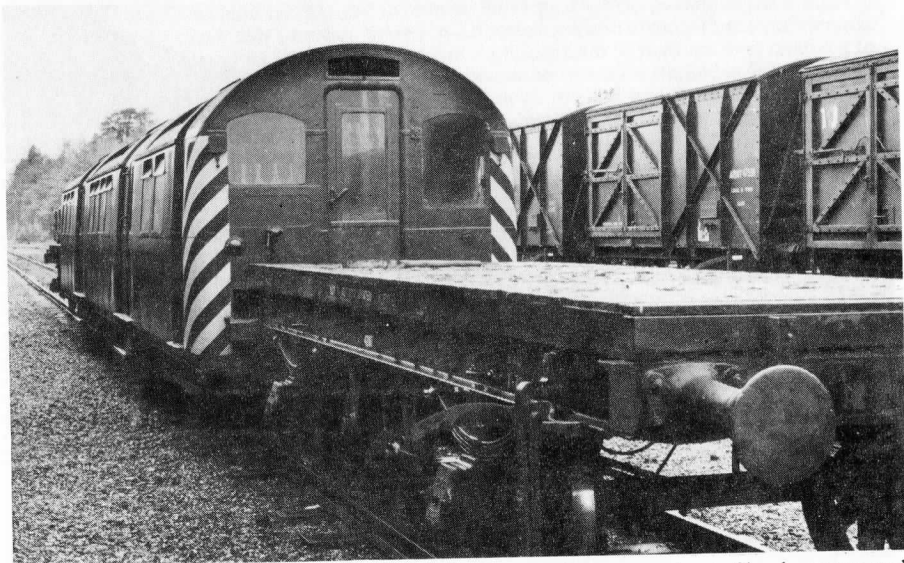


In June 1986 "Network SouthEast" was created by British Rail and the area includes the Ryde-Shanklin line. It was therefore inevitable that the Pre-1938 Tube Stock on the Isle of Wight would receive the special Network livery and the first to do so, entered service on 2nd March 1987. Formed of cars 10, 93 and 9, the three car train is seen (*above*) at Brading on 4th March 1987.

For the first time on the Isle of Wight, a control trailer is being prepared for "proper" use in passenger service. It will be recalled that CTs have never operated in their own right, as they have been confined to the middle of trains. S28 was undergoing conversion (*below*) on 4th March 1987 in Ryde Works. Its old button-operated deadman has been replaced with a standard BTH hinged one.

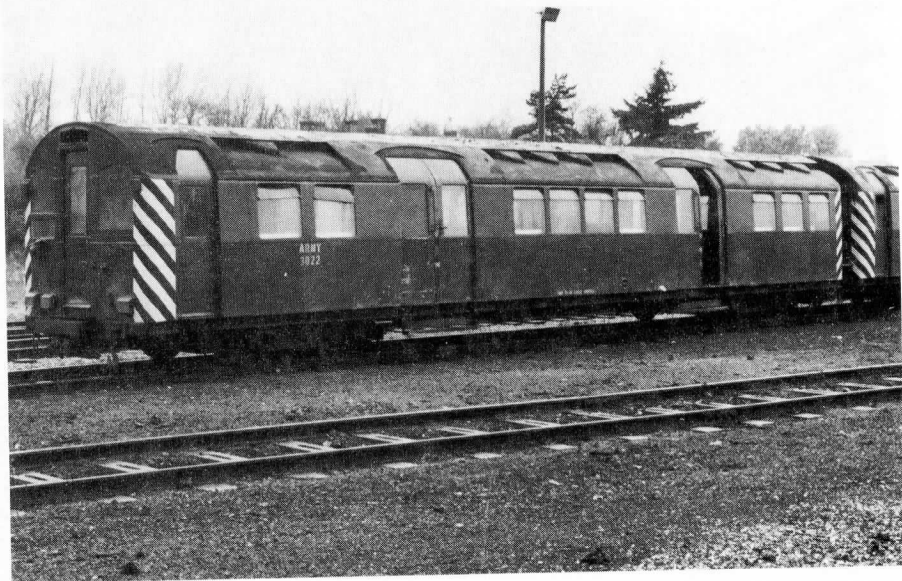


## SOLD FOR FURTHER SERVICE – THE ARMY



In 1961 six control trailers were acquired by the Army, three cars going to Shoeburyness and three to Bramley, where at the latter a 1930 MCCW CT is seen with its new owners coupled to an Army-owned match wagon on 10th November 1973.

Another view of a 1930 MCCW CT at Bramley showing the driving end, and how the doors have been converted to be worked by hand. Army No. 3022 was ex-75202, one of 50 CTs renumbered in March and April 1961 to avoid duplication of numbers with new A60/62 stock. The three cars at Bramley were replaced by three 1938/49 Tube Stock cars in 1973.



## PRESERVATION



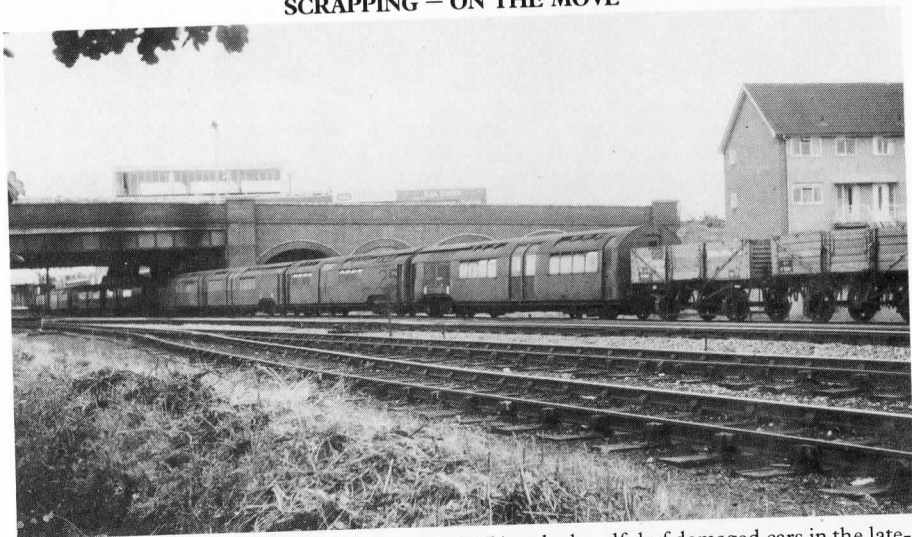
Only one car of Pre-1938 Tube Stock has been preserved for posterity, being 1927 MCCW (B.T.H. type) DM 3327 in the Science Museum at South Kensington, London. This car was taken by road from Acton Works on 3rd September 1961 and is seen *above* leaving the exit gates of Acton Works. The bridge behind is that which carried the South Acton branch of the District Line (closed on 28th February 1959) over Bollo Lane, and now demolished.

