

MÄRKLIN



D 53 E o. P.



This catalog shows primarily our line of H0 trains. An exception is page 49 which shows 0 gauge mechanical trains. Those interested in other 0 gauge items should ask their dealers for the special catalog.

The factory sells through the trade only.

Our policy is one of constant improvement; we reserve the right to make changes in color, size or weight. All measurements are approximate. This catalog supersedes all previous catalogs.

GEBR. MÄRKLIN & CIE. ^{GM}_{BH}

Manufacturers of Fine Metal Toys
GÖPPINGEN/WURTEMBERG



Trade Mark

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To All **MÄRKLIN** Fans

Highest quality at lowest prices is the slogan for this year's catalog. The steadily climbing demand for our products has made it necessary to install the very latest in production machinery. Greatly improved methods have been developed to produce the **MÄRKLIN** trains. At the same time it became possible to lower the cost of producing several items which savings were passed on to the consumer in the form of lower prices.

Outstanding examples of this development are the new locomotives CM 800 and CE 800 (pages 2 and 3). These are particularly well designed models with a wealth of detail that can hardly be surpassed. Also of great interest to all model railroaders is our completely new automatic block system. Following prototype practice 8 new signals have been created: Warning signals, Semaphores, and Color Light Signals, which make it possible to install realistically operating train safety systems on all layouts. Here too, it was possible to keep costs at a minimum and make it possible for anyone to install the signals on his layout.

Our crowning achievement among this year's new items is the new **MÄRKLIN** model track (3900 and 3800), which is illustrated on pages 34 and 35. This track combines the realistic appearance of the 2-rail track with the simplicity and versatility of the 3-rail track. It is a true model track, which will delight even the most spoiled model railroaders.

And so, this year's catalog, which shows all articles in full colours, will give all of our friends the opportunity to select interesting and exciting additions to their layouts. At the same time we constantly strive to increase the number of owners of **MÄRKLIN** layouts. The opportunity to possess a **MÄRKLIN** train, long regarded as the standard of the world, is now given even to those with the most modest budgets.



GEBR. MÄRKLIN & CIE. ^{GM}_{BH} · GÖPPINGEN/WTTBG.

The Superb Qualities of **MARKLIN**

The locomotives have:

Faithful reproduction of all details of the prototype.

Reliable operation.

Precision Motors with reduction gears.

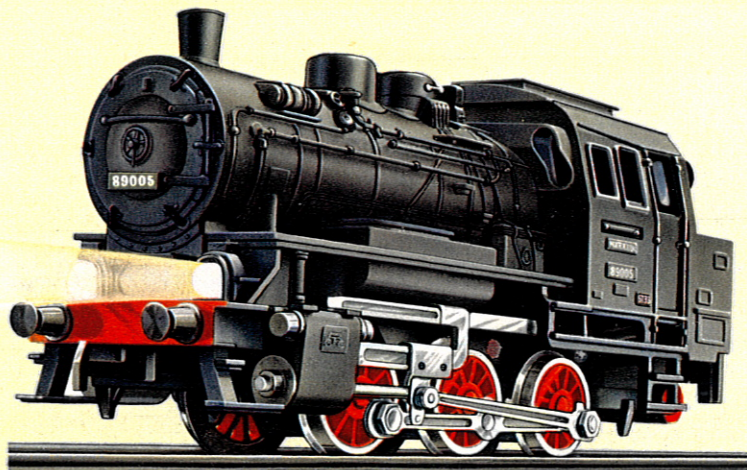
Reversing by remote control from transformer or by manual lever on locomotive.

Rheostat speed control from transformer.

Some models have lights at both ends changing automatically according to direction of travel.

Easily exchangeable headlights bulbs.

Two exciting New Models



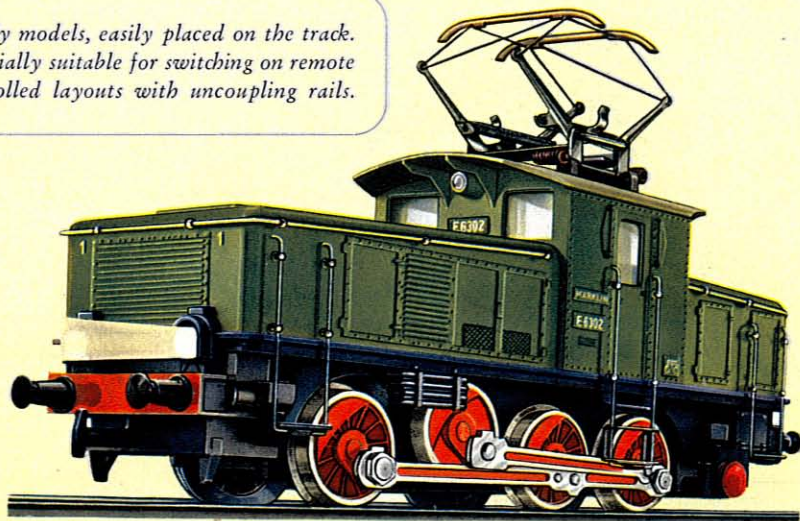
CM 800

23-3-0
Tank Locomotive, series 89 of the German Federal Railways • Dull black • 0-6-0T • Plastic body • Remote controlled reversing with additional manual lever • 2 electric head lights • Increased pulling and climbing ability through neoprene tires on the rear two wheels • Couplers at both ends • Length over buffers 4½ in. • Weight about 8 oz.

Electric HO Locomotives

HO

*Sturdy models, easily placed on the track.
Especially suitable for switching on remote
controlled layouts with uncoupling rails.*



CE 800

Electric Switching Locomotive, series E 63 of the German Federal Railways • 0-6-0 • Plastic body • Remote controlled reversing with additional manual lever • Two electric headlights at each end, always burning in direction of travel • Lever controlling optional operation from overhead wire or center rail • Windows with cellophane glass • Length over buffers 5 in. • Weight about 10 oz.

Neoprene tires on many models; increased pulling and climbing ability.

New pick-up shoes suitable for both standard and model track sections.

Electric Type Locomotives, in addition, have:

Spring Pantographs which, like their prototypes, may be pressed upon the roof and thus cut the circuit.

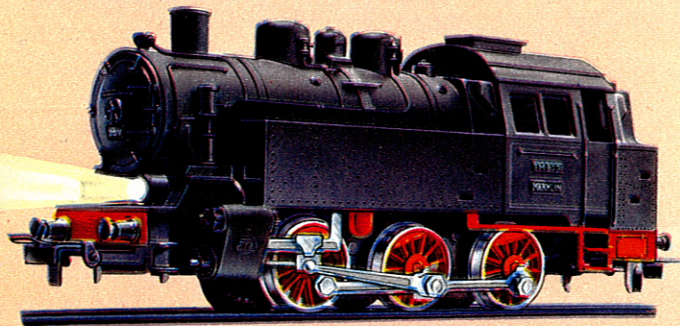
Lever for optional operation from overhead wire or center rail.



Transformer 278A is required to operate these models. For larger layouts, however, transformer 280 A is recommended.

MARKLIN

Electric Locomotives



TM 800

26-2-6

Tank Locomotive • Dull black • 0-6-0 T • Remote control for reversing, additional lever for manual operation • 2 electric headlights • Neoprene tires on the rear two wheels • Solid die-cast body • Especially suited as a switcher on layouts with remote controlled uncoupling rails • Length over buffers 5 1/4 in. • Weight 15 oz.

The models pictured here have won many friends because of their sturdy construction and their suitability for switching, as well as local freight and passenger trains. They are easily placed on the track, have high pulling and climbing power, and negotiate curves with ease. They possess beautiful lines and finely worked out details.

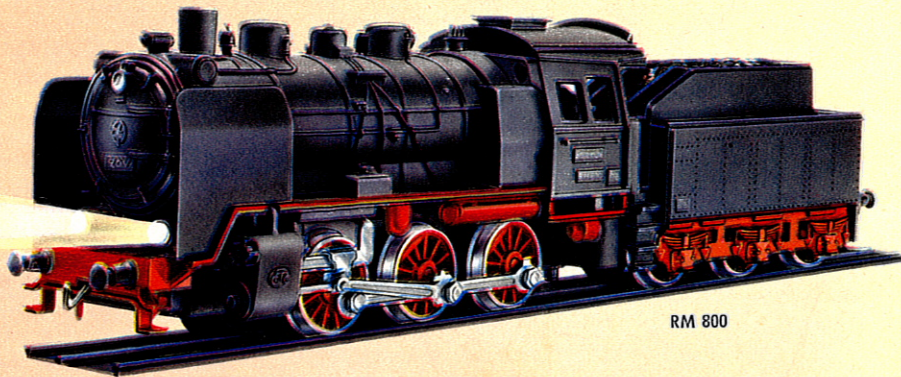
Required transformer 278 A or 280 A

HO

RM 800

28-4-6

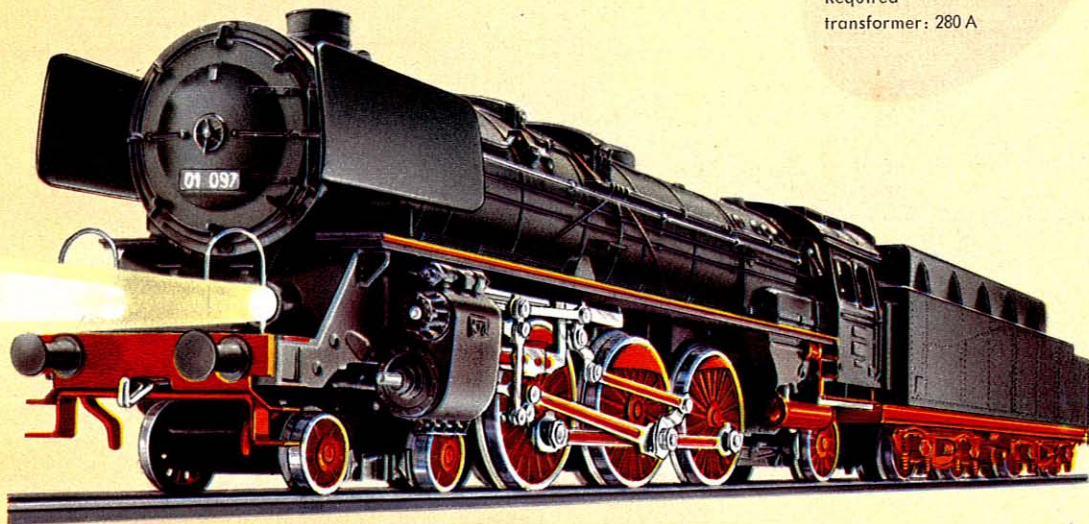
Steam Locomotive with Tender • Black • 0-6-0 • Remote control for reversing, additional lever for manual operation • 2 electric headlights • Solid die-cast body • Suitable for both freight and passenger traffic • Length over buffers 8 in. • Weight 18 oz.



RM 800

Super Models in H0 Gauge

This engine ranks among the most beautiful of MÄRKLIN locomotives. A true model of the 01 series of the German Federal Railway, it is noted for its beauty and power. Here is an engine which belongs on every MÄRKLIN layout.



