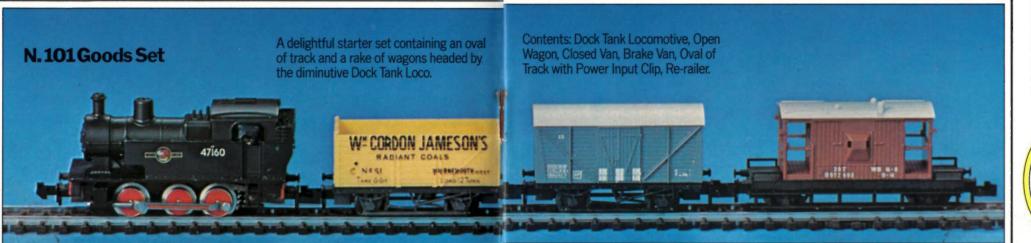
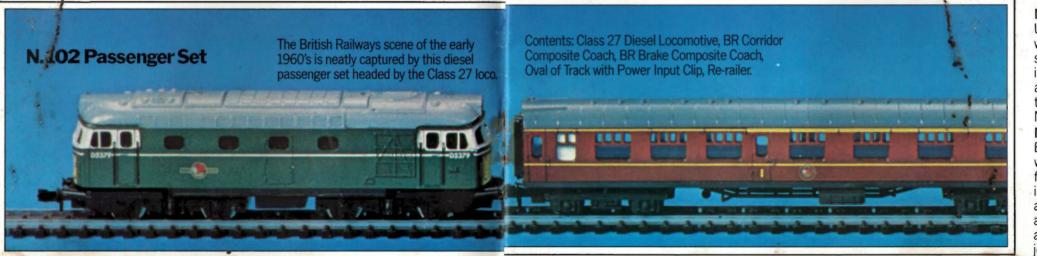


HORNBY® MINITRIX

The Hornby Minitrix range has been further extended this year by the addition of 2 new locos, 2 new wagons and by no fewer than 7 pieces of track which include versatile 'double slips'.

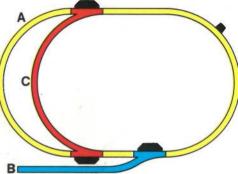
Hornby Minitrix has always meant precision railway engineering in miniature and this year the range carries this reputation one stage further. The N-gauge 'Mallard', in BR livery, is a completely new moulding - the first totally new product introduction for some years. Its fine detail and excellent running characteristics in common with all Hornby Minitrix rolling stock, will ensure a long active life on the layouts of all 2 mm scale modellers. The 2 additional wagon liveries for 1980 are both based on prototype private owner wagons and finished with 2 colour printing for that extra degree of authenticity and interest. N-gauge modellers will be pleased to see the introduction of the Minitrix double 'slip' points into the range. These allow an accurate representation of prototype trackwork to be constructed and provide even more space saving potential. The Hornby Minitrix range in total enables the modeller to reproduce prototype British Rail operations in miniature.





Extending your layout

Hornby Minitrix have designed progressive track packs to enable you to expand your set oval to a system containing a passing loop and a siding without stretching the pocket. Unit A in the diagram is the basic oval contained in both sets.



N.902 Passing Loop Set

Unit C in the A,B,C series is the Passing Loop which provides additional shunting and storage space for rolling stock. If the loop is isolated then a second train can be accommodated and offers more realistic train operations. The set includes 2 points, 4 N.912 curves and 2 N.916 quarter curves.

N.901 Siding Set

Every layout requires storage facilities for wagons and coaches and the basic elements for this first extension to your circuit are included in the pack which contains a point and compensating curve, 3 N.904 straights and a N.991 buffer track. The siding (unit B above) will have to be isolated (using N.639 joiners) if it is to be used for loco stabling.

LOCOMOTIVES

The 1960's operations of BR can be recaptured using the fine range of Hornby Minitrix locos which is further expanded this year with the introduction of the 'Mallard' plus the Class 27 in rail-blue livery. All locos are fully tested before leaving the factory and their designs reflect the most modern production techiques available and the careful attention to detail characteristic of the complete range.

N.201 BR Class 2F 0-6-0T

Designer: Fowler Weight: 43 tons Tractive Effort: 18400 lbs.

Designed for heavy shunting and dock use, these small but powerful locos saw service from 1928 right into BR days with Bidston in N. Wales and Fleetwood, Lancs among their home sheds.

N.203 BR Class 7P6F 4-6-2 'Britannia'

Designer: Riddles Weight: 143 tons (including tender) Tractive Effort: 32150 lbs.

