

# DARSTAED

Coach Builders Since 1966



## BRITISH RAILWAYS MARK I COACHES

[www.darstaed.com](http://www.darstaed.com)

**Warning :**

This is not a toy. This model is not suitable for children under 14yrs.  
Operation of this model should at all times be under the supervision of an adult.

## The British Railways Mark I coaches

Britain's railways at the end of the Second World War in 1945 were in a perilous state. Worn out after 6 years of war work with little or no maintenance, constant over-use and starved of investment, 'The Big Four' railway companies who had been responsible for railway operations were in no position themselves to provide the necessary investment and the only solution was for government financial intervention.

Preparations were therefore made for railway nationalisation in the early post war years with the result that 'British Railways' officially came into existence on the 1st January 1948. The organisation was controlled by a Board of ex Big Four railway managers and civil servants and one of the Board's overriding principles was the standardisation of locomotives and rolling stock. Prior to that, in 1946, a committee of Big Four railway senior officers had determined the basic requirements for a new nationwide railway coach operating standard. Although this committee itself was disbanded, its findings formed the basis for the BR Carriage Standards Committee design of the British Railways Mark 1 - BR Mk1- coach at the start of nationalisation.

This standards committee had looked at recent Big Four coach designs and borrowed the best aspects of each - taking into account the severe material and labour skill shortages Britain was then experiencing. The result was a coach built with economies of materials and labour very much in mind. It had an independent steel chassis (with a forty year life span) which could accept a number of different steel based body designs - with a minimum 20 year life. The steel chassis were independent units and actual railway vehicles in their own right this led to greater flexibility in construction planning and economic use of existing workshop facilities. The chassis could be manufactured in one location and then hauled to another to have the body fitted. The fact that a large number of these coaches are still in daily service on heritage lines nearly 70 years later is testimony to the effectiveness of this design.

The LNER and GWR bogie designs were considered to have the best ride qualities and the GWR version was eventually chosen as the basis of the new "BR1" bogie for the early group of MK1 coaches.

A significant aspect of the MK1 design was that most parts were interchangeable and the use of common parts was maximized, chassis, bogies, body ends and roofs were the same for all stock until the final detailing stage.

The MK1 coaches were built in two distinct tranches, the early vehicles (1951-60) and the “commonwealth” stock (named after the bogie used) from 1961 onwards. The MK1 design was used for loco hauled passenger stock, multiple unit coaches and non-passenger carrying stock. An unusual feature of the design for passenger stock was the subtle side curvature just discernable at 28ft (8.53 m) radius.

The final withdrawal of Mark 1s from daily mainline use took place in 2005 (except for two three-car EMUs on the Lymington branch, withdrawn 2010) some 54 years since the design entered service. Mark 1s continue to be used on special charter trains, but this use is also likely to be much reduced as Mark 2 coaches released from service by Virgin West Coast become available to replace them. This will leave the preserved railways as the only places to ride on Mark 1 stock.

## Liveries

British Railways Mark I coaches have been painted in a wide range of liveries. On introduction in 1951 the coaches were painted Crimson Lake (the official Railways Executive designation), usually referred to as Crimson (BS381C:540 Crimson being the British Standard colour reference) and Cream (the combination often referred to colloquially as "blood and custard" or B+C ) for corridor stock and Crimson for non-corridor stock. Corridor passenger stock was normally also lined out whereas non-corridor stock was not. The term 'Carmine' is often incorrectly used as a consequence of an error made by a contemporary railway journalist and has, unfortunately, been repeated ever since.

1956 saw the first big changes, with the end of 'third class' and the return of regional colour schemes. The Western Region promptly adopted GWR chocolate and cream livery for vehicles used on its named express trains and maroon for other stock. The Southern Region reverted to green and the other regions adopted maroon. 1960 saw Southern Region adopt the now familiar yellow cantrail above first class and red above dining areas. By 1963 this was found on all coaches. In 1962 the Western Region abandoned the use of chocolate and cream.

With the introduction of spray painting in 1964, the coach ends were painted the same colour as the bodywork. A year later the ubiquitous British Rail blue and grey was introduced and by 1968 most non-suburban Mark I stock was blue and grey; however it wasn't until 1974 that the last maroon MK1 was repainted into blue and grey livery. The use of blue and grey continued until 1982 when the first experiments in new liveries occurred. During the BR blue period other changes took place - notably the last 'Ladies Only' compartments vanished in 1977.