Required
transformer: 280 A

F 800

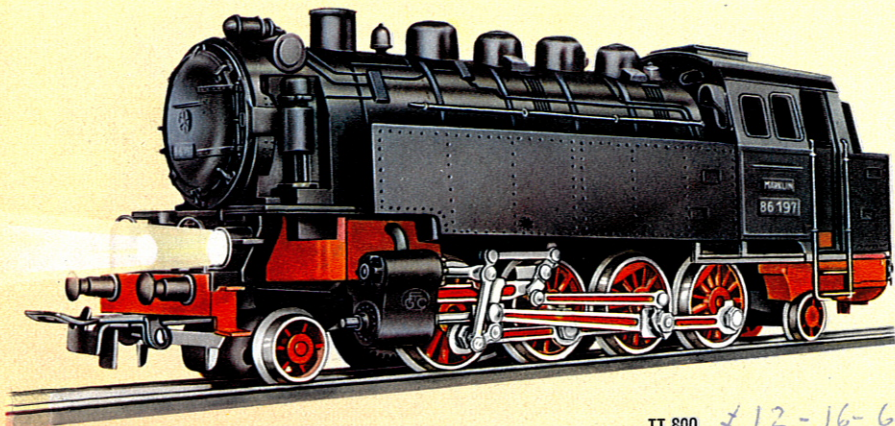
£10.15-6

Express Locomotive • Dull black • 4-6-2 Pacific Type • Remote control for reversing, additional lever for manual operation • Complete valve gear mechanism • 2 electric headlights 485 • Solid die-cast body • Exactly reproduced smoke deflectors, armatures, and cylinders • Flanges on all wheels • Leading and trailing trucks are pressed on track by soft springs; no danger of derailments • Neoprene tires on the rear pair of drivers assure added pulling and climbing power • 8 wheel tender • Length over buffers 11 $\frac{1}{8}$ in. • Weight including tender 31 oz.

Electric Locomotives

HO

Required Transformer: 280 A

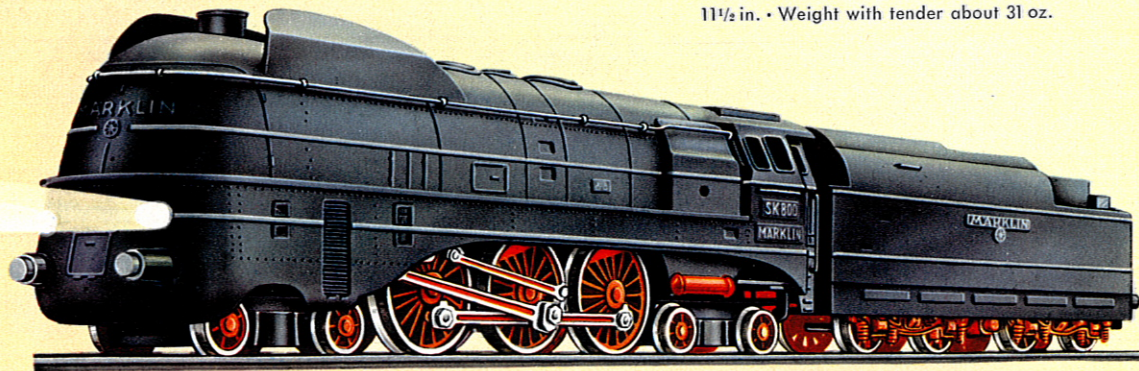


TT 800 £12-16-6

Tank Locomotive, series 86 of the German Federal Railways • Dull black • 2-8-2T • Remote control for reversing, additional lever for manual operation is reached by opening boiler door • 2 electric headlights at each end, which burn automatically in direction of travel • Solid die-cast body with many added details • Motor with reduction gears for slow travel • Length over buffers 5 1/4 in. • Weight 15 oz.

SK 800 £13-10-0

Streamline Locomotive • Dull black with Silver Lining, 4-6-4 Hudson type • Remote control for reversing, additional lever for manual operation • 2 headlights • Streamlined solid die-cast body • Motor with spur reduction gear • Solidly built trucks with spoked wheels, sprung to prevent derailment • 8-wheel tender • Length with tender over buffers about 11 1/2 in. • Weight with tender about 31 oz.



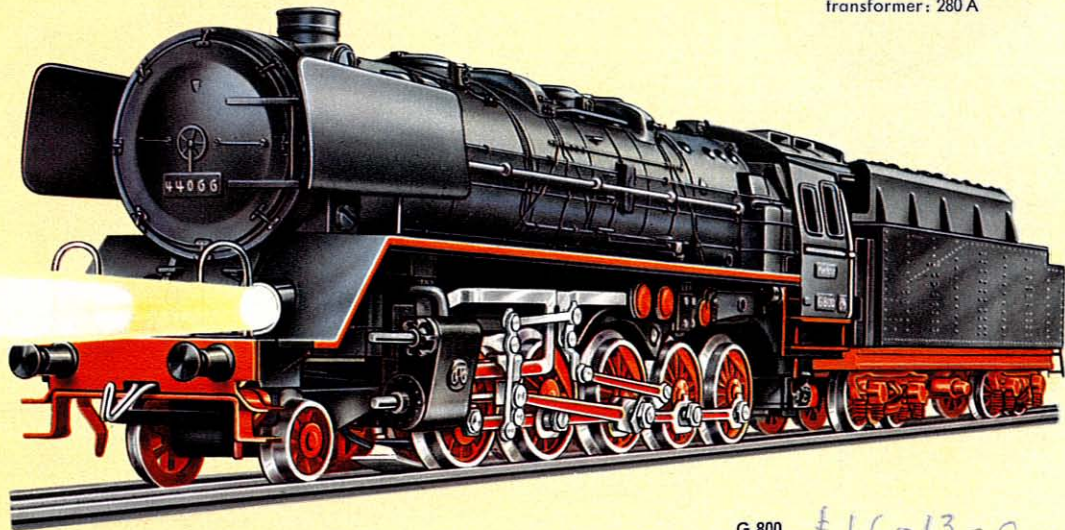
Brute Power and Graceful Lines

MARKLIN



Required
transformer: 280 A

It need hardly be pointed out that this MARKLIN engine has been the object of enthusiastic admiration from the moment it appeared on the market. Brute power combined with rakish lines are the main features of this locomotive which is a faithful reproduction of series 44 of the German Federal Railways. Watching it, one can almost hear the puffing approach of its powerful prototype with its long string of cars. The long, heavy side rods connect all the drivers without hindering their negotiation of the curves. This model represents a strong engine for goods trains.



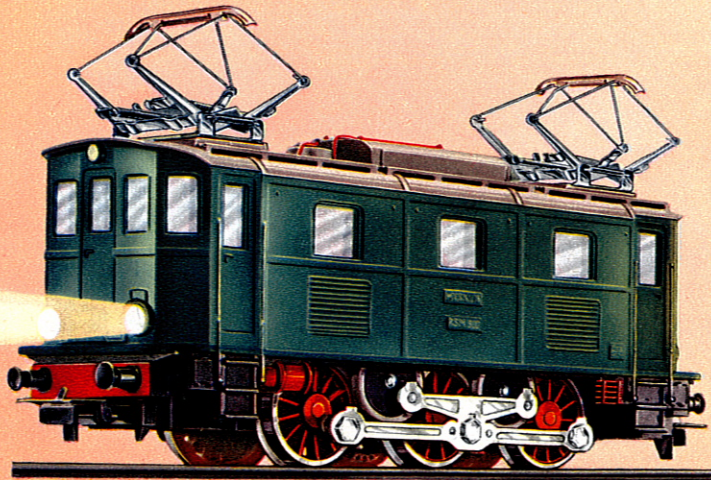
G 800

16-13-0

Heavy Freight Locomotive • Dull black • 2-10-0 • Remote controlled reversing placed in the tender, additional lever for manual operation on rear part of tender • Complete valve gear mechanism • All drivers are powered • 2 electric headlights 485 • Solid die-cast body with extensive detail • Because of the arrangement of the drivers into groups, model will easily negotiate normal radius curves • Flanges on all wheels • Front truck sprung to prevent derailment • Latest type smoke deflectors • 8 wheel tender with trucks • Length over buffers 11 in. • Weight 36 oz. including tender.

MARKLIN

Locomotives



RSM 800

RSM 800

£ 6-19-6

Electric Locomotive for Mixed Traffic • Green • 0-6-0 • Remote control reversing with additional hand lever • All 3 axles powered • 2 exchangeable electric headlights • Powerful, sturdy model easily placed on rails even in curves • Fine detailed body casting • Windows with cello glass • Length over buffers 5 in. • Weight about 16 oz.

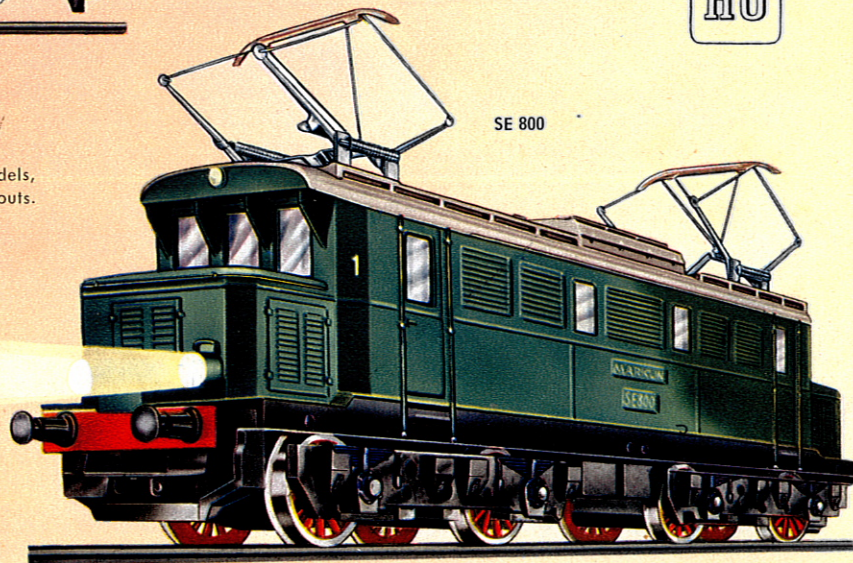


Transformer 278 A is required to operate these models, but transformer 280 A is recommended for larger layouts.

SE 800

£ 9-9-0

Electric Passenger and Fast Freight Locomotive • Green • 8 wheels • 0-4-4-0 • Remote control for reversing with additional lever for manual operation • The two inner axles are driven by the motor, the two outer axles are in trucks for better negotiation of curves • 2 electric headlights • Optional operation from overhead wire or third rail • Length over buffers 6 3/4 in. • Weight about 21 oz.



