

märklin
HO



...with computer hook-up

1985/86 E

märklin

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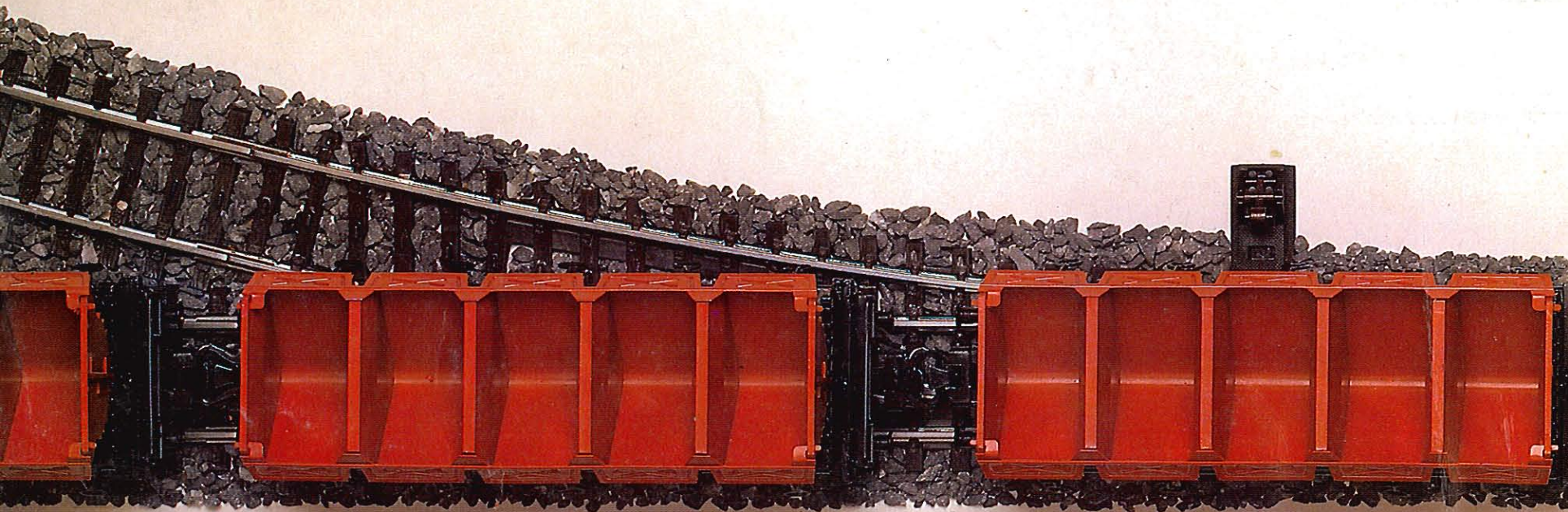
150 Years of German Railroading

150 years ago the first German train ran between Nürnberg and Fürth on December 7, 1835.

The German Federal Railway has created an emblem for the numerous events surrounding the 1985 Jubilee year. The general purpose locomotive, class 120 001-3, was the first locomotive of the German Federal Railroad to be decorated with this jubilee emblem and the coat-of-arms of the city of Nürnberg.

This locomotive is the prototype for the Märklin model 3153 (page 84) and during the jubilee year of the German Federal Railway it will also bear the "150 Years of German Railroading" emblem and the coat-of-arms of the city of Nürnberg.

Scale H0
Gauge 16.5 mm ($\frac{5}{8}$ ")
Scale 1:87



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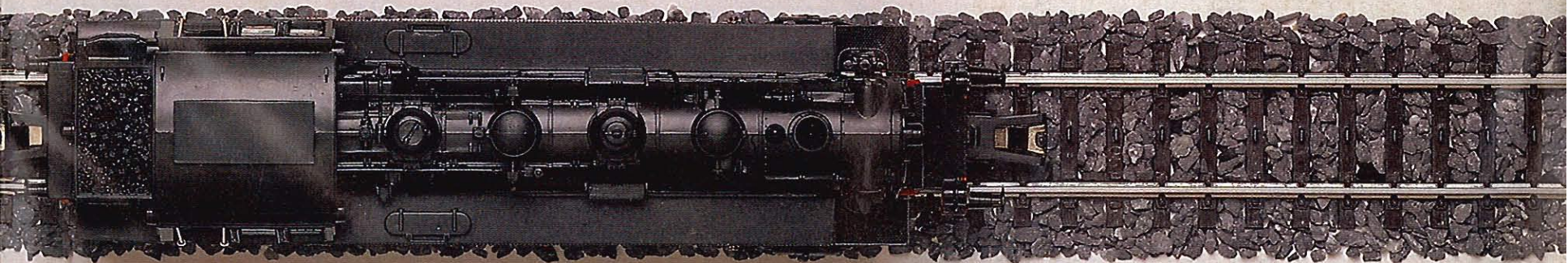
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**Märklin Model
Railroad Club (Inc)
Wgtn NZ**

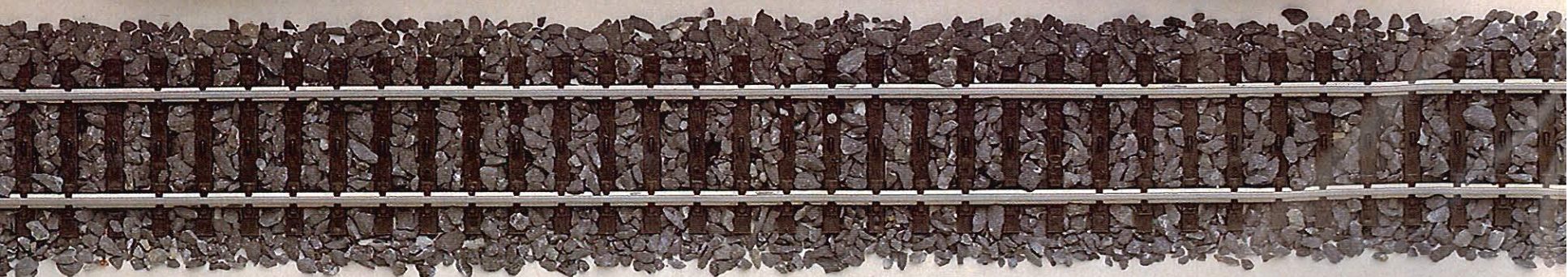




RS 700 (1935-1939)



ST 800 (1948-1956)



Märklin H0 – Fascination and Form for 50 Years

It was a sensation at the 1935 Leipzig Fair when Märklin unveiled its new electric table top 00 scale railway. Because it required little space, it was an overnight success and quickly found a wide following. It was only half as wide as 0 scale, hence its present day name: H0 (Half 0).

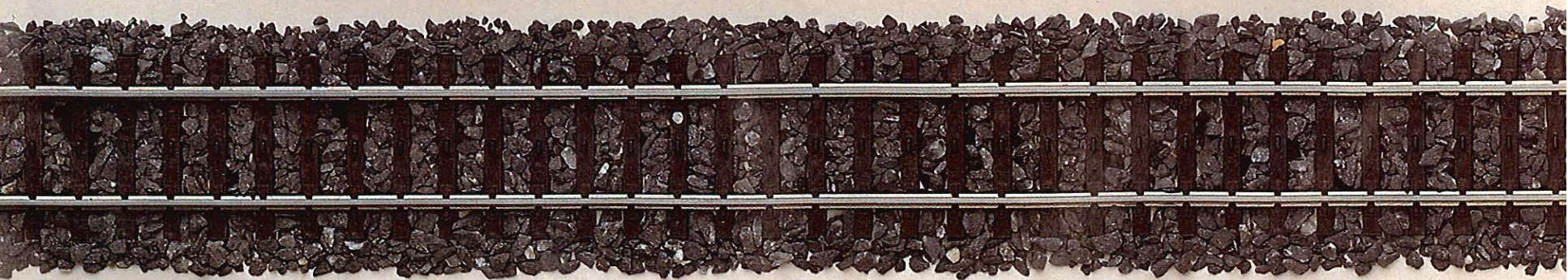
Märklin H0 has a gauge of 16.5 mm ($\frac{5}{8}$ ") and is scaled 1:87.

Its reliable operation results from the 3-rail system with the powered center rail and sliders on the engines. This technology has evolved into the present day Märklin system of center "rail" studs and a ski sliders on the locomotives.

Five decades of Märklin production has assured a wide variety of models. Among them are the RS 700 electric, ST 800 self-propelled car, and the futuristic "Inter City Experimental" (ICE). All the models typify the reliability and performance of well-built Märklin models. These features have consistently served to increase the fun of owning and treasuring Märklin models. Ask any collector!



ICE (1985)



Märklin – from Wind-Up to Electronics

It was a sensation in 1891 when Märklin presented its complete railroad and track program at the Leipzig Fair. The little I gauge clockwork locomotive ran in circles – and into the hearts and minds of the onlookers.

The electric age in model railroading was introduced by Märklin in 1897. Now it was no longer necessary to keep winding up the locomotives for continual fun!

The big breakthrough came in 1926 when Märklin developed the transformer, which formed the basis for the hobby as we know it today. The transformer made it possible to operate the model trains with a safe voltage.

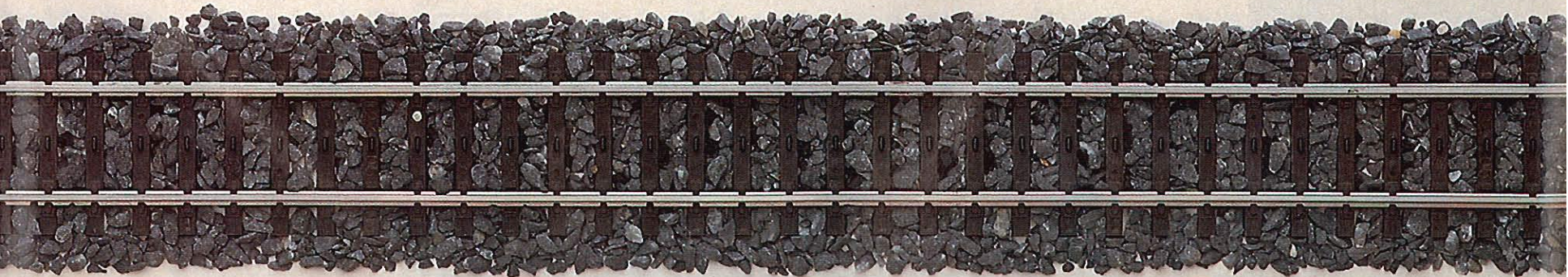
The victory march of 00/H0 began in 1935 at the Leipzig Fair. This gauge (just 16.5 mm or $\frac{5}{8}$ ") opened up all new vistas as it was now possible to build model railroads in smaller spaces.

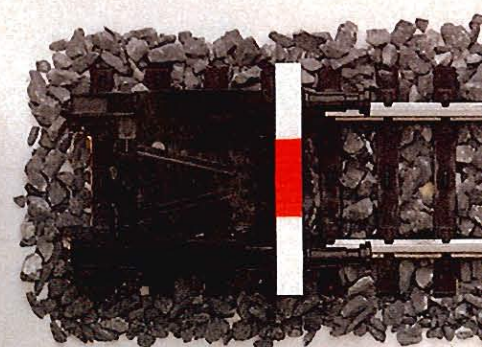
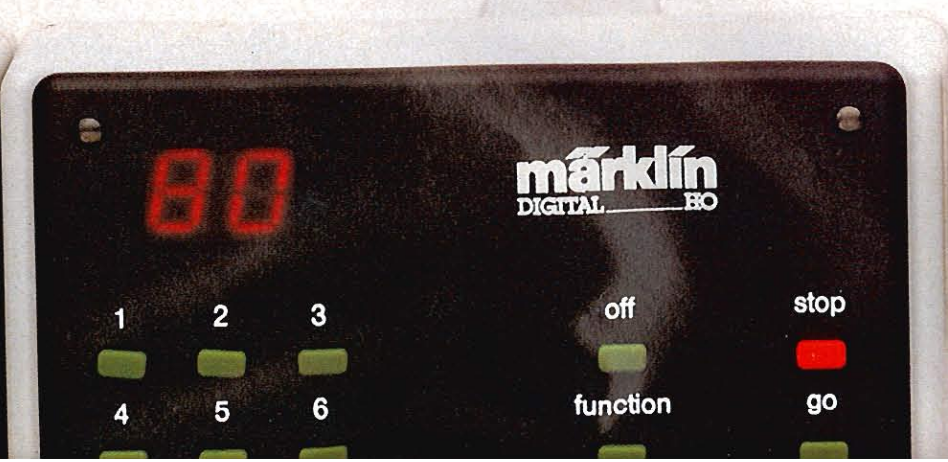
I gauge models were re-introduced to the modeling world in 1969. Just $\frac{1}{32}$ nd as large as their real life counterparts, these trains run on tracks just 45 mm ($1\frac{13}{16}$) wide.

In 1972, at the Nürnberg Fair, Märklin unveiled the smallest electric railway in the world. Z gauge, 6.5 mm ($\frac{1}{4}$ "), scaled 1:220 has been an eye-stopper ever since. The mini-club models are constructed to the most exacting standards and are prototypically accurate.

In 1984, at the 125th anniversary celebration of the company, Märklin introduced space-age electronics to model railroading – Digital H0. Now up to 80 locomotives and 256 switches and/or signals can be operated problem-free and independently of each other at the same time. General sales of this exciting system began in 1985.

The "Inter City Experimental" (ICE) is the symbol of the future for railroading – both real and model. The prototypically accurate Märklin model of the modern DB train incorporates the latest state-of-the-art technology.



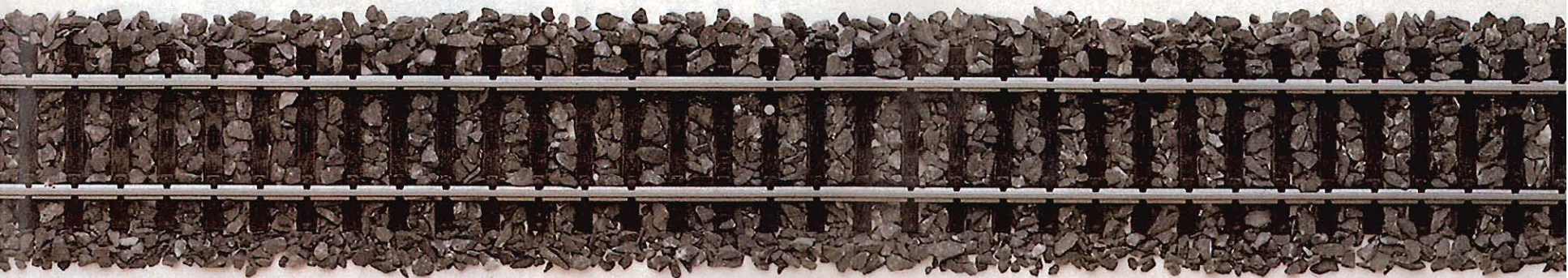


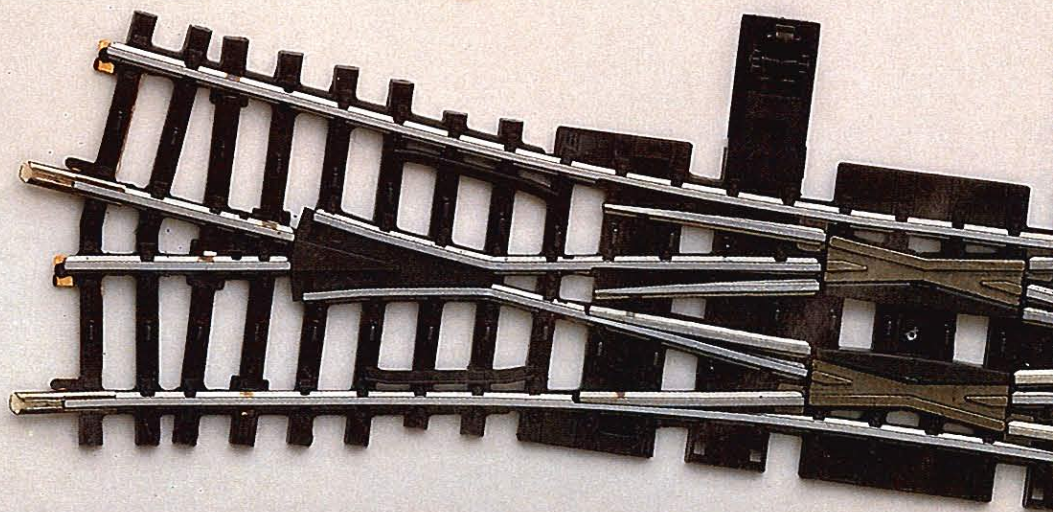
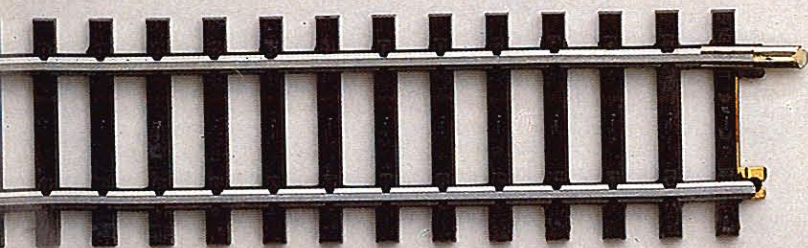
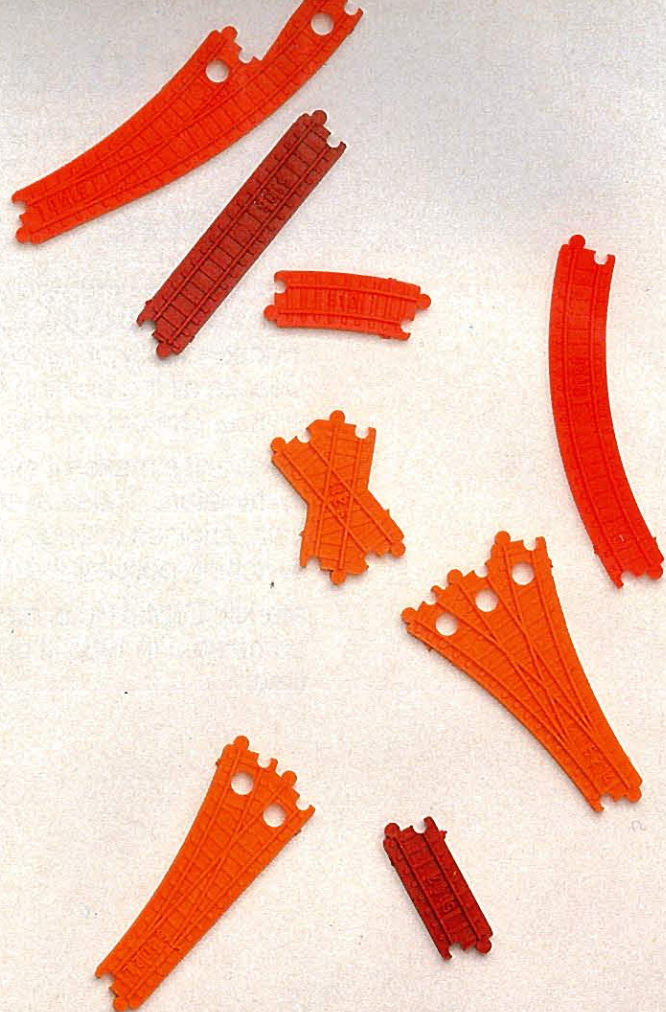
Märklin Digital H0 – Computer-Age Model Railroading

The future is here: With the Märklin Digital H0 electronic control system for model railroading, up to 80 locomotives and 256 switches and/or signals can be operated independently of each other. This system incorporates state-of-the-art technology. Despite all the exciting operational possibilities, installation of the system is amazingly simple. The old confusing wiring mess has been reduced to just a few leads.

Electronics makes it even more possible to duplicate real life railroading operations in miniature. Trains overtake one another, a helper eases up to the tail end of a slow train, engines change direction without affecting the direction of others, realistic switching possibilities all serve to make model railroading even more fun.

Märklin Digital H0 is ready for the Computer Age: The union with computers was completed in 1985. It opens up new and fascinating dimensions for spending leisure time.





Märklin H0 – The Fun Begins When Planning a Layout

Model railroading excites young and old. Bringing home the world of railroading is its greatest fascination. Model railroading offers something for everyone, regardless of age or how much space or time one has available. Everyone can plan and build a layout according to one's own tastes. One's imagination has no limits thanks to the Märklin system.

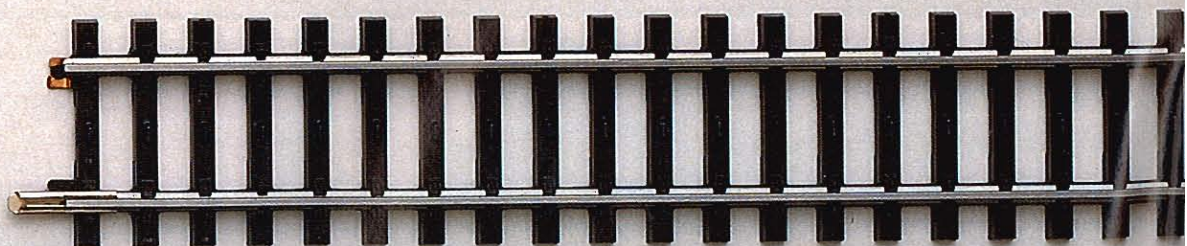
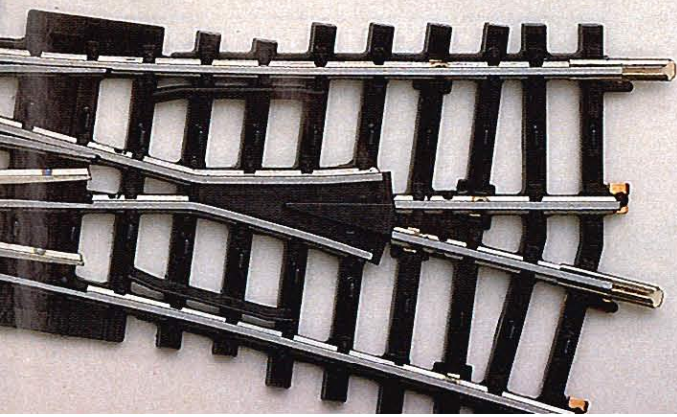
The fun of Märklin railroading begins at the planning stage. Märklin offers planning aids which make it so easy, it becomes a game.

Building a layout is as easy as pie. Märklin has two track systems, M track (with a metal roadbed base) and K track (with a conventional plastic tie strip and prototypical appearance). Both have one thing in common: the unique center-stud (third rail) system.

With the center-stud system current travels to a locomotive through the center studs and the pickup shoe on the locomotive. Return current is routed through the wheels and the running rails. This guarantees trouble-free layout construction and reliable operation.

With the Märklin center-stud system every type of track configuration, return loops and wyes can be installed without any kind of special wiring.

Märklin guarantees undisturbed fun.



Beginning is Easy

Climb Aboard! Choose from among five different beginner sets for an exciting trip into the fabulous world of model railroading.

If you are in a hurry, select an M-track set – they can be set up and taken down in minutes. Or, choose a set with the realistic looking K-track.

1

2920 S 220 Volt
2924 S 240 Volt
2927 S 110 Volt (60 Hz)
2929 S 100 Volt Japan

Ready-to-run Passenger Train

The most economical first-step into the world of railroading. Includes steam locomotive, 2 coaches and transformer. As with all Märklin sets, it can be expanded as desired. Just add some additional track and switches for more varied operation.

2

2930 S 220 Volt
2934 S 240 Volt
2937 S 110 Volt (60 Hz)
2939 S 100 Volt Japan

Ready-to-run Freight Train Perfect for those who want to begin with freight service. Includes transformer. Endless hours of railroading fun are provided with an illuminated class 89 steam locomotive, low-side gondola and dump car which can be used for

all sorts of loads. This set can also be enlarged as desired.

The transformers for the beginner sets have terminals for track and accessories. The transformer can operate larger locomotives or additional switches or signals.

The transformers in the beginner sets are not available separately.

Connect the transformers to AC outlets only.



2920
 94 x 76 cm
 (3' 1" x 2' 5")

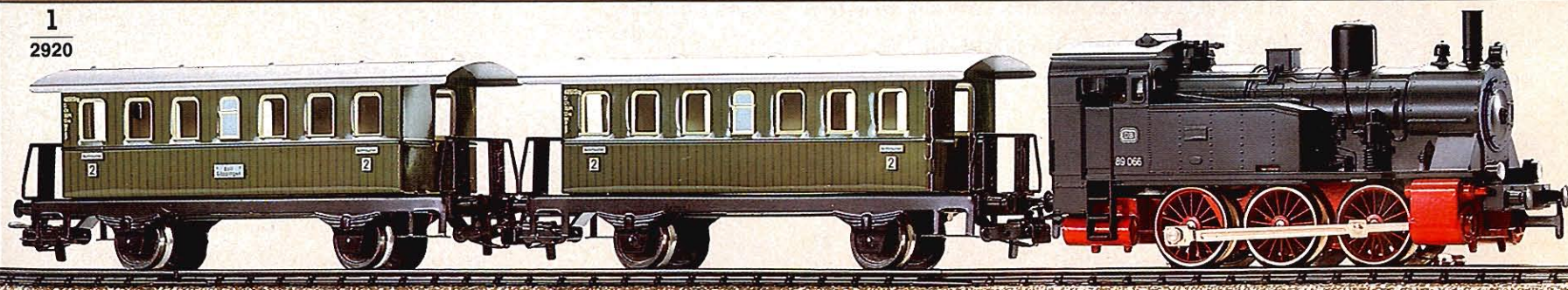


2930
 94 x 76 cm
 (3' 1" x 2' 5")

An ideal step-by-step way of extending these beginner sets is to use the SET program shown on page 26.

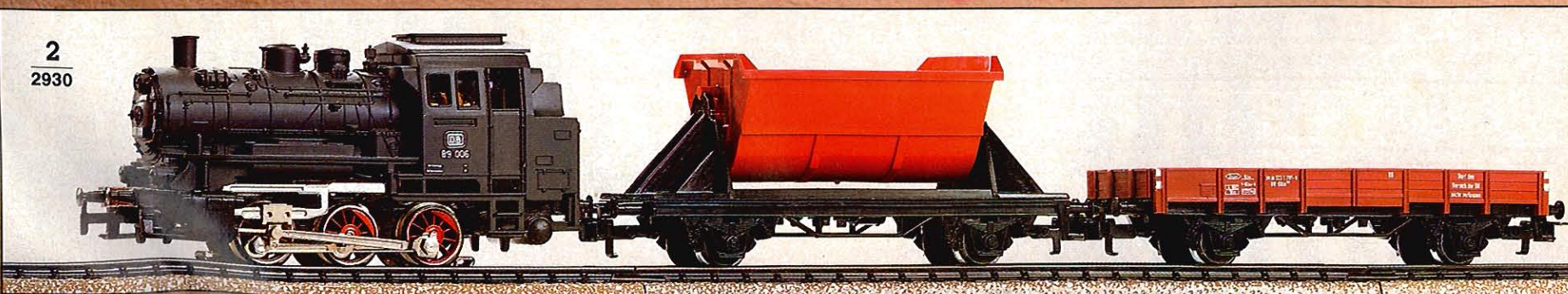
1

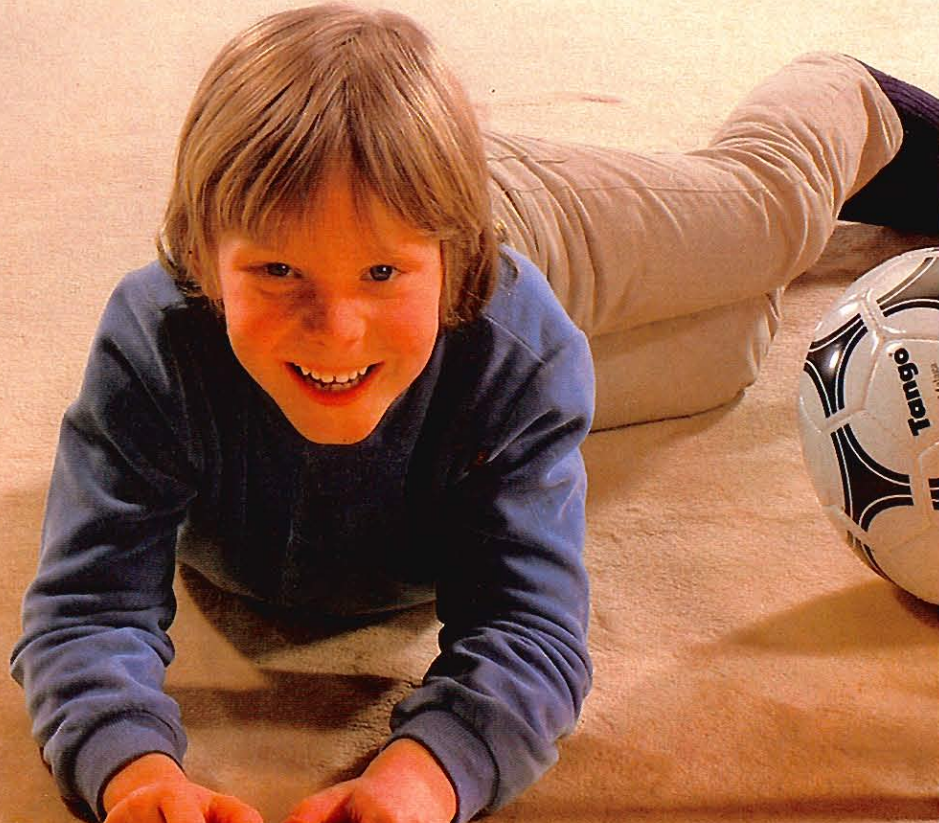
2920



2

2930









2950 220 Volt
2954 240 Volt
2957 110 Volt (60 Hz)
2959 100 Volt Japan

Freight Train with Transformer · This set offers an exciting and adventure-filled introduction for all new rail-
roaders · Among the operational possibilities: remote control uncoupling, classifying cars, switching, designing layouts and much more · Includes an illuminated steam locomotive, three freight cars with loads, an uncoupling track with signal mast, a transformer, a manual switch and a lot of track · A 28-page booklet

offering many tips on how to enjoy model railroading is also enclosed



2950 130 x 76 cm
(4' 4" x 2' 5-7/8")

An easy step-by-step way to enlarge this beginner set is to use the SET layout program described on page 26.

2875

Long Freight Train · A beautiful beginner set for anyone who would like to get started with a fully functional freight railroad · Among its exciting features:

- Realistic assortment of freight cars
- Locomotive with headlights and RELEX couplers
- Operating marker lights for rear car
- Switches and lots of track
- Prototypical operation

Track layout allows for oval running and switching · This set gives one a clear track into the fabulous world of model railroading

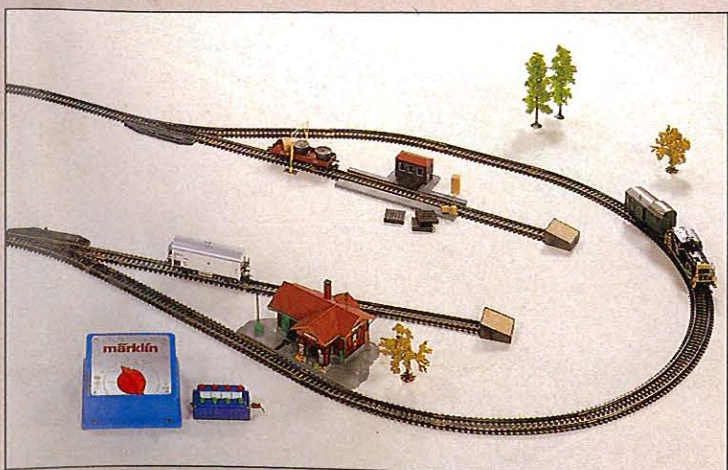
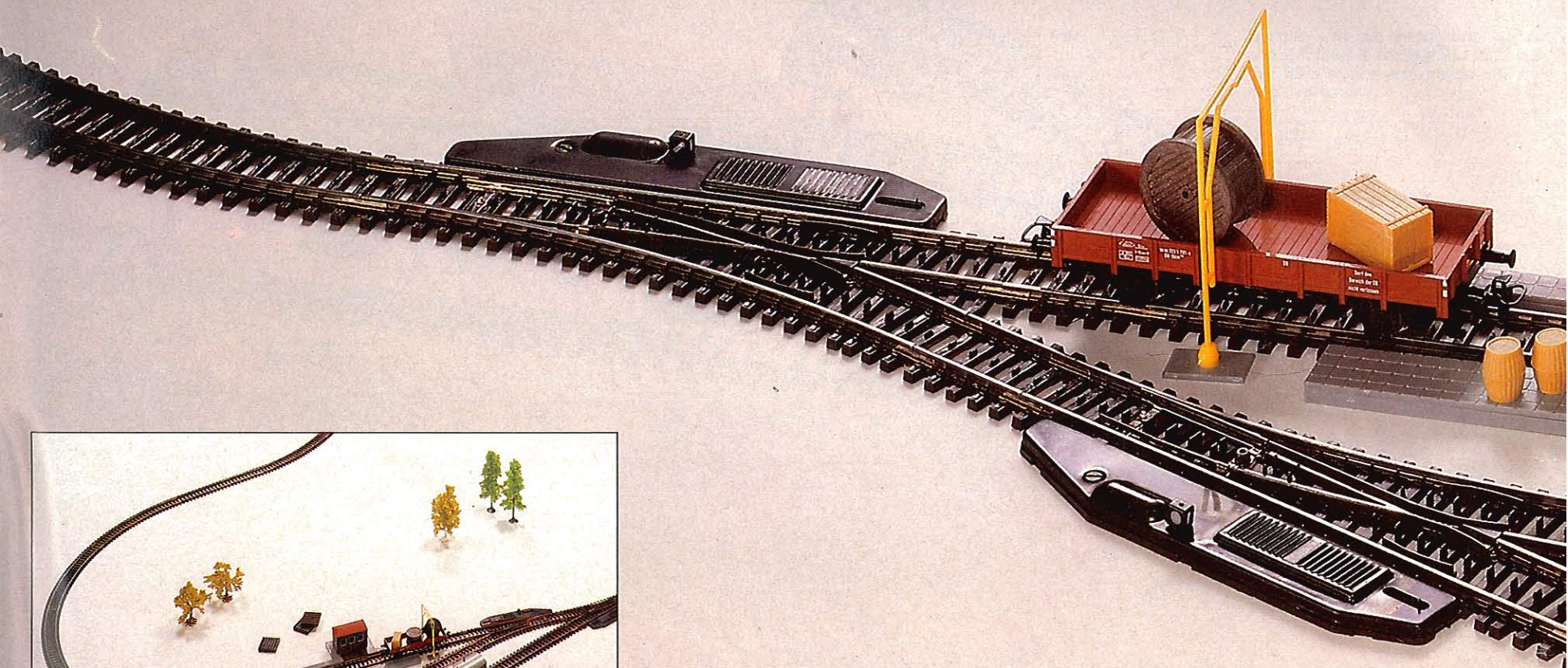


2875 184 x 76 cm (6' 1" x 2' 5-7/8")



A nice way to extend this set is with the T1 and T2 sections of the SET layout program shown on page 26.



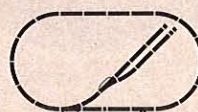


2980 220 Volt

Freight Train with Transformer · This is the ideal way to get aboard the marvelous world of Märklin model railroading with its realistic looking K Track · Includes a diesel with accurate German Federal markings, three freight cars, and freight station accessories (freight house kit, loading platform, piles of ties and assorted freight loads), one transformer, two remote control switches and a lot of track

This beginner set includes enough track for other layout designs. For example:

The transformer included with the set is only available in 220 Volt.



150 x 78 cm
(4' 11-1/2" x 2' 6-1/4")



168 x 85 cm
(5' 6" x 2' 9")



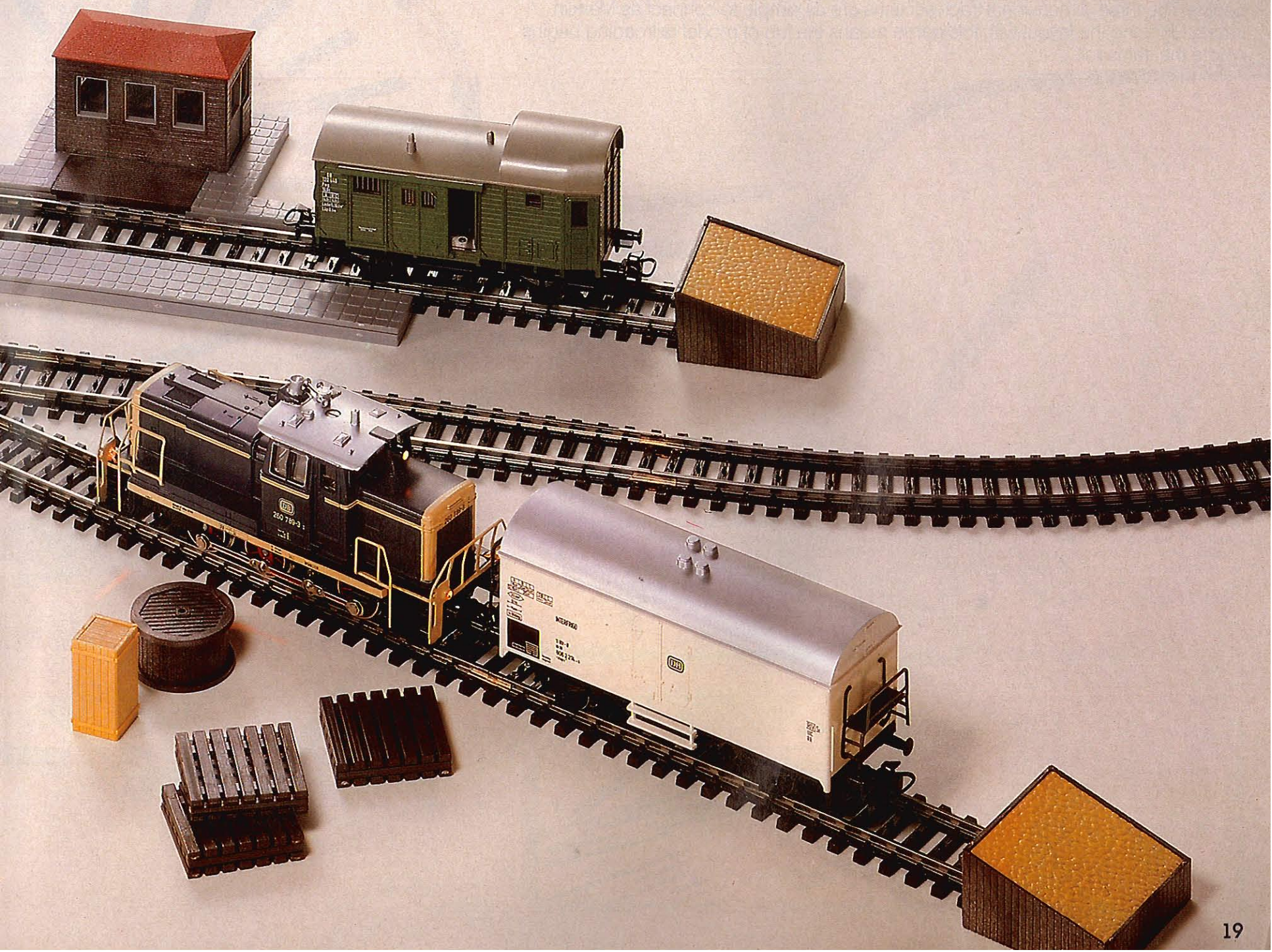
2980 186 x 78 cm
(6' 2" x 2' 6-1/4")



165 x 85 cm
(5' 5" x 2' 9")



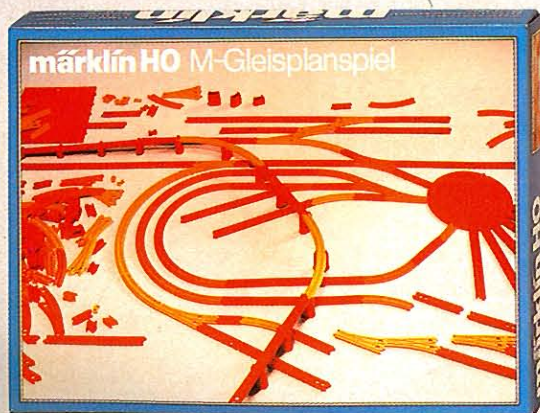
163 x 92 cm
(5' 4-1/2" x 2' 11-3/4")



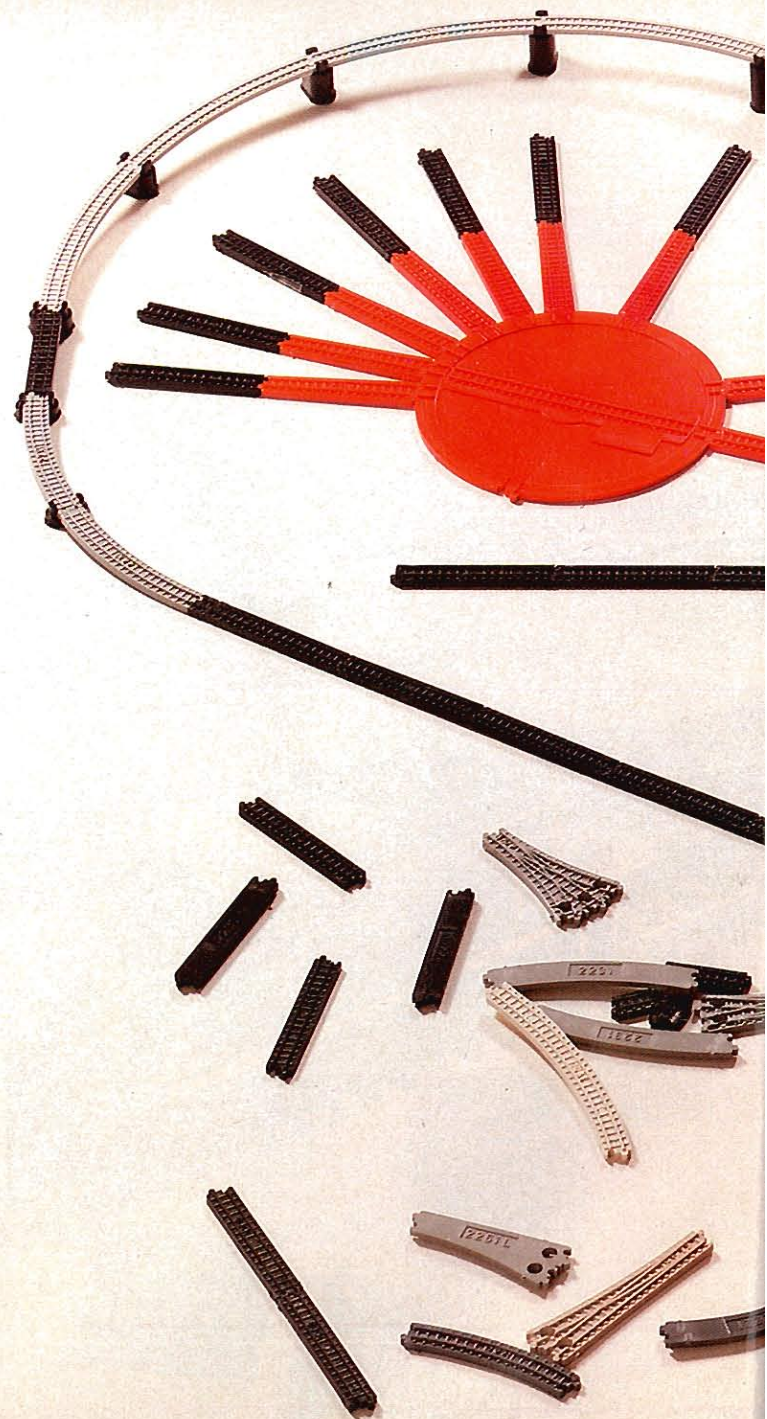
Have Fun Before the Run

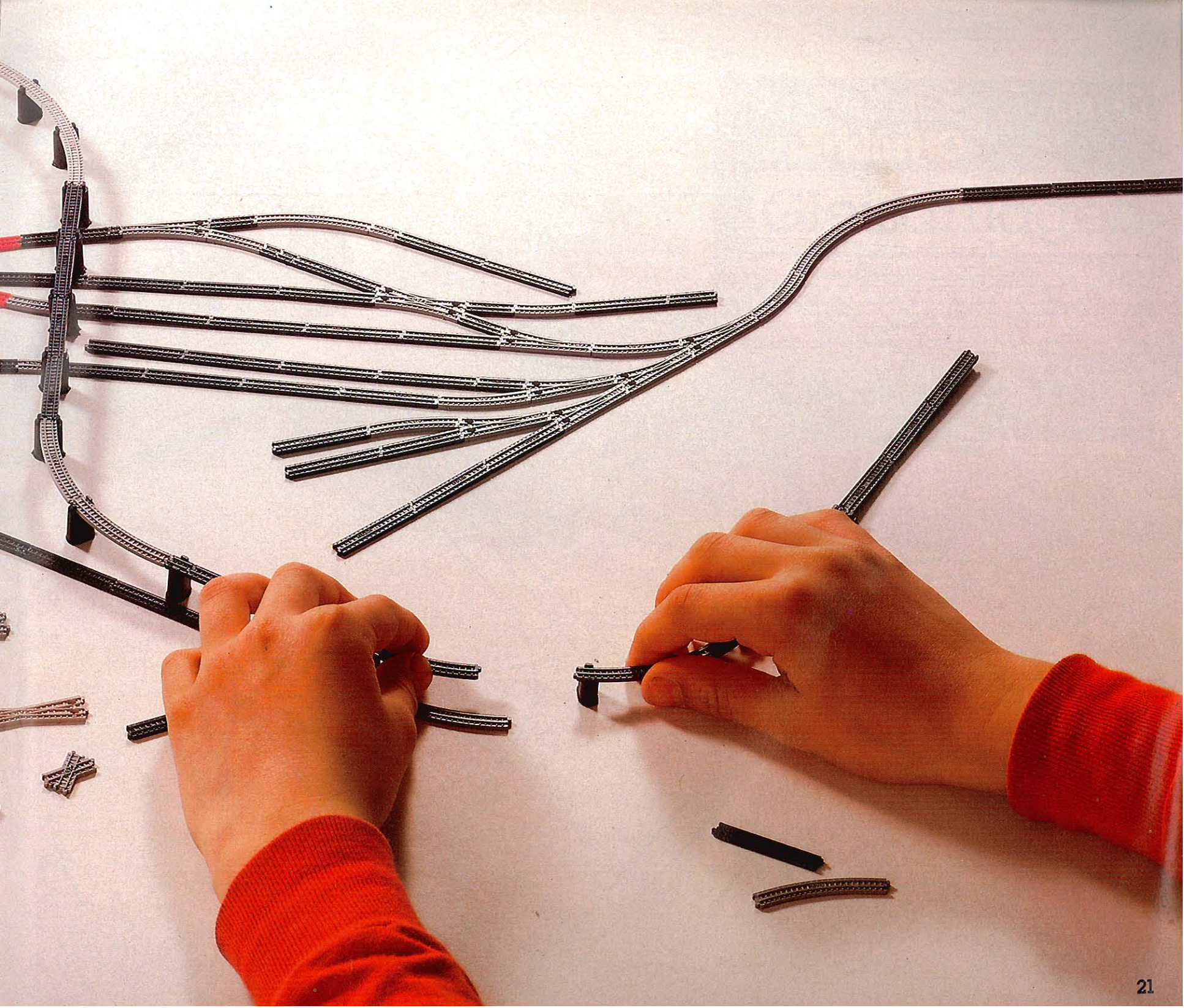
Have some fun before the trains begin to run by designing a railroad empire with the Track Planning Game. Let the dream layout take shape before actual construction begins. The three dimensional track sections are as simple to connect as Märklin tracks. Planning the layout with this game means the fun of model railroading begins before the trains roll.

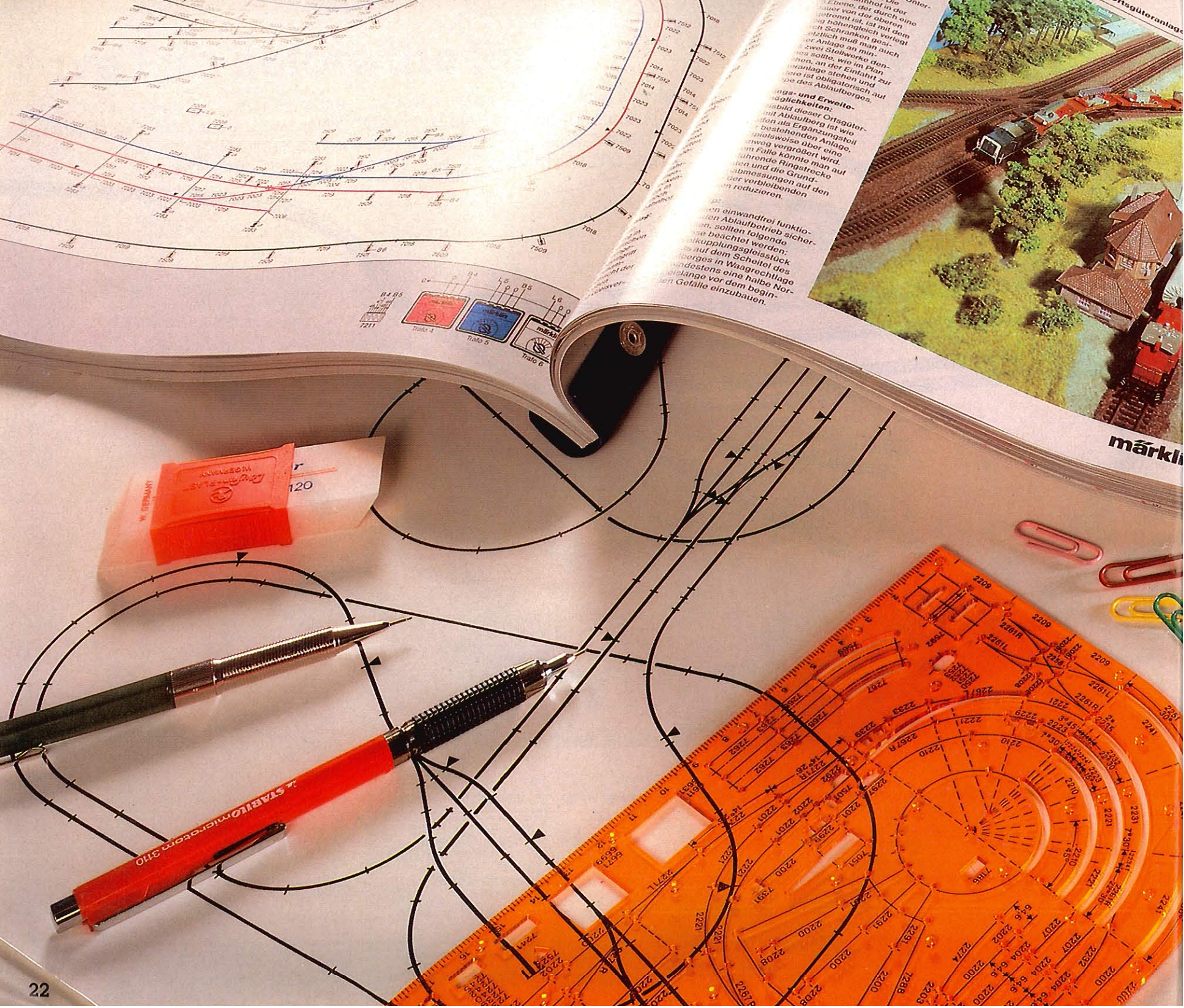
0230 M · Track Planning Game · For designing M Track layouts · All track sections scaled 1:5 · Has transfer table, turntable, pillars · Enough parts to plan a medium size layout · All pieces have corresponding part numbers · Pieces are 4 color-coded (3 curve radii and straight tracks) · Pieces fit snug and quick



0231 K · Track Planning Game · For designing K Track layouts · All track sections scaled 1:5 · Has transfer table, turntable, pillars · Enough parts to plan a medium size layout · All pieces have corresponding part numbers · Pieces are 7 color-coded (5 curve radii and straight tracks, and 14° 26' switches) · Pieces fit snug and quick

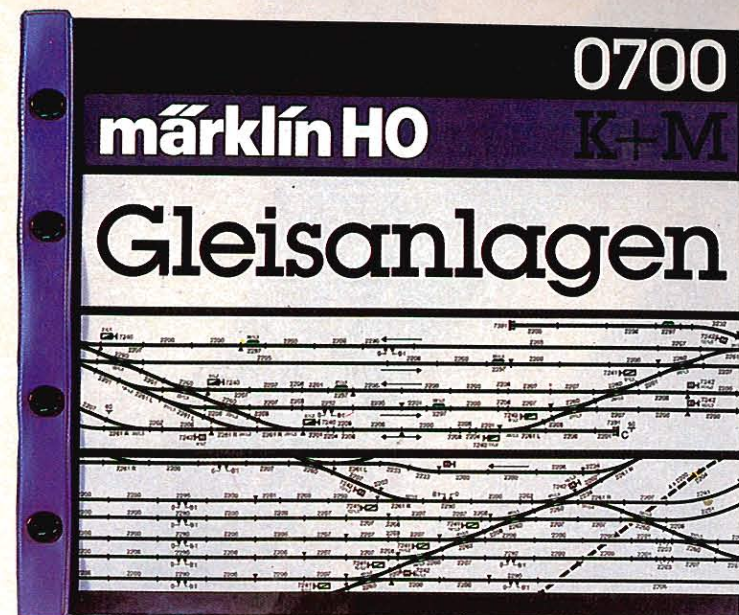








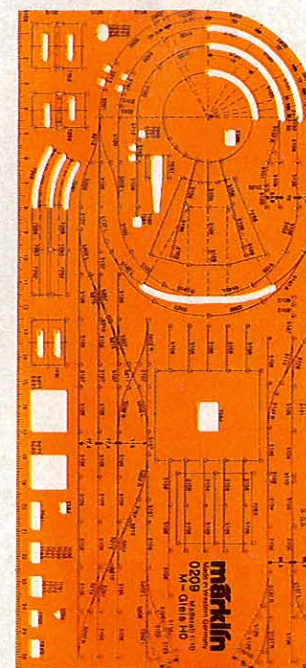
0702 K + M · H0 Layout Book ·
 30 Layouts, 15 for K Track and 15 for M Track · A supplement gives K Track equivalents for 14 M Track layouts and M Track equivalents for 15 K Track layouts · Each layout example includes a 1:10 track plan with wiring schematic, catenary, landscape design, color photos of completed layout, tips and suggestions for laying track and adding scenery · Special space-saving layout concepts such as narrow shelf layouts, diagonal layouts, U-shaped layouts · Also includes schematic layouts which can stand by themselves or be used as add-ons to other layouts · 186 pages · Size 22 x 26.4 cm (8-3/4" x 10-1/2") · English text



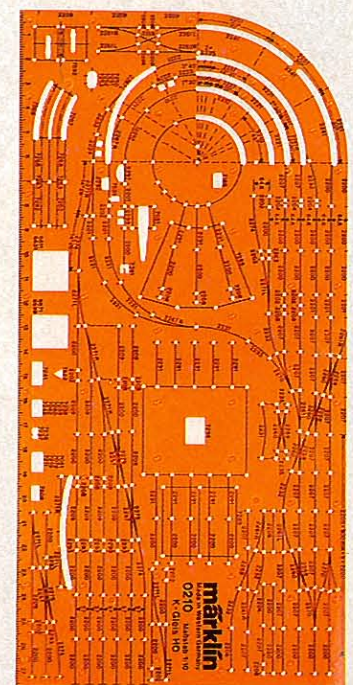
0702 K + M

0209 M · Track Planning Stencils ·
 For M Track, 5100 and 5200 series · All track sections are scaled 1:10 on stencils and can be traced on paper with a sharp pencil · Instructions included

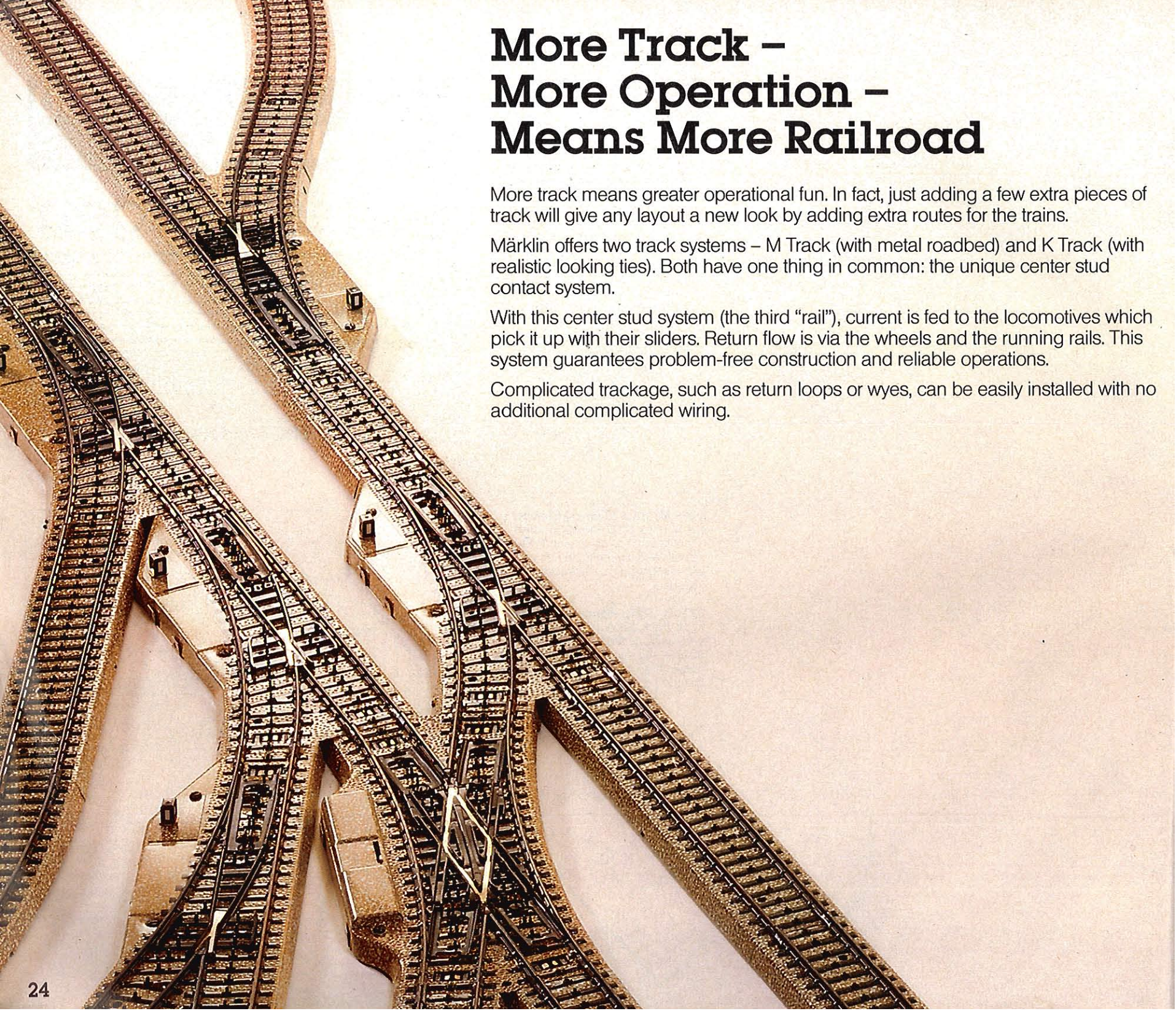
0210 K · Track Planning Stencils ·
 For K Track, 2200 (2100) series · All track sections are scaled 1:10 on stencils and can be traced on paper with a sharp pencil · Instructions included



0209 M



0210 K



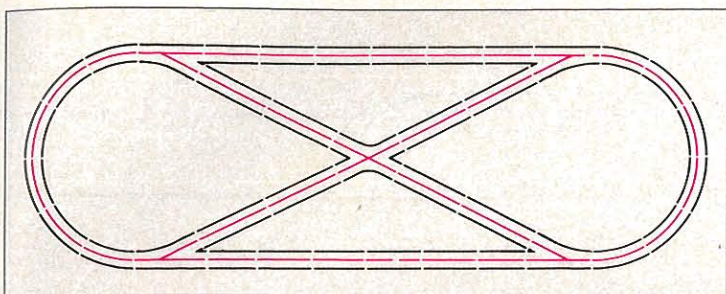
More Track – More Operation – Means More Railroad

More track means greater operational fun. In fact, just adding a few extra pieces of track will give any layout a new look by adding extra routes for the trains.

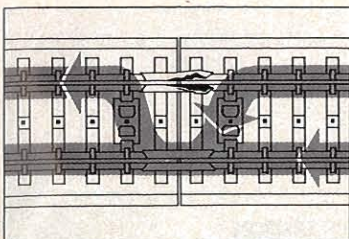
Märklin offers two track systems – M Track (with metal roadbed) and K Track (with realistic looking ties). Both have one thing in common: the unique center stud contact system.

With this center stud system (the third “rail”), current is fed to the locomotives which pick it up with their sliders. Return flow is via the wheels and the running rails. This system guarantees problem-free construction and reliable operations.

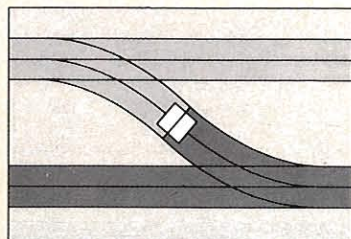
Complicated trackage, such as return loops or wyes, can be easily installed with no additional complicated wiring.



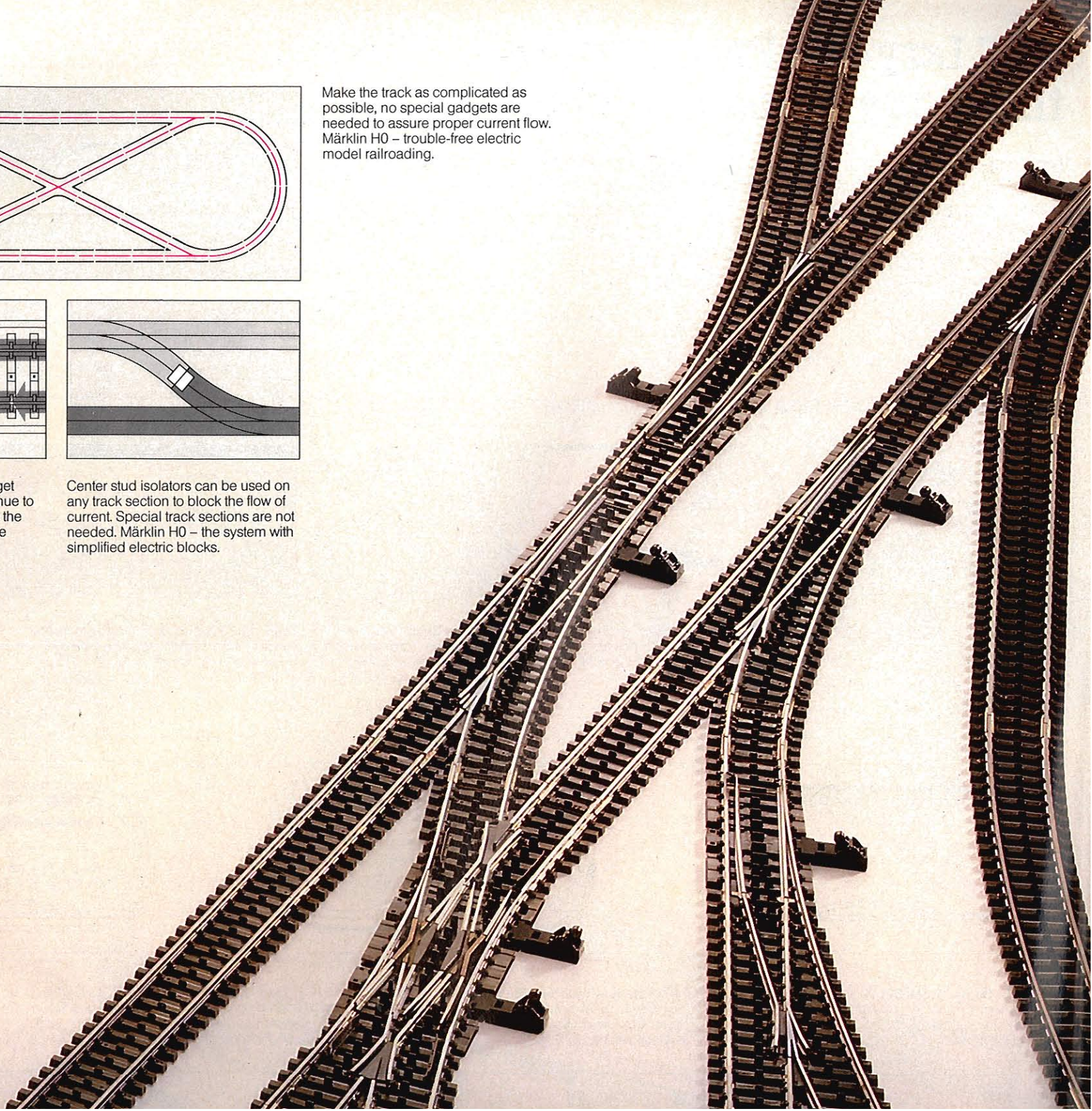
Make the track as complicated as possible, no special gadgets are needed to assure proper current flow. Märklin H0 – trouble-free electric model railroading.



If one of the track clips should get loose or bent, current will continue to flow back to the transformer via the other track clip. Märklin H0 – the system with good current flow.



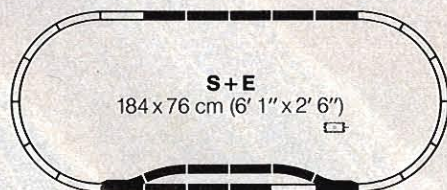
Center stud isolators can be used on any track section to block the flow of current. Special track sections are not needed. Märklin H0 – the system with simplified electric blocks.



SET Layout Program – the Easy Does It system

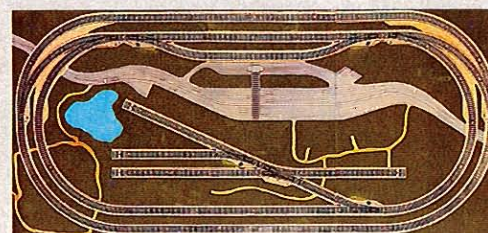
Start with the simple oval included with the beginner sets 2920 S, 2930 S (page 12) and 2950 (page 14). For the first extension select either the 5190 E (with manual switches) or the 5191 E (with remote control switches). The last three steps, the "T" steps, can be added in any order. The SET 5192 and 5193 can also be added to the track included with the beginner set 2875 (page 16).

Track diagrams show step-by-step construction

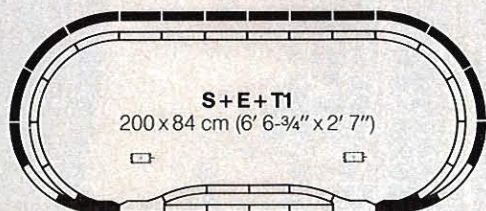


5190 · Extension Set E · Includes: 10 straights, 2 curves, 1 pair of manual switches and instructions

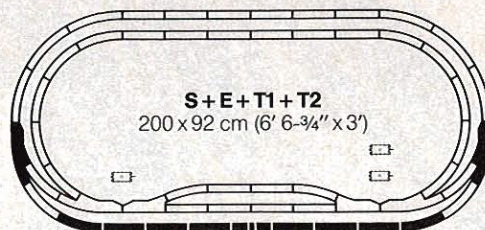
5191 · Extension Set E · Includes: 10 straights, 2 curves, 1 pair of remote control switches, position control box, distribution strip, leads, socket, plugs and instructions



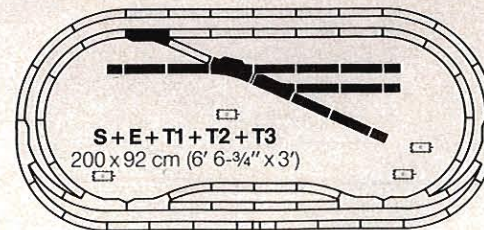
7298 · SET Toporama · Realistic landscape design · Multi-colored · Track layout printed on · Grass already glued on · Size 205 x 97 cm (6' 8-3/4" x 3' 2-1/4")



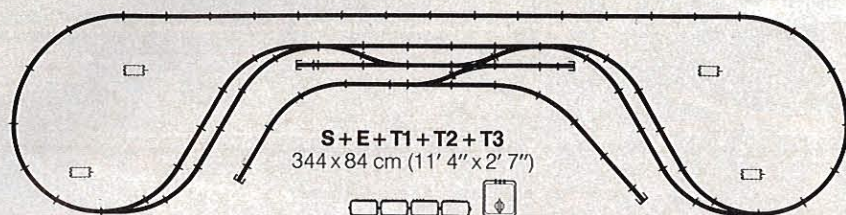
5192 · Double Track Set T1 · Includes: 6 straights, 8 curves, 1 pair of remote control switches, position control box, distribution strip, leads, sockets, plugs and instructions



5193 · Station Track Set T2 · Includes: 9 straights, 2 curves, 1 pair of remote control switches, position control box, distribution strip, leads, sockets, plugs and instructions



5194 · Yard Track Set T3 · Includes: 9 straights, 1 pair of remote control switches, 1 double slip switch, 4 bumpers, position control box, distribution strip, leads, sockets, plugs and instructions



The layout configurations possible with SET extensions are virtually unlimited. Shown here are some examples of layouts using the SETs. Extension sets

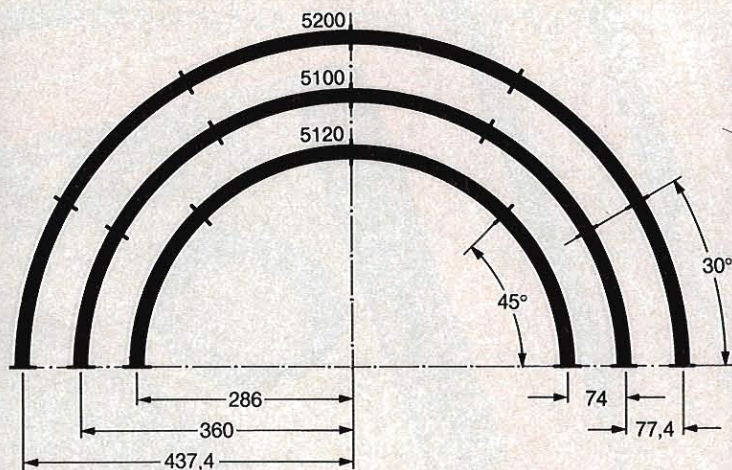
make wonderful gifts since **each** extension can be integrated into **any** existing layout.



Tips on Using M Track

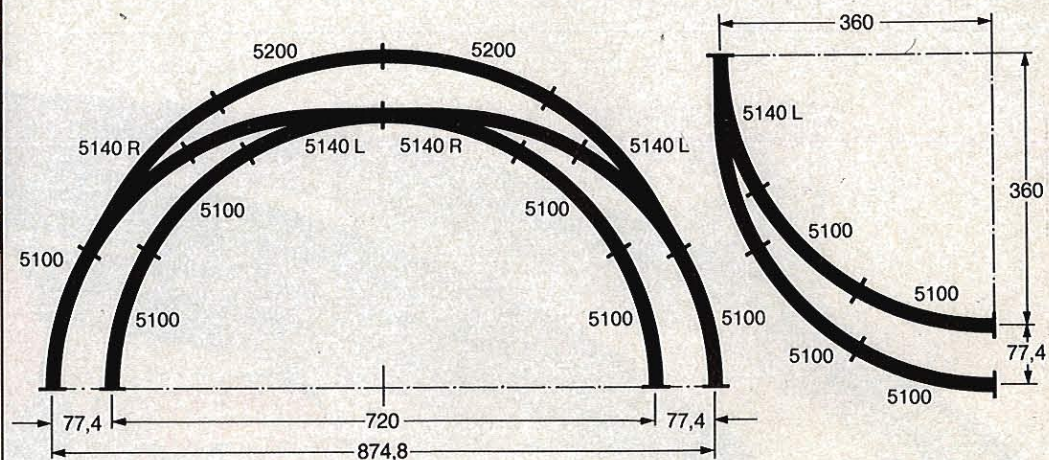
The special feature about M Track is that the roadbed is an integral part of the track section giving it the durability necessary for layouts that are changed often. M Track is excellent for children.

The 3 Radii



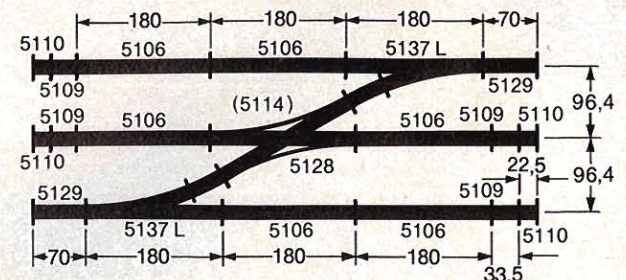
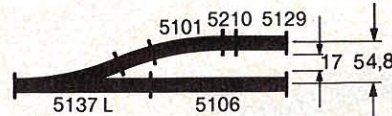
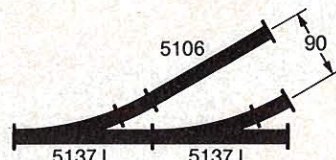
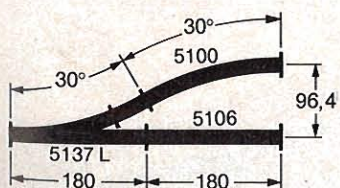
Switches 5202, 5221 or 5140 are necessary for a transition from the standard circle 5100 to a parallel circle 5200.

Branches with the Curved Switch 5140

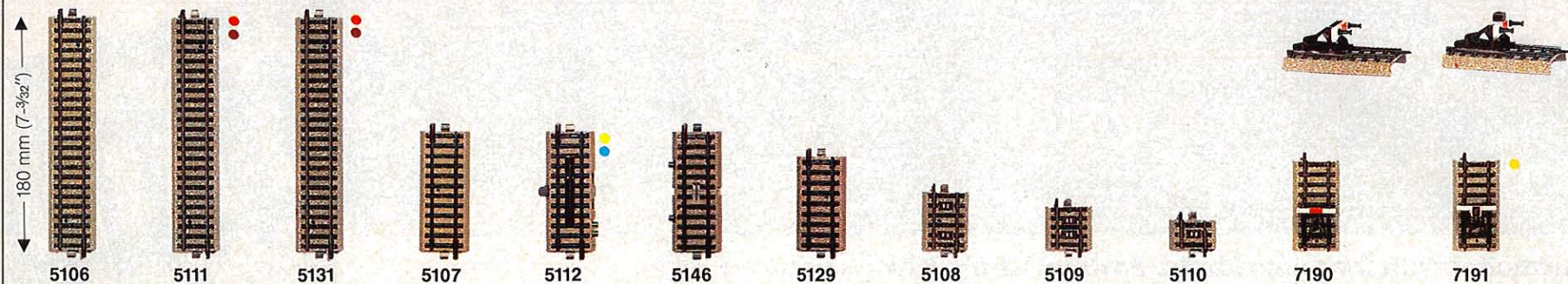


Curved switches permit operation of longer trains since slip tracks can be added on a curve.

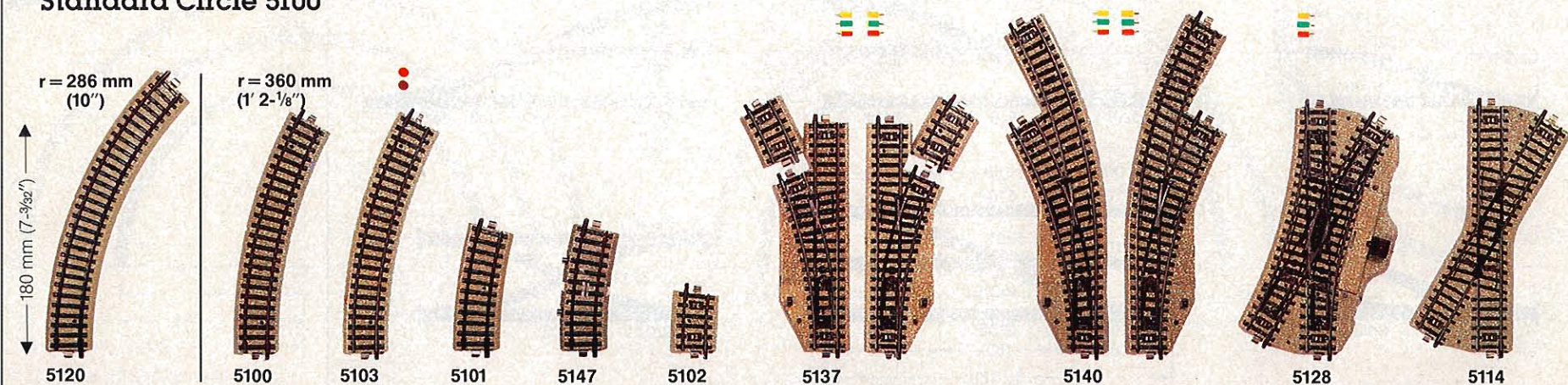
Branches with Switches for the Standard Circle 5100



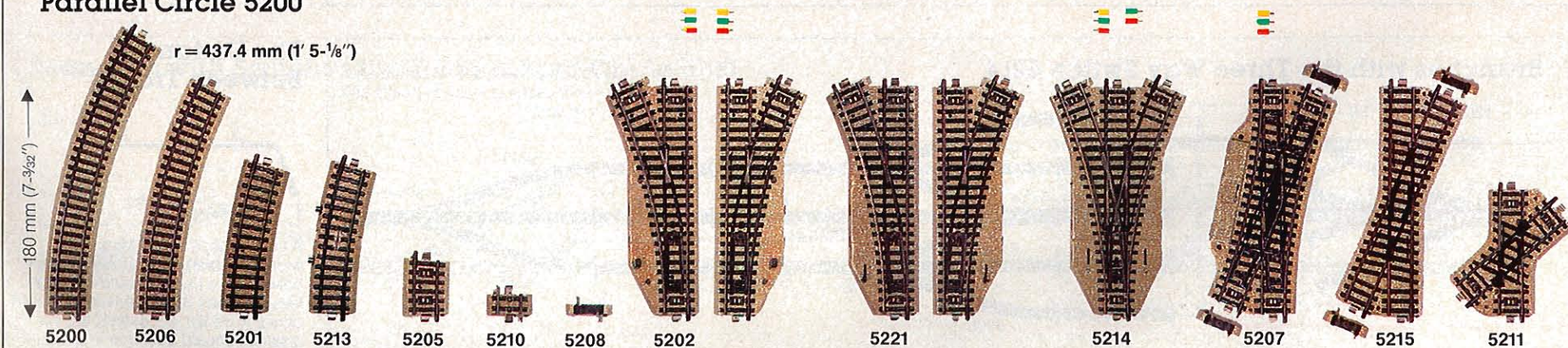
M Track



Standard Circle 5100



Parallel Circle 5200



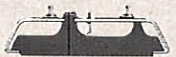


5113 · Light Pole · For use with uncoupler track 5112 · Signal lights during uncoupling · Height 85 mm (3-3/8")

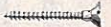
Q = 60010



2291 · Adapter Track · Length 180 mm (7-3/32") · For connecting M Track (either 5100 or 5200 series) to K Track



7171 · Sound Absorbent Strips · Pack of 50 strips with 50 wood screws · Strips absorb some of the natural sounds created when trains operate on M Tracks laid on a wood base · Strips do not affect mounting of catenary



7299 · Wood Screws · For securing M Tracks · Pack of 200

7

7195 · Number Plate Set · For use in identifying switches and signals on a layout · Includes 12 slotted bases and 24 number plates

5106 · Straight Track · Length 180 mm (7-3/32")

5111 · Feeder Track · Length 180 mm (7-3/32") · Has 2 leads

5131 · Feeder Track · Length 180 mm (7-3/32") · Has capacitor to suppress radio static · 2 leads · One 5131 required for each track circuit

5107 · Half Straight Track · Length 90 mm (3-9/16")

5112 · Uncoupling Track · Length 90 mm (3-9/16") · For releasing automatic couplers · Uncoupling ramp raised by remote control operation · Requires position control box 7072 (page 170) · 2 leads included

5146 · Remote Control Track · Length 90 mm (3-9/16")

5129 · Adjustment Straight · Length 70 mm (2-3/4")

5108 · 1/4 Straight Track · Length 45 mm (1-3/4")

5109 · 3/16th Straight Track · Length 33.5 mm (1-9/16")

5110 · 1/8th Straight Track · Length 22.5 mm (7/8")

7190 · Bumper · Riveted steel type · Clipped onto 70 mm (2-3/4") track section

7191 · Bumper · Illuminated · Riveted steel type · Clipped onto 70 mm (2-3/4") track section
Q = 60000

5120 · 45° Curve · Tight radius for branches and industrial sidings · For use with short vehicles only

5100 · 30° Curve Track

5103 · Feeder Track · 30° curve · 2 leads

5101 · 15° Curve Track · Half section

5147 · Remote Control Track · 15° curve

5102 · 1/4 Curve Track · 7° 30' curve

5137 · Remote Control Switches · One right and one left hand switch · Illuminated · Length of tangent 180 mm (7-1/8") · Radius of curve 360 mm (1' 2-1/4") · To maintain a 5100 curvature, use section 5102 (included)
Q = 60000

5140 · Remote Control Curved Switches · One right and one left hand switch · Illuminated · Length and radii same as 5100 curve · Length of outside curve 265.4 mm (10-1/2")
Q = 60000

5128 · Double Slip Switch · 30° crossing angle · Double solenoid operation · Illuminated to indicate direction of points · Can be operated manually · Tangent 193 mm (7-5/8") · Curvature same as 5100 curve
Q = 60000

5114 · 30° Crossing · Length 193 mm (7-5/8") · Third "rails" isolated from each other

All switches have sprung points. Double solenoids for remote control operation are included with the electro-magnetic switches 5137, 5140, 5202, the double slip switches 5128, 5207 and the three way switch 5214. To operate, a position control box 7072 (page 170) or a remote control track 5146, 5147 or 5213 is required

5200 · 30° Curve Track

5206 · 24° 17' Curve Track · Same radius as the 5202 and 5221 switches

5201 · 15° Curve Track

5213 · Remote Control Track · 15° Curve

5205 · 5° 43' Curve Track · When used with a 5206, length equals a 5200

5210 · Adjustment Section · Length 16 mm (5/8")

5208 · Adjustment Section · Length 8 mm (5/16")

5202 · Remote Control Switches · One right and one left hand switch · Illuminated · Track lengths correspond to 5206 and 5106
Q = 60000

5221 · Pair of Manual Switches · Track lengths same as 5202

5214 · Symmetrical Three Way Switch · With 2 double solenoids · Can be operated manually · 5 leads included · Tangent 180 mm (7-1/8") · Curvature 437.4 mm (1' 5-1/8"), same as 5200 circle · To maintain parallel spacing of 77.4 mm (3-1/16") use 5206 track section

5207 · Double Slip Switch · Ideal for maintaining parallel track spacing of 77.4 mm (3-1/16") · Double-solenoid operation · Can be operated manually · Tangent 180 mm (7-3/32") · Curvature same as 5202, 5221, 5206 · 2 adjustment tracks 5208 included

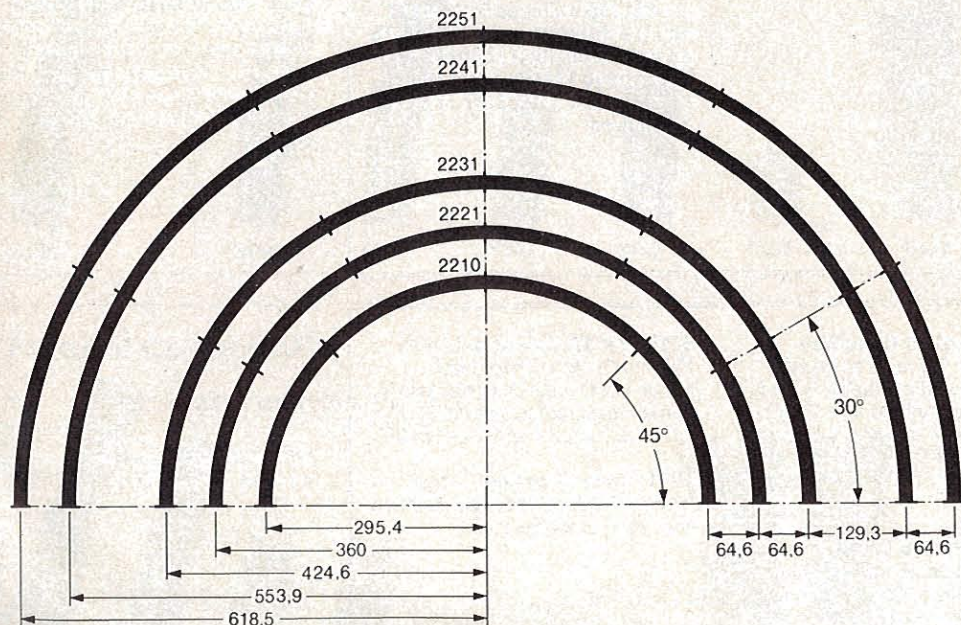
5215 · 24° 17' Crossing · Length 180 mm (7-3/32") · Third "rails" isolated from each other electrically · Same measurements as the 5207 · Includes 2 adjustment tracks 5208

5211 · 48 1/2° Crossing · Length 98 mm (3-7/8") · Third "rails" isolated from each other electrically

Tips on Using K Track

The realistic looking K Track offers five different curve radii and a flex track allowing modelers to duplicate many of the track configurations found on real railroads, such as closely paralleled tracks, long passing sidings, gentle curves and long tangents.