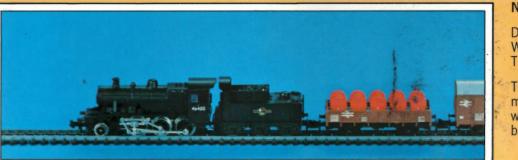
'Britannia' was the first of a class of 55 locos designed for express passenger work on British Railways trunk routes. Its elegant lines can still be seen on the Severn Valley Railway in Shropshire.

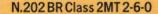












Tractive Effort: 35455 lbs.

Designer: Ivatt Weight: 84 tons (including tender) Tractive Effort: 18510 lbs.

N.211 BR Class A4 4-6-2 'Mallard'

Weight: 167 tons (including tender)

'Mallard', the holder of the world steam

Brunswick Green livery enables it to slot

neatly into the BR layout of any N-gauge

speed record, is a completely new model. Its

Design: Gresley

modeller.

These mixed traffic locos were built for the many LMS cross-country routes with severe weight restrictions. The class formed the basis of a later BR standard design.



N.204 BR Class 27 Bo-Bo Diesel-Electric (Green Livery)

Design: BRC & W Weight: 71 tons Tractive Effort: 40000 lbs.

Built by Birmingham Railway Carriage & Wagon in 1961, the class was designed for mixed traffic use and was very similar in specification to the now extinct Class 24.

N.209 BR Class 9F 2-10-0 'Evening Star'

Design: Riddles

Weight: 139 tons (including tender)

Tractive Effort: 39670 lbs.

'Evening Star', built in 1960 and the last steam loco built by BR, was given a special fully lined BR express livery to commemorate the event.

N.205 BR Class 2MT 2-6-2T

Designer: Ivatt Weight: 63 tons Tractive Effort: 17410 lbs.

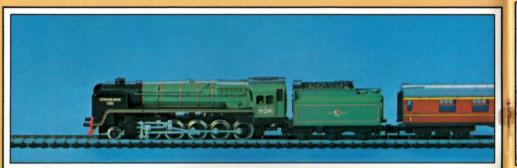
Another of Ivatt's successful designs for the LMS which later formed the basis of a standard BR design. The class was employed on a variety of duties in the major conurbations of the Midlands, Merseyside and West Yorkshire.

N.206 BR Warship Class 42 B-B Diesel-Hydraulic 'Hermes'

Design: Maybach Weight: 78 tons Tractive Effort: 52400 lbs.

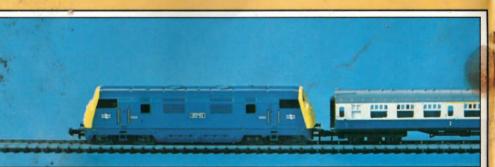
Deutsche Bundesbahn.

The 'Warships' were introduced onto the Western Region of BR in 1958 and were a direct derivative of a successful design on the





MILLOM SHEEP BRIDGE







N.212 BR Class 27 Bo-Bo Diesel-Electric (Blue Livery)

Design: BRC & W Weight: 71 tons Tractive Effort: 40000 lbs.

The corporate rail-blue livery and now familiar BR logo superseded the earlier green (see N.204). These locos can still be seen on both passenger and freight workings in Scotland.

N.207 BR Class 9F 2-10-0

Design: Riddles Weight: 139 tons (including tender) Tractive Effort: 39670 lbs.

This class of 251 locos was designed for heavy freight duties on the BR network. First introduced in 1954 they saw service in most areas of the country north and west of London.

N.208 BR Warship Class 42 B-B Diesel Hydraulic 'Intrepid'

Design: Maybach Weight: 78 tons Tractive Effort: 52400 lbs.

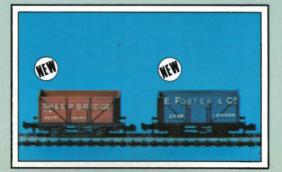
The singular 'diesel-hydraulic' philosophy of the Swindon based Western Region designers probably hastened the decline of this powerful class.



COACHES

N.301 BR Mkl Corridor Composite
Decorated and lined in the Western Regional livery of BR.

N.302 BR Mkl Brake Composite
With glazed windows and precision built wheels in common with all Hornby Minitrix rolling stock.



WAGONS

The attractive wagon range has two new additions this year – both authentic private owner wagons based on the proven 8-plank chassis with its smooth running metal-axled wheels.