SE 800

under the Catenary

SEW 800

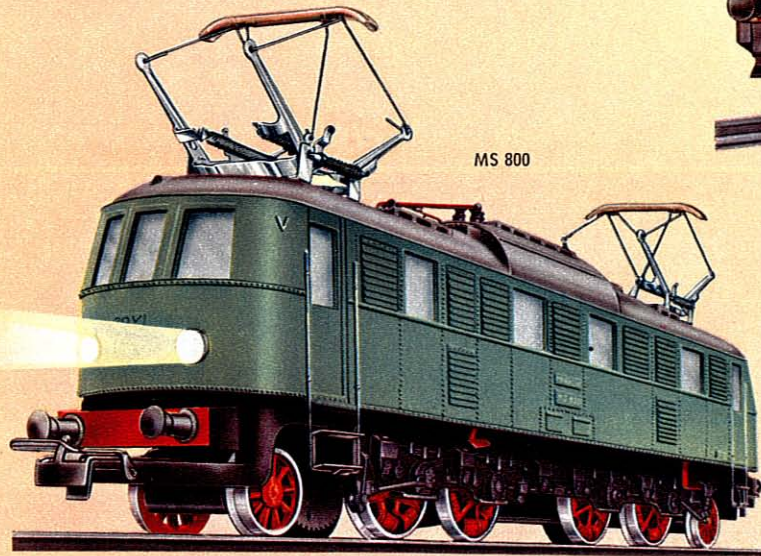
£10-16-0

Electric Express Locomotive • Green with silver lining • 8 wheels • 0-4-4-0 • Remote control for reversing with additional manual lever • 2 electric headlights • Optional operation from overhead wire or third rail • The two middle axles are powered, the two outer axles are in trucks, each of which is an imitation 4-wheel truck, for an easier negotiation of curves • Porthole type windows • Set-off driver's stand • Length over buffers 6 $\frac{3}{4}$ in. • Weight 21 oz.



SEW 800

Required transformer 280 A



MS 800

MS 800

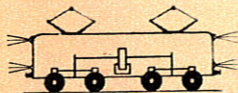
£14-12-6

Electric Express Locomotive • Green • 12 wheels • 2-8-2 • Remote control for reversing with additional lever for manual operation • 2 electric headlights at each end, which change automatically • Optional operation from third rail or overhead wire • Realistic pantographs • Extraordinary power • Durable motor with reduction gears, great precision • Scale wheels • Sprung leading and trailing trucks to prevent derailment • Extensive details on roof • Windows with cello glass • Length over buffers 7 $\frac{1}{4}$ in. • Weight about 31 oz.

RE 800

15-10-6

Electric Locomotive • Super model • Green • Roof and details silver • 0-4-4-0 • Remote control reversing, additional lever for manual operation • 3 electric headlights on each end changing automatically with direction of travel • Optional operation from overhead wire or third rail • Powerful motor driving all 4 axles • Realistic reproduction of the Swiss prototype • Length over buffers $6\frac{3}{4}$ in • Weight 21 oz.

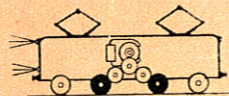


Drivers and
lighting of
RE 800
Super Model

RES 800

10-16-0

Economy Model • Wheel arrangement similar to SE 800 (page 8) • The inner two axles are powered by the motor; the rear pair of driven wheels is equipped with neoprene tires • 3 electric headlights at the front end only, no automatic change of light • Remote control for reversing; additional lever for manual operation • Lever for optional operation from overhead wire or center rail • Length $6\frac{3}{4}$ in • Weight 21 oz.



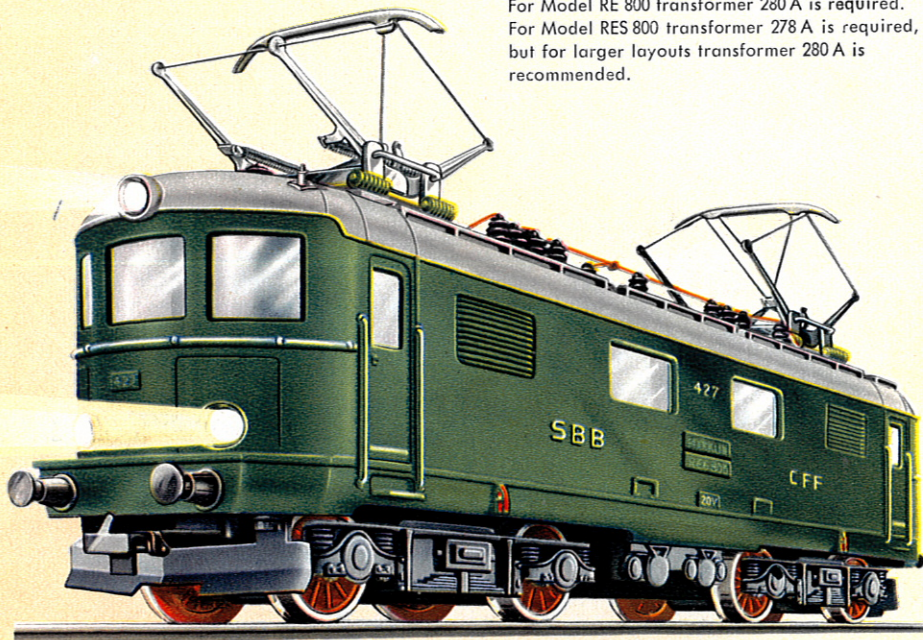
Drivers and
lighting of
RES 800
Economy
Model

The Popular Swiss Locomotives

MÄRKLIN

To haul the popular stainless steel passenger trains between Switzerland's principal cities, a great number of these modern locomotives have been placed in service. Whether they are used alone or at the head of Swiss passenger trains, such models are showpieces on many a layout. In performance and reliability the RE and RES 800 are quite equal to their prototype for they are MÄRKLIN products.

For Model RE 800 transformer 280 A is required.
For Model RES 800 transformer 278 A is required,
but for larger layouts transformer 280 A is recommended.



Heavy Electric Freight Locomotive

MARKLIN

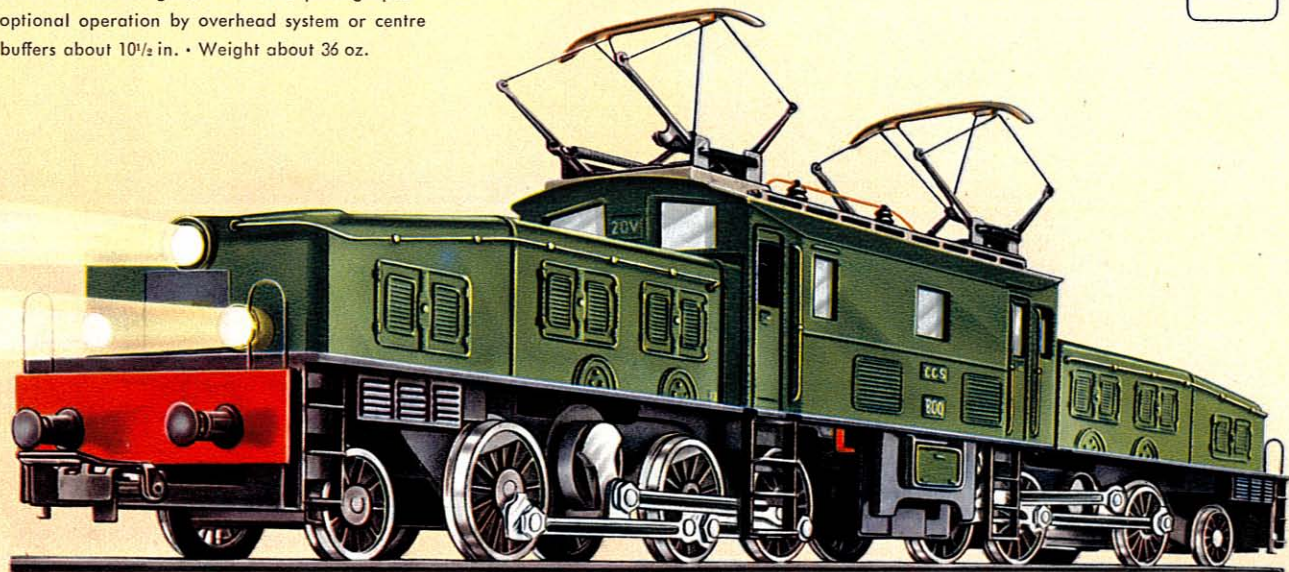
CCS 800 £21-0-0

Electric Locomotive "Crocodile" • Green • 16 wheels • 2-6-6-2 • Remote control for reversing, additional inconspicuous hand lever • 3 electric headlights at each end, which change automatically • The locomotive is built in three sections and articulated so that it may adapt itself to the curves • It negotiates normal radius track without difficulty • Superb pulling power through powerful motor in connection with spur and worm gears of highest precision • All 12 drive wheels powered • Leading and trailing trucks are sprung to prevent derailment • Windows with cello glass • Realistic pantographs • Manual lever for optional operation by overhead system or centre rail • Length over buffers about 10½ in. • Weight about 36 oz.

This master piece is a faithful reproduction of its internationally famous prototype which hauls heavy passenger and freight trains over the difficult Gotthard route in Switzerland. This model is of astonishing power and ranges among the most beautiful and characteristic Swiss locomotives.

Required transformer: 280 A

HO



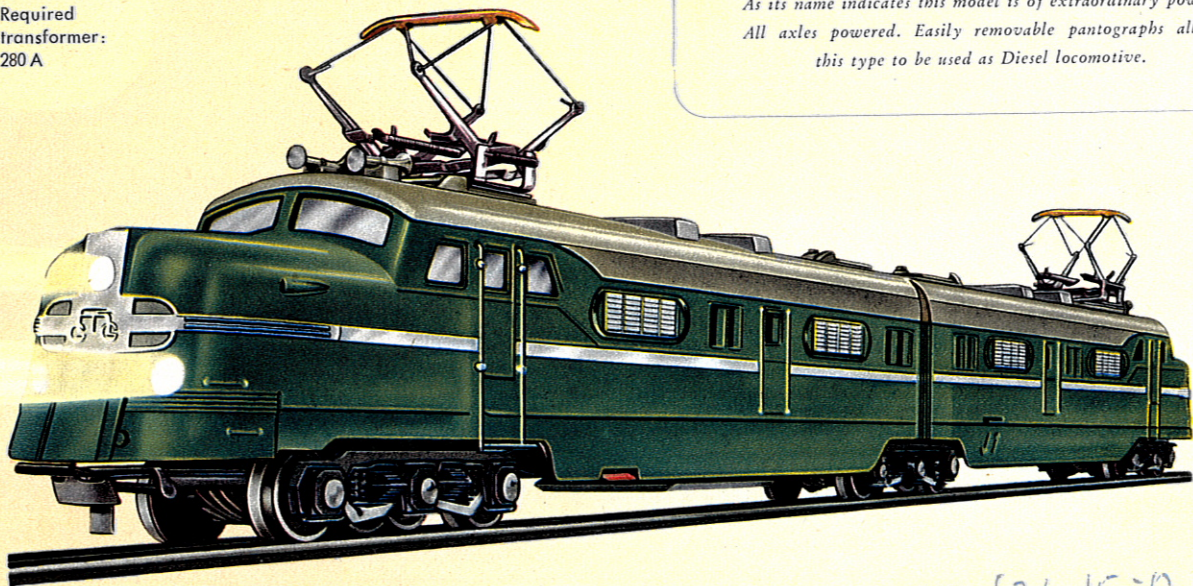


Required
transformer:
280 A

Heavy and powerful Twin Electric Locomotive

MARKLIN

*As its name indicates this model is of extraordinary power.
All axles powered. Easily removable pantographs allow
this type to be used as Diesel locomotive.*