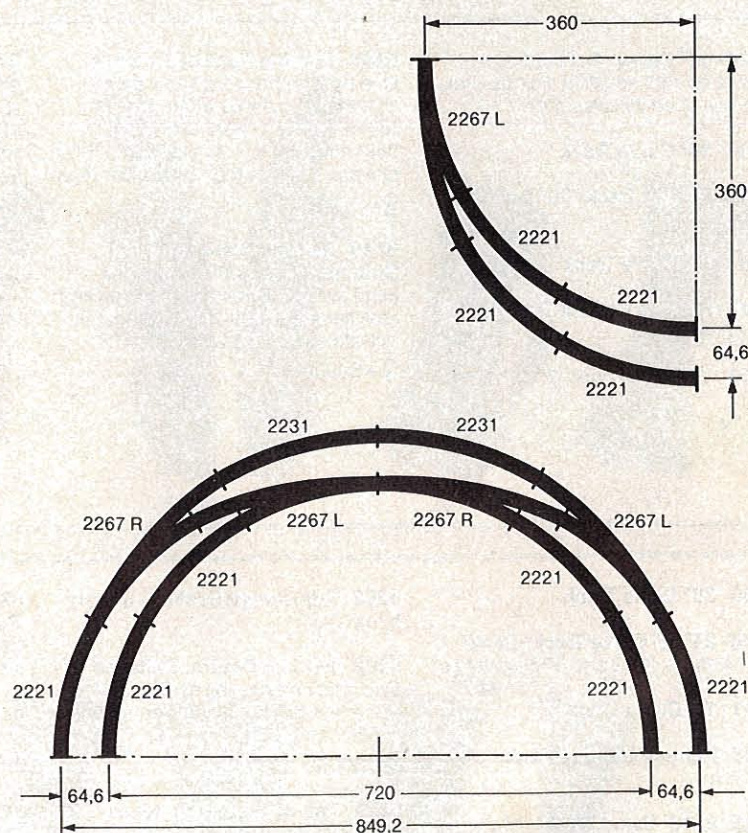
The 5 Radii



For Standard Circle I, all track sections have a **2** as the **third digit** (2221, 2223, 2224).

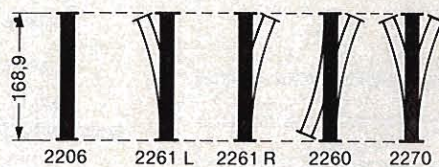
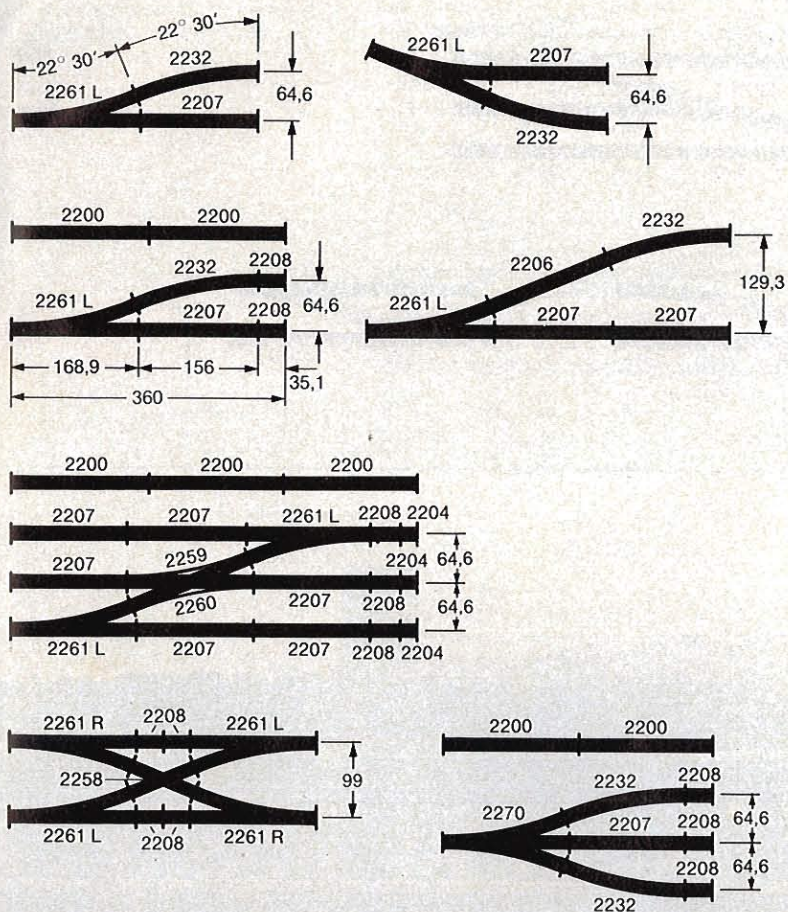
For Standard Circle II, all track sections have a **3** as the **third digit** (2231, 2232, 2233, 2234, 2235).

Branches with Curved Switches 2267



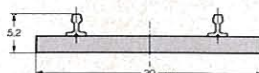
Curved switches allow the use of longer trains since slip tracks can be installed on curves.

Branches, Sidings and Crossovers



The radii for switches 2260, 2261, 2264 and 2270 are the same as the 2232 curve track and the tangents on these switches equal a 2206. Thus switches and crossings can be interchanged at will without affecting the layout's geometry.

The Distance Between Tracks

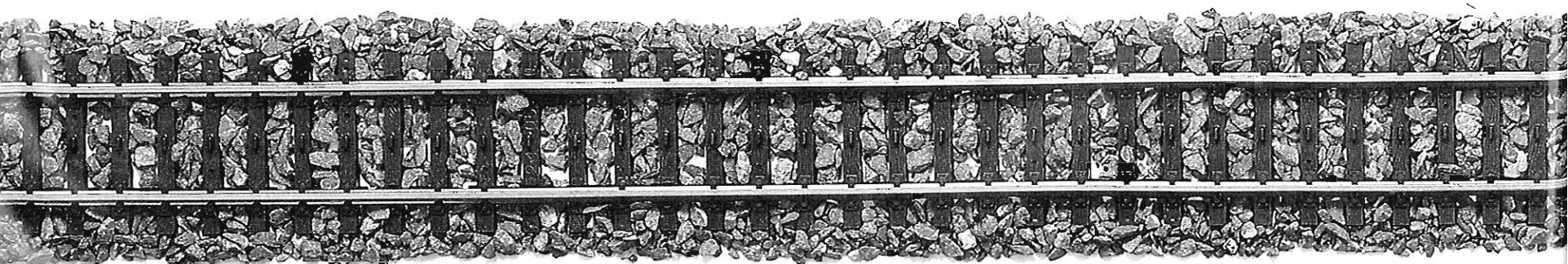
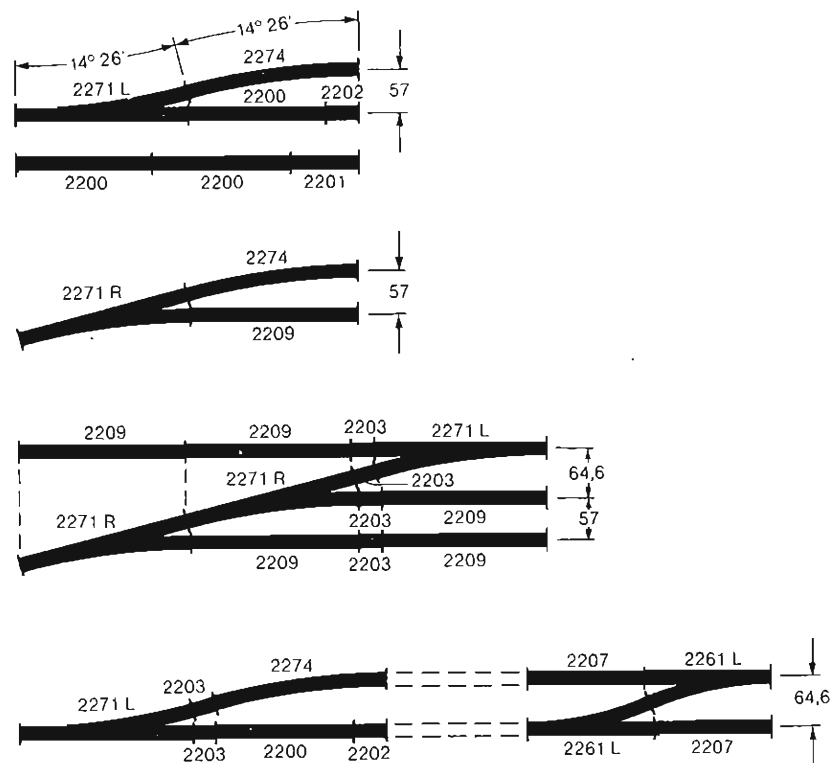


The tracks are 30 mm (1- $\frac{3}{16}$ ") wide and the spacing between parallel tracks should be at least 30 mm (1- $\frac{3}{16}$ "), figured center to center. On curves, the distance should be greater to allow for car overhang.

The Sleek Switches

- Parallel track spacing of 57 mm (2-1/4") is possible.
- Modelers can duplicate the elegant sleek turnouts seen on high speed mainlines.
- Prototype-like track configurations are possible because the switch angle is 14° 26' and its radius is 902.4 mm (2' 11-5/8").
- Simply add a 7549 solenoid operated actuator to convert a manual 2271 to remote control operation.
- The switch machines or manual lever can be attached to either side of the switch.
- The outside running rails are indented to receive the switch points.
- The frog lines up with the switch points for almost derail-proof switching.
- The switch machine includes contacts to provide only momentary current to solenoid coils.
- The switch machines can be connected to control panels to allow for easy monitoring.
- The switch machines can be placed "out of sight" by mounting them under the train table using the under layout mounting kit 7548. The kit is adjustable for board widths 6 - 16 mm (1/4" - 5/8"). Only the corrugated iron cover remains visible on the layout.

Branches with the 2271 Switches



The Sleek Double Slip Switch

- The 2275 double slip switch matches the 2271 switch by having the same $14^{\circ} 26'$ angle and the same radius 902.4 mm ($2' 11\frac{5}{8}"$) and maintains the same track spacing of 57 mm ($2\frac{1}{4}"$).

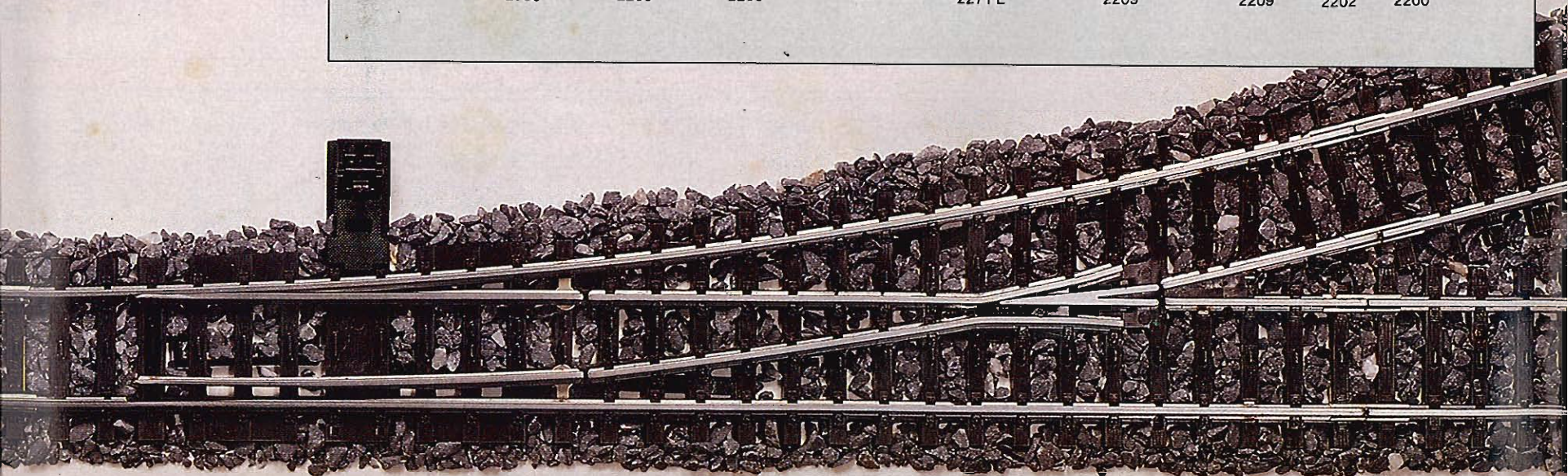
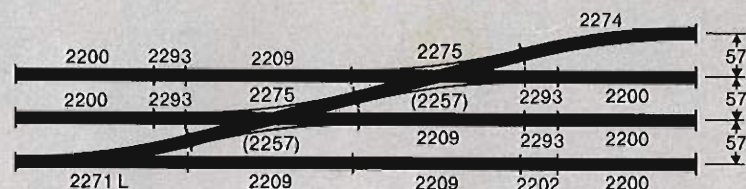
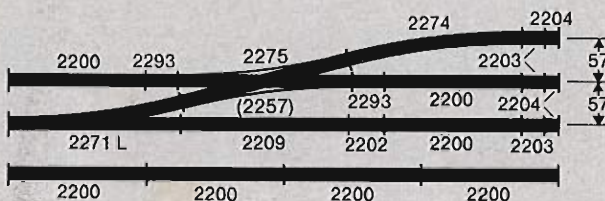
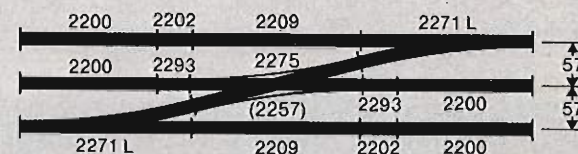
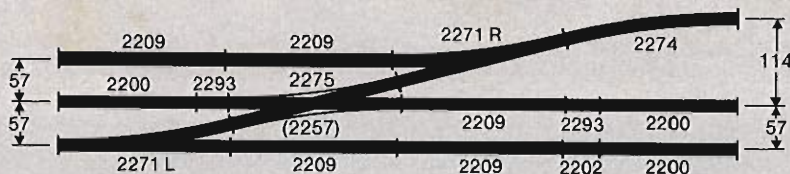
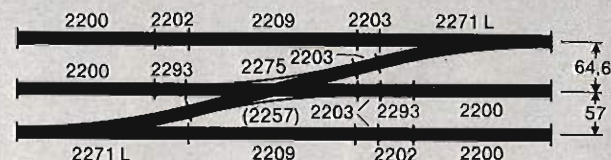
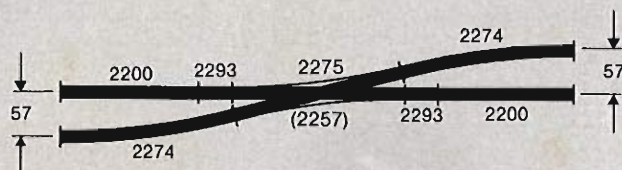
- The two manual levers are replaceable with two solenoid operated actuators (switch machines) 7549.

- The switch machines or the manual levers can be placed on either side of the switch.

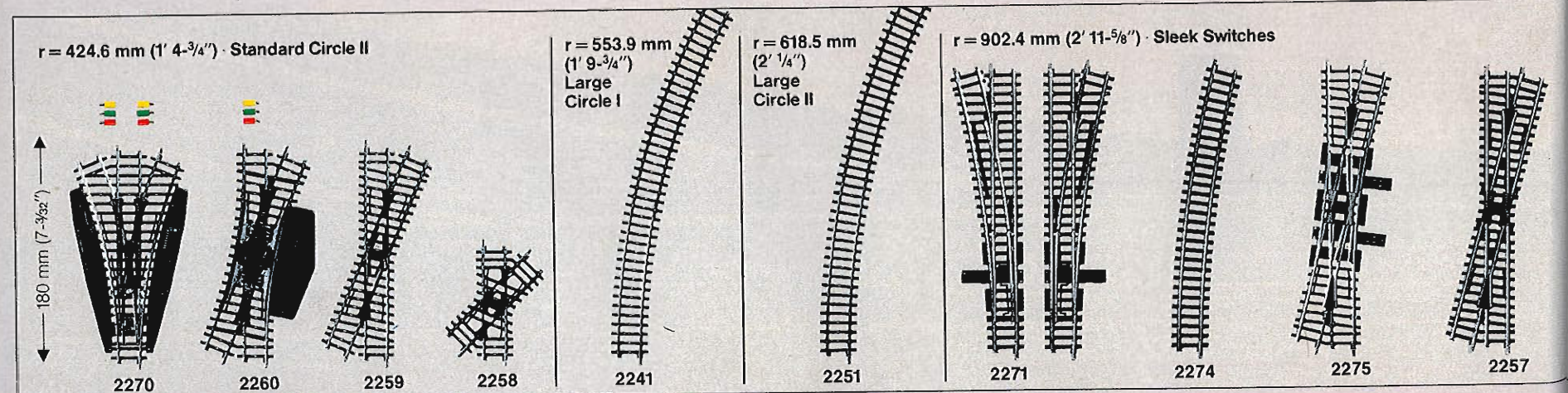
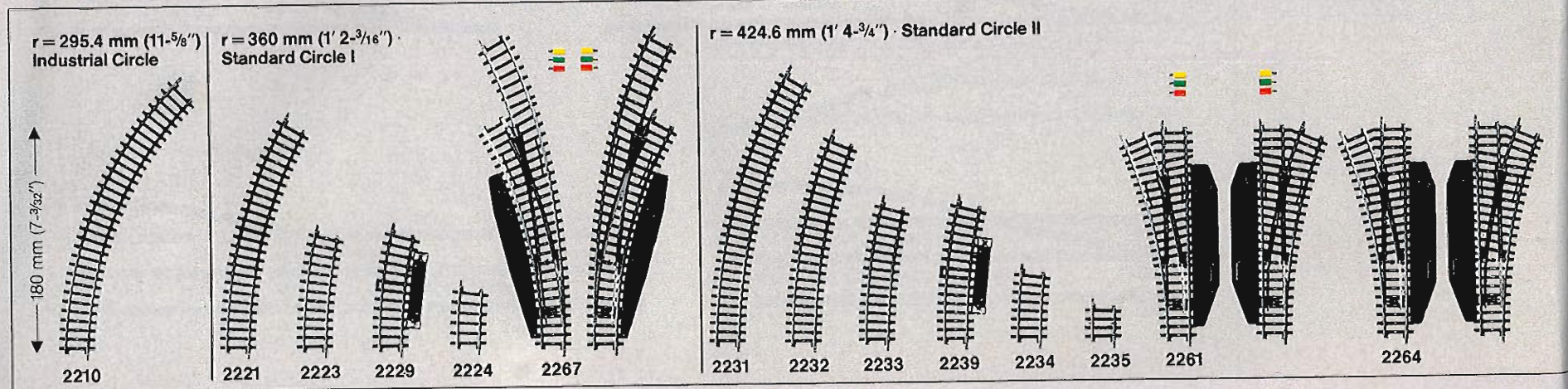
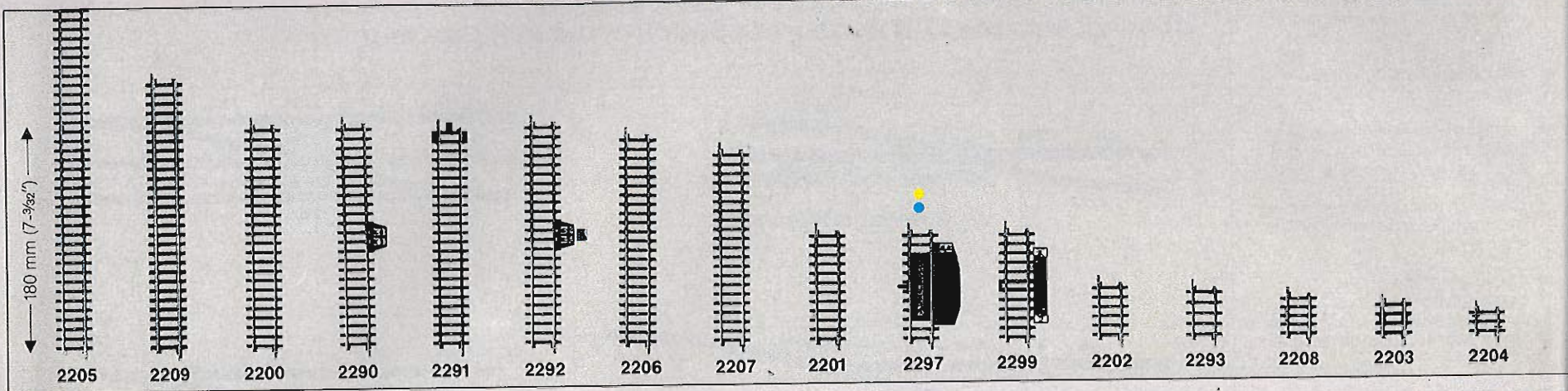
- A special highlight of the 2275 switch is that the points are independent of each other. Thus points can be aligned for two separate routes.

- The switch machines can be placed under the layout by using two under layout mounting kits 7548.

Branches with the 2275 Double Slip Switch or the 2257 Crossing



K Track



2205 · Flex Track · Length 900 mm (2' 11-7/16") · same as five regular straight tracks · Flexible · Can be carefully bent to any desired radius · Can be cut with a track saw (be sure to add rail joiners and track clips 7595 to the "new" ends)

2209 · Adjustment Track · Length 217.9 mm (8-9/16") · For keeping parallel spacing when a 2271 switch is installed on an angle

2200 · Regular Straight Track · Length 180 mm (7-3/32")

2290 · Feeder Track · Length 180 mm (7-3/32") · Includes terminals marked "O" and "B"

2291 · Adapter Track · Length 180 mm (7-3/32") · For connecting M Track (either 5100 or 5200 series) to K Track

2292 · Feeder Track · Same as 2290, but with a suppressor for radio static · One required for each circuit

2206 · Adjustment Track · Length 168.9 mm (6-5/8")

2207 · Adjustment Track · Length 156 mm (6-1/8")

2201 · Half Straight Track · Length 90 mm (3-9/16")

2297 · Uncoupling Track · Length 90 mm (3-9/16") · To release automatic couplers · A position control box 7072 (page 170) is required to operate uncoupling ramp

2299 · Remote Control Track · Length 90 mm (3-9/16")

2202 · 1/4 Straight Track · Length 45 mm (1-3/4")

2293 · Adjustment Track · Length 41.3 mm (1-5/8") · To maintain tangent with the 2275 double slip switch or the 2257 crossing

2208 · Adjustment Track · Length 35.1 mm (1-3/8")

2203 · Adjustment Track · Length 30 mm (1-3/16") · For maintaining track spacing on parallel lines

2204 · 1/8th Straight Track · Length 22.5 mm (7/8")

7595 · Rail Joiners and Track Clips · 10 of each · For 2205 track · Required for connecting the 2205 track to other tracks if the flex track has been shortened



7391 · Bumper · Riveted steel type · Clips onto rails · Length 38 mm (1-1/2") · Round head wood screw included



7599 · Wood Screws · Pack of 200 · For securing K Track

All switches have sprung points. Double solenoids for remote control operation are included with the electro-magnetic switches 2261, 2267, the double slip switch 2270, and the three way switch 2270. A position control box 7072 (page 170) or remote control tracks 2229, 2239 or 2299 are necessary to operate them.

2210 · 45° Curve Track · Tight radius for branches and industrial spurs · For short cars only

2221 · 30° Curve Track

2223 · 15° Curve Track

2229 · Remote Control Track · 15° Curve

Remote Control Tracks

The remote control tracks (2229, 2239, 2299) enable moving trains to operate solenoid-operated accessories. The sliders (pick up shoes) on locomotives and cars trip the controls and a different operation can be performed for each direction of travel. The pulses are fed through 2 sockets which are isolated from each other electrically.

2224 · 7° 30' Curve Track

2267 · Remote Control Curved Switches · On right and one left hand switch · Length and curvature of inside curve same as 2221 · Length of outside curve 244.6 mm (9-5/8")

2231 · 30° Curve Track

2232 · 22° 30' Curve Track

2233 · 15° Curve Track

2239 · Remote Control Track · 15° curve

2234 · 7° 30' Curve Track

2235 · 3° 45' Curve Track

2261 · Remote Control Switches · One right and one left hand switch · Illuminated · Radius 424.6 mm (1' 4-3/4") · Tangent 168.9 mm (6-5/8") · $Q = 60000$

2264 · Manual Switches · One right and one left hand switch · Radius 424.6 mm (1' 4-3/4") · Tangent 168.9 mm (6-5/8")



7549 · Solenoid Operated Actuator (switch machine) · For converting 2271 and 2275 to remote control operation · Two actuators needed for the 2275 · Fits on either side · Can be placed under the layout by using under layout mounting kit 7548 · Includes momentary current contacts · Can be connected to a control board

2270 · Symmetrical Three Way Switches · With 2 double solenoids · Can be operated manually · Tangent length 168.9 mm (6-5/8") · Radius 424.6 mm (1' 4-3/4")

2260 · Double Slip Switch · Radius 424.6 mm (1' 4-3/4") · Remote control operation · Can be operated manually · Length of tangents 168.9 mm (6-5/8")

2259 · 22° 30' Crossing · Tangent 168.9 mm (6-5/8")

2258 · 45° Crossing · Tangent 90 mm (3-9/16")

2241 · 30° Curve Track

2251 · 30° Curve Track

2271 · Manual Switches · One right and one left hand switch · Radius 902.4 mm (2' 11-5/8") · Tangent 225 mm (8-1/8") · Angle 14° 26' · Manual lever replaceable with solenoid operated actuator 7549

2274 · Curve Track · Radius 902.4 mm (2' 11-5/8") · Length 14° 26' · Same radius as 2271 switch

2275 · Double Slip Switch · Matches the 2271 switch · Tangent 225 mm (8-1/8") · Angle 14° 26' · 2 manual levers replaceable with 2 solenoid operated actuators 7549 · Each point lined separately

2257 · 14° 26' Crossing · Tangent 225 mm (8-1/8")



7548 · Under Layout Mounting Kit · For mounting the 7549 switch machines out of sight under the layout · Works with the 2271 and 2275 switches · Adjustable for board widths 6 - 16 mm (1/4" - 5/8")

Multi-Train Operation

Adding catenary adds more than realism and excitement. It also allows for running more than one train on the same track.

Just connect the catenary to a separate transformer and two trains can operate totally independent of each other on the same stretch of track. Or let the overhead supply current for running the trains and let the center "rail" supply current for lighting the cars.

Märklin catenary is functionally reliable and is easily set up.

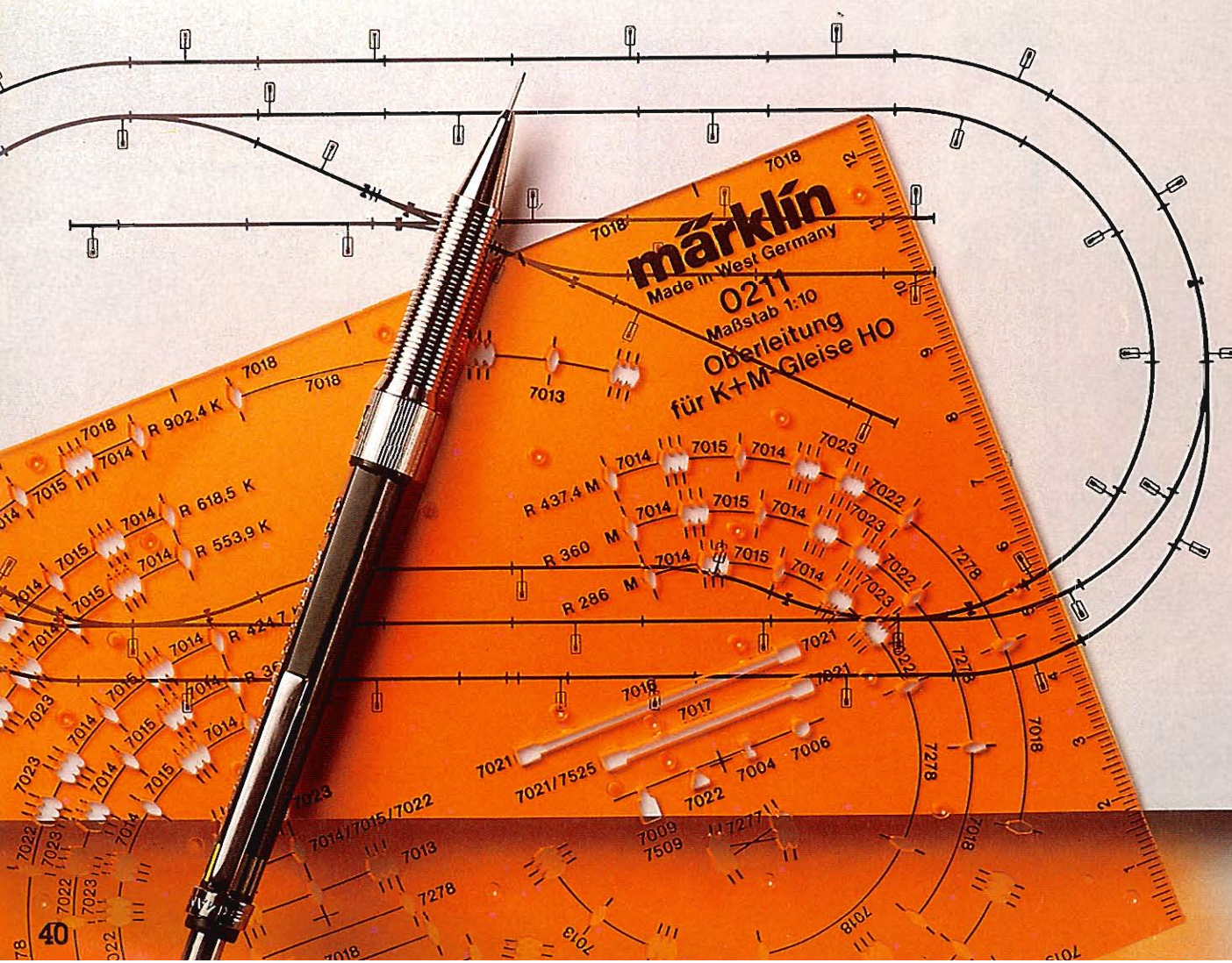




Catenary Adds Realism

Catenary or overhead wires, provides a realistic and practical way to supply electric current to locomotives. The overhead wires serve the same function as the center studs on the tracks.

Getting started is easy thanks to the Märklin catenary stencils. The stencil set is scaled 1:10 and has replicas of all wire lengths and tower masts as well as the necessary article number.



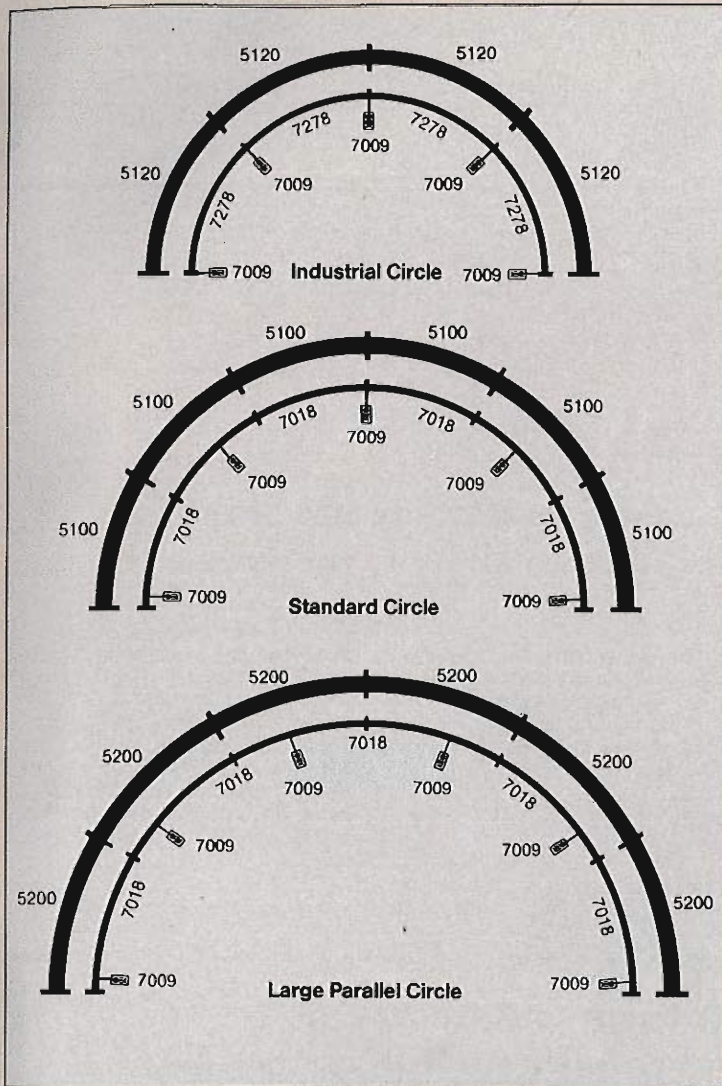
0211 K + M · Catenary Stencils ·
For planning an overhead system ·
For K or M Tracks · Stencils include
1:10 scaled replicas of all towers and
wire lengths · Use a sharp pencil to
trace · Instructions included

Catenary Parts List for the SET Layout (page 26)
(S + E + T1 + T2 + T3)

3-7004
54-7009
10-7013
16-7014
16-7015
22-7018
7-7019
9-7023
1-7201
1-7277
2-7278

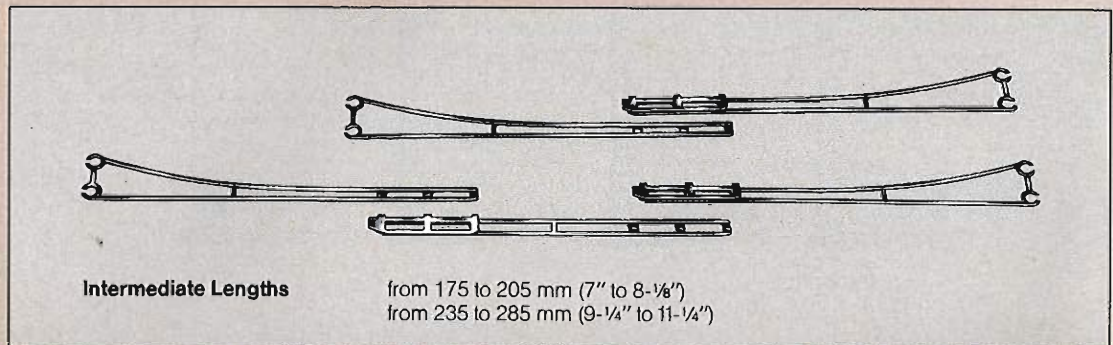
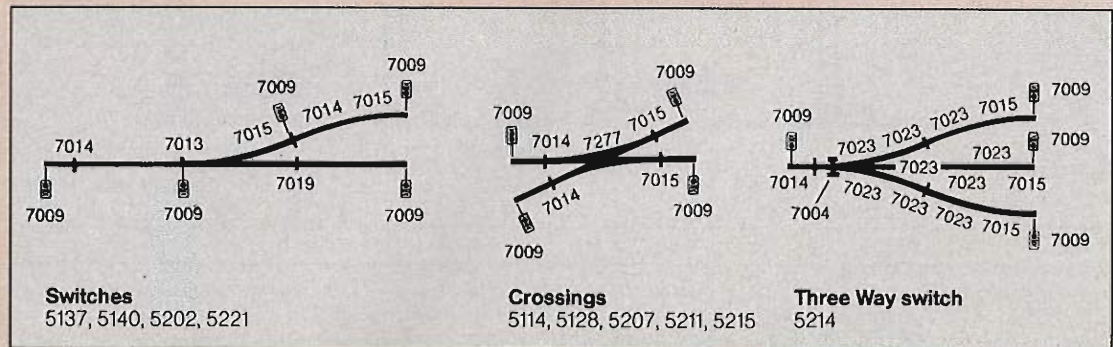
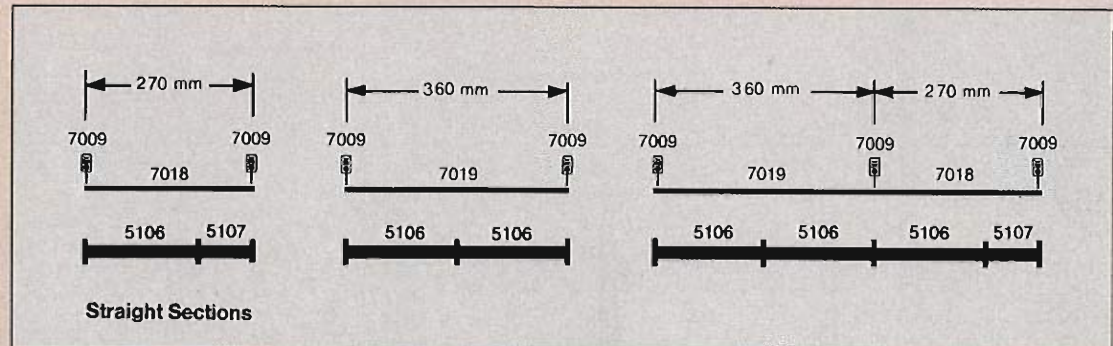
1 30 VA transformer

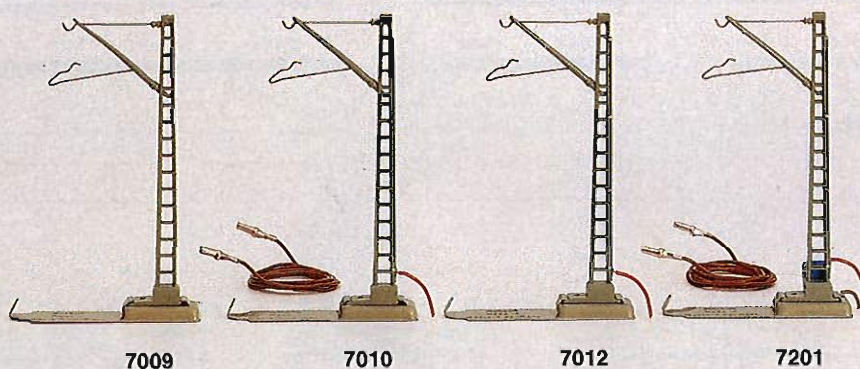
Overview of Necessary Items Needed for Adding Catenary to M Tracks



The number of required towers or masts is always one higher than the number of 7018 and/or 7019 wire sections. Intermediate lengths using a 7014/7015 or 7014/7023/7015 can be treated as a single wire section.

Finally, Catenary is quite flexible and the difference between theory and application is often only 1 or 2 masts or wire sections.





7009

7010

7012

7201

Catenary for M Tracks 5100/5200

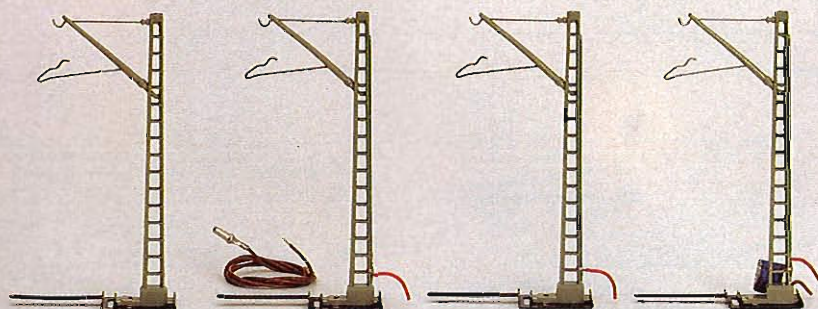
7009 · Catenary Mast · Basic element for M Track catenary · Height 100 mm (4")

7010 · Feeder Mast · For supplying current · Includes 2 leads and instructions · Height 100 mm (4")

7012 · Feeder Mast · For signals with 1 lead · Height 100 mm (4")

7201 · Feeder Mast · For supplying current · Includes red and brown lead · Additional brown lead · Built-in capacitor for suppressing radio static · 1 mast required for each circuit · Instructions included · Height 100 mm (4")

7005 · Catenary Set · For train control with 7000 series signals not mounted on tower masts · Includes 2 feeder masts 7012, 2 insulator sections 7022 and 2 overhead line sections 7014



7509

7510

7512

7501

Catenary for K Tracks 2200

7509 · Catenary Mast · Basic element for K Track catenary · Height 97 mm (3-7/8")

7510 · Feeder Mast · With red lead and plug attached to mast · Brown lead with plug · Includes instructions · Height 97 mm (3-7/8")

7512 · Feeder Mast · With red lead attached · For use when using home signals with catenary system · Height 97 mm (3-7/8")

7501 · Feeder mast · With red and brown leads · Built-in capacitor for suppressing radio static · One mast required per circuit · Instructions included · Height 97 mm (3-7/8")

7505 · Catenary Set · For train control on 7200 series signals not mounted to tower · Includes 2 feeder masts 7512, 2 insulator sections 7022 and 2 contact line sections 7014 · For K Track (2200 series) only

Catenary for K and M Tracks

All contact line sections are nickel plated.

7013 · Contact Line Section · Designed especially for switches · Length 240 mm (9-1/2")

7016 · Cross-Span · Spans 5 tracks · Hooks onto tower masts · Length 390 mm (1' 2-1/4")

7017 · Cross-Span · Spans 3 tracks · Hooks onto tower masts · Length 280 mm (11")

7018 · Contact Line Section · For straight and curve tracks · Length 270 mm (10-5/8")

7019 · Contact Line Section · For straight tracks only · Length 360 mm (1' 3-3/8")

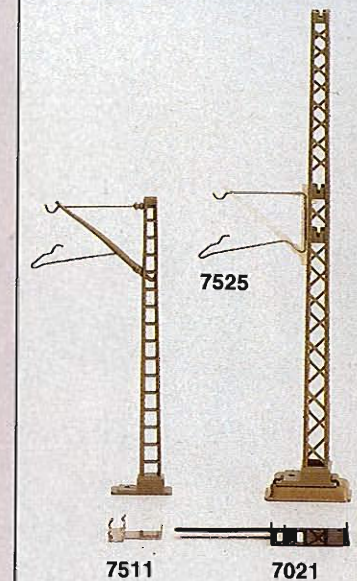
7277 · Crossing Section · For 2257, 2258, 2259, 2260, 2275, 5114, 5128, 5207, 5211, 5215

7278 · Contact Line Section · For straight and curve tracks · Length 230 mm (9-1/16")

7003 · Catenary System Connector Lead · For use with signals when tower masts are used, and for supplying current to any point · Length 600 mm (1' 11-5/8")

7004 · Fastening Kit · Includes 5 bolts, 5 nuts, 5 washers · Ideal for use when usual methods of construction not possible

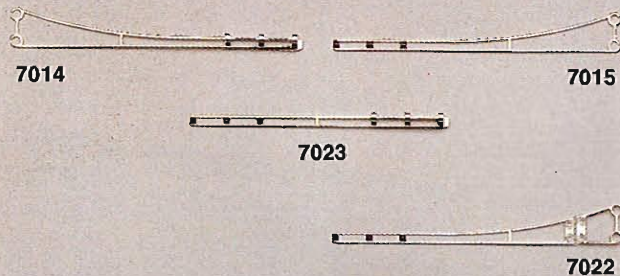
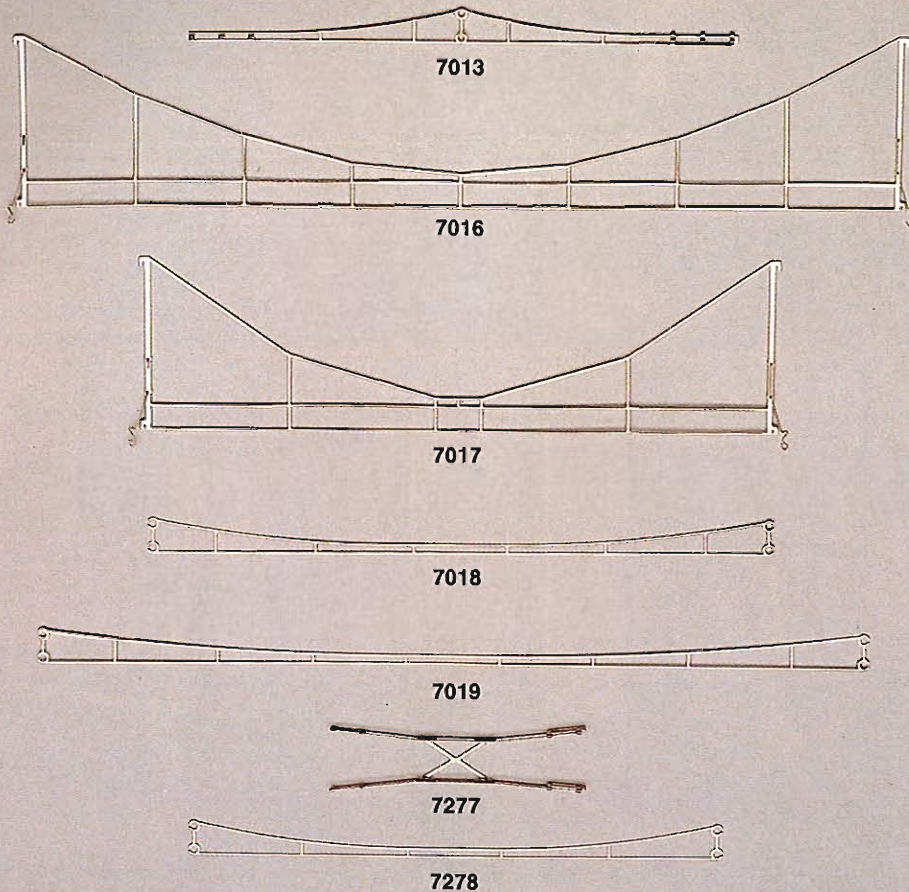
7006 · Contact Line Insulation · For insulating sections of contact line from cross-spans · One required for each track and cross-span · 15 x 6 mm (5/8" x 1/4")



7511 · Bridge Mast · For attaching to sides of plastic bridges and ramps · Height 97 mm (3-7/8")

7021 · Tower Mast · With recesses for hooking on cross-spans 7016 or 7017 and the cantilever support arm 7525 · For tower mast with arc light see page 180 · Height with M Tracks 157 mm (6-13/16") · Height with K Tracks 154 mm (6-1/16")

7525 · Cantilever Support Arm · For use with tower mast 7021 · Can hold one or two overhead lines



7014 · Contact Line Section · Female portion for snap-on connection · Length 115 mm (4-1/2")

7015 · Contact Line Section · Male portion for snap-on connection · Length 115 mm (4-1/2")

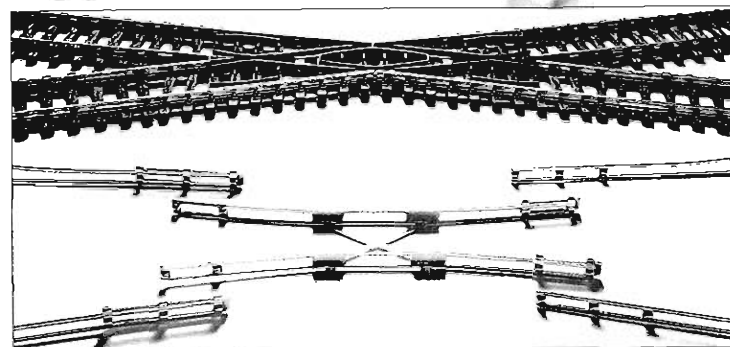
7022 · Insulator Section · Male portion (for snap-on connection) for interrupting current flow · Length 115 mm (4-1/2")

7023 · Adjustment Section · For snap-on connections · Length 100 mm (4")

Overhead Strings Easily

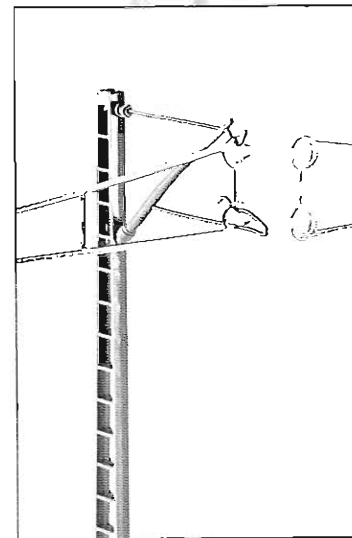
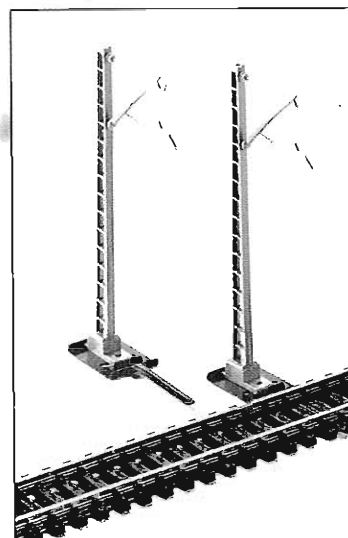
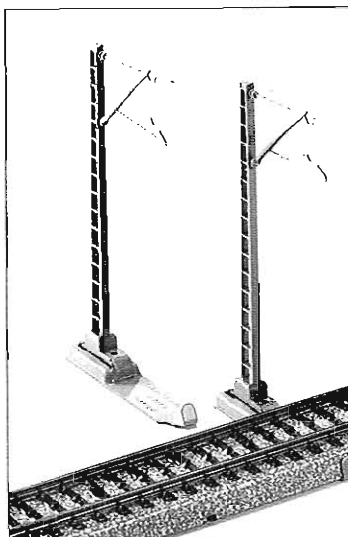
1. Always start either at a crossing (using a 7277) or at a switch (using a 7013).

2. Connect to the above piece the sections 7014 or 7015. Remember to bend wire where necessary to conform to track curvature.

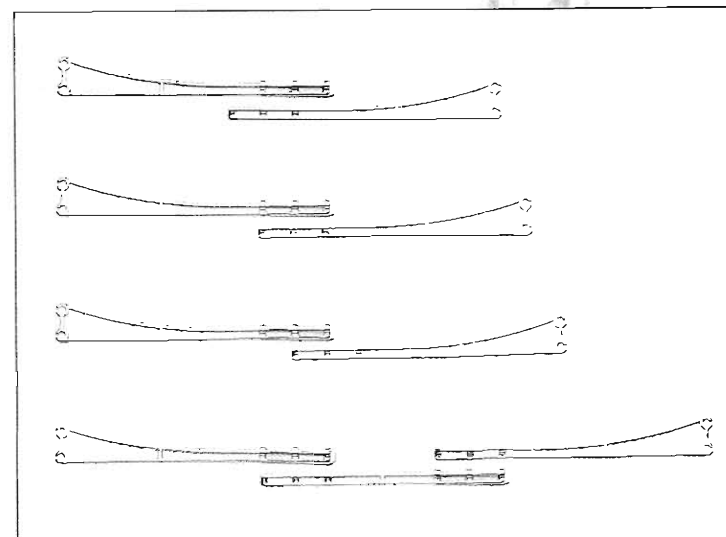


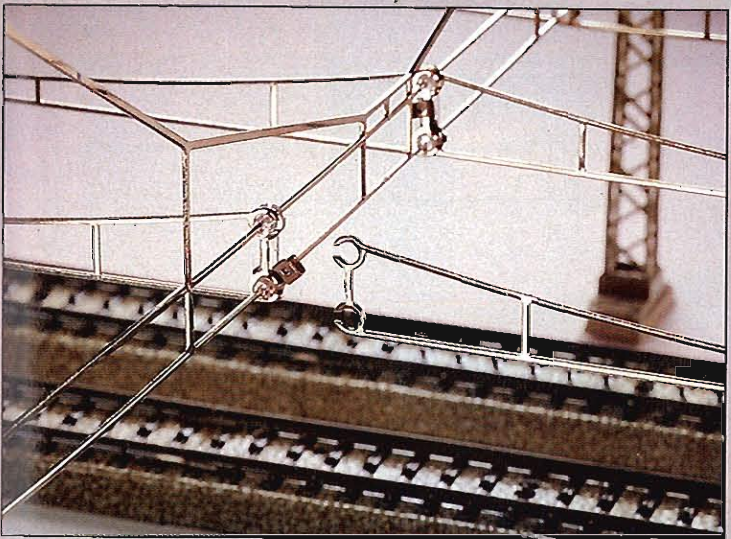
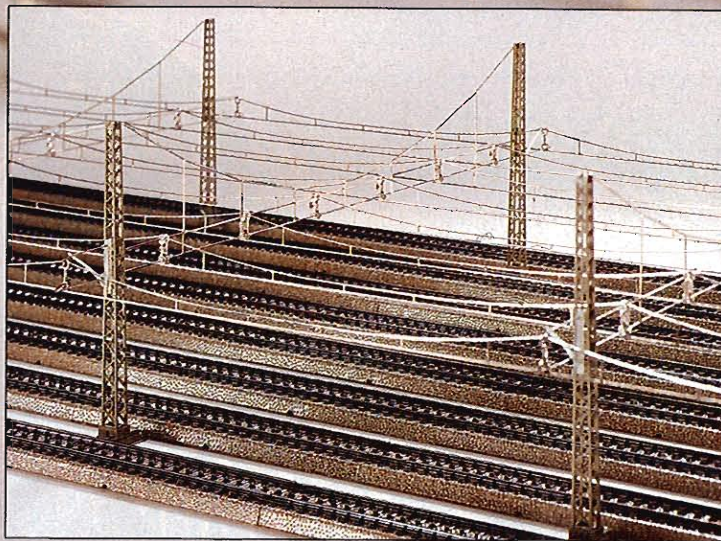
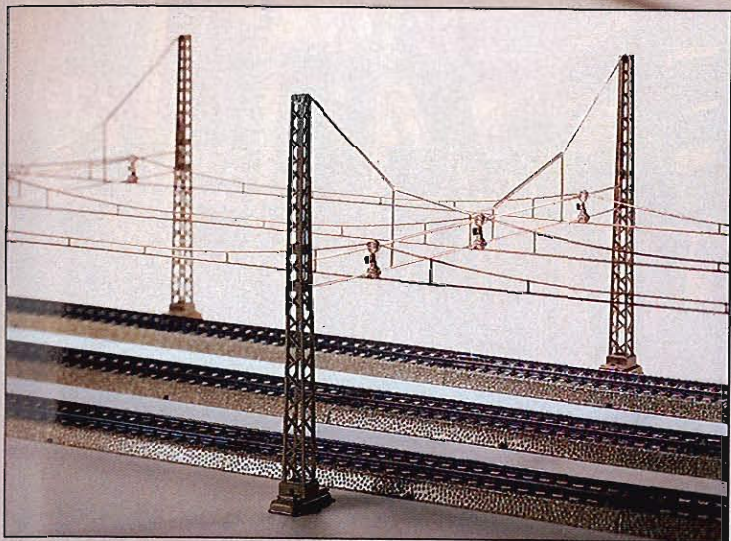
3. Now position the masts and string the wires.

4. On one and two track lines, continue adding wire sections and masts until a switch or crossing is reached.



5. The stretch between the last mast and the next switch requires either a 7014 and 7015, or a 7014-7023-7015 combination. These variable sections are always applied at such special areas. They have the same functions as half or quarter track sections.





6. For three or four track lines, use tower 7021 and cross span 7017 for holding the contact wires. On five or six track lines, use the cross span 7016 instead of the 7017. The cantilever support arm is used to support a contact wire of a track on the "other" side of the mast. Remember that, on multi-track lines, the masts should always be directly opposite each other.

7. This illustration shows how contact wires are hung onto cross span wires.

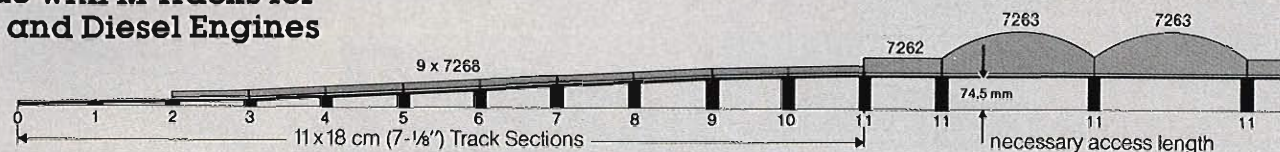
Overhead (catenary) construction through bridges, signals, circuit breaks, or for train control and connection to additional transformers are also easy to install. Please refer to page 43 for necessary accessories.

Bridges Span the Gap – To a Layout with more Laps

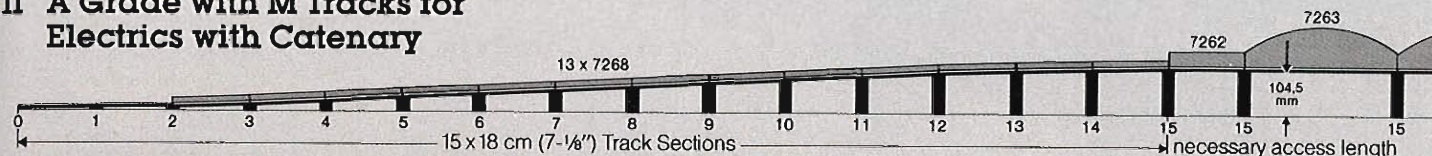
Bridges and ramps add drama and excitement to a model railroad. Besides offering logical extensions to the mainline, they also permit the railroad to gracefully span valleys, rivers, roads, and other parts of the railroad.



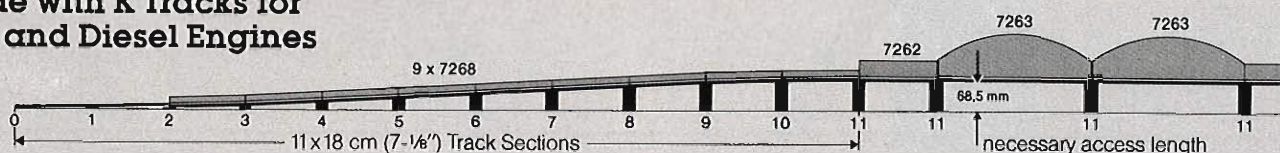
I A Grade with M Tracks for Steam and Diesel Engines



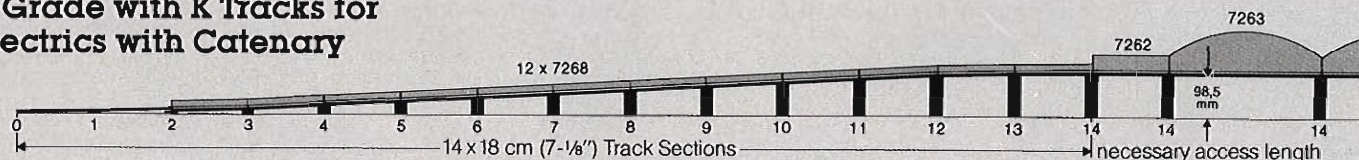
II A Grade with M Tracks for Electrics with Catenary



III A Grade with K Tracks for Steam and Diesel Engines



IV A Grade with K Tracks for Electrics with Catenary



The drawings shown here illustrate how many track sections are required for the access ramps. Thus each model railroader can quickly see how this interesting stretch of track can be added to a particular layout. Just look at the figures for the necessary number of pillar sections. The grade is 5 % and is tapered at the beginning and the end.

Bridges and access ramps can be placed in most any desired combination. The pillar sections 7252 and 7253, which connect to each other like building blocks, allow for raising the track in 6 mm (1/4") increments. Smaller increments (3 mm - 1/8") are possible with the base plates 7250 and 7251. Pillar sections and base plates can be fastened to the track-board with the 7599 wood screws.

Pillar Requirements for M Track

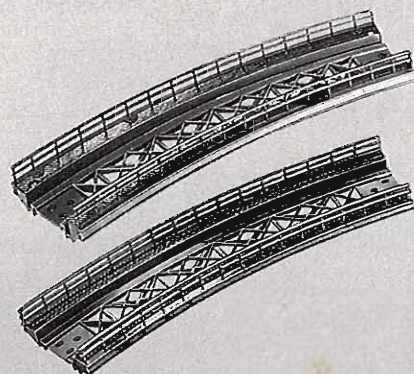
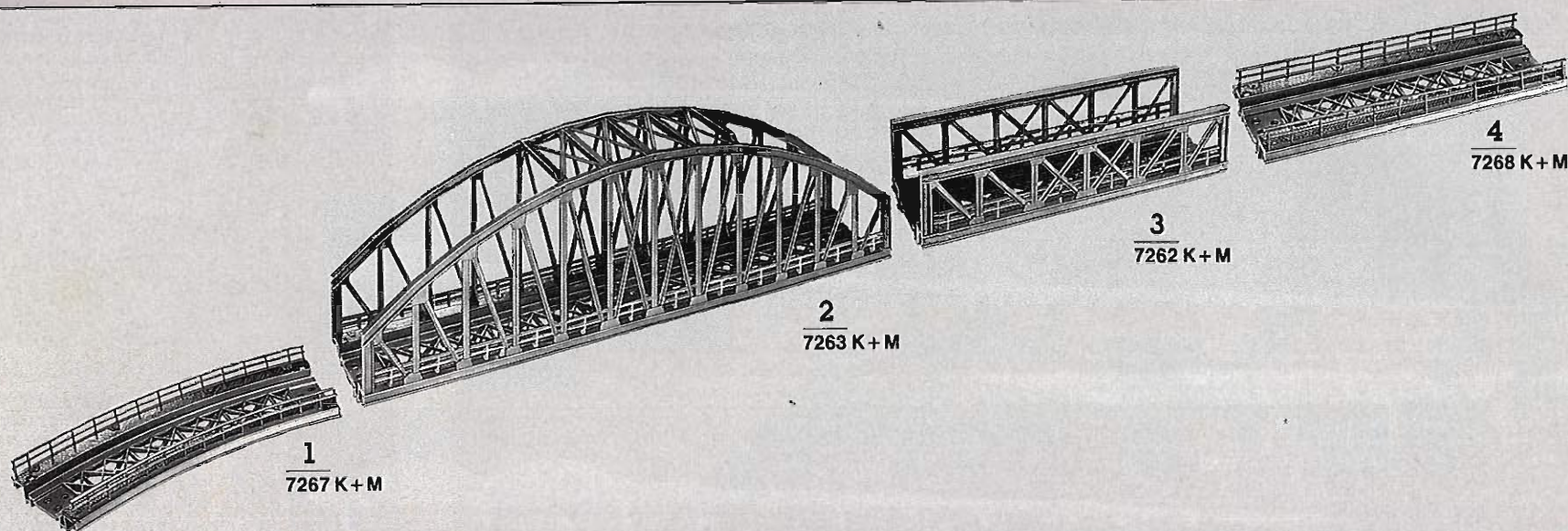
I	Pillar	7250	7251	7252	7253
No.	Height mm/inch	2,5 mm (3/32")	3 mm (1/8")	6 mm (1/4")	30 mm (1-3/16")
1	2,5 (3/32")	1			
2	5,5 (7/32")	1	1		
3	11,5 (29/64")	1	1	1	
4	20,5 (13/16")	1		3	
5	29,5 (1-5/32")	1	1	4	
6	38,5 (1-33/64")	1		1	1
7	47,5 (1-7/8")	1	1	2	1
8	56,5 (2-15/64")	1		4	1
9	65,5 (2-37/64")	1	1		2
10	71,5 (3-13/16")	1	1	1	2
11	74,5 (2-59/64")	1		2	2
Total		11	6	18	9

II	Pillar	7250	7251	7252	7253
No.	Height mm/inch	2,5 mm (3/32")	3 mm (1/8")	6 mm (1/4")	30 mm (1-3/16")
1	2,5 (3/32")	1			
2	5,5 (7/32")	1	1		
3	11,5 (29/64")	1	1	1	
4	20,5 (13/16")	1		3	
5	29,5 (1-5/32")	1	1	4	
6	38,5 (1-33/64")	1		1	1
7	47,5 (1-7/8")	1	1	2	1
8	56,5 (2-15/64")	1		4	1
9	65,5 (2-37/64")	1	1		2
10	74,5 (2-59/64")	1		2	2
11	83,5 (3-9/32")	1	1	3	2
12	92,5 (3-21/32")	1			3
13	98,5 (3-7/8")	1		1	3
14	101,5 (4-1/4")	1	1	1	3
15	104,5 (4-1/8")	1		2	3
Total		15	7	24	21

Pillar Requirements for K Track

III	Pillar	7250	7251	7252	7253
No.	Height mm/inch	2,5 mm (3/32")	3 mm (1/8")	6 mm (1/4")	30 mm (1-3/16")
1	2,5 (3/32")	1			
2	5,5 (7/32")	1			
3	11,5 (29/64")	1		1	
4	17,5 (11/16")	1	1	2	
5	26,5 (1-3/8")	1		4	
6	35,5 (1-13/32")	1	1		1
7	44,5 (1-3/4")	1		2	1
8	53,5 (2-7/64")	1	1	3	1
9	62,5 (2-15/32")	1			2
10	65,5 (2-37/64")	1	1		2
11	68,5 (2-54/64")	1		1	2
Total		11	4	13	9

IV	Pillar	7250	7251	7252	7253
No.	Height mm/inch	2,5 mm (3/32")	3 mm (1/8")	6 mm (1/4")	30 mm (1-3/16")
1	2,5 (3/32")	1			
2	5,5 (7/32")	1			
3	11,5 (29/64")	1		1	
4	17,5 (11/16")	1	1	2	
5	26,5 (1-3/8")	1		4	
6	35,5 (1-13/32")	1	1		1
7	44,5 (1-3/4")	1		2	1
8	53,5 (2-7/64")	1	1	3	1
9	62,5 (2-15/32")	1			2
10	65,5 (2-37/64")	1	1	1	2
11	68,5 (2-54/64")	1		3	2
12	89,5 (3-17/32")	1	1	4	2
13	95,5 (3-5/8")	1	1		3
14	98,5 (3-7/8")	1		1	3
Total		14	6	21	17



5
7269 for M only

6
7569 for K only

1
7267 K + M · Curved Ramp · Radius 360 mm (1' 2-1/16") · For K or M Tracks · Has 3 clips for securing K Tracks · Length and radius same as 2221 and 5100

2
7263 K + M · Through Bridge · For K or M Tracks · Has 6 clips for securing K Tracks · Instructions · Center height 117 mm (4-5/8") · Length 360 mm (1' 2-1/16")

3
7262 K + M · Truss Bridge · Can be used alone or with the 7263 through bridge · For K or M Tracks · Has 3 clips for securing K Tracks · Instructions · Height 45 mm (1-3/4") · Length 180 mm (7-3/32")

4
7268 · K + M · Straight Ramp · For K or M Tracks · Has 3 clips for securing K Tracks · Length 180 mm (7-3/32")

5
7269 for M only · Curved Ramp · Radius 437.4 mm (1' 5-1/8") · For 5200 M Tracks only · Length and radius same as 5200 track section

6
7569 for K only · Curved Ramp · Radius 424.6 mm (1' 4-3/4") · For K Tracks only (standard circle II, see page 36) · 3 clips for securing track · Length and radius same as 2231 track section

7
7234 · Base Plate · For securing 7200 series signal masts to bridges

8
7250 · Base Plate · For pillar foundation · 2.5 mm (1/16") thick

9
7251 · Base Plate · For use with the 7250 · 3 mm (1/8") thick

10
7252 · Pillar · 6 mm (1/4") high · For building ramps in 6 mm (1/4") increments

11
7253 · Pillar · 30 mm (1-3/16") high



7
7234



8
7250



9
7251

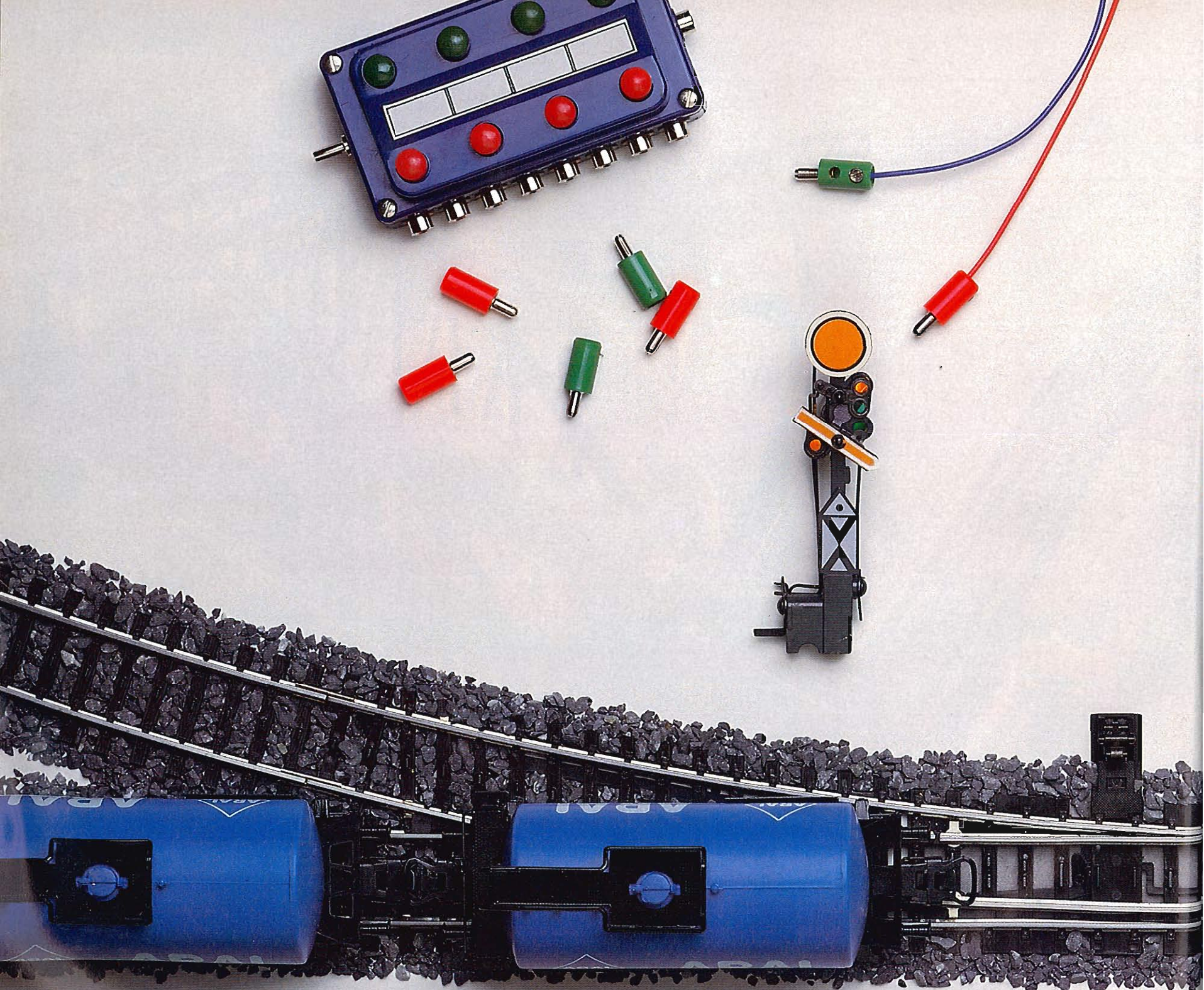


10
7252



11
7253





Märklin H0 – Operating a Railroad in the Right Dimension

The locomotives and cars offered by Märklin are detailed reproductions representing a broad spectrum of trains from around the world and from different historical periods. All of the rolling stock incorporates Märklin's proven technology along with its reliability and sturdiness.

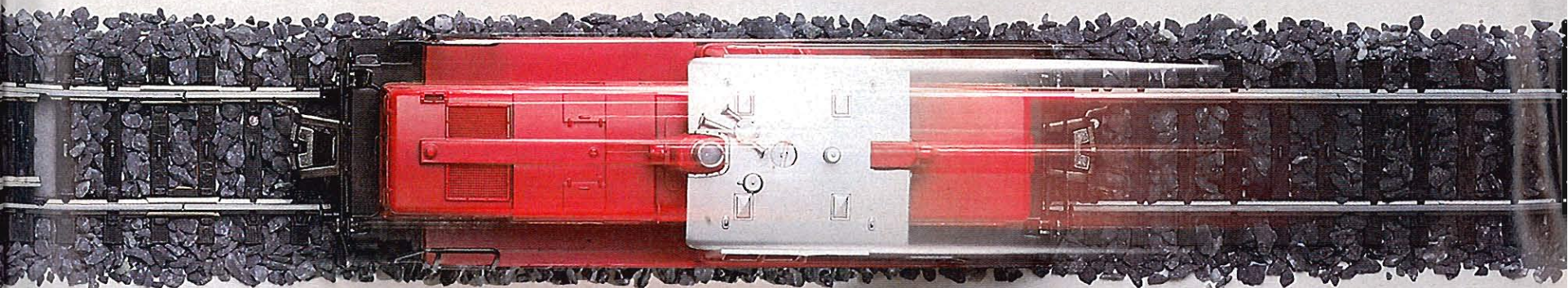
The unbeatable Märklin H0 center-stud system guarantees trouble-free operation. Locomotives receive current from a slider which glides over the studs. Thus, direction control is in the engine, not in the track. Thus, it is possible to have two trains running in opposite directions on the same circuit. This adds operational flexibility to any layout.

And for even greater fun when switching, many Märklin locomotives and cars come equipped with RELEX couplers and some engines also have TELEX couplers, such as the class 85 (page 60), class 86 (page 60) and the class 260 (page 70).

With RELEX couplers cars can be uncoupled as well as pre-uncoupled at the uncoupling track. Locomotives can continue to push pre-uncoupled cars until they are spotted where the operator wishes, and the cars will not recouple during this process. A lot of fun! Locomotives equipped with TELEX couplers can have their couplers activated anywhere on the layout via commands from the transformer.

With the easy Märklin H0 system the hobbyist is in complete control of his layout at all times. From the layout's command center the operator can run several trains simultaneously at different speeds, accelerate and decelerate them in a realistic manner, incorporate a fully-operational push-pull commuter service, control switches, route trains, work signals, illuminate all or parts of a layout, have a train operate trackside functions, etc., etc.

That is technology at play. Typical for Märklin H0.



Special Train Sets

Beautifully packaged, prototypically accurate models of real train sets, these special trains make treasured gifts. Most items in these sets are not available separately.





1

2854 · Mannesmann Pipe Train · Includes: 1 class 86 tank engine with new engine number, 6 special duty flat cars (floor centers pivot) lettered for DB and loaded with Mannesmann pipes and 1 package car with new car number and illuminated end markers · Entire train is a special run · Cars and locomotive not available separately · Train length 99.5 cm (3' 3-3/4")

■ Prior to 1968, steam power was used to haul pipes on nonelectrified routes of the DB. Between 1966 and 1968 some 500,000 tons of pipe were delivered annually to ports such as Bremen, Hamburg, and Rotterdam for export. Mannesmann pipes are used to carry oil, gas and water.

2

2858 · Passenger Train of the German Federal Railways · Includes: 1 class V 36 239 diesel, 1 1st and 2nd class four-wheel coach, and 3 individually numbered 2nd class four-wheel coaches · Entire train is a special run · Cars and diesel not available separately · Train length 79 cm (2' 7-1/2")

■ During the 1950s there was a huge demand for commuter service on the German Federal Railways. Because of a scarcity of equipment, V 36 diesels were pressed into commuter service, teamed up with standard coaches. The red livery on the cars denoted commuter cars.

These trains saw service in commuter districts as well as on branch lines.

1
2854

2 NEW
2858



1
2855



2
2856





1

2855 · EVA Unit Train · Includes: 1 class 212 diesel with new road number and 6 four-wheel tank cars lettered for Eisenbahn-Verkehrsmittel-Aktiengesellschaft (EVA) with individual car numbers · Entire train has a slightly weathered look · Cars and engine not available separately · Train length 81 cm (2' 7-1/8")

■ The Eisenbahn-Verkehrsmittel-Aktiengesellschaft (EVA) leases special duty cars to various industries. Petroleum products are transported in tank cars leased from EVA. In Germany, tank cars are privately owned or leased, the Federal Railways does not field tank cars of its own. EVA tank cars carry about 10 million tons of petroleum products to refineries, dealers and users each year.

2

2856 · Airport Train · Includes: 1 class 111 electric locomotive with new road number and single-arm pantograph, 1 1st and 2nd class commuter car and 2 2nd class commuter cars with individual road numbers · Entire train is a special run · Cars and engine not available separately · Train length 102 cm (3' 4-1/2") · Cars will accept interior lighting unit 7329 (page 139)

■ The Airport Train is a service of the German Federal Railways offering direct connections between Ludwigs- hafen and the Frankfurt (M) airport. The express commuter train makes two round trips daily, stopping at Mannheim, Weinheim, Heppenheim, Bensheim and Darmstadt.

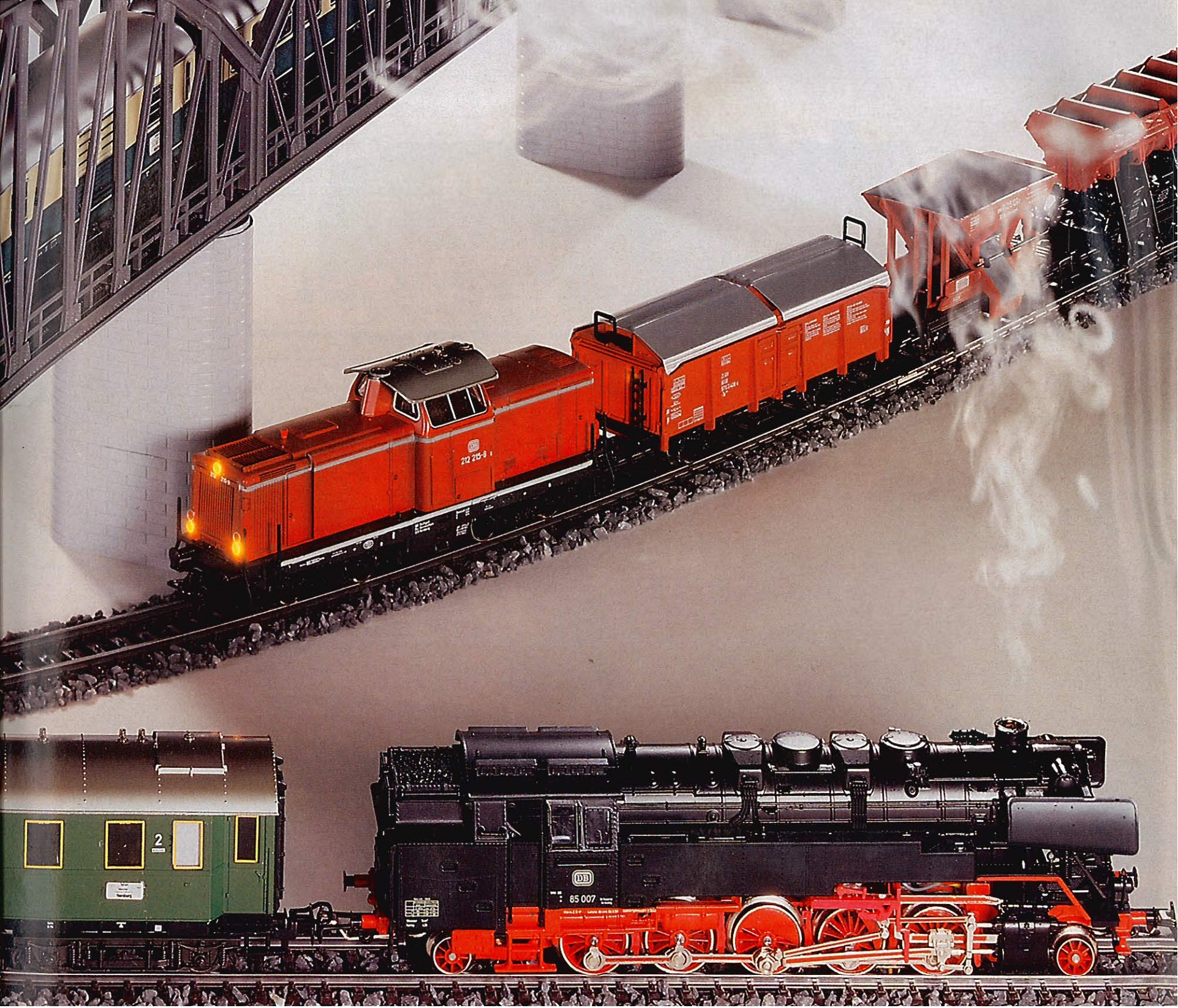
Clear Board – Let 'er Roll

When the early steam locomotives puffed, snorted and wheezed their way onto the stage of human history, a new age in travel unfolded. Railroads replaced rivers as the avenues of commerce. Today, the billowing plumes of smoke have been replaced by faint diesel exhausts or, in many cases, by overhead wires.

The development of motive power has been one of the most intriguing aspects of railroad history.

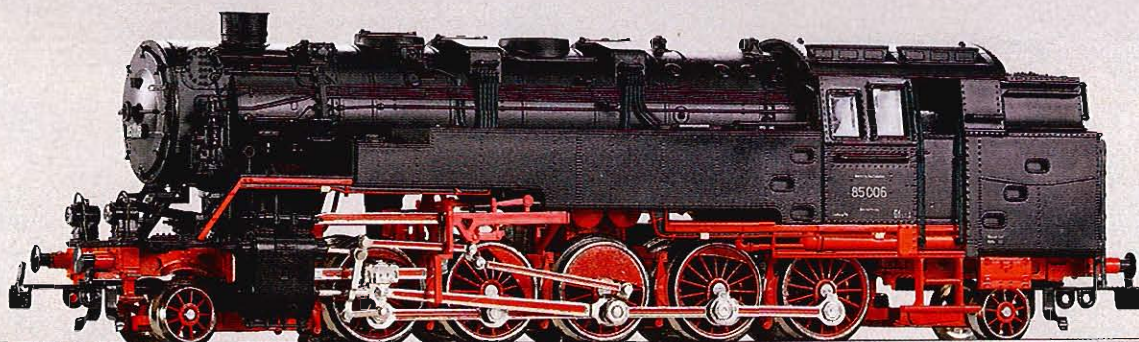
This variety of locomotives is evident in the assortment of locomotives available to power Märklin trains. Each engine gives a model railroad a clear board for experiencing the fun of the high iron.





1 NEW

3308



1

3308 · Tank Locomotive · Class 85 of the former German State Railways · All drivers powered · 4 non-skid tires · Illuminated double headlights at each end · Metal boiler · Highly detailed · Metal trucks · Driving wheels divided into two groups to negotiate sharp curves · Coupling hooks at each end · Electronic direction control switch · Length over buffers 18.6 cm (7-1/4") · will accept smoke unit set 7226 (page 67)

① = 7153 ② = 7164 ③ = 60010



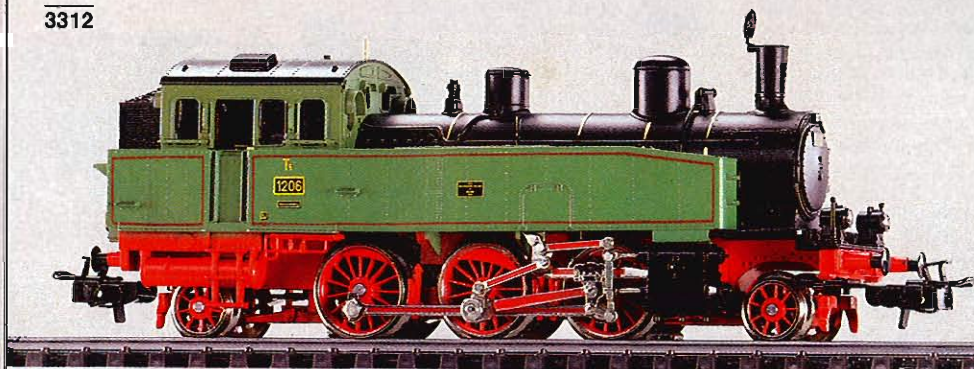
■ The Höllental (Hell's Valley) route of the German railroads between Freiburg and Titisee in the Black Forest was a cog railway until as recently as the 1930s because of the steep grades.

In 1932 and 1933, the German State Railways outshopped 10 new standard locomotives of the 85 class with a 2-10-2T wheel arrangement. These engines were so powerful that they could negotiate steep grades and, as a result, the Hell's Valley line was converted to conventional adhesion operation. Except for the 85 004, these locomotives remained in service on

this line until 1961. The 85 007 was transferred to Wuppertal-Vohwinkel for use as a helper on the Erkrath-Hochdahl grade.

The locomotives were rated at 1,500 psi and had a top speed of 80 kmph (50 mph).

2
3312



2

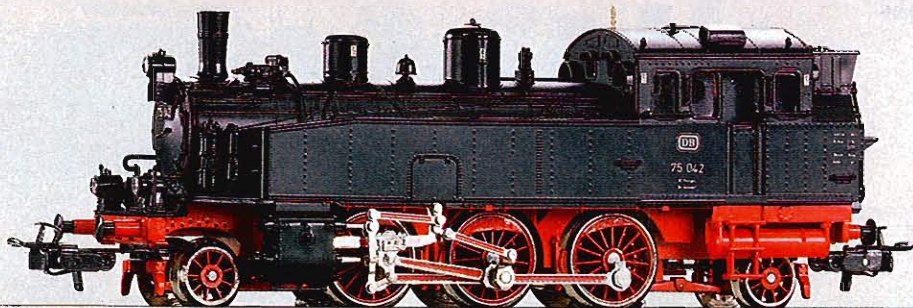
3312 · Tank Locomotive · No. 1206, a class T 5 of the former Royal Württemberg State Railways · All drivers powered · 2 non-skid tires · Illuminated double headlights at each end · Metal boiler · Removeable smokestack · Highly detailed · Metal trucks · RELEX-couplers (page 50) at each end · Electronic direction control switch · Length over buffers 14 cm (5-1/2")

0 = 7153 1 = 7185 2 = 60019

■ The class T 5 engines were built by the Esslingen and Heilbronn foundries from 1910 onward for the old Royal Württemberg State Railways. The engines were designed as fast passenger locomotives for crack limiteds. But they were so popular with the crews that they were used on all kinds of trains.

3 NEW

3313



3

3313 · Tank Locomotive · German Federal Railways' class 75 · All drivers powered · 2 non-skid tires · Illuminated triple headlights at each end · Metal boiler · Highly detailed · Metal trucks · RELEX-couplers (page 50) at each end · Electronic direction control switch · Length over buffers 14 cm (5-1/2")

0 = 7153 1 = 7185 2 = 60019

■ Almost all of the versatile T 5 tank engines of the old Royal Württemberg State Railways were acquired by the German State Railways after the merger and were re-classed as the 75°. Of the original 96, 89 units were assigned to the German Federal Railways. The last of them, the 75 042, was retired and scrapped in 1968, despite attempts to preserve it.

The 2-6-2T locomotives had a rating of 880 psi and a top speed of 80 kmph (50 mph). They could be found at the head of all kinds of trains, from local runs crack limiteds.