No. 3327 in Chiswick High Road, *below*, passing L3 class trolleybus 1445 – whose days were numbered, as the last trolleybuses ran in London on 8th May 1962, route 667 seen here being one of the last.





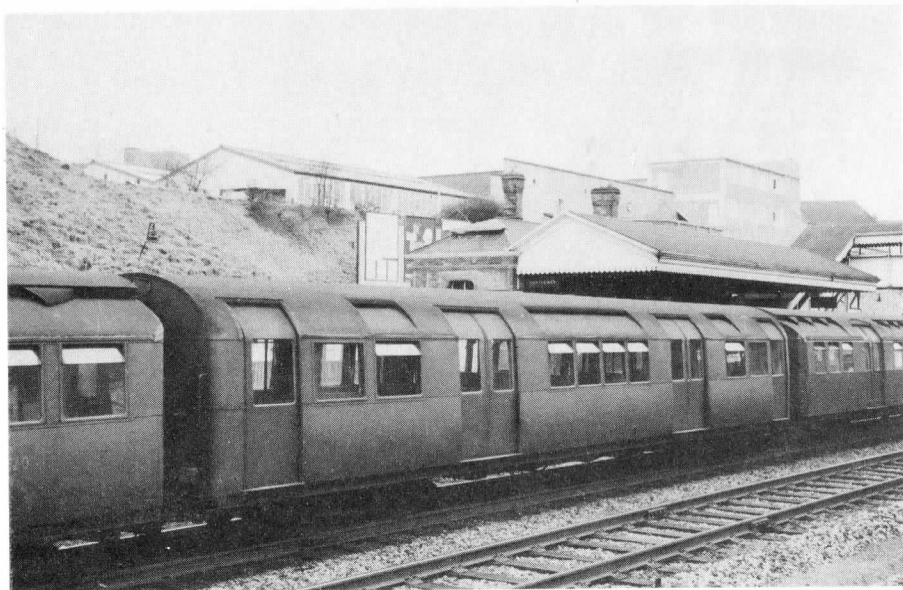
## SCRAPPING — ON THE MOVE



Apart from the cars that were withdrawn in 1954 and a handful of damaged cars in the late-1950's, all of which were cut up and scrapped on LT premises, the first consignment of scrap Pre-1938 Tube Stock departed by rail from Ruislip depot on 1st June 1960, comprising all CT's to Cohens of Tamworth. George Cohen was one of a number of scrap dealers that took the Pre-1938 Tube Stock. A seven-car all DM formation is seen, *above*, shunting at West Ruislip on 21st June 1963, which was also destined for Cohens of Tamworth. The train comprises, from right to left: 3055 (1928 UCC), 3006 (1929 UCC), 3784 (1927 MCCW — the highest number reached in the DM fleet, being ex-3421 in 1957), 3781 (1930 MCCW — Watford replacement stock, and formerly 3352), 3120, 3177 and 3075 (1931 MCCW).

A seven-car all trailer formation at Beaconsfield, *below*, on 30th March 1962, en route for the Steel Breaking & Dismantling Co's scrapyards at Tapton Junction north of Chesterfield, being hauled by 5MT "Hall" class 4-6-0 locomotive 5968 "Cory Hall". This train comprises (not necessarily as viewed): 7006, 7020, 7059, 7191, 7192, 7409 and 7498.

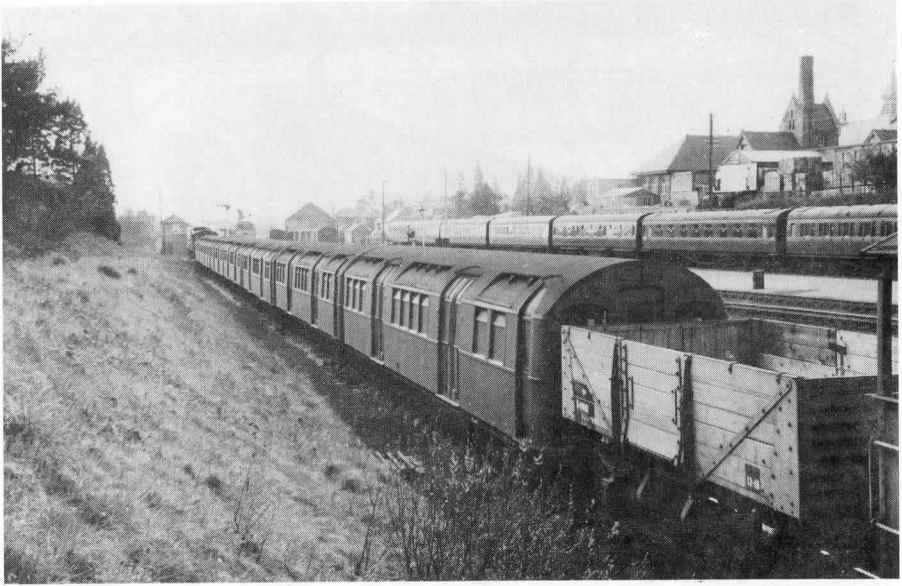




*Above:* Included in the 30th March 1962 consignment to SBD Chesterfield was one of the experimental 1930 UCC trailers, No. 7059. This, and 7058, were the first two trailers to be fitted with end single doors. Apart from a short spell on what is now the Northern Line in November 1930, and on the Central from February 1960, Nos. 7058 and 7059 spent all their working life on the Piccadilly Line.