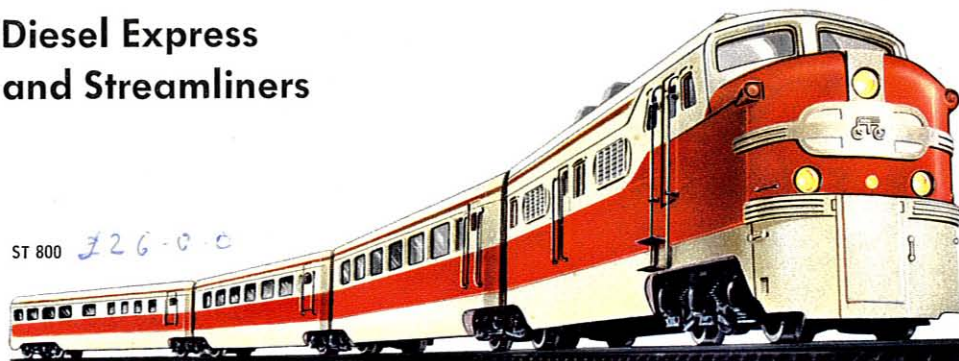


DL 800

221-15-0

Twin Electric Locomotive • Green • Especially powerful motor driving 6 axles • Remote control for reversing • Additional lever for manual operation • 3 electric headlights on each end changing automatically according to the direction of travel • Optional operation from third rail or overhead wire • Solid die-cast body with much detail • The pantographs are sent together with the machine, but not fixed to it • Immense power and high speed • Length 17 in. • Weight about 42 oz.

Diesel Express and Streamliners



ST 800 £26-0-0

Diesel Streamliner • 3 car Set • Available in red, green, or blue with ivory • 4 trucks, central sections connected by Jacobs trucks • Remote control for reversing • Additional lever for manual reversing • 3 white headlights, 2 red taillights • Manual lever for optional operation from overhead wire or third rail • Modern streamlined form • Especially powerful motor • High speed • No derailment • Windows with cello glass • Removable pantographs are furnished with this model • Length of train about 22,5 in. • Weight about 48 oz.

ST 800 MT £3-3-0
Extra Coach (Length 7 1/4 in.)

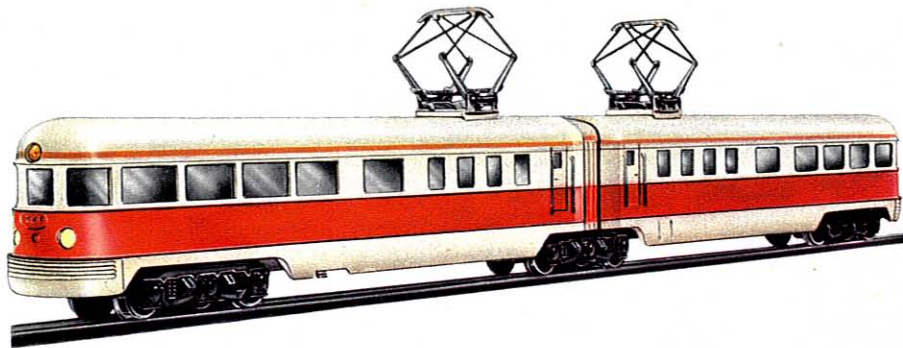


The 3 car streamliner can easily be lengthened by one or two additional coaches • Through an ingenious coupling both the electrical and mechanical connections are made simultaneously • Available in the same colors as the Diesel Streamliner • When ordering please specify color.

Required transformer: 280 A

DT 800 £15-0-0

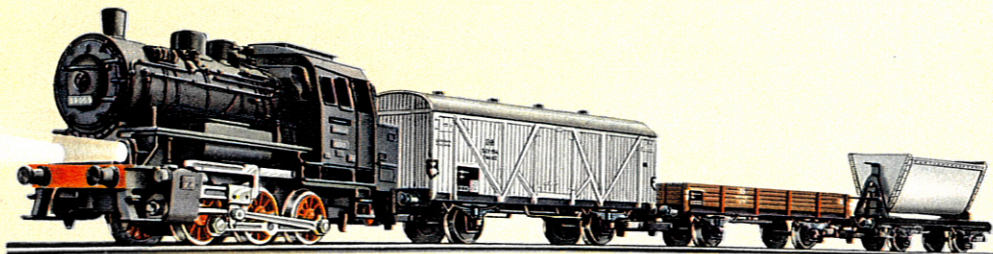
Twin Electric Express Car consisting of two parts • Red with ivory • Jacobs truck in the middle • Remote control for reversing with additional manual lever • One red and two white lights at each end, which change automatically according to the direction of travel • Neoprene tires on two wheels of center truck • Optional operation from overhead wire or third rail • Powerful motor driving wheels of center truck • Interior illumination • Windows with cello glass • Length 16 1/2 in. • Weight 37 oz.



HO
MÄRKLIN

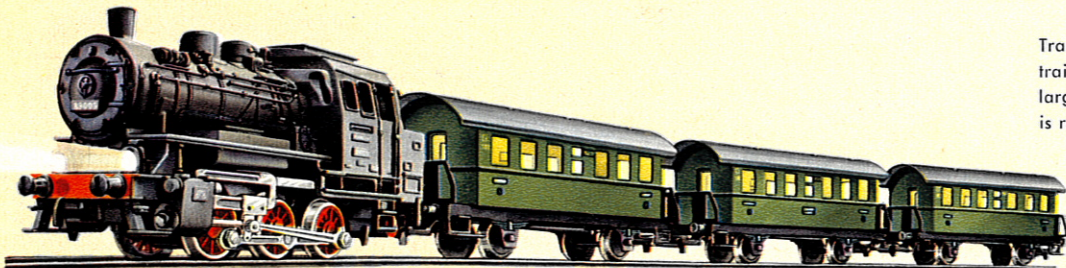
Popular Priced New Sets

In spite of their low prices, these sets consist of the finest models among our new items for this year. The combinations present such a great value that it has now become possible for anyone to become the owner of a new MÄRKLIN layout at very small expense.



CM 805/3

Freight Train without transformer, consisting of locomotive CM 800, 3 freight cars • Length of train 17 in. •
Track layout: 12 curved track sections B 3600 A, 2 straight track sections B 3600 D, including terminal section.



CM 827/3

Local Passenger Train without transformer, consisting of locomotive CM 800, 3 local coaches 327/1 • Length of train 19 in. •
Track layout: 12 curved track sections B 3600 A, 2 straight track sections B 3600 D, including terminal section.

Transformer 278 A is required to operate the trains shown on the pages 14 and 15 • For larger layouts, however, transformer 280 A is recommended.

Train Sets with Oval of Track less transformer

MARKLIN

HO

CE 829/3

Local Passenger Train (less transformer) consisting of locomotive CE 800, 3 cars 329 series, length of train 22 in. • Track layout: 12 curved track sections B 3600 A, 2 straight track sections B 3600 D, including terminal section • Booklet.



CE 807/3

Freight Train (less transformer) consisting of locomotive CE 800, 3 plastic freight cars • Length of train 17 in. • Track layout: 12 curved track sections B 3600 A, 2 straight track sections B 3600 D, including terminal section • Booklet.



RM 829/4

Local Passenger Train (less transformer) consisting of locomotive RM 800 with tender, 3 four-wheel coaches 329/1 and baggage car 329/4 • Length of train 32 in. • Track layout: 12 curved track sections B 3600 A, 6 straight track sections B 3600 D, including terminal section • Also leaflet.



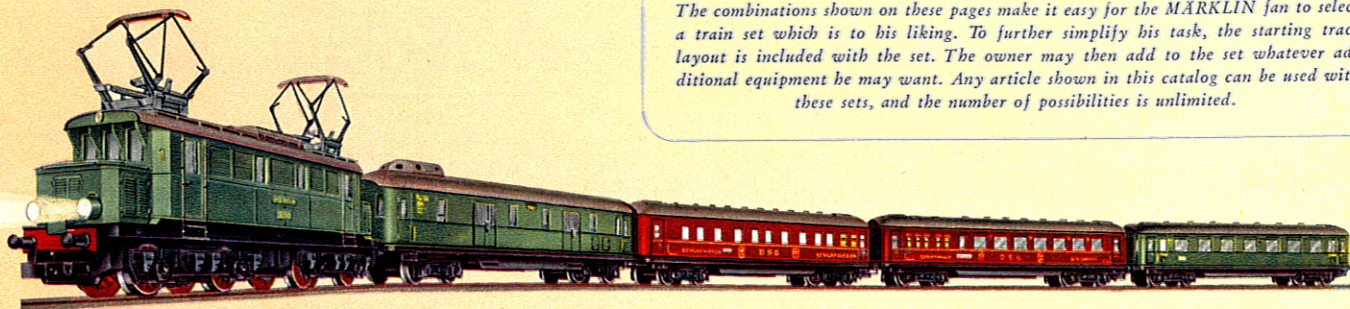
Local Passenger Train (less transformer) consisting of locomotive RSM 800, 3 four-wheel coaches 329/1 and baggage car 329/4 • Length of train 29 in. • Track layout: 12 curved track sections B 3600 A and 6 straight track sections B 3600 D, including terminal section • Booklet.

RSM 829/4

Other Complete Train Sets

MARKLIN

The combinations shown on these pages make it easy for the MARKLIN fan to select a train set which is to his liking. To further simplify his task, the starting track layout is included with the set. The owner may then add to the set whatever additional equipment he may want. Any article shown in this catalog can be used with these sets, and the number of possibilities is unlimited.



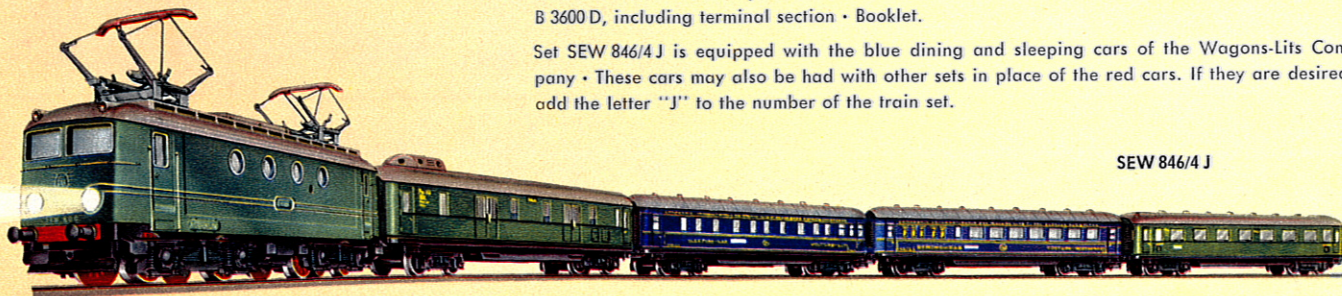
SE 846/4

Express Train (less transformer) consisting of locomotive SE 800, baggage car 346/4, coach 346/1, dining car 346/2, and sleeping car 346/3 • Length of train 42 in. • Track layout: 12 curved track sections B 3600 A, and 6 straight track sections B 3600 D, including terminal section • Booklet.