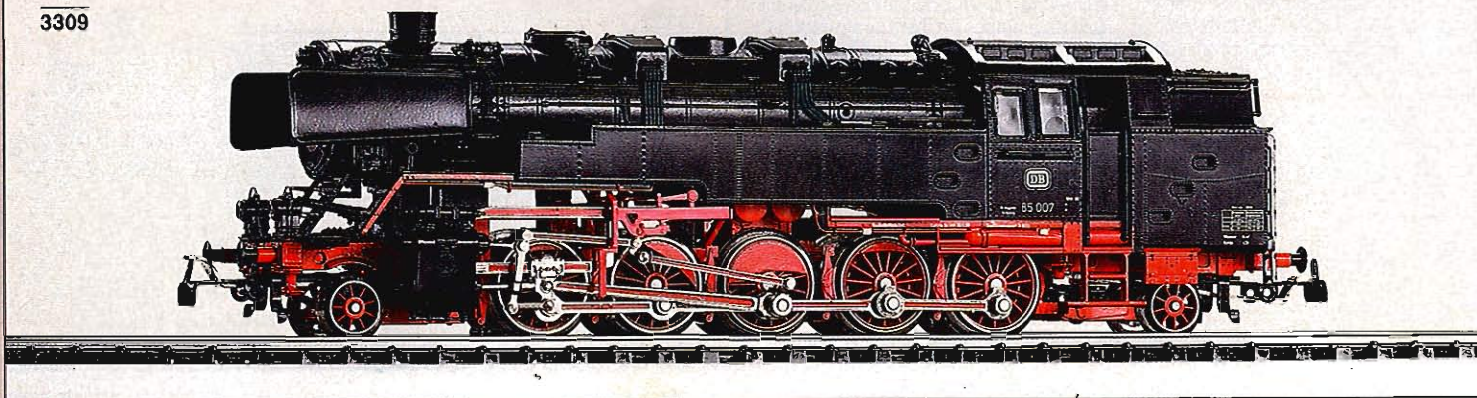
1

3309 · Tank Locomotive with TELEX Couplers · German Federal Railways' class 85 · All drivers powered · 4 non-skid tires · Illuminated triple headlight at each end · Metal boiler · Highly detailed · Metal frame · Drivers divided into two groups enabling the locomotive to negotiate sharp curves · TELEX couplers (page 50) at each end · Electronically controlled direction switch · Length over buffers 18.6 cm (7-1/4") · Accepts smoke unit 7226 (page 67)

① = 7153  = 7164  = 60019

1

3309



2

3096 · Tank Locomotive with TELEX Couplers · German Federal Railways' class 86 · All drivers powered · 2 non-skid tires · Illuminated triple headlights each end · Highly detailed · Metal underbody · TELEX couplers (page 50) at each end · Length over buffers 15.8 cm (6-1/2")

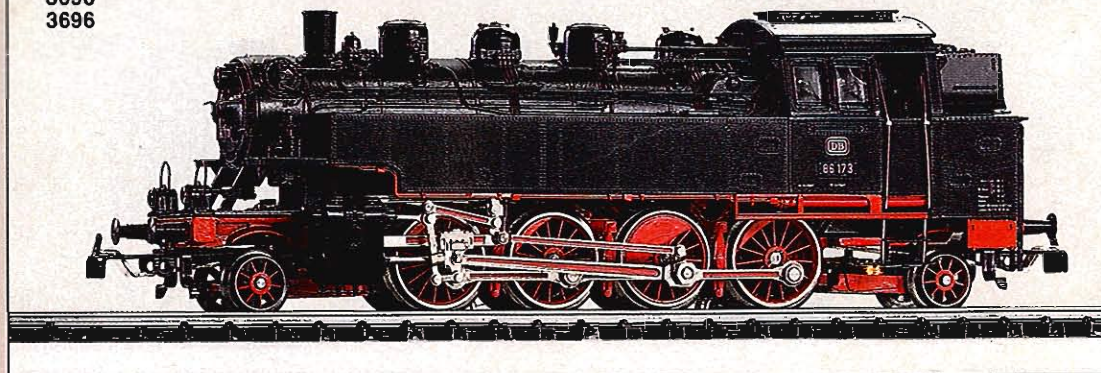
① = 7153  = 7164  = 60015

2

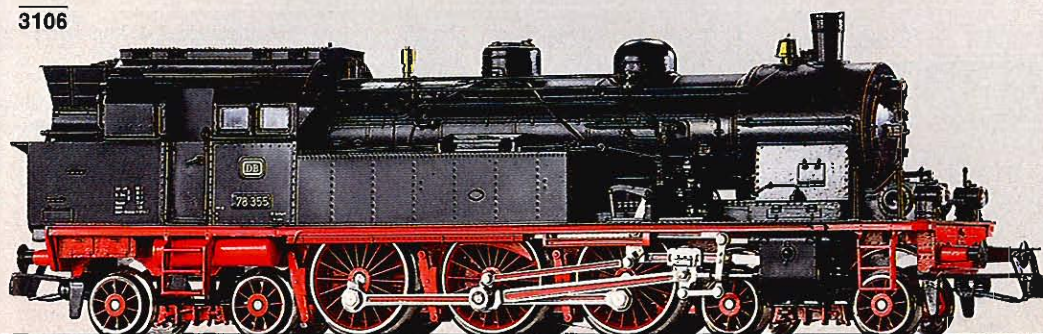
3696 · Digital Locomotive · Same as model 3096 but with a different road number and a built-in decoder · For use with Märklin digital H0 (pages 190–205)

① = 7153  = 7164  = 60015

2

3096
3696

3
3106



3

3106 · Tank Locomotive · German Federal Railways' class 78 · All drivers powered · 2 non-skid tires · Illuminated triple headlights at each end · Metal boiler · Highly detailed · Metal underbody · Coupling hooks with pre-uncoupler at each end · Length over buffers 16.9 cm (6-11/16")

0 = 7153 = 7164 9 = 60015

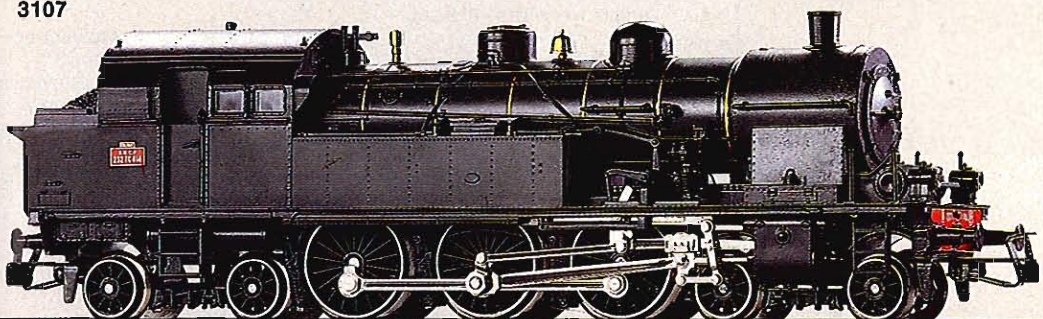
4 France

3107 · Tank Locomotive · French State Railways' (SNCF) class 232 TC · All drivers powered · 2 non-skid tires · Illuminated double headlights at each end · Metal boiler · Highly detailed · Metal underbody · Coupling hooks with pre-uncoupler at each end · Length over buffers 16.9 cm (6-11/16")

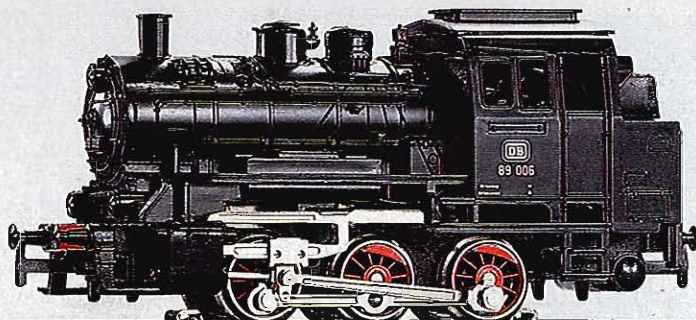
0 = 7153 = 7164 9 = 60015

■ From 1915 to 1918, the Vulcan Locomotive Foundry in Stettin built 27 Prussian class T 18 engines for the Alsace-Lorraine Railways. These units were acquired by France in 1918 and were rostered on the French State Railways where they were classed 232 TC, Nos 401-427 (ex-AL 8401-8427).

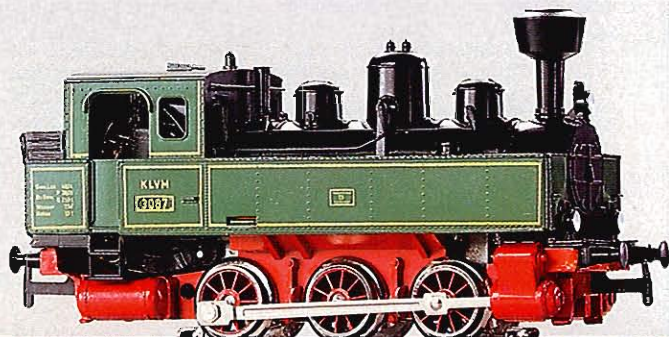
4
3107



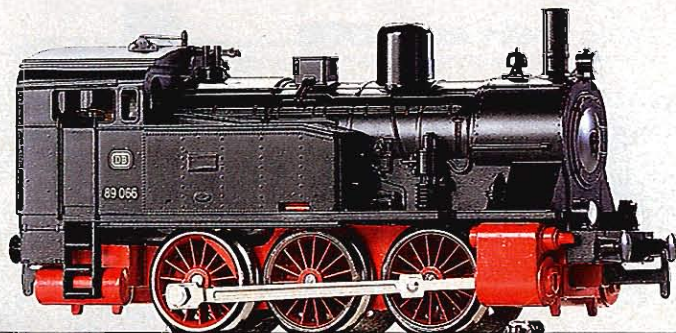
1
3000



2
3087



3
3104



1

3000 · Tank Locomotive · Class 89 · All drivers powered · 2 non-skid tires · Three working headlights · Metal trucks · Coupling hooks at each end · Length over buffers 11 cm (4-15/16")

⊖ = 7154 ⊞ = 7185 ♀ = 60010

2

3087 · Tank Locomotive · German provincial railways' type · One pair of drivers powered · 2 non-skid tires · Metal trucks · Coupling hooks at each end · Length over buffers 10.8 cm (4-1/4")

⊖ = 7154 ⊞ = 7185

3

3104 · Tank Locomotive · German Federal Railways' class 89° · One pair of drivers powered · 2 non-skid tires · Metal trucks · Coupling hooks at each end · Length over buffers 10.8 cm (4-1/4")

⊖ = 7153 ⊞ = 7185

4

3003 · Locomotive with Tender · German Federal Railways' class 24 · All drivers powered · 2 non-skid tires · Three working headlights · Metal trucks · Coupling hooks at the front · RELEX-coupler (page 50) at rear of tender · Length over buffers 20 cm (7-7/8")

⊖ = 7153 ⊞ = 7185 ♀ = 60010

5

3095 · Tank Locomotive · German Federal Railways' class 74 · All drivers powered · 2 non-skid tires · Three working headlights · Metal trucks · Coupling hook with pre-uncoupler at the front · RELEX-coupler (page 50) at the rear · Length over buffers 13.5 cm (5-5/16")

⊖ = 7153 ⊞ = 7185 ♀ = 60010

6

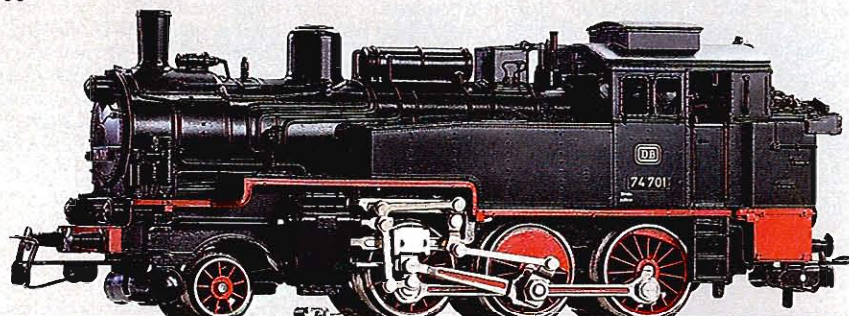
3089 · Streamlined Express Locomotive with Tender · Class 03¹⁰ · Driving axles powered via connecting rods · 2 non-skid tires · Two working headlights · Metal body · Metal trucks · RELEX-coupler (page 50) on tender · Length over buffers 27.4 cm (10-3/4")

⊖ = 7152 ⊞ = 7185 ♀ = 60015

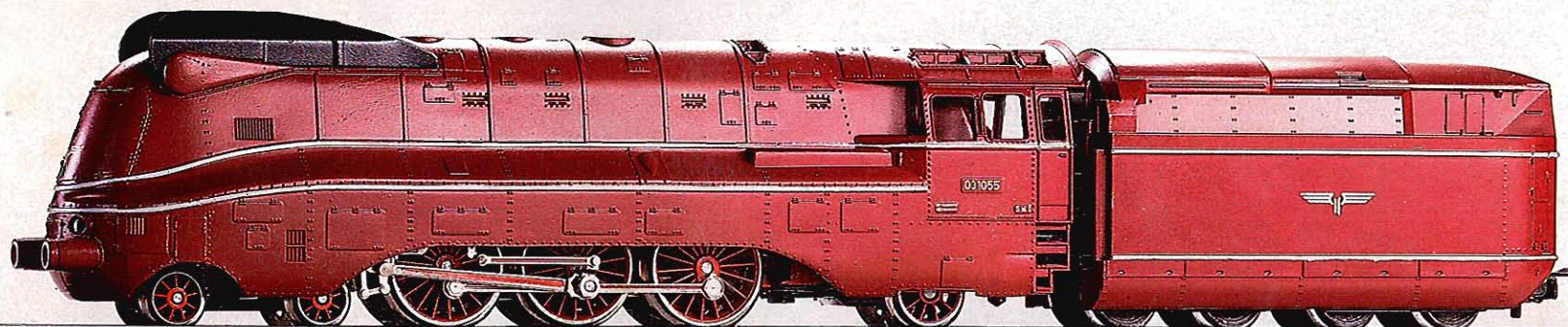
4
3003



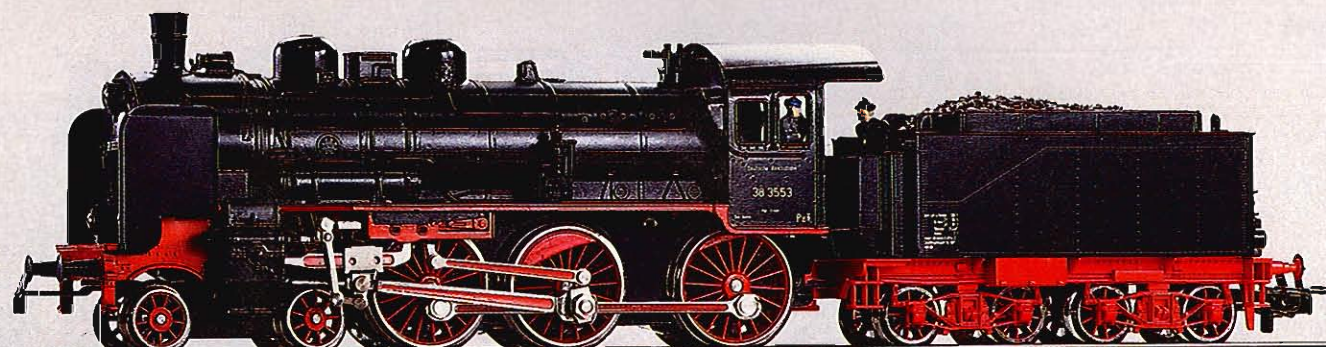
5
3095



6
3089



1
3099



1

3099 · Locomotive with Tender · Former German State Railways' class 38 · All drivers powered · 2 non-skid tires · Three working headlights · Metal body · Metal trucks · Engineer and fireman figures · Coupling hook at the front, RELEX-coupler (page 50) at rear of tender · Length over buffers 21.8 cm (8-9/16")

①=7152 ②=7185 ③=60015

2

3085 · Express Locomotive with Tender · German Federal Railways' class 003 · All drivers powered · 2 non-skid tires · Three working headlights · Metal boiler · Metal trucks · RELEX-couplers (page 50) on tender · Length over buffers 27.7 cm (10-7/8") · Accepts smoke unit 7226 (page 67)

①=7152 ②=7164 ③=60015

3

3092 · Express Locomotive with Tender · Royal Bavarian State Railways' class S 3/6, series i · Driving axles powered via connecting rods · 2 non-skid tires · Three working headlights · Metal body · Metal trucks · RELEX-coupler (page 50) on tender · Length over buffers 24.9 cm (9-13/16") · Accepts smoke unit (Seuthe No. 20)

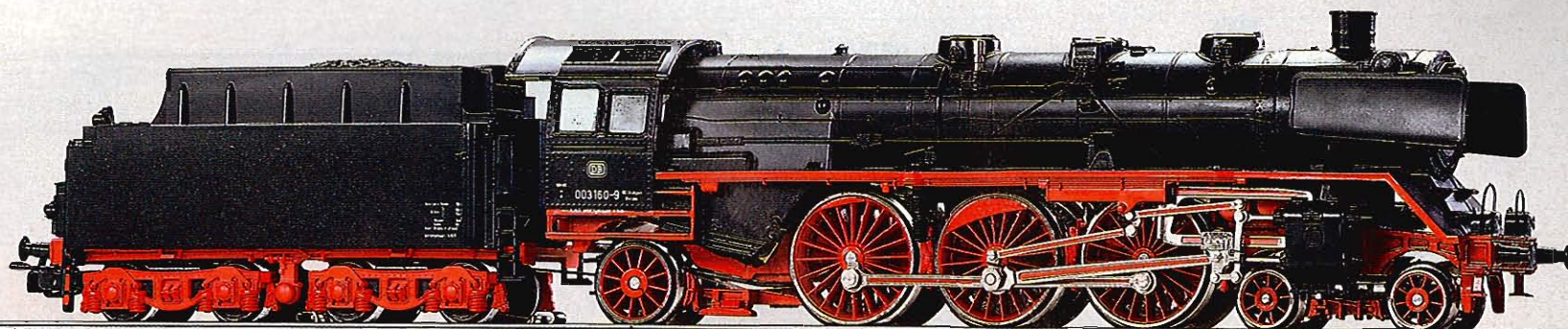
①=7152 ②=7185 ③=60015

4

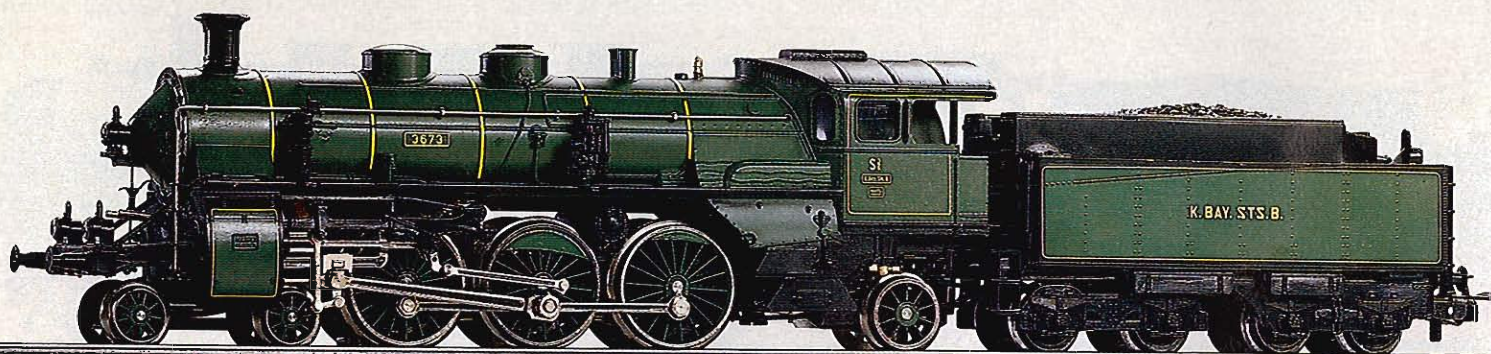
3093 · Express Locomotive with Tender · German Federal Railways' class 18⁴ (ex-Bavarian S 3/6) · Driving axles powered via connecting rods · 2 non-skid tires · Three working headlights · Metal body · Metal trucks · RELEX-coupler (page 50) on tender · Length over buffers 24.9 cm (9-13/16") · Accepts smoke unit (Seuthe No. 20)

①=7152 ②=7185 ③=60015

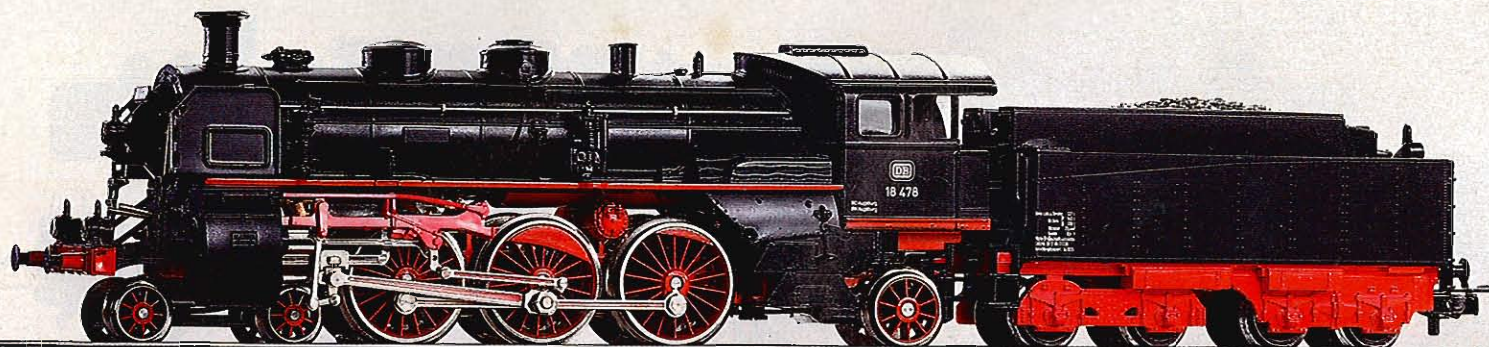
2
3085



3
3092

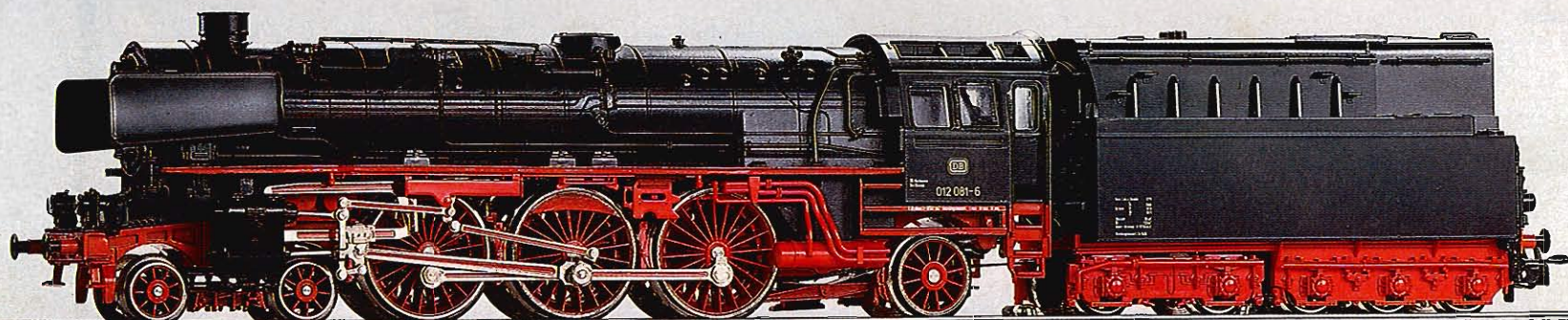


4
3093



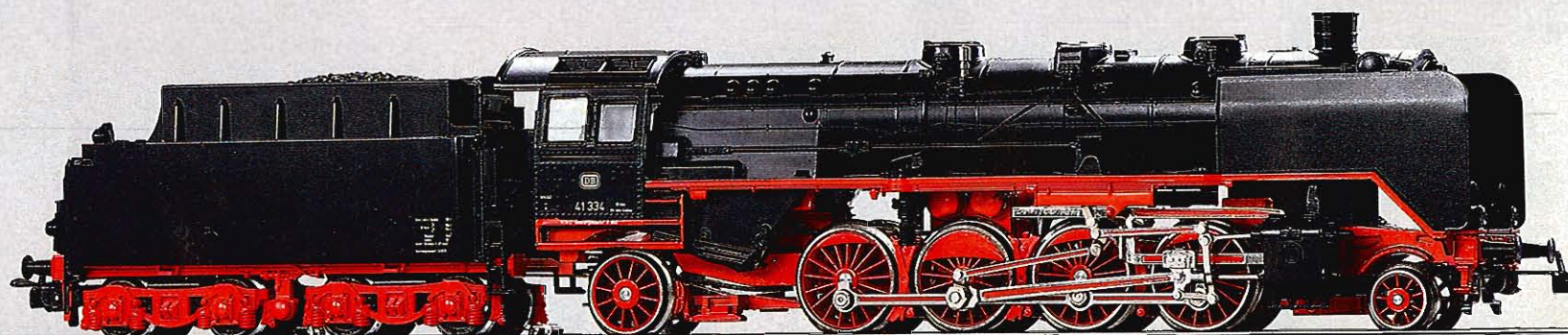
1

3310
3610



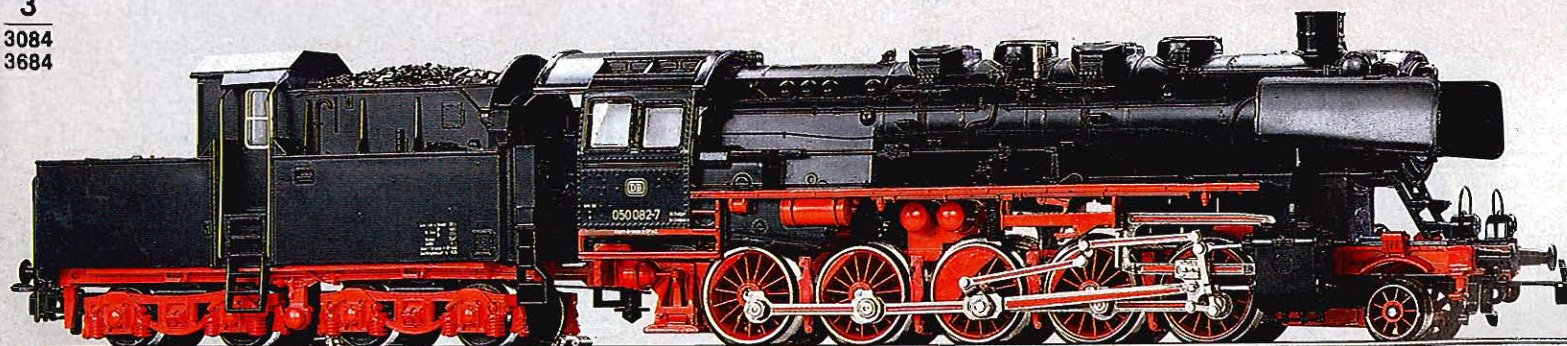
2

3082



3

3084
3684



1

3310 · Express Locomotive with Tender · German Federal Railways' class 012 · All drivers powered · 2 non-skid tires · Illuminated triple headlights at front of locomotive and at rear of tender · Metal boiler · Highly detailed · Metal underbody · RELEX couplers (page 50) on tender · Electronically controlled direction switch · Length over buffers 27.8 cm (11") · Accepts smoke unit 7226

0 = 7152  = 7164  = 60019

1

3610 · Digital Locomotive · Same as model 3310 but with a different road number and a built-in decoder · For use with Märklin digital H0 (pages 190–205)

0 = 7152  = 7164  = 60010

■ The former German State Railways class 01st streamlined locomotives which were acquired by the German Federal Railways received new welded high-capacity boilers from 1953 until 1957. From 1956 to 1958, 34 units were converted to oil-burners so they could run for 450 km or more (280 miles or more) according to the boiler's rated output. A second main burner was installed in 1961. As a result of this rebuilding, the class 012 was the most powerful German steam locomotive.

2

3082 · Freight Locomotive with Tender · German Federal Railways' class 41 · All drivers powered · 2 non-skid tires · Illuminated triple headlights · Metal boiler · Highly detailed · Metal underbody · Coupling hooks in front, RELEX couplers (page 50) on the tender · Length over buffers 27.5 cm (10-3/4") · Accepts smoke unit 7226

0 = 7153  = 7164  = 60015

3

3084 · Freight Locomotive · Brake-man's Cab on Tender · German Federal Railways' class 050 · All drivers powered · 4 non-skid tires · Illuminated triple headlights · Metal boiler · Highly detailed · Metal underbody · Drivers divided into two groups enabling the locomotive to negotiate sharp curves · Coupling hooks in front, RELEX couplers (page 50) on tender · Length over buffers 26.1 cm (10-1/4") · Accepts smoke unit 7226

0 = 7153  = 7164  = 60015

3

3684 · Digital Locomotive · Same as model 3084, but with a different road number and built-in decoder · For use with Märklin digital H0 (pages 190–205)

0 = 7153  = 7164  = 60015

7226 · Smoke Unit · For use with Locomotives 3082, 3084, 3085, 3102, 3308, 3309, 3310, 3610, 3684 · Includes smoke-stack, cleaning wire, tweezers, and a capsule of smoke fluid

0241 · Smoke Oil · Refills, in plastic capsules, for smoke unit 7226



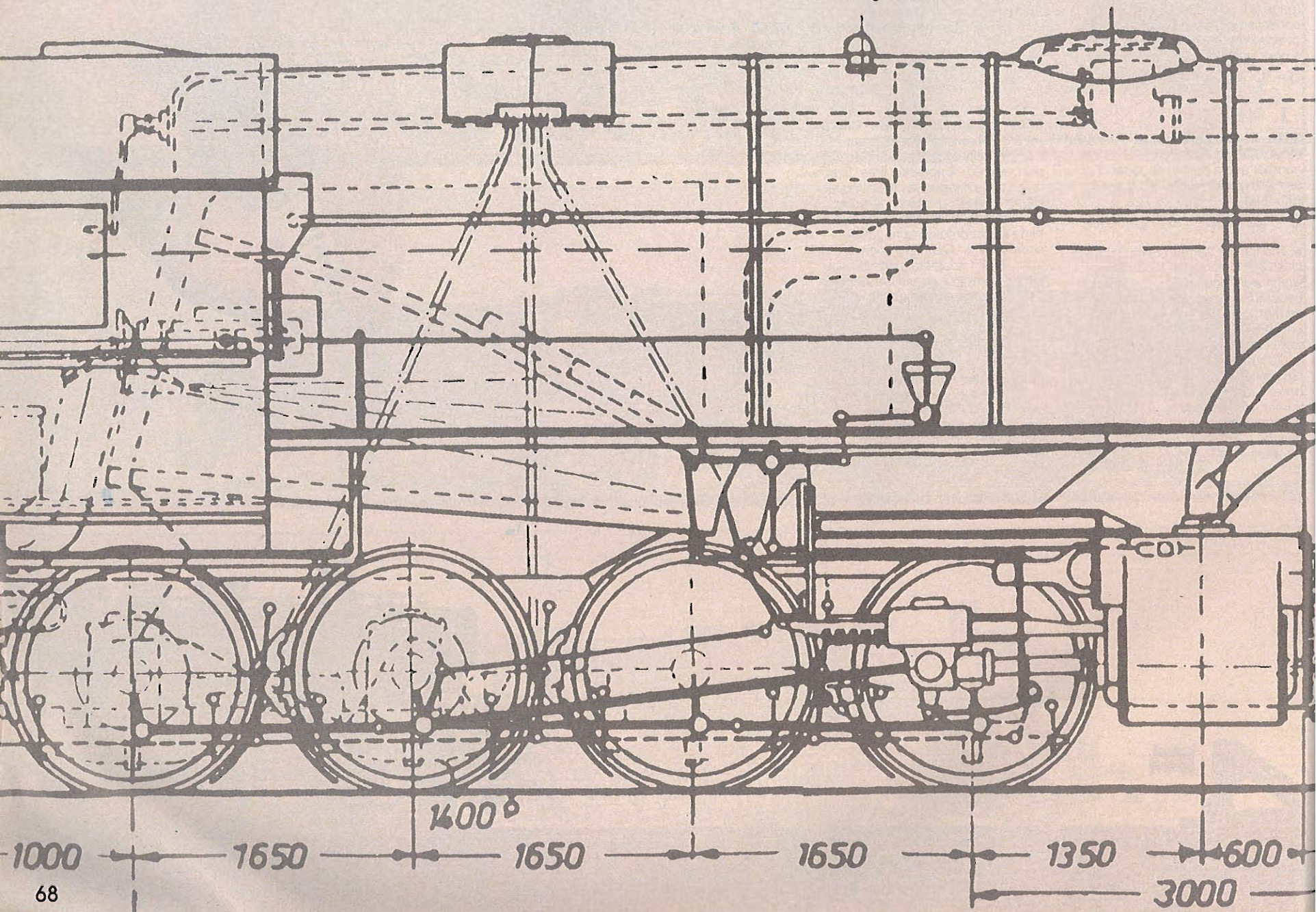
The Engine, That Was Never Built.

■ In 1943, the former German State Railways offered several locomotive foundries the commission to develop an extra-heavy freight locomotive. The proposed engine was to be able to drag 1,700 tons up an 0.8% grade, have a curve with a radius of 360 meters (1,181') while maintaining a speed of 20 kmph (12.5 mph) and a maximum speed of 80 kmph

(50 mph) in either direction. Its axle weight must be 20 tons and the locomotive must be able to negotiate switches 1:7 with 140 meter (459') curves and also be able to fit on a 23 meter (75' 6") turntable.

In addition, the locomotive had to be constructed as rationally as possible within the building guidelines then in effect. Along with other foundries'

designs, the Borsig Foundry submitted two proposals. Their first model was a (2-6) Dh4G 78.20 having a boiler with a circumference somewhere between 2 and 2.2 meters (6' 6" to 7' 3") and a length of 6 meters (19' 8"). It was to have two sets of drivers, Mallet fashion and the front of the long boiler rested on the bolster of the front drivers.



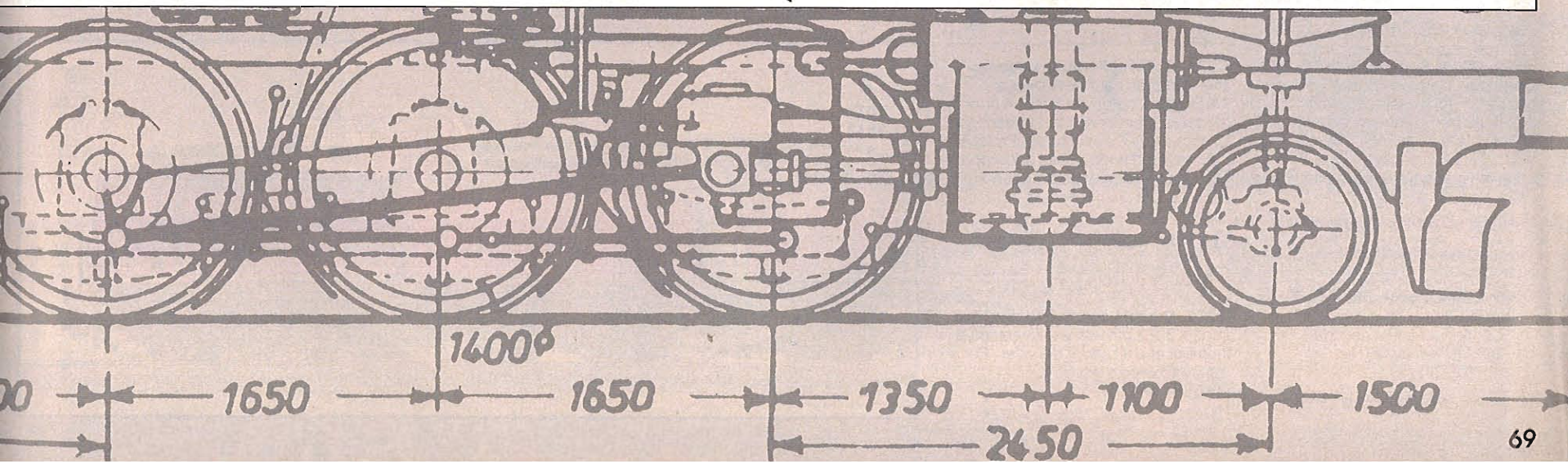
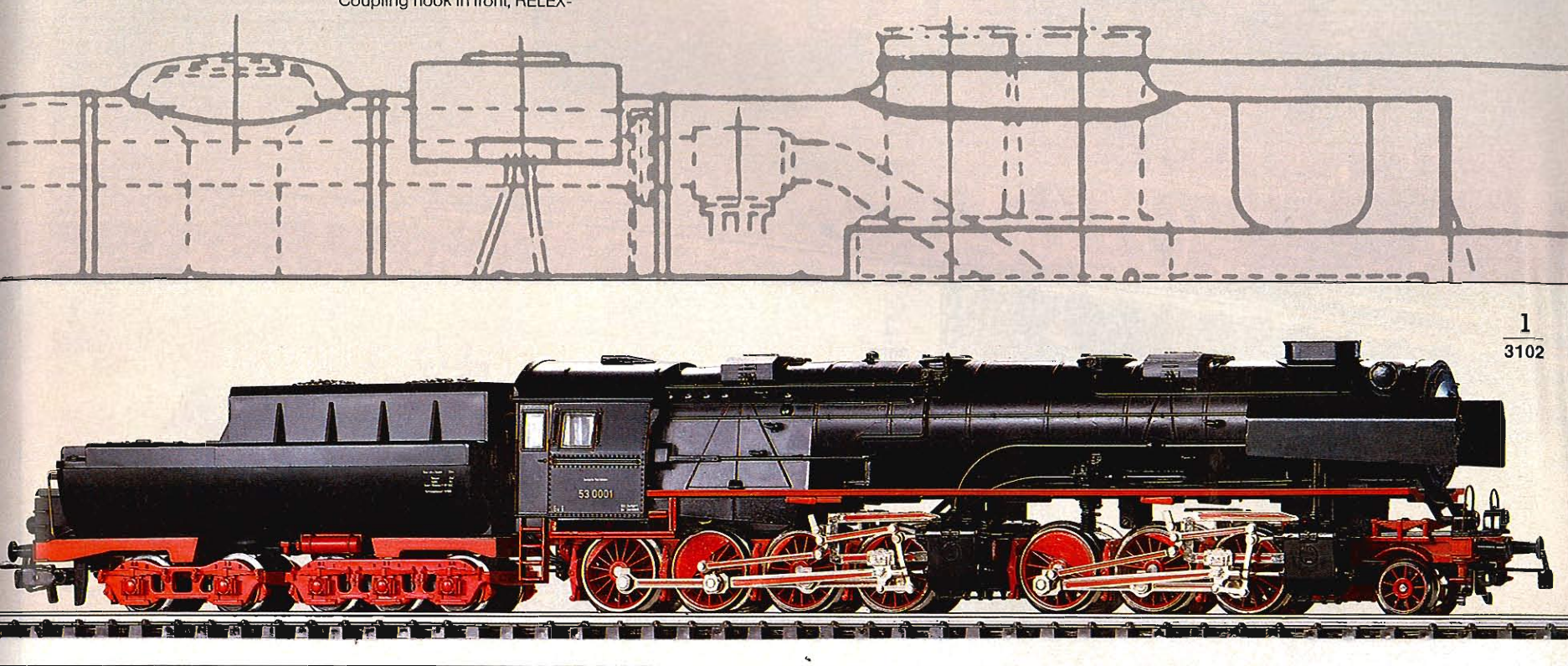
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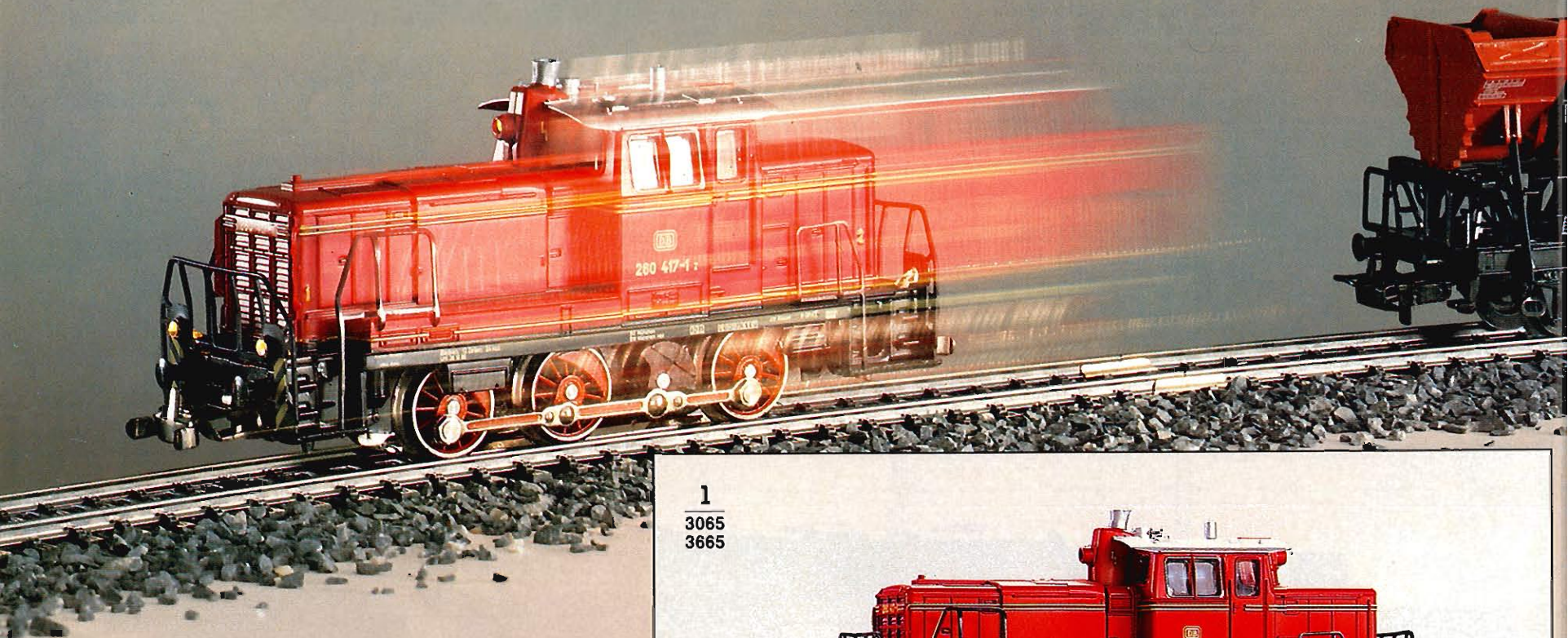
This locomotive would definitely have been a practical, simple yet powerful workhorse. In any event, this engine with its double Heusinger valve gears was never built. She is available, however, as a Märklin model.

3102 · Heavy Freight Locomotive with Tender · Based on a Borsig design for the former German State Railways · Mallet type · 8 drivers powered · 4 non-skid tires · Two working headlights at front of locomotive and at rear of tender · Metal boiler · Metal trucks · Good cornering ability because drivers are coupled · Coupling hook in front, RELEX-

coupler (page 50) on tender · Length over buffers 31.4 cm (1' 3/8") · Accepts two smoke units 7226 (page 67)

0=7153 =7185 =60015





1
3065
3665



2
3072
3672

1
3065 · Diesel Switcher with TELEX Couplers · German Federal Railways' class 260 · All wheels powered · 2 non-skid tires · Illuminated triple headlights at each end · Colorful body · Metal underbody · TELEX couplers (page 50) at each end · Length over buffers 12 cm (4-3/4")
0=7153 ☞=7185 ♀=60010

1
3665 · Digital Locomotive · Same as model 3065 but with a different road number and a built-in decoder · For use with Märklin digital H0 (pages 190-205)
0=7153 ☞=7185 ♀=60010

2
3072 · General Purpose Locomotive · German Federal Railways' class 212 · One power truck · 4 non-skid tires · Illuminated triple headlights at each end · Colorful body · Prototypically tapered ends · Metal underbody · RELEX couplers (page 50) at each end · Length over buffers 14.1 cm (5-9/16")
0=7154 ☞=7164 ♀=60010

2
3672 · Digital Locomotive · Same as model 3072 but with a different road number and a built-in decoder · For use with Märklin digital H0 (pages 190-205)
0=7154 ☞=7164 ♀=60010



3

3021



3

3021 · Express Diesel Locomotive · German Federal Railways' class 220 · One power truck · 4 non-skid tires · Illuminated triple headlights at each end · Metal body · Metal underbody · Coupling hooks with pre-uncoupler at each end · Length over buffers 21 cm (8-1/4")

0 = 7154 = 7183 9 = 60010

4

3075 · General Purpose Diesel Locomotive · German Federal Railways' class 216 · One power truck · 4 non-skid tires · Illuminated triple headlights at each end · Colorful body · Metal underbody · RELEX couplers (page 50) at each end · Length over buffers 18.2 cm (7-3/16")

0 = 7154 = 7164 9 = 60015

4

3075



1

3141 · Diesel Switcher · German Federal Railways' class 260 · All wheels powered · 2 non-skid tires · Illuminated triple headlights at each end · Colorful body · Metal underbody · Coupling hooks with pre-uncoupler at each end · Length over buffers 12 cm (4-3/4")

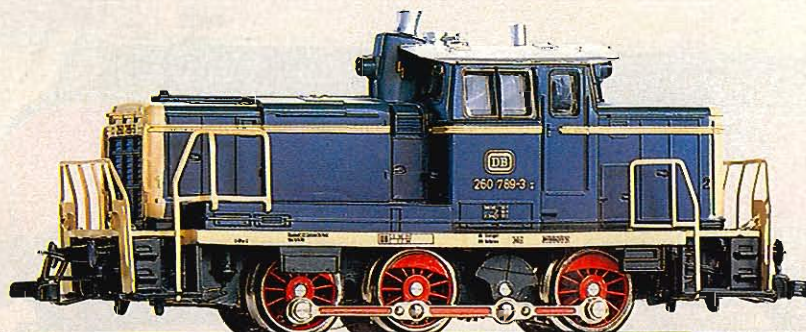
①=7153 ②=7185 ③=60010

2

3147 · General Purpose Diesel Locomotive · German Federal Railways' class 212 · One power truck · 4 non-skid tires · Illuminated triple headlights at each end · Colorful body · Prototypically tapered ends · Metal underbody · RELEX couplers (page 50) at each end · Length over buffers 14.1 cm (5-5/16")

①=7154 ②=7164 ③=60010

1
3141



2
3147



3

3081 · Express Diesel · German Federal Railways' class 220 · One power truck · 4 non-skid tires · Illuminated triple headlights at each end · Metal body · Metal underbody · Coupling hooks with pre-uncoupler at each end · Length over buffers 21 cm (8-1/4")

①=7154 =7183 =60010

■ The graceful V 200 was the 1953 prototype for the powerful dual motor diesel developed by the German Federal Railways to replace an assortment of older freight and passenger units. Its power output reached 2,000 kW. Top speed was 140 kmph (87 mph). The original lot of 153 featured a red and gray livery but many of these 220 and 221s have been painted in the new ocean blue and cream colors.

4

3074 · General Purpose Diesel Locomotive · German Federal Railways' class 216 · One power truck · 4 non-skid tires · Illuminated triple headlights at each end · Colorful body · Metal underbody · RELEX couplers (page 50) at each end · Length over buffers 18.2 cm (7-3/16")

①=7154 =7164 =60015

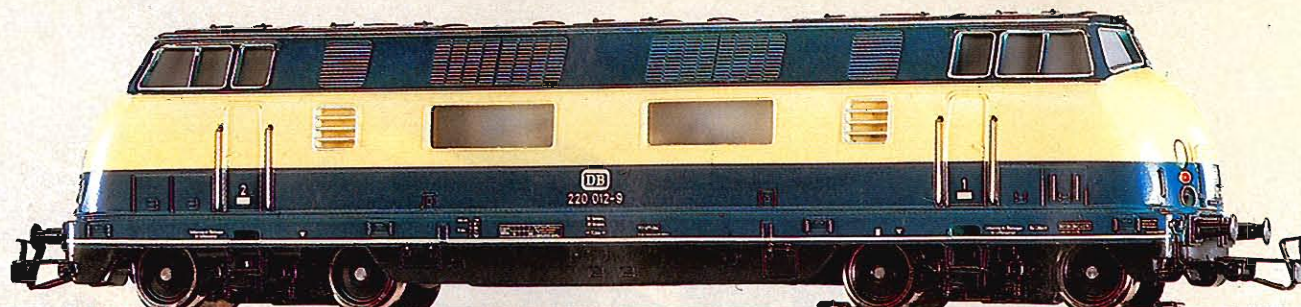
4

3674 · Digital Locomotive · Same as model 3074 but with a different road number and built-in decoder · For use with Märklin digital H0 (pages 190-205)

①=7154 =7164 =60015

3

3081



4

3074
3674

1

3146 · Diesel Locomotive · German Federal Railways' class 236 · All drivers powered · 2 non-skid tires · Illuminated triple headlights at each end · Colorful body · Metal underbody · RELEX couplers (page 50) at each end · Length over buffers 10.6 cm (4-3/16")

0 = 7154  = 7185  = 60015

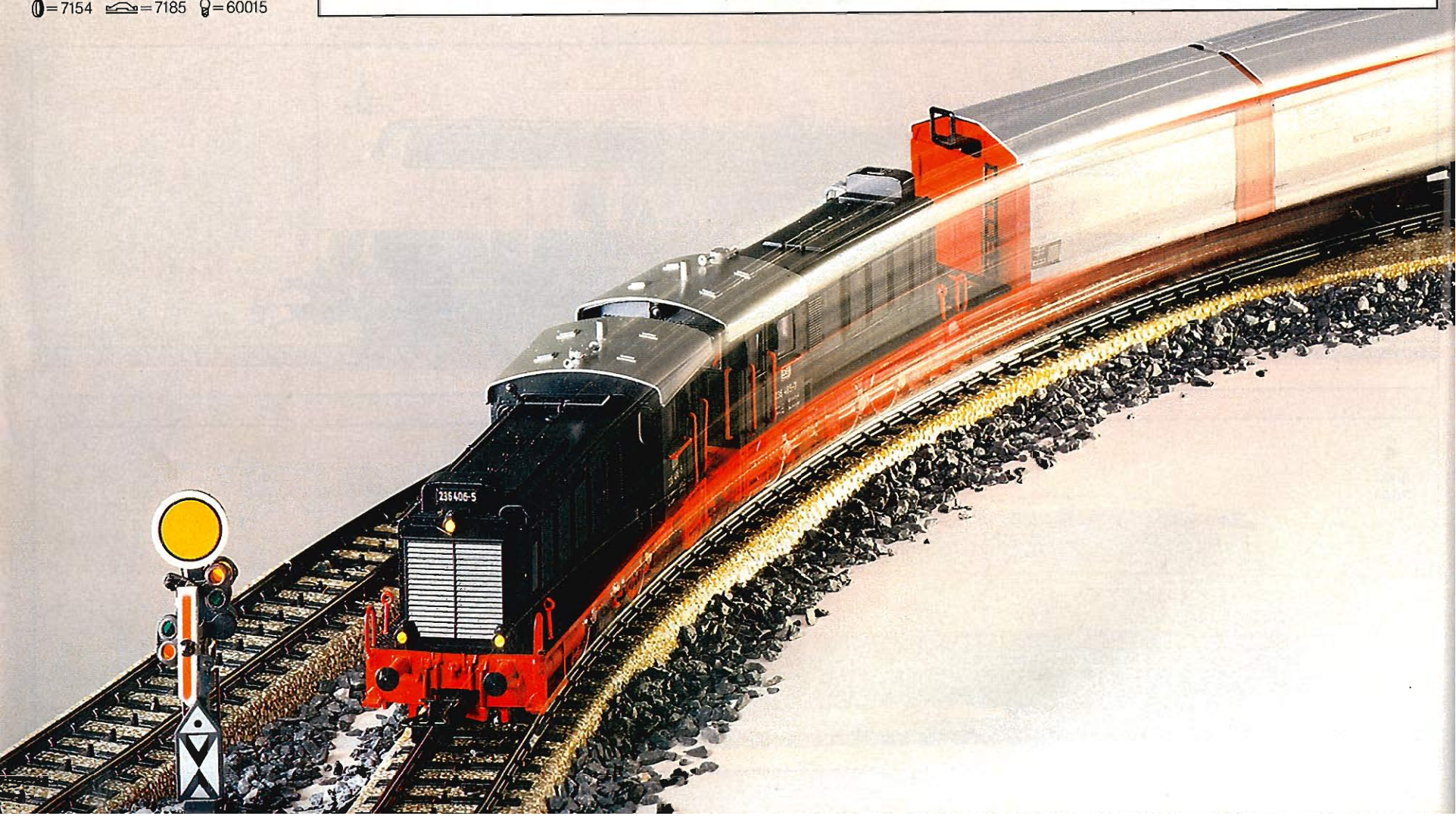
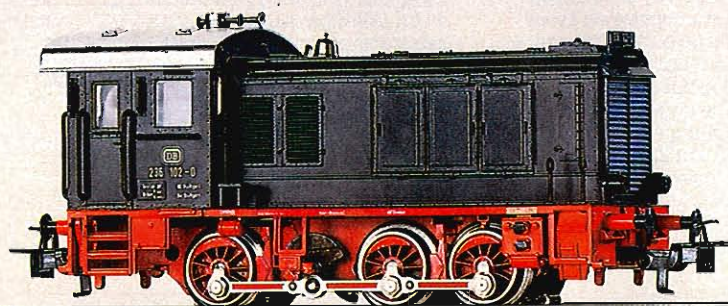
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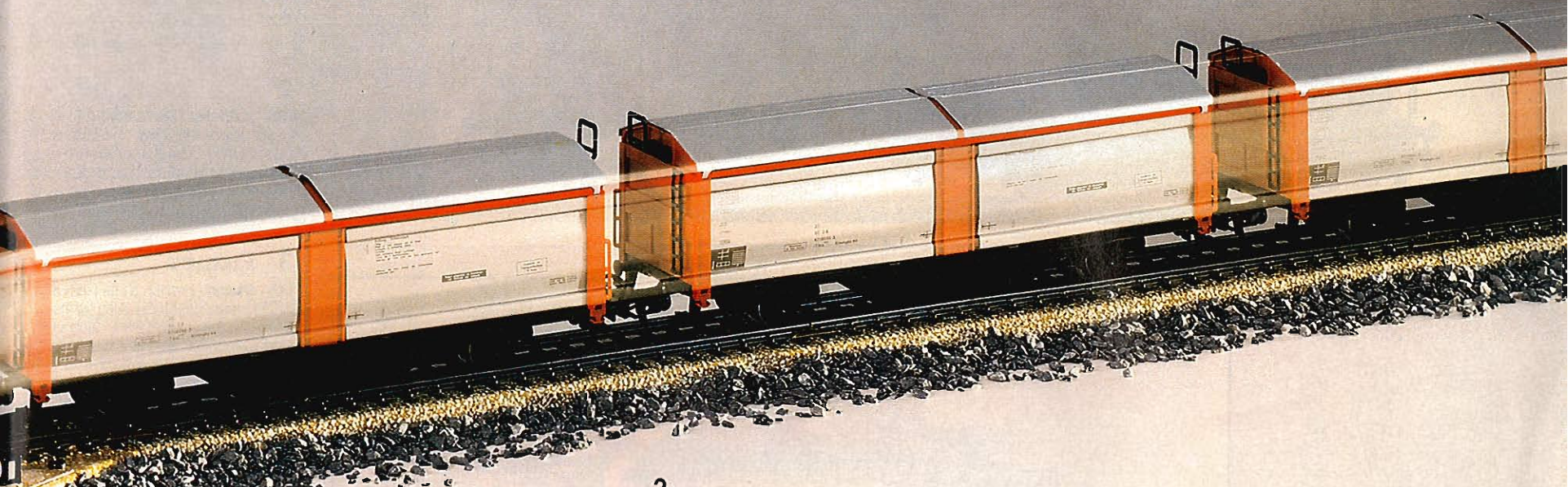
3646 · Digital Locomotive · Same as model 3146 but with a different road number and a built-in decoder · For use with Märklin digital H0 (pages 190-205)

0 = 7154  = 7185  = 60015

1

3146
3646





2

3346 · Twin Unit Diesel · German Federal Railways' class 236 · 2 units permanently coupled · All wheels powered · 4 non-skid tires · 2 motors · Illuminated triple headlights at each end · Colorful body · Metal underbody · RELEX couplers (page 50) at each end · Electronically controlled

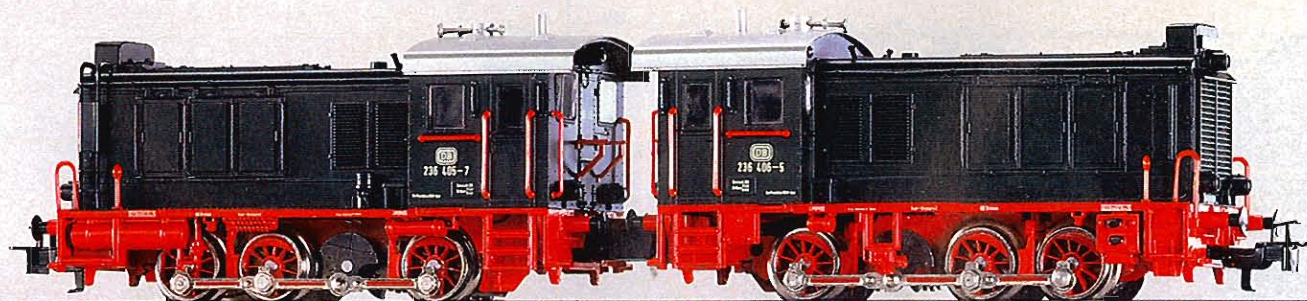
direction switch · Length over buffers 21.4 cm (8-½")

①=7154 ②=7185 ③=60019

■ A single class 236 often does not have enough power to move certain trains. For this reason, these diesels are usually operated in tandem. In fact, they were designed with such an operation method in mind and both diesels can be controlled from a single cab.

2

3346



1
3078



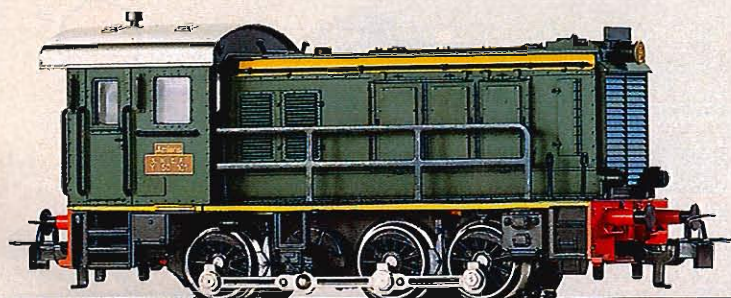
1
3078 · Industrial Switcher · Type DHG 500 · All wheels powered · 2 non-skid tires · Illuminated triple headlights at each end · Colorful body · Metal underframe · Coupling hooks at each end · Length over buffers 11.2 cm (4-3/8")
 ⌀ = 7154  = 7185  = 60015

2
3080



2
3080 · Industrial Switcher · All wheels powered · 2 non-skid tires · Colorful body · Metal underframe · Coupling hooks at each end · Length over buffers 11.2 cm (4-3/8")
 ⌀ = 7154  = 7185

3
3145



3 **France**
3145 · Diesel · French State Railways' (SNCF) class Y 50 100 · All wheels powered · 2 non-skid tires · Illuminated double headlights at each end · Colorful body · Metal underframe · RELEX couplers (page 50) at each end · Length over buffers 10.6 cm (4-3/16")
 ⌀ = 7154  = 7185  = 60015

4 Denmark

3067 · Multi-Purpose Diesel · Danish State Railways' (DSB) class My 1100 · One power truck · 4 non-skid tires · Illuminated triple headlights at each end · Metal body · Metal trucks · Coupling hooks at each end · Length over buffers 20.5 cm (8-1/16")

0=7154 =7164 Q=60015

5 Belgium

3149 · Switcher · Belgian State Railways' (NMBS/SNCB) class 80 · All wheels powered · 2 non-skid tires · Illuminated double headlights at each end · Colorful body · Metal under-frame · Coupling hooks with pre-uncoupler at each end · Length over buffers 12 cm (4-3/4")

0=7153 =7185 Q=60010

6 Belgium

3066 · Multi-Purpose Diesel · Belgian State Railways' (NMBS/SNCB) class 204 · One power truck · 4 non-skid tires · Illuminated triple headlights at each end · Metal body · Metal trucks · Coupling hooks at each end · Length over buffers 20.5 cm (8-1/16")

0=7154 =7164 Q=60015

4
3067



5
3149



6
3066



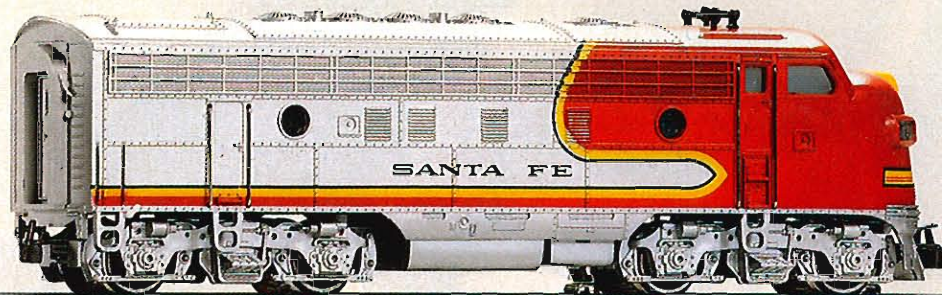
1 USA

3060 · Diesel · General Motors EMD F-7 lettered for the Atchison, Topeka and Santa Fe · One power truck · 4 non-skid tires · Illuminated double headlights · Metal body · Metal trucks · Coupling hooks with pre-uncoupler at cab end · RELEX-coupler (page 50) at other end · Length 17.5 cm (7-7/8")

0=7154 =7185 =60015

1
3060





2
4060

2 USA

4060 · Dummy Diesel · Mates with 3060 · Illuminated double headlights · Metal body · Coupling hook with pre-uncoupler at cab end · Length 17.5 cm (7-7/8")

☞ = 7185 ☞ = 60015

3
3129



3 USA

3129 · Diesel · General Motors EMD F-7 lettered for Southern Pacific · One power truck · 4 non-skid tires · Illuminated double headlights · Metal body · Metal trucks · Coupling hook with pre-uncoupler at cab end · RELEX-coupler (page 50) at other end · Length 17.5 cm (7-7/8")

☞ = 7154 ☞ = 7185 ☞ = 60015

4
4129



4 USA

4129 · Dummy unit · Mates with 3129 · Illuminated double headlights · Metal body · Coupling hook with pre-uncoupler at cab end · Length 17.5 cm (7-7/8")

☞ = 7185 ☞ = 60015

■ Some 4000 EMD F-7 diesels saw service on railroads throughout the United States. The diesel electrics were rated at 1100 kW and had a top speed of 160 kmph (100 mph). The Southern Pacific color scheme shown here is known as the "Black Widow".

1
3016

2
4018



1

3016 · Railbus · German Federal Railways' class 795 · 1 powered axle · 2 non-skid tires · Three working headlights at each end · Interior lighting · Metal trucks · Special short couplers at each end · Length over buffers 14.7 cm (5-¾")

⊙=7153 ⊞=7164 ⊕=60010

2

4018 · Railbus Trailer · German Federal Railways' class 995 · Red tail-lights at each end · Interior lighting · Special short couplers, mates only with railbuses · Length over buffers 12 cm (4-¾")

⊞=7175 ⊕=60010

3

3028 · Self-propelled Coach · German Federal Railways' class 515, accumulator battery powered coach · 2 axles powered · 4 non-skid tires · Three white headlights and two red tail-lights at each end, illuminated according to direction · Interior details · Interior lighting · Metal trucks · Coupling hooks at each end · Length over buffers 24 cm (9-½")

⊙=7154 ⊞=7164 ⊕=60001 r
⊕=60015 w

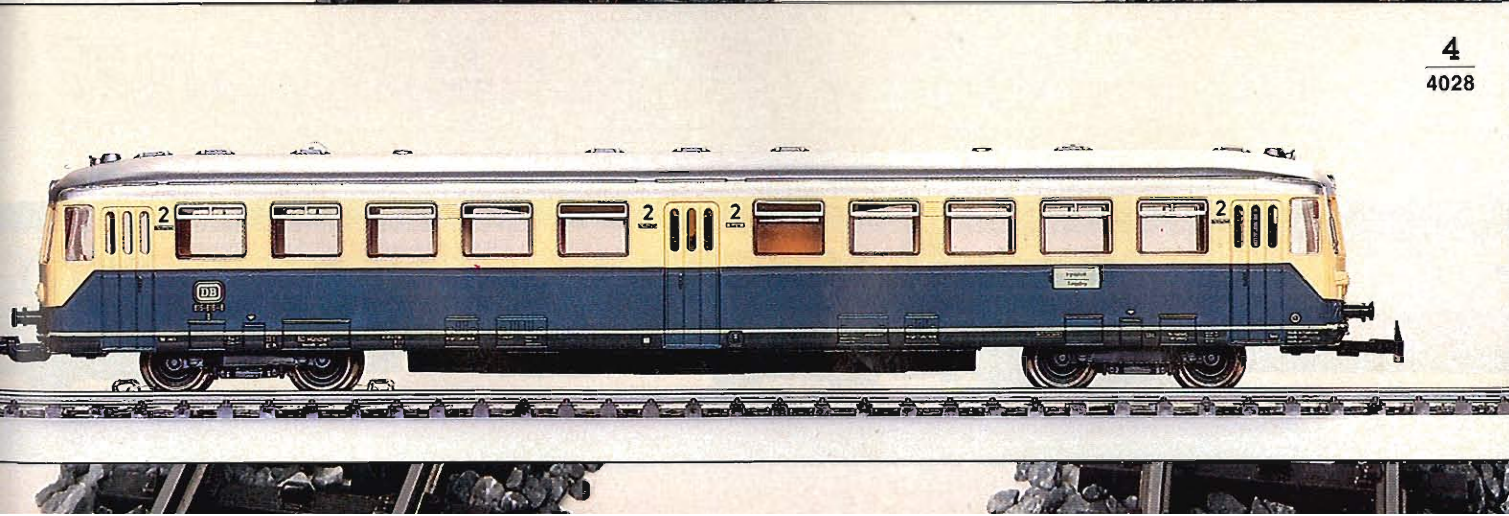
4

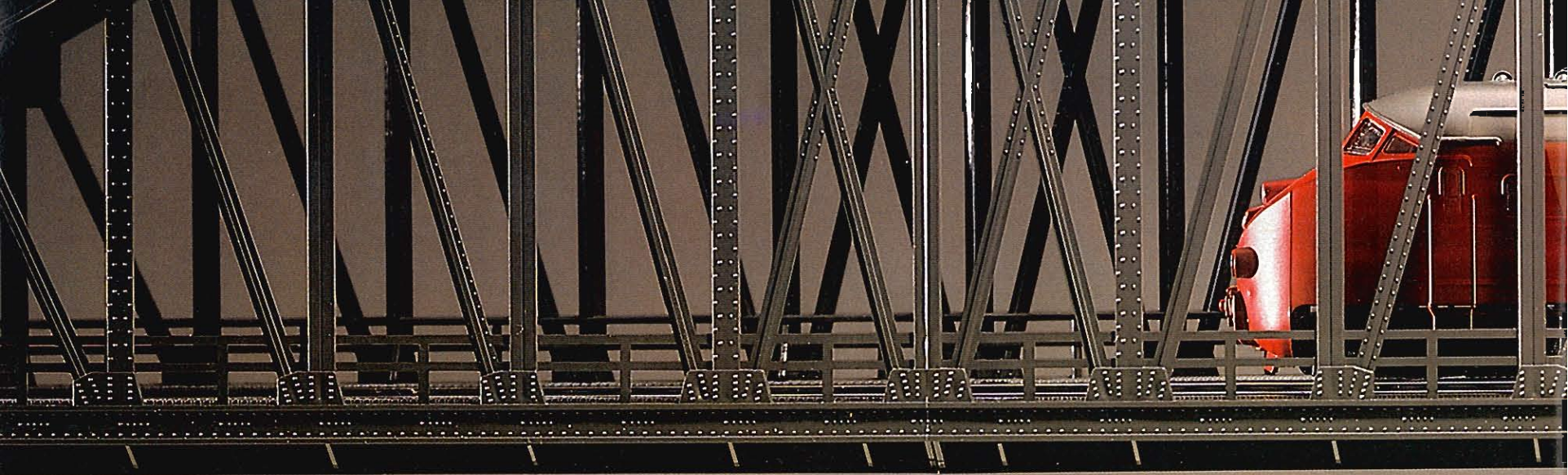
4028 · Control Car · Not powered · For use with 3028 · German Federal Railways' class 815 · When coupled to 3028, three white headlights or two red tail-lights illuminated according to direction · Interior details · Interior lighting · Dummy couplers, eye at one end, hook at the other · Length over buffers 24 cm (9-½")

⊞=7164 ⊕=60001 r
⊕=60015 w

3
3028





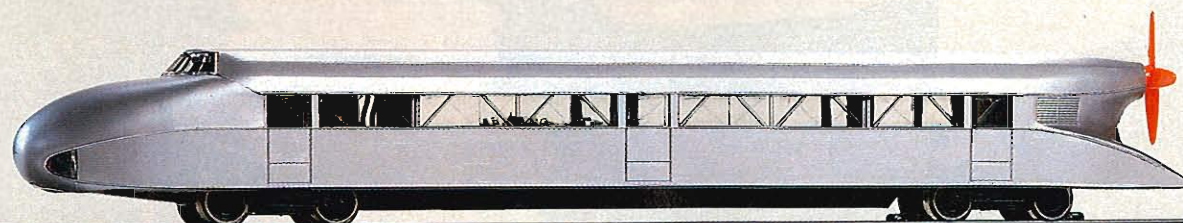


1

3077 · Rail Zeppelin · Based on Kruckenberg's system · 2 axles powered · 4 non-skid tires · Realistic operation: as track current is slowly increased from 4 V, the propeller is activated by small motor – as track current increases further, the zeppelin begins to roll · Two working headlights at front · Streamlined shape · Metal trucks · Length 28.8 cm (11-3/8")

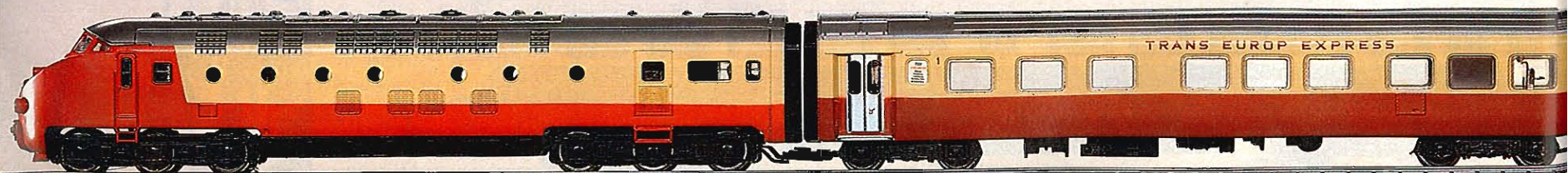
0=7154 1=7164 2=60015

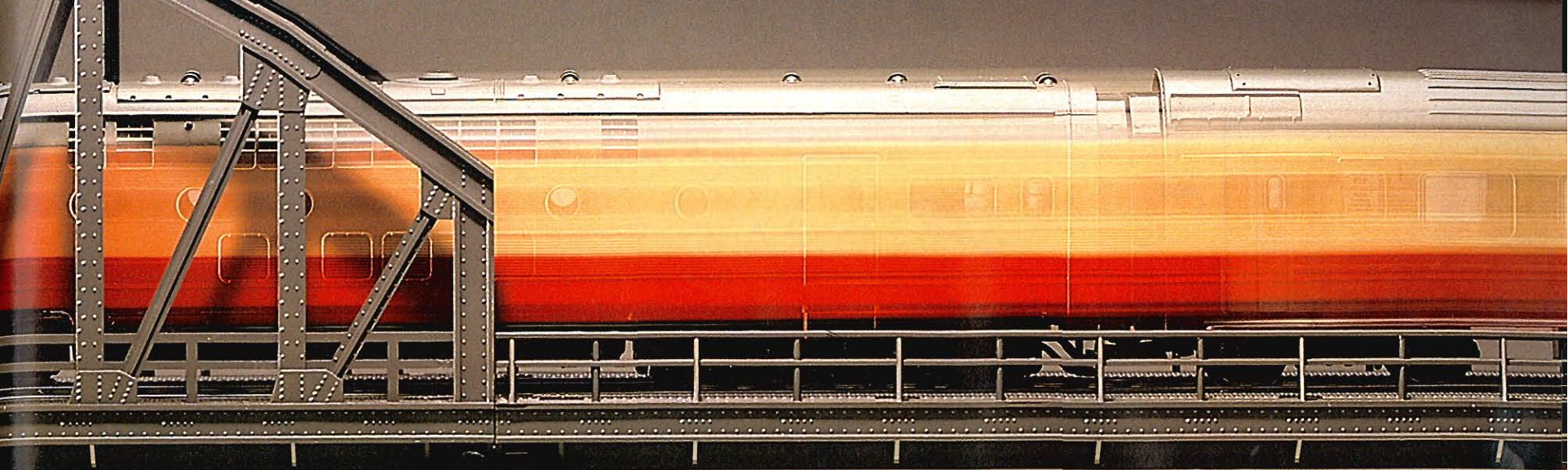
1
3077



2

3071





2

3071 · TEE Articulated Train · Dutch-Swiss TRANS-EUROP-EXPRESS train · 3 cars

Locomotive: 3 axles powered · 4 non-skid tires · Metal trucks

First-Class Diner-Coach and Control Car having large first-class compartment

Train has special couplers narrowing the gaps between cars · Gaps have

special diaphragms · Three white headlights and two red tail-lights at each end of train, illuminated according to direction · Sliders at each end, current obtained from lead slider · Length of 3-car train 70 cm (2' 3-5/8")

⊖=7154 ⊕=7164 ⊖=60001 r
⊕=7175 ⊖=60015 w

3

4071 · TEE Compartment Car · 1st class · Flexible diaphragms at each end · Special TEE couplers · Length 23.3 cm (9-3/16")

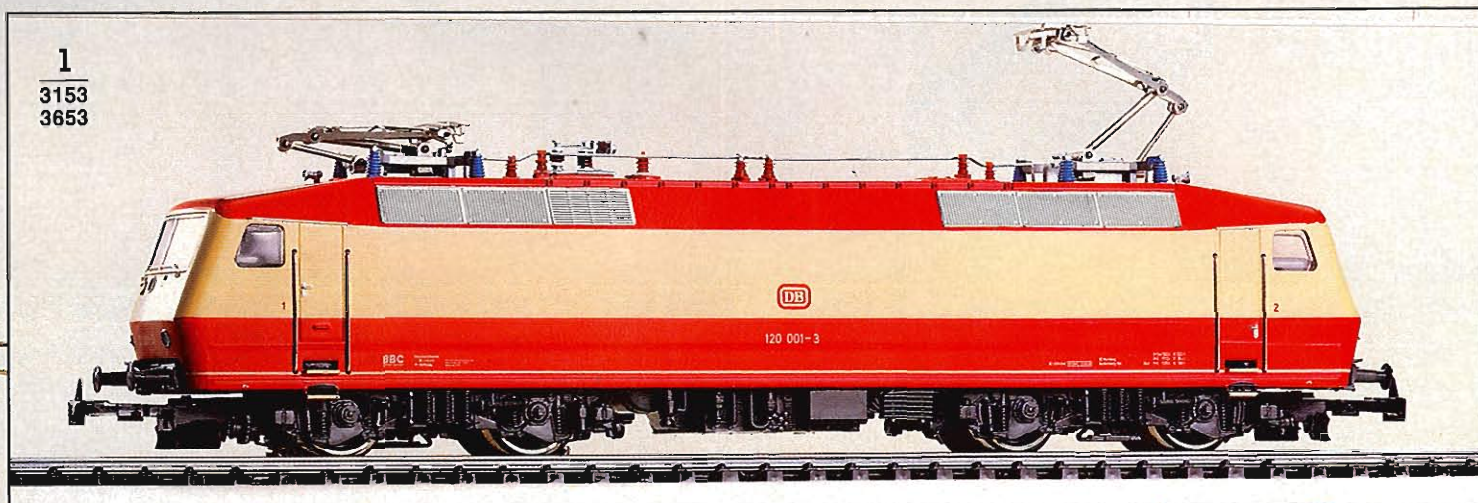
The TEE train illustrated here consists of one 3-unit 3071 and one 4071, based on prototype practice. Length of 4 car train is 93.3 cm (3' 3/4").

3

4071



The Märklin Prototype is the Fastest



1

3153 · Multi-Purpose Electric · German Federal Railways' class 120 · One power truck · 4 non-skid tires · Illuminated triple headlights at each end · Colorful body · Metal underbody · Coupling hooks at each end · Length over buffers 22.1 cm (8-3/4")

0=7153 ☞=7164 ♀=60015

1

3653 · Digital Locomotive · Same as model 3153 but with a different road number and a built-in decoder · For use with Märklin digital H0 (pages 190-205)

0=7153 ☞=7164 ♀=60015

■ On October 17, 1984 the 120 001-3 was baptized the "Nürnberg" by Mayor Dr. Urschlächter at the Nürnberger Main Railway Station and the town's coat-of-arms was affixed to the locomotive. On the same day, on a test run between Munich and Nürnberg, the engine had set a new world speed record on rails. Under the watchful eyes of railroad experts from around the world including Federal Transport minister Dr. Dollinger, the 120 001-3 attained an absolute top speed record for an AC powered locomotive. Pulling four coaches and a test car, the train zipped along at 265 kmph (165 mph) between kilo-

meter 26.0 and 27.0 (i.e. between Nordendorf and Mertingen).

Such a high speed had never been attained before on the German Federal Railways' tracks, and no railroad in the world has ever run a fully-loaded conventional train with locomotives and cars at such a speed.

But the purpose of 4 years of testing the E 120 was not making speed records. It was, rather, to prove the suitability of AC power technology.

2

3357
3657



2

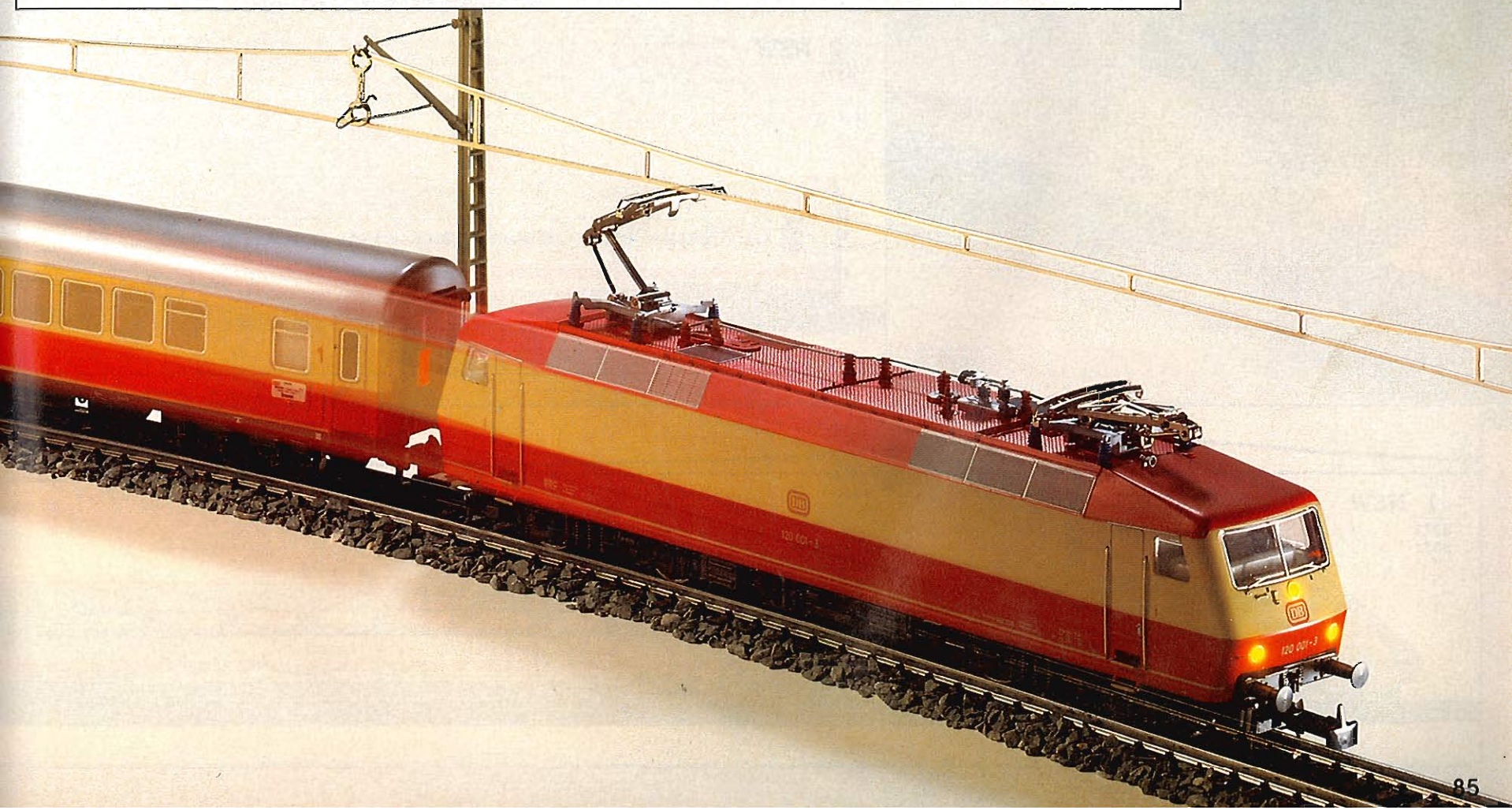
3357 · Express Electric · German Federal Railways' class 103 · One power truck · 4 non-skid tires · Illuminated triple headlights at each end · Colorful body · Metal underbody · Coupling hooks at each end · Electronically controlled direction switch · Length over buffers 21.9 cm (8-5/8")

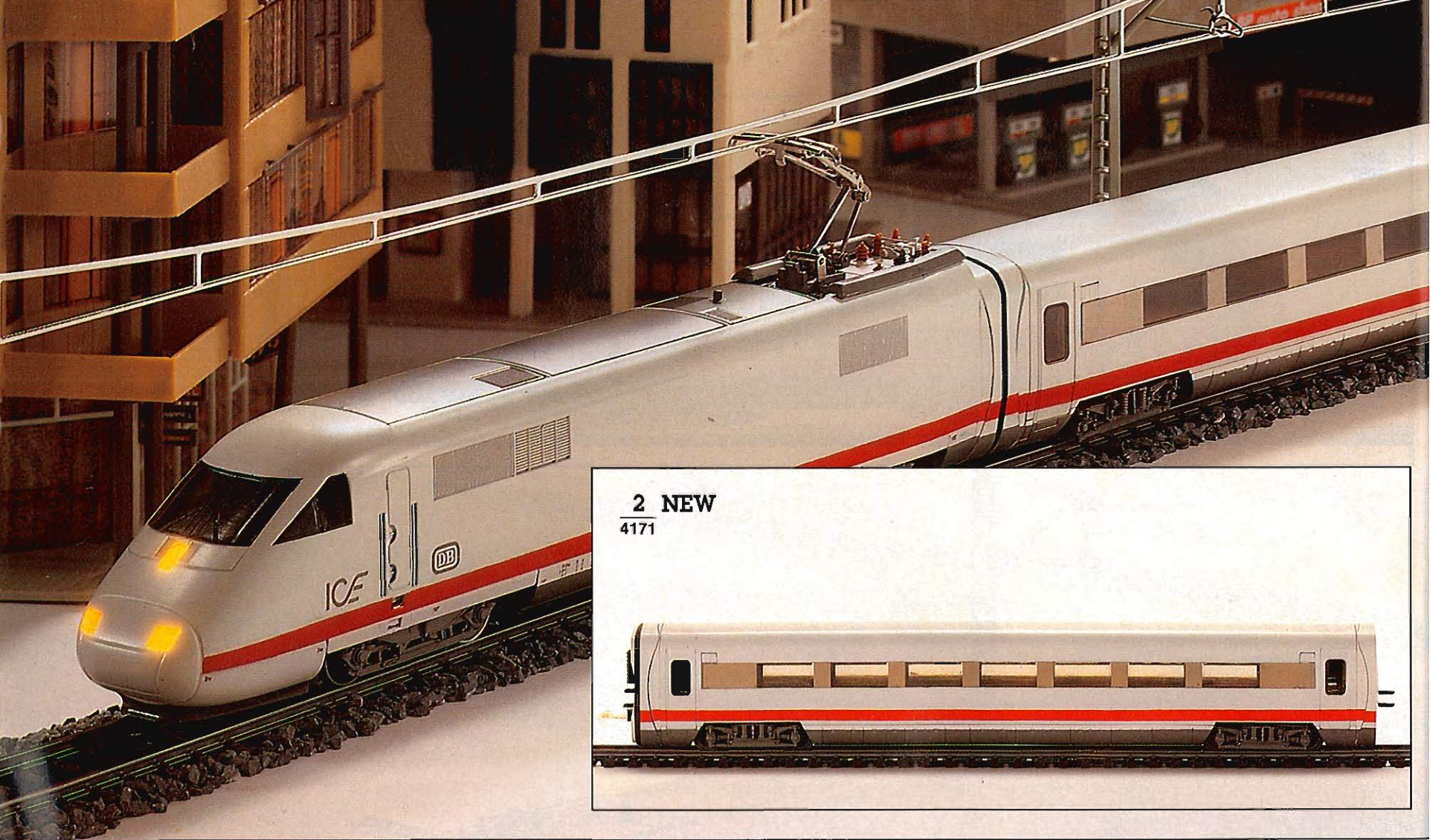
①=7153 ⚙=7164 ⚡=60019

2

3657 · Digital Locomotive · Same as model 3357 but with a different road number and a built-in decoder · For use with Märklin digital H0 (pages 190-205)

①=7153 ⚙=7164 ⚡=60010



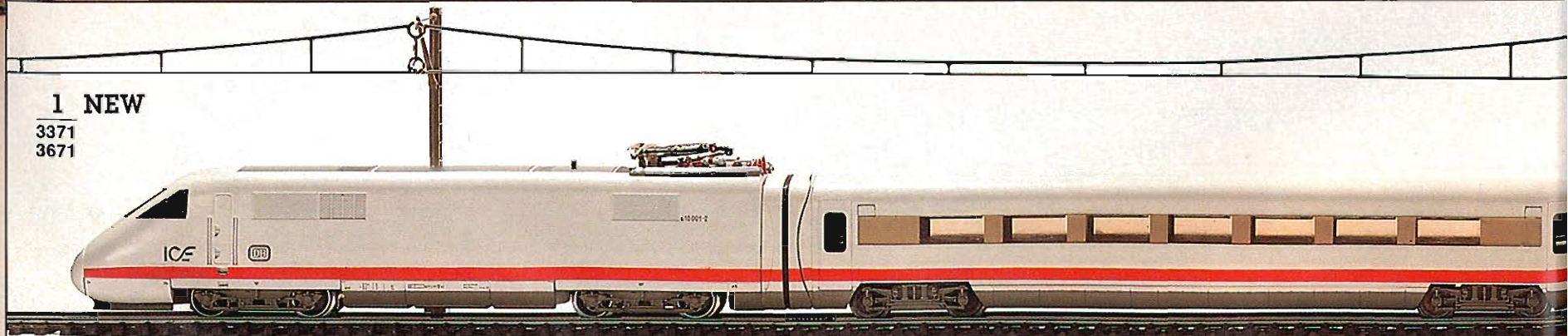


2 NEW
4171



1 NEW

3371
3671





1

3371 · Multi-Unit Train Set · German Federal Railways' ICE (Inter City Experimental) · 4 parts · 2 powered end units and two coaches

Power units: One power truck · 4 non-skid tires · Colorful body · Metal underbody

Coaches: Colorful body · Interior lighting

4 units connected with special couplers · Special diaphragms make entire train appear as a single unit · 3 white headlights and 2 red taillights at each end, illuminated according to direction · Each end unit has its own pickup shoe; according to the direction of travel only the lead pickup shoe carries current · Electronically controlled direction switch · Length of model 91.5 cm (3')

①=7154 ②=7164 ③=60008

1

3671 · Multi-Unit Train Set · Same as model 3371 but with a built-in decoder · For use with Märklin digital H0 (pages 190-205)

①=7154 ②=7164 ③=60008

2

4171 · ICE Coach · Mates with ICE train 3371 and 3671 · Flexible diaphragms · Interior lighting · Special couplers at each end · Length 24.5 cm (9-5/8")

■ On the occasion of the 150th anniversary of railroading the German Federal Railways unveils a new concept in high speed travel: the Inter City Experimental. In cooperation with the Federal Ministry of Research and with German industry, efforts are underway to translate the latest concepts in vehicle technology into reality. On test runs, the ICE has reached 250 kmph (150 mph) and should be able to go 350 kmph (200 mph) on special test tracks.