1982 saw a proliferation of new liveries, including yellow and grey for stock that was requisitioned for engineering and maintenance work. 1985 saw the reappearance of some coaches in chocolate and cream for the GWR 150th anniversary celebrations, along with a brief Scottish experiment in green and cream. Then around 1988 reclassification of 'second class' as 'standard class' took place. 1983 was the year that the Intercity livery was first seen, 1986 the introduction of Network South East and the end of the Searail livery. 1988 saw the first Regional Railways livery (as well as postal trains and parcels trains becoming Royal Mail red).

# Liveries



Crimson & Cream



BR(S) Green



BR(W) Chocolate/Cream



BR(M), BR(E) Maroon



BR Blue/Grey



Intercity



## Coach Types

BR used codes to describe coaching stock that were inherited from the LNER telegraphic codes.

The main letters used are :

F	First Class
S	Second Class (formerly Third)
T	Tourist Class
C	Composite
B	Brake (first and second)
O	Open
K	Corridor
SL	Sleeper
R	Restaurant

Darstaed is using the following livery abbreviations :

Crimson & Cream	B+C (Blood & Custard)
BR(S) Green	Gr
BR(W) Chocolate/Cream	C+C
BR(M), BR(E) Maroon	Mar
BR Blue/Grey	B/G
Intercity	IC

## Running Practice

The Southern Region was heavily congested with several relatively short journey requirements. To keep train numbers down they combined two (or more) short trains in one longer train over busy parts of the system. These trains were then divided at intermediate stations with the separate parts then going on to their final individual destinations. This practice was made easier if trains were already made up into (independent) sets of 3, 4 or 5 coaches, often including two BEs so formations could be easily reversed for the return journey. The sets were made up of the following: 2 x BSK + CK, 2 x BSK + CK+ SK or 2 x BSK + CK + 2 x SK. It was especially BR(S) practice to have these units combined with similar units of Bulleid stock.

The Western Region had something similar on certain routes. The Cambrian Coast Express, for example, was a seven coach train from Paddington to West Wales which dropped off three coaches (the restaurant section) at Wolverhampton. The remaining four coaches included two brake ends and did the rest of the journey in that formation.

The LMR and ER ,with much longer journey requirements, tended to have complete trains (with at least two BEs) for each destination (sleeping car services being an exception - where these often very long trains could be split into several sub portions).

*Sources :*

Consultant : *John Roberts Esq.*

British Railways Mark I Coaches *by Keith Parkin*

BR Mark 1 and Mark 2 coaching stock *by Hugh Longworth*

*Wikipedia & Wikimedia*

### **The Darstaed MK1 coaches**

“Welcome to the minefield” is the expression often heard when delving into the history of the MK1 coaches. Over time various alterations were made during the long period the MK1 coaches were in use. At Darstaed with our knowledgeable consultants we have made an in-depth study to render as true a representation as possible of the MK1 coaches as they ran and appeared.

The Darstaed MK1 coaches are made according to the following specifications :

1. Finely detailed brass etched coach sides.
2. Coach ends and roofs in finely detailed ABS
3. Underframe (metal) with all details.
4. Fitted automatic Kadee Buckeye couplings
5. Detailed interiors with installed coach lighting.
6. One pick up bogie per coach, on/off switch.
7. Sprung all metal C/W bogies on the B/G and IC liveries. (Also available separately)
8. Detailed all metal BR1 compensated bogies on the four early liveries.
9. End gangways with sprung closing action on straights and curves down to 6ft radius
10. Sprung all metal buffers
11. Brake Ends and Full Brakes with detachable working (plug in) rear light.
12. Needle-point axles.
13. FS wheels fitted (According to the GOG and NEM 310 track and wheel standards)

Darstaed has modelled the liveries B+C, Gr, C+C and Mar as early vehicles with BR1 bogies. To model the later post 1960 coaches a set of decals will be included to add the yellow First Class and red Restaurant lines at cantrail level, C/W bogies are available separately. The B/G and IC liveries will be supplied as later “Commonwealth bogie” vehicles

To reflect prototypical running practice (see above) Darstaed will offer two sets : Set A representing a standard 4- coach unit; and Set B, a 3 – car catering unit; plus various individual single coaches, as follows :