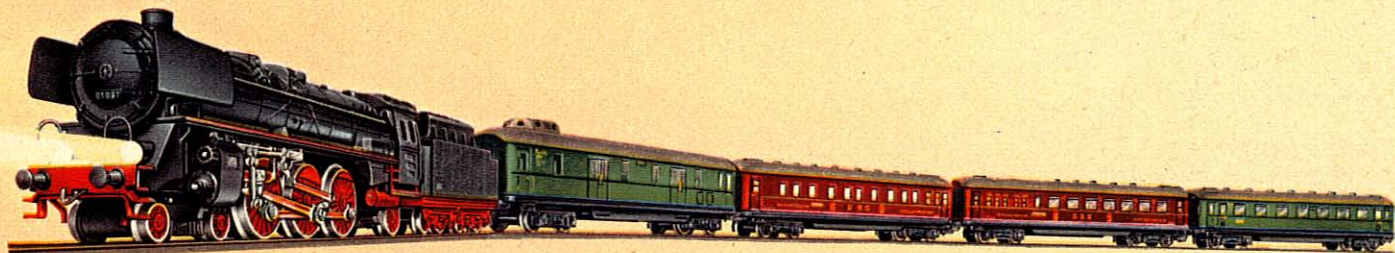
Express Train, as per Western European Prototypes (less transformer), consisting of locomotive SEW 800, baggage car 346/4, Coach 346/1 • Dining car 346/2 J, and sleeping car 346/3 J • Length of train 42 in. • Track layout: 12 curved track sections B 3600 A and 10 straight track sections B 3600 D, including terminal section • Booklet.

Set SEW 846/4 J is equipped with the blue dining and sleeping cars of the Wagons-Lits Company • These cars may also be had with other sets in place of the red cars. If they are desired, add the letter "J" to the number of the train set.

SEW 846/4 J



Complete ready-to-run Train Systems with Oval of Track and Siding, less Transformer

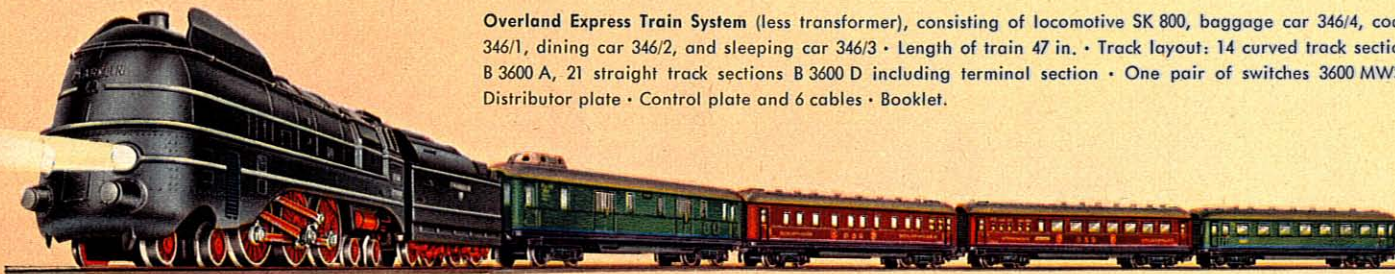


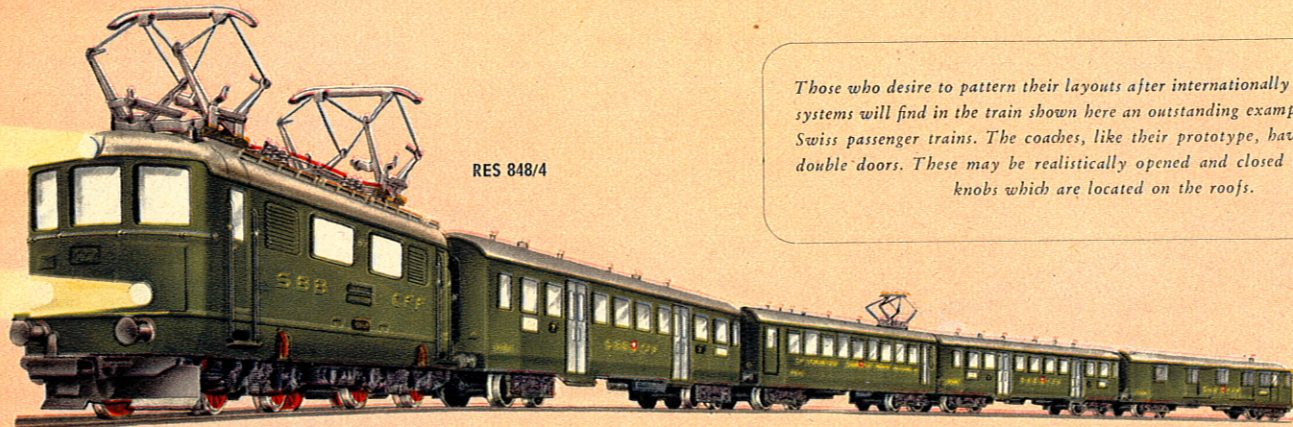
F 846/4

Express Train System (less transformer), consisting of locomotive F 800, baggage car 346/4, 2nd class coach 346/1, dining car DSG 346/2, and sleeping car DSG 346/3 • Length of train 47 in. • Track layout: 14 curved track sections B 3600 A, 21 straight track sections B 3600 D including terminal section • One pair of switches 3600 MWS, Distributor plate • Control plate • 6 cables • Booklet.

SK 846/4

Overland Express Train System (less transformer), consisting of locomotive SK 800, baggage car 346/4, coach 346/1, dining car 346/2, and sleeping car 346/3 • Length of train 47 in. • Track layout: 14 curved track sections B 3600 A, 21 straight track sections B 3600 D including terminal section • One pair of switches 3600 MWS • Distributor plate • Control plate and 6 cables • Booklet.





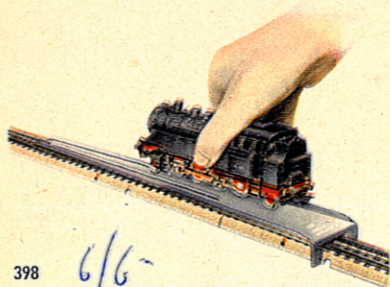
RES 848/4

Those who desire to pattern their layouts after internationally famous foreign systems will find in the train shown here an outstanding example of the latest Swiss passenger trains. The coaches, like their prototype, have operating double doors. These may be realistically opened and closed by turning the knobs which are located on the roofs.

Swiss Express Train (less transformer) consisting of locomotive RES 800 • Baggage car 348/4 • 2 coaches 348/1 with operating doors • Dining car 348/2 • Length of train about 42 in. • Track layout: 12 curved track sections B 3600 A and 10 straight track sections B 3600 D including terminal section • Booklet.

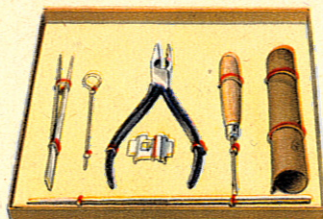
RES 848/3

Same train (less transformer) but with only 3 cars • Coach 348/1, baggage car 348/4 • Dining car 348/2 • Track layout: 12 curved track sections B 3600 A and 4 straight track sections B 3600 D including terminal section • Booklet.



398

Re-railer simplifies setting of locomotives on track • Length 12 in. • Height $\frac{3}{4}$ in.

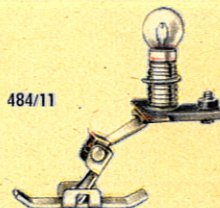


397/1 21-0-9

Set of Train Maintenance Tools consisting of: Special pliers, pincers, round file, screw driver, coupler gauge, oiler, emery cloth.



397/2 21-4-6
Set of Train Maintenance Tools consisting of: Soldering iron, half round file, rosin, solder, emery cloth.



484/11

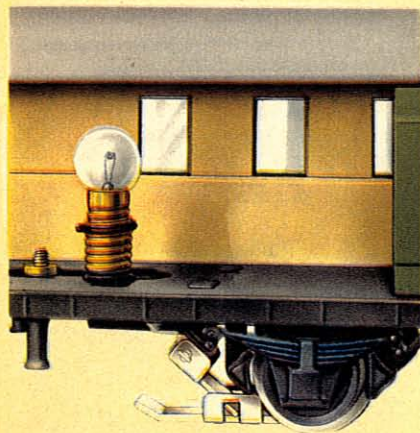
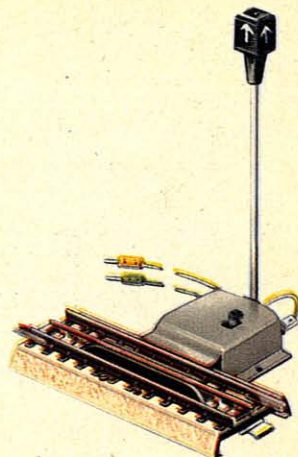
Interior Lighting for Passenger Cars 329 and 330 series, with bulb 499.

Remote Control Uncoupling



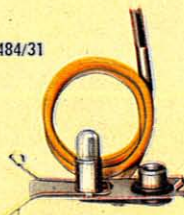
3600 EKS 21-18-6

Uncoupling Rail Section with signal which lights up when ramp is raised • Ramp uncouples cars which are stopped over it • Ramp located on both sides of third rail is raised by remote control • Cables for connection to control plate 476/4 • Length $4\frac{1}{4}$ in. • Height 4 in.



A local coach with coach light 484/11 installed.

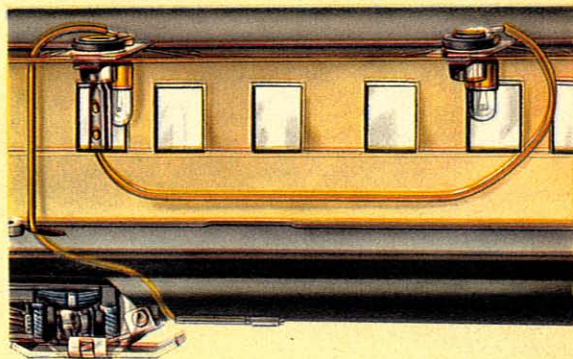
484/31



Interior Lighting for all 8-wheel Passenger Cars with bulb 485 • Several coach lights 484/31 may be connected to one pick-up shoe 484/21.