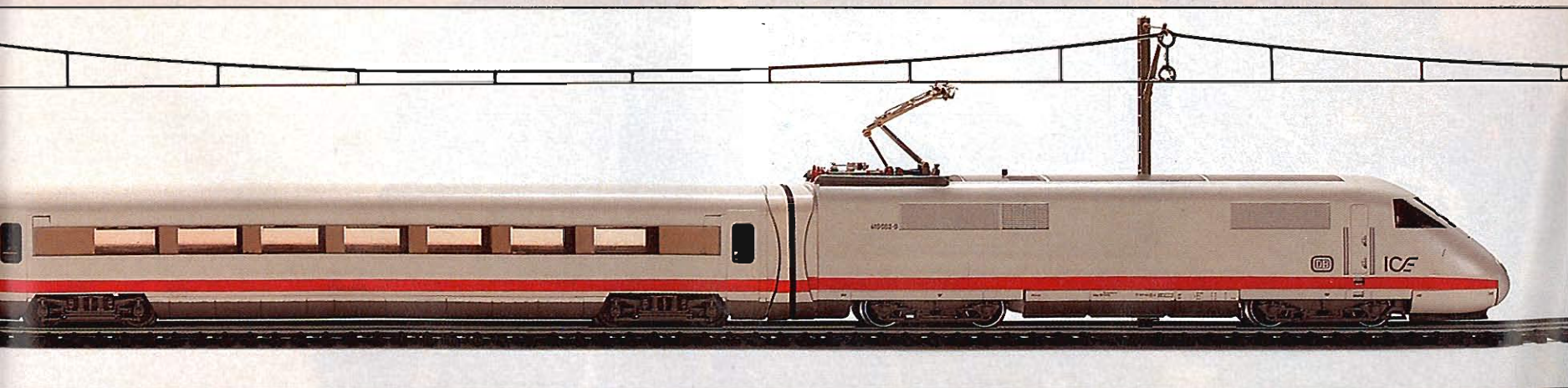
The end units are constructed of steel with fiberglass nose pieces streamlined to give an optically pleasing shape. The four AC motors are based on those used in the class 120 electrics and achieve 4,200 kW. Propulsion and braking are controlled by micro-computers.

The coaches run on trucks incorporating the latest technology and are designed for top speed with the greatest comfort. The car bodies are constructed chiefly of light-weight metal.

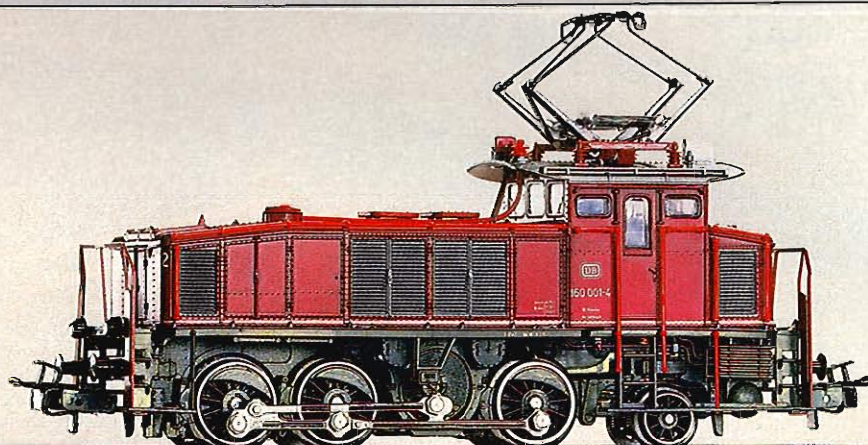
The doors and windows are installed in such a way as to give a smooth seamless appearance. The interiors are designed so they can be changed easily. Thus, for example, one of the coaches was converted into a testing and measuring car.

All cars connect with each other by means of special diaphragms that mate the cars so well with each other that the train appears as one single unit. This cuts down on wind resistance and noise.

Test runs of the ICE commenced in 1985 and the train will begin serving the public in the fall of 1985. By 1990, the German Federal Railways hopes to have 20 additional ICE trains plying their rails.



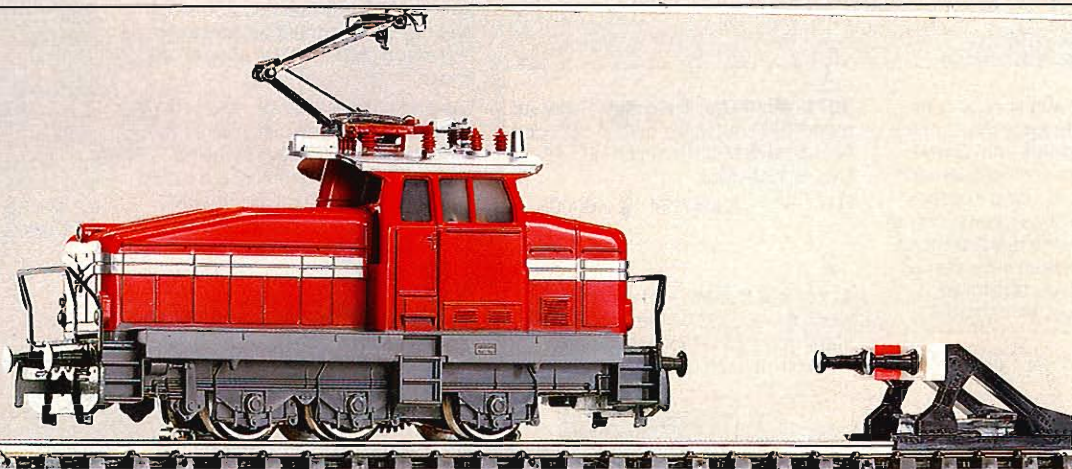
1
3157



1
3157 · Electric Locomotive · German Federal Railways' class 160 · 3 axles powered · 2 non-skid tires · Three working headlights at each end · Metal trucks · RELEX-couplers (page 50) at each end · Length over buffers 12.8 cm (5")
 0 = 7153  = 7185  = 60010

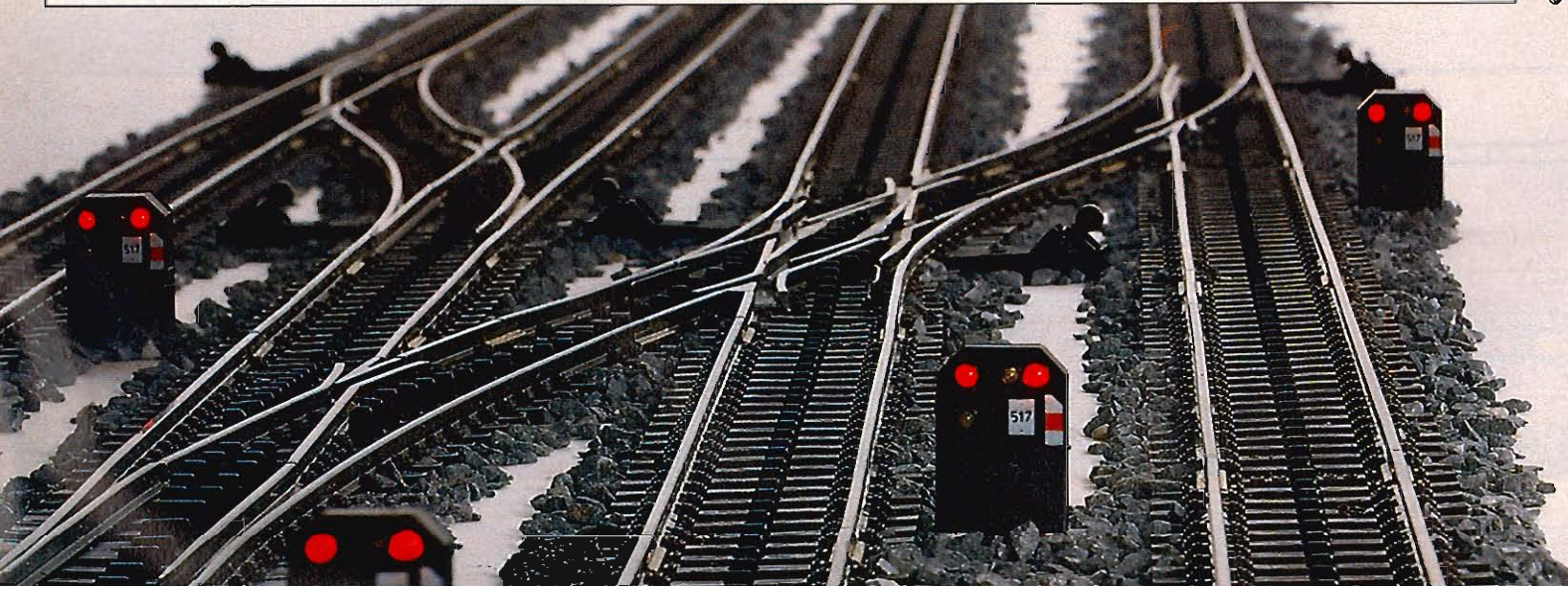
2
3044 · Switcher · Multi-system industrial locomotive type EA 800 · 3 axles powered · 2 non-skid tires · Three working headlights at each end · Metal trucks · Coupling hooks at each end · Length over buffers 11.2 cm (4-3/8")
 0 = 7154  = 7185  = 60015

2
3044

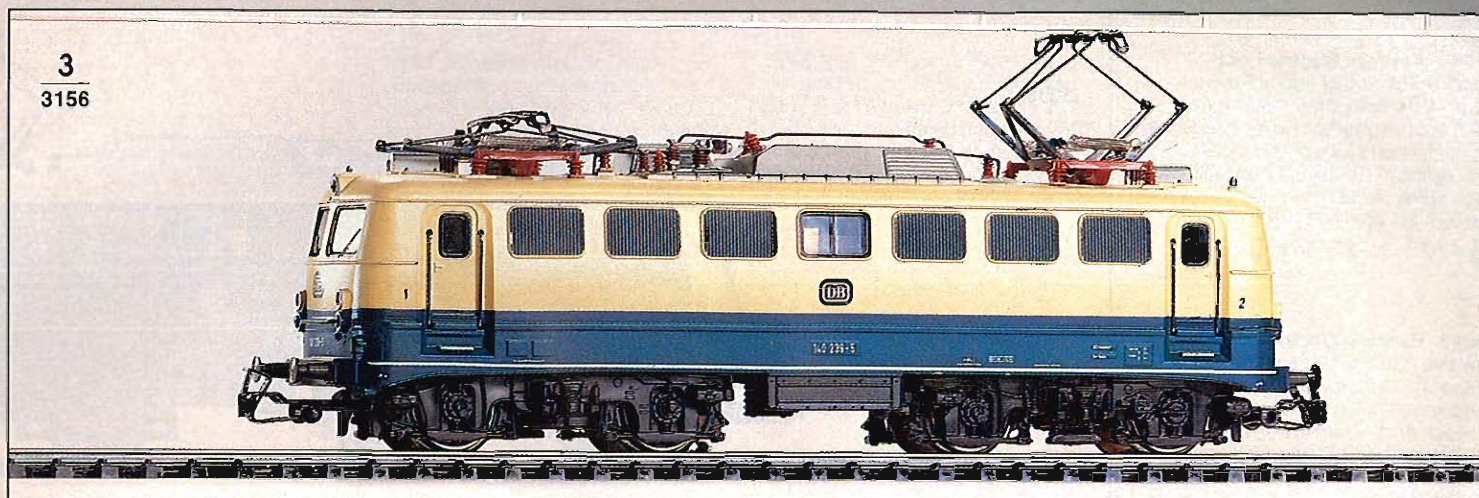


3
3156 · Freight Locomotive · German Federal Railways' class 140 · 2 axles powered · 4 non-skid tires · Three working headlights at each end · Metal body · Metal trucks · Coupling hooks with pre-uncoupler at each end · Length over buffers 18.1 cm (7-1/8")
 0 = 7153  = 7164  = 60015

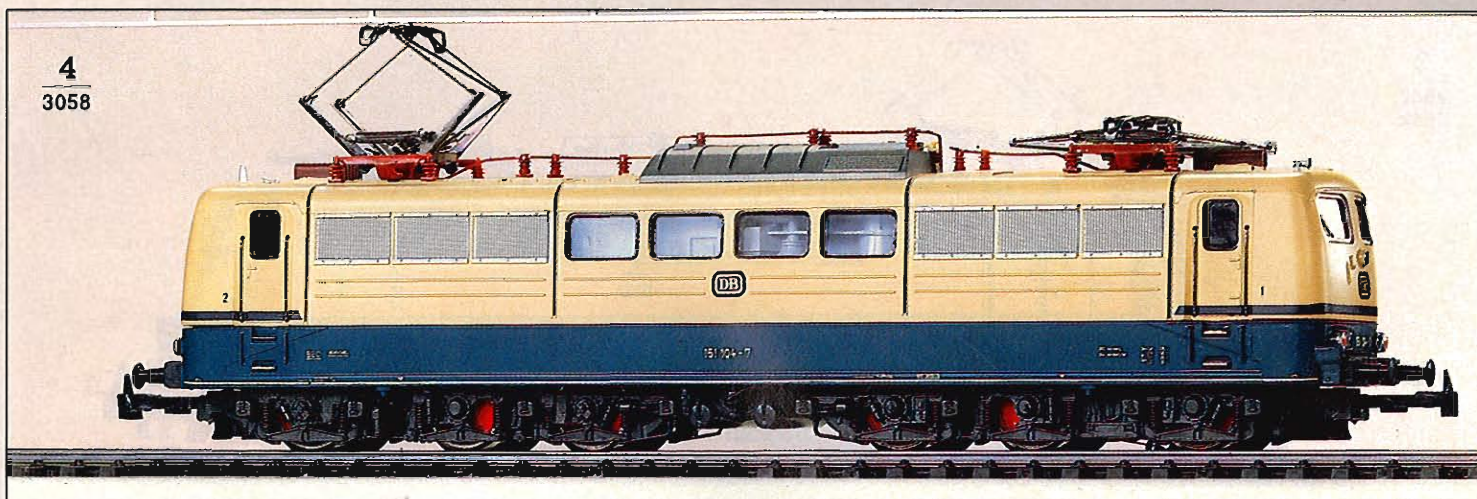
4
3058 · Freight Locomotive · German Federal Railways' class 151 · 3 axles powered · 4 non-skid tires · Three working headlights at each end · Metal trucks · Coupling hooks at each end · Length over buffers 22.2 cm (8-3/4")
 0 = 7153  = 7164  = 60015



3
3156



4
3058

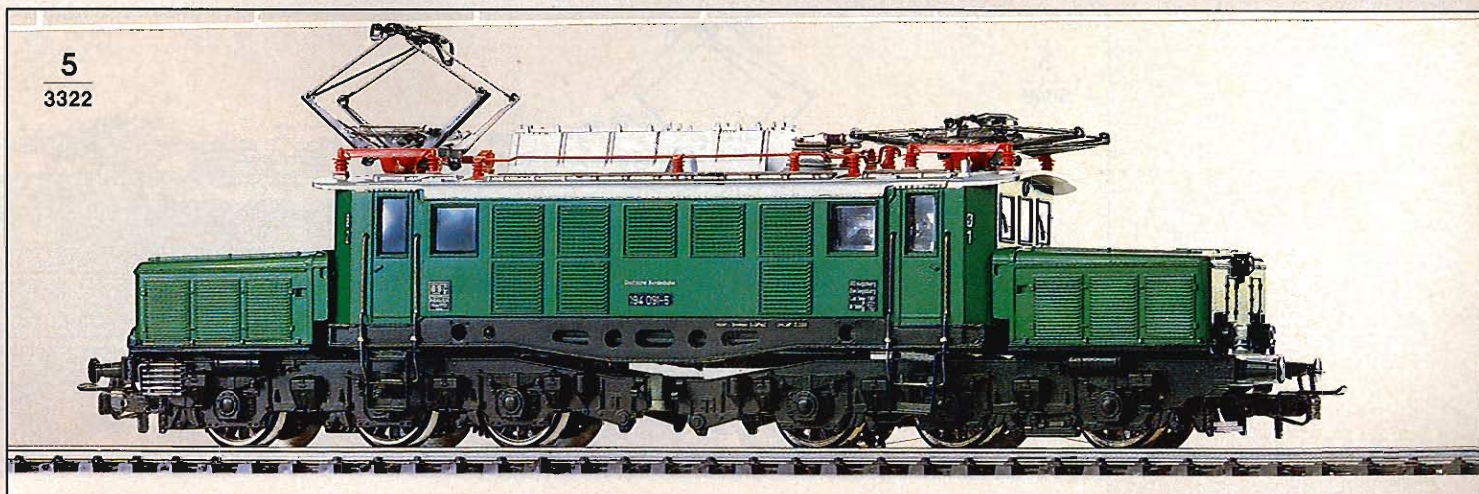


5

3322 · Freight Locomotive · German Federal Railways' class 194 · 3 axles powered · 4 non-skid tires · Three working headlights at each end · 3-part metal body · Metal trucks · RELEX-couplers (page 50) at each end · Electronic direction control switch · Length over buffers 21 cm (8-1/4")

0=7153 =7164 9=60019

5
3322



1

3039 · Express Electric Locomotive

German Federal Railways' class 110 · One power truck · 4 non-skid tires · Illuminated triple headlights at each end · Metal body · Metal underbody · Coupling hooks with pre-coupler at each end · Length over buffers 18.1 cm (7-1/8")

①=7153 =7164 =60015

2

3042 · Express Electric Locomotive

German Federal Railways' class 111 · One power truck · 4 non-skid tires · Illuminated triple headlights at each end · Colorful body · Metal underbody · RELEX couplers (page 50) at each end · Length over buffers · 19.1 cm (7-1/2")

①=7153 =7164 =60015

2

3642 · Digital Locomotive · Same as model 3042 but with a different road number and a built-in decoder · For use with Märklin digital H0 (pages 190-205)

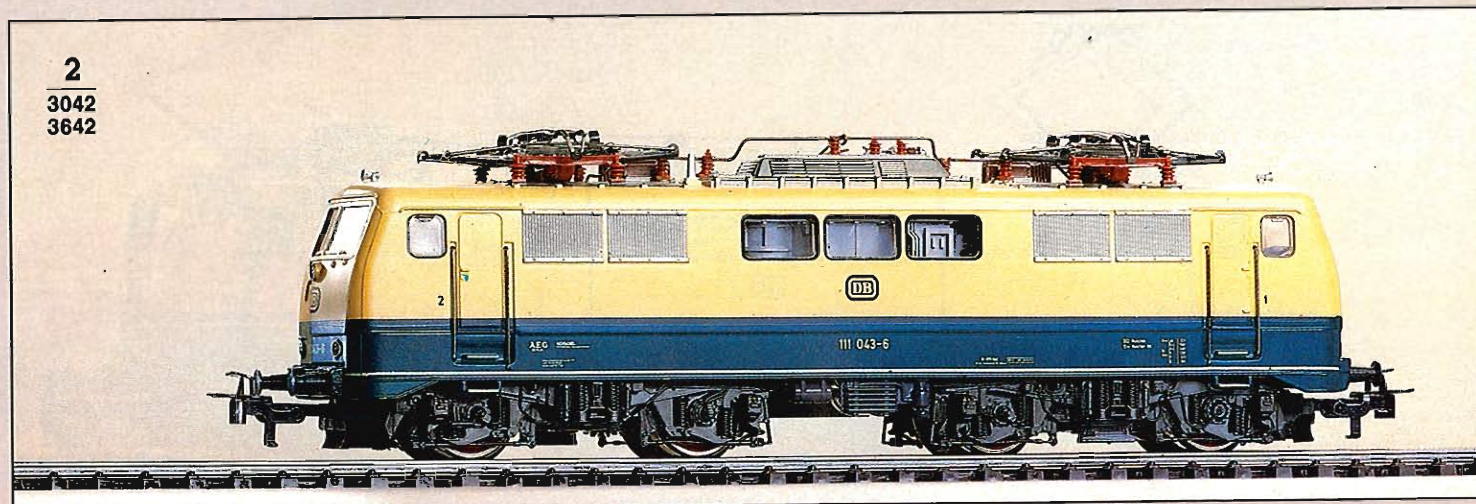
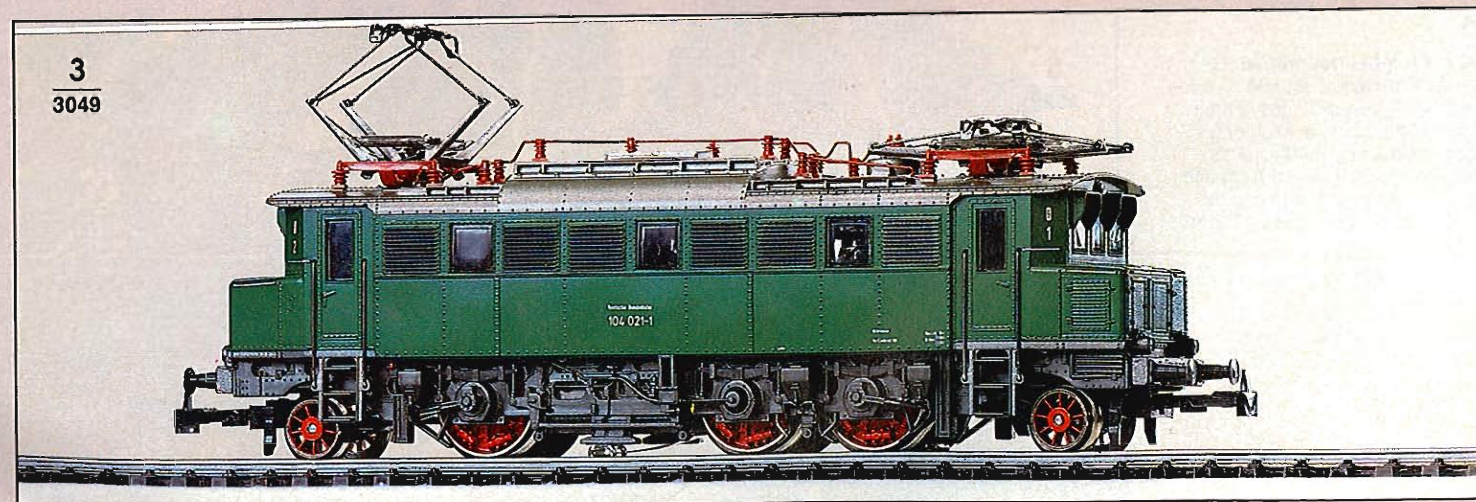
①=7153 =7164 =60015

3

3049 · Express Electric Locomotive

German Federal Railways' class 104 · All drivers powered · 2 non-skid tires · Illuminated triple headlights at each end · Colorful body · Metal underbody · 2 sprung trucks · Coupling hooks at each end · Length over buffers 17.8 cm (7")

①=7153 =7185 =60015

1
30392
3042
36423
3049

4

3155 · Express Electric Locomotive · German Federal Railways' class 111 · One power truck · 4 non-skid tires · Illuminated triple headlights at each end · Colorful body · Metal underbody · RELEX couplers (page 50) at each end · Length over buffers 19.1 cm (7-½")

⊖ = 7153 ⊞ = 7164 ⊙ = 60015

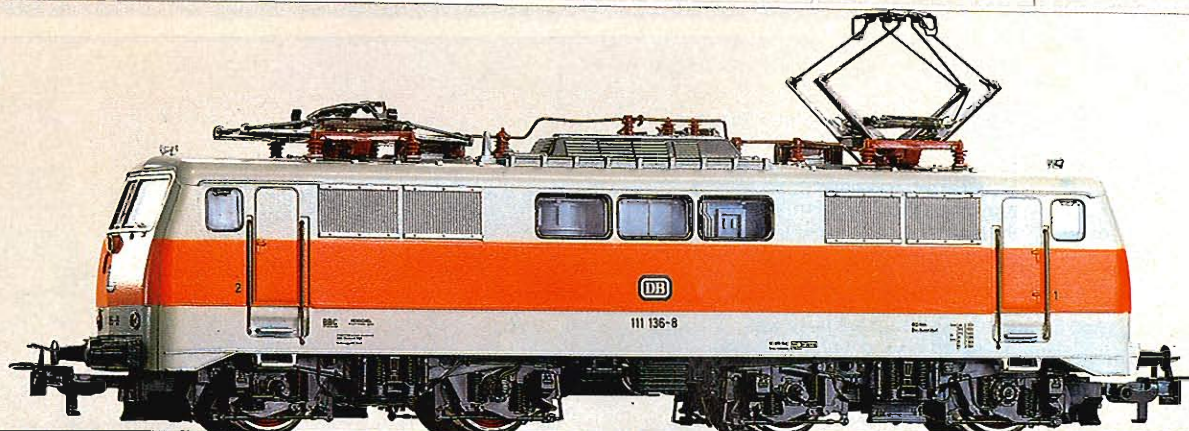
5

3366 · Electric Locomotive · German Federal Railways' class 152 (ex-Bavarian EP 5) · 4 powered drivers · 4 non-skid tires · Illuminated triple headlights at each end · Colorful body · Metal underbody · The drivers are divided into groups enabling them to negotiate sharp curves · 2 sprung pilot trucks · Coupling hooks at each end · Electronically controlled direction switch · Length over buffers 19.8 cm (7-⅞")

⊖ = 7153 ⊞ = 7164 ⊙ = 60019

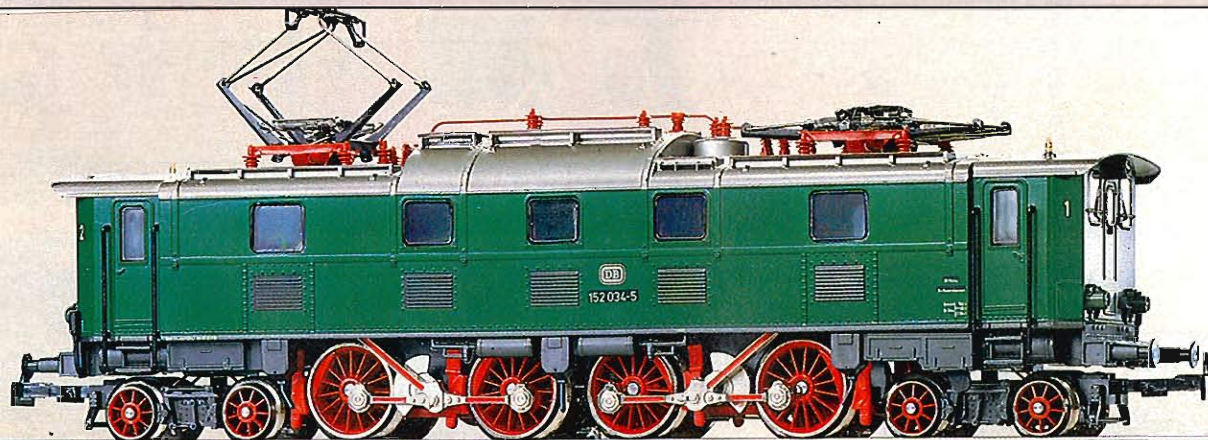
4

3155

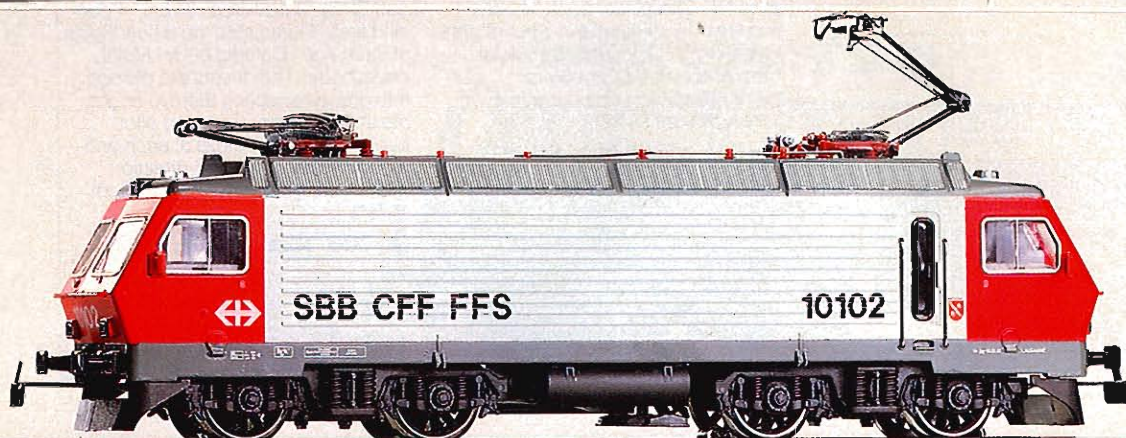


5

3366



1

3323
3623

1 Switzerland

3323 · Electric Locomotive · Swiss Federal Railways' (SBB) class Re 4/4^{IV} No. 10 102 · One power truck · 4 non-skid tires · Illuminated triple headlights at each end · Metal body · Metal underbody · Coupling hooks at each end · Electronically controlled direction switch · Length over buffers 18.1 cm (7-1/8")

①=7153 🚗=7164 ⚙=60019

2 Switzerland

3328 · Electric Locomotive · Swiss Federal Railways' (SBB) class Re 4/4^{IV} No. 10 103 · One power truck · 4 non-skid tires · Illuminated triple headlights at each end · Metal body · Metal underbody · Coupling hooks at each end · Electronically controlled direction switch · Length over buffers 18.1 cm (7-1/8")

①=7153 🚗=7164 ⚙=60019

■ In 1978, the Swiss Federal Railways ordered four prototypes of a new type of locomotive, classed as the Re 4/4^{IV}. Rated at 4475 kW and possessing a top speed of 160 kmph (100 mph), these electrics are capable of pulling 700 tons on a level grade and 650 tons on a 2.6% grade, as well as 500 tons in passenger service on a level grade. The engine's nose was designed in wind tunnel tests and sports a red livery for improved visibility. The various colors applied to the sides reflect on-going design testing.

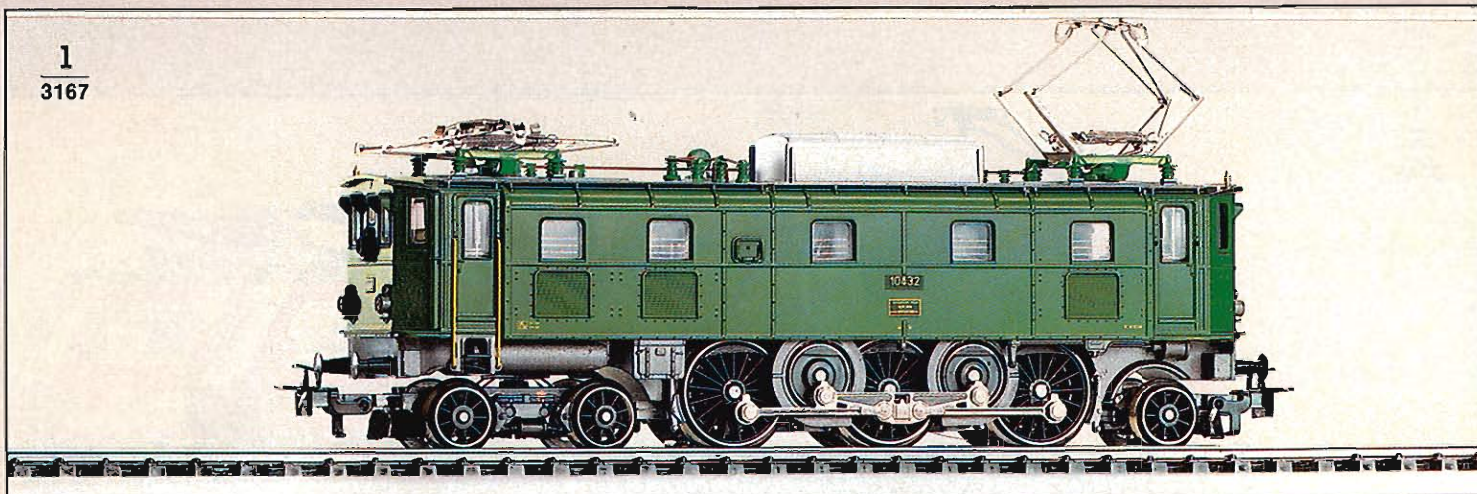
1 Switzerland

3623 · Digital Locomotive · Same as model 3323 and 3328 but with road number 10 104 and built-in decoder · For use with Märklin digital H0 (pages 190-205)

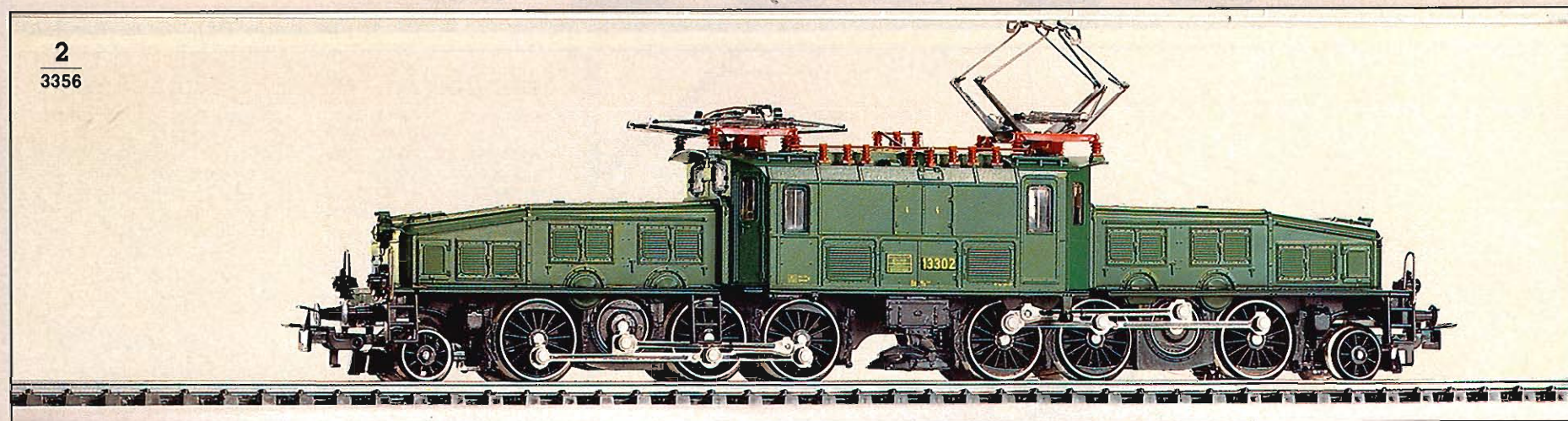
①=7153 🚗=7164 ⚙=60010



1
3167



2
3356



1 Switzerland

3167 · Express Electric Locomotive · Swiss Federal Railways' (SBB) class Ae 3/6^{III} · All drivers powered · 2 non-skid tires · Illuminated triple headlights at each end · Colorful body · Metal underbody · Sprung pony and trailing trucks · RELEX couplers (page 50) at each end · Length over buffers 16 cm (6-5/16")

⊖=7153 ⊕=7185 ♀=60015

2 Switzerland

3356 · Crocodile – Heavy Freight Electric Locomotive · Swiss Federal Railways' (SBB) class Be 6/8^{III} · One power truck · 4 non-skid tires · Illuminated triple headlights at each end · 3-part body · Metal underbody · Driving wheels divided into 2 trucks, enabling the locomotive to negotiate sharp curves · RELEX couplers (page 50) at each end · Electronically controlled direction switch · Length over buffers 22.8 cm (9")

⊖=7153 ⊕=7164 ♀=60019

0356 · Crocodile Book · By H. S. Stammer · The most comprehensive publication on the famous Swiss crocodiles, full of dates and facts, serious history and humorous anecdotes · Fabulous illustrations of the various models made by Märklin over the last 50 years · 96 pages · Size 26.4 x 22 cm (10-1/2" x 8-3/4") · German text

3 Switzerland

3125 · Rail Car · Swiss Federal Railways' (SBB) class RBe 2/4 "Red Arrow" · Based on the original as it appears in the Swiss Transport Museum in Lucerne · One power truck · 4 non-skid tires · Illuminated triple headlights at each end · Metal body · Interior details · Metal underbody · Length over buffers 25.7 cm (10")

⊖=7154 ⊕=7164 ♀=60008

■ In the 1930's, the Swiss Federal Railways developed a new concept in regional passenger service. Lightweight fast rail cars would provide shorter running times and attractive service to intermediate stations. The result was the "Red Arrows" which were placed into service in 1935 where they achieved great popularity in excursion service.

The one-piece cars are almost symmetrical in shape and have a cab at each end, but only one powered truck. Two were diesel powered (290 hp) and seven were electric (395 kW). Both versions could reach speeds of 125 kmph (77 mph).



3 NEW
3125



4 NEW
3350
3650

4 Switzerland

3350 · Multi-Purpose Locomotive · Swiss Federal Railways' (SBB) class Ae 6/6 No. 11439 · One power truck · 4 non-skid tires · Illuminated triple headlights at each end · Metal body · Metal underbody · Livery includes coat-of-arms of cantonal capital Schaffhausen · Other coats-of-arms included · Coupling hooks at each end · Electronically controlled direction switch · Length over buffers 20 cm (7-7/8")

0=7153 ☞=7164 ♀=60008

4 Switzerland

3650 · Digital Locomotive · Same as model 3350 but with a different road number and a built-in decoder · For use with Märklin digital H0 (pages 190-205)

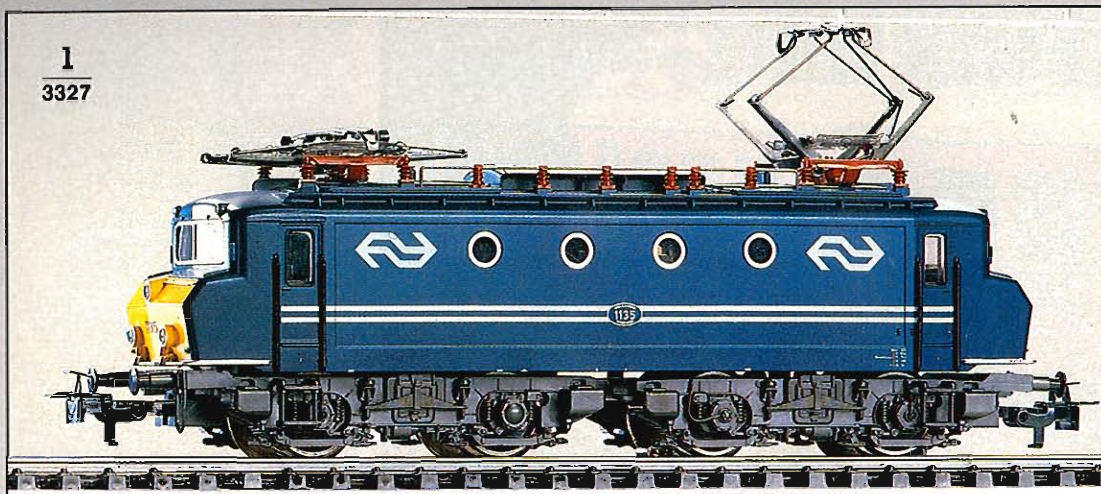
0=7153 ☞=7164 ♀=60008

■ Beginning in 1955 the heavy electric locomotive Ae 6/6 was produced in quantity for express train service over the Gotthard and Simplon mountain passes.

The first 25 locomotives were sponsored by the various Swiss Cantons and bear the latter's coats-of-arms on their sides, as well as polished striping. After the "canton locomotives"

another 95 units were built without striping until 1966. These engines were termed "city locomotives" and bore coats-of-arms of major Swiss cities and transportation centers.

1
3327



2
3324



1 Netherlands

3327 · Multi-Purpose Electric · Netherlands Railways' (NS) class 1100 · One power truck · 4 non-skid tires · Illuminated triple headlights at each end · Colorful body · Metal underbody · RELEX couplers (page 50) at each end · Electronically controlled direction switch · Length over buffers 16.3 cm (6-1/4")

0=7153 1=7164 2=60019

2 Netherlands

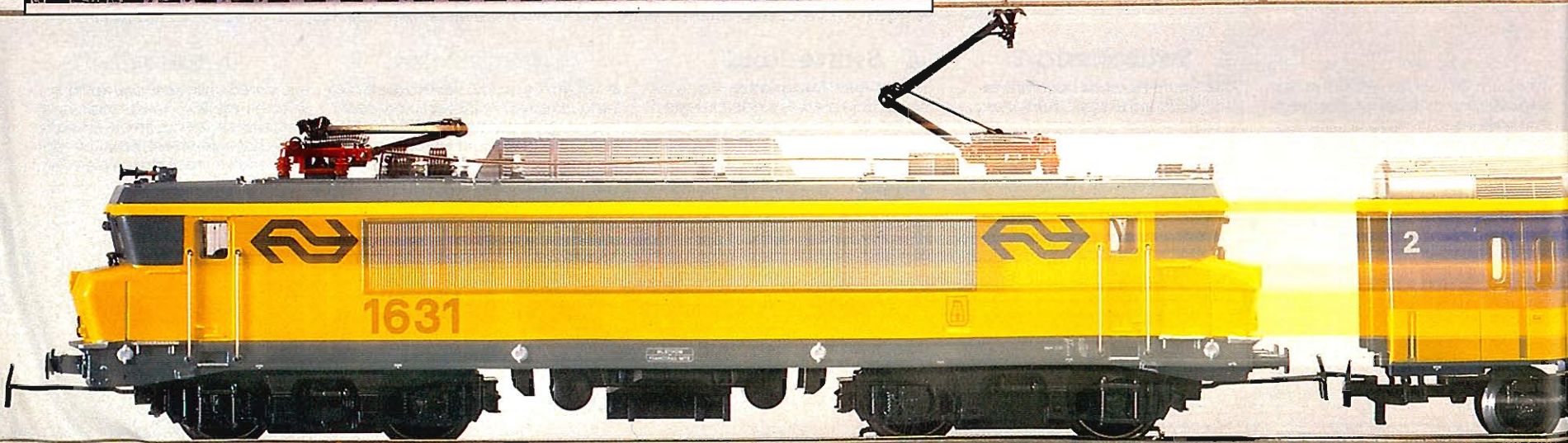
3324 · Multi-Purpose Electric · Netherlands Railways' (NS) class 1100 · One power truck · 4 non-skid tires · Illuminated triple headlights at each end · Colorful body · Metal underbody · RELEX couplers (page 50) at each end · Electronically controlled direction switch · Length over buffers 16.3 cm (6-1/2")

0=7153 1=7164 2=60019

3 Netherlands

3168 · Electric Locomotive · Netherlands Railways' (NS) class 1200 · One power truck · 4 non-skid tires · Illuminated triple headlights at each end · Metal body · Metal underbody · Coupling hooks at each end · Length over buffers 19.6 cm (7-3/4")

0=7154 1=7164 2=60015



3
3168



4 NEW
3326



4 Netherlands

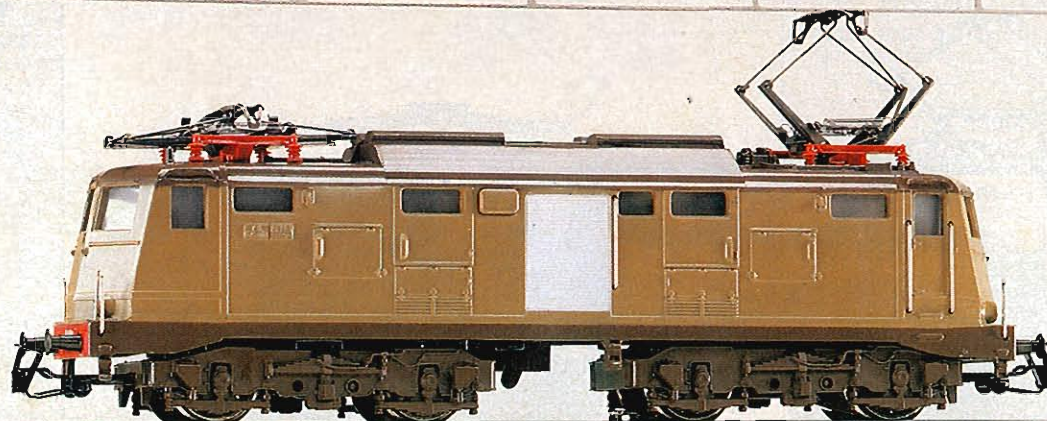
3326 · Electric Locomotive · Netherlands Railways' (NS) class 1600 · One power truck · 4 non-skid tires · Illuminated triple headlights at each end · Metal body · Metal underbody · Coupling hooks at each end · Electronically controlled direction switch at each end · Length over buffers 20 cm (7-7/8")

①=7153 ②=7164 ③=60019

■ The Netherlands Railways wanted a universal locomotive as part of their 1980's modernization program. In order to avoid the expense of developing one from scratch, new engines were extensively field-tested on NS rails. The best all-around electric was the French BB 7200, soon to go in series production. It was accepted as is and classed as the 1600, receiving Netherlands Railways' colors. Recently, these engines have also received the coats-of-arms of sponsoring Dutch cities.



1
3035



1 Italy

3035 · Electric Locomotive · Italian State Railways' (FS) class E 424 · One power truck · 4 non-skid tires · Illuminated double headlights at each end · Metal body · Metal underbody · Coupling hooks with pre-uncoupler at each end · Length over buffers 17.5 cm (6-7/8")

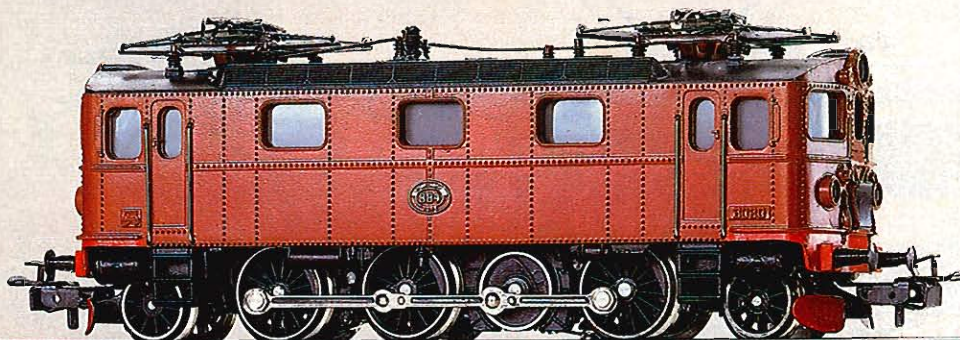
①=7153 ②=7164 ③=60015

2 Sweden

3030 · Multi-Purpose Electric Locomotive · Swedish State Railways' (SJ) class Da · All drivers powered · Jack-shaft driven by gears · 2 non-skid tires · Illuminated triple headlights at each end · Metal body · Metal underbody · RELEX couplers (page 50) at each end · Length over buffers 14.7 cm (5-3/4")

①=7153 ②=7185 ③=60015

2
3030

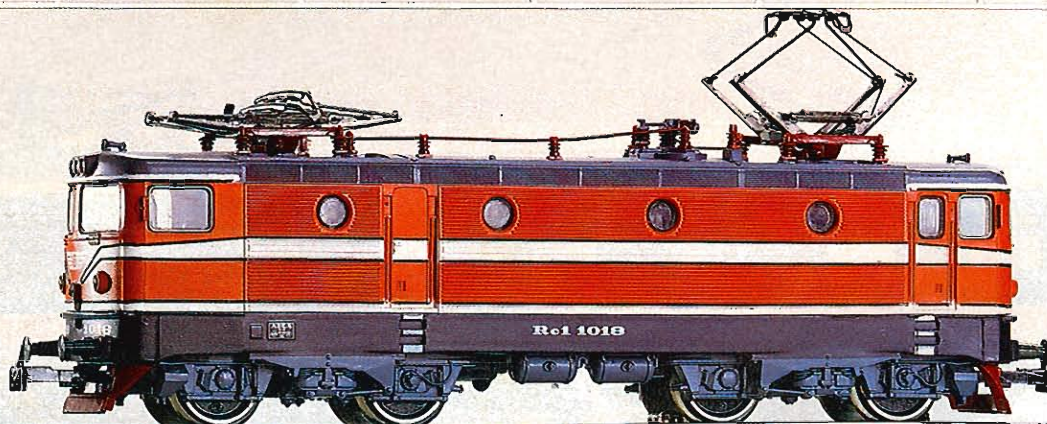


3 Sweden

3043 · Multi-Purpose Electric Locomotive · Swedish State Railways' (SJ) class Rc1 · One power truck · 4 non-skid tires · Illuminated quadruple headlights at each end · Colorful body · Metal underbody · Coupling hooks at each end · Length over buffers 17.5 cm (6-7/8")

①=7153 ②=7164 ③=60015

3
3043



4 Austria

3041 · Multi-Purpose Electric · Austrian Federal Railways' (ÖBB) class 1043 · One power truck · 4 non-skid tires · Illuminated quadruple headlights at each end · Colorful body · Metal underbody · Coupling hooks at each end · Length over buffers 17.5 cm (6-7/8")

① = 7153  = 7164  = 60015

5 France

3165 · Electric Locomotive · French State Railways' (SNCF) class BB 9200 · One power truck · 4 non-skid tires · Illuminated double headlights at each end · Metal body with "Corail" colors · Metal underbody · Coupling hooks with pre-uncoupler at each end · Length over buffers 18 cm (7-1/8")

① = 7153  = 7164  = 60015

6 Belgium

3163 · Four-Phase Express Electric Locomotive · Belgian State Railways' (NMBS/SNCB) class 16 · One power truck · 4 non-skid tires · Illuminated triple headlights at each end · Colorful body · Metal underbody · RELEX couplers (page 50) at each end · Length over buffers 19.4 cm (7-5/8")

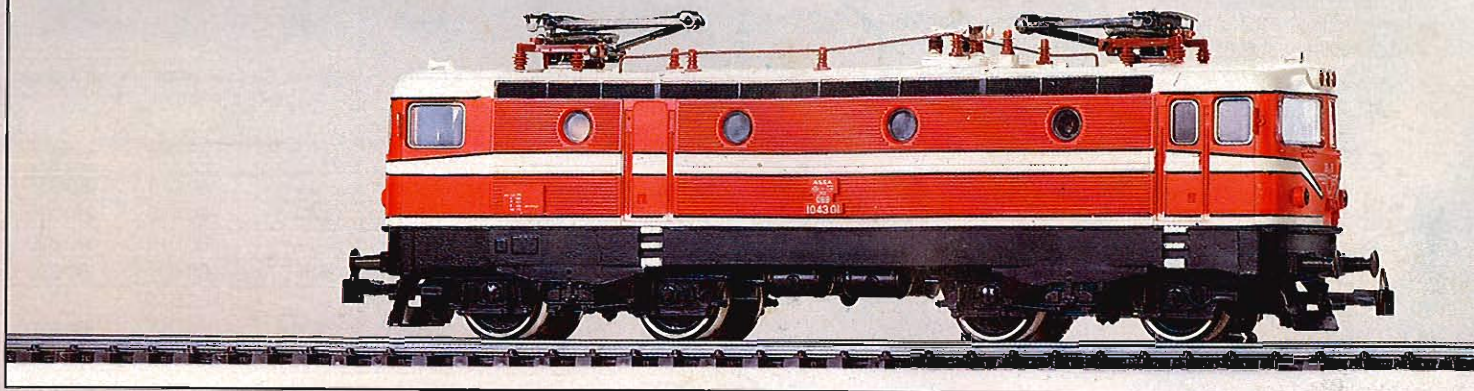
① = 7153  = 7164  = 60015

■ The Belgian class 16 electrics were designed for international traffic on electrified routes have different currents. They are rated 2,600 kW and have a top speed of 160 kmph (100 mph). They are compatible with these systems:

1500 V =	(SNCF, NS)
3000 V =	(SNCB, FS, JZ)
15 kV / 16 2/3 Hz ~	(DB, SBB, ÖBB)
25 kV / 50 Hz ~	(SNCF, CFL)

Originally painted blue, they were eventually given yellow safety stripes to make them more visible to trainmen.

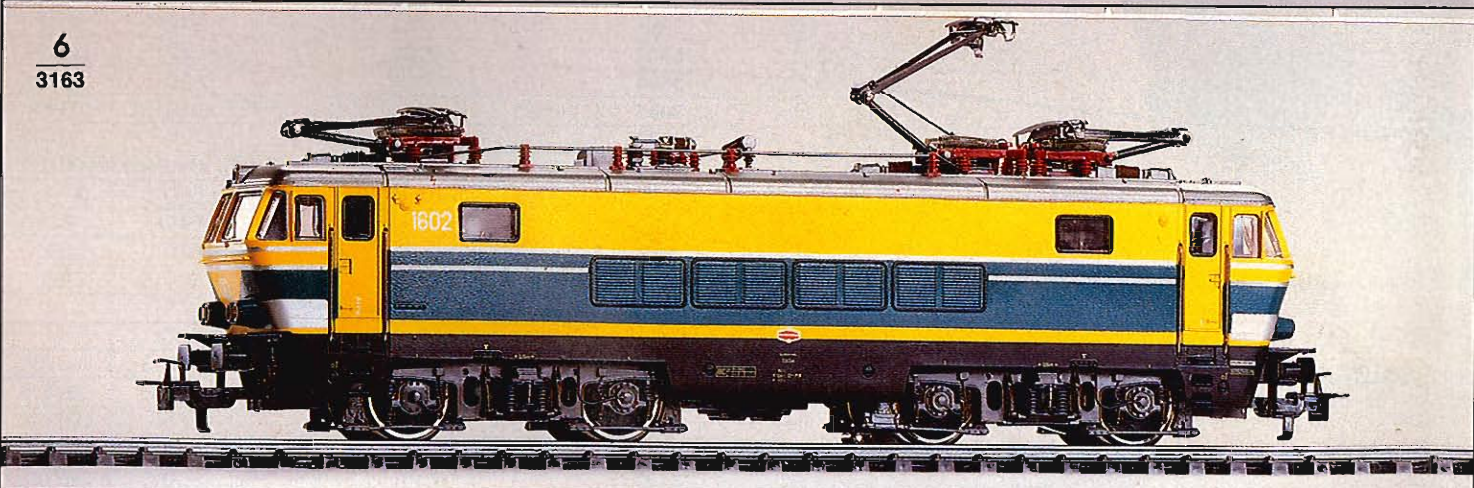
4
3041



5
3165



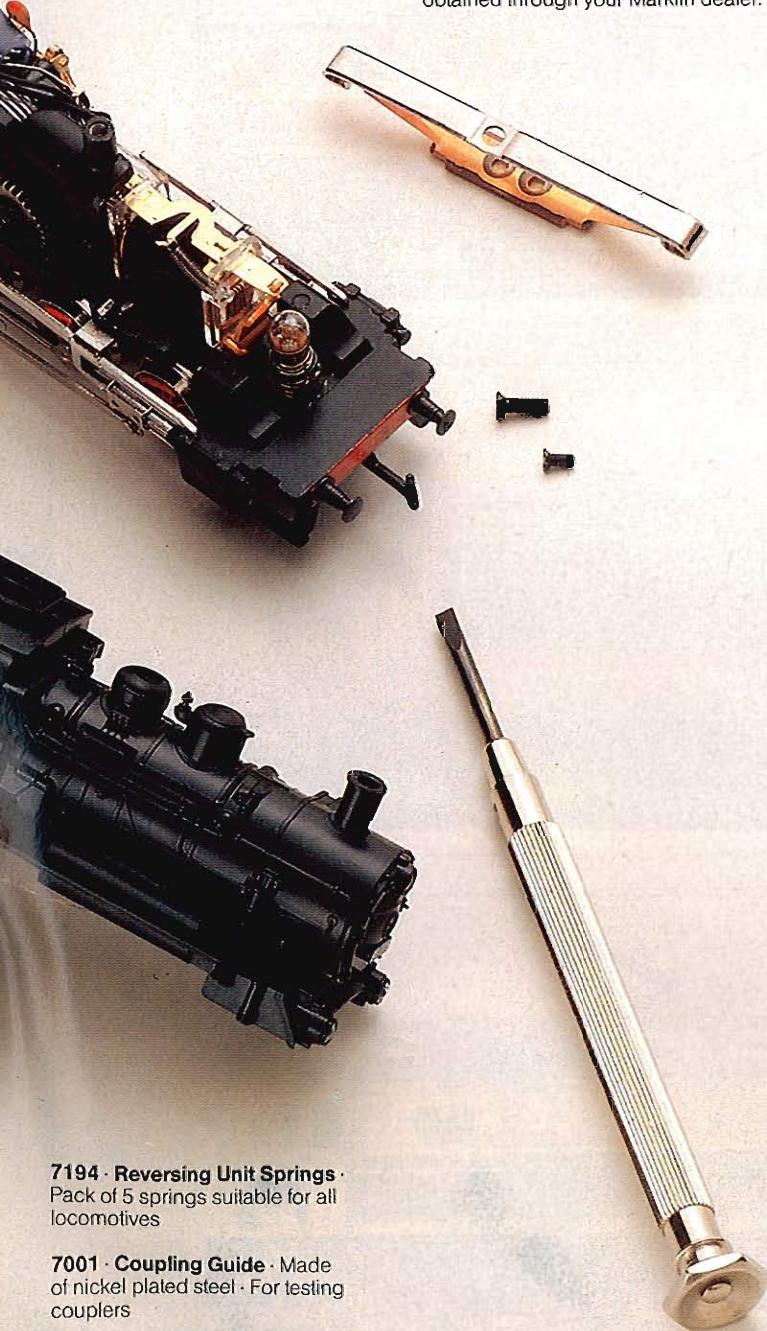
6
3163



Spare Parts for Locomotives

Installation instructions are included with the non-skid tires, sliders, light bulbs, and reversing unit springs.

The tables shown here list the important spare parts for each locomotive. All spare parts can be obtained through your Märklin dealer.



7194 · Reversing Unit Springs · Pack of 5 springs suitable for all locomotives

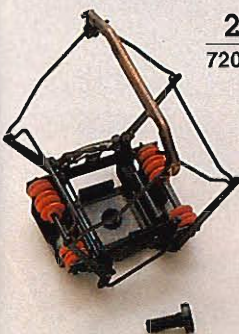
7001 · Coupling Guide · Made of nickel plated steel · For testing couplers

7199 · Bottle of Oil · Contains 9 ml · Suitable for all cars and engines

								
Locomotives	Non-skid tire	Slider	Pantograph	Light bulb	Brushes	Reversing switch	Front coupler	Rear coupler
3000	7154	7185	-	60 010	60 030	20 824	20 001	20 001
3003	7153	7185	-	60 010	60 030	20 824	20 214	70 154
3016	7153	7164	-	60 010	60 030	20 824	20 989	20 989
3021	7154	7183	-	60 010	60 030	20 824	21 166	21 166
3028	7154	7164	-	60 001	60 030	21 899	70 412	70 412
				60 015				
3030	7153	7185	7218	60 015	60 030	20 824	21 128	21 128
3035	7153	7164	7218	60 015	60 146	20 824	21 484	21 484
3039	7153	7164	7218	60 015	60 146	20 824	21 484	21 484
3041	7153	7164	7219	60 015	60 030	20 824	70 412	70 412
3042	7153	7164	7218	60 015	60 146	20 824	70 156	70 156
3043	7153	7164	7218	60 015	60 030	20 824	70 412	70 412
3044	7154	7185	7219	60 015	60 030	20 824	20 001	20 001
3049	7153	7185	7218	60 015	60 146	20 824	70 412	70 412
3058	7153	7164	7218	60 015	60 146	20 824	70 412	70 412
3060	7154	7185	-	60 015	60 030	20 824	21 583	21 586
3065	7153	7185	-	60 010	60 030	22 970	21 376	21 376
							21 377	21 377
3066	7154	7164	-	60 015	60 030	20 824	21 783	21 783
3067	7154	7164	-	60 015	60 030	20 824	21 783	21 783
3071	7154	7164	-	60 001	60 030	22 049	-	21 929
		7175		60 015				21 951
								21 954
3072	7154	7164	-	60 010	60 030	20 824	21 842	21 842
3074	7154	7164	-	60 015	60 030	20 824	70 156	70 156
3075	7154	7164	-	60 015	60 030	20 824	70 156	70 156
3077	7154	7164	-	60 015	60 030	20 824	-	-
3078	7154	7185	-	60 015	60 030	20 824	20 001	20 001
3080	7154	7185	-	-	60 030	20 824	20 001	20 001
3081	7154	7183	-	60 010	60 030	20 824	21 166	21 166
3082	7153	7164	-	60 015	60 146	20 824	21 843	21 842
3084	7153	7164	-	60 015	60 146	20 824	21 843	21 842
3085	7152	7164	-	60 015	60 146	20 824	-	21 842
3087	7154	7185	-	-	60 030	20 824	20 001	20 001
3089	7152	7185	-	60 015	60 030	20 824	-	70 154
3092	7152	7185	-	60 015	60 030	20 824	-	21 842
3093	7152	7185	-	60 015	60 030	20 824	-	21 842
3095	7153	7185	-	60 010	60 030	20 824	22 532	21 842
3096	7153	7164	-	60 015	60 030	22 970	24 456	24 456
							22 897	22 897
							22 924	22 924
3099	7152	7185	-	60 015	60 030	20 824	22 418	21 842
3102	7153	7185	-	60 015	60 146	20 824	21 843	21 842
3104	7153	7185	-	-	60 146	20 824	20 001	20 001
3106	7153	7164	-	60 015	60 146	20 824	24 281	24 281
3107	7153	7164	-	60 015	60 146	20 824	24 281	24 281



1
7247

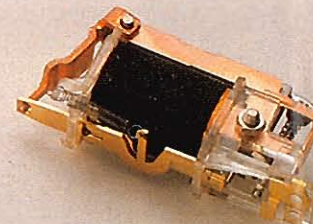


2
7207

								
Locomotives	Non-skid tires	Slider	Pantograph	Light bulb	Brushes	Reversing switch	Front coupler	Rear coupler
3125	7154	7164	25 640	60 008	-	-	-	-
3129	7154	7185	-	60 015	60 030	20 824	21 583	21 586
3141	7153	7185	-	60 010	60 030	20 824	21 411	21 411
3145	7154	7185	-	60 015	60 146	20 824	70 156	70 156
3146	7154	7185	-	60 015	60 146	20 824	70 156	70 156
3147	7154	7164	-	60 010	60 030	20 824	21 842	21 842
3149	7153	7185	-	60 010	60 030	20 824	21 411	21 411
3153	7153	7164	7208	60 015	60 146	20 824	70 412	70 412
3155	7153	7164	7218	60 015	60 146	20 824	70 156	70 156
3156	7153	7164	7218	60 015	60 146	20 824	21 484	21 484
3157	7153	7185	7218	60 010	60 146	20 824	21 842	21 842
3163	7153	7164	7219	60 015	60 146	20 824	70 156	70 156
3165	7153	7164	7218	60 015	60 146	20 824	21 773	21 773
3167	7153	7185	24 800	60 015	60 146	20 824	70 156	70 156
3168	7154	7164	7218	60 015	60 030	20 824	21 783	21 783
3308	7153	7164	-	60 010	60 146	25 220	24 456	24 460
3309	7153	7164	-	60 019	60 146	22 970	24 456	24 460
							24 457	24 461
3310	7152	7164	-	60 019	60 146	25 220	-	32 540
3312	7153	7185	-	60 019	60 146	25 220	21 842	21 842
3313	7153	7185	-	60 019	60 146	25 220	21 842	21 842
3322	7153	7164	7218	60 019	60 030	25 220	21 842	21 842
3323	7153	7164	7219	60 019	60 146	25 220	24 810	24 810
3324	7153	7164	7218	60 019	60 146	25 220	70 156	70 156
3326	7153	7164	7219	60 019	60 146	25 220	24 810	24 810
3327	7153	7164	7218	60 019	60 146	25 220	70 156	70 156
3328	7153	7164	7219	60 019	60 146	25 220	24 810	24 810
3346	7154	7185	-	60 019	60 146	25 220	70 156	70 156
3350	7153	7164	25 069	60 008	60 030	25 220	21 708	21 708
3356	7153	7164	7218	60 019	60 146	25 220	70 156	70 156
3357	7153	7164	7247	60 019	60 146	25 220	22 313	22 313
3366	7153	7164	7218	60 019	60 146	25 220	70 412	70 412
3371	7154	7164	25 445	60 008	-	-	-	-

Locomotives which have been discontinued within the past 3 years:

3050	7153	7164	7218	60 015	60 030	20 824	21 708	21 708
3055	7154	7164	7218	60 015	60 030	20 824	21 783	21 783
3062	7154	7185	-	60 015	60 030	20 824	21 583	21 586
3064	7153	7185	-	60 010	60 030	20 824	21 411	21 411
3083	7152	7185	-	60 015	60 030	20 824	-	21 842
3144	7154	7185	-	60 015	60 030	20 824	20 001	20 001
3151	7153	7185	7218	60 015	60 146	20 824	70 156	70 156
3152	7153	7164	7219	60 015	60 146	20 824	70 156	70 156
3159	7153	7164	7218	60 015	60 030	20 824	21 842	21 842
3161	7154	7164	7218	60 015	60 030	20 824	21 783	21 783
3354	7153	7164	7218	60 019	60 030	20 824	22 313	22 313



All Abo-o-oard!

The hustle and bustle of a railroad passenger station is true poetry in motion. A limited with a heavy consist of sleepers departs for a vacation mecca while a railbus gets the clear board, over on another track a switcher is shoving some baggage cars while a commuter train waits for the highball, meanwhile an international express train with its colorful consist of cars from various railroads glides to a halt on track 3 and just out in the yards a long freight train gets broken up as its motive power is hostled to the service bay...

All this prototype action can be captured on Märklin layouts because of the huge number of freight and passenger cars of various railroads, Europe and America, offered by Märklin.





Special Rolling Stock

1

4190



1

4190 · "Umweltzug" (Environmental Train) · Includes: 3 coaches of the German Federal Railways' Environmental Information Train · Coach sides feature environmental motifs · Cars available only as a set · Individual items not available separately · Automatic couplers · Train length 72 cm (28-3/8") · Will accept interior lighting set 7329 (page 139)

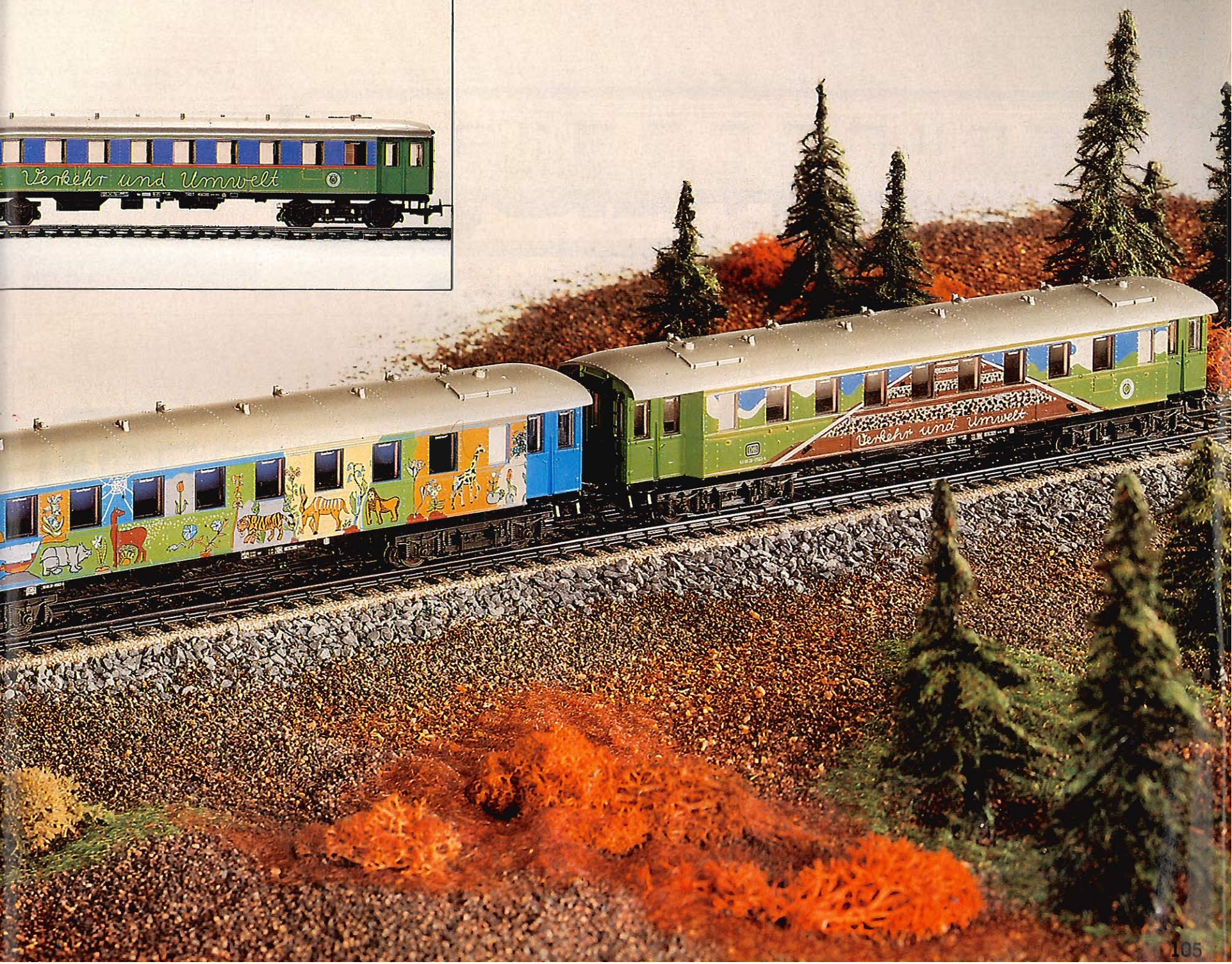
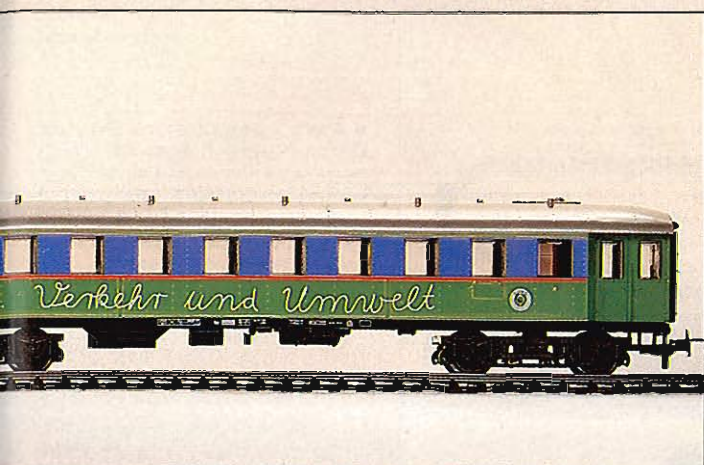
■ A cooperative educational program was organized by the German Federal Railways to better explain to the public the benefits of the environmentally friendly railroad. A graphic expression of this effort is the colorful Environmental Information Train. Comprised of modified coaches, the exhibition train concentrates on two main themes.

The first theme is that, thanks to modern construction methods, new railroad lines are far more environmentally sound than roads or highways. Further, a railroad requires less than half the amount of space required by highways. Also, a train operates only 1/4 the amount of energy

trucks need for moving goods. Finally, since most of the heavy mainlines in Germany are electrified, and the current is obtained from hydro-electric plants, the energy used by railroads does not foul the air.

The second theme illustrated how a new Biotope is established along railroad lines, offering living space to plants and animals.

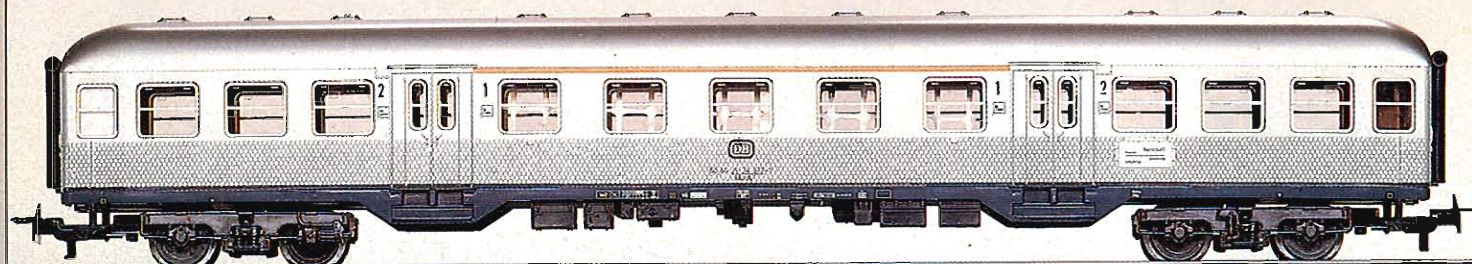




"Silverliners"

1

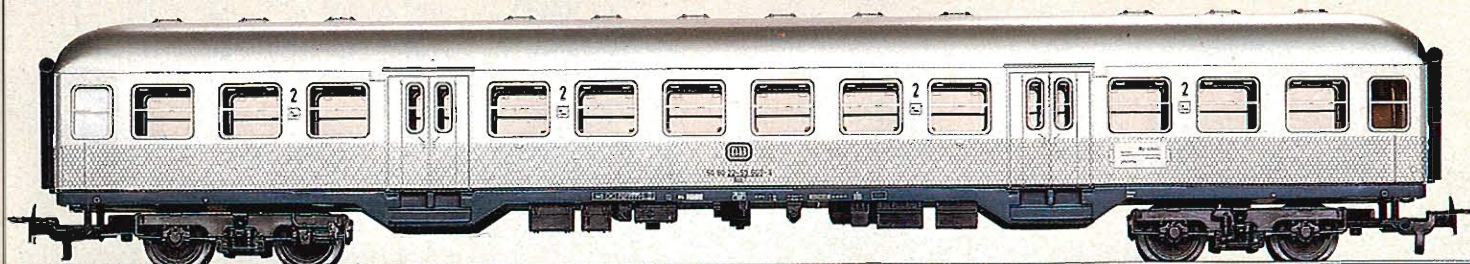
4158



■ After a few trial demonstrations, the German Federal Railways began replacing aging commuter cars in the 1960s with these 8-wheel cars having a length of 26.4 m (83' 7"). Because of the cars' unique silvery finish, they are nicknamed "Silberlinge" (Silverliners).

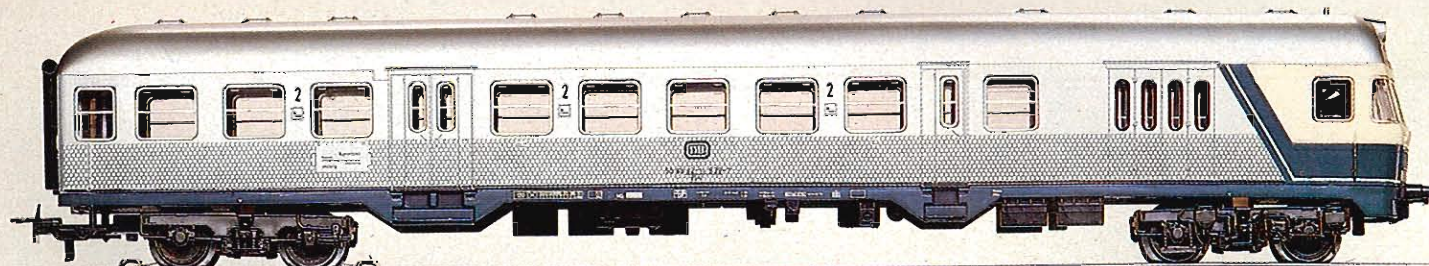
2

4159



3

4160



**German Federal Railways'
Commuter Cars**

1

4158 · Commuter Coach · Type ABnrzb 704 · 1st and 2nd class · Peacock-eye livery · Interior details · Automatic couplers · Length 26.4 cm (10-3/8") · Accepts interior lighting set 7329 (page 139)

2

4159 · Commuter Coach · Type Bnb 719 · 2nd class · Peacock-eye livery · Interior details · Automatic couplers · Length 26.4 cm (10-3/8") · Accepts interior lighting set 7329 (page 139)

3

4160 · Commuter Combine with Control Compartment · Type BDnf 735 · 2nd class · Peacock-eye livery · Interior details · Built-in switch for the automatic operation of the tail lights · Illuminated route signs at control end · Automatic couplers · Length 26.4 cm (10-3/8") · Accepts interior lighting set 7329 (page 139)

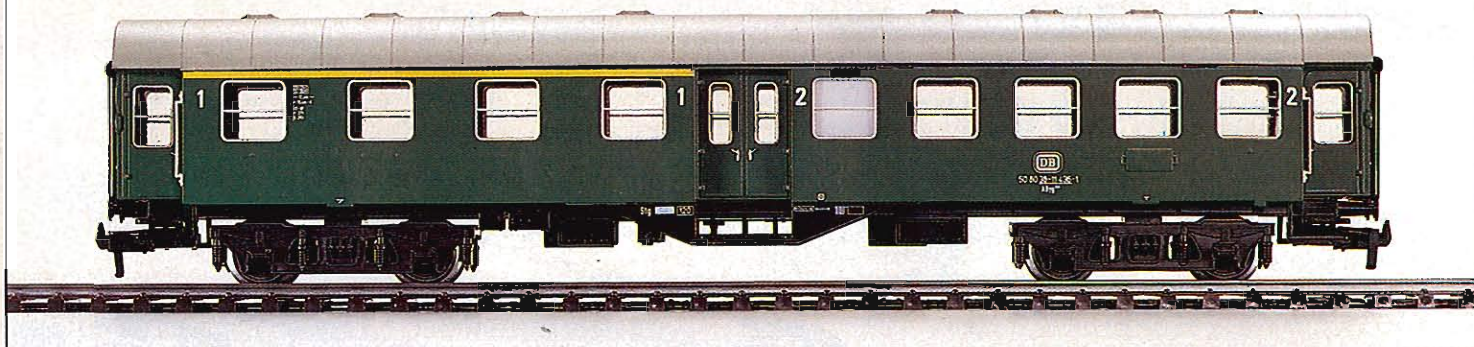
If the car is at the front of the train, three white headlights shine.

If car is at the end of the train, two red taillights shine.



Rebuilds with Märklin Close Couplers

1 NEW 4131



Rebuild Cars of the German
Federal Railways

1

4131 · Coach · AByg 503 · 1st and 2nd class · Highly detailed · Interior details · Automatic couplers · Length 22.4 cm (8-7/8") · Accepts interior lighting 7329 (page 139)

2

4132 · Coach · Byg 515 · 2nd class · Highly detailed · Interior details · Automatic couplers · Length 22.4 cm (8-7/8") · Accepts interior lighting 7329 (page 139)

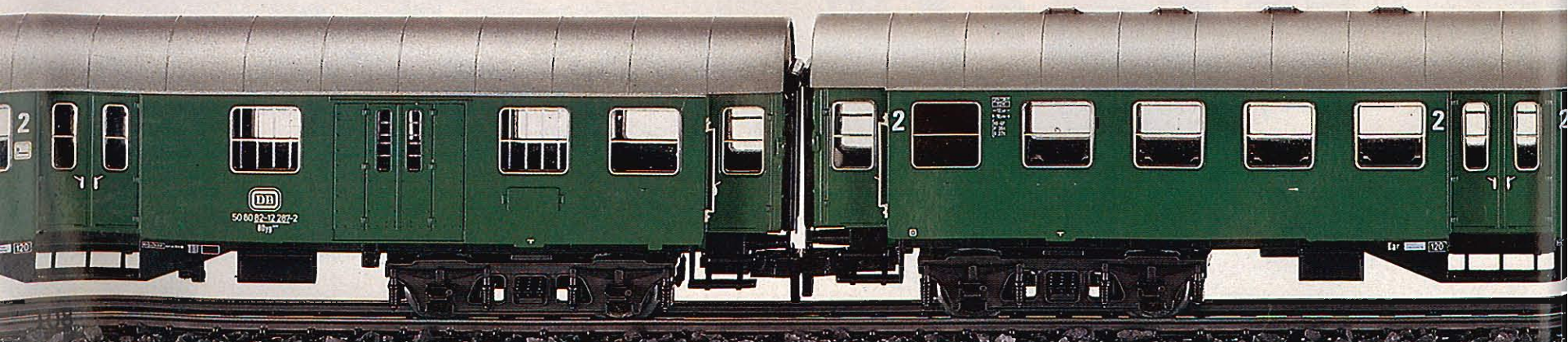
3

4133 · Combine · BDyg 533 · 2nd class · Highly detailed · Interior details · Automatic couplers · Length 22.4 cm (8-7/8") · Accepts interior lighting 7329 (page 139)

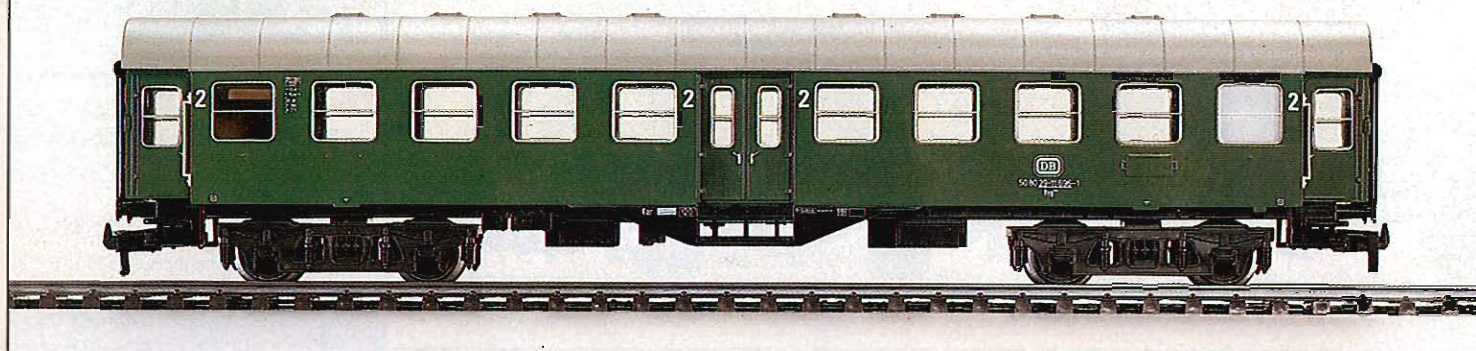
■ The German Federal Railways acquired a large number of four, six, and eight wheel passenger cars which underwent a major overhaul beginning in 1954. The first of the new 8 wheel cars were put into service in 1955.

The rebuild program called for stripping the cars bare, welding the floors into standard lengths and using ribbed construction in building the bodies. The original Prussian trucks were retained on the cars in the rebuilding program.

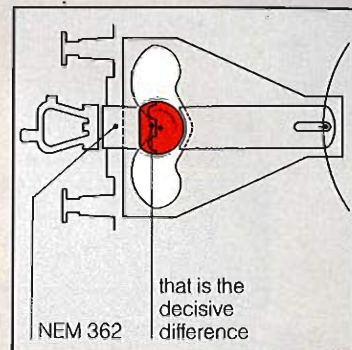
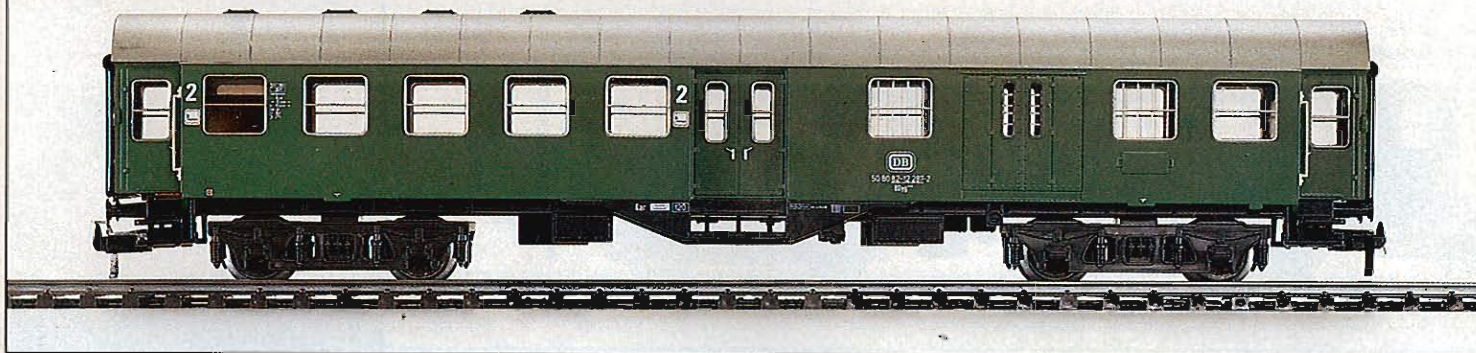
The rebuild program included dual class cars, 2nd class cars and 2nd class cars with baggage compartments.