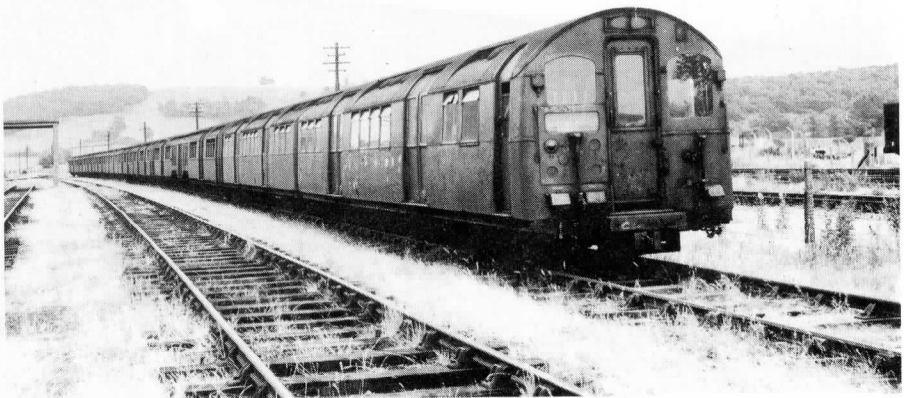
*Below:* 1924 MCCW DM 3529 takes up the rear of a seven-car all motor formation passing Malvern Wells on its way to Cohens yard at Rotherwas Junction, near Hereford. This particular train left Ruislip depot on 17th May 1961. DM 3529 was one of those modified for working in the middle of train formations, as denoted by the letter "M" over the car number.

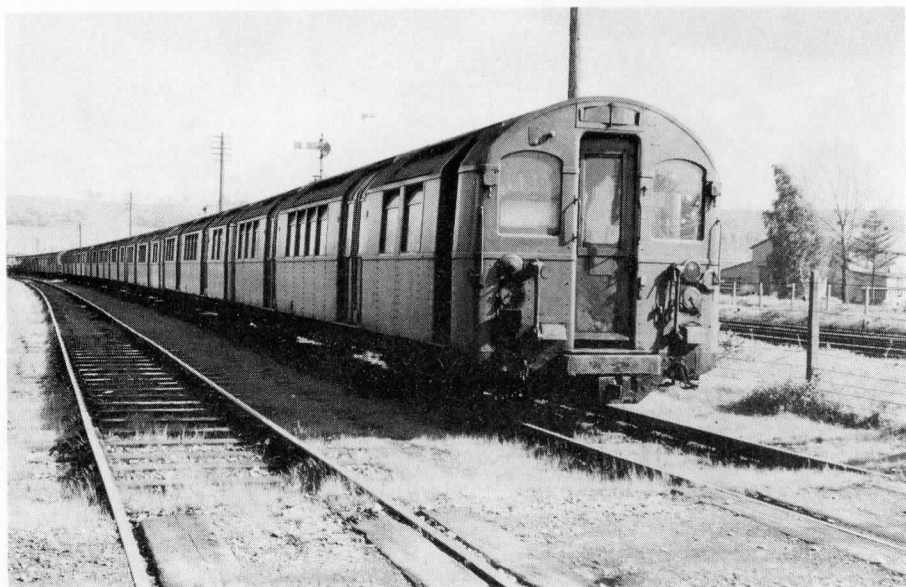




*Above:* This seven-car mixed Trailer/CT train, ex-Ruislip on 27th March 1961, is seen being shunted into a siding at Colwall, with two 1925 MCCW CT's nearest the camera. The whole train comprised cars: 5260, 5280, 5322, 5330, 5332, 7383 and 7396.

*Below:* At Rotherwas Junction, beside the line to Gloucester via Ross-on-Wye (now closed) stands a mixture of Pre-1938 Tube Stock, most types of car being in evidence in these two recent arrivals for Cohens scrapyards. The leading vehicle is a 1928 UCC CT, next to which is a 1930 MCCW CT.



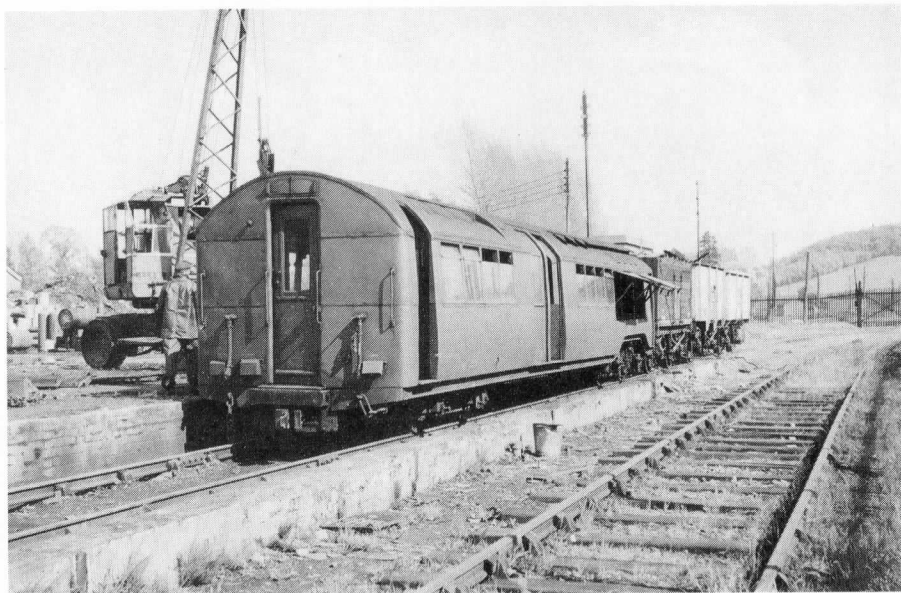


*Above:* A different train formation at the same location as the previous picture shows the leading car to be a 1925 MCCW CT, one that had been fitted with passenger door control. The position of the sun in this picture highlights the rivets which used to stand proud on most of the earliest examples of the Pre-1938 Tube Stock.