**Set A :**

2 x BSK	Brake End Second cl. Corridor
1 x CK	Composite Corridor
1 x SK	Second cl. Corridor

**Single coaches :**

BG	Full Brake
BCK	Brake End Corridor
FK	First cl. Corridor
SLF/S	Sleepers First and Second cl.
TSO*	Tourist Second cl. open
RMB	Miniature Buffet Car

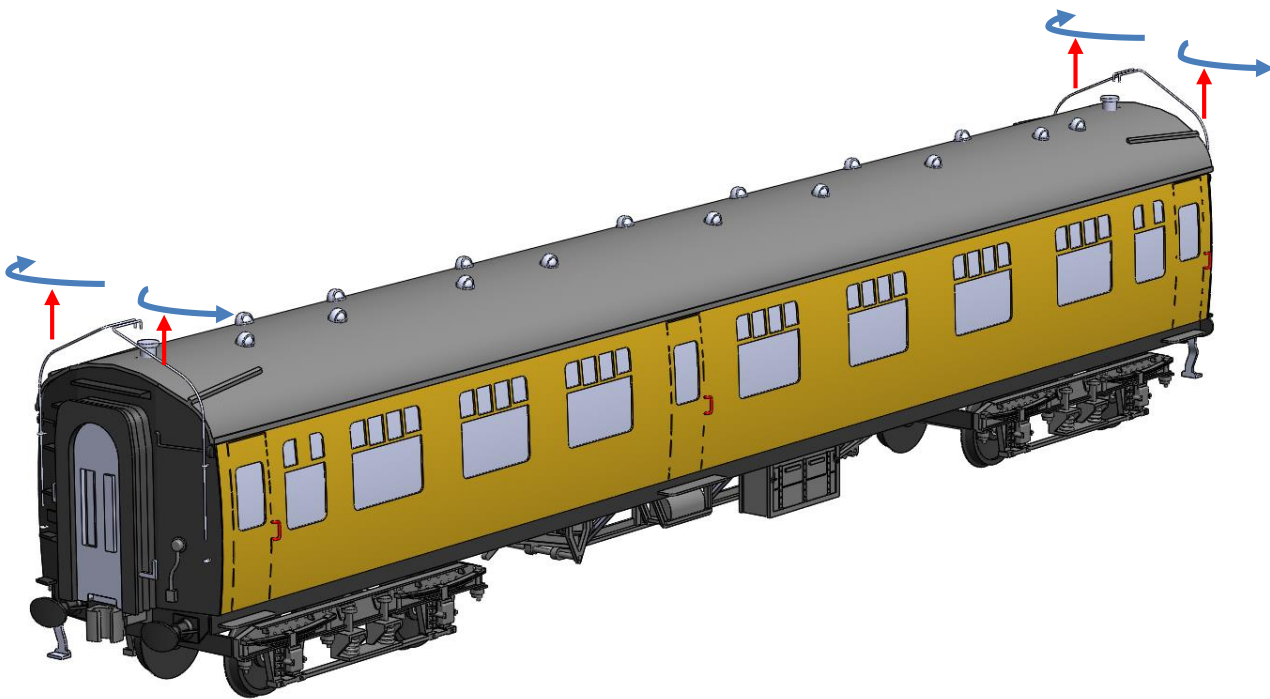
**Set B :**

1 x RU	Restaurant with Kitchen
1 x RSO	Restaurant Second cl.
1 x RFO	Restaurant First cl.

\*The TSO had a seating arrangement of 2+2 whereas a SO only had 2+1 seat.  
SO coaches were rarely used.