2 NEW
4132



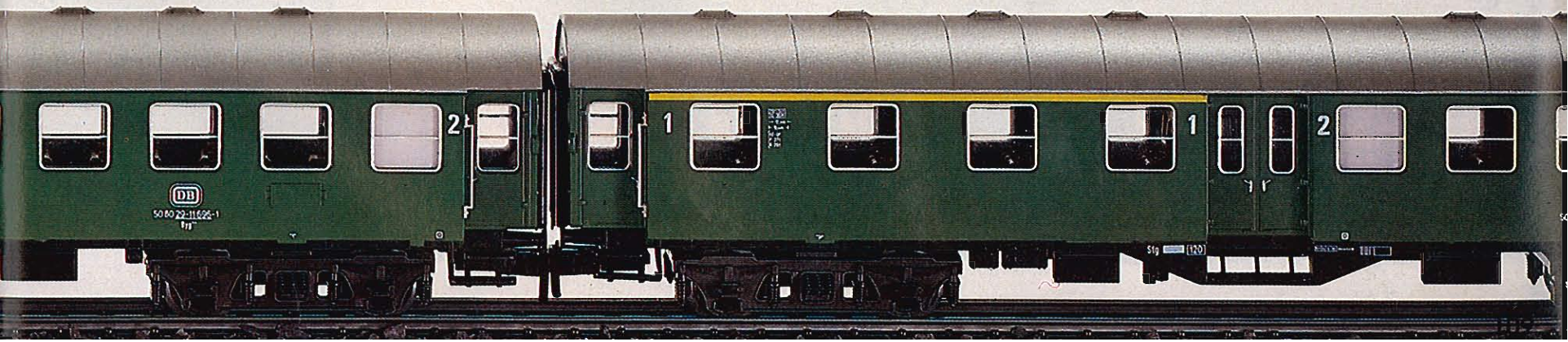
3 NEW
4133



The new Märklin close couplers with futuristic technology

Those eight-wheel Rebuilds are outfitted with the new Märklin close couplers. These couplers enable a prototypical spacing between cars, even on curves and through switches. The coupler guard is sprung to avoid unwanted uncouplings.

These couplers conform to the NEM standard 362. What is especially nice about the Märklin close couplers is that they will mate with conventional Märklin couplers. Thus, no additional equipment is required when operating these new Rebuilds with other Märklin cars.



1
4067



Rebuild cars of the German Federal Railways

1

4067 · Coach · AB3yge⁷⁵⁶ · 1st and 2nd class · Highly detailed · RELEX couplers (page 50) · Length 15.2 cm (6") · Accepts interior lighting 7074 (page 139)

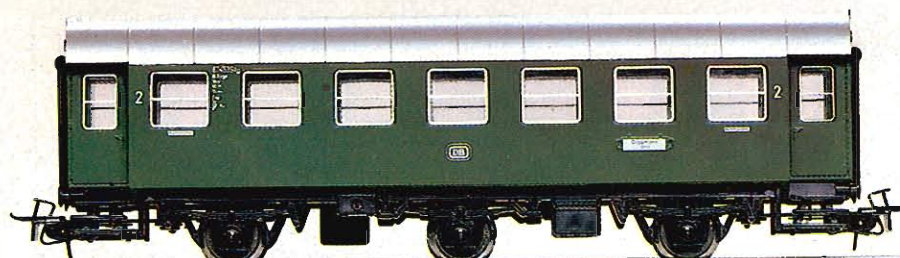
2

4079 · Coach · B3yge⁷⁶¹ · 2nd class · Highly detailed · RELEX couplers (page 50) · Length 15.2 cm (6") · Accepts interior lighting 7074 (page 139)

3

4080 · Combine · BD3yge⁷⁶⁶ · 2nd class · Highly detailed · RELEX couplers (page 50) · Length 15.2 cm (6") · Accepts interior lighting 7074 (page 139)

2
4079



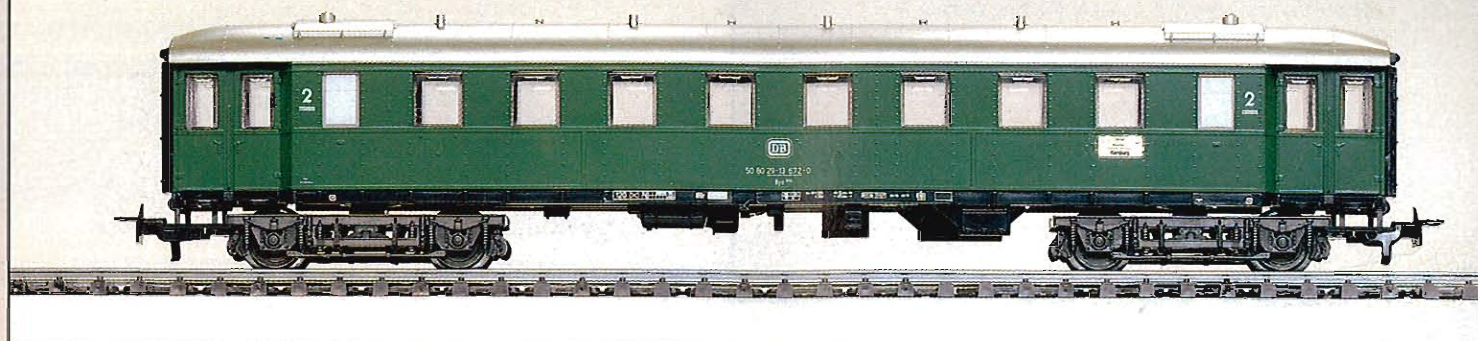
3
4080



4

4134 · Coach · German Federal Railways' type Bye 664 · 2nd class · Highly detailed · Interior details · Automatic couplers · Length 23 cm (9") · Accepts interior lighting 7329 (page 139)

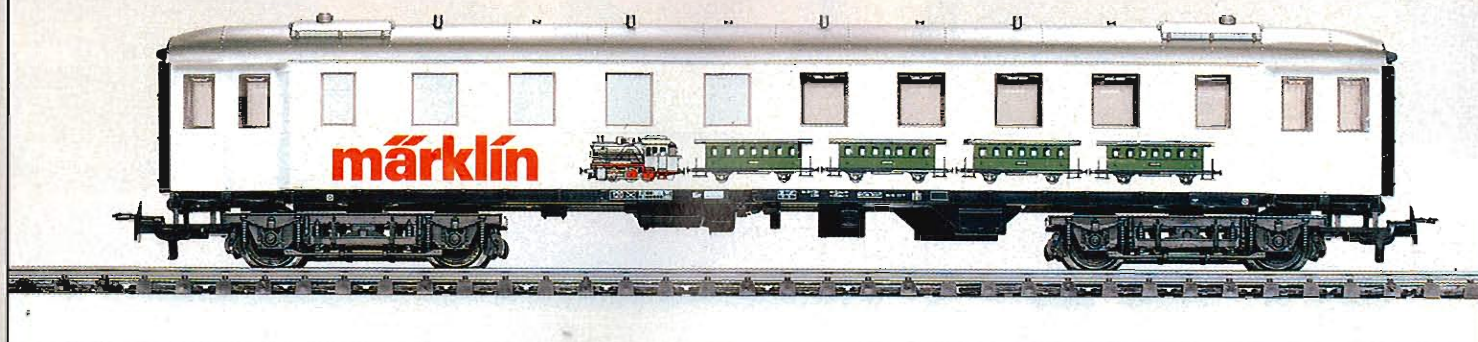
4
4134



5

4122 · Exhibition Car · German Federal Railways' type D (exhibition) 997 · Highly detailed · Automatic couplers · Length 23 cm (9") · Accepts interior lighting 7329 (page 139)

5
4122



6

4121 · Exhibition Car · German Federal Railways · Lettered for Shell road maps · Highly detailed · Automatic couplers · Length 23 cm (9") · Accepts interior lighting 7329 (page 139)

6 NEW
4121

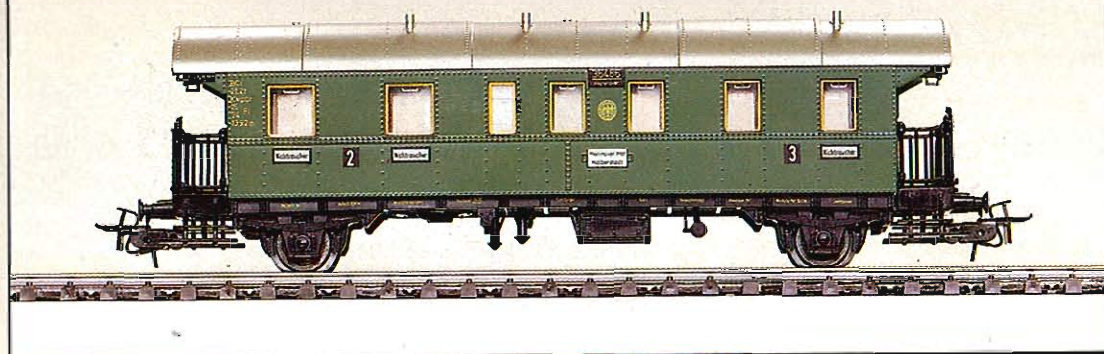


"Donnerbüchsen"

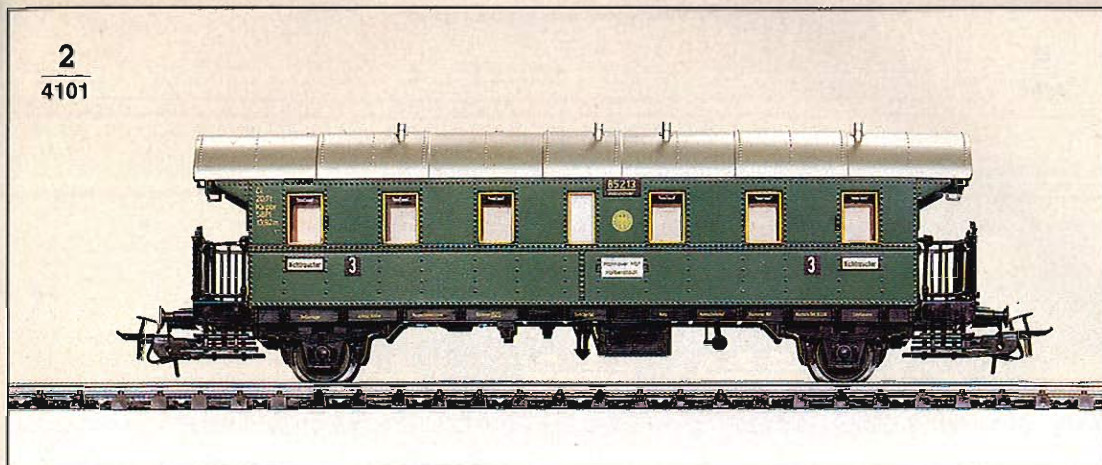
■ Shortly after establishing the German State Railways, studies were undertaken to create a standardized passenger car to replace the assorted older cars inherited from the provincial lines. Two- and four-axle designs were developed. Originally the two-

axle cars had wooden roofs and interior walls. Later versions, such as the model 29, were all steel. Because these cars were noisy when operated, they were nicknamed "Donnerbüchsen" (Rattling Crates).

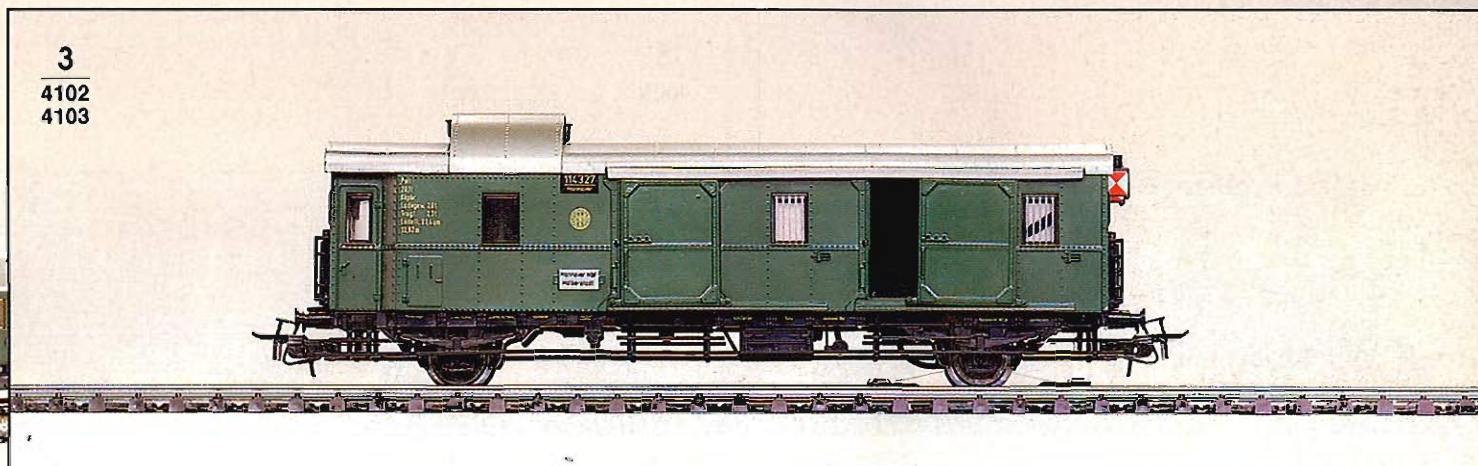
1
4100



2
4101



3
4102
4103



Standard Passenger Cars of the former German State Railways

1

4100 · Coach · BCi 29 · 2nd and 3rd class · Highly detailed · Interior details · RELEX couplers (page 50) · Length 16 cm (6-5/16")

2

4101 · Coach · Ci 29 · 3rd class · Highly detailed · Interior details · RELEX couplers (page 50) · Length 16 cm (6-5/16")

3

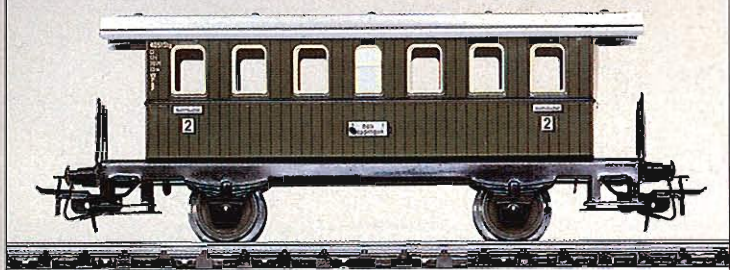
4102 · Baggage Car · Pwi 30 · Highly detailed · 4 sliding doors · Interior details · RELEX couplers (page 50) · Length 16 cm (6-5/16")

3

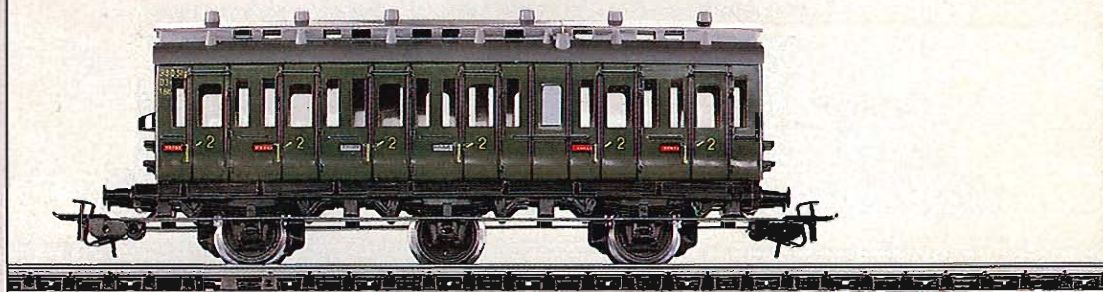
4103 · Baggage Car · Same as 4102 but with current pickup shoe and LED marker lights

 = 31051

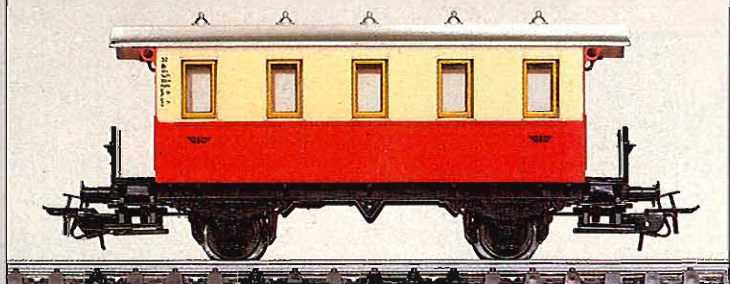
1
4040



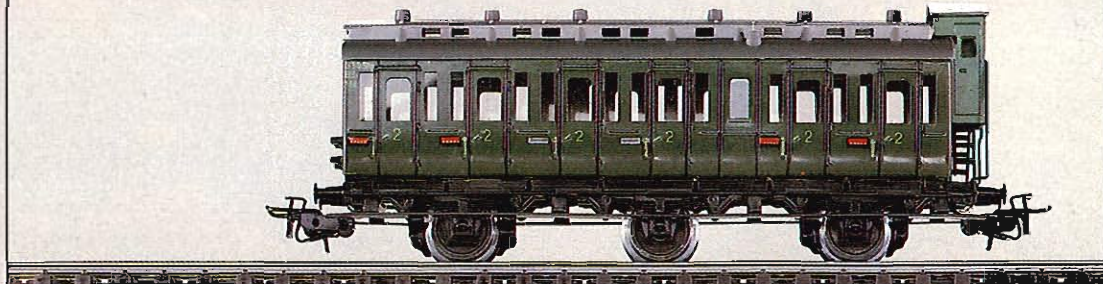
4
4004



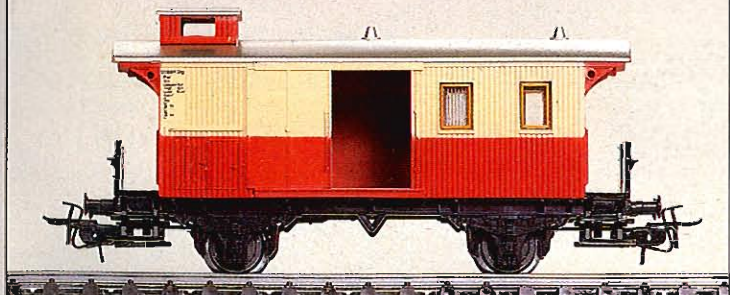
2
4107



5
4005



3
4108



Coaches

1

4040 · Coach · 2nd class · RELEX-couplers (page 50) · Length 11.5 cm (4-1/2")

Cars of Privately owned Railways

2

4107 · Coach · Interior details · RELEX-couplers (page 50) · Length 11 cm (4-3/8") · Accepts interior lighting set 7323 (page 139)

3

4108 · Baggage Car · With conductor's cupola · RELEX-couplers (page 50) · Length 11 cm (4-3/8") · Accepts interior lighting set 7323 (page 139)

Prussian Coaches

4

4004 · Compartment Car · RELEX-couplers (page 50) · Length 13 cm (5-1/8") · Accepts interior lighting set 7074 (page 139)

5

4005 · Compartment Car · With Brakeman's cab · RELEX-couplers (page 50) · Length 13 cm (5-1/8") · Accepts interior lighting set 7074 (page 139)

French (SNCF) Passenger Cars

6 France

4104 · Coach · Type B²C³ v²tmfp, former German State Railways' class BCi 29 · 2nd and 3rd class · Interior details · RELEX-couplers (page 50) · Length 16 cm (6-5/16")

7 France

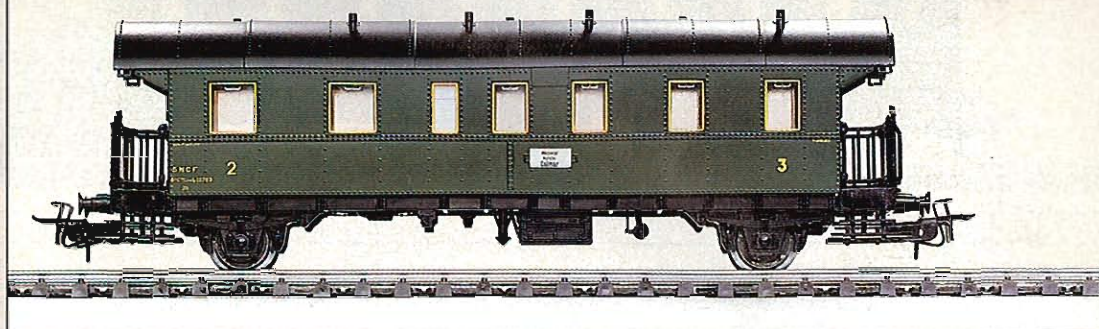
4105 · Coach · Type C⁸tmfp, former German State Railways' class Ci 29 · 3rd class · Interior details · RELEX-couplers (page 50) · Length 16 cm (6-5/16")

8 France

4106 · Baggage Car · Type Dmp, former German State Railways' class Pwi 30 · 4 sliding doors · Interior details · RELEX-couplers (page 50) · Length 16 cm (6-5/16")

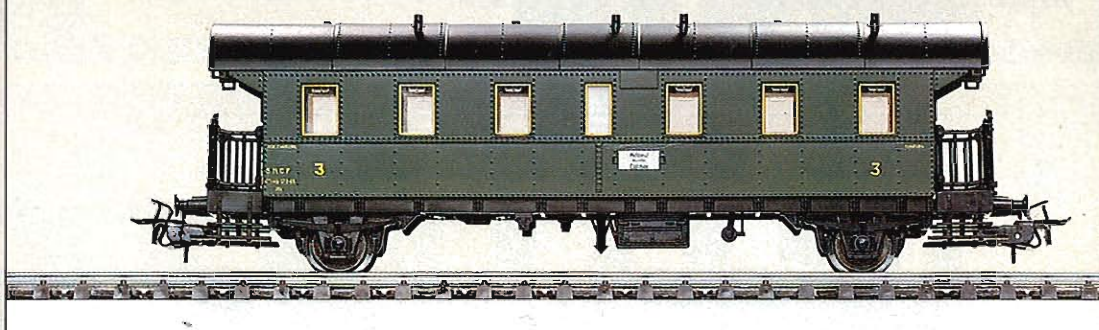
6

4104



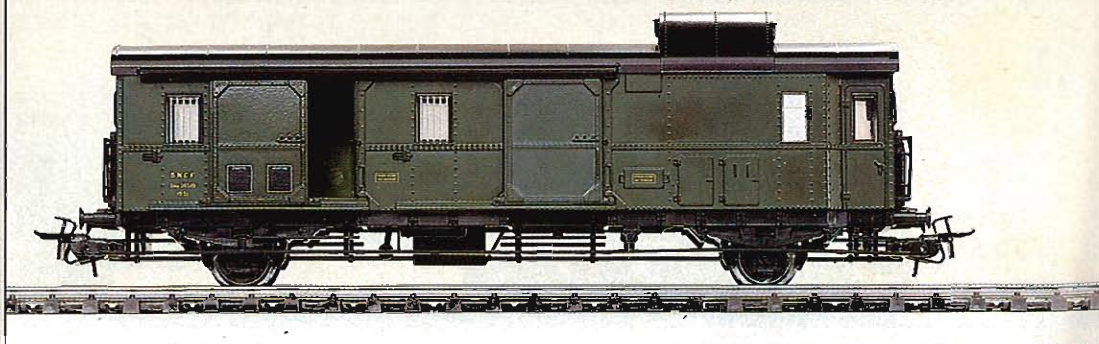
7

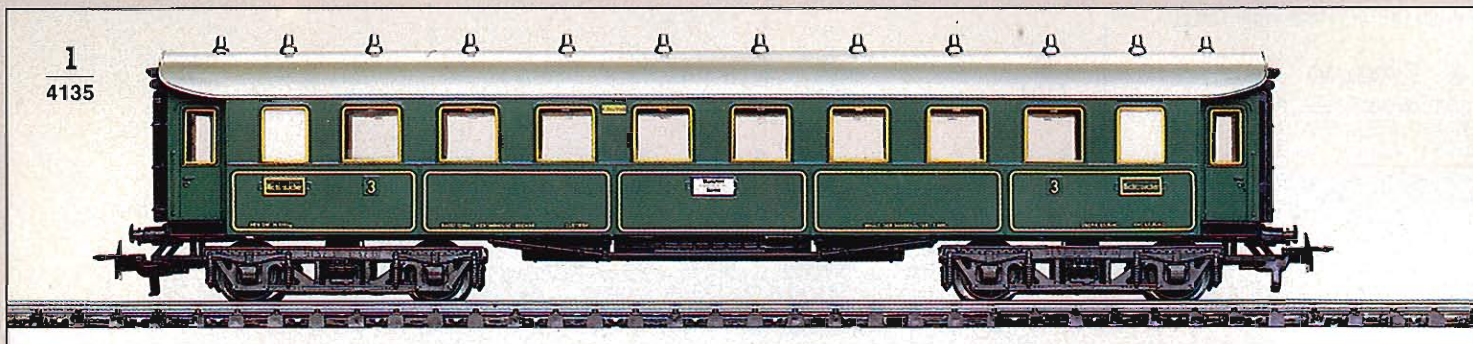
4105



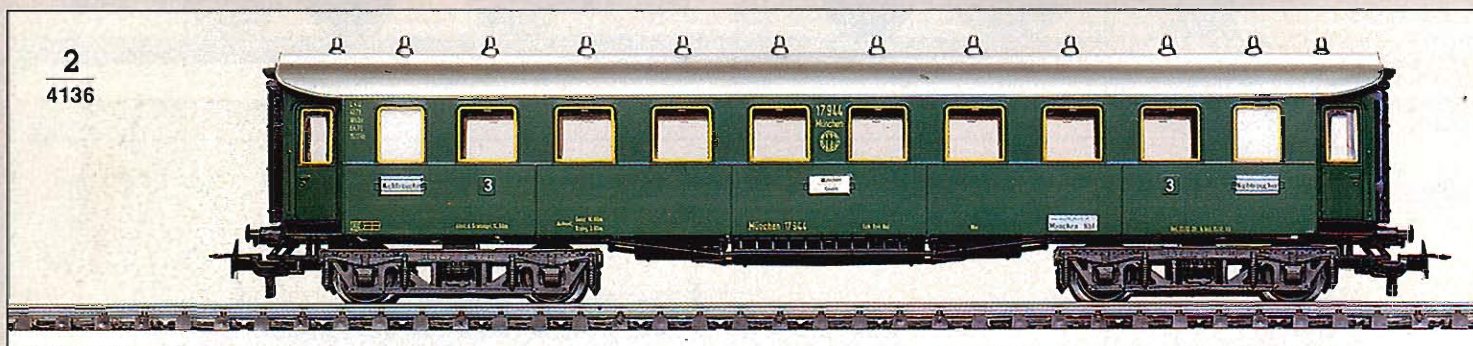
8

4106

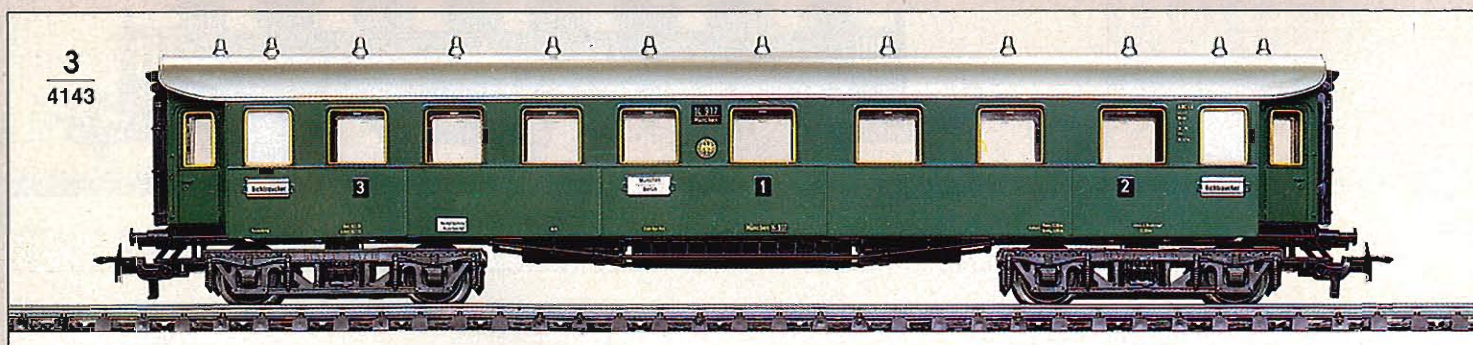




Former Royal Bavarian Railways' Express Coach



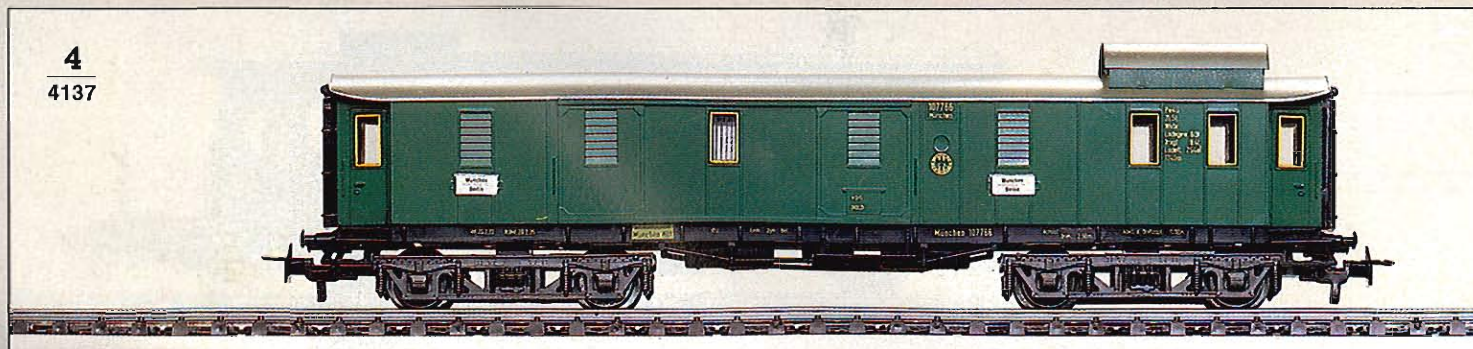
Former German State Railways Older Style Express Coaches



1
4135 · Express Coach · Type CCü · 3rd class · Interior details · Automatic couplers · Length 22 cm (8-5/8") · Accepts interior lighting set 7329 (page 139)

2
4136 · Express Coach · Type C4ü bay 11 · 3rd class · Interior details · Automatic couplers · Length 22 cm (8-5/8") · Accepts interior lighting set 7329 (page 139)

3
4143 · Express Coach · Type ABC4ü bay 11 · 1st, 2nd and 3rd class · Interior details · Automatic couplers · Length 23.2 cm (9-1/8") · Accepts interior lighting set 7329 (page 139)

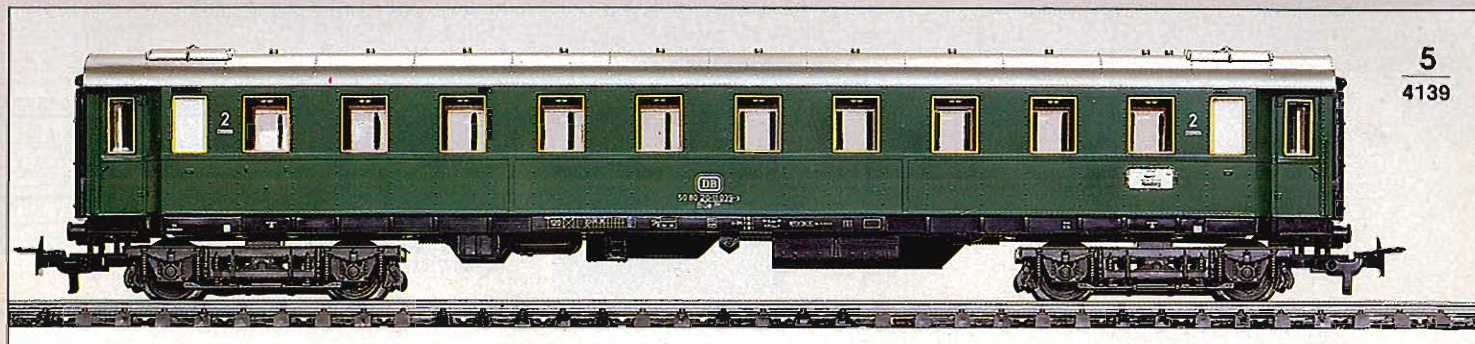


4
4137 · Baggage Car · Type Pw4ü bay 09 · Automatic couplers · Length 20 cm (7-7/8") · Accepts interior lighting set 7329 (page 139)

**Standard Express Coaches of the
German Federal Railways**

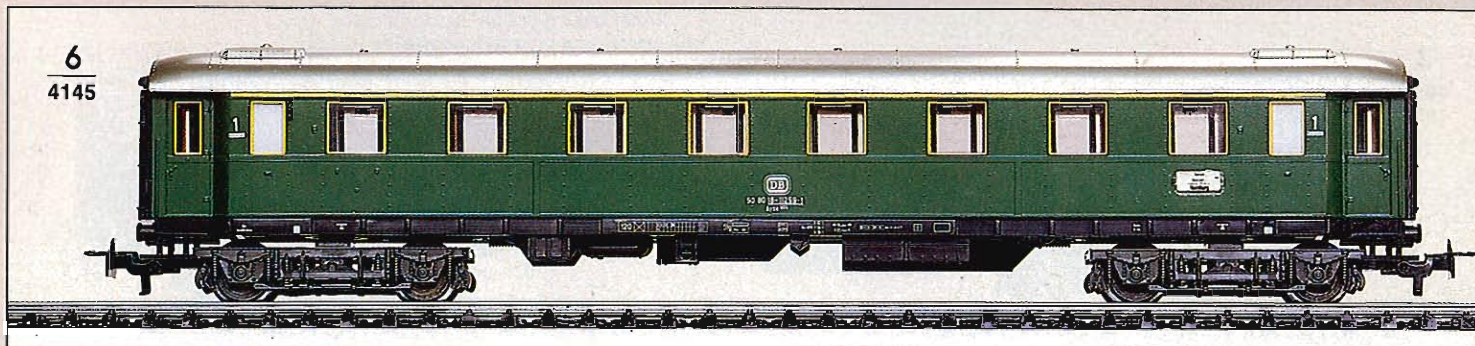
5

4139 · Express Coach · Type Büe³⁵⁴ ·
2nd class · Interior details · Görlitz
trucks · Automatic couplers · Length
24.3 cm (9-7/16") · Accepts interior
lighting set 7329 (page 139)



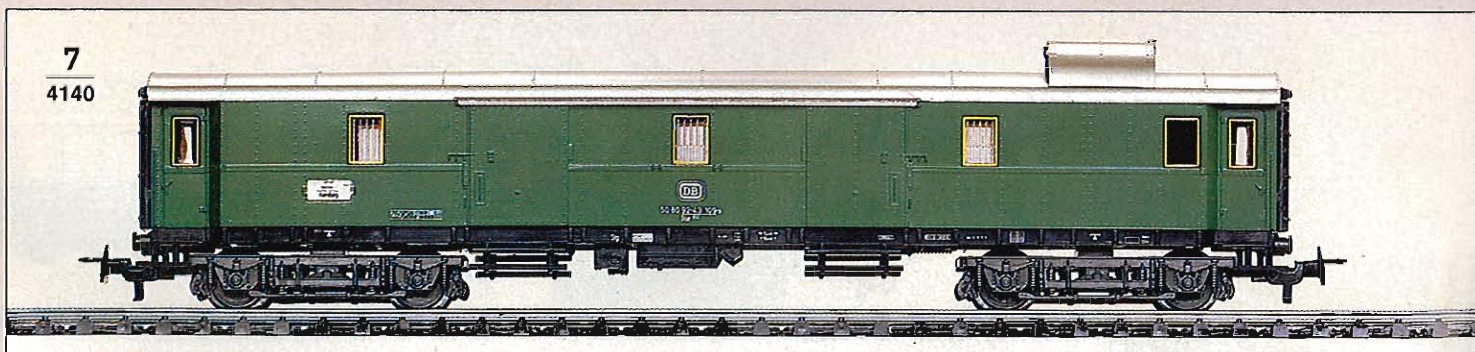
6

4145 · Express Coach · Type
Ayse⁶⁰⁴ · 1st class · Interior details ·
Görlitz trucks · Automatic couplers ·
Length 24.3 cm (9-7/16") · Accepts
interior lighting set 7329 (page 139)



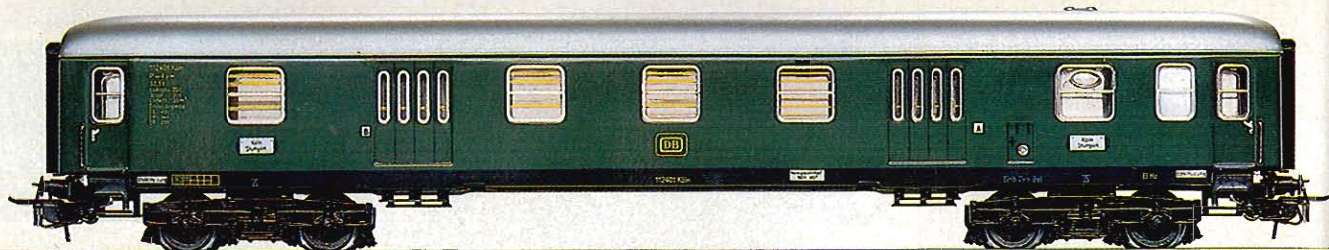
7

4140 · Baggage Car · Type Düe⁹³² ·
Görlitz trucks · Automatic couplers ·
Length 22 cm (8-3/4") · Accepts interior
lighting set 7329 (page 139)



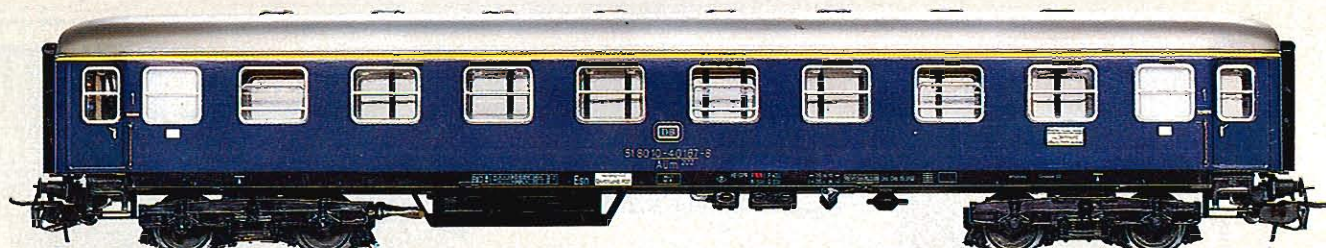
Express Coaches 24 cm (9-1/2")

1
4026



German Federal Railways'
Express Coaches

3
4051
4053



1
4026 · **Baggage Car** · Type Dyl⁹⁶¹
(ex-Dym 961) · RELEX-couplers
(page 50) · Length 24 cm (9-1/2") ·
Accepts interior lighting sets 7077 +
7198 (page 139)

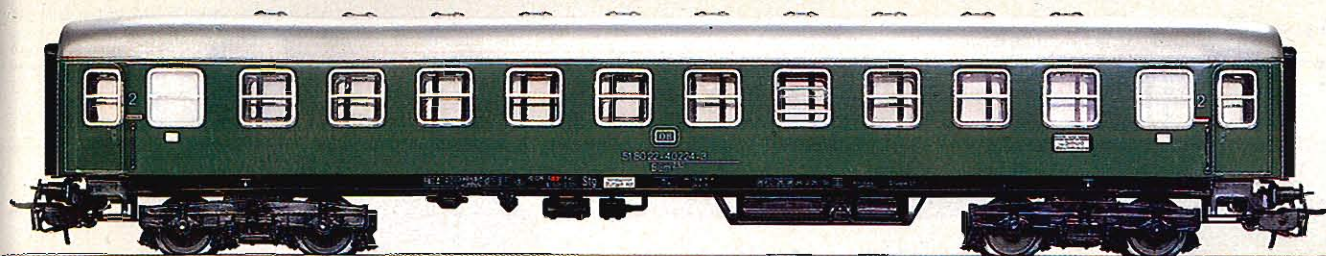
4
4054



2
4052 · **Express Coach** · Type Bm²³²
(ex-Büm 232) · 2nd class · Interior
details · RELEX-couplers (page 50) ·
Length 24 cm (9-1/2") · Accepts interior
lighting sets 7077 + 7198 (page 139)

5
4111





2
4052

3

4051 · Express Coach · Type Am²⁰²
(ex-Aüm 202) · 1st class · Interior
details · RELEX-couplers (page 50) ·
Length 24 cm (9-½") · Accepts interior
lighting sets 7077 + 7198 (page 139)

3

4053 · Express Coach · Same as
4051, but includes illuminated end
markers · Accepts interior lighting set
7077 (page 139)

☞ = 7175

4

4054 · Diner · Type WRm¹³²
(ex-WRümh 132) · Interior details ·
RELEX-couplers (page 50) · Length
24 cm (9-½") · Accepts interior
lighting set 7320 (page 139)

5

4111 · Express Coach · Type Am²⁰²
(Aüm 202) · 1st class · Interior details ·
RELEX-couplers (page 50) · Length
24 cm (9-½") · Accepts interior
lighting sets 7077 + 7198 (page 139)

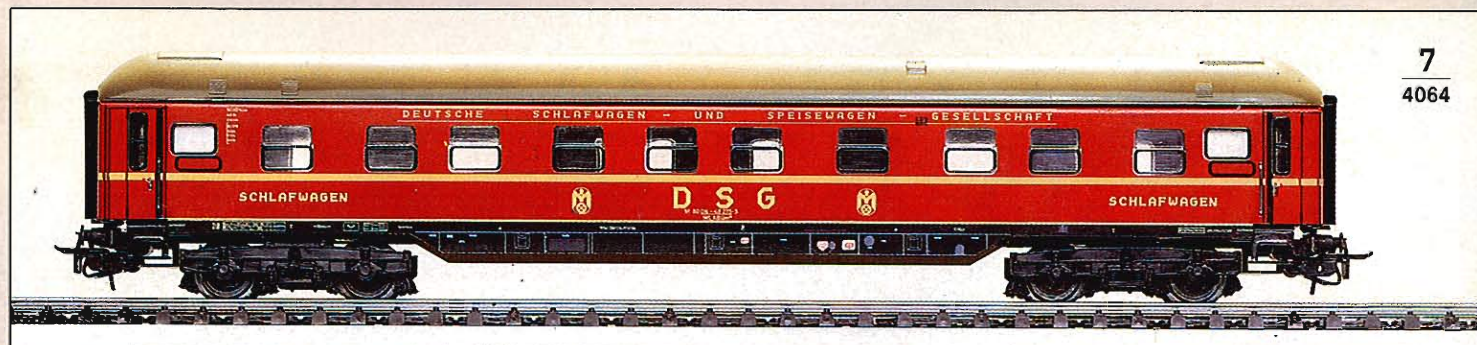
6

4112 · Express Coach · Type Bm²³²
(ex-Büm 232) · 2nd class · Interior
details · RELEX-couplers (page 50) ·
Length 24 cm (9-½") · Accepts interior
lighting sets 7077 + 7198 (page 139)

**Express Sleeping Cars of the
German Sleeping and Dining Car
Co. (DSG)**

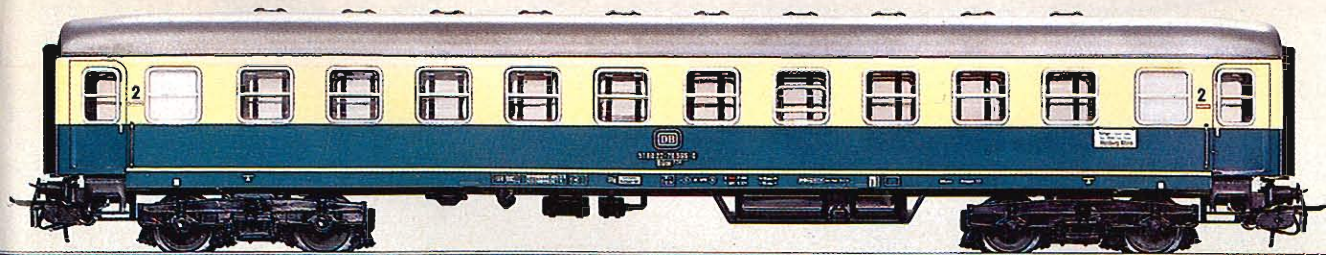
7

4064 · Sleeping Car · Type WLABm¹⁷⁴
(ex-WLABüm 174) · 33200 class
sleeper · 1st and 2nd class · RELEX-
couplers (page 50) · Length 24 cm
(9-½") · Accepts interior lighting set
7320 (page 139)



7
4064

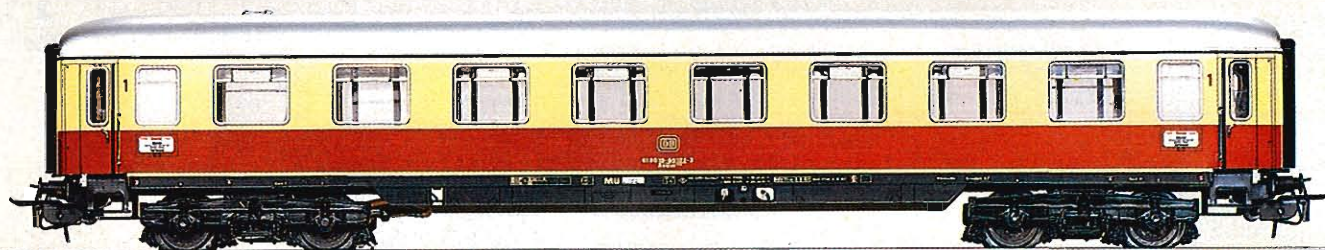
6
4112



Express Coaches 24 cm (9-½")

1

4085
4089



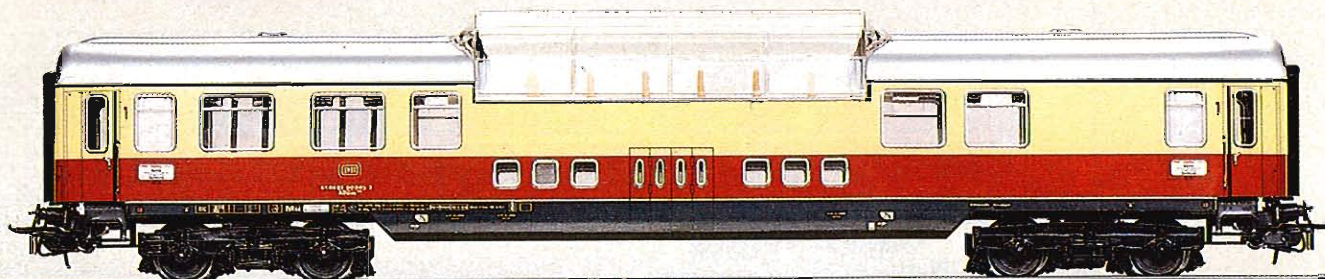
2

4087



3

4090



**German Federal Railways'
TEE Coaches – Also Used on
Intercity (IC) Trains**

1

4085 · TEE/IC Compartment Car ·
Type Avmh¹¹¹ (ex-Avüm 111) · 1st class ·
Interior details · RELEX-couplers
(page 50) · Length 24 cm (9-½") ·
Accepts interior lighting set 7320
(page 139)

7224 · Re-railer · Molded plastic ·
Ideal for getting multi-axle cars on the
tracks · Length 30 cm (1') · Height
2.5 cm (1")

1

4089 · TEE/IC Compartment Car ·
Same as 4085, but includes interior
lighting and illuminated end markers

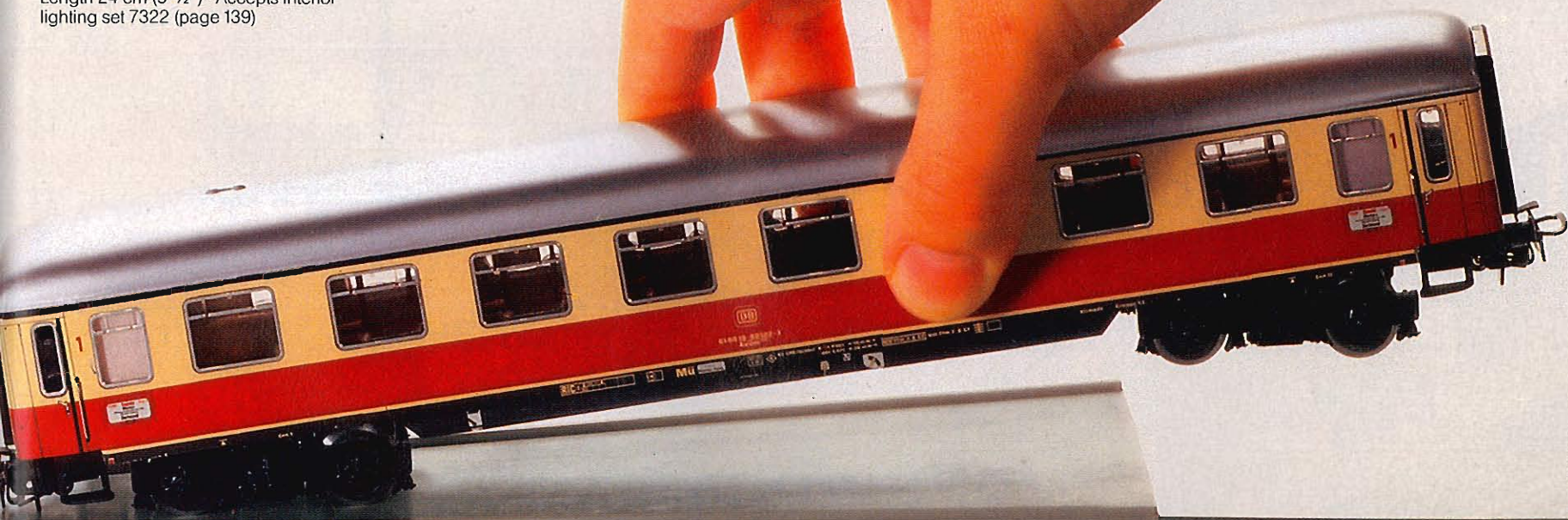
 = 7175  = 60015

2

4087 · TEE/IC Diner · Type WRmh¹³²
(ex-WRümh 132) · Interior details ·
RELEX-couplers (page 50) · Length
24 cm (9-½") · Accepts interior
lighting set 7320 (page 139)

3

4090 · TEE Dome Car · Type ADm¹⁰¹
(ex-ADüm 101) · 1st class · Interior
details · RELEX-couplers (page 50) ·
Length 24 cm (9-½") · Accepts interior
lighting set 7322 (page 139)



Express Coaches 27 cm (10-5/8")

1
4091



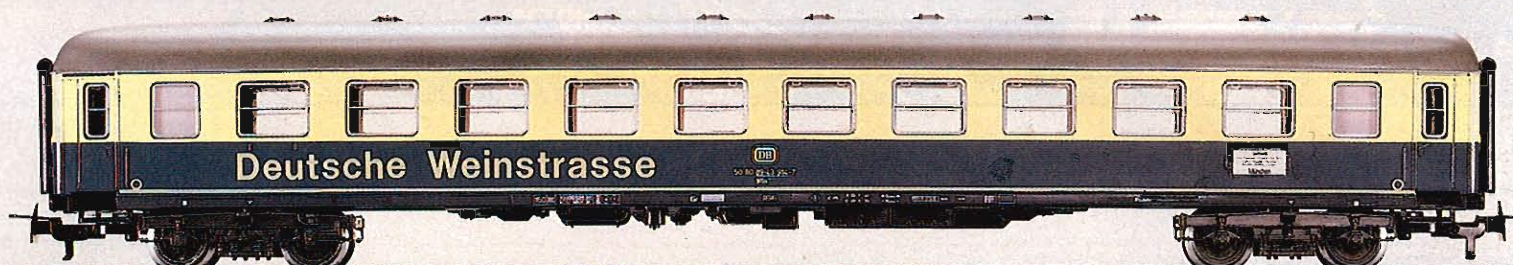
2
4092
4154



3
4175



4
4176



5 NEW
4177



Express Coaches of the German Federal Railways

1

4091 · Express Coach · Arn²⁰³ (Aüm 203) · 1st class · Highly detailed · Interior details · Automatic couplers · Length 27 cm (10-5/8") · Accepts interior lighting 7329 (page 139)

2

4092 · Express Coach · Bm²³⁴ (Büm 234) · 2nd class · Highly detailed · Interior details · Automatic couplers · Length 27 cm (10-5/8") · Accepts interior lighting 7329 (page 139)

2

4154 · Express Coach · Same as 4092 but with current pickup shoe and LED marker lights

 = 41494

3

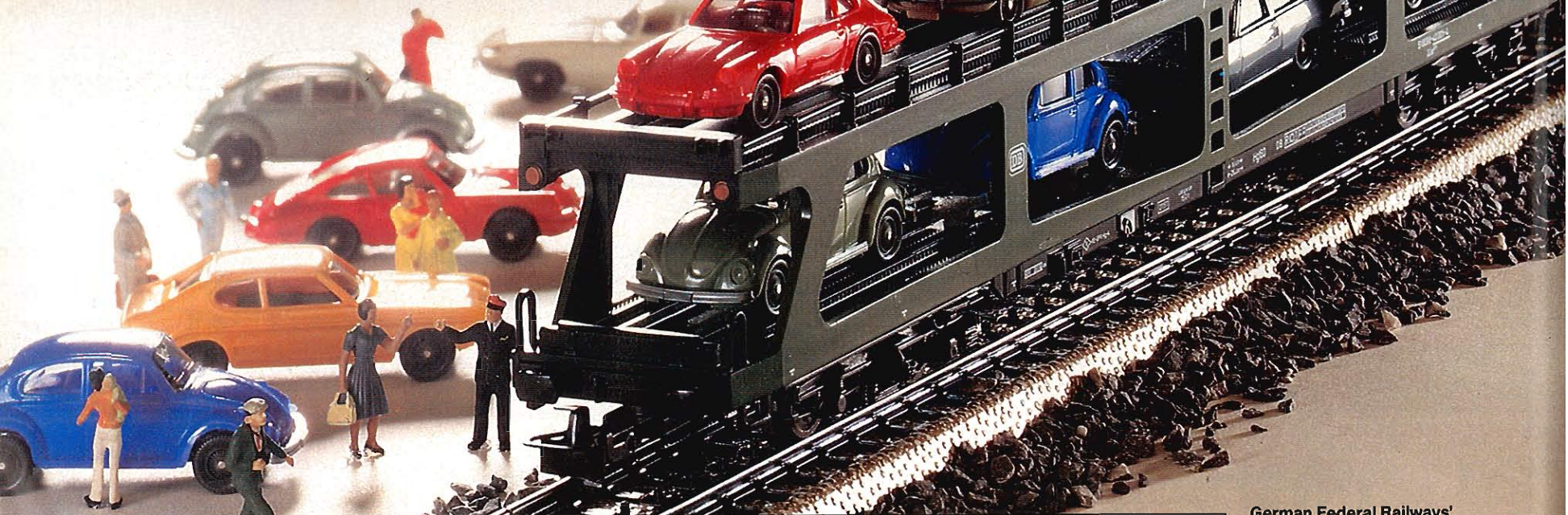
4175 · Express Coach · Entertainment Car WGm 842.0 · Highly detailed · Interior details · Automatic couplers · Length 27 cm (10-5/8") · Accepts interior lighting 7329 (page 139)

4

4176 · Express Coach · Entertainment Car WGm 842.1 "Deutsche Weinstraße" · Highly detailed · Interior details · Automatic couplers · Length 27 cm (10-5/8") · Accepts interior lighting 7329 (page 139)

5

4177 · Slumber Coach · Bcm for the Hapag-Lloyd Tour trains · 2nd class · Highly detailed · Interior details · Automatic couplers · Length 27 cm (10-5/8") · Accepts interior lighting 7329 (page 139)



German Federal Railways' Passenger Train Auto Carriers

1

4084 · Auto Carrier · Type DDm⁹¹⁵ · Without autos · RELEX-couplers (page 50) · Length 26.4 cm (10-3/8")

2

4074 · Auto Carrier · Type DDm⁹¹⁵ · Loaded with 8 Wiking autos · RELEX-couplers (page 50) · Length 26.4 cm (10-3/8")

German Federal Railways' Express Coaches

3

4094 · Diner · Type WRmh¹³² (ex-WRümh 132) · Interior details · Automatic couplers · Length 27 cm (10-5/8") · Accepts interior lighting set 7329 (page 139)

4

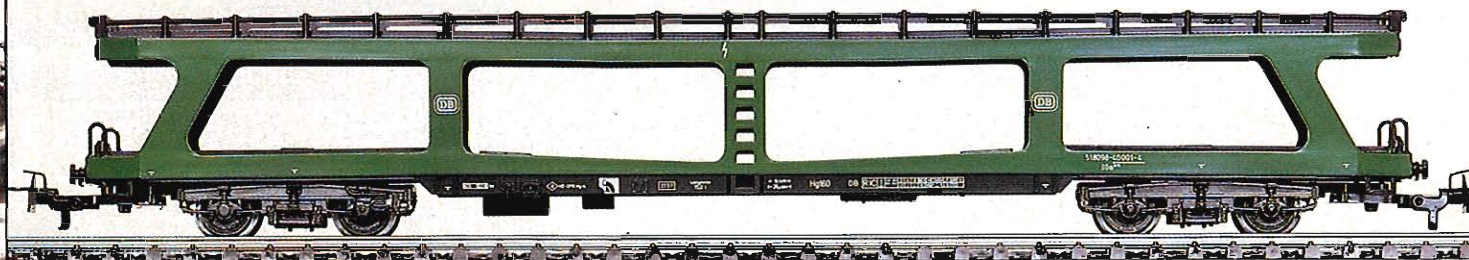
4093 · Baggage Car · Type Dm⁹⁰² (ex-Düms 902) · Operating baggage doors on both sides · Automatic couplers · Length 27 cm (10-5/8") · Accepts interior lighting set 7329 (page 139)

Mail Car of the German Federal Postal Service

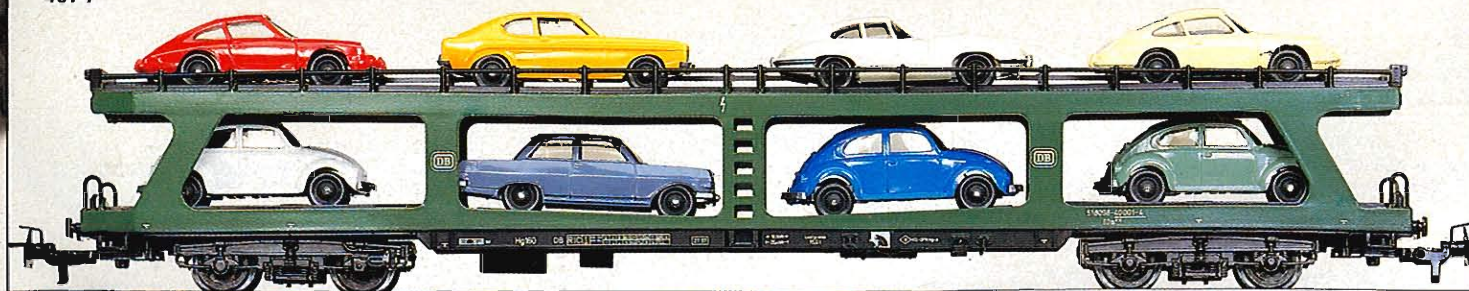
5

4157 · Mail Car · Type Post mrz 73076 · Interior details · Automatic couplers · Length 26.4 cm (10-3/8") · Accepts interior lighting set 7329 (page 139)

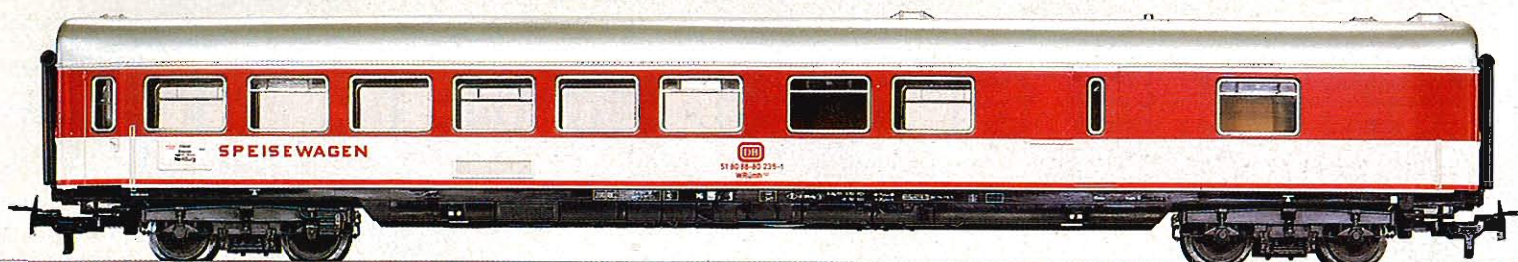
1
4084



2
4074



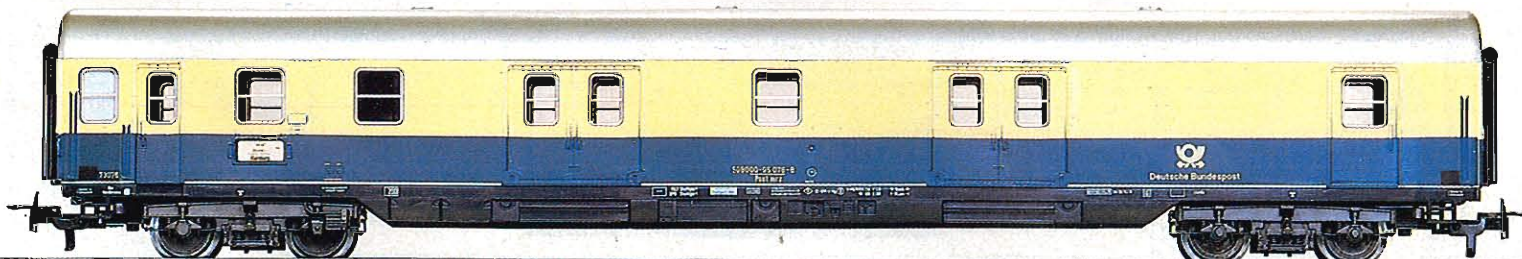
3
4094



4
4093



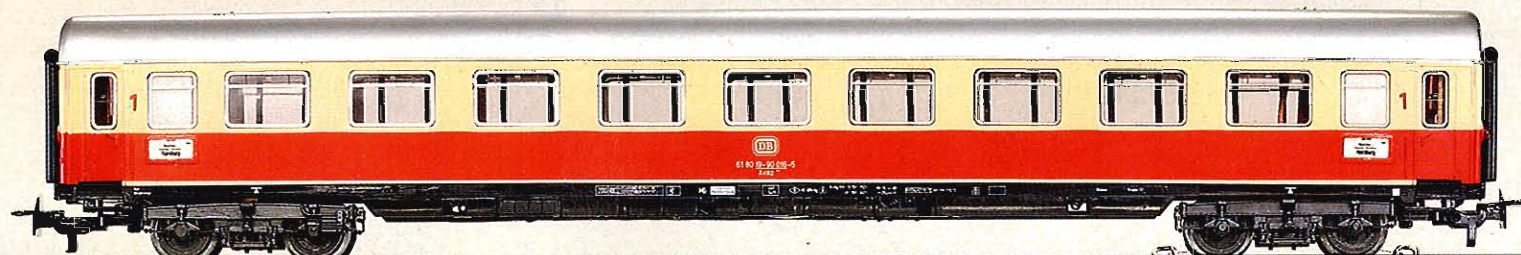
5
4157



Express Coaches 27 cm (10⁵/₈")

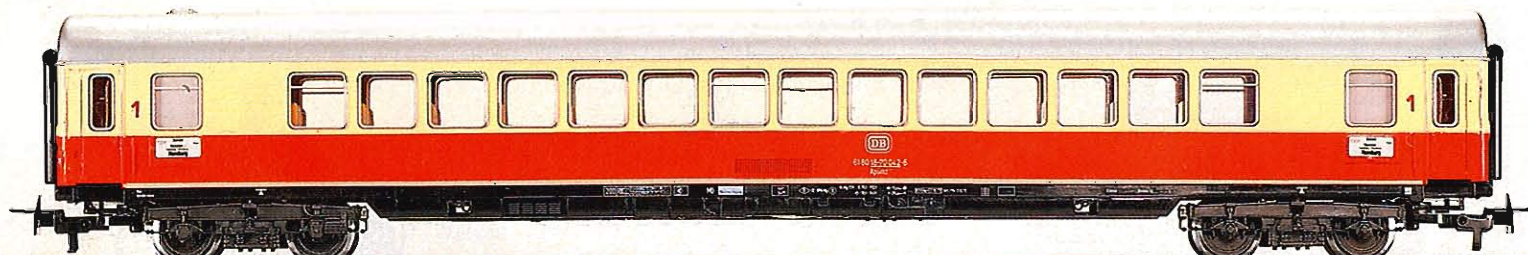
1

4095
4098



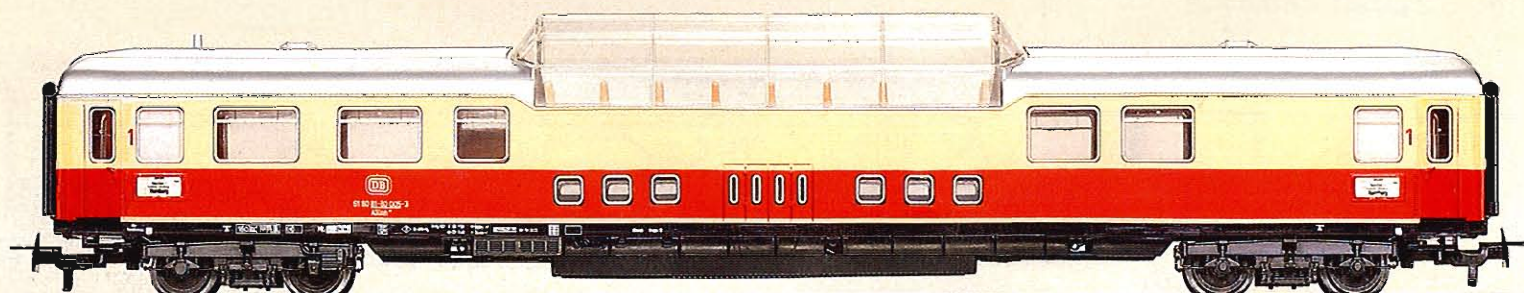
2

4096



3

4099



German Federal Railways'
TEE Cars – Also Used on
Intercity (IC) Trains

1

4095 · TEE/IC Compartment Car · Type Avmh¹¹¹ · 1st class · Interior details · Automatic couplers · Length 27 cm (10-5/8") · Accepts interior lighting set 7329 (page 139)

2

4096 · TEE/IC American-Style Coach · Type Aprm¹²² · 1st class · Interior details · Automatic couplers · Length 27 cm (10-5/8") · Accepts interior lighting set 7329 (page 139)

3

4099 · TEE Dome Car · Type ADm¹⁰¹ · 1st class · Interior details · Automatic couplers · Length 27 cm (10-5/8") · Accepts interior lighting set 7329 (page 139)

4

4097 · TEE/IC Diner · Type WRmh¹³² (ex-WRümh 132) · Interior details · Automatic couplers · Length 27 cm (10-5/8") · Accepts interior lighting set 7329 (page 139)

5

4153 · TEE/IC Diner · Type WRmz 135 · Interior details · Automatic couplers · Length 27 cm (10-5/8") · Accepts interior lighting set 7329 (page 139)

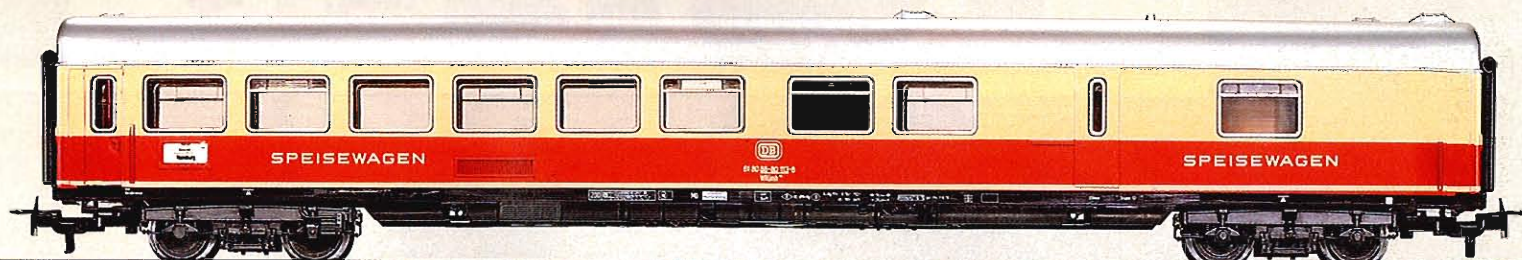
1

4098 · TEE/IC Compartment Car · Same as 4095, but with illuminated end markers

 = 41494

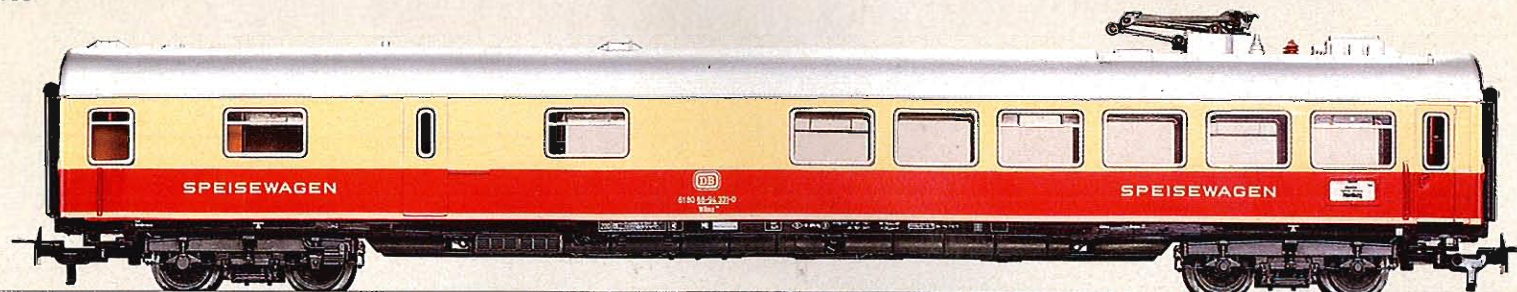
4

4097



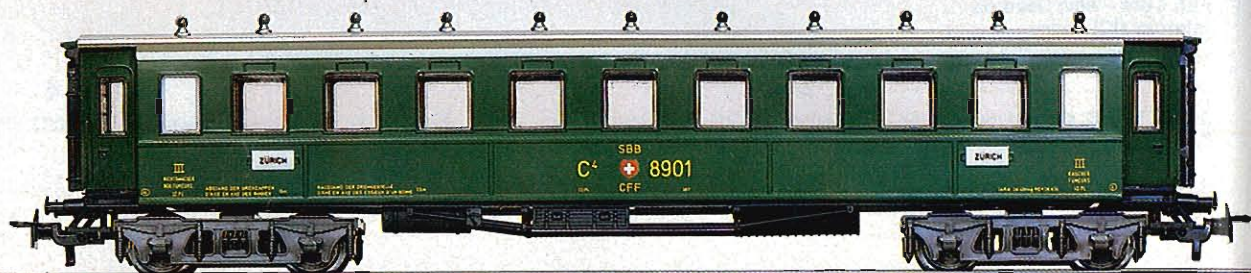
5

4153

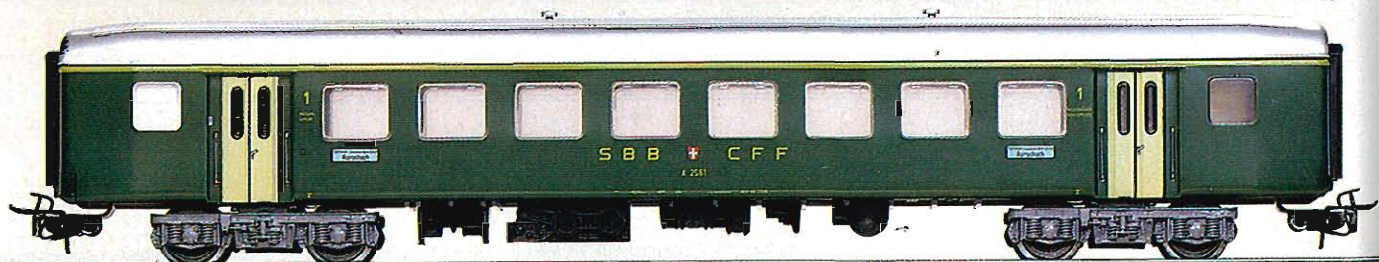


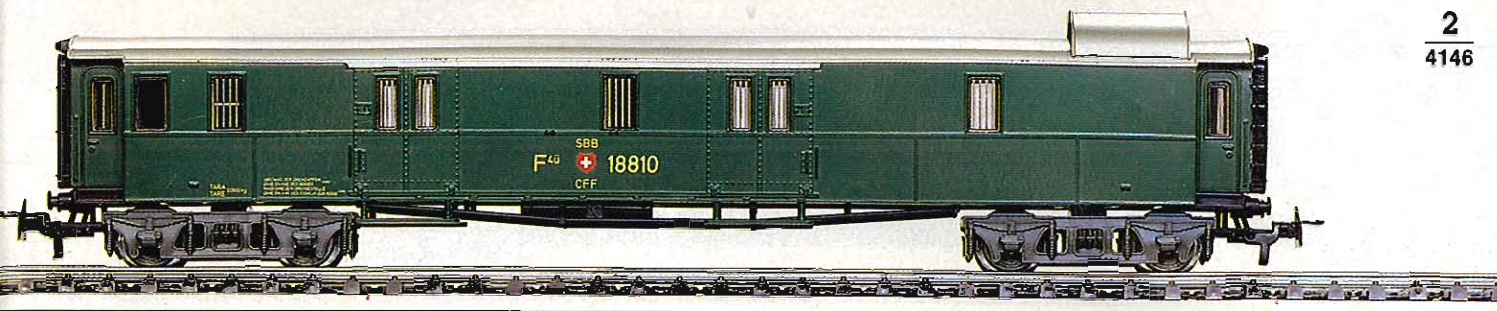
Swiss Express Coaches

1
4138



3
4066





2
4146

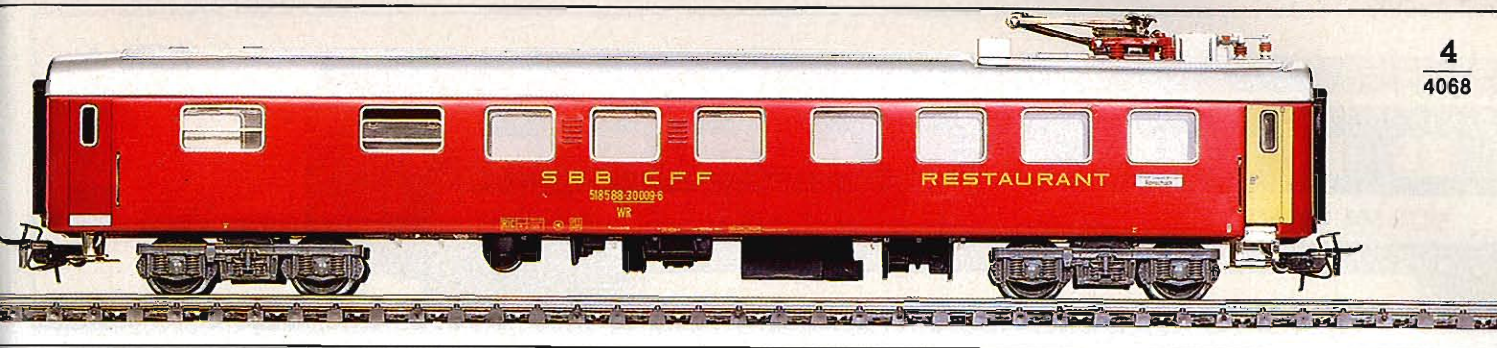
Express Coaches of the Swiss Federal Railways (SBB)

1 Switzerland

4138 · Express Coach · Older C4ü · 3rd class · Highly detailed · Interior details · Automatic couplers · Length 22.2 cm (8-3/4") · Accepts interior lighting 7329 (page 139)

2 Switzerland

4146 · Baggage Car · Older F4ü · Highly detailed · Automatic couplers · Length 23.2 cm (8-3/4") · Accepts interior lighting 7329 (page 139)



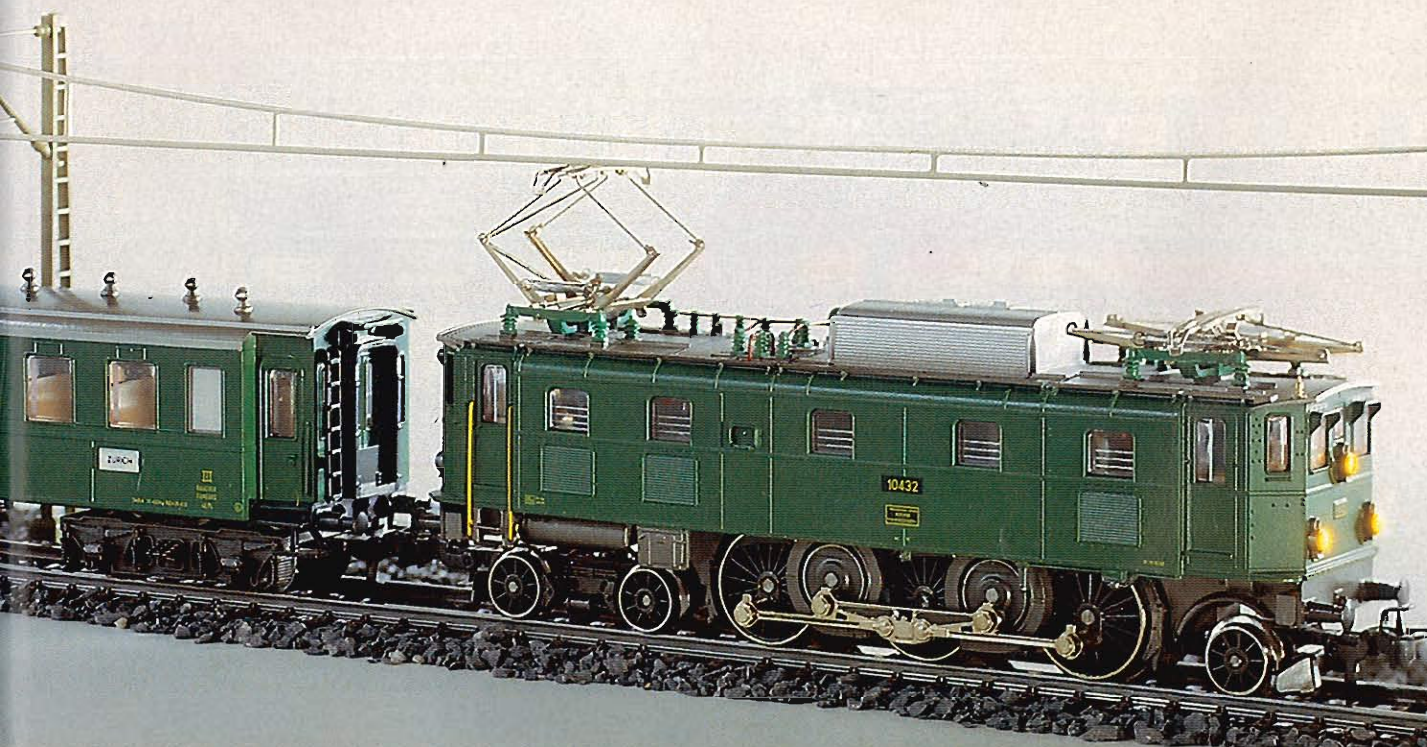
4
4068

3 Switzerland

4066 · Express Coach · Series A 2500 · 1st class · RELEX couplers (page 50) · Length 24 cm (9-1/2") · Accepts interior lighting 7320 (page 139)

4 Switzerland

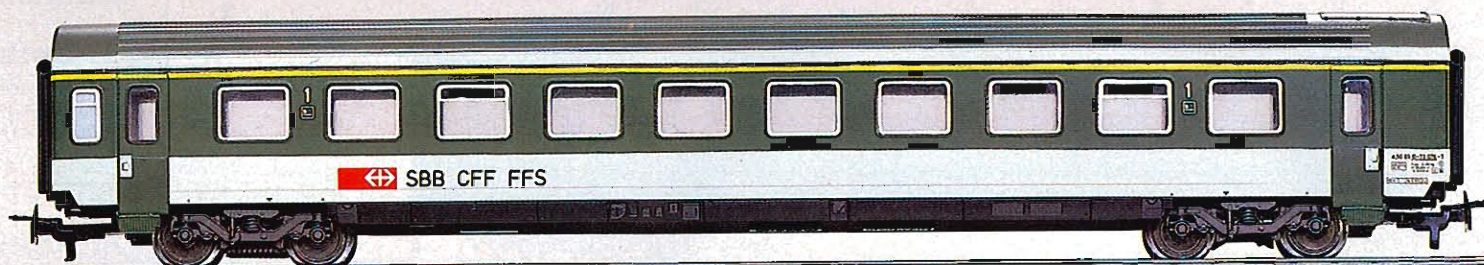
4068 · Diner · RIC · RELEX couplers (page 50) · Length 24 cm (9-1/2") · Accepts interior lighting 7077 (page 139)



Swiss Express Coaches

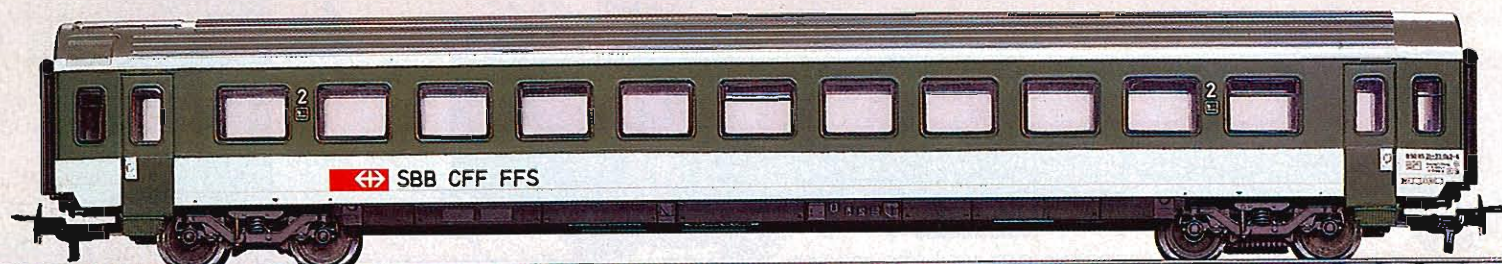
1

4123

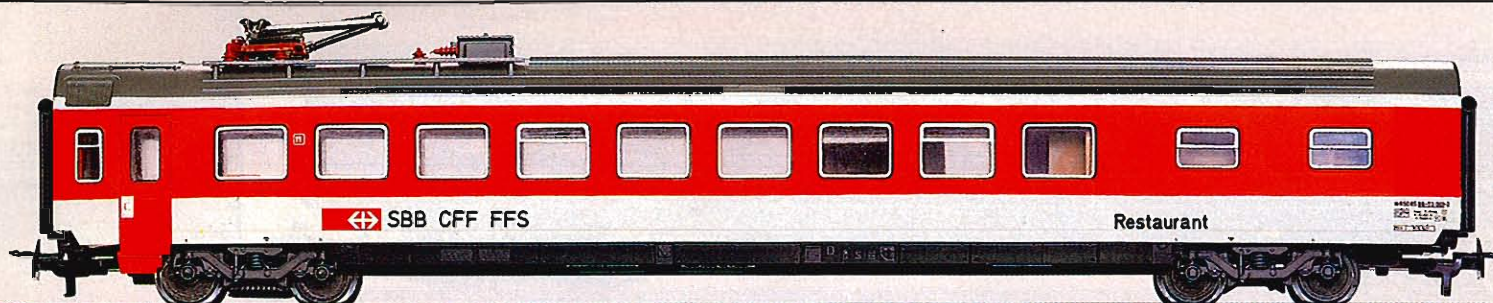


2

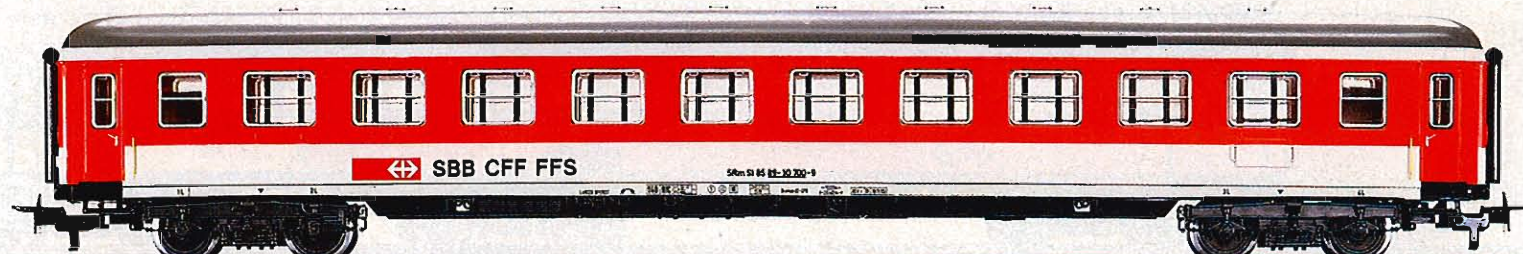
4124



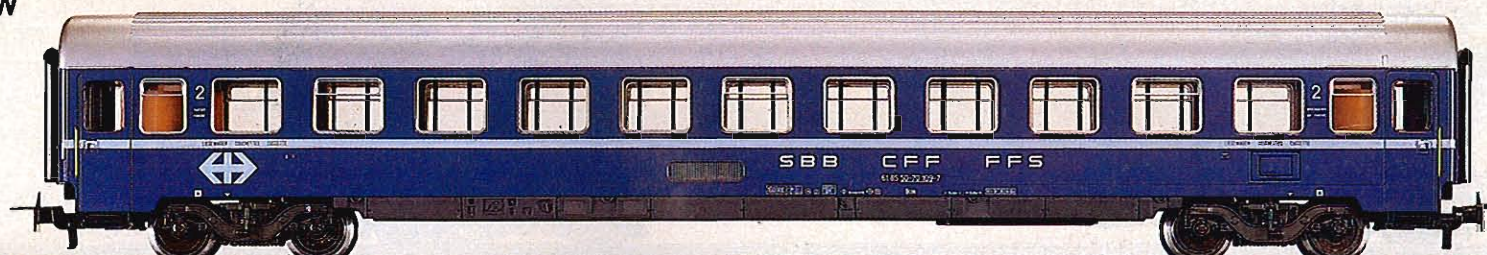
3
4125



4 NEW
4180



5 NEW
4168



Express Coaches of the Swiss Federal Railways (SBB)

1 Switzerland

4123 · Express Coach · A, Standard type IV · 1st class · Highly detailed · Interior details · Automatic couplers · Length 26.4 cm (10-3/8") · Accepts interior lighting 7329 (page 139)