N.514 'Sheepbridge' Open Wagon N.515 'Foster' Open Wagon



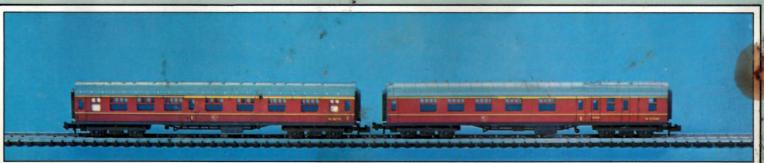
N.303 BR Mkl Corridor Composite

The familiar rail-blue and grey livery designates these coaches as suitable for diesel haulage.

N.306 BR Mkl Brake Composite
The centre weights in all coaching stock ensure balanced friction-free running.



N.507 'Jameson' Open Wagon N.508 'Jenks' Open Wagon



N.305 BR Mkl Corridor Composite

The BR maroon livery was introduced in the early 1950's, the best days of BR steam.

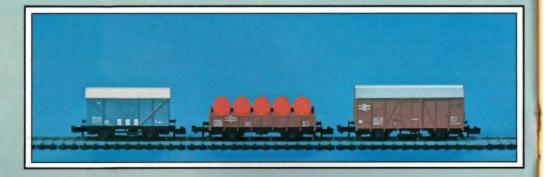
N.308 BR Mkl Brake Composite
Steam and diesel locos were both in evidence

during the life of this livery.

MILLOM Martine Barrier

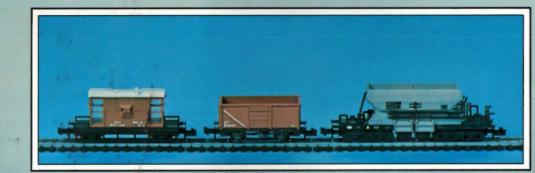
N.512 'Millom' Open Wagon N.513 BR Mineral Wagon (Grey) N.503 12 ton Ventilated Van

N.504 LWB Open Wagon with Barrel Load N.505 Covered AB Van

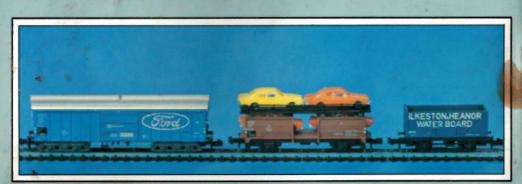


N.501 BR Brake Van

N.502 BR Mineral Wagon (Brown) N.506 Bogie Ballast Wagon



N.509 'Ford' Bogie Covered Van N.510 Car Transporter and Cars N.511 'Ilkeston' Open Wagon



R.900 21 amp Power Controller A large controller capable of controlling one loco and with the capability of powering accessories via its 15 volt A.C. accessory output.

Mains input: Outputs:

200/250 volts A.C. 0-12 volts D.C. controlled 12 volts D.C. uncontrolled 15 volts A.C. uncontrolled



R.902 Circuit Controller

Up to 2 circuit controllers can be added to an R.900 to give simultaneous control over 3 track sections. The R.902 can only be used with an R.900 – it has no mains connection of its own. Both units have stots to take lever frame switches.

Input:

12 volts D.C.

Outputs: 0-12 volts D.C. controlled 12 volts D.C. uncontrolled



R.046 Two-way Lever Switch

CONTROL SYSTEMS

This switch is designed for use with two circuits where either one or the other must be on but never both at the same time - as in passing loops or for colour light signal control.

R.044 Passing Contact Lever Switch Designed for use with point motors and other operating accessories which require a short pulse of current.

TRACK

Track Components

The Hornby Minitrix track range has been thoughtfully extended by the addition of no fewer than 7 new items. These link with the standard N-gauge system of track geometry and allow even more flexibility in layout construction.

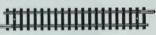
N.903 Straight - 17.2 mm



WEW

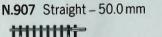


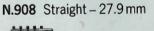
N.904 Straight - 104.2 mm



N.906 Straight - 54.2 mm

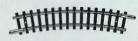




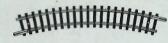


N.910 Flexible Track - 730.0 mm

N.912 Curve 1st Radius - 30°



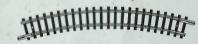
N.914 Curve 1st Radius - 24°



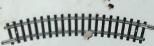
N.916 Curve 1st Radius - 6°



N.922 Curve 2nd Radius - 30°



N.924 Curve 2nd Radius - 24°

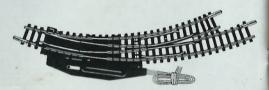


N.926 Curve 2nd Radius - 6°



N.943 Pair Electric Curved Points (left and right hand) Curved sections 1st & 2nd Rad.





N.945 Pair Manual Points (left and right hand) 104.2 mm straight, 24° 1st Rad.





N.946 Pair Manual Points (left and right hand) 112.6 mm straight, 15° 2nd Rad.