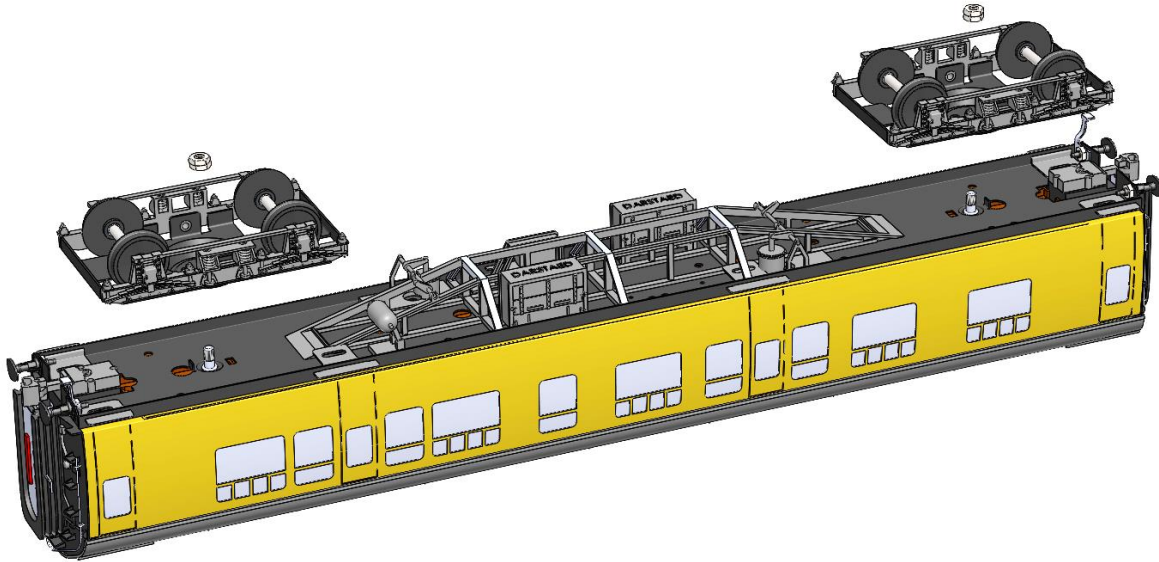
## Maintenance

1. Each axle is fitted into a brass bush that does require light lubrication.
2. The end gangways are assembled to the coach end by way of a long pin that holds the end gangway in place. The pin can be removed by simply lifting it upwards.
3. To access the interior of the coach the roof has to be removed. Please follow the instructions in the next pages



1. The water pipes on the coach ends should be detached from the roof by lifting them up and swinging them outwards

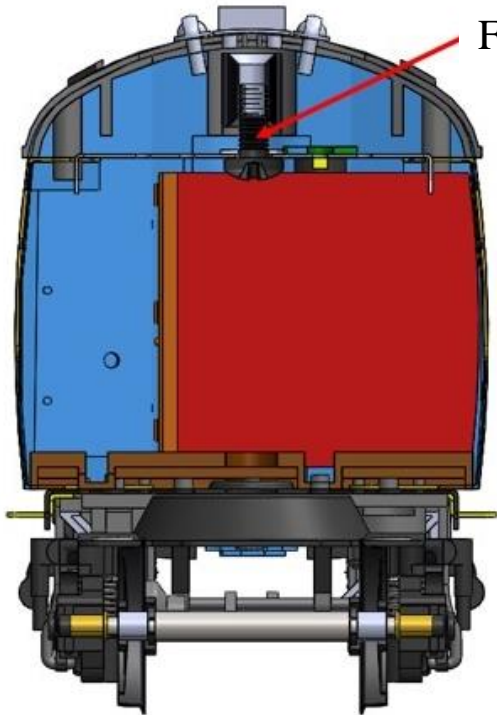




Turn the coach upside down and support it with a soft cloth to avoid damage. Remove the bogie securing nuts and lift the bogies from the chassis