2 Switzerland

4124 · Express Coach · B, Standard type IV · 2nd class · Highly detailed · Interior details · Automatic couplers · Length 26.4 cm (10-3/8") · Accepts interior lighting 7329 (page 139)

3 Switzerland

4125 · Diner · WR, Standard type IV · Highly detailed · Interior details · Automatic couplers · Length 26.4 cm (10-3/8") · Accepts interior lighting 7329 (page 139)

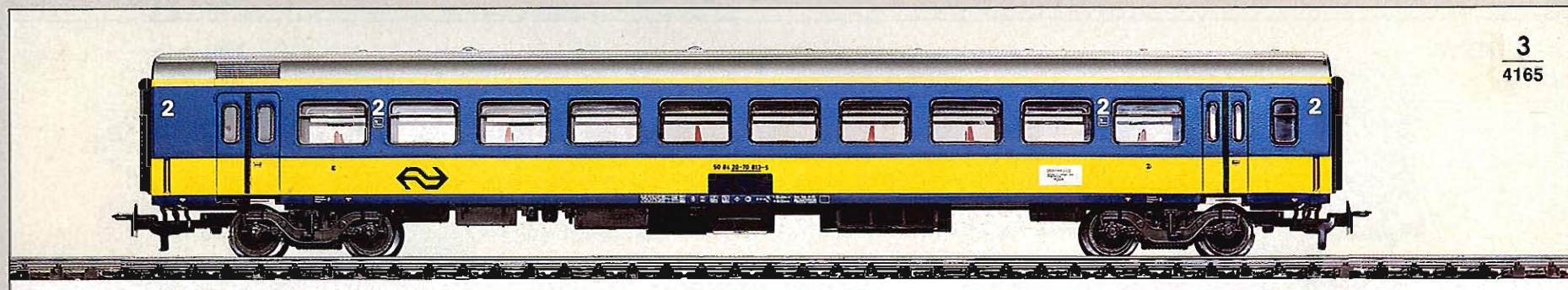
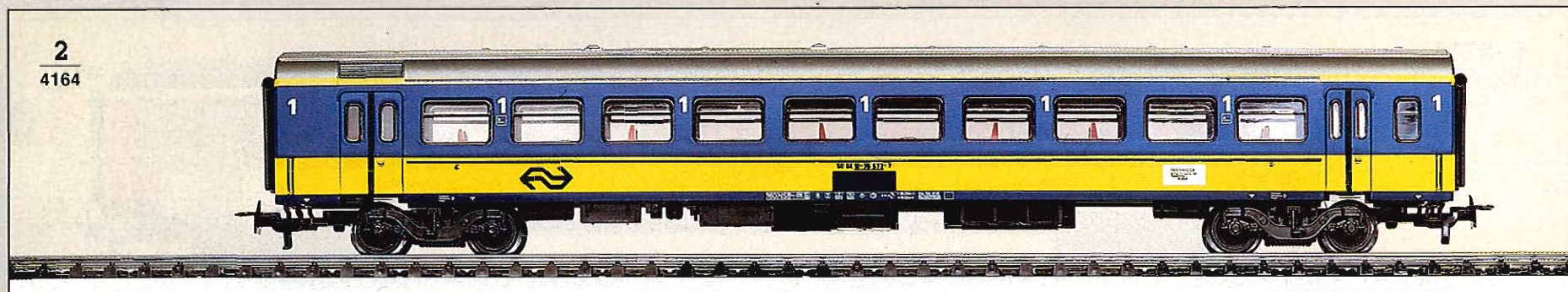
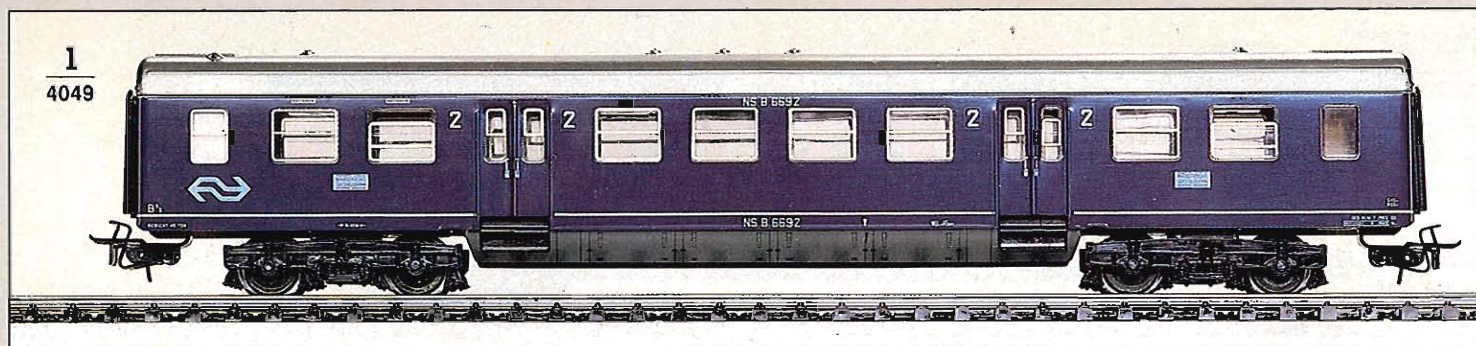
4 Switzerland

4180 · Entertainment Car · SRm "Cafeteria" · Highly detailed · Interior details · Automatic couplers · Length 27 cm (10-5/8") · Accepts interior lighting 7329 (page 139)

5 Switzerland

4168 · Slumber Coach · Bcm Type UIC-Z1 · 2nd class · Highly detailed · Interior details · Automatic couplers · Length 26.4 cm (10-3/8") · Accepts interior lighting 7329 (page 139)

Express Coaches for International Service



Netherlands Railways' (NS)
Express Coaches

1 Netherlands

4049 · Express Coach · Type B 6600 ·
2nd class · RELEX-couplers (page
50) · Length 24 cm (9-½") · Accepts
interior lighting set 7320 (page 139)

2 Netherlands

4164 · Intercity Coach · 1st class ·
Interior details · Automatic couplers ·
Length 26.4 cm (10-¾") · Accepts
interior lighting set 7329 (page 139)

3 Netherlands

4165 · Intercity Coach · 2nd class ·
Interior details · Automatic couplers ·
Length 26.4 cm (10-¾") · Accepts
interior lighting set 7329 (page 139)

**French Railways' (SNCF)
Express Coach**

4 France

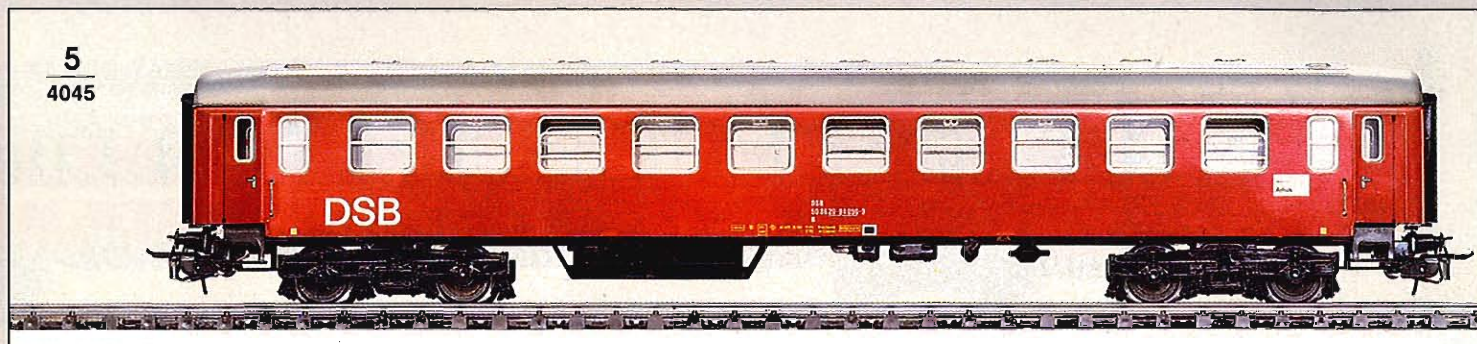
4076 · Express Coach · Type A8myfi · 1st class · Interior details · RELEX-couplers (page 50) · Length 24 cm (10-3/8") · Accepts interior lighting set 7197 (page 139)



**Danish Railways' (DSB)
Express Coach**

5 Denmark

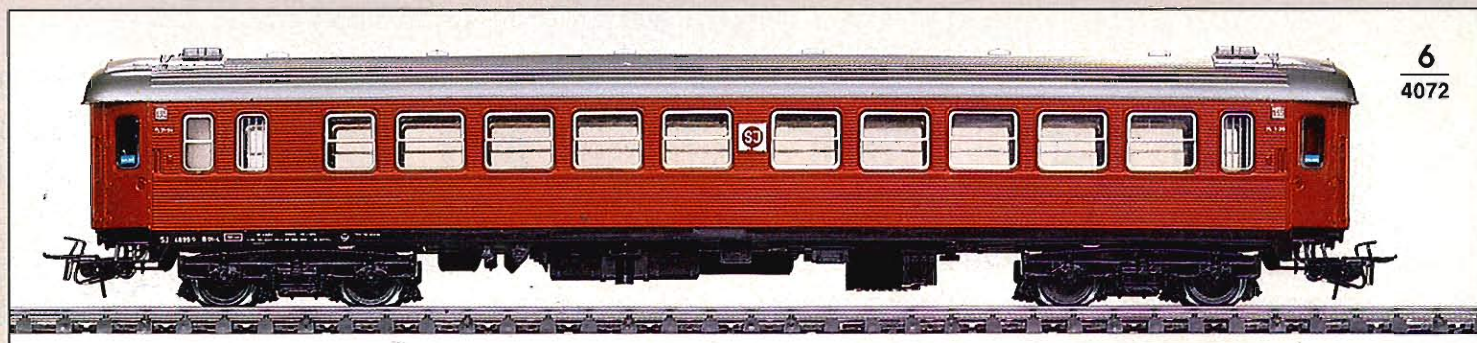
4045 · Express Coach · Type B 2300 · 2nd class · RELEX-couplers (page 50) · Length 24 cm (10-3/8") · Accepts interior lighting sets 7077 + 7198 (page 139)



**Swedish Railways' (SJ)
Express Coaches**

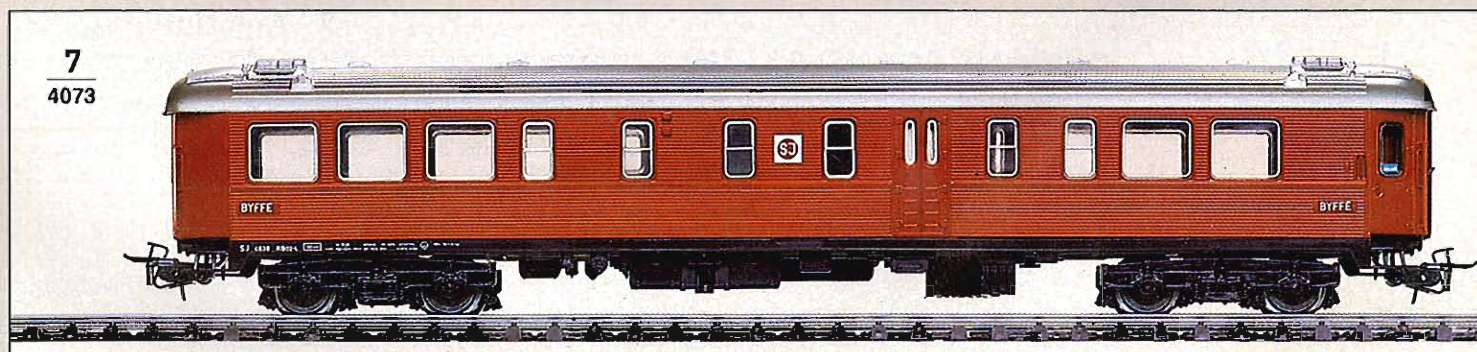
6 Sweden

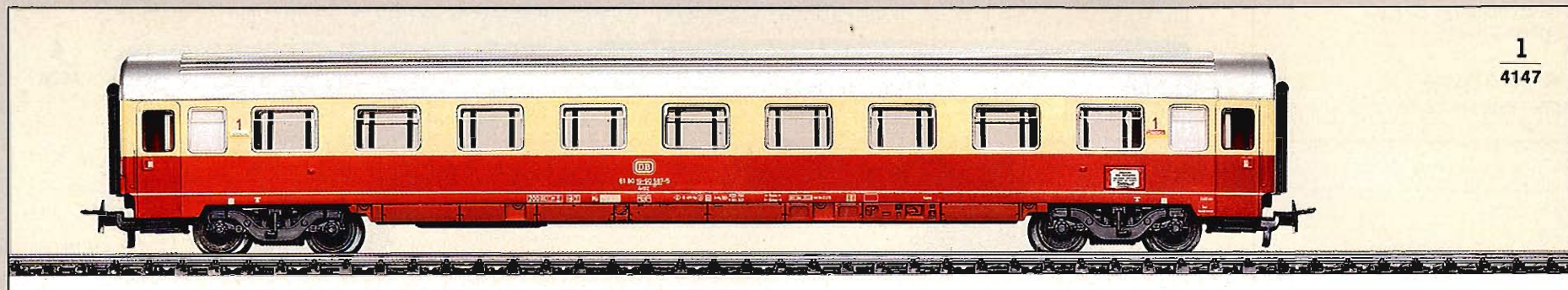
4072 · Express Coach · Type B 1 · 2nd class · RELEX-couplers (page 50) · Length 23.7 cm (9-3/8") · Accepts interior lighting set 7197 (page 139)



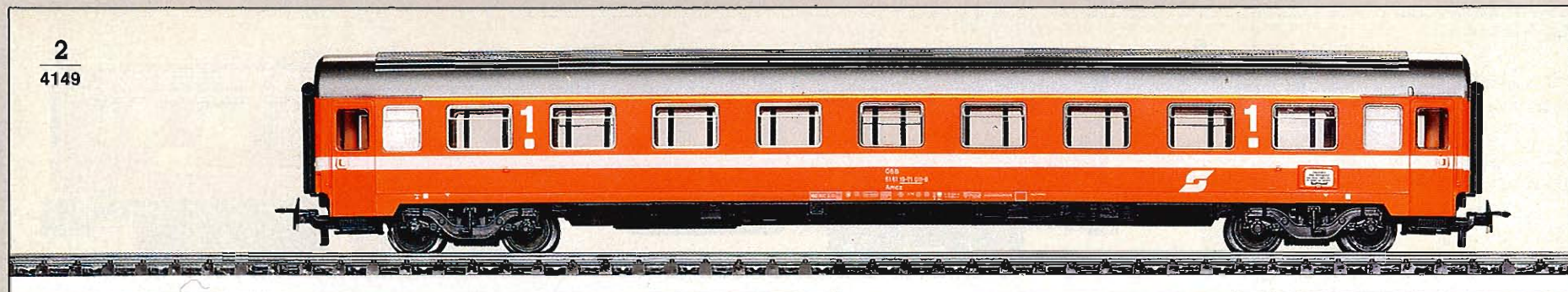
7 Sweden

4073 · Diner · Type R 1 · RELEX-couplers (page 50) · Length 23.7 cm (9-3/8") · Accepts interior lighting set 7197 (page 139)

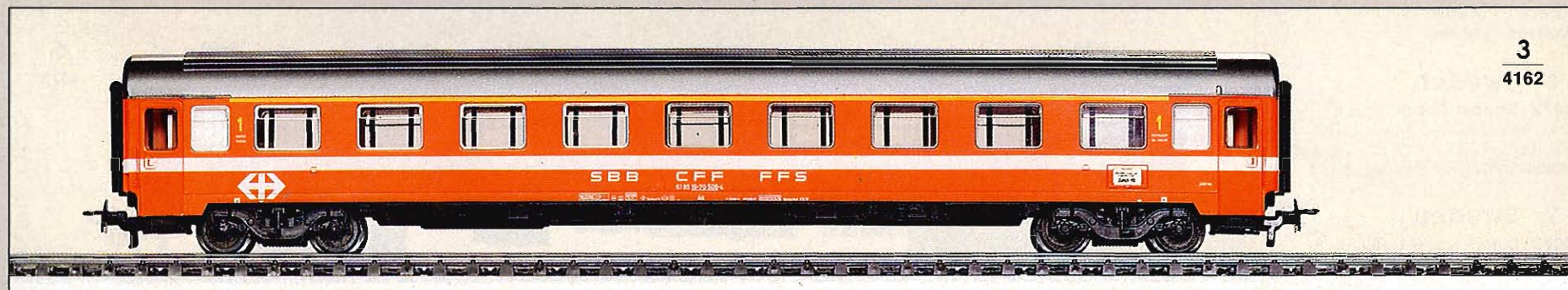




1
4147



2
4149



3
4162

■ The "European Community for the Financing of Railroad Equipment" is composed of representatives of 6 European railroads. Among their accomplishments are the A9 1st class coach now in service on the SNCF, SNCB, SBB, ÖBB, FS and DB as well as the 2nd class B11 coach. The EUROFIMA cars were developed by a consortium headed by the Linke-Hofmann-Busch Car Co.

1
4147 · Express Coach · German Federal Railways' type Avmz²⁰⁷ (EUROFIMA A9) · 1st class · Interior details · Automatic couplers · Length 26.4 cm (10-3/8") · Accepts interior lighting set 7329 (page 139)

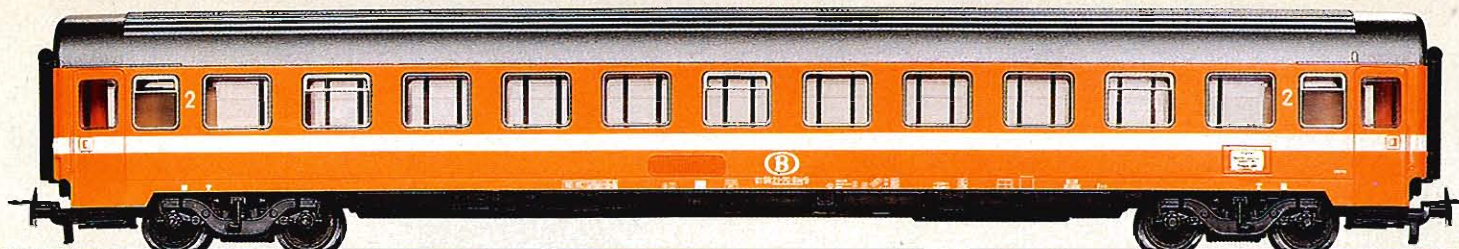
2 Austria
4149 · Express Coach · Austrian Federal Railways' (ÖBB) EUROFIMA A9 · 1st class · Interior details · Automatic couplers · Length 26.4 cm (10-3/8") · Accepts interior lighting set 7329 (page 139)

3 Switzerland
4162 · Express Coach · Swiss Federal Railways' (SBB) EUROFIMA A9 · 1st class · Interior details · Automatic couplers · Length 26.4 cm (10-3/8") · Accepts interior lighting set 7329 (page 139)

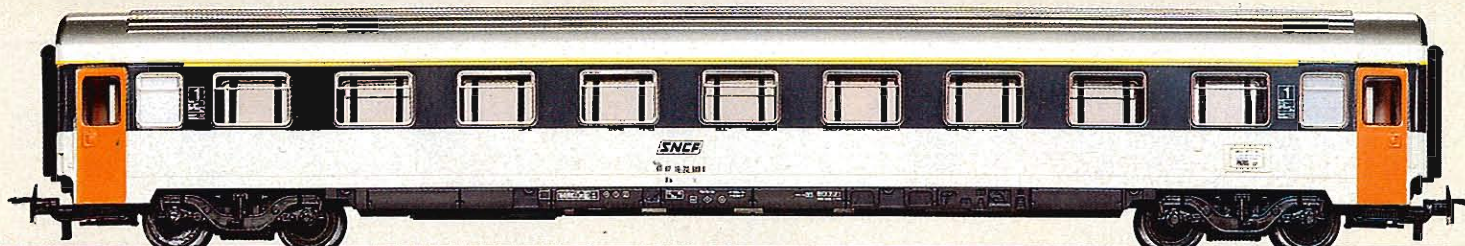
4
4148



5
4166



6
4161



4 Belgium

4148 · Express Coach · Belgian State Railways' (NMBS/SNCB) EUROFIMA A9 · 1st class · Interior details · Automatic couplers · Length 26.4 cm (10-3/8") · Accepts interior lighting set 7329 (page 139)

5 Belgium

4166 · Express Coach · Belgian State Railways' (NMBS/SNCB) EUROFIMA B11 · 2nd class · Interior details · Automatic couplers · Length 26.4 cm (10-3/8") · Accepts interior lighting set 7329 (page 139)

6 France

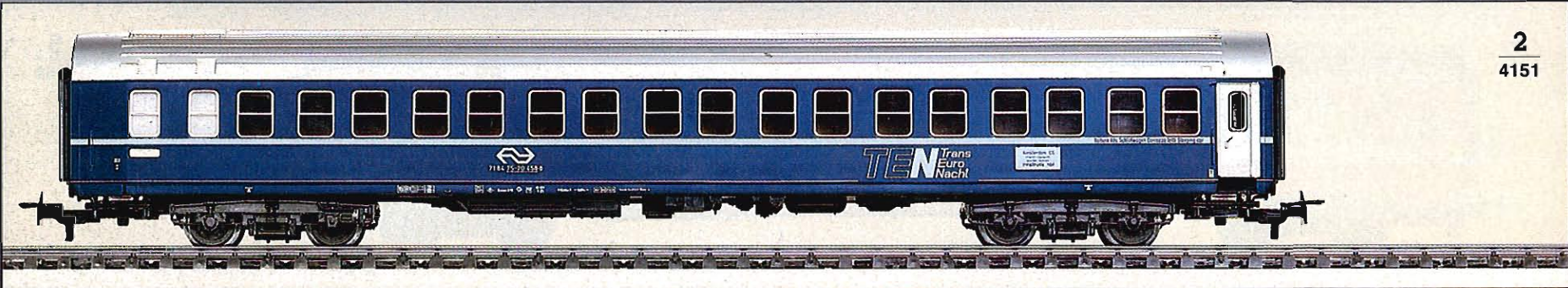
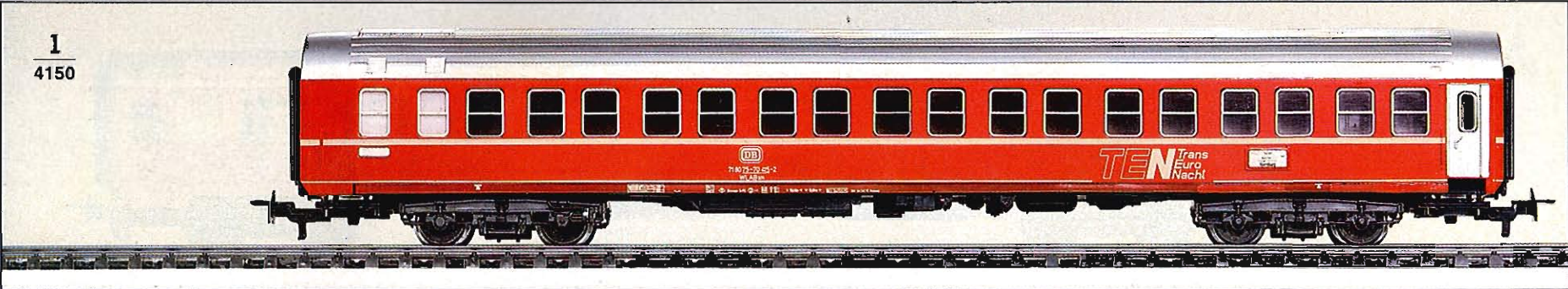
4161 · Express Coach · French State Railways' (SNCF) type A9u (EUROFIMA A9) · 1st class · "Corail" livery · Interior details · Automatic couplers · Length 26.4 cm (10-3/8") · Accepts interior lighting set 7329 (page 139)

■ The standard coach A9, developed by the "European Community for the Financing of Railroad Equipment" (EUROFIMA), is also used by the French State Railways. The SNCF received 100 cars and painted them with the colorful "Corail" livery.

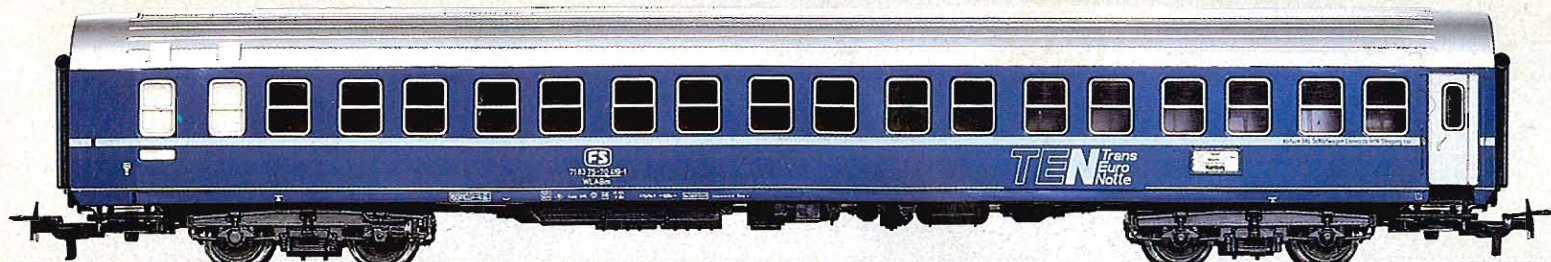
"Corail" i.e. "Confort sur rail" (in English, Comfort on the rails) is a fundamental concept for high standards and comfortable train operation.

Corail cars, along with the Austrian A9 (Märklin model 4149), can be seen on German Federal rails.

TEN Cars 27 cm (10-5/8")



3
4152



1

4150 · Sleeping Car · German Federal Railways' type WLABsmh¹⁶⁶ · 1st and 2nd class sleeper for the TEN pool · Interior details · Automatic couplers · Length 27 cm (10-5/8") · Accepts interior lighting set 7329 (page 139)

2 Netherlands

4151 · Sleeping Car · Netherlands State Railways' (NS) lettering · 1st and 2nd class sleeper for the TEN pool · Interior details · Automatic couplers · Length 27 cm (10-5/8") · Accepts interior lighting set 7329 (page 139)

3 Italy

4152 · Sleeping Car · Italian State Railways' (FS) type WLABm · 1st and 2nd class · Classed T2S for the TEN pool · Interior details · Automatic couplers · Length 27 cm (10-5/8") · Accepts interior lighting set 7329 (page 139)

■ The TEN (Trans-Euro-Night) is a sleeping car pool service organized July 1, 1971 by the state railways of Belgium, Denmark, France, Italy, Netherlands, Switzerland, Luxem-

burg, Austria and the German Federal Republic to better utilize sleepers on international runs. These "rolling hotels" check in about 1 million guests annually.





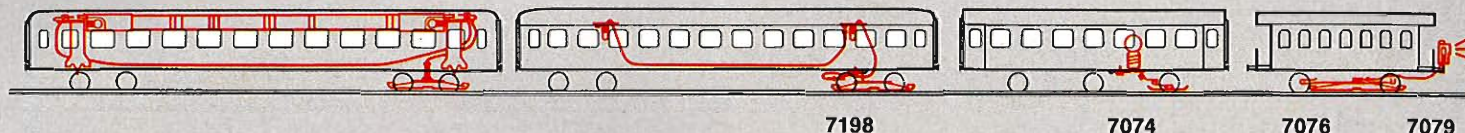
Train Lighting

This schematic illustrates the various styles of train lighting. Instructions are included with each set.

7197, 7320, 7329

7077

7077

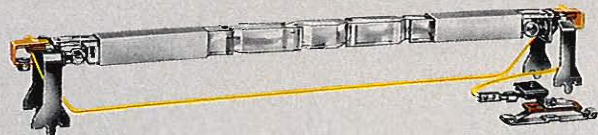


7198

7074

7076

7079



7197

7197 · Interior Lighting Set · For express coaches 4072, 4073 and 4076 · Includes current collector 7198, light diffuser, 2 lamp sockets, 2 bulbs, instructions

☞ = 7175 ☞ = 60015

7320 · Interior Lighting Set · For TEE cars 4085, 4087 and the Express cars 4049, 4054, 4064 and 4066 · Includes current collector 7198, light diffuser, 2 lamp sockets, 2 bulbs, instructions

☞ = 7175 ☞ = 60015

7329 · Interior Lighting Set · Has variable length light diffuser · For cars 4091 - 4099, 4121 - 4125, 4131 - 4140, 4143, 4145 - 4154, 4157 - 4162, 4164 - 4166, 4168, 4175 - 4177, 4180, 4190 and train set 2856 · Includes current collector, light diffuser, 2 lamp sockets, 2 bulbs, instructions

☞ = 41494 ☞ = 60015

Interior Details for cars 4045, 4049, 4066, 4067, 4072, 4073, 4079 and 4080

Interior details and figures are made of finely cast plastic. Figures are hand painted. Illustrated instructions included with each set.

0226 · Pack of 10 Colorful Figures · For use with interior details

0225 · Interior Detail Kit · For express coaches · 18 double seats, 6 single seats, 2 rest rooms

7077 · Interior Lighting Set · For most of the 24 cm (9-1/2") coaches · Has socket for connecting additional sets · Bulb

☞ = 60000

7198 · Current Collector · For interior lighting set 7077

☞ = 7175

7322 · Interior Lighting Set · For TEE coach 4090 · Includes current collector 7198, 2 lamp sockets, 2 bulbs, instructions

☞ = 7175 ☞ = 60015

7323 · Interior Lighting Set · For cars 4107 and 4108 · Bulb

☞ = 7175 ☞ = 60010

7074 · Interior Lighting Set · For coaches 4004, 4005, 4067, 4079, and 4080 · Has socket for connecting additional sets · Bulb

☞ = 60020

7079 · Tail Light · With bulb · Clips onto buffer · For cars with metal buffers only · To illuminate use with 7074, 7076 or 7198

☞ = 60001 (red)

7076 · Current Collector · For illuminating tail light 7079 on the 4040 coach



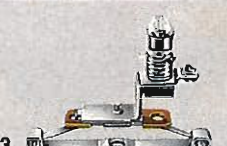
7077



7198



7322



7323



7074



7079



7076



0226



0225

1

4424 · Low-side Gondola · Loaded with Wiking vehicle · Metal wheels · RELEX couplers (page 50) · Length 11.5 cm (4-1/2")

2

4423 · Low-side Gondola · German Federal Railways' type Kklm 505 · Metal wheels · RELEX couplers (page 50) · Length 11.5 cm (4-1/2")

3

4474 · Low-side Gondola · Loaded with Wiking bulldozer and Wiking shovel loader · Metal wheels · RELEX couplers (page 50) · Length 16 cm (6-5/16")

4

4473 · Low-side Gondola · German Federal Railways' type Rlmm5 · Metal wheels · RELEX couplers (page 50) · Length 16 cm (6-5/16")

5

4440 · Tank Car · Aral · Metal wheels · RELEX couplers (page 50) · Length 11.5 cm (4-1/2")

6

4441 · Tank Car · Esso · Metal wheels · RELEX couplers (page 50) · Length 11.5 cm (4-1/2")

7

4442 · Tank Car · Shell · Metal wheels · RELEX couplers (page 50) · Length 11.5 cm (4-1/2")

8 Italy

4443 · Tank Car · Agip · Metal wheels · RELEX couplers (page 50) · Length 11.5 cm (4-1/2")

1

4424

2

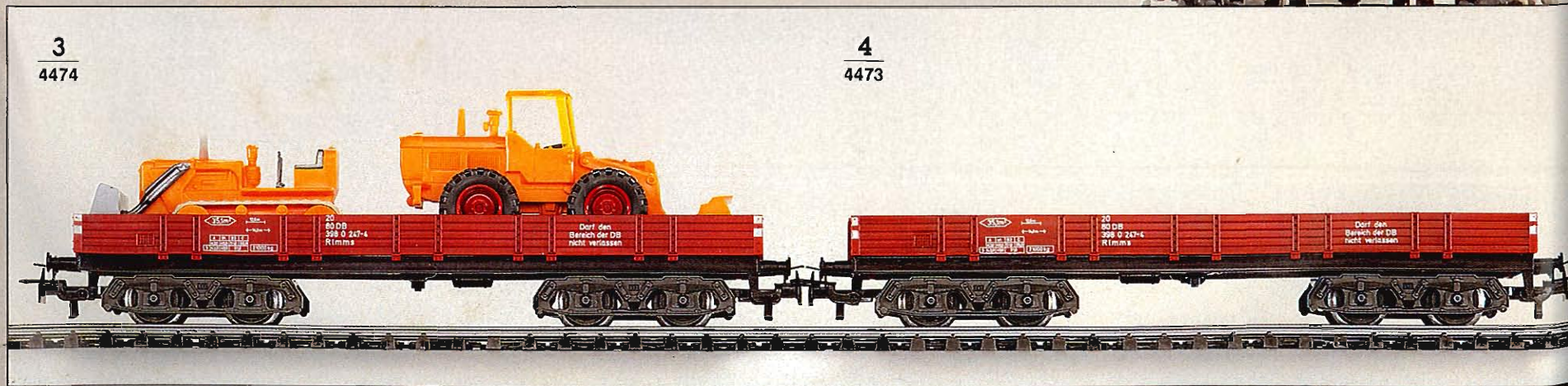
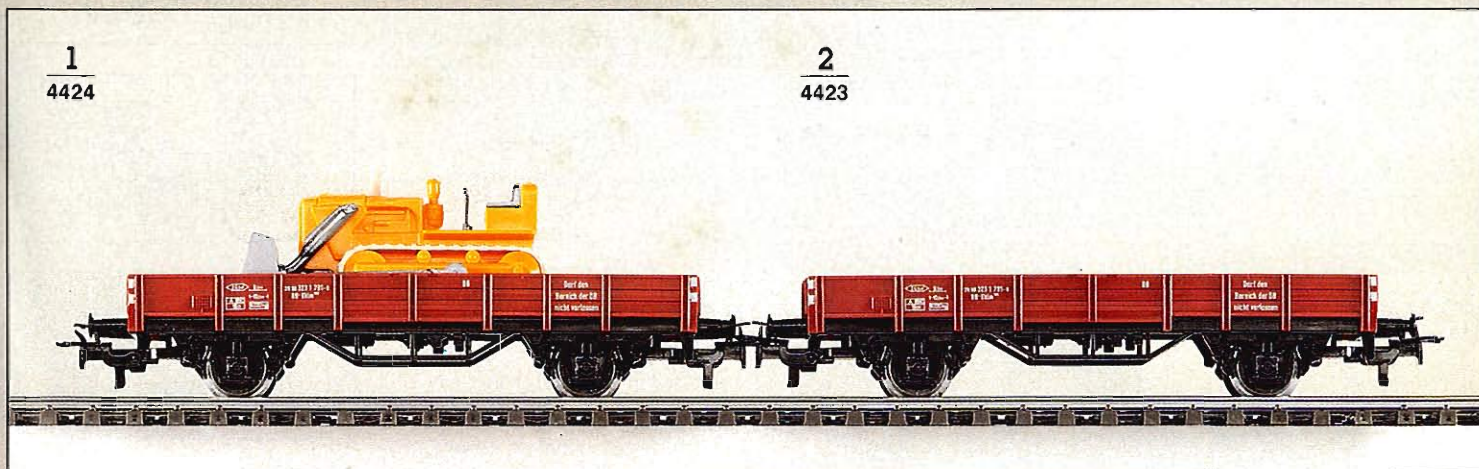
4423

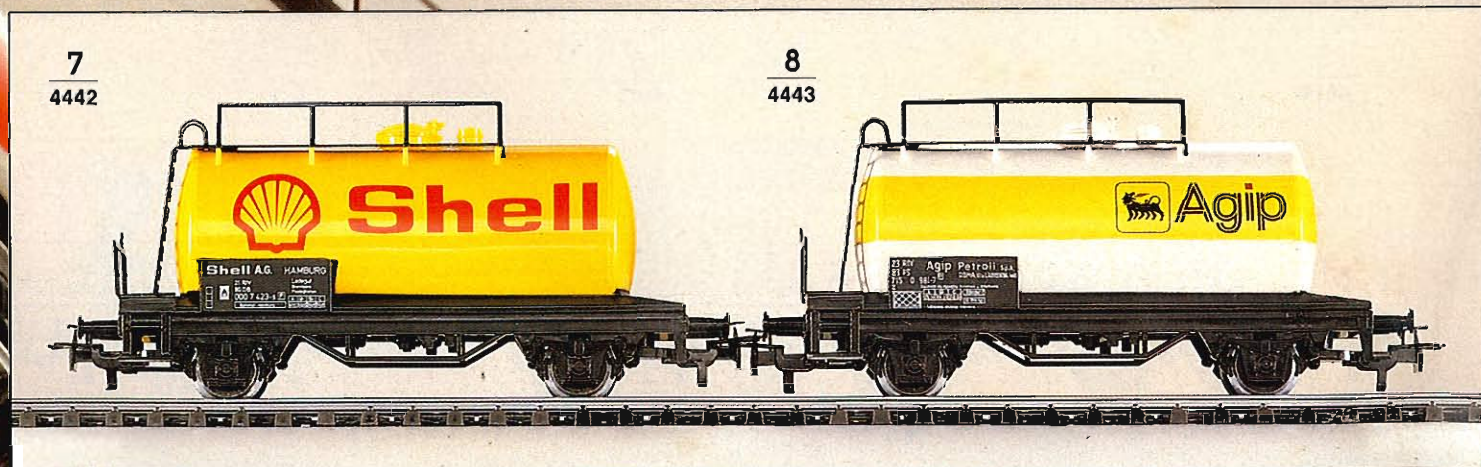
3

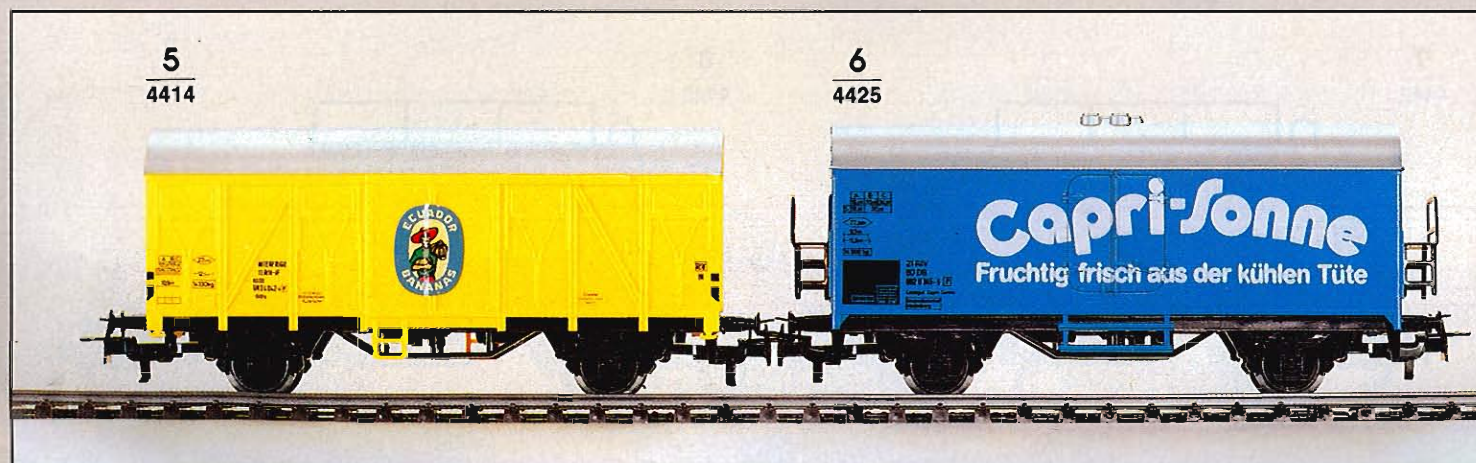
4474

4

4473







1

4415 · Refrigerator Car · Ichqs-u³⁷⁷ (Ichqrs 377) of the German Federal Railways · Metal wheels · RELEX couplers (page 50) · Length 11.5 cm (4-½")

2

4429 · Beer Car · Staufen Bräu · Metal wheels · RELEX couplers (page 50) · Length 11.5 cm (4-½")

3

4436 · Beer Car · C. Dinkelacker Brewery, Stuttgart · Metal wheels · RELEX couplers (page 50) · Length 11.5 cm (4-½")

4

4422 · Beer Car · Wicküler-Küpper Brewery · Metal wheels · RELEX couplers (page 50) · Length 11.5 cm (4-½")

5

4414 · Banana Car · Ibbls of the German Federal Railways · Metal wheels · RELEX couplers (page 50) · Length 11.5 cm (4-½")

6

4425 · Refrigerator Car · Capri-Sonne · Metal wheels · RELEX couplers (page 50) · Length 11.5 cm (4-½")

7 Switzerland

4428 · Refrigerator Car · Ovomaltine · Metal wheels · RELEX couplers (page 50) · Length 11.5 cm (4-½")

8

4426 · Refrigerator Car · Apollinaris · Metal wheels · RELEX couplers (page 50) · Length 11.5 cm (4-½")

9

4413 · Dump Car · Latched bucket can be tipped to either side manually · Metal wheels · RELEX couplers (page 50) · Length 11.5 cm (4-½")

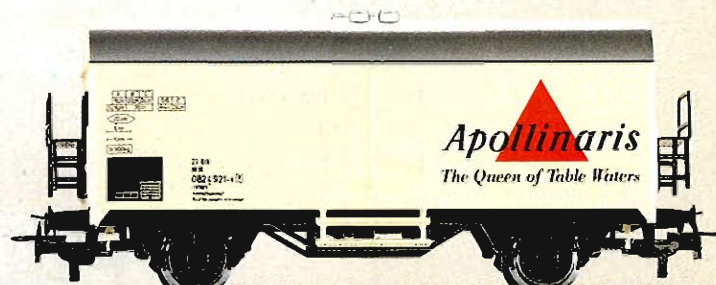
10

4432 · Wine Car · Private car · Metal wheels · RELEX couplers (page 50) · Length 11.5 cm (4-½")

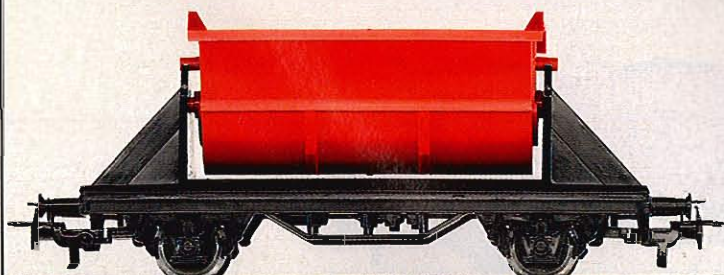
7
4428



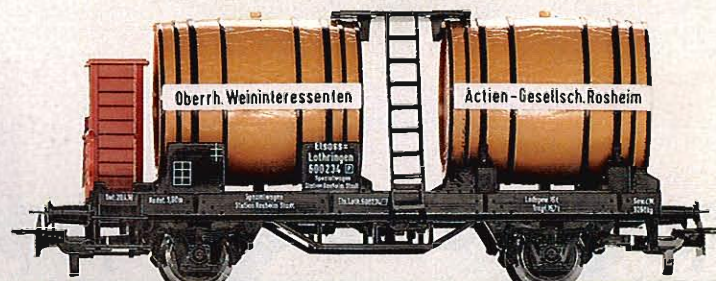
8
4426



9
4413



10
4432



1

4460 · Box Car with Swivel Roof · Taerns⁸⁹⁰ (Taes 890) of the German Federal Railways · Metal wheels · RELEX couplers (page 50) · Length 16 cm (6-5/16")

2

4475 · Low-side Gondola · With tarpulin · Metal wheels · RELEX couplers (page 50) · Length 16 cm (6-5/16")

3

4430 · Gondola · El-u⁰⁶¹ of the German Federal Railways · Metal wheels · RELEX couplers (page 50) · Length 11.5 cm (4-1/2")

4

4431 · Gondola · El-u⁰⁶¹ of the German Railways · With removeable coal load · Metal wheels · RELEX couplers (page 50) · Length 11.5 cm (4-1/2")

1
4460



2
4475

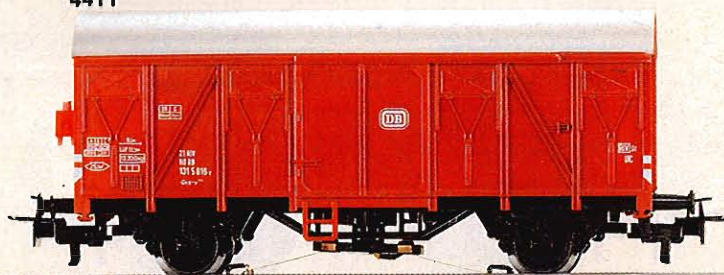


3
4430

4
4431



5
4410
4411



6 NEW
4481



7 NEW
4412



5

4410 · Box Car · Gs²¹⁰ of the German Federal Railways · Metal wheels · RELEX couplers (page 50) · Length 11.5 cm (4-1/2")

5

4411 · Box Car · Illuminated marker lights · Gs-uv²¹³ (Grs-v 213) of the German Federal Railways · Metal wheels · Current pickup shoe · RELEX couplers (page 50) · Length 11.5 cm (4-1/2")

☞ = 41494 ☞ = 60015

6

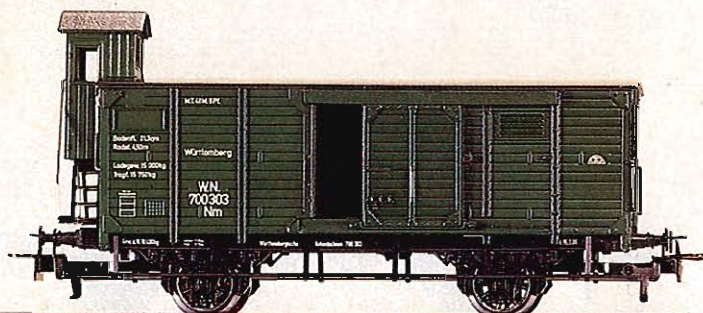
4481 · Container Car · German Federal Railways · Loaded with one container · Metal wheels · RELEX couplers (page 50) · Length 11.5 cm (4-1/2")

7 Austria

4412 · Box Car · Bicycle transport car of the Austrian Federal Railways (ÖBB) · Metal wheels · RELEX couplers (page 50) · Length 11.5 cm (4-1/2")

■ The motto "Fahrrad am Bahnhof" (Bike at the Station) has proven popular along the routes of the Austrian Federal Railways. To avoid shortages caused by sudden demands from tour groups or local festivities, the ÖBB converted two type G boxcars into rolling bike rental stations. These cars can be used in tour trains and can be transported quickly to where the demand is.

1 NEW
4679



2
4685



3 NEW
4675



4
4674



Freight Cars of the former Royal Württemberg State Railways

1
4679 · Box Car with Brakeman's Cab · Nm of the Württemberg Secondary Railways circa 1910 · Sliding doors · Metal wheels · RELEX couplers (page 50) · Length 11 cm (4")

■ The Württemberg Secondary Railways had many boxcars around 1910 which they interlined with the state railways.

Cars 700 302 and 700 303 were outshopped in 1906 by the Uerdingen Car Foundry and are based on the designs used by the Prussian railways; thus their similarity to the later "Verbandswagen" (Association Cars).

2
4685 · Box Car · Ni of the former Royal Württemberg State Railways · Brakeman's platform · Metal wheels · RELEX couplers (page 50) · Length 10.7 cm (3-7/8")

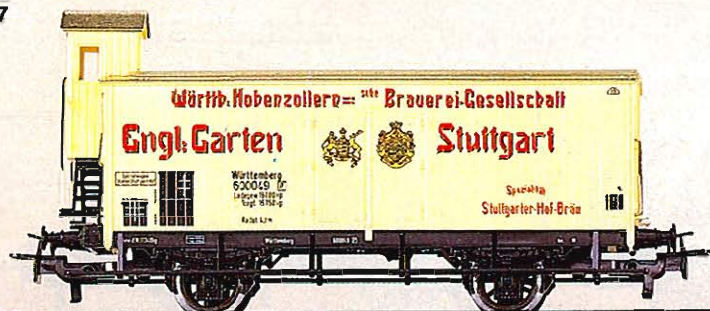
3
4675 · Tank Car · Olex Petroleum GmbH · As used by the former Royal Württemberg State Railways · Brakeman's cab, running boards, ladders · Metal wheels · RELEX couplers (page 50) · Length 10.1 cm (3-1/2")

4
4674 · Tank Car · German-American Petroleum GmbH · As used by the former Royal Württemberg State Railways · Brakeman's cab, running boards, ladders · Metal wheels · RELEX couplers (page 50) · Length 10.1 cm (3-1/2")

5
4677 · Beer Car · Württemberg-Hohenzollern Brewery Company, Englischer Garten, Stuttgart · As used by the former Royal Württemberg State Railways · Metal wheels · RELEX couplers (page 50) · Length 11 cm (4")

6
4678 · Beer Car · Wulle Brewery, Stuttgart · As used by the former Royal Württemberg State Railways · Metal wheels · RELEX couplers (page 50) · Length 11 cm (4")

5
4677

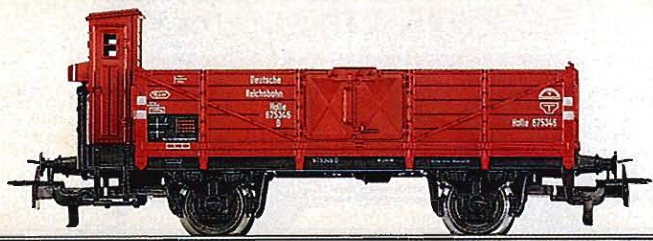


6
4678

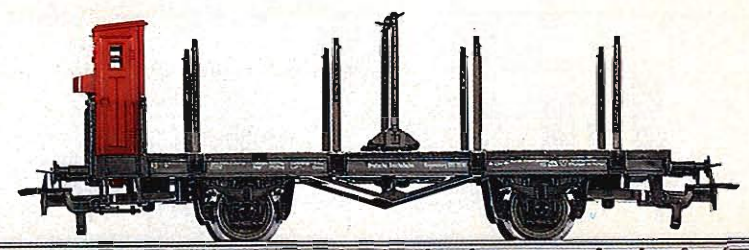




1
4696



2
4697



3 NEW

4680



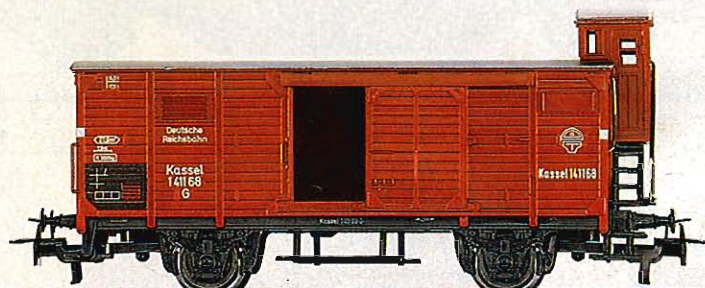
Freight Cars of the former German State Railways

■ A decisive event in the history of freight car construction was the 1909 establishment of the German State Railway Car Association. Freight car styles were standardized and applied to all lines, large and small. This resulted in a great savings in building and maintaining cars and made it easier for cars to interline on the various systems.

Märklin models 4695, 4696, 4697 are faithful reproductions of these Association standards.

4

4695



5

4692



1

4696 · Box Car with Brakeman's Cab · O 10 of the former German State Railways · Metal wheels · RELEX couplers (page 50) · Length 10.1 cm (3-1/2")

2

4697 · Flat Car with Brakeman's Cab · H 10 of the former German State Railways · Metal wheels · RELEX couplers (page 50) · Length 11.5 cm (4-1/2")

3

4680 · Beer Car · "Schwabenbräu" Leicht Brewery, Stuttgart · As used on the German State Railways · Metal wheels · RELEX couplers (page 50) · Length 11 cm (4")

4

4695 · Box Car with Brakeman's Cab · G 10 of the former German State Railways · Sliding doors · Metal wheels · RELEX couplers (page 50) · Length 11 cm (4")

5

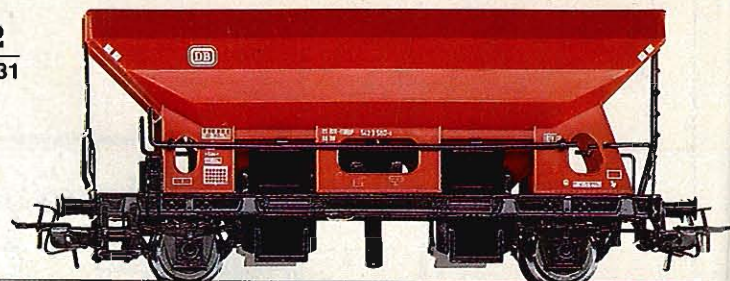
4692 · Box Car · Gr 20 (the "Kassel") of the former German State Railways · Sliding doors · Metal wheels · RELEX couplers (page 50) · Length 10.5 cm (4-1/8")

■ After the German State Railways was formed in 1920 from the merger of provincial railways, freight car standardization continued. The "Kassel" is one example.

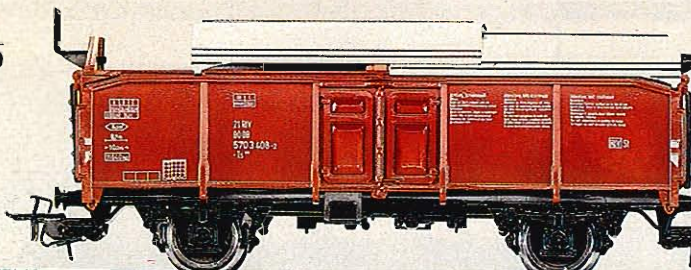
1
4610



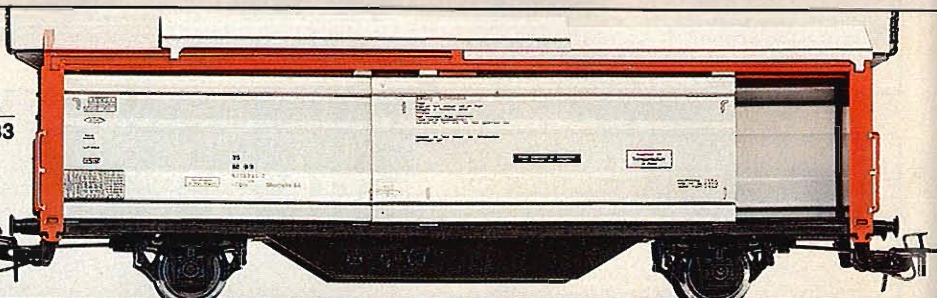
2
4631



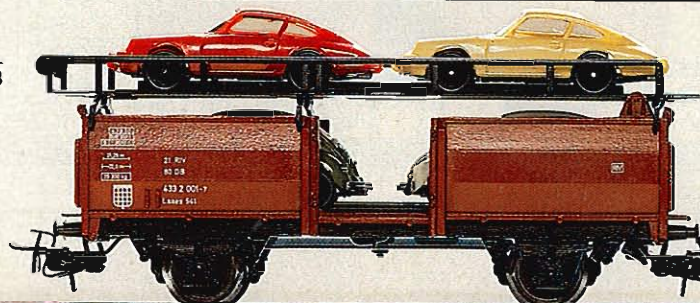
5
4619



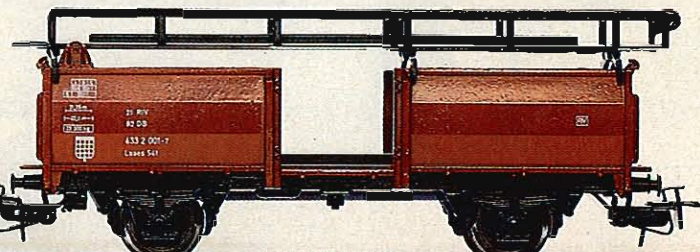
6
4633



9
4613



10
4612



1

4610 · Ore Car · Manually operated unloading hopper · Metal wheels · RELEX couplers (page 50) · Length 9.5 cm (3-3/4")

2

4631 · Side-Unloading Hopper Car · Fc⁰⁹⁰ (Ed 090) of the German Federal Railways · Metal wheels · RELEX couplers (page 50) · Length 11.2 cm (4-3/8")

3

4624 · High Capacity Hopper Car · Fals¹⁷⁸ (Fads 176) of the German Federal Railways · Metal wheels · RELEX couplers (page 50) · Length 13.3 cm (4-1/4")

4

4626 · High Capacity Covered Hopper Car · Tad-u 961 of the German Federal Railways · All hatches open · Metal wheels · RELEX couplers (page 50) · Length 13.3 cm (4-1/4")

The discharge chutes can be operated manually or by remote control by using an uncoupling track 5112 (page 30) or 2297 (page 36).

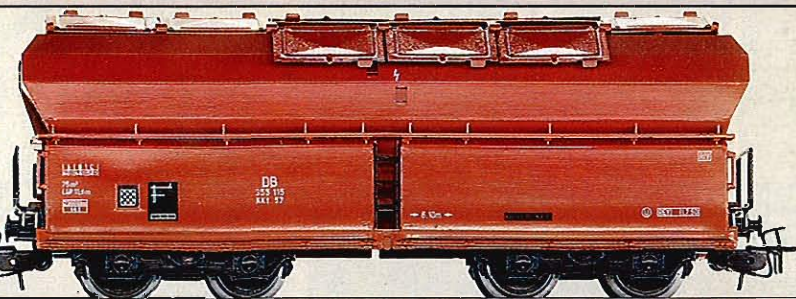
■ These cars are used in international unit trains for the transport of coal, coke, ore, etc.

■ A "top" is installed on many high capacity cars as protection against the elements for items such as grain.

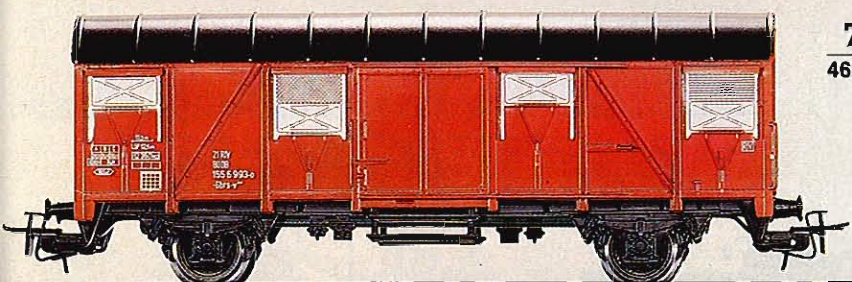
3
4624



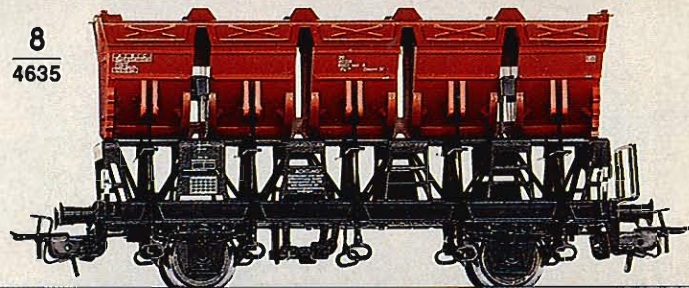
4
4626



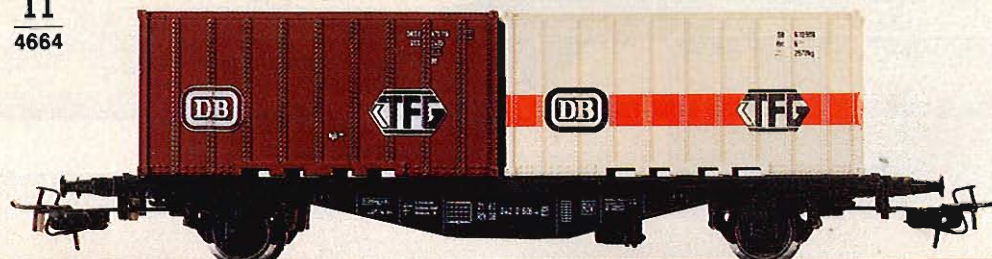
7
4627



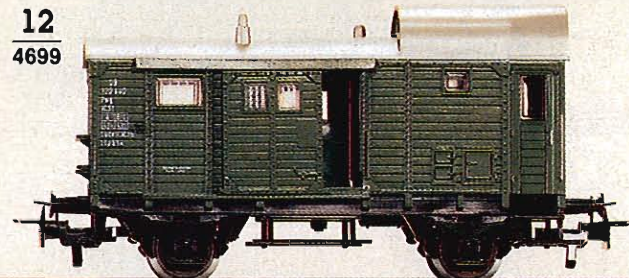
8
4635



11
4664



12
4699



5

4619 · Covered Gondola · Tms⁸⁵¹ (Ts 851) of the German Federal Railways · Sliding roof · Metal wheels · RELEX couplers (page 50) · Length 11.5 cm (4-1/2")

6

4633 · Gondola with Sliding Roof and Sides · Tbis⁸⁷⁰ of the German Federal Railways · Roof halves and sides open · Metal wheels · RELEX couplers (page 50) · Length 15.7 cm (6-3/16")

8

4635 · Multi-Section Ballast Car · F-z¹²⁰ of the German Federal Railways · Buckets can be tipped by unlatching holding bar · Metal wheels · RELEX couplers (page 50) · Length 10.5 cm (4-1/8")

10

4612 · Bi-Level Auto Carrier · Unloaded · Metal wheels · RELEX couplers (page 50) · Length 11.5 cm (4-1/2")

11

4664 · Container Car · German Federal Railways · Loaded with 2 TFG containers · Metal wheels · RELEX couplers (page 50) · Length 15.6 cm (6-1/8")

7

4627 · Box Car · Gos-uv²⁴⁵ (Gbrs-v 245) of the German Federal Railways · Metal wheels · RELEX couplers (page 50) · Length 13.3 cm (4-1/4")

9

4613 · Bi-Level Auto Carrier · With 4 Wiking automobiles · Metal wheels · RELEX couplers (page 50) · Length 11.5 cm (4-1/2")

■ On the German Federal Railways, 2 of the automobile carrier cars are always operated together as a unit and designated Laaekms⁵⁴¹ (Laaes 541).

12

4699 · Package Car · Pwg Pr014 of the German Federal Railways · Sliding doors · Metal wheels · RELEX couplers (page 50) · Length 9.8 cm (3-7/8")

1

4644 · Tank Car · BP standard tank car · Metal wheels · RELEX couplers (page 50) · Length 10 cm (4")

2

4646 · Tank Car · Aral standard tank car · Metal wheels · RELEX couplers (page 50) · Length 10 cm (4")

3

4661 · Bulk Material Tank Car · German Federal Railways' type Ucs⁹⁰⁸ · Quarzwerke (Quartz Works) · Metal wheels · RELEX couplers (page 50) · Length 10 cm (4")

4

4650 · Tank Car · Esso · Metal wheels · RELEX couplers (page 50) · Length 16.4 cm (6-1/2")

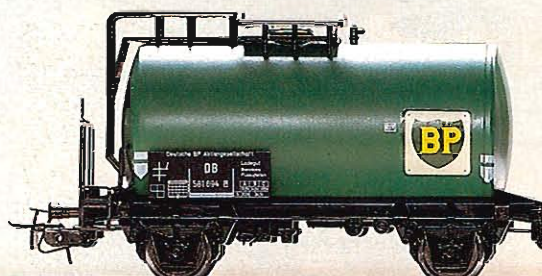
5

4651 · Tank Car · Shell · Metal wheels · RELEX couplers (page 50) · Length 16.4 cm (6-1/2")

6

4652 · Tank Car · Texaco · Metal wheels · RELEX couplers (page 50) · Length 16.4 cm (6-1/2")

1
4644



2
4646



4
4650



5
4651





3
4661



6
4652



1

4671 · Crane Car · With rotating crane, movable boom, boom supports · Hook operated manually · Metal wheels · RELEX couplers (page 50) · Length of underbody 9 cm (3-1/2") · (Low-side gondola 4423 not included but recommended as idler car)

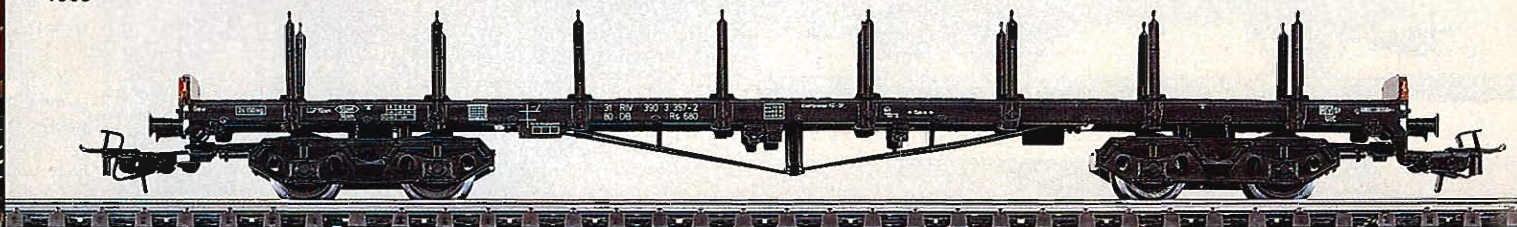
2

4694 · Flat Car · German Federal Railways' type Kbs⁴⁴³ · Removable stakes · Metal wheels · RELEX couplers (page 50) · Length 15.7 cm (6-3/16")



4

4663

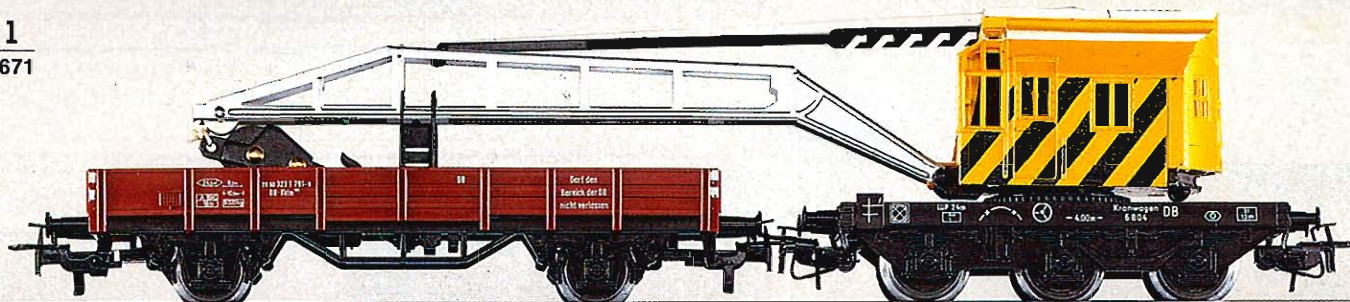


6

4618



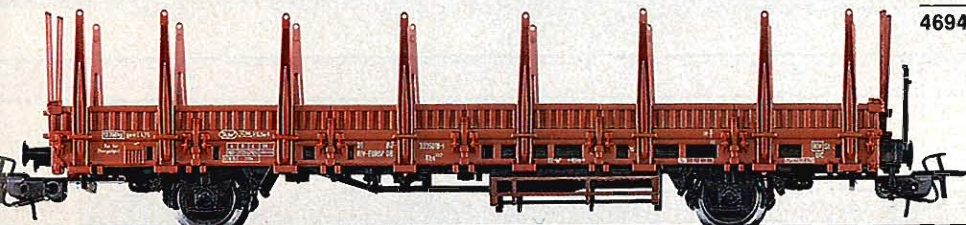
1
4671



3

4693 · Telescoping Freight Car · German Federal Railways' type Shimm's⁷⁰⁸ (Shis 708) · Firm ends · 3 part telescoping sides, shiftable to either end · 5 built-in bays with adjustable restrainers · 3 realistic looking steel coils as freight · Metal wheels · RELEX couplers (page 50) · Length 13.8 cm (5-3/8")

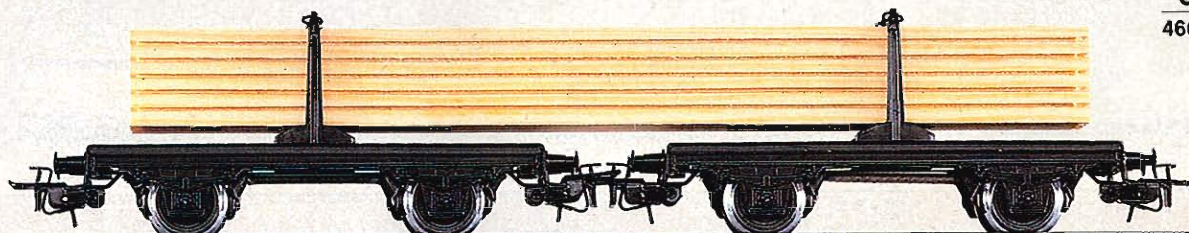
2
4694



3
4693



5
4665



4

4663 · Flat Car · German Federal Railways' type Rs⁶⁸⁰ · Removable stakes · Metal floor and wheels · RELEX couplers (page 50) · Length 22.7 cm (9")

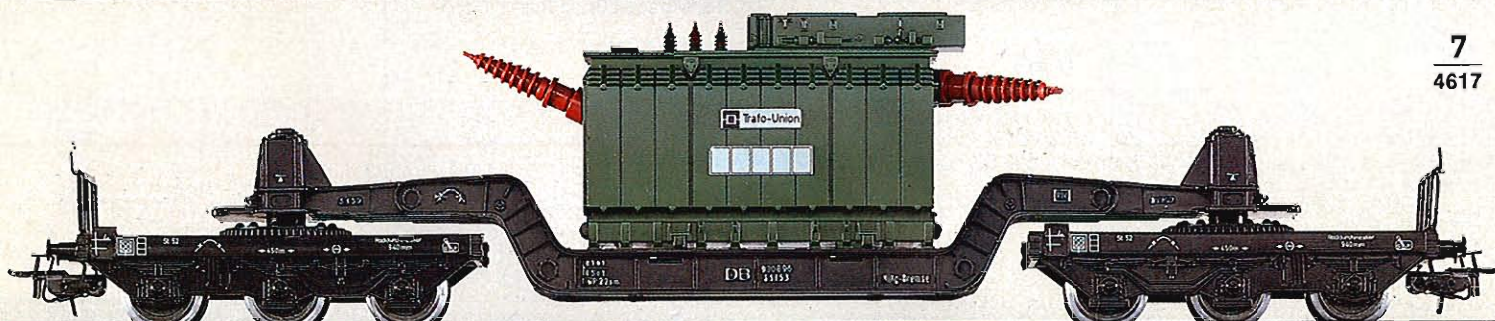
5

4665 · Lumber Car · 2 "shorty" flats loaded with sawn lumber · Metal wheels · RELEX couplers (page 50) · Length 19.5 cm (7-3/4")

6

4618 · Depressed-center Flat Car · Loaded with crate · Metal wheels · RELEX couplers (page 50) · Length 25 cm (9-7/8")

7
4617



7

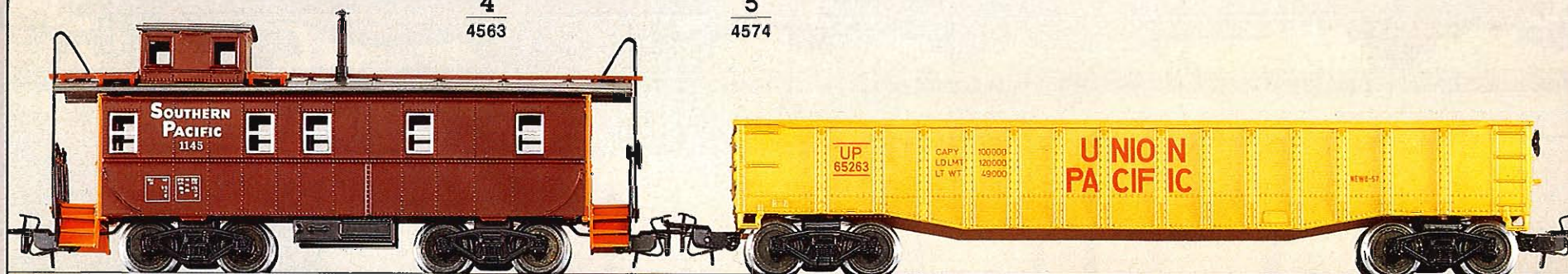
4617 · Depressed-center Flat Car · Loaded with transformer · Metal wheels · RELEX couplers (page 50) · Length 25 cm (9-7/8")

1
4632



4
4563

5
4574



1 Switzerland

4632 · Beer Car · Feldschlösschen · Metal wheels · RELEX couplers (page 50) · Length 19.5 cm (7-¾")

2 Switzerland

4698 · Box Car with Brakeman's Cab · Swiss Federal Railways' (SBB) type H h k · Sliding doors · Metal wheels · RELEX couplers (page 50) · Length 14 cm (5-½")

3 Switzerland

4691 · High Capacity Cement Car · Juracement-Fabriken-Aarau · Bi-lingual lettering (German, French) · Metal wheels · RELEX couplers (page 50) · Length 13.3 cm (5-¼")

4 USA

4563 · Caboose · Southern Pacific · With running boards and ladders · Metal wheels · RELEX couplers (page 50) · Length 12.5 cm (5")

5 USA

4574 · Gondola · Union Pacific · Metal wheels · RELEX couplers (page 50) · Length 17 cm (6-⅝")

6 USA

4564 · Box Car · Chesapeake & Ohio · Removable roof with running board · Sliding doors · Metal wheels · RELEX couplers (page 50) · Length 18.4 cm (7-¼")

7 Netherlands

4639 · Gondola · Netherlands Railways (NS) · Metal wheels · RELEX couplers (page 50) · Length 11.5 cm (4-½")

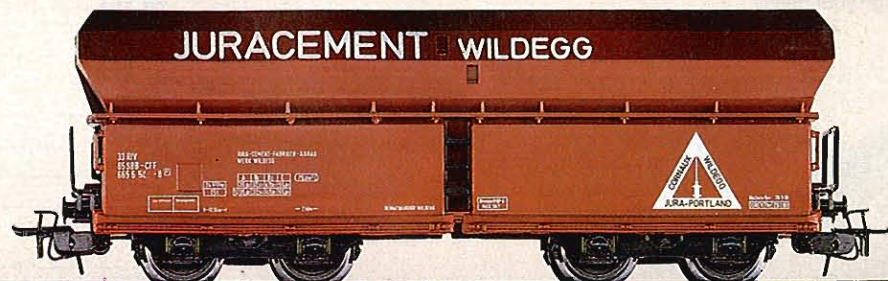
8 France

4681 · Gondola · French Railways (SNCF) type E 3 01 · Metal wheels · RELEX couplers (page 50) · Length 11.5 cm (4-½")

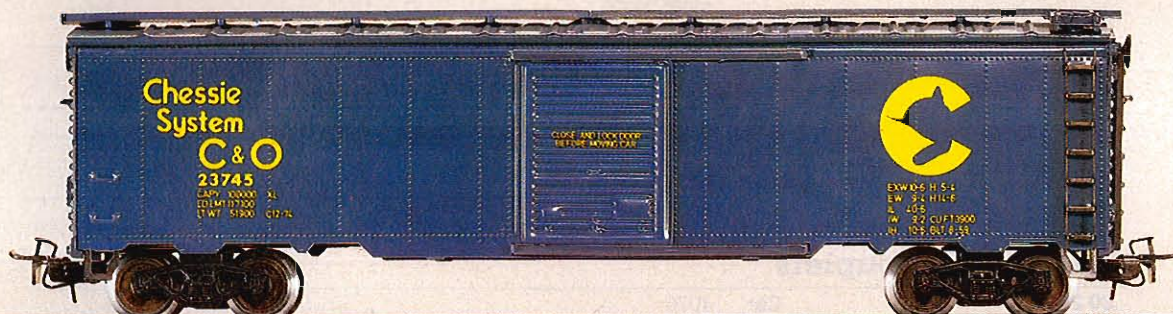
2
4698



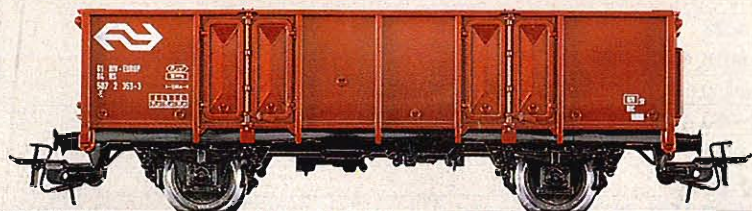
3
4691



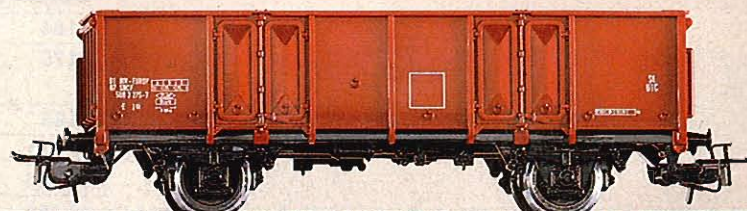
6
4564



7
4639

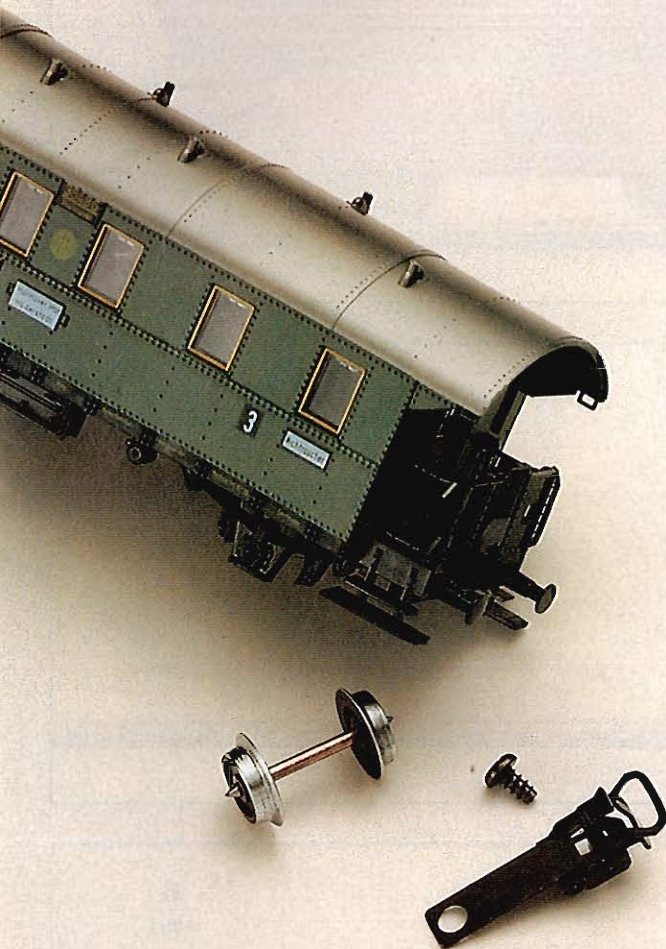


8
4681



Spare Parts for Cars

All spare parts can be obtained through your dealer.



7001 · Coupling Guide · Nickel plated steel · For testing couplers

7199 · Bottle of Oil · Contains 9 ml of special oil for locomotives and cars

Couplers

21 005	Car	4018
21 583	Cars	4060, 4129 (front)
21 622	Cars	4060, 4129 (rear)
21 842	Cars	4631, 4635
21 951	Car	4071
21 954	Car	4071
32 399	Cars	4632, 4650, 4651, 4652, 4663
32 402	Car	4632
32 540	Cars	4067, 4079, 4080, 4100, 4101, 4102, 4103, 4104, 4105, 4106, 4107, 4108, 4633, 4644, 4646, 4664, 4694
70 154	Cars	4004, 4005, 4040, 4610, 4612, 4613, 4617, 4618, 4619, 4627, 4639, 4661, 4665, 4671, 4681
70 157	Cars	4074, 4084, 4410, 4411, 4412, 4413, 4414, 4415, 4422, 4423, 4424, 4425, 4426, 4428, 4429, 4430, 4431, 4432, 4436, 4440, 4441, 4442, 4443, 4460, 4473, 4474, 4475, 4481, 4674, 4675, 4677, 4678, 4679, 4680, 4685, 4692, 4693, 4695, 4696, 4697, 4698, 4699
70 158	Cars	4091, 4092, 4093, 4094, 4095, 4096, 4097, 4098, 4099, 4121, 4122, 4123, 4124, 4125, 4134, 4135, 4136, 4137, 4138, 4139, 4140, 4143, 4145, 4146, 4147, 4148, 4149, 4150, 4151, 4152, 4153, 4154, 4157, 4158, 4159, 4160, 4161, 4162, 4164, 4165, 4166, 4168, 4175, 4176, 4177, 4180
70 162	Cars	4131, 4132, 4133
70 412	Car	4028

Trucks with Couplers

30 256	Car	4076
30 339	Cars	4026, 4045, 4051, 4052, 4053, 4054, 4064, 4085, 4087, 4089, 4090, 4111, 4112
30 417	Cars	4049, 4072, 4073
30 547	Cars	4066, 4068
32 289	Car	4563
32 311	Car	4564
32 339	Cars	4624, 4626, 4691
32 570	Car	4574

Sliders

7164	Car	4028
7175	Cars	4018, 4053, 4089
	Train lighting set	7197, 7198, 7320, 7322, 7323
7185	Cars	4060, 4129
31 051	Car	4103
31 100	Car	4160
41 494	Cars	4098, 4154, 4411
	Train lighting set	7329

Light Bulbs

	60 000	Train lighting set 7077 Switches 2261, 5128, 5137, 5140, 5202 Bumper 7191 Signals 7036, 7038, 7039, 7040, 7041, 7042 Lamps 7280, 7281, 7282, 7283, 7284 Crane 7051
 red	60 001	Car 4028 Train lighting set 7079 Signals 7188, 7339
 green	60 002	Signals 7188, 7339
	60 010	Car 4018 Train lighting set 7323 Light pole 5113 Lamps 7046, 7047, 7048
	60 015	Cars 4028, 4060, 4089, 4129, 4411 Train lighting set 7197, 7320, 7322, 7329
	60 020	Train lighting set 7074
	60 200	Signal 7242
 red	60 201	Signals 7239, 7240, 7241 Crossing gales 7292, 7592
 green	60 202	Signals 7187, 7236, 7237, 7238, 7239, 7240, 7241
 orange	60 204	Signals 7187, 7236, 7237, 7238, 7240, 7241



Multi-Train Operation – A Cinch

The simplest method is merely to add another transformer to get multi-train operation.

When more trains are to be operated on the same layout independently of each other, it is best to divide the layout into different circuits, each with its own transformer and feeder track. The different circuits can easily be kept isolated from each other by use of the third rail (center-stud) isolators 5022 or 7522 (page 163). This makes it more practical for duplicating the tempo of prototype railroads.

Then, the fun of model railroading really begins.





One Transformer = One Circuit

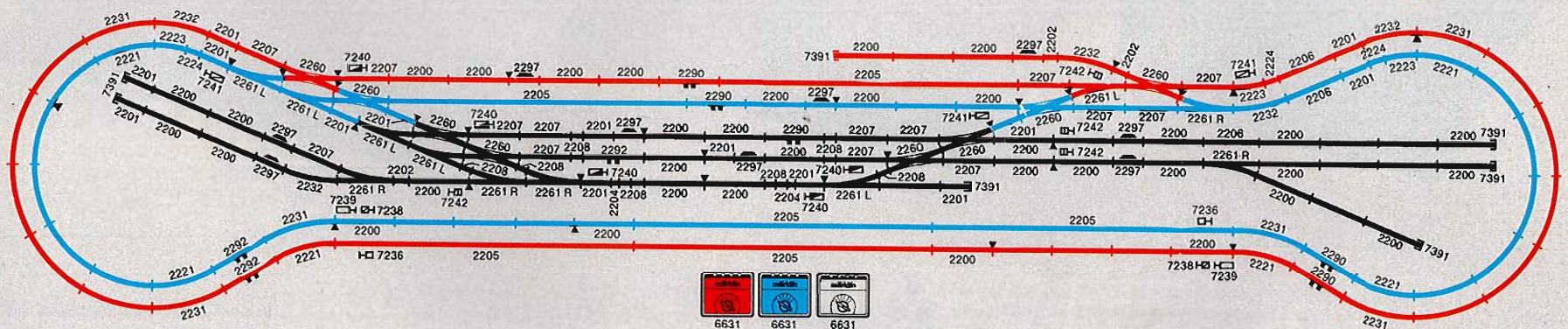
On our layout all trains travel at the same speed, going faster or slower according to the speed setting on the transformer. By using signals, trains can be stopped independently of each other. Changing the direction of one train is possible only when the others are stopped before signals.

Two Transformers = Two Circuits

As soon as the mainline gets wired to a separate transformer, mainline action is kept separate from slower terminal activities. While an express rushes to its distant destination another train can ease its way into the station.

Three Transformers = Three Circuits

Connect the terminal area to yet a third transformer, and the operational alternatives are increased threefold. As many as three trains can operate independent of each other.



Layout Size: 475 x 95 cm
(16' 1" x 3' 2")

Parts List:

50 - 2200	14 - 2207	5 - 2232	9 - 2297	2 - 7239	3 30 VA Transformers Wire, sockets and plugs
14 - 2201	11 - 2208	8 - 2260	5 - 7048	5 - 7240	
3 - 2202	16 - 2221	5 - 2261	12 - 7072	3 - 7241	
2 - 2204	3 - 2223	1 - 2261 L	8 - 7209	4 - 7242	
6 - 2205	3 - 2224	5 - 2290	2 - 7236	7 - 7391	
3 - 2206	16 - 2231	3 - 2292	2 - 7238		

Safety Tested Worldwide

The insulation on Märklin transformers is tested to several thousand volts. In addition, the transformers have a built-in circuit breaker which automatically cuts off power as soon as a short occurs. A standard wire and plug connects the transformer to the house current.

1 16 VA
6671



2 30 VA
6631



3 40 VA
6611



We guarantee trouble-free operation of Märklin trains only when they are used with original Märklin transformers. The transformers must be protected from dampness and are not designed for outdoor operation. Connect only to AC house current.