*Below:* Two middle motor cars of 1924 MCCW origin, 3574 and 3535, which left Ruislip depot on 12th January 1961, at Rotherwas Junction.

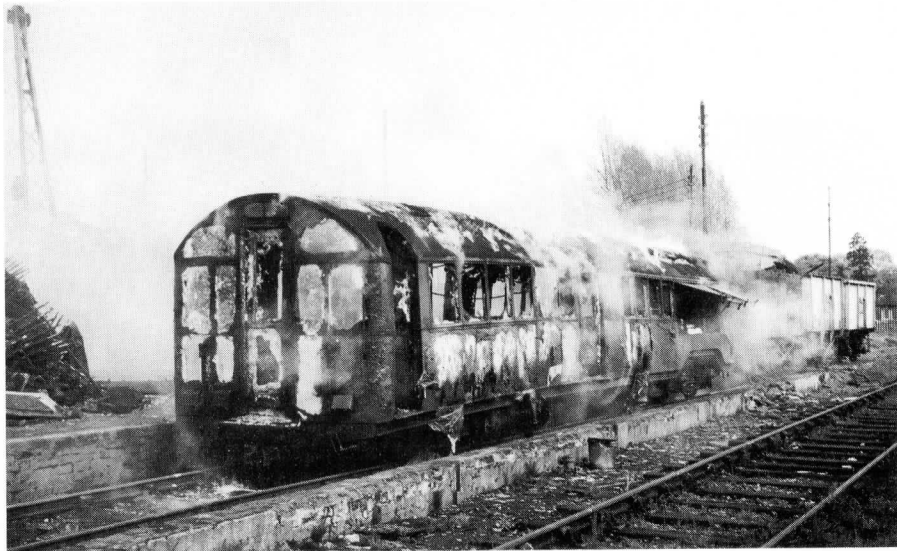


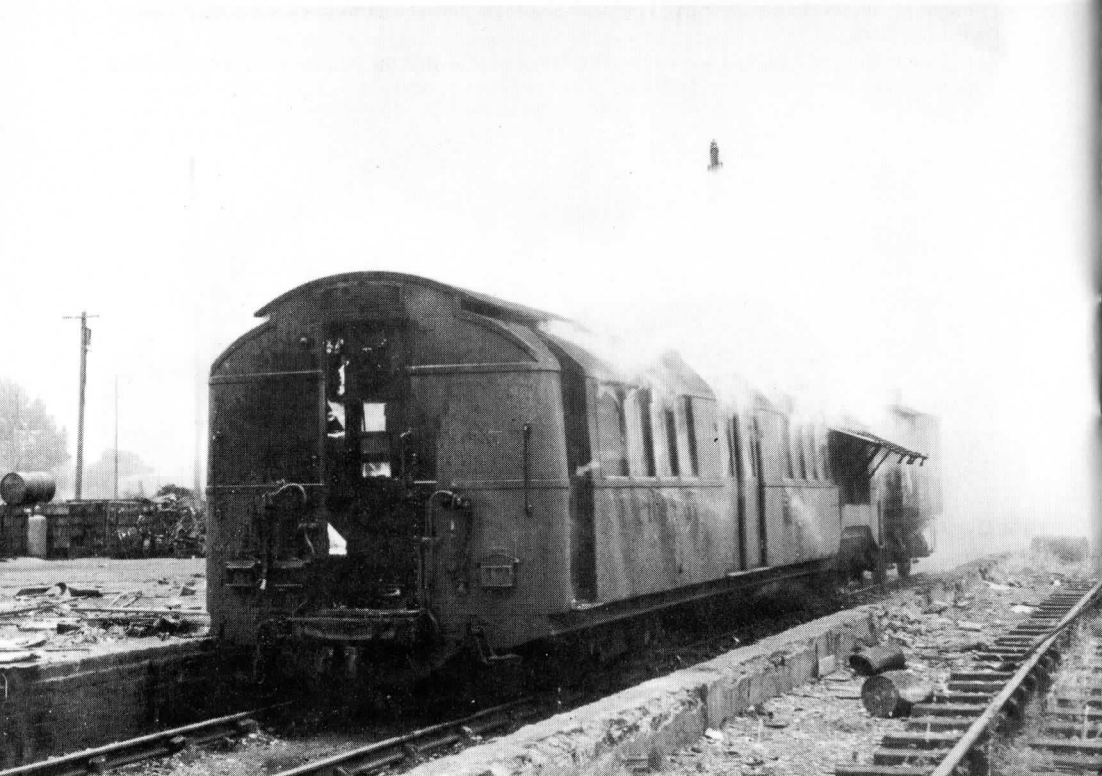
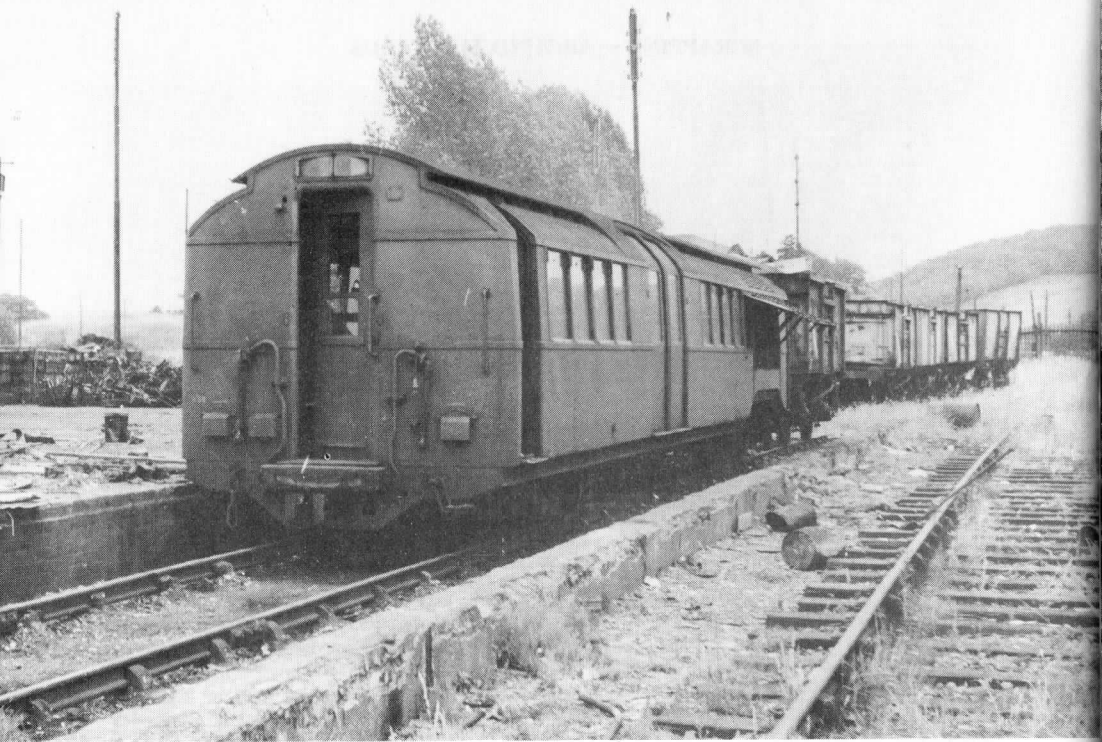
## SCRAPPING – AROUND THE YARDS