N.951 Point Motor - left hand



N.953 Point Motor - right hand

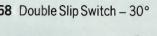


N.960 Double Slip Switch - 15°



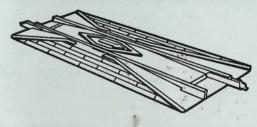
NEW

N.968 Double Slip Switch - 30°

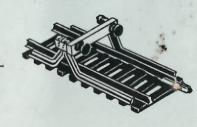




N.974 Re-railer Track - 50.0 mm



N.991 Buffer Track - 50.0 mm



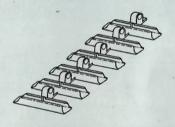
ACCESSORIES

Track Accessories

N.625 Pack of Track Joiners



N.639 Pack of Insulated Track Joiners



N.653 Power Clip



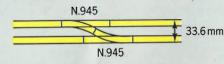
N.641 Power Input Single Terminal Clip with wire (for use in isolating sections)



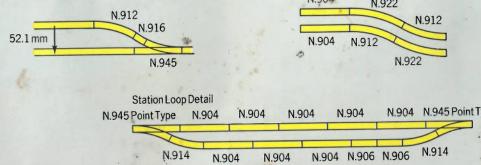
TRACK GEOMETRY

Track Geometry and Formation

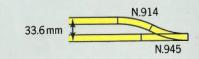
The radii of Hornby Minitrix track components are: Radius 1 - 194.6 mm and Radius 2 – 228.2 mm giving the distance between track centres as 33.6 mm. This is the safe distance necessary for coaches running on Radii 1 and 2 to safely clear each other. This distance is also achieved on parallel straight tracks when a cross-over is formed with N.945 type points.



The curved section of points N.945 has an angle of 24° and may be lengthened by a 6° piece N.916. The addition of an N.912 curve to these gives a track centre distance of 52.1 mm suitable for island platforms.

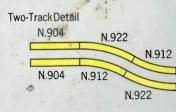


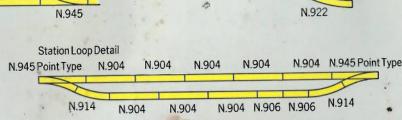
By omitting the 6° piece and using the N.914, a parallel track at 33.6 mm is achieved.



Common Track Formations



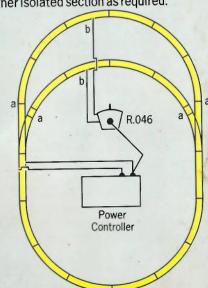




Isolating a loop to hold a second train

in positions (a) in the diagram and replace with insulated rail joiners, then fit track together. The sections (a) to (a) on both loop and main oval are now isolated. Stage 2. To feed power when required into the isolated sections, fit N.641 Power Input Terminal Clips in positions (b), ensuring that contact is made on the same side of the track as the insulated rail joiner. Stage 3. Connect power supply through an R 046 Switch as illustrated. Power can now be switched alternately from the main oval to the Loop, allowing a second train to be held in either isolated section as required.

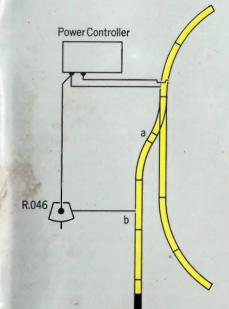
Stage 1. Remove metal rail joiners as shown



Isolating a siding to hold a second train

Stage 1. Remove metal joiner as shown in position (a) in the diagram and replace with insulated (plastic) rail joiner (N.639); then fit track together. The siding from point (a) to the buffer is now isolated on one side. Stage 2. To feed power when required into the isolated section fit N.641 Power Input Terminal Clip in position (b) ensuring that contact is made on the same side of the track as the insulated rail joiner. Stage 3. Connect power supply through an

R.046 Switch, as illustrated. Power can now be switched to the track as required.



Isolating for twin-track, two train running

Stage 1. Remove metal rail joiners as shown in position (a) in the diagram and replace with insulated rail joiners, then fit track together. Both circuits are now isolated. Stage 2. Two Power Controllers or 1 Power Controller (R.900) and 1 Circuit Controller are required to run two trains simultaneously. It is important that the controllers are wired to the tracks as follows: 12v D.C. controlled outlet marked (A) on both controllers to the inside rail of each circuit: 12v D.C. controlled outlet marked (B) to the outside rail of each circuit.

Stage 3. A siding is required on one circuit in which to store one train, while the other is being transferred from one circuit to another. Both controllers should have their forward/reverse switch in the same position and the speed control dial set in approximately the same position when the transfer takes place.