- 1**
6671 220 Volt
6660 100 Volt Japan
6667 110 Volt (60 Hz) USA ·
UL-tested
6669 240 Volt

Transformer · Output 16 VA · Track current adjustable from 4 to 16 volts · Lighting voltage 16 volts · Plastic housing · Weight 1.2 kg (2-½ lb) · Dimensions 125 x 135 x 75 mm (5" x 5-¾" x 3")

- 2**
6631 220 Volt
6620 100 Volt Japan
6627 110 Volt (60 Hz) USA ·
UL-tested
6629 240 Volt

Transformer · Output 30 VA · Track current adjustable from 4 to 16 volts · Lighting voltage 16 volts · Plastic housing · Red pilot light · Weight 2.1 kg (4-¾ lb) · Dimensions 158 x 135 x 75 mm (6-½" x 5-¾" x 3")

- 3**
6611 220 Volt
Transformer for Lights and solenoid-operated items · Output 40 VA · Voltage output approximately 16 volts AC · Plastic housing · Weight 2.0 kg (4-½ lb) · Dimensions 158 x 135 x 75 mm (6-½" x 5-¾" x 3")

- 4**
5022 · Center "rail" isolators · For M Track · Used for separating track circuits

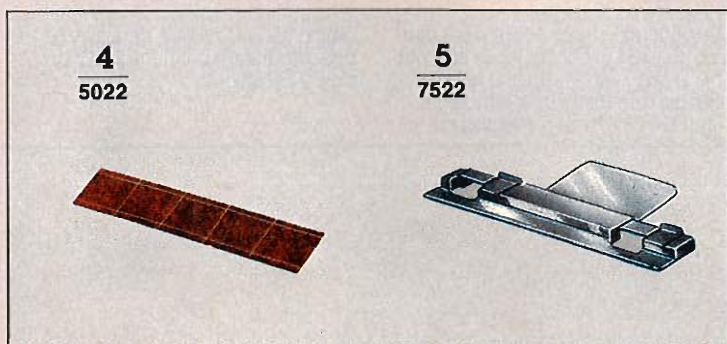
- 5**
7522 · Center "rail" isolators · For K Track · Used for separating track circuits



When two transformers independently control train operation, small layouts can have the excitement and fun of big layouts.



The variety of operational possibilities using several transformers is suggested here. Endless variations are feasible when running three trains.



Power Consumption of Locomotives and Lights

Here is one way to figure out how many items a given transformer can power: The tank engines 3000 and the mainline steam engine 3085 need about 9 VA each; the express diesel 3021 requires about 12 VA. Whatever VA is left over can be used for lights

and accessories, allowing 1 VA per light bulb. Additional examples and more specific information appear in the booklet 0380 "Die Modelleisenbahn Märklin H0 und ihr großes Vorbild" (page 188) (German text).



It Moves Just like a Real Locomotive!

With the electronic power pack 6600
it is simple to duplicate realistic operations
on Märklin H0 layouts.

**6600 · Electronic Power Pack with
Additional Functions** · Connects to
Märklin Light (Accessory) Transformer
6611 or to the accessory sockets of a
Märklin transformer having 30 VA
rating · Electronically controls speed
and direction · Automatically regulates
acceleration, deceleration, length of
stop at station, all with override
controls · Has internal output regulator
so that actual speed of train is kept
constant, independent of grades on
the layout · Emergency button · Circuit
breaker · Plastic housing · Weight
350 g (15 oz.) · Size 125 x 135 x 55 mm
(5" x 5-3/8" x 2-1/8") · Additional wire
and plugs available from Märklin

Adjustable Acceleration

In real life, a strong electric will
accelerate faster than a small switcher.
So, too, on Märklin layouts. The
6600 electronic power pack can
regulate the acceleration for any

train most realistically, without
jerking.

Constant Speed

On real trains, the engineer tries to
maintain speed independent of the
ups and downs of the terrain. He tries
to avoid too much speed on a down-
grade and too little on an upgrade.

Likewise on a Märklin H0 layout, the
6600 electronic power pack keeps the
train speed constant.

Fully Automatic Commuter Operation

The 6600 electronic power pack can
also be used to control the in and out
operations seen at terminal railroad
stations. Controlled by a remote
control track, the train entering the

station glides to a halt, pauses a short,
pre-determined moment, and then
slowly backs out.

Easy to Connect

Several 6600 electronic power packs can be connected to any Märklin transformer and each controller will govern a single circuit. The 6631 transformer can also, by itself, control yet another circuit in the normal way. Thus, for example on the layout shown on page 161, a 6631 transformer controls one train, while two 6600 electronic power packs control the other two trains.

Adjustable Braking

With adjustable braking, a heavy freight train slows down more slowly and realistically than a self-propelled rail bus. Braking is also gradual and without jerking.

Automatic Station Stops

The 6600 electronic power pack also permits stopping a train at a station or other point on the layout. A remote control track is all that is needed to have a train slow down, stop, and

proceed again. This operation can be overridden for through trains.

Built-in Emergency Brake

With the emergency button on the 6600 electronic power pack, all commands can be immediately overridden and all trains will stop fast. The use of the switch will not influence any programmed command.

Direct Controls

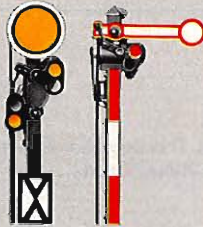
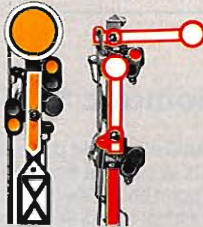
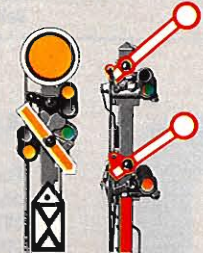
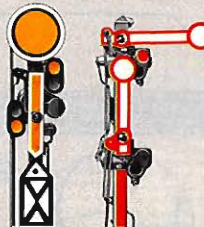
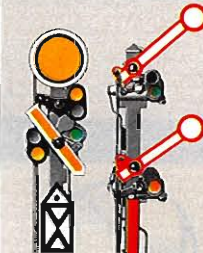
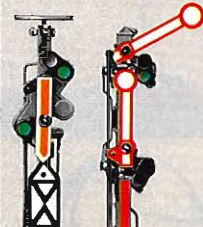
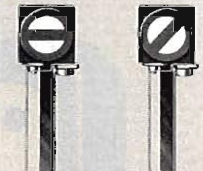
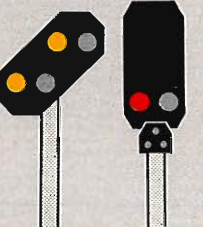
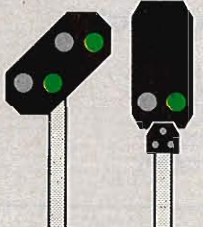
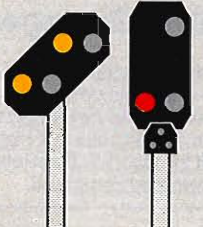
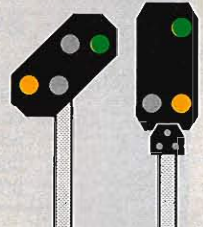
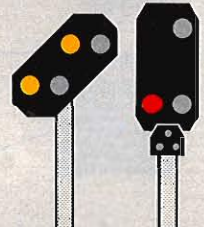
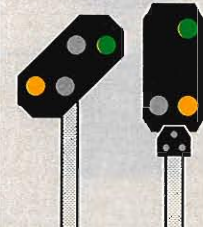
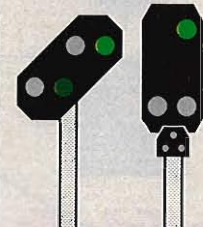
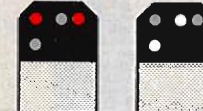
With the electronic power pack, all Märklin H0 locomotives can be operated like their real-life counterparts. Slow, jerk-free acceleration, effortless gliding across switches, and

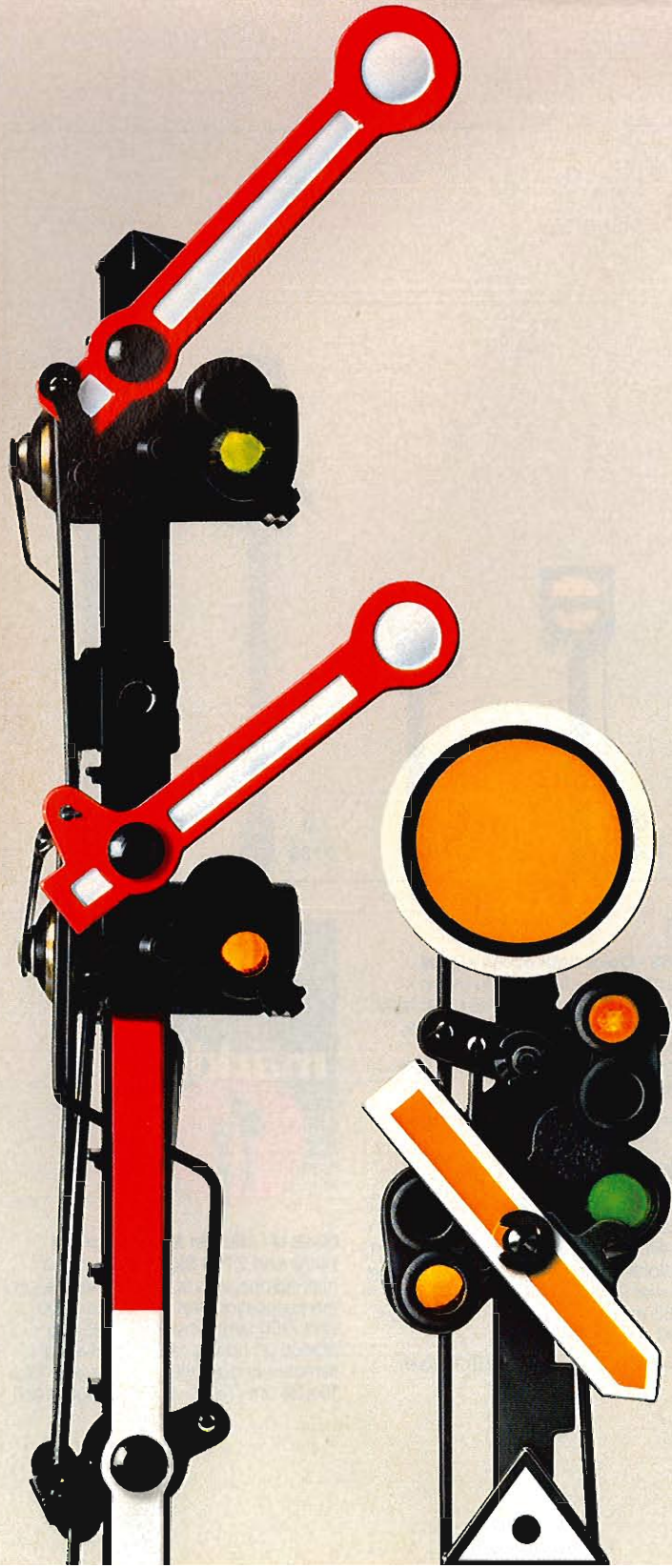
even the "creep" needed for effective marshalling of cars. The directional switch of the locomotives is also controlled by the 6600 electronic power pack.



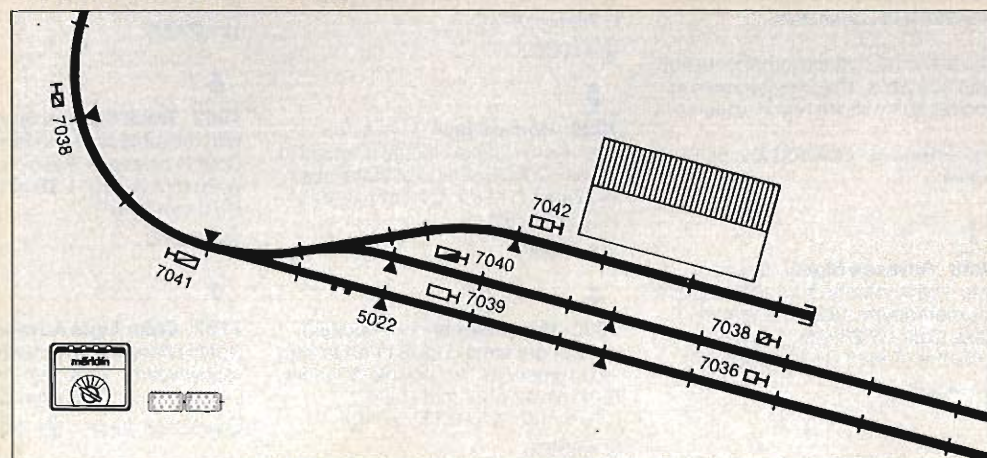
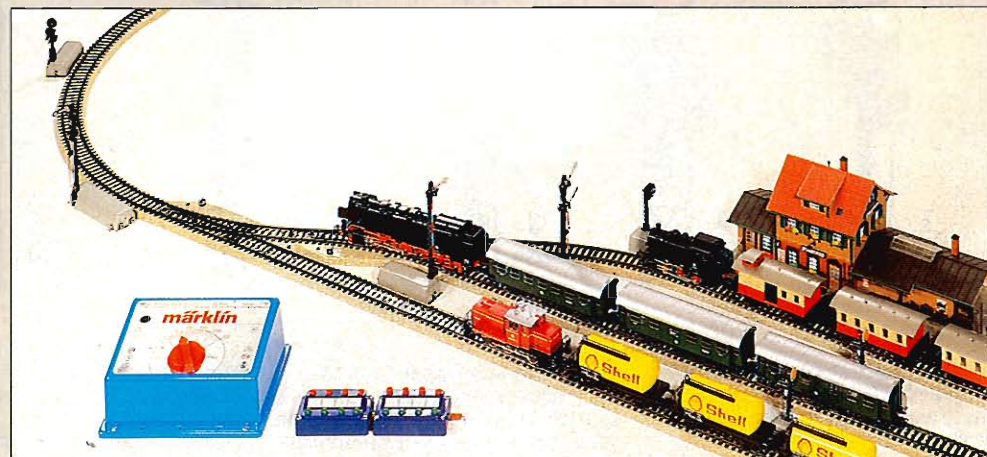
Signals Govern Traffic

Whether on a model railroad or on a real railroad, signals are the most important means of guaranteeing a safe and trouble free flow of traffic. Besides adding visual beauty to a layout, signals offer immeasurable possibilities for model railroading fun: When the signal is red, the train stops and does not move again until the signal says "all clear". Installing the exciting Märklin signals on a layout is simple and quick.

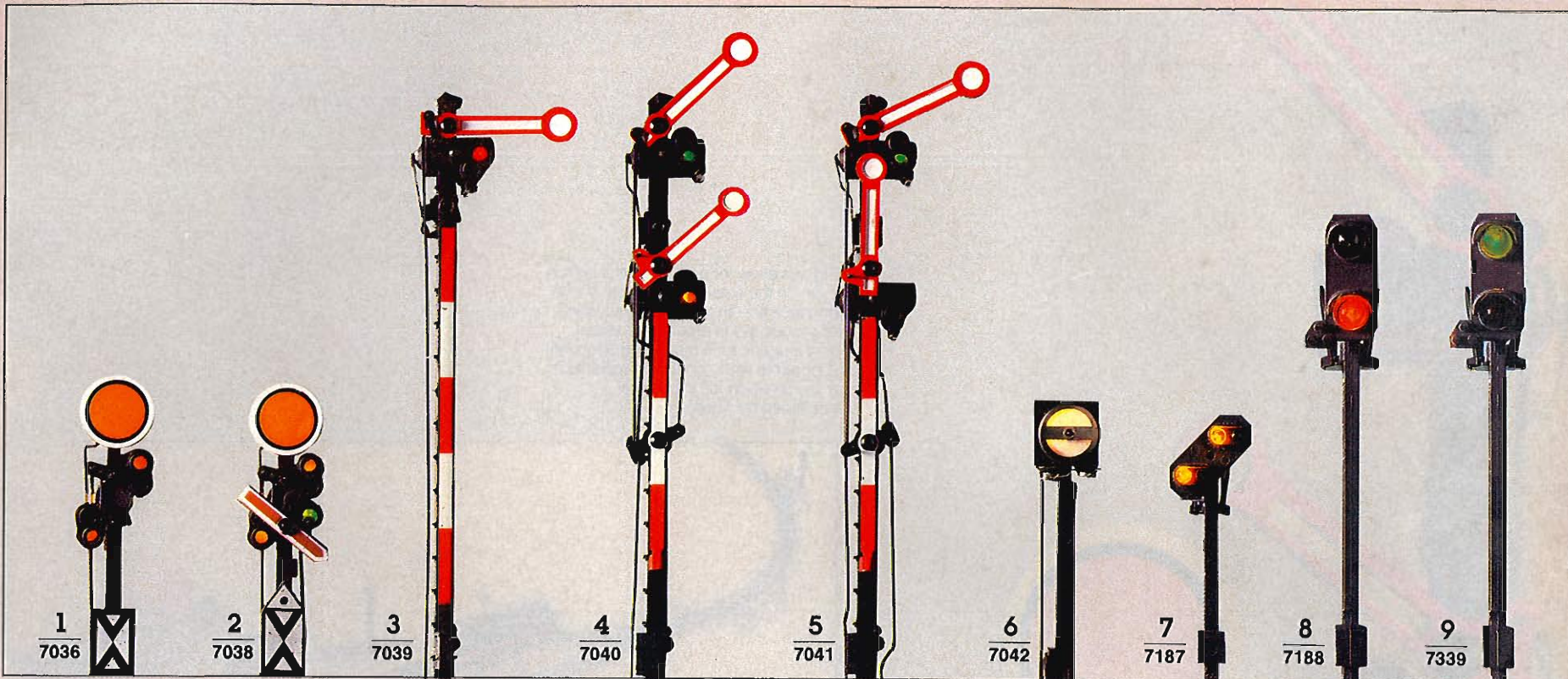
Usually used on mainlines or at stations, where there are no branches or sidings.		Usually used near stations where trains may be switched from the main track.		Usually used at junctions where diversion or direct routing is possible.			Usually used in terminal areas.				
											
7036	7039	7036	7039	7038	7040	7038	7040	7038	7041	7042	7042
											
7236	7239	7236	7239	7237	7240	7237	7240	7238	7241	7242	7242
Advance signal: "Prepare to stop"		Advance signal: "Proceed signal ahead"		Advance signal: "Prepare to stop"		Advance signal: "Prepare to slow down"	Advance signal: "Prepare to stop"	Advance signal: "Prepare to slow down"	Advance signal: "Proceed signal ahead"	Track closure signal "Do not enter"	
Home signal: "Stop"		Home signal: "Proceed"		Home signal: "Stop"		Home signal: "Proceed slowly"	Home signal: "Stop"	Home signal: "Proceed slowly"	Home signal: "Proceed"	"Entry permitted"	



Signals allow for greater operating fun even on the smallest of layouts. While one train sits "in the hole", a second continues its trip around the layout. Just imagine for a moment the fun that is possible when operating trains from a station where all tracks are controlled by signals.



M Track Signals



All Märklin track closure and home signals influence train operation. These signals are activated either by a position control box (7072) or by a train passing over a remote control track. The signals include center-rail isolators and connectors.

The advance signals do not influence train operation. They are operated in conjunction with the home signals.

Instructions are included with each signal.

1

7036 · Advance Signal · Movable disc · Lights change from yellow/yellow to green/green · Double solenoid · Base plate · W 28 mm (1-1/8") · L 65 mm (2-5/16") · H 73 mm (2-7/8")
Q = 60000

2

7038 · Advance Signal · Movable disc and movable semaphore arm · Light sequence same as 7036 or from yellow/yellow to yellow/yellow/green · 2 double solenoids · Base plate · W 28 mm (1-1/8") · L 65 mm (2-5/16") · H 73 mm (2-7/8")
Q = 60000

3

7039 · Home Signal · One semaphore arm · Lights change from red to green · Double solenoid · Base plate · W 27 mm (1-1/16") · L 70 mm (2-3/4") · H 125 mm (5")
Q = 60000

4

7040 · Home Signal · Two coupled semaphore arms · Lights change from red to green/yellow · Double solenoid · Base plate · W 27 mm (1-1/16") · L 70 mm (2-3/4") · H 125 mm (5")
Q = 60000

5

7041 · Home Signal · 2 independent semaphore arms · Lights change from red to green or from red to green/yellow · 3 double solenoids · Base plate · W 27 mm (1-1/16") · L 97 mm (2-9/16") · H 125 mm (5")
Q = 60000

6

7042 · Track Closure Signal · Mast with movable front and rear discs · Double solenoid · Base plate · W 28 mm (1-1/8") · L 70 mm (2-3/4") · H 70 mm (6-3/4")
Q = 60000

7

7187 · Color Light Advance Signal · Lights change from green/green to yellow/yellow · W 16 mm (5/8") · L 11 mm (7/16") · H 60 mm (2-3/8")
Q = 60202 green Q = 60204 orange

8

7188 · Color light home signal · Lights change from red to green · Double solenoid · Includes hand lever · Pair of sockets for connecting to a home signal 7187 · Base plate · W 28 mm (1-1/8") · L 70 mm (2-3/4") · H 90 mm (3-1/2")
Q = 60001 red Q = 60002 green

9

7339 · Color Light Home Signal · Changes from red to green manually · When signal is red, there is no current in block controlled by signal · Includes special 90 mm (3-1/2") track section W 55 mm (2-3/16") · L 90 mm (3-1/2") · H 90 mm (3-1/2")
Q = 60001 red Q = 60002 green



0342 M · Märklin Manual for the 7000 and 7100 Signals · Detailed instructions, with color illustrations, on the installation and use of the 7000 and 7100 series signals · Also has advice on how to use the universal remote control switch · 28 pages · Size 18 x 25 cm (7-1/8" x 9-7/8") · English text

Signals for K and M Tracks



The color light home signals and the track closure signals in the 7200 series have trips enabling them to control current in the catenary or in the center "rail".

The 7200 series signal masts including the 7242 frame can be set up separate from the signalling system. If so, bracket 7230 is required.

7230 · Bracket · For securing masts of the signals 7238, 7239, 7240, 7241, and the closure signal 7242 when they are being use independent of the signalling system

10

7236 · Color Light Advance Signal · Lights change from yellow/yellow to green/green · Includes bracket 7230 and base plate · W 16 mm (5/8") · L 28 mm (1-1/8") · H 67 mm (2-5/8")
Q = 60202 green Q = 60204 orange

11

7237 · Color Light Advance Signal · Lights change from yellow/yellow to yellow/green · Includes bracket 7230 and base plate · W 16 mm (5/8") · L 28 mm (1-1/8") · H 67 mm (2-5/8")
Q = 60202 green Q = 60204 orange

12

7238 · Color Light Advance Signal · Changes from yellow/yellow to green/green or yellow/green · Double solenoid operation for the yellow/green setting · Base plate · W 30 mm (1-3/16") · L 70 mm (2-3/4") · H 67 mm (3-1/2")
Q = 60202 green Q = 60204 orange

13

7239 · Color Light Home Signal · Changes from red to green and track current is controlled by double solenoids · Includes hand lever · Base plate · W 30 mm (1-3/16") · L 70 mm (2-3/4") · H 90 mm (3-1/2")
Q = 60201 red Q = 60202 green

14

7240 · Color Light Home Signal · Lights change from red to green/yellow and track current is controlled by double solenoid · Includes hand lever · Base plate · W 30 mm (1-3/16") · L 70 mm (2-3/4") · H 90 mm (3-1/2")
Q = 60201 red Q = 60202 green
Q = 60204 orange

15

7241 · Color Light Home Signal · Changes from red to green or green/yellow and track current is controlled by double solenoid · Has additional solenoid for the green/yellow setting · Includes 2 hand levers · Base plate · W 30 mm (1-3/16") · L 95 mm (3-3/4") · H 90 mm (3-1/2")
Q = 60201 red Q = 60202 green
Q = 60204 orange

16

7242 · Track Closure Signal · Changes from red/red to white/white and track current is controlled by double solenoid · Includes hand lever · W 30 mm (1-3/16") · L 70 mm (2-3/4") · H 18 mm (11/16")
Q = 60200

17
7245



17

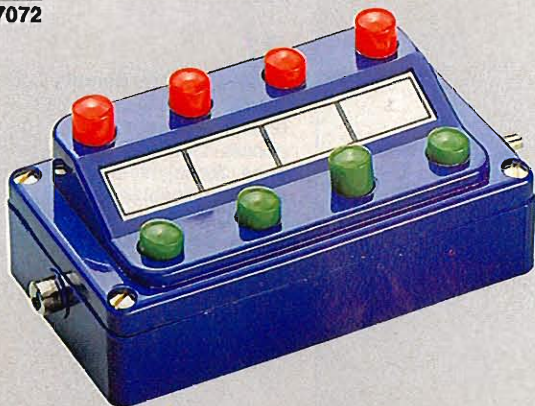
7245 · Universal Remote Control Switch · 2 single pole switches and one changeover switch for various circuits · Operate 3 accessories at once · Signal manuals 0342 and 0361 show additional uses · Double solenoid · Can be operated either by remote control track, position control box or manually · W 30 mm (1-1/8") · L 70 mm (2-3/4") · H 8 mm (5/16")



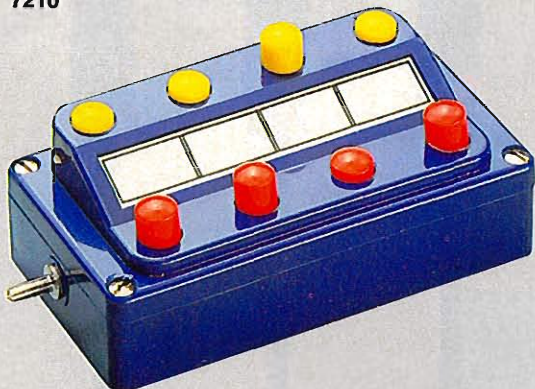
0361 K · Märklin Manual for the 7200 Signals · Detailed instructions, with color illustrations, on the installation of the 7200 series signals · Also has advice on using the universal remote control switch with K tracks · 48 pages · Size 18 x 25 cm (7-1/8" x 9-7/8") · English text

The Control Tower – A Railroad's Nerve Center

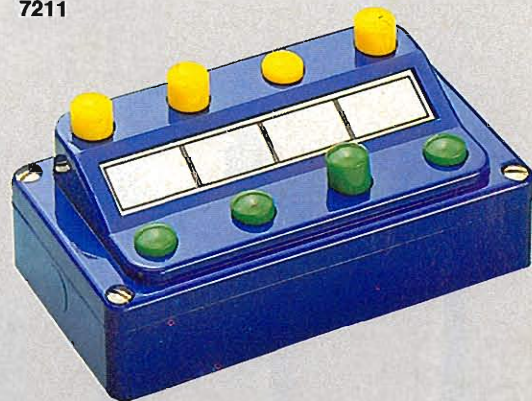
1
7072



2
7210



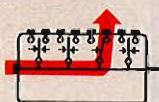
3
7211



Remote Operation

1

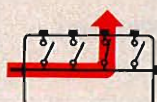
7072 · Position Control Box · Controls four circuits for solenoid-operated accessories momentary contacts · Position of buttons indicate position of switches, signals, etc. · Length 80 mm (3-1/8") · Width 40 mm (1-9/16")



Schematic of 7072
(with line 3 closed)

2

7210 · Control Box · For distributing power to up to four track or accessory circuits · For example, can control current to four yard tracks · Length 80 mm (3-1/8") · Width 40 mm (1-9/16")



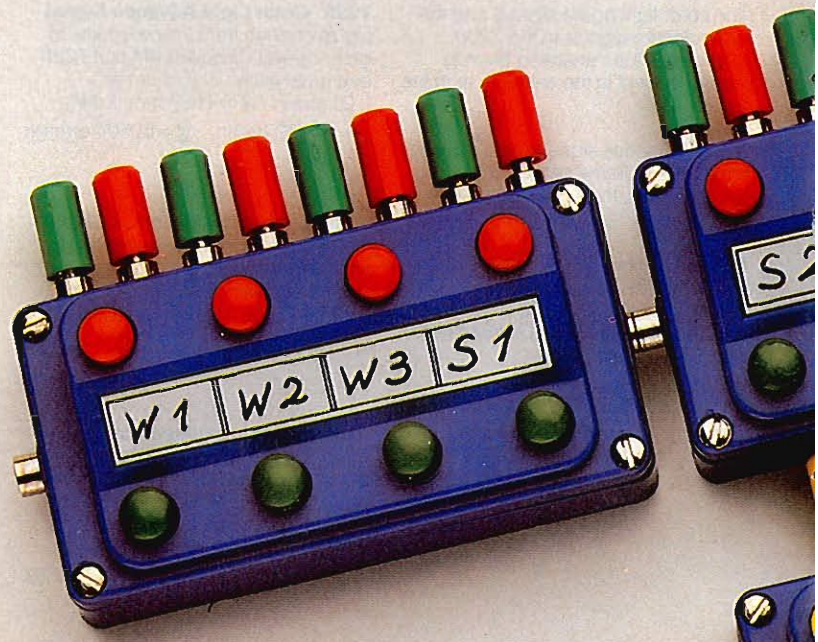
Schematic of 7210
(with line 3 closed)

3

7211 · Control Box · For controlling up to four track or accessory circuits · For example, controlling current to four yard tracks connected to separate circuits · Length 80 mm (3-1/8") · Width 40 mm (1-9/16")



Schematic of 7211
(with line 3 closed)



Märklin Circuits are Color Coded



Red = Track current (Transformer to center "rail" or catenary)



Brown = Ground lead from track or position control box to transformer



Yellow = Lights and accessories



Blue = Return lead for solenoid operated accessories to position control box or remote control track (having green, red, and orange plugs)

Hookup Wire

Extra-flexible stranded hookup wire, for all Märklin accessories - Copper, 24 strands x 10 mm (.004 in). - 24 gauge, single conductor, color coded.

7100 · Wire
Gray · 10 m (33')

7101 · Wire
Blue · 10 m (33')

7102 · Wire
Brown · 10 m (33')

7103 · Wire
Yellow · 10 m (33')

7105 · Wire
Red · 10 m (33')



7000 · Staples · Pack of 50 · For securing wires to wooden bases

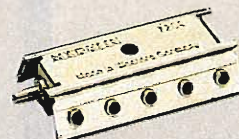
Sockets

7111 = brown
7112 = yellow
7113 = green
7114 = orange
7115 = red
7117 = gray



Plugs

7131 = brown
7132 = yellow
7133 = green
7134 = orange
7135 = red
7137 = gray



7209 · Distribution Strip · With 11 single pole sockets · Size 50 x 20 mm (2-3/4" x 1-1/16")



5022 · Center "rail" Isolators · For M Track · For separating track circuits



7522 · Center "rail" Isolators · For K Track · For separating track circuits



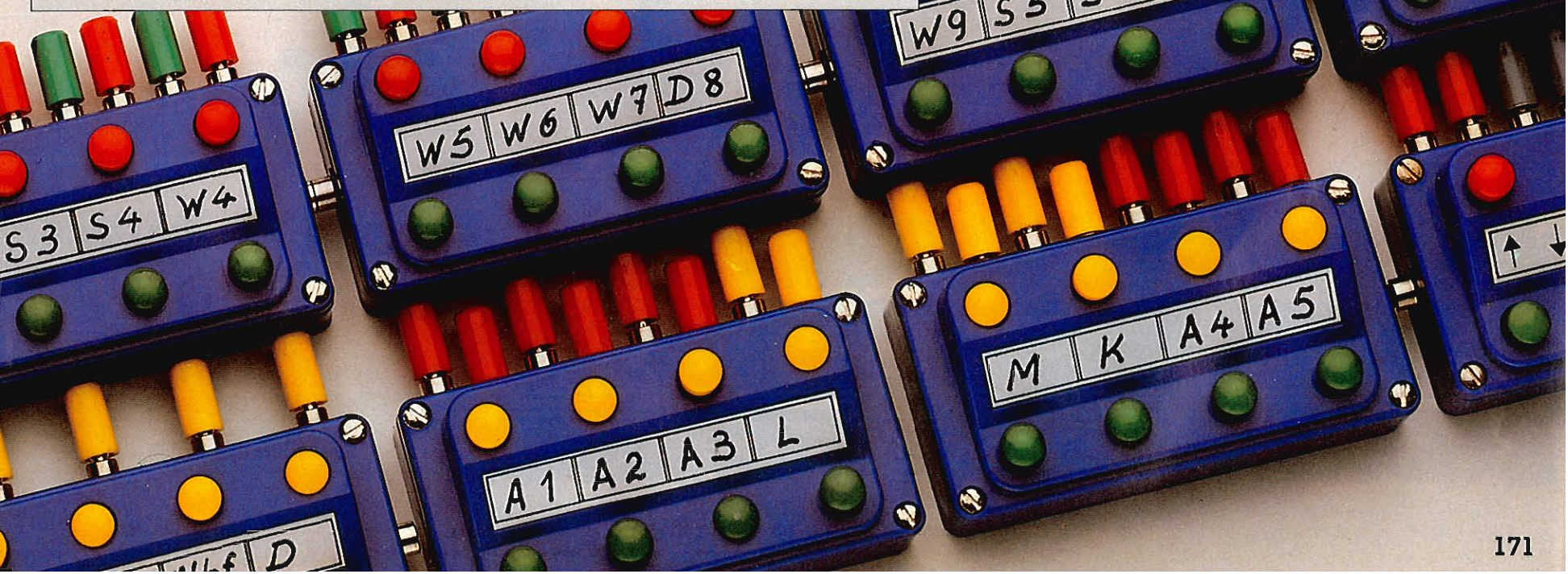
5004 · Center "rail" Feeder Wire · For M Track · Connects at joints in center "rail" · Length 750 mm (2' 5-1/2")

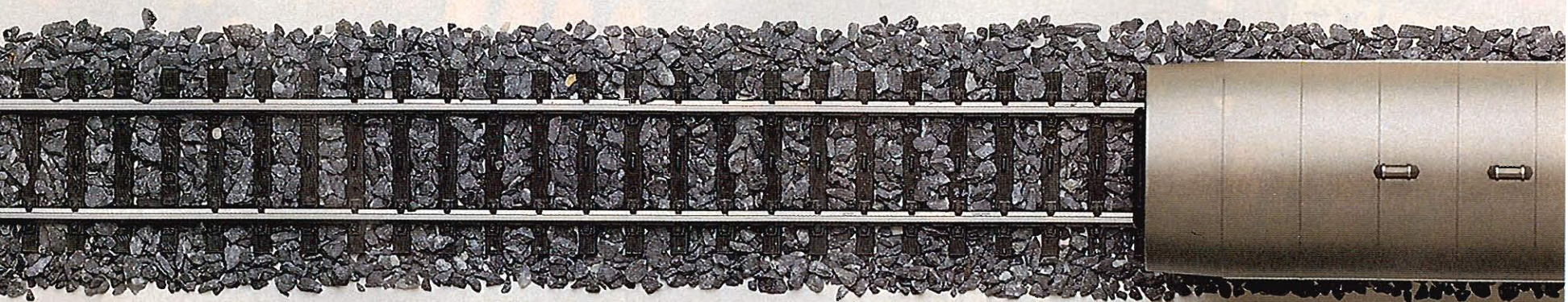
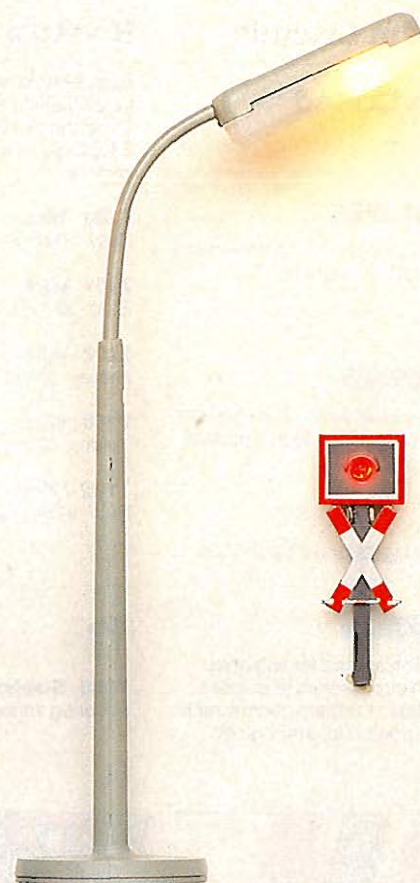
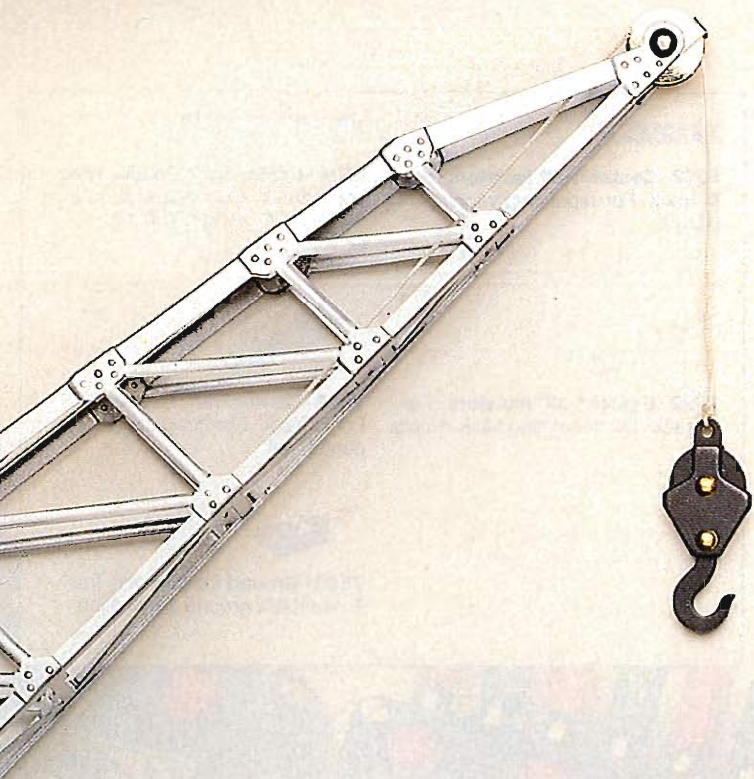


7504 · Center "rail" Feeder · For K Track · Connects at joints in center "rail"



7500 · Ground Lead · For K Track · To establish ground connection



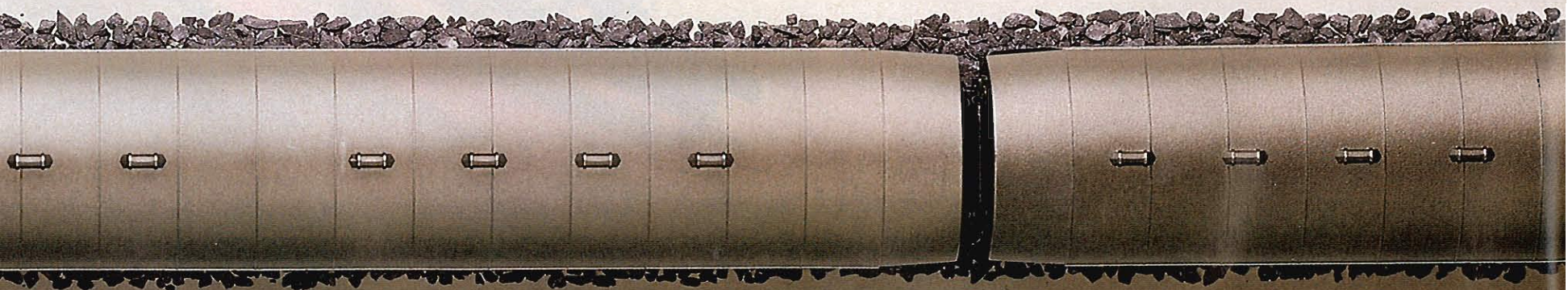


Märklin H0 – Prototype in a Handy Size

There are lots of interesting things along the right-of-way. These heighten the fun of model railroading: crossing gates, which close as a train approaches and reopen as soon as the last car clears the crossing. Different types of illumination make night operation very dramatic. A remote-control operated crane allows for realistic loading and unloading of freight cars. Turntables, transfer tables and engine houses add exciting depth to the terminal area.

H0 is a scale which is easy to work in and which allows you to capture the whole world of railroading in miniature. Everyone can let his creativity have free rein, because the possibilities are endless: from a small layout with track, signals and bridges on a flat board to a highly detailed, fully scenicked layout. From simple layouts where trains are controlled by signals to complex fully automatic layouts with all types of realistic operation.

Märklin H0 lets everyone find the right outlet for their creativity.



The Servicing Area – Where Locomotives are Readied

1

7186 · Automatic Turntable Set ·

Includes a 360 mm (14-1/8") turntable which moves in either direction, plus necessary controls and wiring · Track current is automatically cut off to any track not in alignment with tablebridge

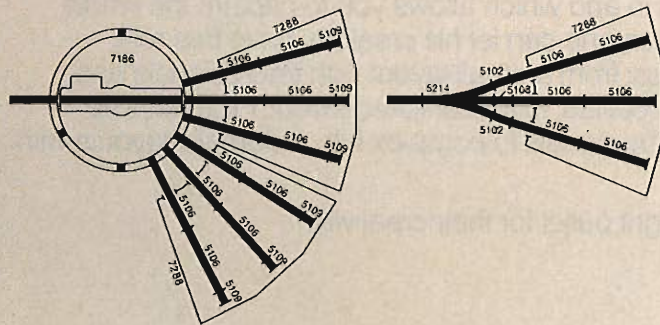
Pair of brushes = 60030

Adapter Track 2291

(page 36) allows use of the 7186 turntable with K Track layouts.

This illustration shows how two 7288 roundhouses connect to a 7186 turntable.

The 3-bay roundhouse 7288 can also be used with a 5214 3-way switch.

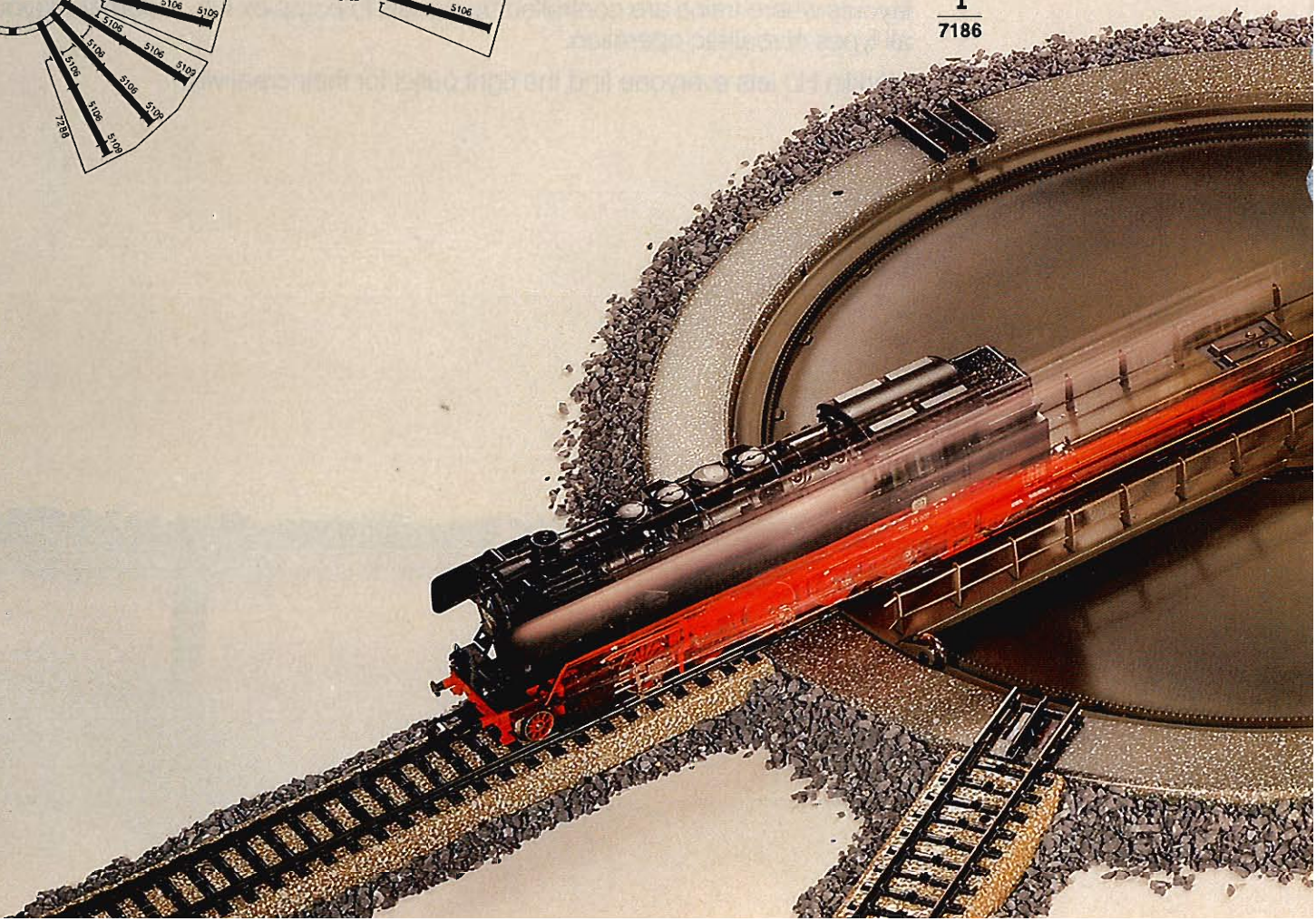


2

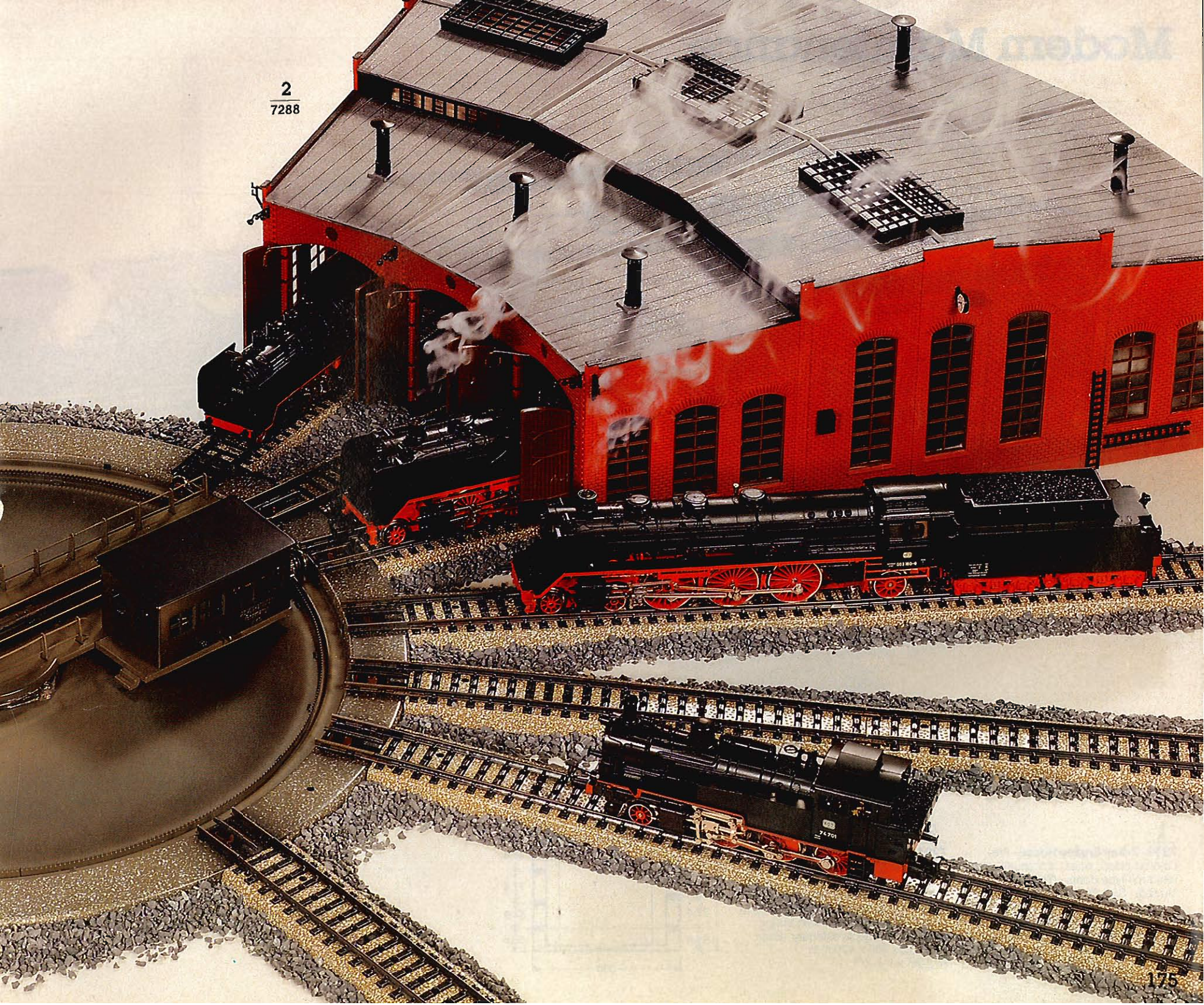
7288 · Locomotive Roundhouse Kit ·

3-bay roundhouse with molded plastic parts · Operating track doors · (Tracks not included) · Size 442 x 350 mm (1' 5-3/8" x 1' 1-3/4") · Height 128 mm (5")

1
7186

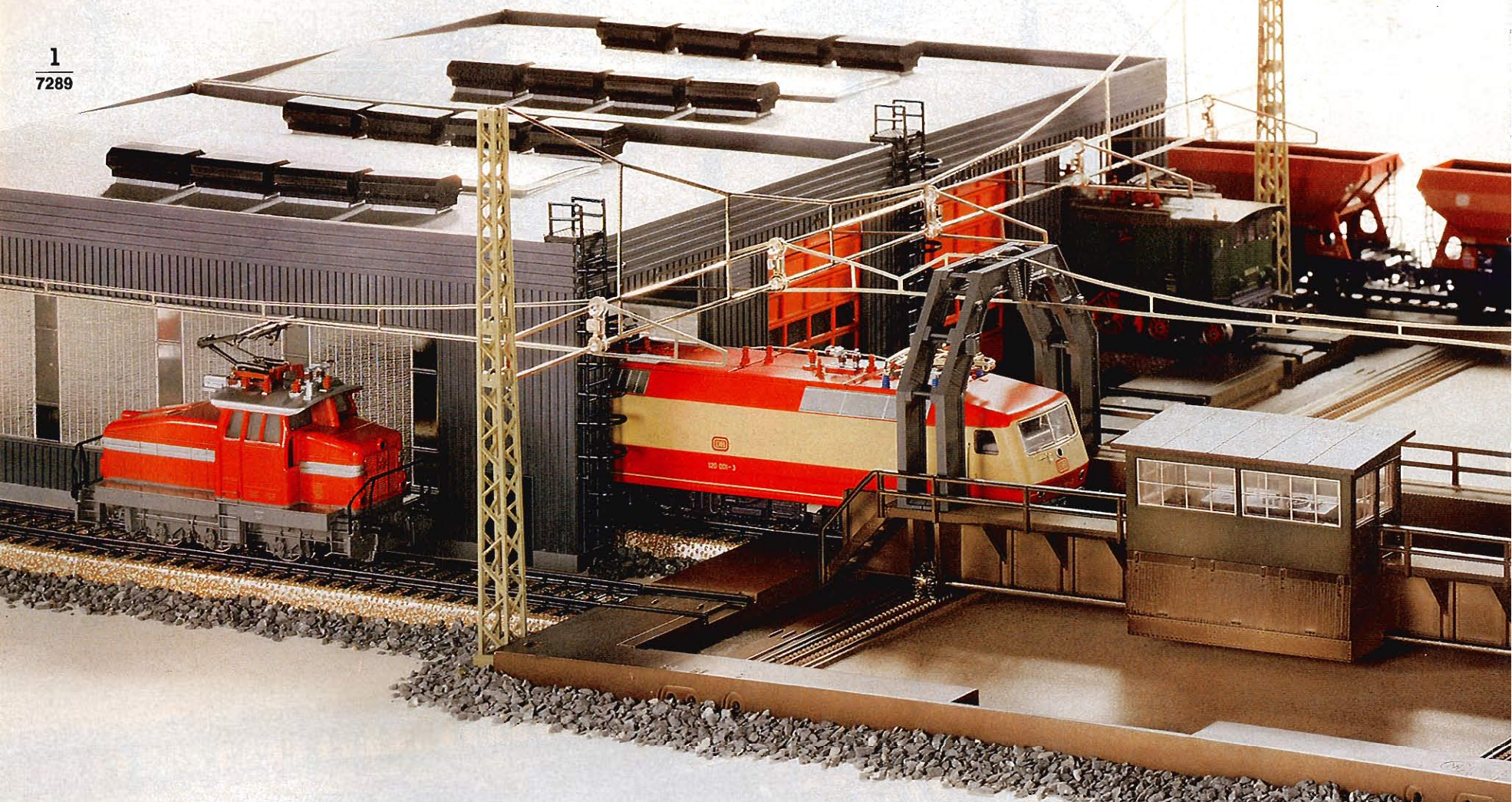


2
7288



Modern Maintenance

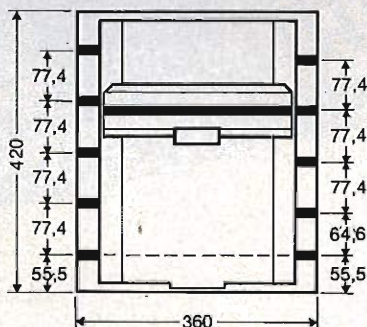
1
7289



1
7289 - 2-Bay Engine House - Pre-colored plastic parts - 4 manually operated roll-type doors - (Track not included) - Size 280 x 150 mm (11" x 6")

The prototype for the locomotive shed is at Maschen, Europe's most modern classification yard.

2
7294 - Transfer Table - 2 approach tracks and 8 stall tracks - Mates with engine house 7289 - Includes operating switch - Operated with electric motor - Current automatically cut off to tracks not in alignment with bridge - Each track accepts catenary - Base measures 360 x 420 mm (1' 2-1/8" x 1' 4-1/2")



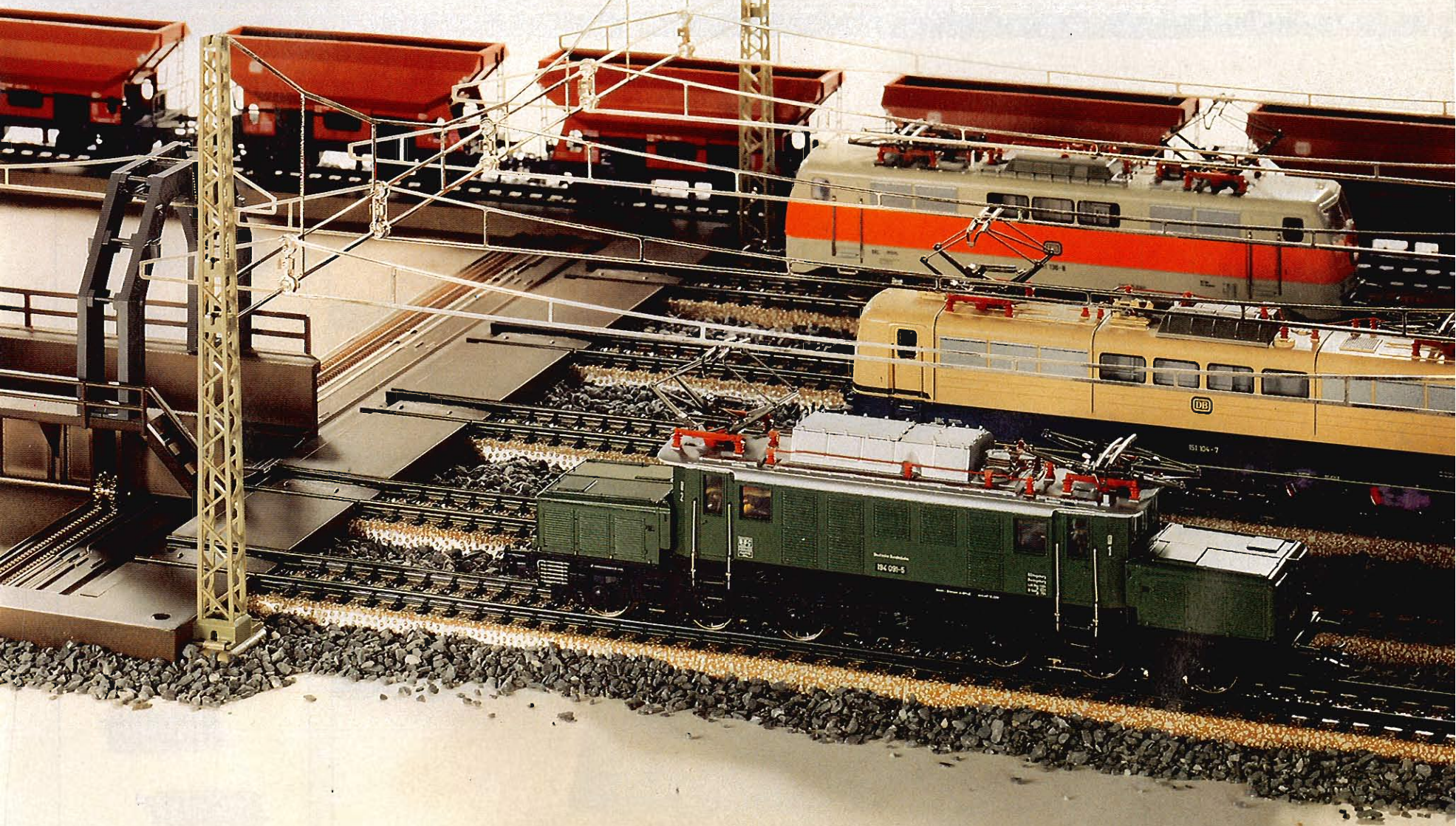
2
7294

3
7295

3

7295 · Overhead Kit for Transfer Table · Includes two overhead support gantries · One piece of catenary wire with a lead soldered on, for the transfer table bridge · 10 short catenary wires for spur tracks

Adapter Track 2291
(page 36) for connecting K tracks to the 7294 transfer table.



Grade Crossings

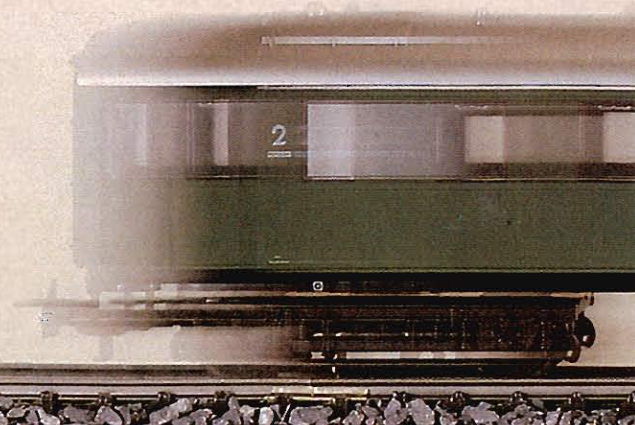
The gates close automatically when an approaching train trips the contacts. As soon as the last car clears the contacts, the gates open again. The length of contact section can be varied as required; for M tracks use 5115 and 5116, for K tracks use regular track sections.

Contact Track Sections

5115 · Straight · Length 180 mm (7-1/8")

5116 · Curved · Radius 360 mm (1' 2-1/8")

These M track sections, 5115 and 5116, are used to extend the contact track included with grade crossings 7192 and 7292. Note: **Only** these tracks can be used to extend the activation range of the crossing gates.



1

7192 M · Fully Automatic Grade Crossing · For M Track · Includes 2 solenoid-operated gates, watchman's shanty, crossing bucks, and 2 lengths of contact track sections · Base measures 180 x 90 mm (7-1/8" x 3-9/16")

2

7193 M · Extension Set · For 7192 · One set required for each additional track at multi-track grade crossings · Includes set of contact tracks and a section of highway

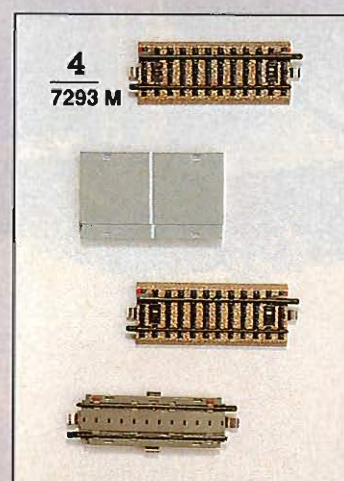
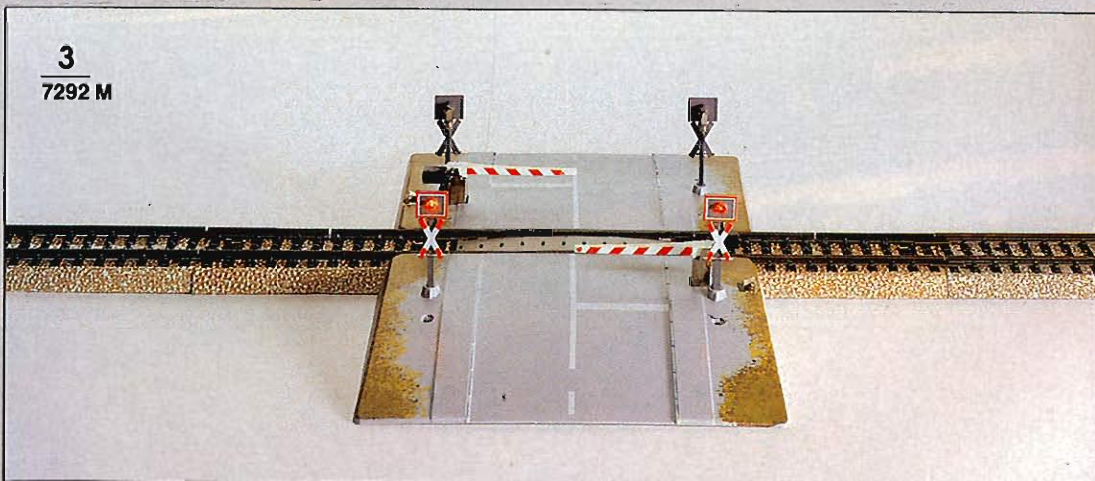
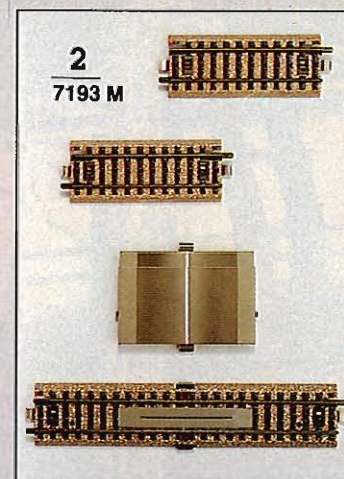
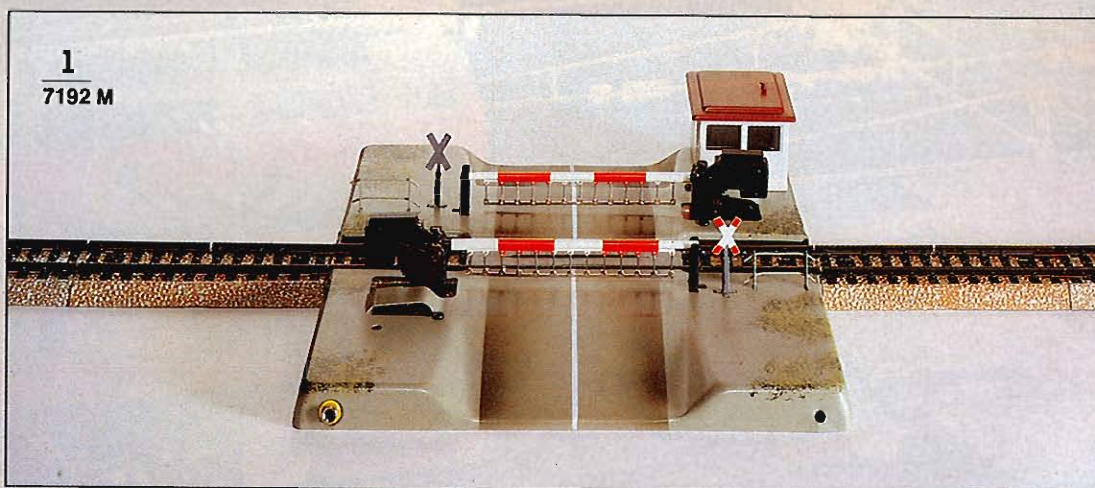
3

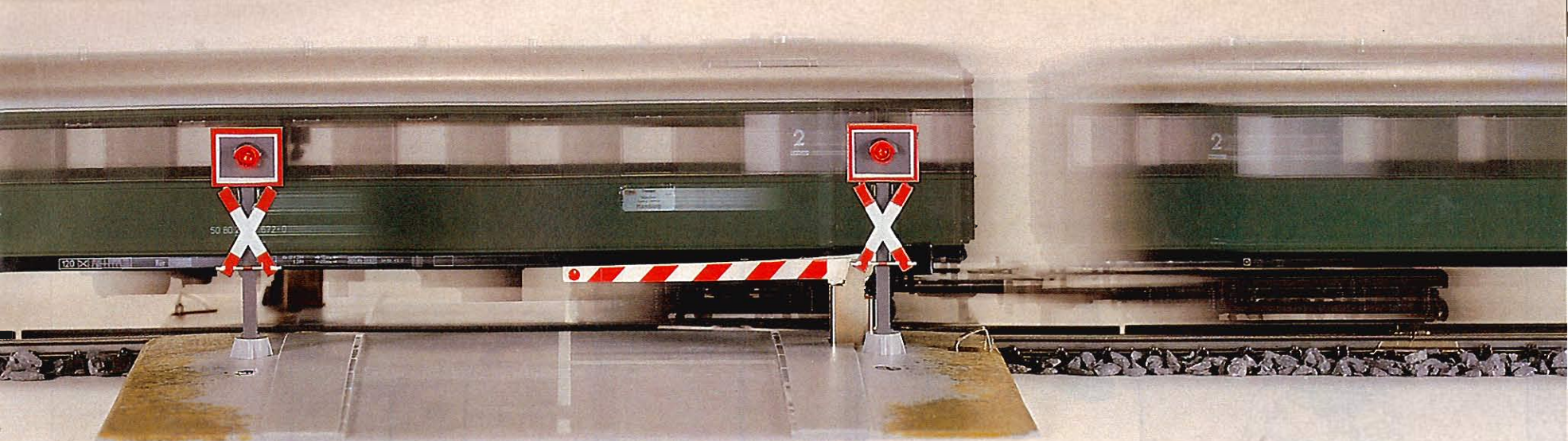
7292 M · Fully Automatic Grade Crossing · For M Track · Half length crossing gates · Includes 2 solenoid operated gates, 4 red warning lights (activated when gates are down) and a set of contact tracks (1 1/2 straight tracks) · Base measures 137 x 95 mm (5-3/8" x 3-3/4")

Q = 60201

4

7293 M · Extension Set · For 7292 · One set required for each additional parallel track · Includes set of contact track sections and a length of highway adjustable between 43 and 78 mm (1-11/16" and 3-1/16")





5

7390 M - Mechanically Operated Grade Crossing · For M Track · For single track · Includes built-in M track section · The gates are activated by a lever which is tripped by the train · Length of grade crossing same as 5106 track section · Base measures 135 x 180 mm (5-3/8" x 7-1/8")

Adapter Track Section 2291
(page 36) for connecting K Tracks to grade crossings 7192 and 7390.

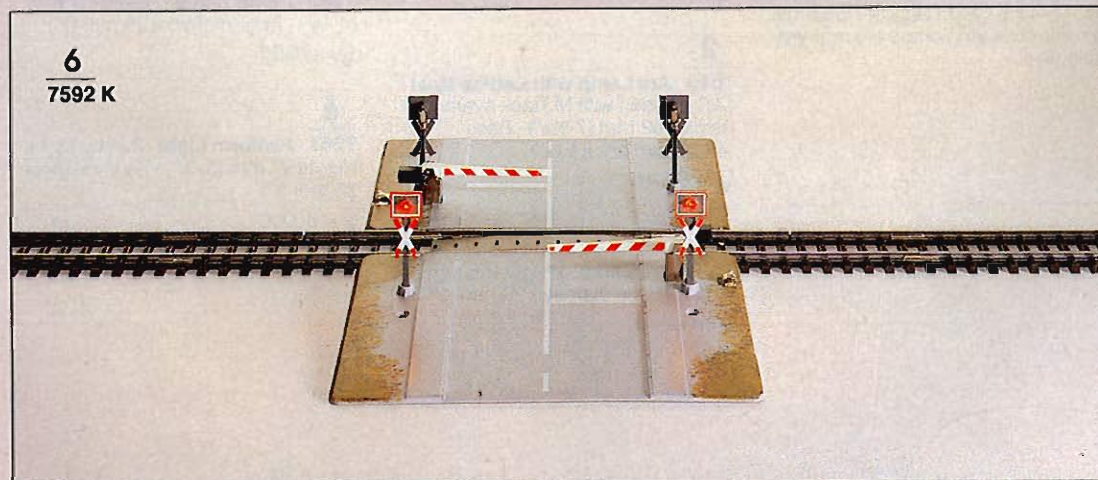
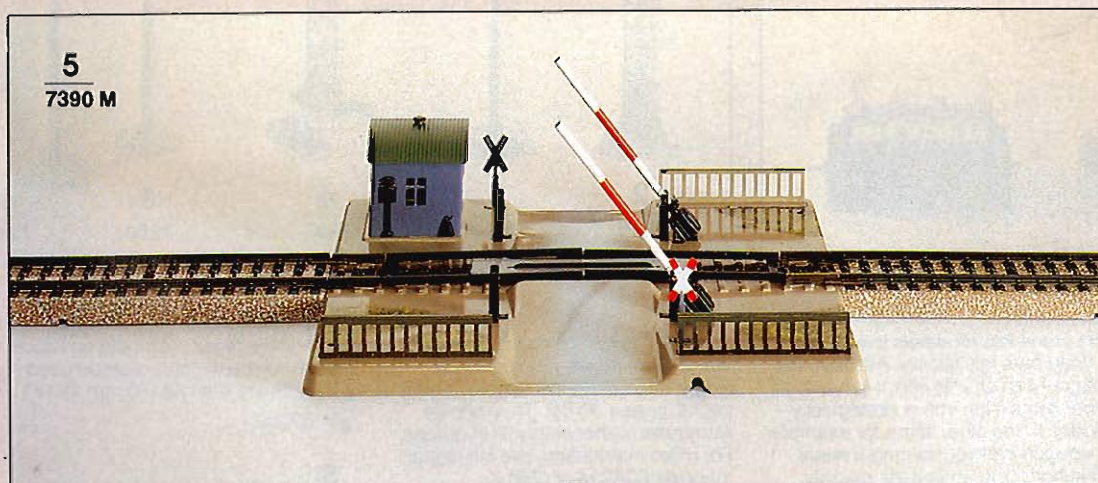
6

7592 K - Fully Automatic Grade Crossing · For K Track · With half length gates · Includes 2 solenoid operated gates, 4 red warning lights (activated when gates are down), and a set of contact track sections (1 1/2 straight tracks) · Base measures 137 x 95 mm (5-3/8" x 3-3/4")

Q = 60201

7

7593 K - Extension Set · For 7592 · One set required for each additional parallel track · Includes set of contact tracks (1 1/2 straight tracks) plus length of highway adjustable between 43 and 78 mm (1-11/16" x 3-1/16")



7
7593 K



1
7051



1
7051 · Operating Crane with Magnet · Operates by remote control · Separate motors rotate crane and lift hook · Electrically operated magnet can lift iron or iron-containing objects · Boom adjustable by hand · Illuminated cab · Height 260 mm (10-1/4") · Base measures 90 x 90 mm (3-1/2" x 3-1/2") · 1 combined position control box and on/off switch panel
Light = 60000
Carbon brushes = 60030

The crane lets modelers load and unload cars realistically. Although the magnet can only lift iron, it can also lift other items if the iron is strategically hidden in the other items, for example, a wooden crate containing a metal "machine". Or remove the magnet, and simply use the big hook for extra fun. All of the varied activities possible with this fascinating crane are remotely controlled.

2
7046 · Arc Lamp with Lattice Mast · Can be used with M Track overhead · Height 192 mm (7-9/16") · Base 14 x 28 mm (9/16 x 1-1/8")
Q = 60010

3
7048 · Arc Lamp · Height 156 mm (6-1/8") · Base diameter 29 mm (1-1/8")
Q = 60010

These lights can be activated either with control boxes 7210 and 7211 (page 170) or with the remote control tracks (pages 30/36). They can be illuminated either singly or in groups. For more information, see the signal manuals 0342 M or 0361 K (page 168).

4
7283 · Floodlight · Mounted on lattice mast · With base plate · Can be used with catenary · Height 170 mm (6-3/4")
Q = 60000

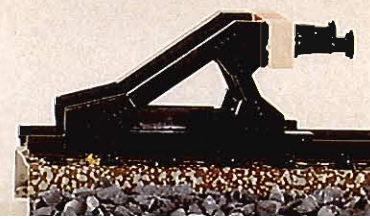
5
7280 · Street Lamp · Height 117 mm (4-5/8") · Base diameter 25 mm (1")
Q = 60000

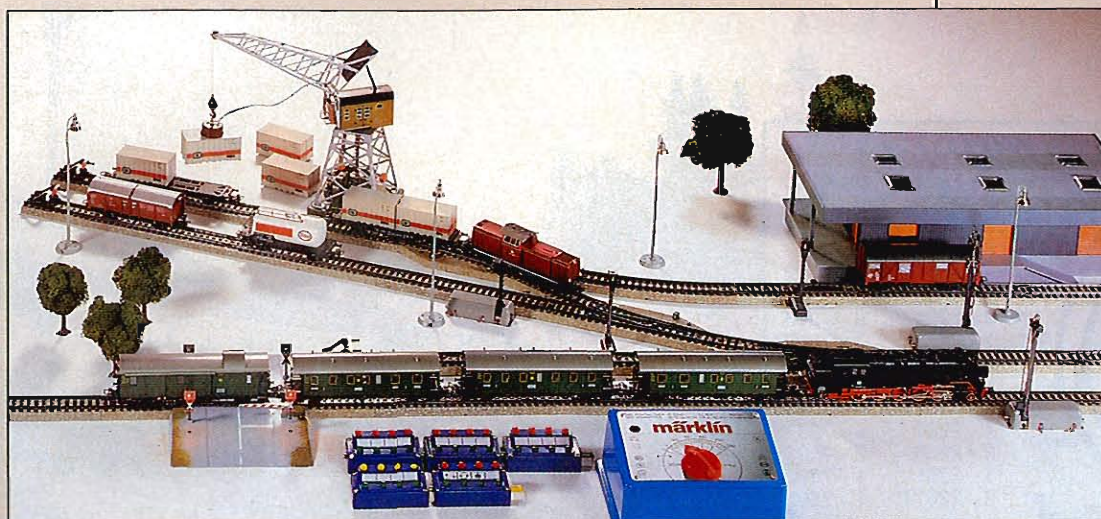
6
7281 · Platform Light · 2 lamp arms · Height 97 mm (3-7/8") · Base diameter 25 mm (1")
Q = 60000

7
7282 · Twin-Lamp Street Light · Height 120 mm (4-3/4") · Base diameter 25 mm (1")
Q = 60000

8
7284 · Park Light · Height 63 mm (2-1/2") · Base diameter 15 mm (5/8")
Q = 60000

9
7047 · Modern Street Light · Height 127 mm (5") · Base diameter 27 mm (1-1/16")
Q = 60010





In the beginning it was just a one track line. Now it's a big, heavy-duty, exciting railroad complete with grade crossings, remote control cranes, switches and lots of track.



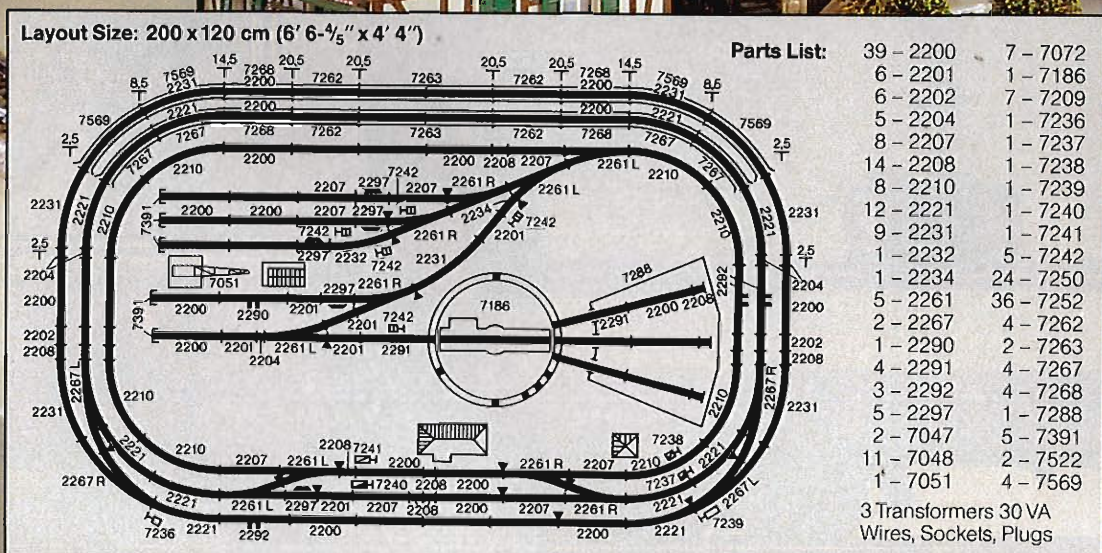
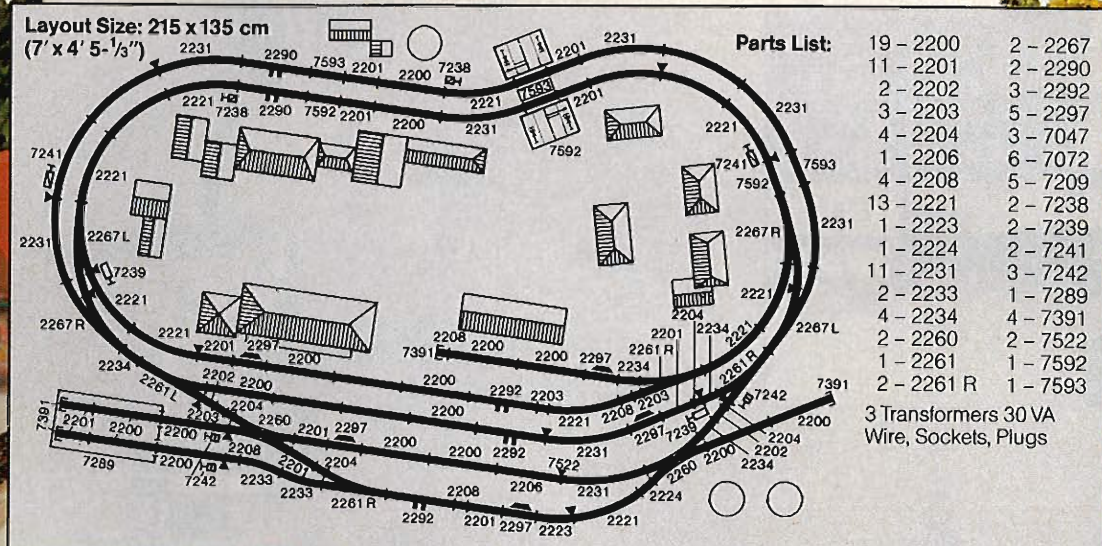
Here are a few suggestions on how, with a little effort, a lot of railroad can be incorporated into small spaces.

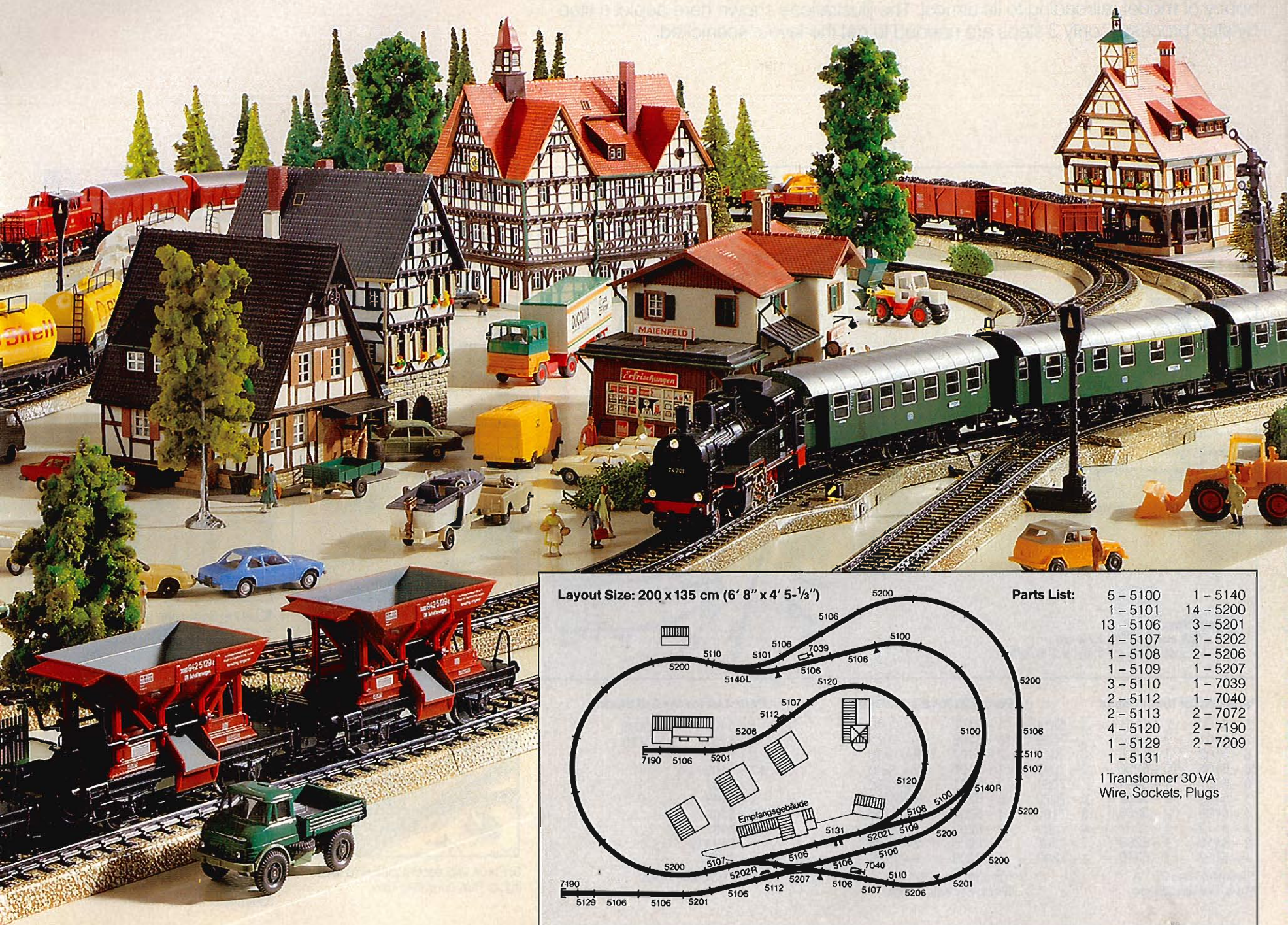


A Lot of Fun in Small Spaces

Märklin H0 allows everyone free rein to develop one's own creativity and talents in the ever-fabulous world of model railroading – and it does not matter how much space or time one has for the hobby.

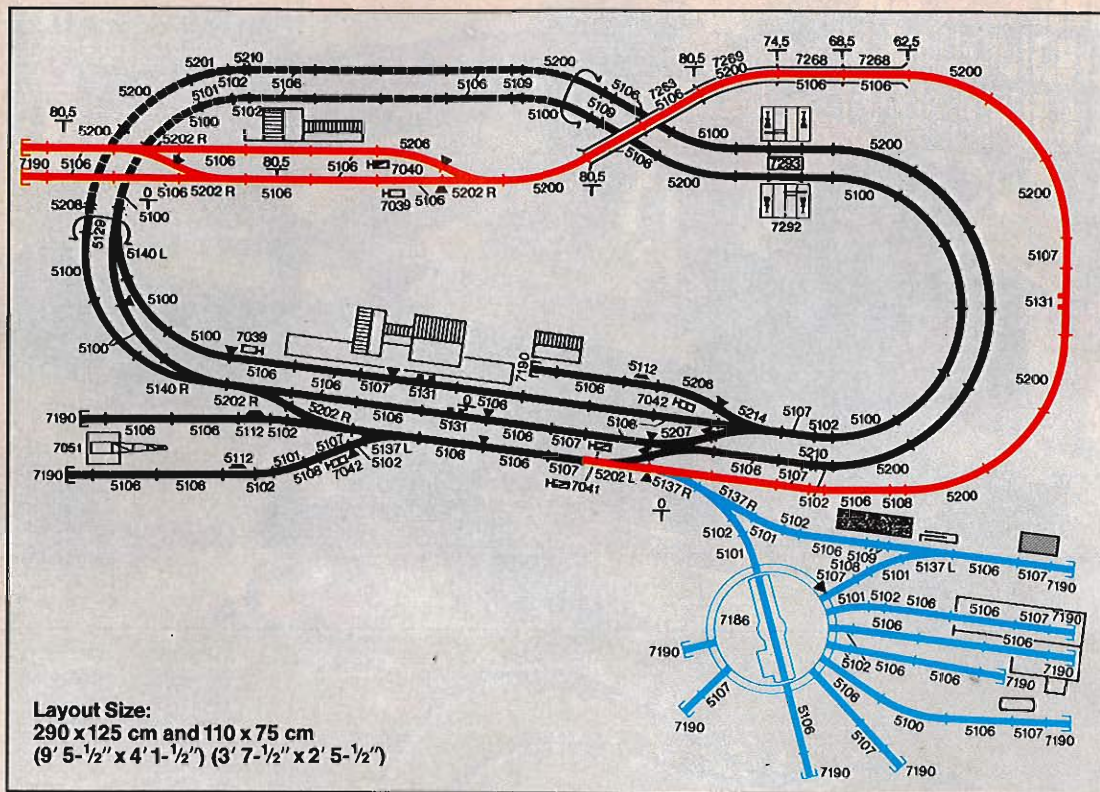
Here are a few suggestions on how, with a little effort, a lot of railroad can be incorporated into small spaces.





Expansion is Built-In

To plan, build and modify a fully scenicked layout is the way to enjoy the exciting hobby of model railroading to its utmost. The illustrations shown here depict a step-by-step process – only 3 steps are needed to get the layout scenicked.