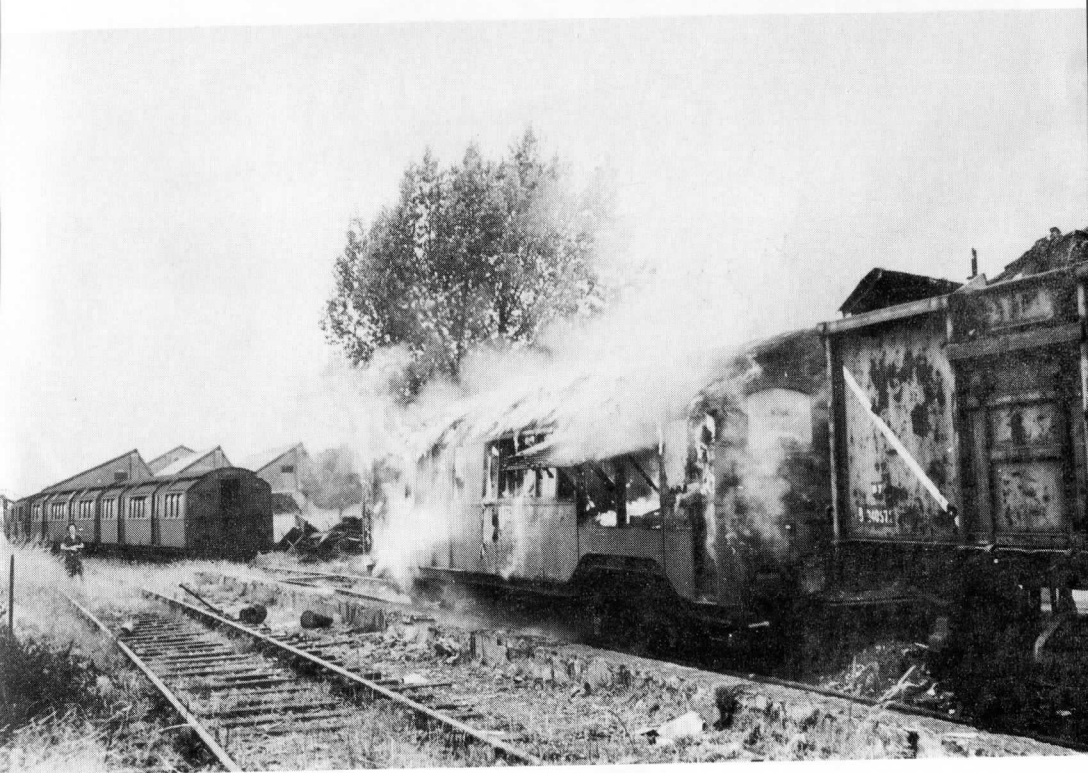
Scrap Dealer George Cohen had several scrap metal yards around the country, the Pre-1938 Tube Stock using Rotherwas Junction (Hereford), Kingsbury (Tamworth) and Cransley (Kettering). At Rotherwas Junction a 1928 UCC DM awaits being set alight, *above*. This photograph shows clearly the curved below-waist-level panels that were a feature on Feltham-built tube stock.