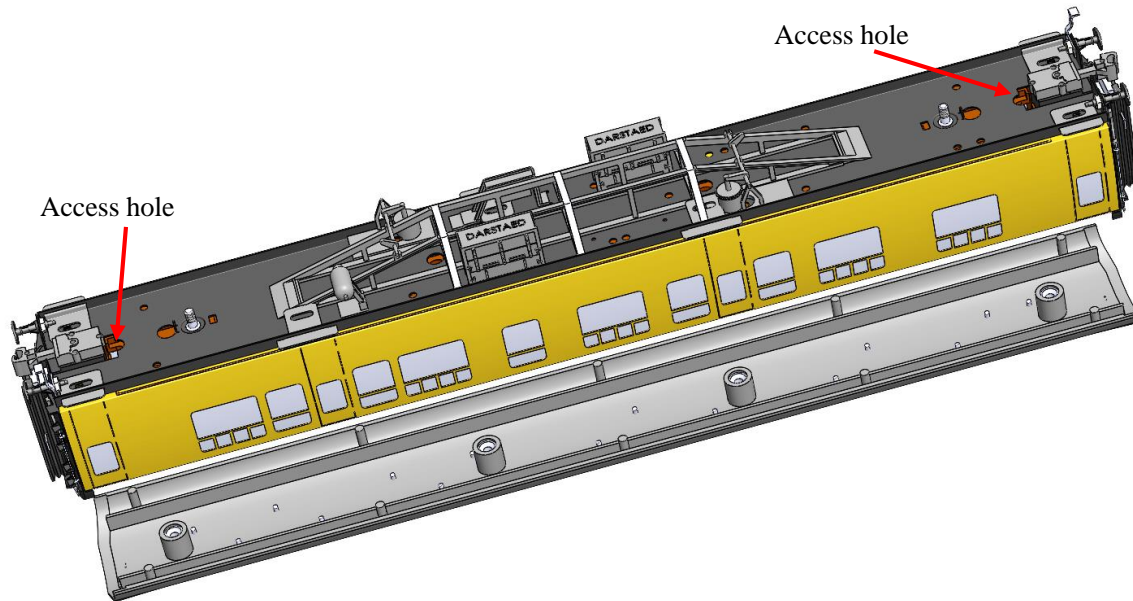
**Note:**

1. Caution do NOT to pull out the electrical connections from the bogies
2. Take care not to dislodge ( or distort too much) the power pick-ups when removing the nut securing the pick-up bogie



Free Rotating Screw

The roof is fixed to the coach body by means of free-rotating screws through the cross members securing the tops of the coach sides. These screws cannot be removed, only loosened so that the roof can be detached.



Starting at one end of the coach, insert a + ended screwdriver through the access hole and part-release the roof screw for about 4 turns. Repeat this with the screw at the other end. With both screws loosened, repeat the sequence (about 3 times) until both screws are fully released and ease the roof away. The screws are captured in the cross members and will not fall out. Re-assembly is the reverse procedure, making sure final tightening is done carefully.

Note: Ensure the roof is re-assembled the correct way round by checking the position of the roof ventilators before removing the roof

4. The automatic Kadee couplings are suitable for running on curves > 6ft radius whereby the end gangways will remain connected together. For running on 40" radius the Kadee couplings have to be repositioned to a more outward position and the end corridors will not be able to connect.
5. To attach a coach to a locomotive not equipped with a buckeye coupling the Kadee coupling on the coach has to be changed to a screw-link coupling available separately from our distributors
6. The gangway close-coupling system between coaches consists of a magnet and steel lug set side by side in each corresponding gangway - the steel lug protrudes beyond the magnet. Spare steel lugs are provided with brake end coaches to enable gangway coupling with other coaches as required

Note: It may be appropriate to secure the spare lug with non-setting glue to allow for it's removal if a gangway end plate is required in the future

## **DARSTAED**

Darstaed was founded in 1966 in Zug, Switzerland by Marcel Darphin specifically with the purpose to manufacture replicas of the famous tinplate pre-war Marklin 40 cm coaches and later, Continental European rolling stock in finescale 0 Gauge.

In 1993 the brand name and tooling was purchased by Mr. Grabowsky who had until then manufactured two models in HO scale for the Netherlands which won the first prize “Model of the Year” at the Nuremberg toy fairs both in 1991 and 1992.

In 1994 during a visit to Mr. Ron Budd, the UK distributor for Mr. Darphin, the suggestion was made to manufacture a replica of the Hornby O Gauge tinplate 4-4-4T with electric power. The production of this locomotive in 1996 heralded an upsurge of interest in operating tinplate trains; and subsequent productions of modern vintage-style tinplate helped make the hobby once again affordable to many.

With the advent of the 50<sup>th</sup> anniversary of Darstaed in 2016 it was decided to expand our scope to again include 2-R finescale.

The MK1 coach range will be followed by LNER Gresley stock, Pullmans, SR Bulleid and Maunsell, LMS and GWR Toplight coaches plus their subsequent BR liveries.

We are also preparing a 2-R A3 and A4 in all liveries and a range of goods wagons.

It is the Darstaed maxim to offer our customers a better product at the best possible price.

Enjoy your hobby, Enjoy Darstaed.

Andries Grabowsky  
CEO



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## Authorized Distributors

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