Parts List for the 1st Step:

15 - 5100	2 - 5131	1 - 5214
2 - 5101	1 - 5137 L	1 - 7039
6 - 5102	1 - 5140	2 - 7041
28 - 5106	10 - 5200	2 - 7042
6 - 5107	1 - 5201	1 - 7051
1 - 5108	2 - 5202 R	5 - 7072
4 - 5109	2 - 5206	3 - 7190
3 - 5112	1 - 5207	4 - 7209
3 - 5113	1 - 5208	1 - 7292
1 - 5129	2 - 5210	1 - 7293

2 Transformers 30 VA
Wires, Sockets, Plugs

Parts List for the 2nd Step:

1-5102	1-7040
16-5106	2-7072
2-5107	2-7190
1-5108	2-7209
1-5131	5-7250
8-5200	9-7252
1-5202	10-7253
2-5202 R	1-7263
1-5206	2-7268
1-7039	1-7269

1 Transformer 30 VA
Wires, Sockets, Plugs

Parts List for the 3rd Step:

1-5100 1-7186
4-5101 9-7190
2-5102
13-5106
6-5107
1-5108
2-5109
1-5137
1-5137 R
1-7072

Wires, Sockets, Plugs

1st Step:

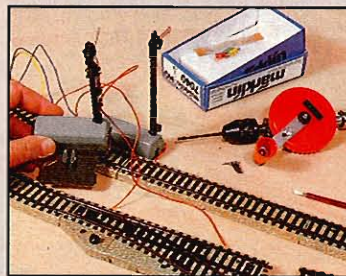
Station area with two-track mainline for three train operation.



1. Fasten a 10 mm ($\frac{3}{8}$ ") thick plywood board to the framework.



4. City planning. Secure and wire the buildings for lights.



2. Lay and connect tracks, install signals. Drill holes for under the board wiring.



5. Lift the layout and arrange the wires in an orderly fashion.



3. Place and secure platforms and lights. Run a few test laps.



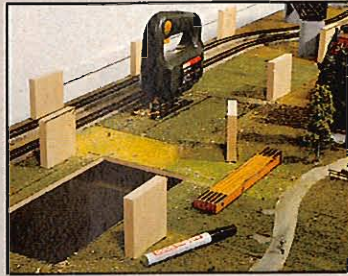
6. Test and clean. Connect transformers, control boxes and position controllers.

2nd Step:

Single track branch line leading to a station in a mountain village.



7. Prime the free areas with a mixture of modeling plaster and paints.



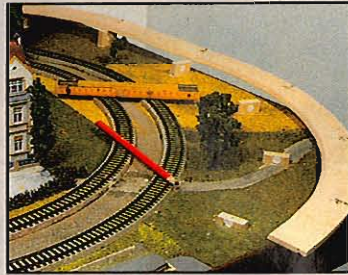
10. Secure the board for the mountain village on 80 mm (3") high.



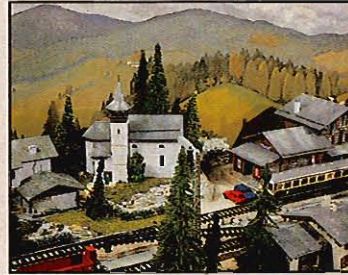
13. Use styrofoam and screening to build up the mountains and cover it with crepe paper, then plaster and paint.



8. Glue down the grass mats and sprinkle loose material on areas to which white glue has been applied.



11. Saw and position the ramps. The grade should be about 6 mm ($\frac{3}{16}$ ") per track section.



14. The 2nd step is now finished. The branch line is in operation.



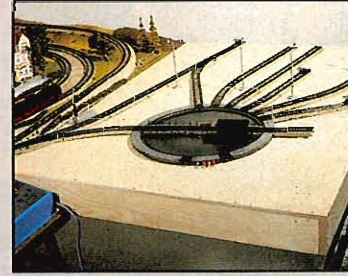
9. Now place the finishing touches: bushes, trees, figures, vehicles, etc. Be sure they are glued or otherwise secured.



12. Place and secure pillars and bridges leading to the mountain village.

3rd Step:

Yard and maintenance area with turntable, roundhouse and related buildings and accessories.



15. Secure the board for the yard area. Install switches, lay track, mount the turntable.



17. Secure buildings, glue down the trees and other details.



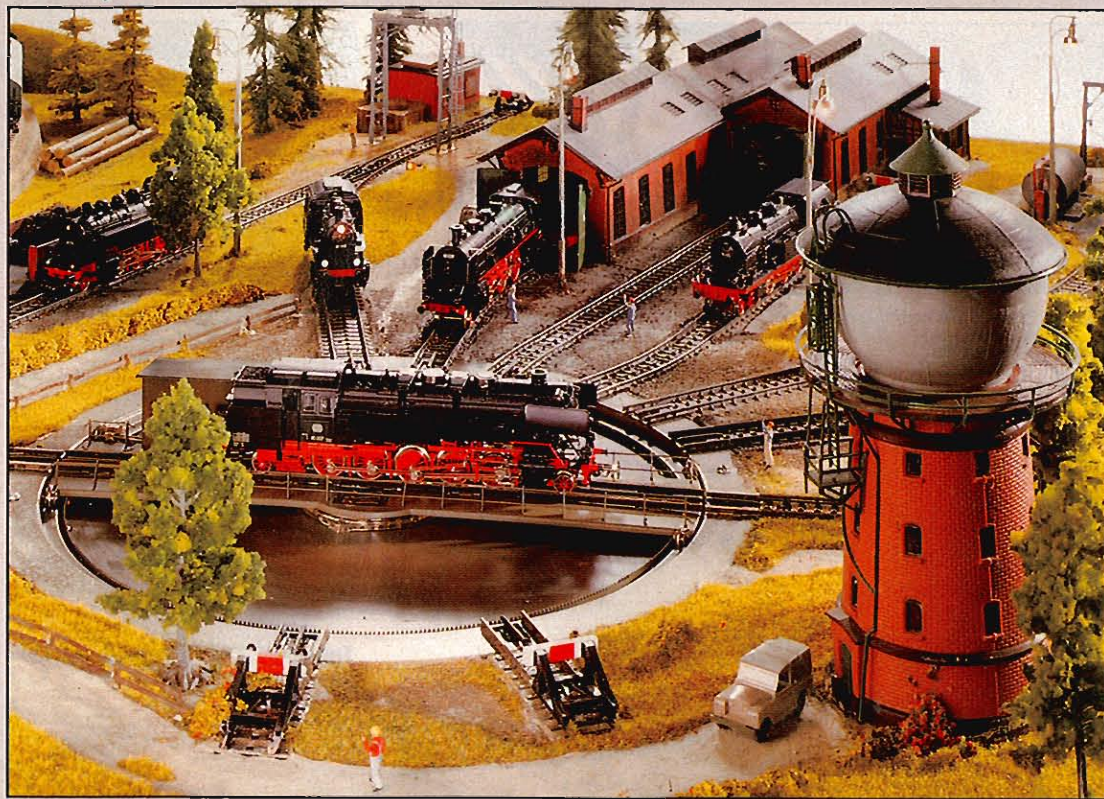
16. Fill in the area between the tracks with 10 mm ($\frac{3}{8}$ ") thick styrofoam, prime it with plaster and cover it with material.

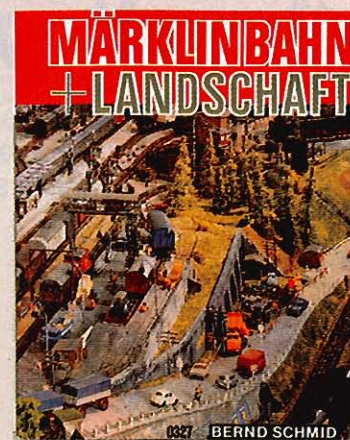


18. Model Railroad is Fun.

This scenicked layout is shown also on the next page.

How to build this layout is detailed on pages 184/185.





0327 · Märklin-Bahn + Landschaft · By Bernd Schmid · An excellent aid for building free-lance layouts · Technical details, roadbed design, landscape planning and information on accessories are discussed in depth · Well illustrated, many photos in color · 192 pages · Size 16.4 x 20.3 cm (6-1/2 x 8") · German text



0328 · Märklin-Bahn mit Pfiff · By Bernd Schmid · Many new tips on railroad construction for the more ambitious modelers · The "How" in book 0327 is explained as "What" · All kinds of construction projects are discussed · Well illustrated, many photos in color · 262 pages · Size 22 x 17 cm (8-3/4" x 6-3/4") · German text



0380 · Die Modelleisenbahn Märklin HO und ihr großes Vorbild · A handbook for Märklin model railroad fans · Full of ideas and suggestions for scenicking a layout, what kinds of cars and engines, signals, rules of real railroads, how real railroads maintain their systems, wiring for multi-train operation on a model railroad and much much more · 228 pages · Size 15 x 24 cm (6" x 9") · German text

The Magazine for Everyone Who wants to Enjoy Märklin Railroading Even More

Each issue of the Märklin-Magazin is a trainload of ideas, tips and information. Besides beginners and professional model railroaders, everyone who is interested in the lore and lure of steel wheels on steel rails will find something of interest in this exciting publication.

Märklin-Magazin's 60 page (many in color) issues offer:

- How to add scenery to layouts
- Reports of Märklin enthusiasts
- Märklin models and their prototypes
- Current and historical anecdotes of real railroads
- International railroads
- Schematics for scratchbuilding engines, cars and accessories
- Unveiling of new products
- Letters to the Editor and a book review
- Model railroad electronics
- Information on the House of Märklin

Published in German, six times yearly – around the 15th of February, April, June, August, October and December.

Available at hobby shops, bookstores
and from Modellbahnen-Welt
Verlags-GmbH, Postfach 9 40,
D-7320 Göppingen, Federal Republic
of Germany.

**Ein Paradies –
doch nicht für Kinder.**
Besuch in der Märklin-
Anlagenbauabteilung

Nicht für Kinder ist dies „Paradies“ gedacht und eigentlich auch nicht für erwachsene Modellbesitzer. Zutritt haben nur die dort benötigten Personen. Wir befinden uns im Werk 4 des Hauses Märklin, in Bisingen, nahe bei Goppingen, paradiesisch hier für den Bau von Märklin-Atanlagen in der Schweiz. Schweißmaschinen und die Vielzahl von Werkzeugen bewundern wir vor allem zur Weihnachtszeit dann, die Einzelstücke gefertigt werden. Die eigenen Betriebswerke sind die besten

bahnzubehors kommen die Loks, Wagen und
Gleise wesentlich besser zur Geltung als auf
niedrigeren Marktplatzanlagen. Deshalb gibt
man sich in München-Anlagenbau heute noch
größere Mühe als in früheren Jahren. Man hat
eine Ordnung in bezug auf Landschaft, die An-
ordnung von Ortschaften und eine realistische
Begründung des qualitativ leichteren Modellbanni-
stehens.
Dabei sollte man nicht übersehen, daß gerade
in der Detailarbeit zur Ausschaltung einer Fab-
rik aufwendiger und damit kostenreicherer Fab-
riken entstehen. Lieber zur Arbeit ist hier und
anzusehen. Die Resultate bestätigen das.
Die in MM-Reihe "Gedanken zu einem A-
entwurf" hat bei unseren Lesern ein un-
großes Echo gefunden. Offensichtlich

die Modellbahnfreunde eine große Anzahl praktischer Anregungen in diesen Berichten findet. Anregungen, die auch bei der eigenen Heimbahnverwirklichung verwertet werden können. Das hat uns veranlaßt, einmal einen Blick „hinter die Kulissen“ zu werfen. Dabei ergaben sich bestimmte „zu nützliche“ Tipps für den Mäklin-Freund. Man sollte jedoch absteigenden Erfolgsmitteln. Unser weiterer Vorschlag ist, dass die Modellbahnanlagen unter Berücksichtigung der verschiedenen Voraussetzungen erfolgen. Man sollte jedoch absteigenden Erfolgsmitteln. Unser Bericht wird eine rationale Herstellung sein. Der Bericht wird eine rationale Herstellung sein. Der Bericht wird eine rationale Herstellung sein.

Abb. 2
Wichtige Details bespricht der Meister mit seinen Lehrlingen. Es geht um die Anwendung von Zuberhaken oder -wie hier – um den Einbau einer Brücke. Je einfacher bestimmte Arbeitsschritte sein werden, desto rationaler kann die Fertigung werden. Seltener werden Einzelstücke gefertigt. Sondern werden 50 gleiche Platten aus Holz gefertigt. Und wenn das Holz aus der Planung ausscheidet, kann dies sehr viel Geld einsparen.



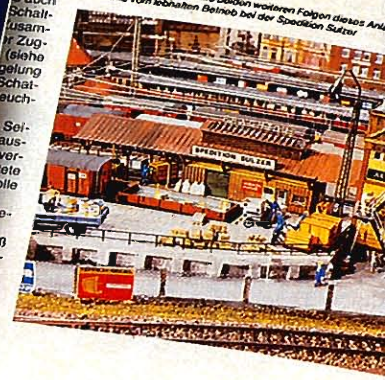
bei der im Hintergrund in einer Höhe von 40 cm verlaufenden Bergstrasse auf, die inzwischen als dritte Ebene eingezeichnet war. Kopfbahnen berolte vor allem die Frage, wie diese drei Ebenen miteinander verbunden werden sollten. Links war ohne Gleiswandel verbunden werden sollte, rechts war hierfür keinerlei Platz vorhanden. Fast stand, daß keine der Strecken in ihrem jetzt festgelegten Verlauf nachträgliche Änderungen erfahren durften.

Die Bahn geht durch die Wand
Nach langem Griben über mehrere Tage hinweg war schließlich die Lösung gefunden. Durch Mauerdurchbrüche hindurch sollten die betreffenden Gleisbögen zu den Stielgrabenstrassen außerhalb der Zimmerwände in den angrenzenden Dachraum verlaufen. Damit ließen sich nicht nur obige Schwierigkeiten beseitigen, sondern es konnte werden. Vor allem verblieb im Raum selbst noch genügend Platz, um jeder Streckenebene einen eigenen Schalterkasten zuordnen. Nun mußte nur noch das Bw unterirdisch durch den Tunnel im rechten Anlagenfeld platziert. Links neben dem Bahnhofsgelände sollte ursprünglich die Stadt entstehen. Beide Standorte wurden später jedoch gegeneinander ausgetauscht, wodurch sich ein besserer optischer Gesamteindruck errichten ließ. Außerdem vordrückt die herausnehmbar konstruierte Stadtgrundplatte eine Luke an zentraler Stelle.



Diese Abbildung zeigt über den großen Bahnhof hinweg ohne Detailplanen können aufmerksame Betrachter schon

In zwei weiteren Folgen erläutert Herr Abrecht den Aufbau und gibt wertvolle Hinweise auf Arbeitsmethoden, die er bei der G herausragend detaillierten Modellzone teilweise selbst an



Als „Appeshappen“ für die beiden weiteren Folgen dieses An

märklin

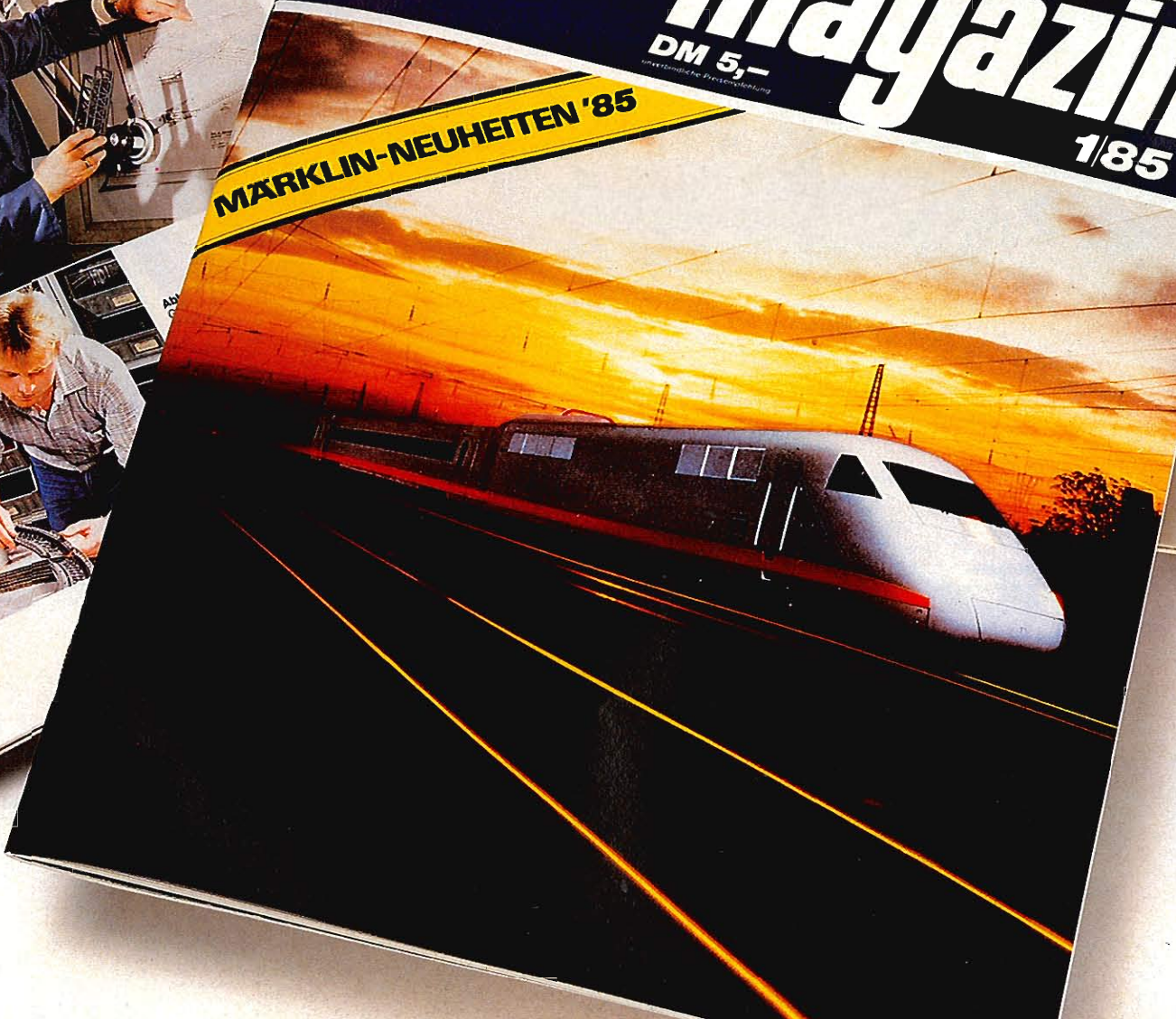
Die Zeitschrift für Modell-Eisenbahner

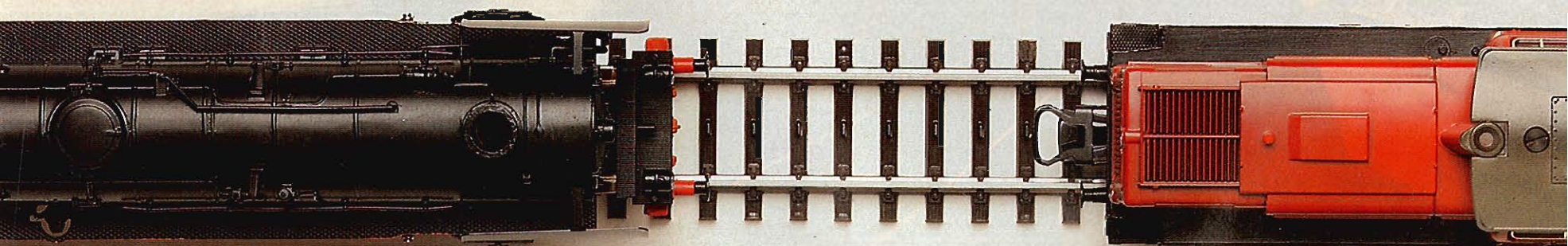
magazin

DM 5,-
monatliche Preisgestaltung

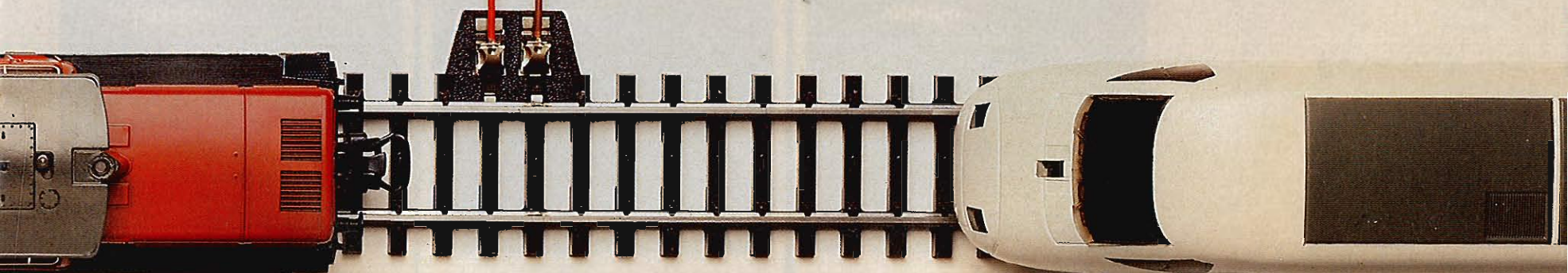
1/85

MÄRKLIN-NEUHEITEN '85





**Please
Climb Aboard!**



Märklin Digital H0 – The Future of Model Railroading has Begun

With the presentation of Märklin Digital H0 at the 125th anniversary of the Company on September 13, 1984, the switches were lined for an entirely new dimension in model railroading. During 1985 these items were made available for the first time to the general public.

Can you imagine using your computer to control your model railroad?

Can you imagine that merely connecting two wires to your layout is all that is required for remote operation of locomotives, switches and signals?

Can you imagine independent multi-train operation on your layout that uses all your locomotives?

Märklin Digital H0 is a digital, electronic control system using modern micro-processor technology. With Märklin Digital H0, locomotives, switches and signals can be operated in any order without the complicated wiring necessary in conventional systems.

A conventional layout can be converted to a digital layout at any time. Because the rolling stock, track, catenary, signals, control tracks and blocks do not need to be altered.

Transformer

Transformers for powering the layout and electronic controls

Booster

Increases the range of the central unit and can be connected to an additional transformer



 Märklin Digital H0 layouts are quickly built and can be changed or modified easily: Only two wires lead to the layout.

 These two wires can control up to 256 signals and/or switches.

 You have direct access to every engine on the layout. Up to 80 locomotives can be independently controlled.

 The unique Märklin H0 system with the center-stud contacts in the tracks and the sliders on the locomotives guarantees reliable operation with Märklin Digital too.

märklin
DIGITAL HO

Keyboard

Control panel for 16 switches or signals

Central Unit

Central unit with micro-processor and sequencing control

Control 80

Universal throttle for operating up to 80 Digital locomotives

Interface

Electronic device allowing home computers with interface connections to be linked to a Digital H0 system



Operations with Modern Micro-Processor Technology



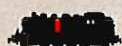
Each Märklin Digital H0 locomotive is manufactured with a factory-installed decoder. Each locomotive will respond to its code when the operator keys it in. The code can be changed at any time.



Conventional Märklin H0 locomotives can have the c 80 decoders for digital operation installed.



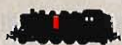
The control 80 can command up to 80 locomotives and each engine can be operated independently of each other.



Control 80 units can be coupled together. Each locomotive can be called and controlled from each unit.



The number of the called locomotive is displayed on the control 80 digitally. If a digital locomotive has already been called up on another control unit, the selected number will blink.



When calling an additional locomotive, the commands given to the earlier engine remained unchanged, whether the command was for speed, direction or whatever. Thus, many digital locomotives can be operated from a single control 80.



The control 80 can activate an additional function of a locomotive, such as illumination, smoke, TELEX couplers.



Changing the direction of locomotives automatically changes the head and tail lights.



Locomotives have constant brightness lights – even when the train is stopped.



Cars equipped with interior lighting or with end marker lights also have constant illumination.



After stopping at a signal, engines will proceed with the last given command.



The emergency button will stop all locomotives immediately.

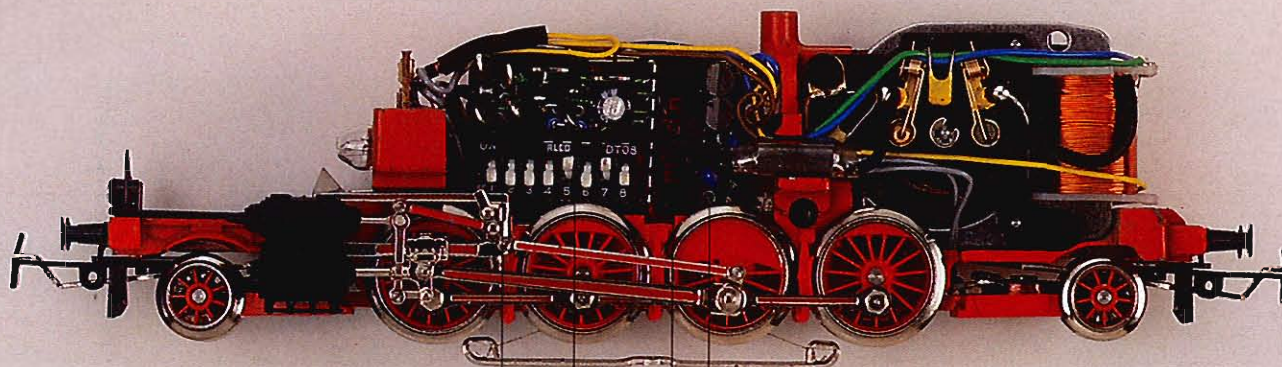


Märklin Digital H0 locomotives are compatible. They run also on conventional layouts.



The brain of the Märklin Digital H0 locomotives: the exclusive Märklin chip shown actual size.

märklin
DIGITAL HO



Code switch

Transistors
for the motor

Märklin chip

Quartz for accuracy

TELEX couplers

Controls with Digital Electronics



Signals, switches and uncoupling tracks receive power via the center-stud contacts as well as commands.



Four switches or signals can be connected to a k 83 decoder.



A keyboard controls 16 switches or signals. Positions are indicated by LEDs.



Up to 16 key-boards can be connected to a central unit.



Thus, up to 256 switches or signals can be operated from a single control board.



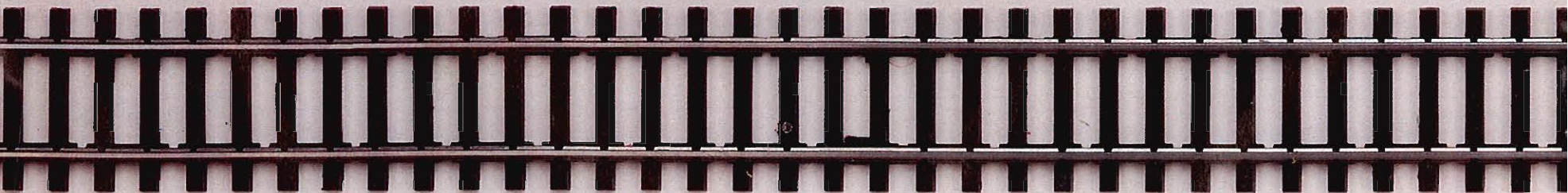
Electrical accessories can also be used on Märklin Digital H0 layouts. Current for crossing gates, station lights, streets and buildings is fed from the nearest track.



Whatever can be done on a conventional layout can also be done on a Digital H0 layout. For example, a k 83 decoder with its switches and signals can also be connected to a control track for block operation activated by a passing train.



Switches and signals can also be operated in a conventional manner.

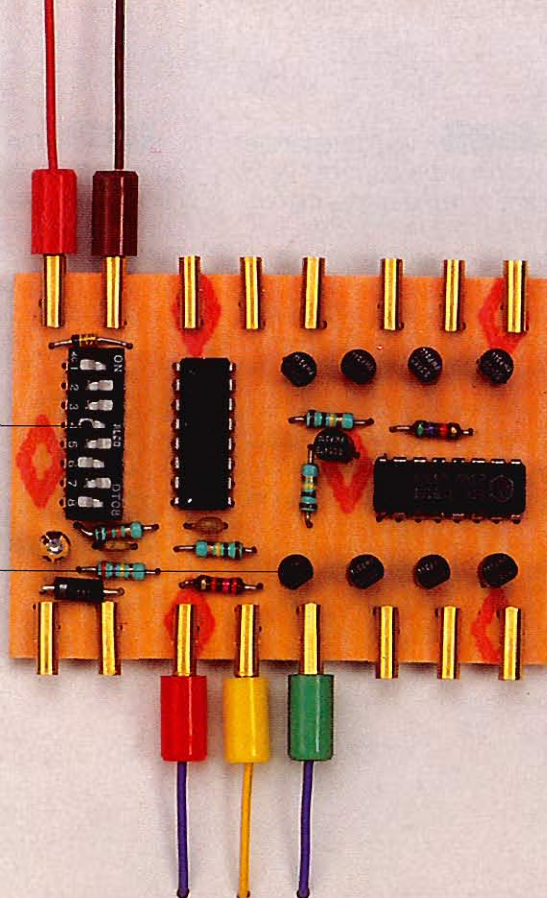


The decoder
for 4 signals or switches:

märklin
DIGITAL HO

Code switch

Transistors for the 8 coils
of the solenoid-operated
accessory



Central Unit – the Heart of the System

With Märklin Digital H0 there is no separate track and light circuits. Only two wires lead from the central unit to the layout. A steady 16 volts is fed through the tracks on a digital layout. A digital circuit feeds the entire layout and transmits all commands of the central unit to the decoders on the locomotives, switches, signals, and uncoupling tracks. The central unit coordinates all command information and sends it along with the track current out on the layout.

 The transformer supplies the current necessary to run a digital layout. With a rating of 52 VA, the transformer has enough strength to power the digital equipment as well as all items that draw current on the layout.

Since very little current is actually used by the digital equipment, almost all the output is applied to the layout.

Current draw

for locomotives
ca. 10 VA (when in use)

for switches, signals
ca. 4 VA (when activated)

for lights
ca. 1 VA

 On large layouts drawing more than 52 VA, a booster is used to connect an additional transformer. Thus layouts of any size can be operated on Märklin Digital H0.

 Any Märklin transformer with an output of 16 volts and 30 VA can be used to power a Märklin Digital H0 layout.

 The overhead can be connected either to the digital circuit or to a conventional circuit.

The Heart of the System:
Central Unit

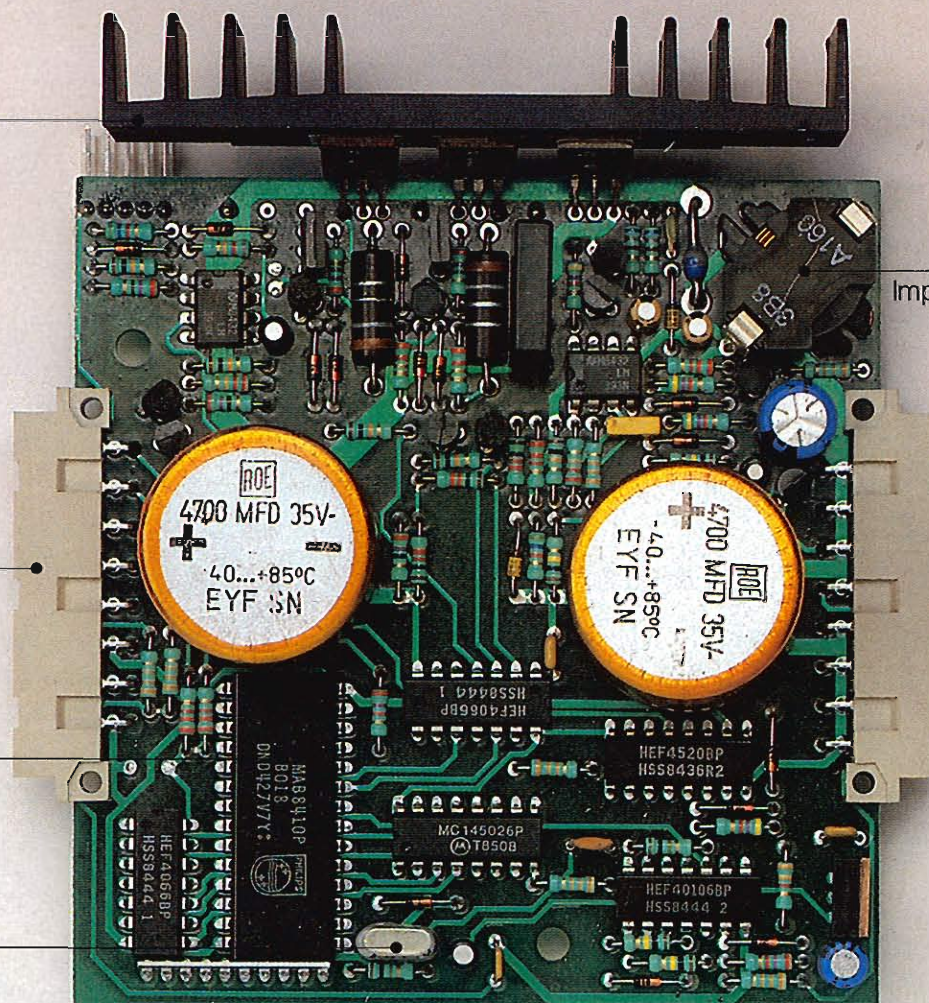
Heat sink for
the transistors

Impedance for switching circuit

16 pole plug

Internal data
processing using a
microprocessor chip

Quartz for accuracy



Märklin Digital H0 – the Model Railroad System for the Computer Age

The space age made it possible to miniaturize electrical components, and the chip was born. The exclusive Märklin chip is the brain of the Märklin Digital H0 locomotives. The chip converts data received into actual functions, from speed variations to any additional functions and holds the command. It recognizes whether the layout is conventional or digital and adjusts itself accordingly. The Märklin chip

incorporates the latest in modern CMOS semiconductor technology.

Märklin Digital H0 is the model railroad for the computer age. Many computer owners have long sought something extra, something which goes beyond the second dimension of the screen. Thanks to Märklin Digital H0, two of the best forms of recreation are combined into one: Model Railroading and home computers.



The interface unit is the link between the Märklin Digital H0 and the home computer.



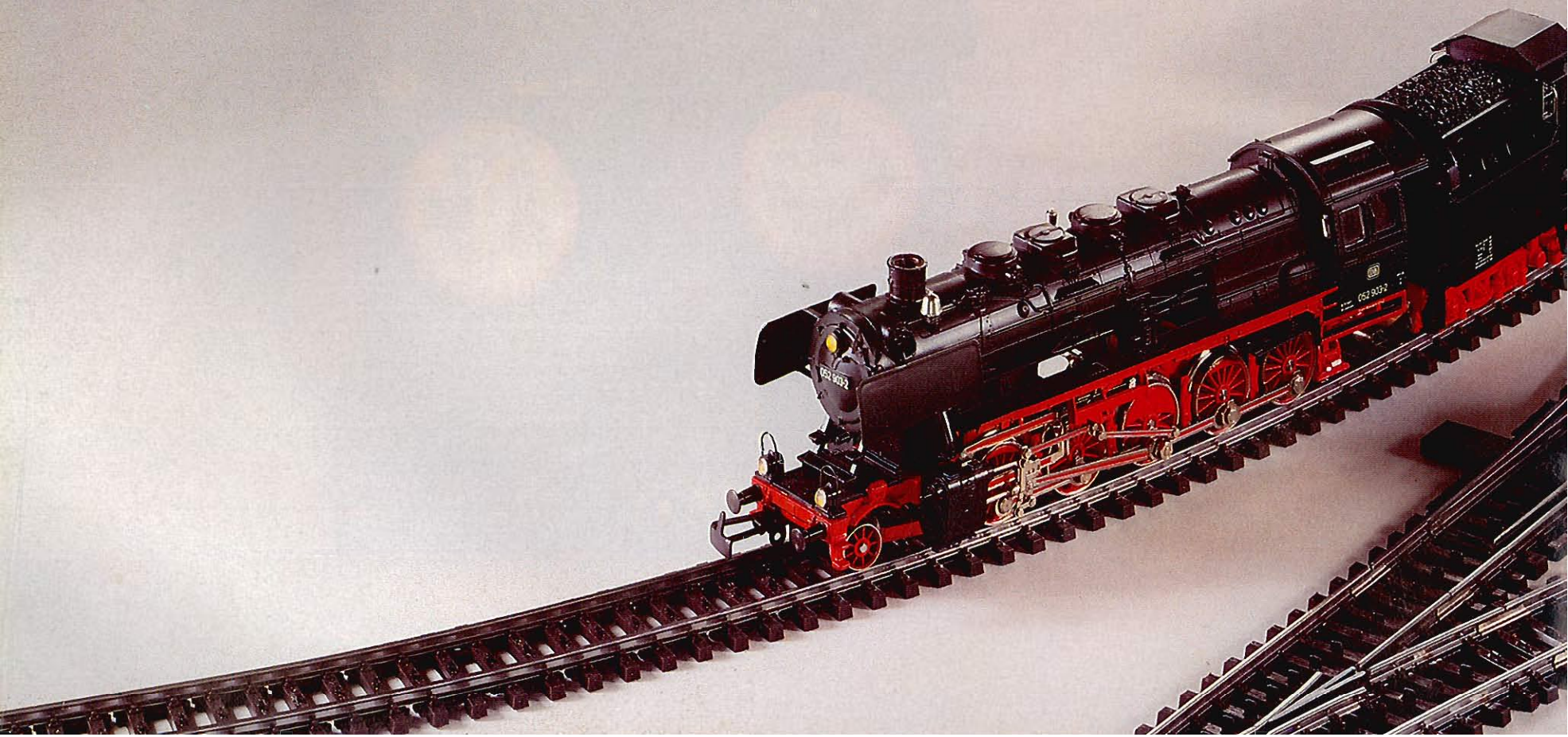
A modular plug on the Interface of the Märklin Digital H0 makes it possible to connect it to the home computer.

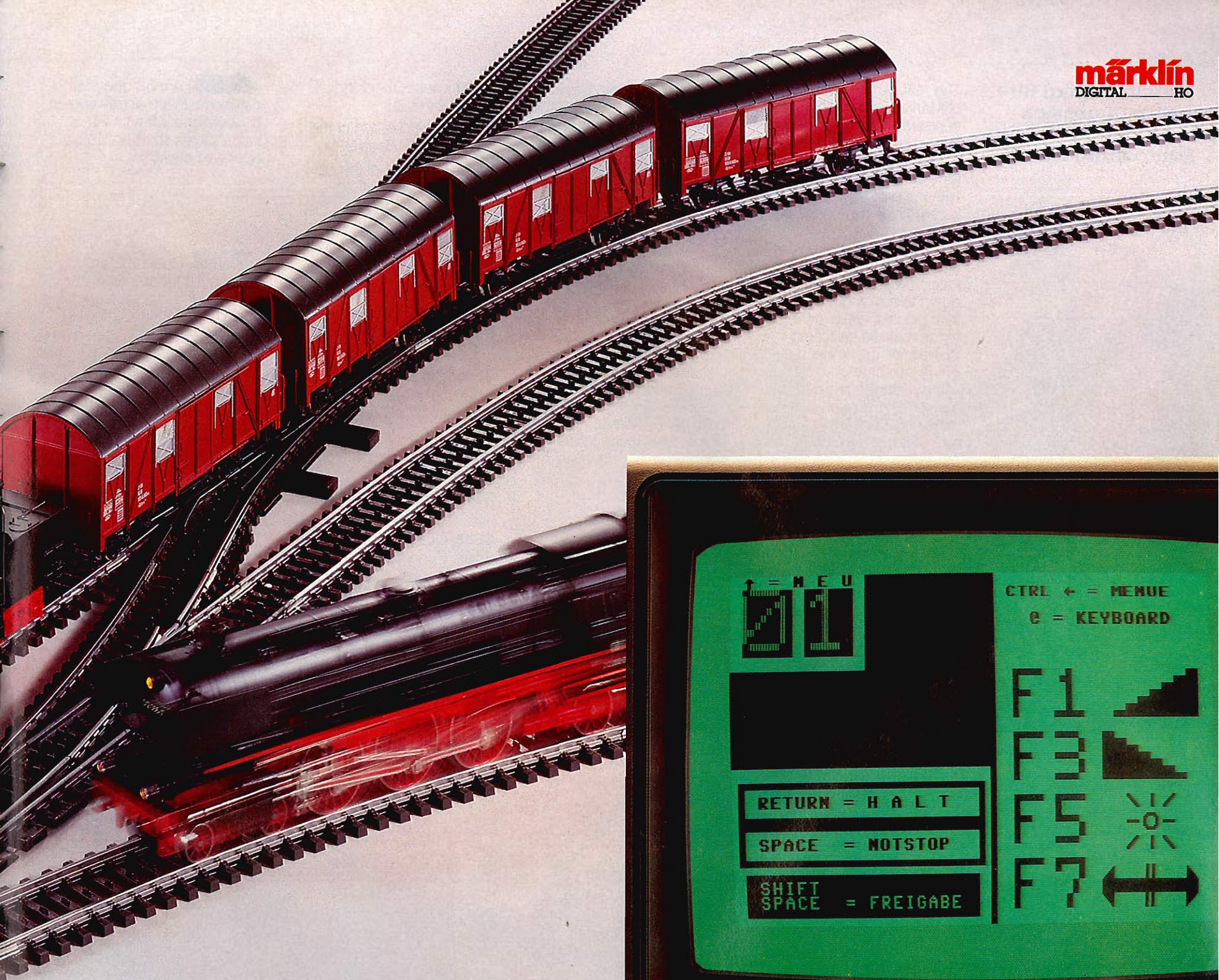


The positions of the control tracks and track contacts are relayed to the computer via the s 88 decoder.



Now it is possible to program all kinds of train operations. Controlled by control tracks and track contacts, a fully automatic model railroad system can be realized on a layout using Märklin Digital H0.



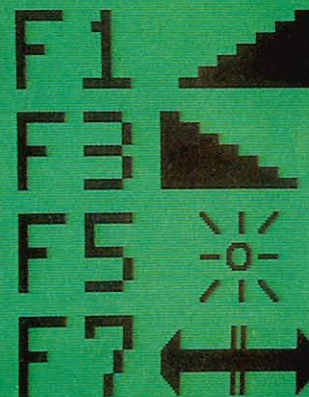


CTRL ← = MENUE
C = KEYBOARD

RETURN = H A L T

SPACE = NOTSTOP

SHIFT SPACE = FREIGABE



Märklin Digital H0 – a New Dimension in Model Railroading Fun

The real exciting advantage of Märklin Digital H0 is seen in operations. All kinds of new, extraordinary and amazing operational possibilities can be realized: Just as with the prototype, several locomotives run on the same section of track, one locomotive will overtake a train, couple up and run in tandem. Later, it will uncouple and drift down to a siding. Other trains fly by locals, while in the yards realistic switching operations are under way, trains can change direction without influence on other trains, real life push-pull commuter trains can be fielded, etc., etc. Now, a club can operate a layout with each member operating a single locomotive. It is all possible with Märklin Digital H0.

 Märklin Digital H0 locomotives are compatible. They will operate flawlessly on conventional layouts with normal transformers and power packs. Only the additional functions cannot be activated.

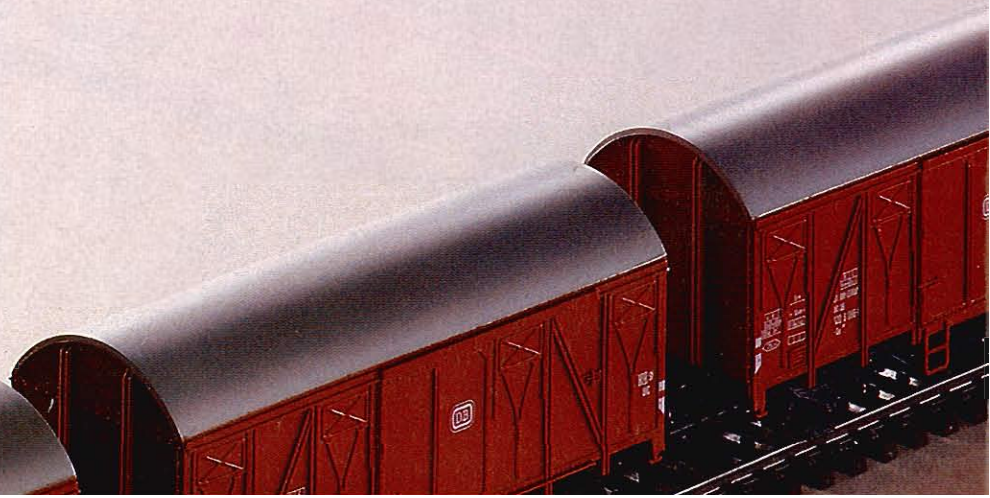
 The Märklin Digital H0 locomotives listed here already include factory-installed decoders for digital operation. Except for the 3671, each of the following have different road numbers from their conventional counterparts.

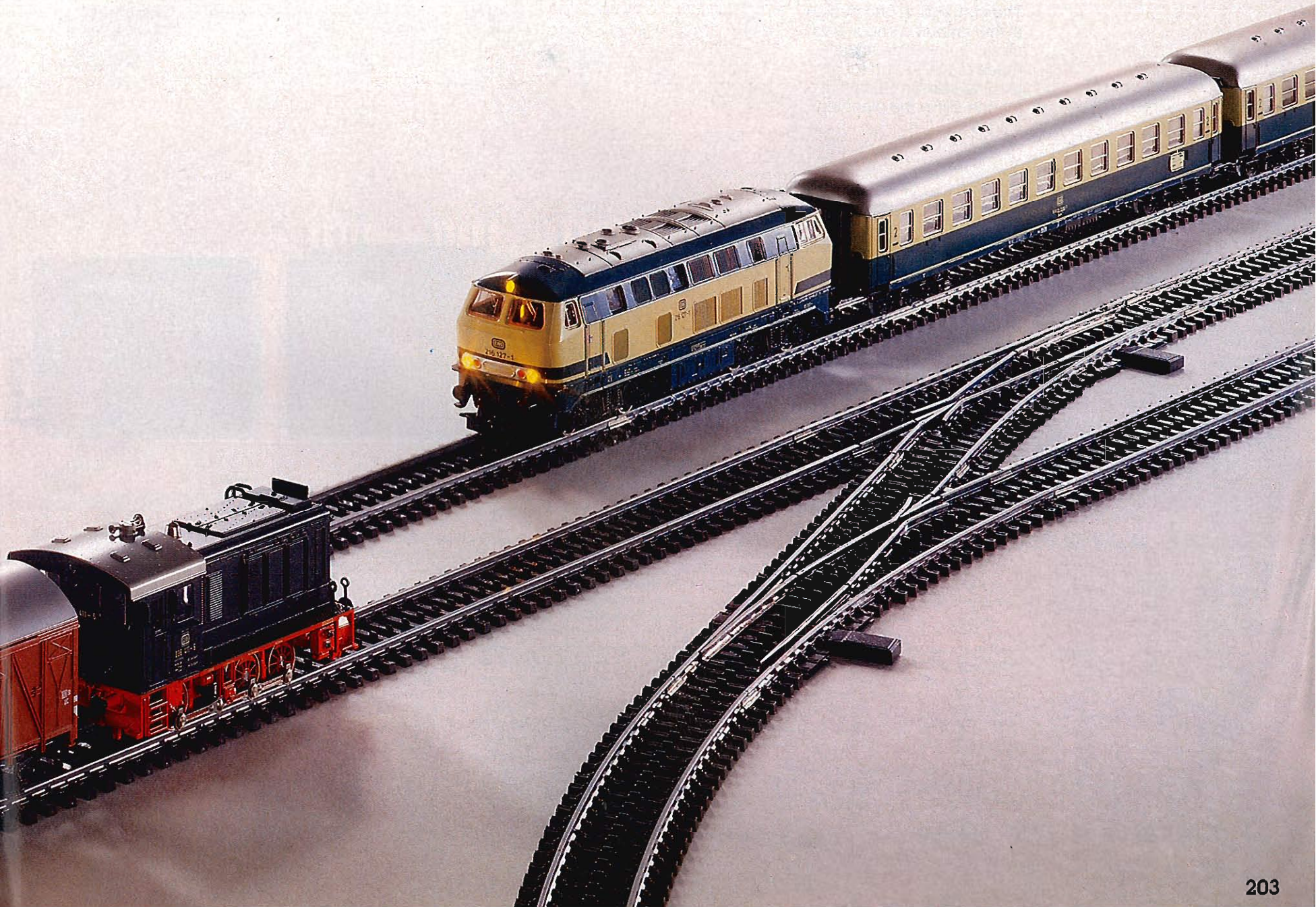
- 3610** Class 012 of the DB
Page 66
- 3623** Class Re 4/4 of the
SBB – Page 92
- 3642** Class 111 of the DB
Page 90
- 3646** Class 236 of the DB
Page 74
- 3650** Class Ae 6/6 of the
SBB – Page 95
- 3653** Class 120 of the DB
Page 84
- 3657** Class 103 of the DB
Page 85
- 3665** Class 260 of the DB
Page 70
- 3671** Inter City Experimental
of the DB – Page 86
- 3672** Class 212 of the DB
Page 70
- 3674** Class 216 of the DB
Page 73
- 3684** Class 050 of the DB
Page 66
- 3696** Class 86 of the DB
Page 60

 A c 80 decoder can be installed at any time in conventional Märklin H0 locomotives so they can be operated digitally.

 Conventional Märklin H0 locomotives can be operated at a steady speed on Märklin Digital H0 layouts.

 It is also possible to have a layout with one part controlled digitally and one part operated conventionally.





The Components For Getting Started - With A 12 Month Guarantee

You do not have to convert a conventional system overnight to enter model rail-roading's world of the future. You can add the digital system step by step.

The conception and design of the various components allows you to plan a tailor-made digital set-up for an existing Märklin H0 layout or for one still in the planning stages.

 Transformer and central unit are the basic units for Digital operation.

 One control 80 is sufficient to control any number of digital locomotives up to 80 units.

 A keyboard and k 83 decoder are necessary for controlling switches and signals along the right-of-way.



6002 · Transformer · For Digital H0 layouts · 220 Volt · Supplies power for track, electronics and additional boosters (6015) · LED displays · 2 pairs of connector terminals · 52 VA (watts) rating · 16 volts AC output · Sturdy housing · 1.6 kg (3 lb.) weight · Size 135 x 120 x 80 mm (5-3/8" x 4-7/8" x 3-1/4")



6015 · Booster · For Digital H0 layouts consuming more than 52 VA (watts) of power · For use with additional transformers · For use on large layouts · Output up to a maximum of 2.5 amps · LED display · 2 sets of connections for transformers and track · 1 set of connections for central unit and additional boosters · 1 adapter cable for connecting to central unit · Size 135 x 120 x 80 mm (5-3/8" x 4-7/8" x 3-1/4")

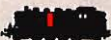


6020 · Central Unit · Heart of the Digital H0 layout · Nerve center · Integrates output and information commands · Feeds energy and commands to layout with only 2 wires · With micro-processor and data bus · One set of connections each for universal throttle control (right) and keyboard (left) · 10 universal throttle controls and 16 keyboards can be connected in a series to the central unit · 2 sets of connections for transformer and track · 1 set of connections for booster · Output up to a maximum of 2.5 amps · LED display · Size 135 x 120 x 80 mm (5-3/8" x 4-7/8" x 3-1/4")



6035 · Control 80 · Universal throttle control for Digital H0 layouts · Commands up to 80 digital locomotives · 10-button keyboard for entering locomotive addresses · Two digit LED display of address · Sockets and plugs for connecting to central unit and additional throttle control units · Micro-processor · Emergency and release buttons · On-off button for additional functions · Size 135 x 120 x 80 mm (5-3/8" x 4-7/8" x 3-1/4")

 The interface is necessary if you want to have the home computer operate the layout.

 Finally, the s 88 decoder is necessary for a fully automatic layout controlled by the home computer.

Have any questions about Märklin Digital H0? Please drop us a line. We will be glad to help you.

märklin
DIGITAL HO



6040 · Keyboard · Control panel for Digital H0 layouts · For 16 double-solenoid (switches or signals) or 32 single-solenoid (uncoupling tracks) accessories · LED display of positions · Sockets and plugs for connecting to central unit and additional keyboards · Microprocessor · Coding switch enabling the setting of addresses for specific groups of 16 solenoid accessories · When the layout is turned off, the last given command is stored · Size 135 x 120 x 80 mm (5-3/8" x 4-7/8" x 3-1/4")

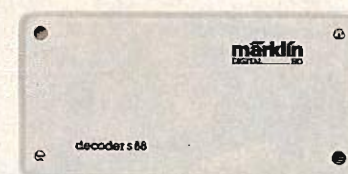


6050 · Interface · Connects to home computer · Interface RS 232 C (V 24), can be switched to TTL-level · Able to use positive or negative logic · Sockets for connecting to central unit or throttle control unit · Plugs for connecting to computer · Connector for s 88 decoder (6088) · Size 135 x 120 x 80 mm (5-3/8" x 4-7/8" x 3-1/4")

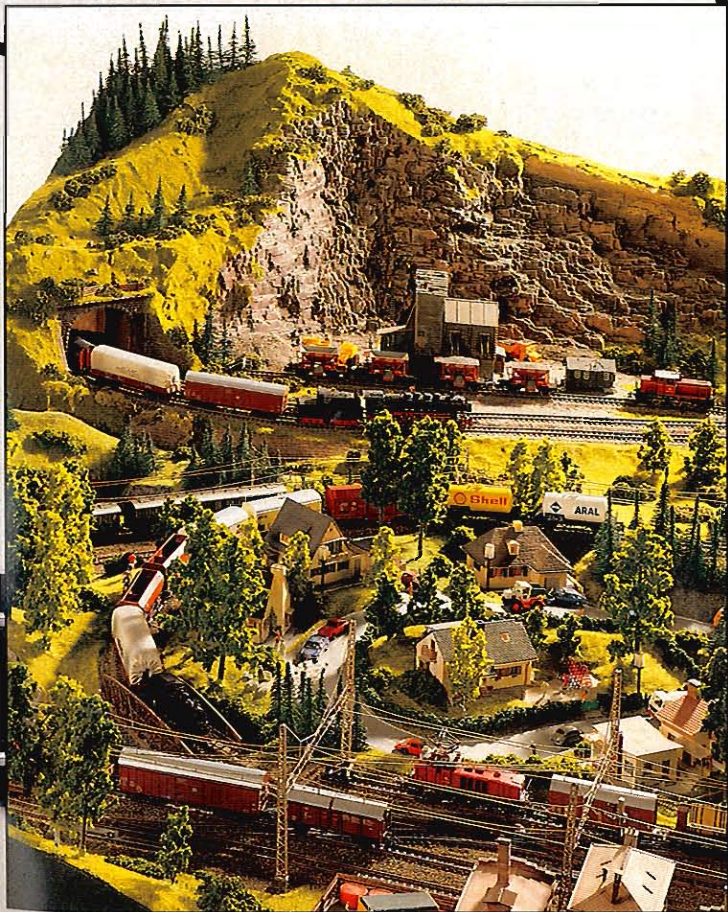
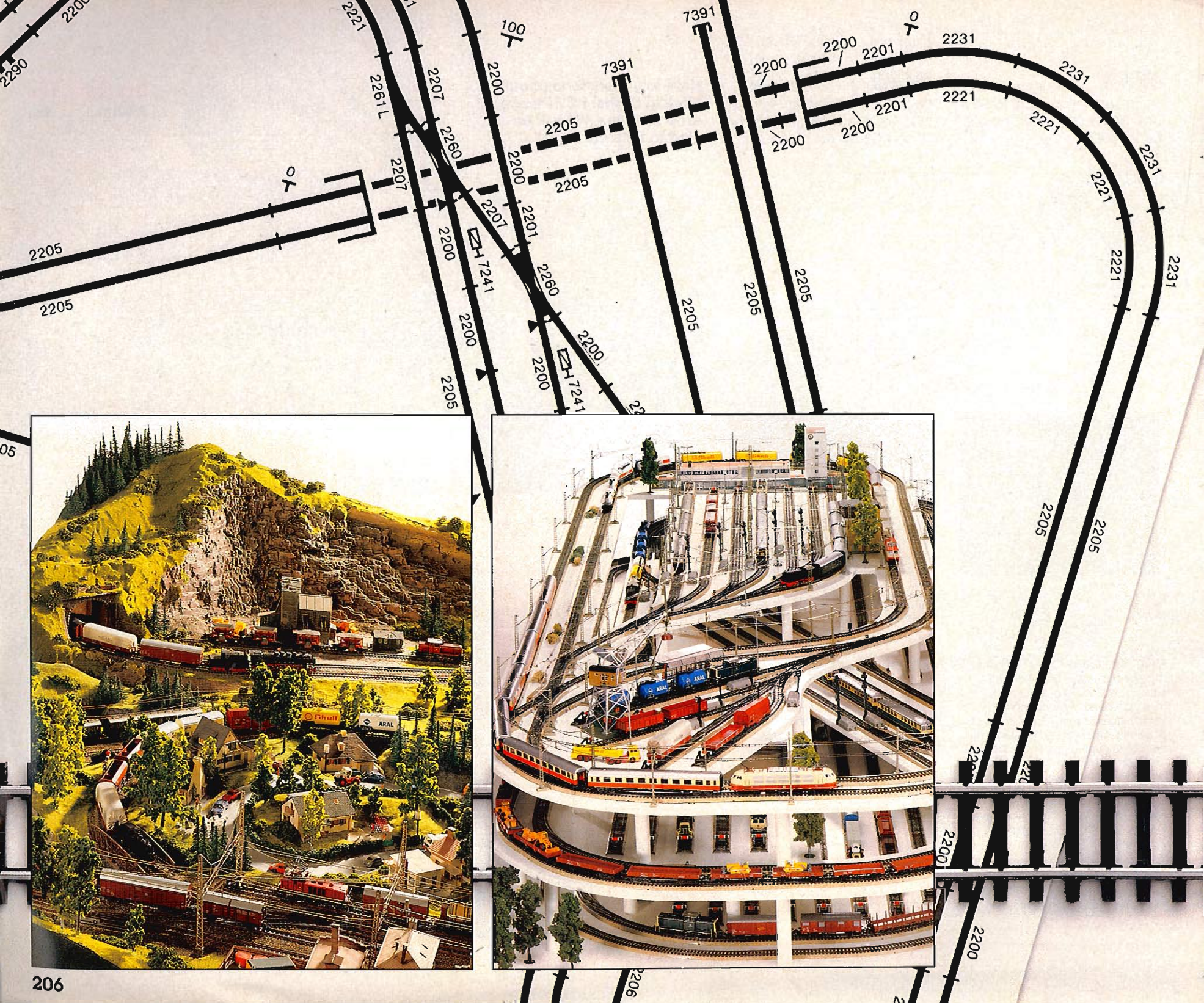
6080 · Decoder c 80 · Receiver for Märklin Digital H0 locomotives · For converting conventional locomotives to digital operation · Replaces the conventional reverse unit · Leads for an additional remote-controlled function · Size 12 x 16.8 x 30 mm (3/8" x 1/2" x 1-1/4")



6083 · Decoder k 83 · Receiver for switches, signals and uncoupling tracks in a Digital H0 system · For 4 double-solenoid or 8 single-solenoid accessories · 4 sets of 3 sockets each to connect up accessories · 2 sets of 2 sockets each for connections to track and another decoder · Code switch can be set for any of a number of possible addresses · 2 resistors for signals are included · Size 22 x 54 x 100 mm (7/8" x 2" x 4-1/4")



6088 · Decoder s 88 · Track detection component for circuit tracks in Digital H0 layouts · Works in connection with the interface unit and a home computer · Special wire for connecting to an interface unit · Connecting sockets for additional track detection components · 16 contacts · Size 23 x 54 x 124 mm (7/8" x 2" x 4-1/2")



Märklin H0 – With New Service

For years the service department has repaired trains with great attention and care. Now this service has been greatly expanded. The dreams of many modelers are now reality:

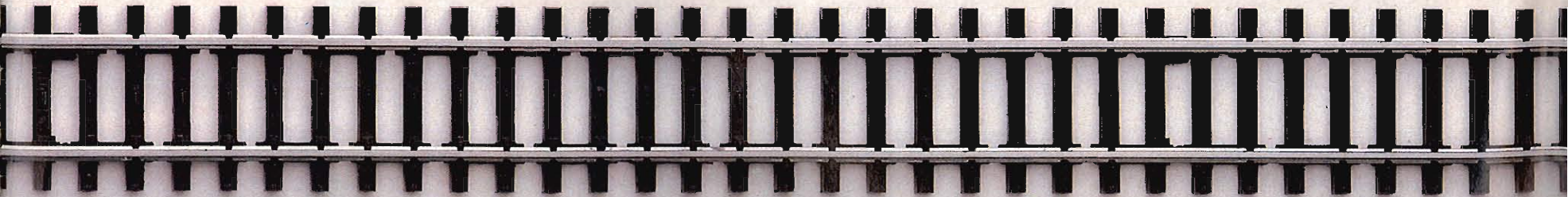
Want to save yourself the time needed to plan a layout? Looking for ideas and suggestions for personalizing your layout? Märklin Service is at your service – via your dealer.

For a small fee, your dealer can offer track plans, parts lists and a layout price list. We will even build your layout. Besides a series of stock layouts, we can construct virtually any kind of personalized layout, just give us the necessary time! Naturally, this offer includes the new Digital H0. See your dealer for more information.

And, what ever goes for Märklin H0, is applicable for Märklin I and mini-club, the tiny Märklin Z.

Need a “tune-up” for your railroad before the next operating session, or because it has been in storage for a while? Märklin Service is at your service. Just check with your dealer.

Would you like to restore some historic Märklin models of the last 20 years? Mention it to your dealer, along with information on what’s missing. We will investigate the restoration possibilities and give you an estimated cost for the job.



Märklin Metal Construction Sets – Experience Technology with Fun

Märklin metall is a series of well-designed metal construction sets. A screwdriver and a wrench are the only tools necessary for the connecting the individual parts. Märklin metall models are strong and robust, and offer all sorts of possibilities for spending leisure time.

1051 · Basic Kit A · 178 individual parts for 30 suggested models

1061 · Extension Kit E1 · Enlarges Basic Kit A to the level of Basic Kit B

1052 · Basic Kit B · 265 individual parts for 56 suggested models

1062 · Extension Kit E2 · Enlarges Basic Kit B to the level of Basic Kit C

1053 · Basic Kit C · 442 individual parts for 74 suggested models

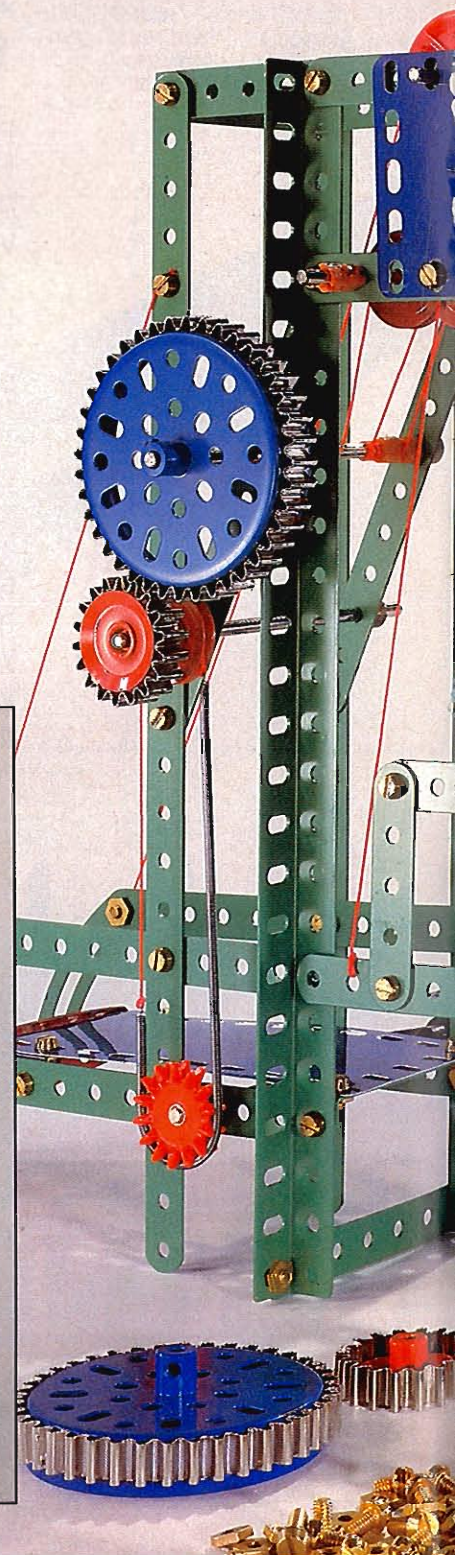
1063 · Extension Kit E3 · Enlarges Basic Kit C · 329 additional parts for 10 more suggested models

1073 · 2-gear Motor

1074 · 5-gear Motor

Märklin metall motors can be connected to any AC or DC transformer having an output between 12 and 16 volts, for example, Märklin model railroad transformers.

6409 · Transformer · Steady 12 volt output · 12 VA



Märklin Metal Construction Sets – Experience Technology in Miniature

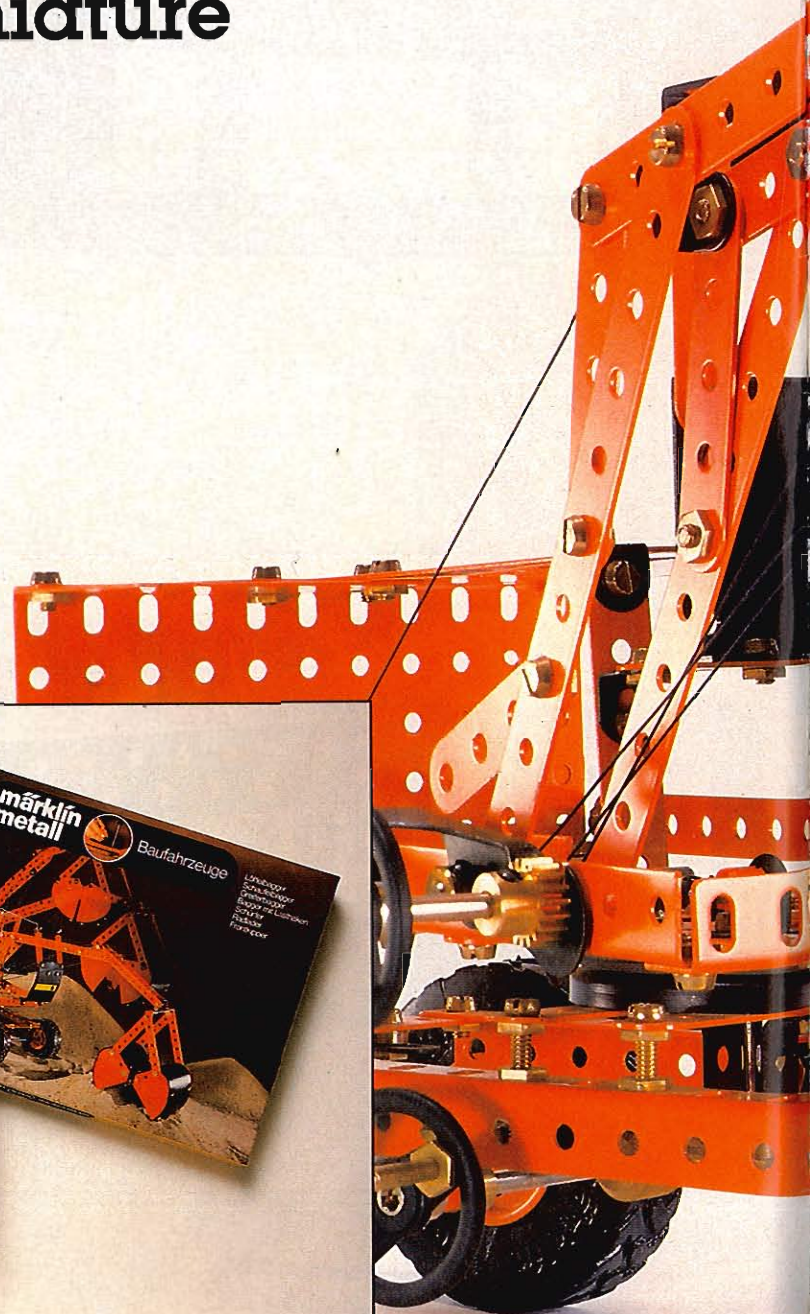
There are over 200 individual and special parts in the Märklin series of metal construction sets. Märklin metall offers technological refinement, exciting operation and creative construction with the realistic metal construction technology. Parts from a Märklin metal set can be used with those of any other metal set.

1054 · Farm Machines · Machines and implements of modern farming can be modeled · 24 page manual

1055 · Construction Vehicles · Realistic, operating models of construction equipment can be built with this set · 28 page manual

1056 · Trucks · All sorts of trucks with cab-over-engine designs, steering gears, winches, tandem axles or sprung rear axles can be built with this set · 36 page manual

1057 · Cable Car Set · Capture the excitement of the a cable car railroad in the Alps with this set · 24 page manual



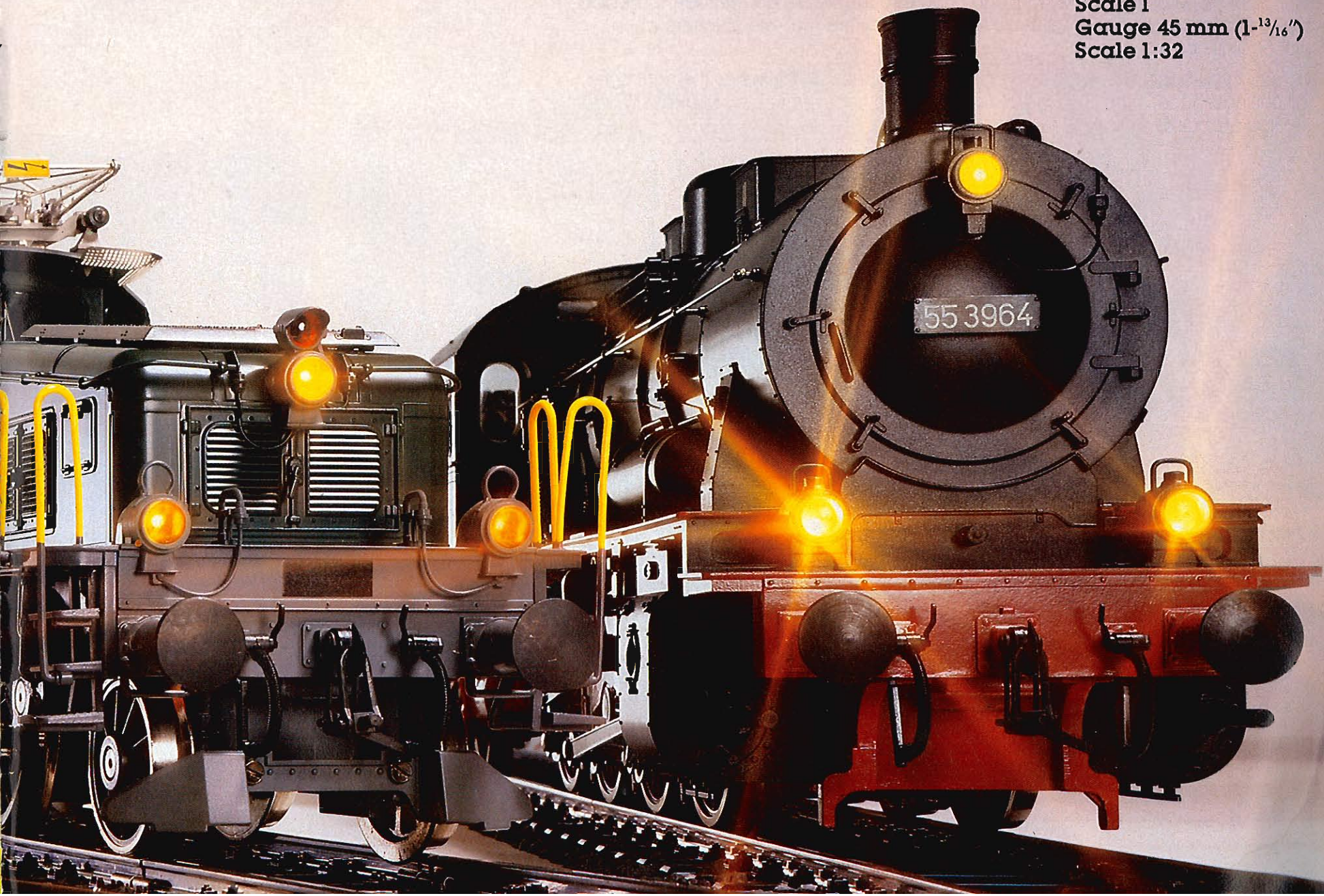


Märklin I – the Big Railroad



märklin
I

Scale I
Gauge 45 mm (1-¹³/₁₆"')
Scale 1:32



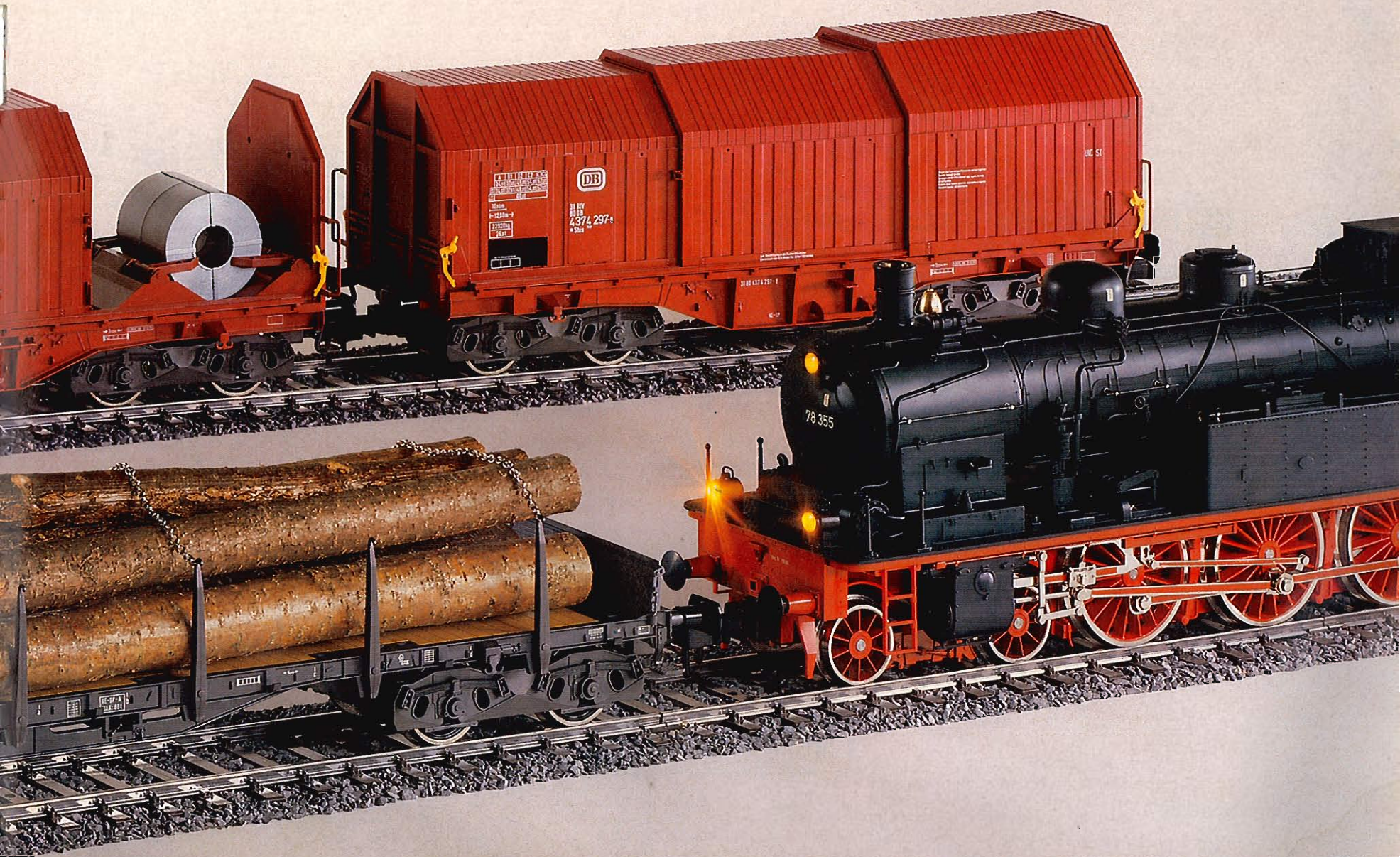
Märklin I – the Big One with Tradition

In 1891, at the Leipzig Fair, Märklin first unveiled I gauge railroading. It was reintroduced in 1969 by Märklin. The technology and fabulous detail of these 1:32 models running on 45 mm (1-13/16") gauge track is stunning.

With a full head of steam they puff and chug through house and garden. Collectors are very interested in these valuable models – they are real eye-catchers when placed in a show case.

Whether you begin with a set or with individual models, Märklin has the right ones for getting started in the Big One. Be sure to get a copy of the new Märklin I gauge catalog at your dealer.





mini-club – the smallest electric railway in the world

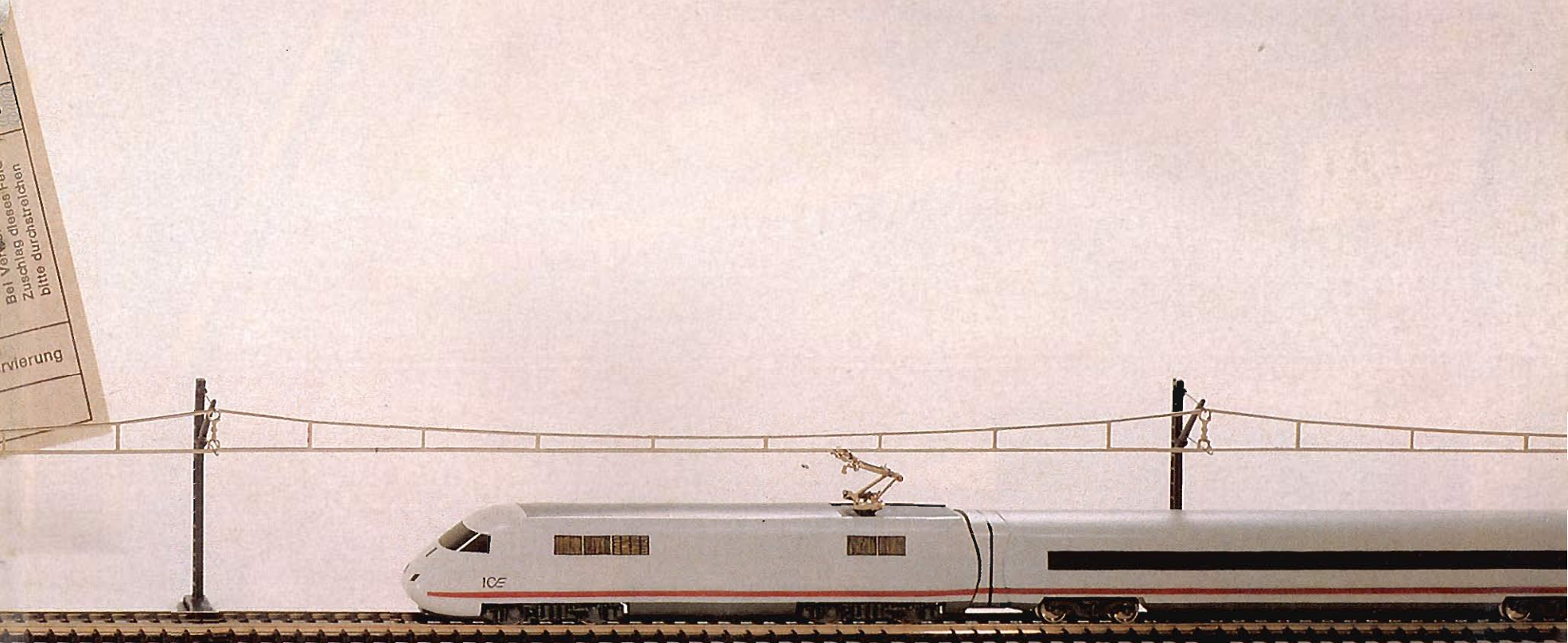
IE-Zuschlag
 erster Geltungstag / 1985
 Gültig 2 Tage
 Bei Verwendung als Zuschlag dieses Feld bitte durchstreichen
 1. Klasse
 kfurt/Main
 für die Benutzung
 zuschlagpflichtiger IE
 1229344

DB Fahrausweis oder IE-Zuschlag
 Nichtzutreffendes bitte streichen
 Großkundenabonnement
 erster Geltungstag / 1985
 Gültig 2 Tage
 Fahrausweis einfache Fahrt **1. Klasse**
 von Köln
 nach Karlsruhe
 über
 Zuschlag für die Benutzung zuschlagpflichtiger **IE** ☒ Platzreservierung
 N 1229344

DB Fahrausweis oder IE-Zuschlag
 Nichtzutreffendes bitte streichen
 Großkundenabonnement
 erster Geltungstag / 1985
 Gültig 2 Tage
 Fahrausweis einfache Fahrt **1. Klasse**
 von Hamburg
 nach Stuttgart
 über
 Bei Verwendung als Zuschlag dieses Feld bitte durchstreichen
 Zuschlag für die Benutzung zuschlagpflichtiger **IE** ☒ Platzreservierung
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 Gültig 2 Tage
 Fahrausweis einfache Fahrt **1. Klasse**
 Düsseldorf
 schweig
 Benutzung **IE** ☒ Platzreservierung
 1229343

Scale Z
Gauge 6.5 mm ($\frac{1}{4}$ ")
Scale 1:220

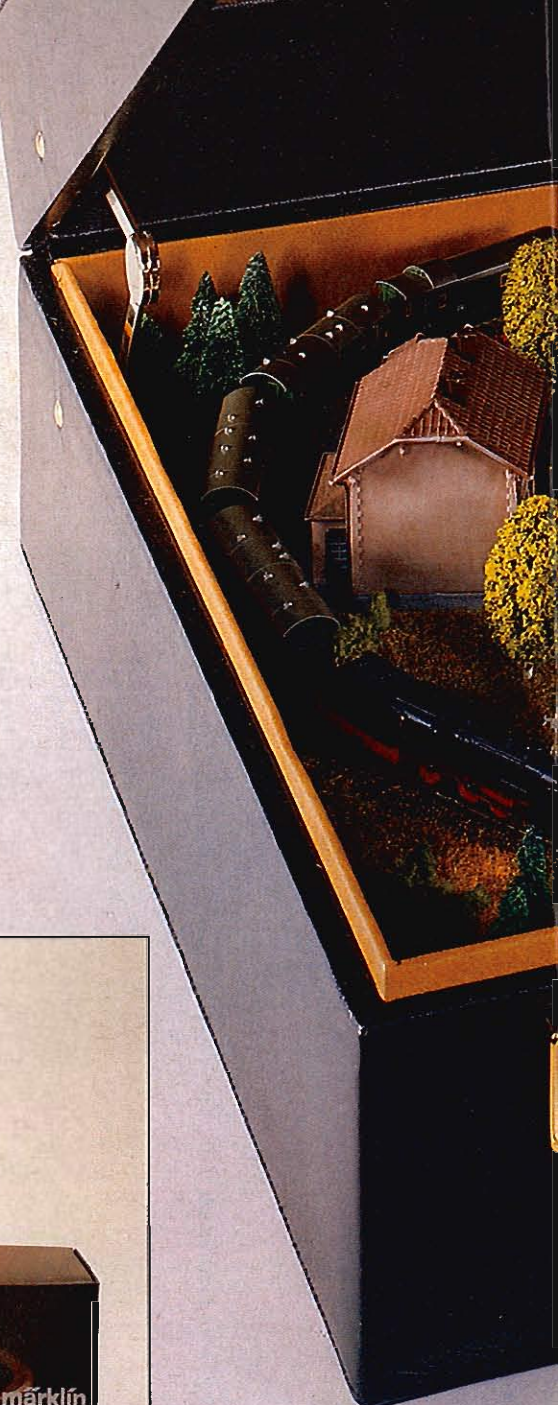
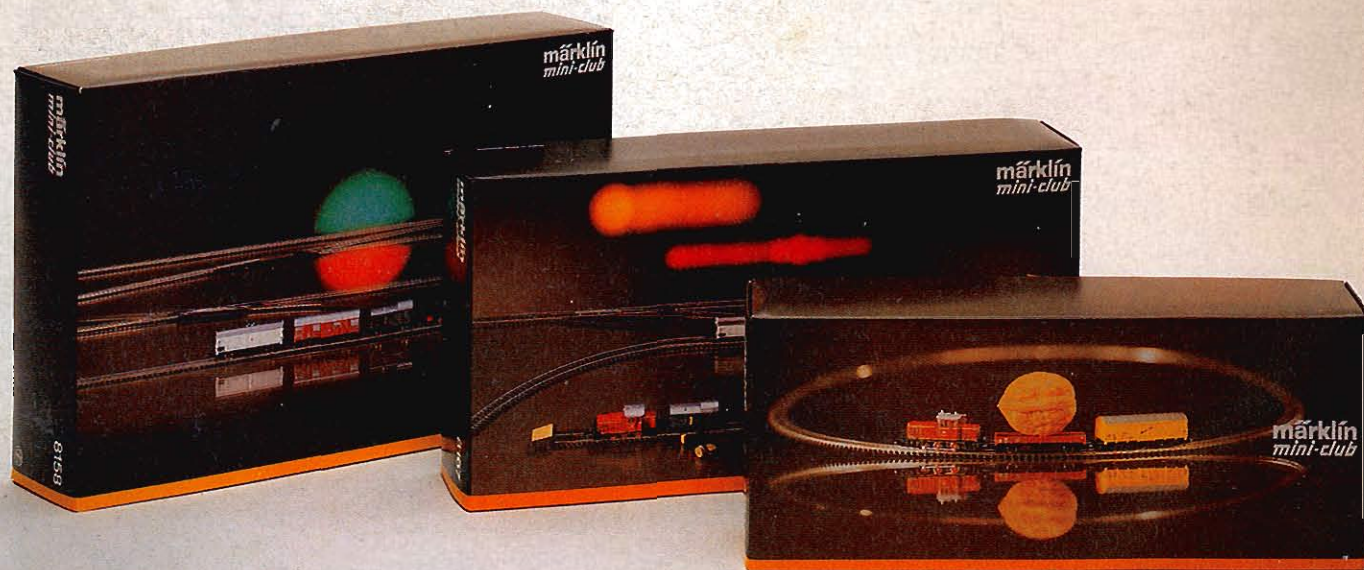


mini-club – Adult Model Railroading

With a scale of 1:220 and a track width of only 6.5 mm (1/4"), mini-club is an extraordinary railroad. It is specially designed for adults. Despite its small size, Märklin Z models possess stunning detail – they are true miniatures of the real thing.

mini-club requires so little space that it can actually run on a box of cigarettes. An attaché case has enough space for a layout. Just a little extra space, and one can reproduce a prototypical scene in Z gauge. All this is only possible with the smallest electric railway in the world – Märklin mini-club.

Unpack, set up, go – it is that easy, and there are three different beginner sets ready to take you into the lilliputian world of Z gauge. See your dealer for more information and be sure to get a copy of the latest mini-club catalog.







märklin

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