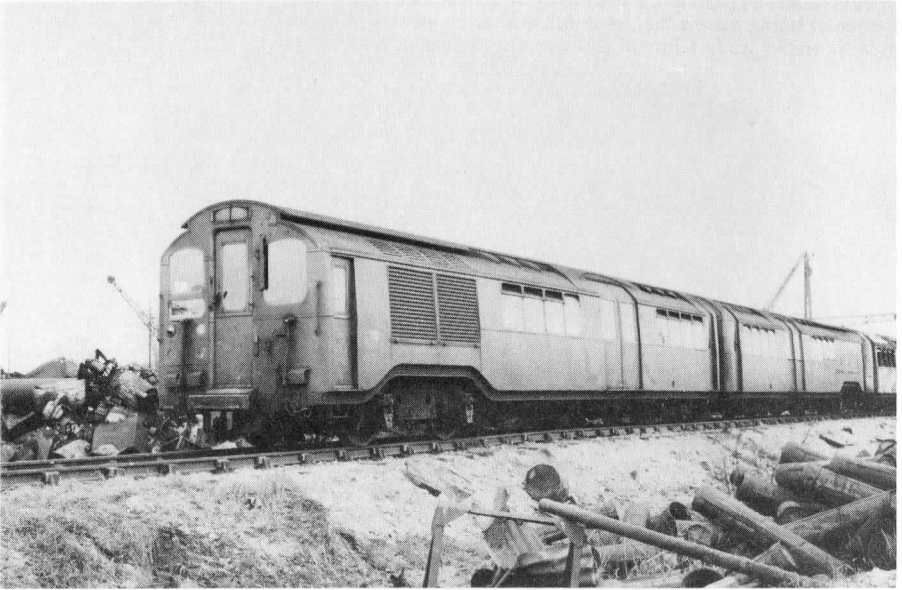
The same car, *below*, having been set on fire. It can be seen that the intense heat has caused the trailing end of the underframe to buckle downwards.





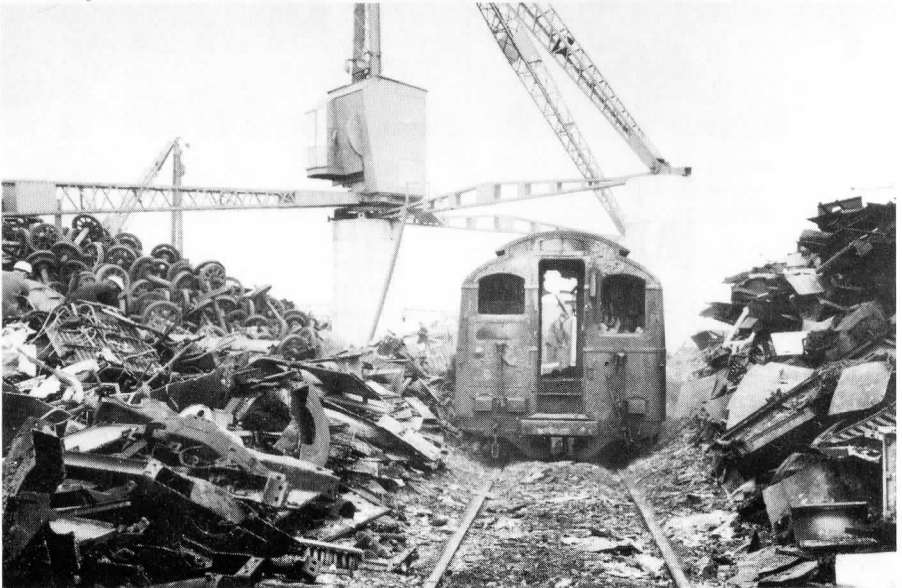
At Rotherwas Junction, a 1923 MCCW DM is seen before scrapping, *above left*, in the earliest stages of being set on fire, *lower left*, and at an advanced stage of destruction, *below*. A 1924 BRCW trailer leads a line of cars awaiting a similar fate.





*Above:* 1930 MCCW DM 3354 (formerly Watford Replacement Stock) in Cohens yard at Kingsbury, near Tamworth. This car still displays its line/destination and set number plates, likely to have been its last passenger working — train 70, to West Ruislip. It left Ruislip depot for Tamworth on 4th April 1962.

*Below:* An unidentifiable burnt out “A” end DM of Pre-1938 Tube Stock stands in Cohens yard, Tamworth, amidst numerous pieces of fellow Pre-1938 stock dumped either side.