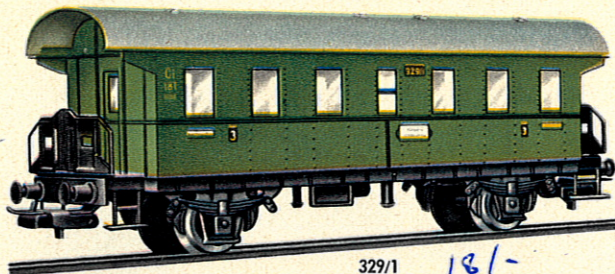
Pick-up Shoe for Coach Light 484/31



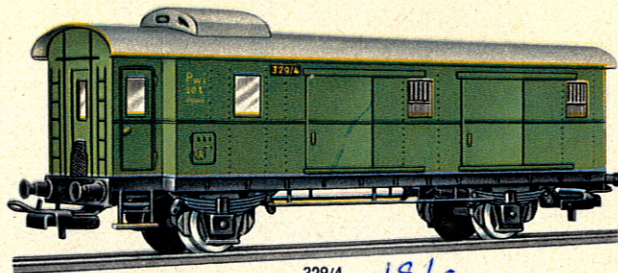
An express coach with shoe 484/21 and coach light 484/31 installed.

Local Coaches of finely lithographed pressed steel

MARKLIN

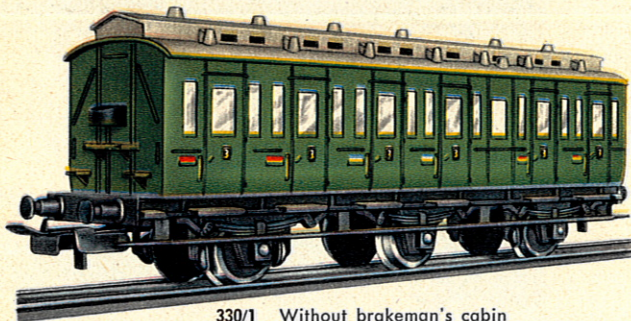


Coach with open platform and doors at the ends
329/1 Simplified construction • Illustrated on page 48

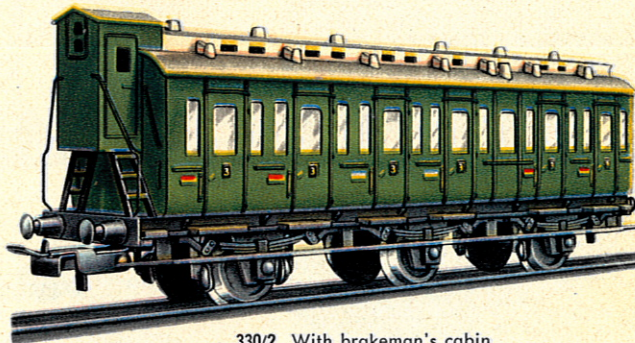


Baggage Car with sliding doors on each side and look-out dome for conductor.

Standard Coaches with extensive details • Windows with cellon glass •
Dark green • Grey roof • Many markings • Length over buffers 5 1/4 in.



330/1 Without brakeman's cabin



330/2 With brakeman's cabin

Compartment Coaches, 6 wheels, walls divided into 6 compartments, dark green, grey roof, many markings • Length over buffers 5 1/4 in.

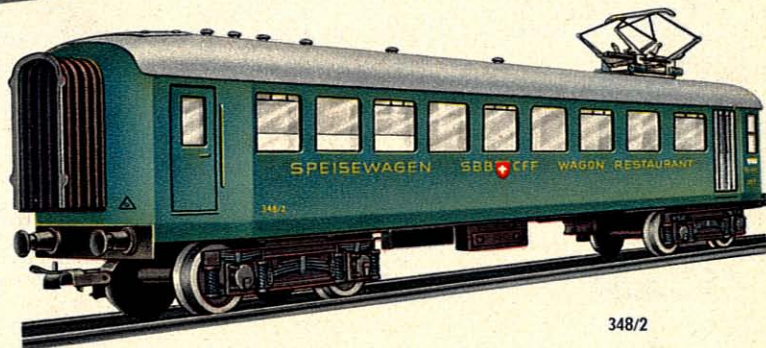
Stainless Steel Passenger Cars of the Swiss Federal Railways

(All-metal Construction)



348/1 £2-5-0

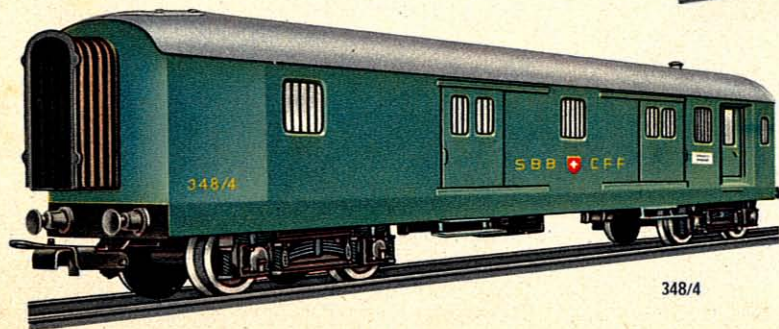
Commuter Coach • 8 wheels • Swiss Prototype (SBB) • Equalized trucks of new type • 2 double sliding doors on each side which open by twisting buttons on roof • Windows with cello glass • Fine reproduction of all details (Corridor connections, running boards, battery boxes) and markings • Dark green, silver-grey roof • Length over buffers 8½ in.



348/2

348/2 £2-5-0

Dining Car suitable for use with the above coach • Pantograph usable for interior illuminations • Ventilation window • Roof ventilation • Corridor connections • Frosted glass for kitchen • Battery boxes • Dark green, yellow markings, silvergrey roof • Length over buffers 8½ in.

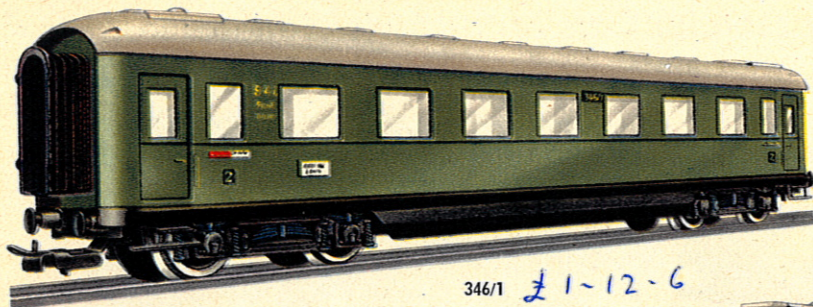


348/4

348/4 £2-5-0

Baggage Car for use with Commuter coach 348/1 • Sliding doors • Windows with bars • Many details • Dark green • Silver-grey roof • Yellow markings • Length over buffers 8½ in.

All-metal



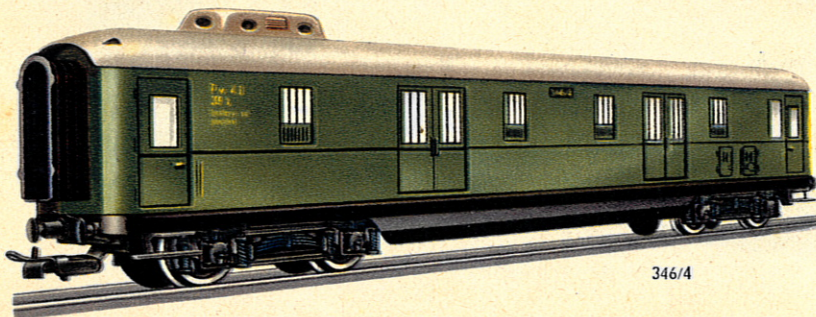
346/1 £1-12-6

Day Coach • 8 wheels • Removable roof • Windows with cello glass • Dark green, grey roof • Length over buffers 8¼ in.

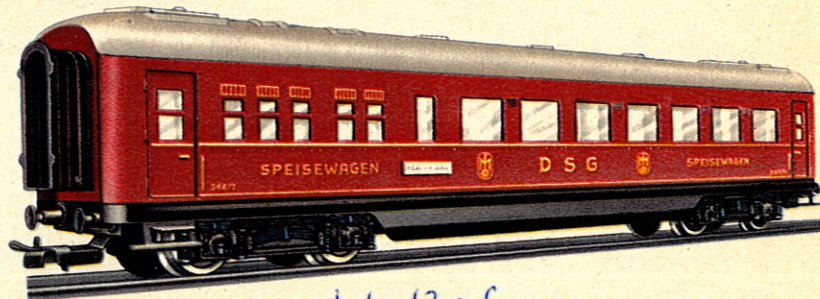


346/1 BS £3-11-0

Coach same as No 346/1, but with taillights, interior illumination, and pick-up shoe.



346/4



346/2 £1-12-6

Dining Car • 8 wheels • German DSG prototype • Wine-red, yellow markings • Length over buffers 8¼ in.

346/2 J £1-12-6

Dining car as above, but with International Sleeping Car Company markings • Blue, yellow markings

346/4 £1-18-6

Baggage Car • Barred windows • 2 double sliding doors on each side • Dark green • Length 8¼ in.

The cars shown here are models of 8-wheel coaches for overland traffic. The bodies are made of finely lithographed pressed steel.

Coaches

Equalized trucks. Easy operation through curves. Corridor connections. Removable roofs. Windows with cellon glass.



346/6 21-12-6

Coach as used on express trains of the German Federal Railways
• 8 wheels • Blue • Roof and markings silver • Length 8 1/4 in.



346/3 21-12-6

Sleeping Car • 8 wheels • Blue with International Sleeping Car Company markings in yellow • Length over buffers 8 1/4 in.

346/3 21-12-6

Sleeping Car • 8 wheels • Wine-red with DSG markings in yellow • Length over buffers 8 1/4 in.



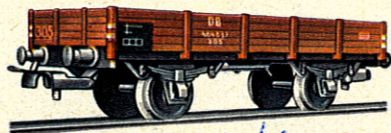
346/5

HO

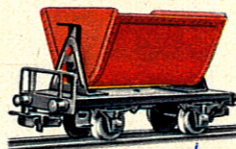
346/5 21-18-6

Railway Post Office Car • Barred windows • Stamped double doors • 8 sky-lights • Green with yellow markings • Post Office Sign • Length over buffers 8 1/4 in.

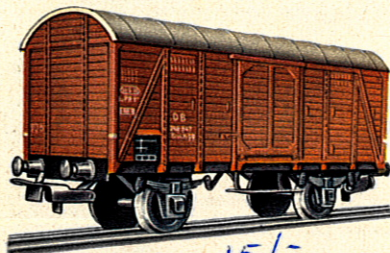
Inexpensive Freight Car Models with Plastic Bodies



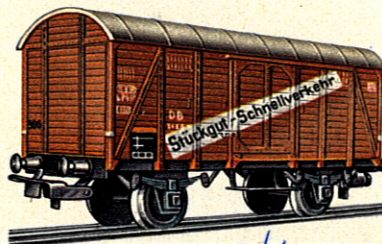
305 10/9-
Low sided Gondola • Brown • Length 4 in.



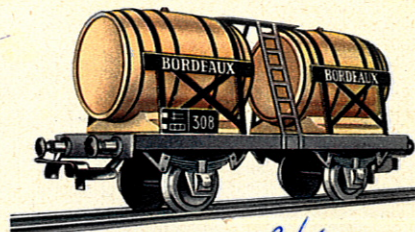
362 121-
Side Tipping Truck • Red • Tips
to either side • Locking device •
Length 3 1/2 in.



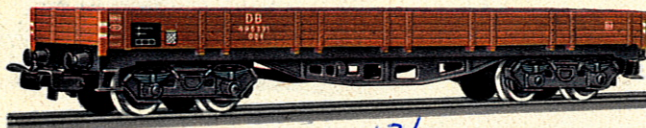
306/1 151-
Covered Goods Wagon
Brown • Length 4 in.



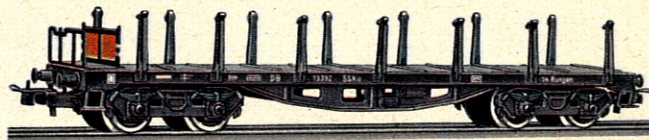
306/2 151/6-
Covered Goods Wagon • Brown • With
diagonal markings • Length 4 in.



308/1 181/6-
Wine Wagon with 2 barrels and ladder
on both sides • Barrels light-brown with
markings BORDEAUX • Length 4 in.

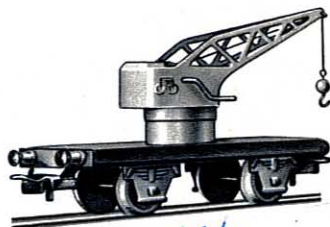


391 C 171-
Low Sided Gondola • 8 wheels • Brown • Length 7 in.



392 C 21-2-6
Flat Car • 8 wheels • Steel stakes • Length 7 in.

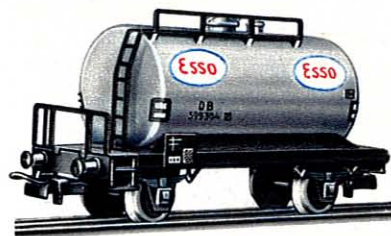
Chassis of finely enamelled steel • 4 wheels •
Body of thermoplastics • Die-cast wheels •
Length are measured over the buffers.



366

191-

Wrecker Truck • All-metal construction • Aluminium colored • Movable boom with crank • Length 3½ in.



304 E

Tank Wagon • Silver • ESSO • Walk with ladder and filling apparatus • Length 4 in.



307/1

141-

Refrigerator Wagon • White with red markings • Roof with imitation ventilator • Length 4 in.



307/2

151-

Banana Wagon with picture of plantation worker • Yellow • Blue markings • Length 4 in.



304 S

17/6-

Tank Wagon • Yellow • SHELL • Walk with ladder and filling apparatus • Length 4 in.



393 C

1-2-6

Covered Wagon • Brown • 8 wheels • White canvas cover • Length 7 in.

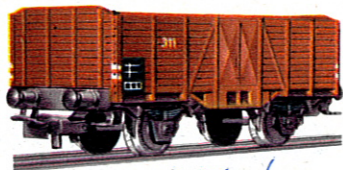


304 A

Tank Wagon • Silver • ARAL • Walk with ladder and filling apparatus • Length 4 in.

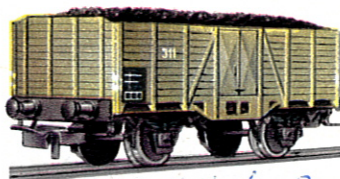
All-metal

The undercarriages of the cars are die-cast of zinc while the bodies are cast of light weight alloys. All details have been reproduced with painstaking care. All 4-wheel cars have dummy



311 *21-1-6*

Open Goods Truck • Brown or grey • Length 4 in.



311 K *21-6-0*

Open Goods Truck • Brown or grey • With plastic insert resembling coal • Length 4 in.

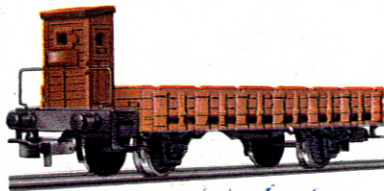
311 S *21-6-0*

Open Goods Truck • Brown or grey • Same as above, with insert resembling track ballast



315 *21-6-0*

Open Goods Truck with brakeman's cabin • Brown or grey • Length 4 in.



323 *21-6-0*

Low-sided Open Goods Truck • With brakeman's cabin • Brown • Length 4 3/4 in.

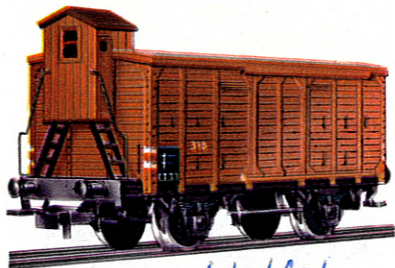


321 G *21-10-6*

Timber Truck with brakeman's cabin • Loaded with timber • Brown • Length 4 3/4 in.

321 *21-8-0*

Timber Truck, as above, without timber



316 *21-10-6*

Closed Goods Wagon with brakeman's cabin • Brown • Length 4 in.



322 *21-10-6*

Covered Wagon • With brakeman's cabin • Brown, white canvas • Length 4 3/4 in.



320 *21-10-6*

Closed Goods Wagon with brakeman's cabin and arched roof • Brown • Length 4 3/4 in.

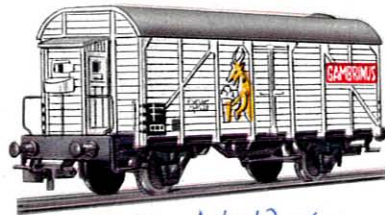
Construction

brake shoes. All cars have couplers which couple automatically when two cars meet; they can be uncoupled by remote control on the uncoupling section 3600 EKS.



310 21-10-6

Goods Brake Van • Green • One side with open, the other with closed door • Length 3 3/4 in.



325 21-12-6

Beer Wagon • With brakeman's cabin • White • Length 4 3/4 in.



311 H 21-6-0

Open Goods Truck • Brown or grey • Plastic insert of imitation wood • Length 4 in.



314 E 21-12-6

Petrol Truck • With brakeman's cabin • Light Grey • ESSO markings • Ladder and walk • Filling apparatus • Length 4 in.

314 G white GASOLIN markings

314 S yellow SHELL markings

314 BP green "BP" markings



326 21-12-6

Banana Wagon with brakeman's cabin • Yellow • Length 4 3/4 in.



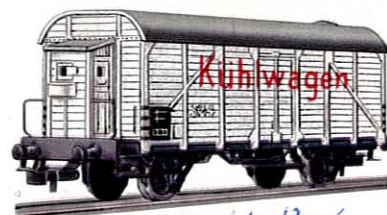
312 21-3-6

Closed Goods Wagon without brakeman's cabin • Brown • Length 4 in.



320 S 22-7-6

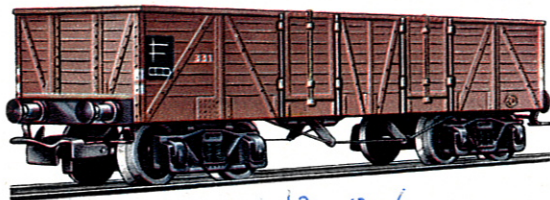
Closed Goods Wagon with brakeman's cabin and arched roof • 2 electric tail-lights and pick-up shoe for illumination • Length 4 3/4 in.



324 21-12-6

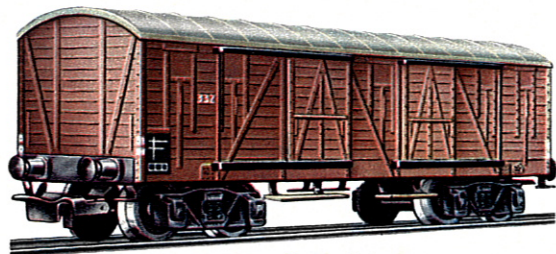
Refrigerator Van with brakeman's cabin • White • Length 4 3/4 in.

Super-Model Freight Cars • Die-cast of unbreakable light weight alloys



331 22-0-6

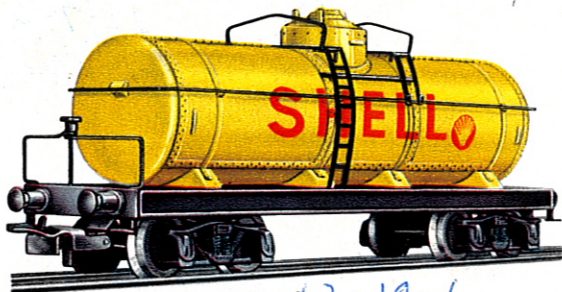
Gondola • Brown • 8 wheels • Length 5 $\frac{1}{4}$ in.



332 22-14-0

Box Car • Brown • 8 wheels • Operating sliding doors • Length 5 $\frac{1}{4}$ in.

*Smooth running • Trucks with imitated springs •
All details carefully reproduced*

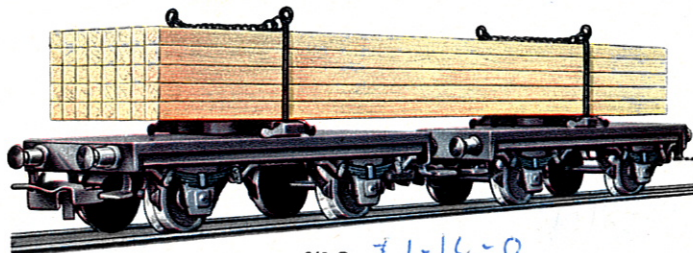


334 S 22-19-6

Tank Car • 8 wheels • Yellow • "SHELL" markings • Brake wheel • Hand rails • Ladder and walk • Filling apparatus • Length 5 $\frac{1}{4}$ in.

334 E

Tank Car as above • Light grey, "ESSO" markings



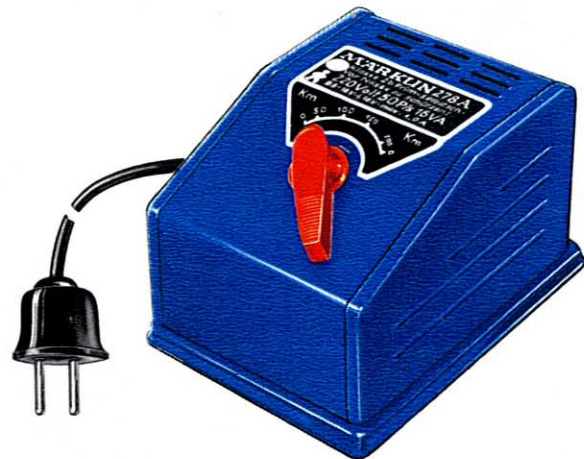
361 G 21-14-0

Lumber Truck • Loaded • Black • In Pairs • Length 7 $\frac{1}{2}$ in.

The Efficient **MARKLIN** Transformers

The transformers shown here are built according to the latest safety regulations. They have an output of only 8 to 25 volts. There is a speedometer and a knob which is used to regulate both the speed and direction of travel. A thermostatic cut-out prevents any damage in cases of short circuit or overload. The cables of transformers sold in the United States and Canada are equipped with American plugs.