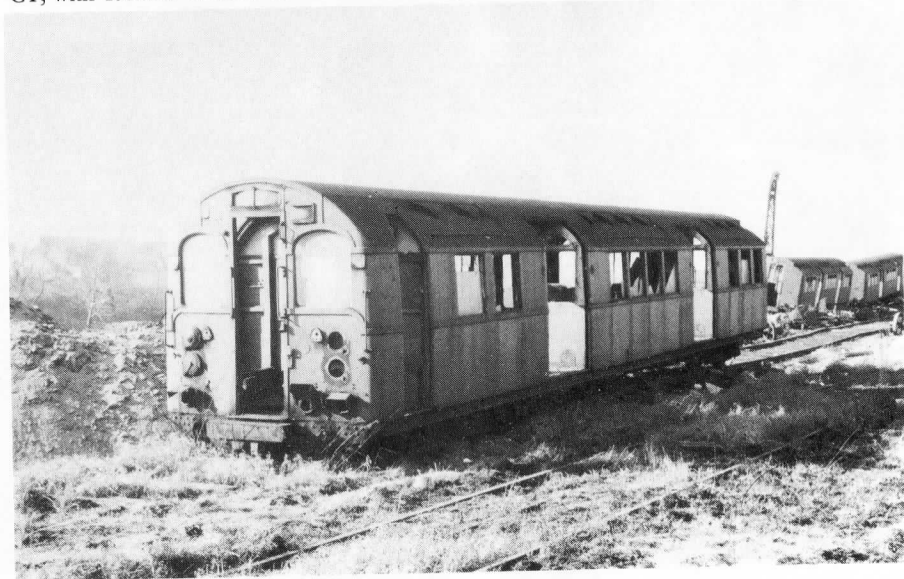


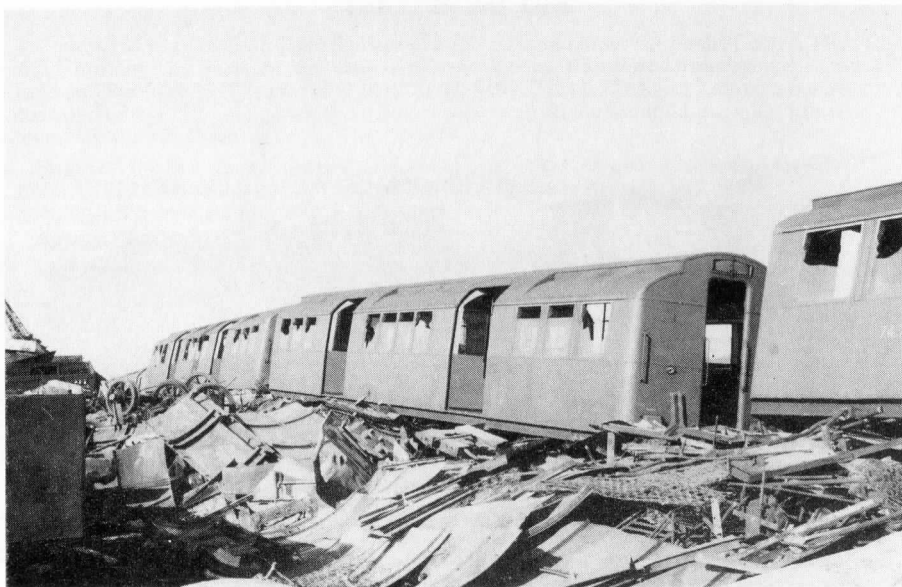




*Above:* Cohens of Kettering took some Pre-1938 tube Stock cars, but not until 1964 and after the plant at Hereford ceased to be used. 1931/34 MCCW DMs stand at Kettering, this consignment having left Ruislip on 9th April 1964.

*Below:* The Steel Breaking & Dismantling Co. near Chesterfield has long been involved with the scrapping of LT rolling stock, as all the stock withdrawn from the 1935-40 New Works Programme and into the early 1950's was sent there. However, their role in later years has declined considerably in favour of now more familiar names like C. F. Booth of Rotherham and Bird's Commercial Motors of Long Marston. In the SBD's yard at Chesterfield stands a 1924 CL CT, with 1926/27 MCCW trailers in the background.





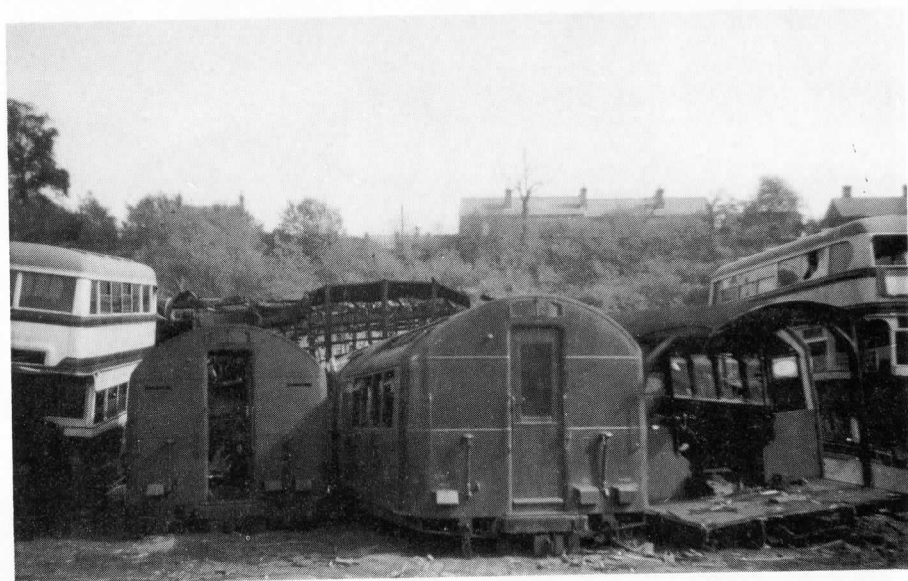
*Above:* At the same location, 1927 MCCW trailer 7458 lies dumped, minus bogies, with the end of sister trailer car 7471 (right) and an unidentified trailer (left) of the same type, despatched from Ruislip on 1st March 1963.

*Below:* Another company that took Pre-1938 Tube Stock in its earliest days of scrapping was Bird's Commercial Motors, of Morryston, near Swansea. Two 1923 CL DMs and a 1930 CT can be seen in the foreground, the nearest DM having been a "middle" DM in its last months of service.





Bird's Commercial Motors also took four DMs which they cut up at Ruislip and transported by road. These were 1926 MCCW 3676, 1927 MCCW 3416 and 3442 and 1928 UCC 3295. The two views on this page are believed to have been taken at Bird's Stratford-on-Avon yard on 18th September 1961 and show small sections of these cars awaiting their fate with ex-Birmingham City Transport Daimler COG5 buses of pre-war vintage.





A close up (*above*) of the remains of a cab end of a 1923 MCCW former middle motor at Birds yard, Morrision.

Of the 58 Bakerloo Line trailers modified in 1938–40 to work with the then new 1938 Tube Stock, five were scrapped before the bulk were withdrawn during 1972–74. The five included 70550 (scrapped at Croxley Green by Parry Ltd. in 1963 after a collision near Watford), 70524, 70531 and 70543 (at Neasden by J. & P. Metals in 1967) and 70532, *below*, at Acton where this car is seen on 29th October 1970, having been cut into three pieces for transfer by road to SBD of Chesterfield.





The last of the 1954–55 Ballast Motor car conversions were scrapped in 1978 at Neasden (L63, L64 and L71) and Ealing Common (L68, L74, L75 and L77), having been gradually replaced from 1973 by 1938 Tube Stock DM conversions. L74 and L77 had been at Golders Green and were transferred to Ealing Common between two of their successors, L152 and L153. L77 is seen (*above*) at Ealing Common Station on 19th September 1978 and L74 (*below*) is at Ealing Broadway two days later.

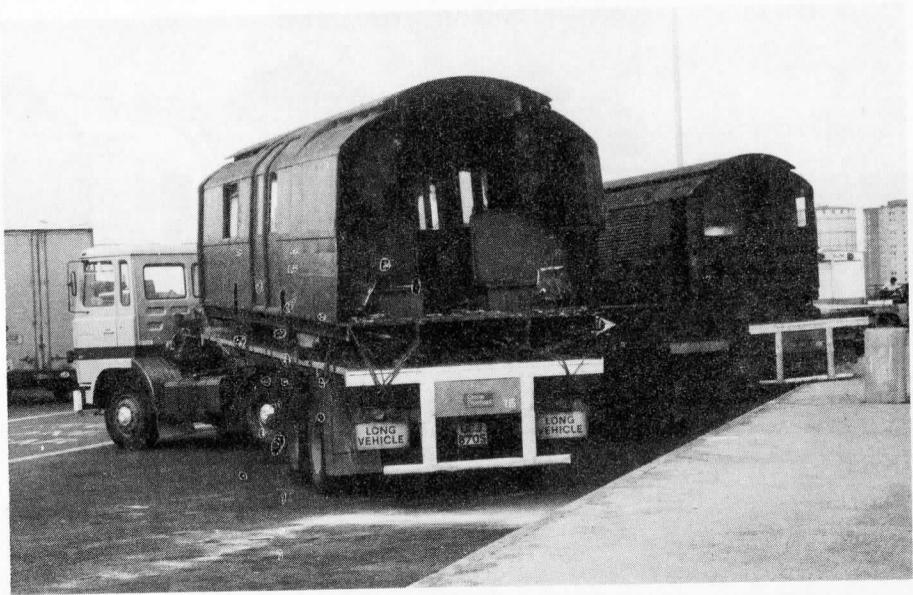




The remains of L75, *above*, have been cut in two, the trailing end being loaded onto a transporter. This work was carried out by Cashmore's of Newport, although Oakley's of Hereford provided the road transport.

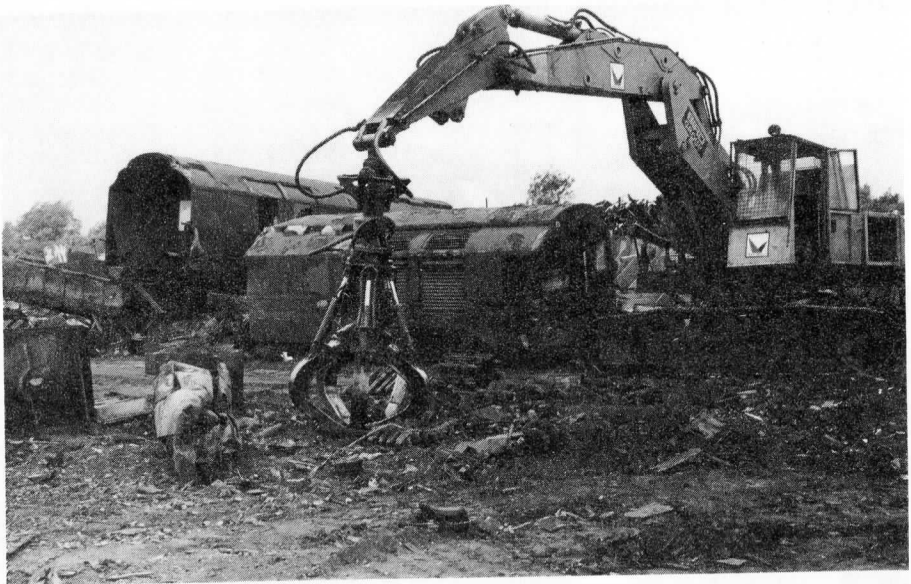
*Below:* The driving end of L75 emerges from the Acton Town end of Ealing Common depot at the start of its long run to Cashmore's scrapyards near Newport, South Wales on 21st September 1978.





*Above:* The two halves of L75 on lorries parked in the Heston service area of the M4 on 21st September 1978.

*Below:* The remains of L65, cut up at Ruislip depot earlier in 1978 awaiting final disintegration at Bird's Long Marston yard.







The first six converted trailers that worked with the 1960 Tube Stock DMs were scrapped between 1975 and 1978, a pair being despatched in a formation of scrap 1938 Tube Stock. The second pair, 4906 and 4907, the latter being a 1927 MCCW car that was given end single doors on conversion, are seen, *above left*, at Neasden prior to transfer to Ruislip, from where they departed for Bird's of Long Marston on 25th August 1977.

The other six cars were scrapped "on site", 4900/01/04/05 were taken from Hainault in complete condition to Booths' of Rotherham on 2nd August 1983, but 4910/11 were cut up at Ruislip depot in early 1980 by Resco Ltd. of Woolwich. Trailer 4910, *lower left*, stands in Ruislip depot on 28th February 1980 with the remains of 4911 in the foreground.



*Above:* A start has been made in the scrapping of 4910.

*Below:* The official scrapping date of 4910 is 4th March 1980, on which date the remains of the car can be seen.



## Acknowledgements

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- J. A. S. Milne — Pages 18 (lower); 19; 33 (lower); 35 (lower); 63 (both); 64 (both); 65 (both); 66 (both); 67 (both); 68 (both); 69; 70 (both); 71 (both); 72 (both); 74 (upper).
- R. J. Greenaway — Pages 38 (both); 39 (upper); 40 (lower); 45 (lower); 46 (both); 47 (lower); 48 (upper); 49 (upper); 53 (both); 55; 56 (both); 58; 59 (both); 61 (both); 74 (lower); 75 (both); 76 (upper).
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ISBN 1 870324 15 3