Transformers may be connected
only to AC outlets



Sockets on the
reverse side of
the transformer

278 A *±2-14-0*

Transformer with perfect reverse (110, 125, 150, or 220 V.) capacity 16 VA • Sockets for train (B), ground (0), accessories and lights (L) • Housing made of steel, finely enamelled • Weight about 3 lbs. • Size 5 x 4 x 3 in. • (When ordering, please specify voltage)



Sockets on the
reverse side of
the transformer

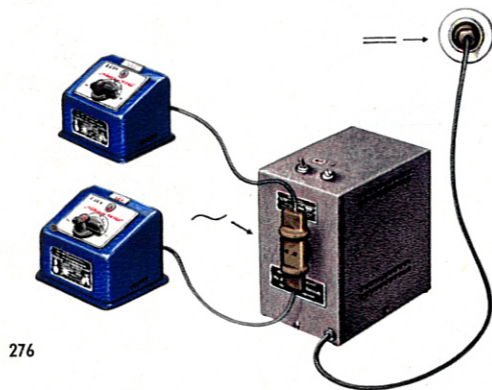
280 A *±5-17-0*

Transformer with perfect reverse (110, 125, 150, or 220 V.) Capacity 30 VA • Sockets for the train (B), light and magnetic articles of new type (L), magnetic articles of former type (W), and 3 ground connections • Red control lamp • Housing made of pressed steel, finely enamelled • Weight about 5 lbs. • Size 6 x 5 x 4 in. • (When ordering please specify voltage)

For connection to direct current:

Inverter No. 276

If your house has direct current, an inverter No. 276 must be inserted between the house current and the transformer. The inverter changes the direct current to 220 Volts alternating current. The transformers connected to the inverter reduce the high tension of the inverter to the fully harmless voltage of 20 Volts. When ordering, please state the voltage of the house current (DC). The inverter is to be connected to (110 or 220 Volts). The inverters are especially suited for MÄRKLIN transformers. We cannot take any guaranty for smooth operation if other transformers than ours are used.



276

The inverter whose capacity is 100 VA, is suitable for the operation of several trains since 2 transformers 280 A or 3 to 4 of the smaller transformer 278 can be attached. For this purpose the three-way plug 3494 K should be used. MÄRKLIN transformers for 0 gauge can also be attached.

Some popular track layouts for H0 gauge

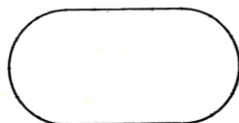


Figure B 3600/602 Oval
Size 59 x 30 in. •
Track sections 11 A, 1 AA, 8 D



Figure B 3600/606 Large Eight
Size 82 x 30 in. • Track sections 19 A,
1 AA, 4 A $\frac{1}{2}$, 6 D, 1 K

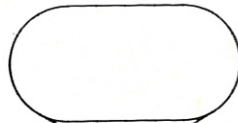


Figure B 3600/605
Oval with Siding
Size 59 x 34 in. • Track sections 11 A, 1 AA, 10 D,
1 D $\frac{1}{4}$, 1 pair of switches W

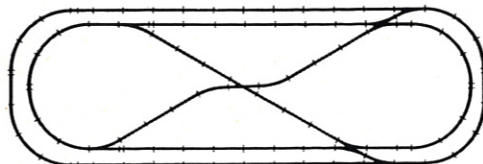


Figure B 3600/611 Double Track oval with
double reverse loop • Size 116 x 40 in. • Track
sections 25 A, 1 AA, 50 D, 4 D $\frac{1}{2}$, 2 D $\frac{1}{4}$,
2 pairs of switches MWS, 2 DKWS, 1 K



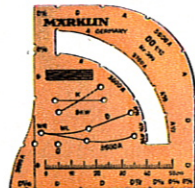
763

Track plans are contained in
booklet No. 763 "Track Plans H0
gauge" • 16 pages • Size 8 $\frac{1}{2}$ x 11 $\frac{1}{2}$
in. • Published in German only.



399

Booklet "The Electric Miniature Rail-
way H0 gauge", a richly illustrated
guide through the field of Model
Railroading, 80 pages, sizes 5 $\frac{7}{8}$ x 8 $\frac{1}{2}$
in. • Published in German only.



399

Stencil of transparent
lucite for designing track
plans using standard
track sections 3600 •
(Scale 1:10)

Accessories for Remote Control and Lights

MÄRKLIN



470 *7/3-*
Distributor Plate • With 9 socket connections • Size 2 1/4 x 3 1/4 in.



476/4 *12/3-*
Control Plate with 8 socket connections • Suitable for operating 4 double solenoid accessories • The control buttons are so arranged that the positions of switches and signals can be seen on the control plate. A set of decals with numbers 1-48 is included.



433 G/12
16/9



Set of Number Plates • For marking of switches, signals, etc. Consists of 12 die-cast bases and a set of cardboard numbers (1-24) which can be cut out and inserted into the bases.



475/4 *18/1-*
Control Plate switch type • Used to switch lights on or off • Can also be used to momentarily interrupt power to sections of the track layout without the use of signals • 4 switches with 4 single pole socket connections • Length 3 1/4 in. • Width 1 1/2 in.



489/1
Cable, single pole, with 1 plug and 1 socket connection • Available in red, brown, black, blue, yellow, or green • Length 1 yard.

489/2
Cable, single pole, with 1 plug and 1 socket connection • Available in red, brown, black, blue, yellow, or green • Length 2 yards.

The MÄRKLIN wiring system uses the following color coded cables:

Red = Motive power (Transformer to center rail or overhead wire)

Brown = Ground (Transformer to roadbed or lights to transformer through roadbed)

Yellow = Power for lights and magnetic accessories

Blue = Interrupted ground (used on switches, signals, etc. to lead the current back through the control plate or contact track section) with red, green, or orange plugs

489 GP
32 foot Spool of Cable packed separately in all colors.



490 M *8*
Socket



490 S *8*
Plug



490 SQ *9*
Plug with cross socket



497/3 P *1/11-*
Pair of Brushes suitable for almost all H0 locomotives • The springs are required only for older types of locomotives.



490 Z *8*
Two-way Plug used to connect two sockets.



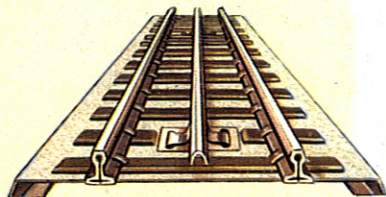
497/4 P *1/11-*
Pair of Brushes for locomotives CCS 800, DL 800, and ST 800.



490 Y *9*
Cross Plug used in a similar manner as 490 Z, but can also be used to connect two plugs

No.	Light Bulb
485	Bayonet type clear red/green <i>2/1-</i>
495	5 mm thread clear 6 mm globe red/green <i>3/11-</i>
499	5 mm thread clear 9 mm globe red/green or frosted

MARKLIN Standard Rail Sections with Center Rail



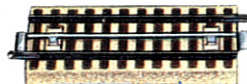
The B 3600 track sections are of all-metal construction with tubular rails. They are the standard track sections with third rail. A circle with an outside diameter of $2\frac{9}{16}$ inches consists of 12 curved sections B 3600 A $\frac{1}{4}$. The sections have imitation rock ballast and contact tongues which make short circuits impossible.



B 3600 D $\frac{1}{4}$ 2/11-
Straight Track Section, Length $7\frac{1}{4}$ in.



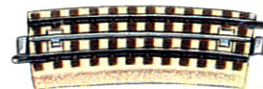
B 3600 A $\frac{1}{4}$ 2/11-
Curved Track Section, Length $7\frac{1}{4}$ in.



B 3600 D $\frac{1}{2}$ 2/7-
Straight Track Section
Length $3\frac{3}{4}$ in.



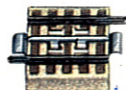
B 3600 D $\frac{1}{4}$ 2/7-
Straight Track Section
Length $1\frac{3}{4}$ in.



B 3600 A $\frac{1}{2}$ 2/7-
Curved Track Section
Length $3\frac{3}{4}$ in.



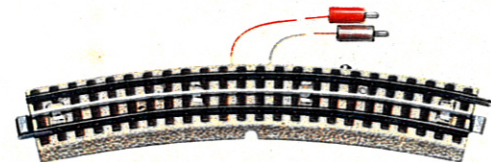
B 3600 A $\frac{1}{4}$ 2/7-
Curved Track Section
Length $1\frac{3}{4}$ in.



B 3600 D $\frac{3}{16}$ 2/7-
Straight Track Section
Length $1\frac{3}{16}$ in.



B 3600 D $\frac{1}{8}$ 2/7-
Straight Track Section
Length $\frac{7}{8}$ in.



B 3600 AA Terminal Track Section, curved
B 3600 DA Terminal Track Section, straight



3600 K Crossing, Length $7\frac{1}{2}$ in.



3600 BSD Contact Track Section, straight
3600 BSA Contact Track Section, curved

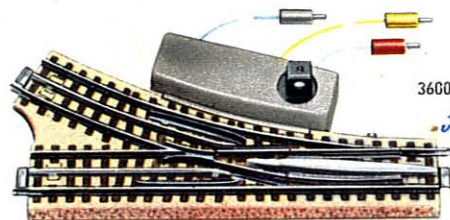
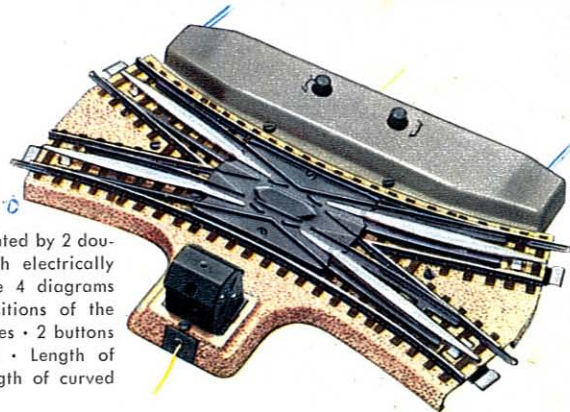
Electromagnetic Switches

with double solenoid switch machines for remote control

Electro-magnetic Switches 3600 MWS and Double Slip Switches 3600 DKWS are equipped with double solenoid switch machines. Electrically illuminated lights indicate the settings of the switches. All switches are spring switches. If a train happens to pass over a closed switch, it will not derail, and the switch will return to its original position after the train has passed over it.

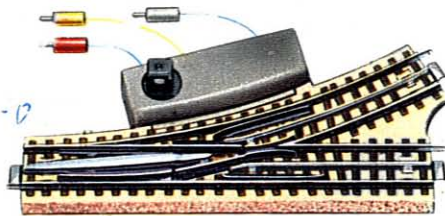
3600 DKWS 25-10-0

Double Slip Switch • Operated by 2 double solenoid magnets with electrically illuminated lantern whose 4 diagrams indicate the possible positions of the switch • 6 connecting cables • 2 buttons enable manual operation • Length of straight way 2 1/2 in. • Length of curved way 7 1/4 in.



3600 MWS

24-10-0



Pair of Electro-Magnetic Switches consisting of right hand and left hand switch, both with double solenoid switch machines, illuminated lantern, 3 connecting cables per switch • Length corresponds to that of track sections B 3600 D 1/1 and B 3600 A 1/1.



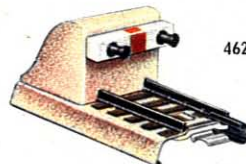
3600 W

22-17-6



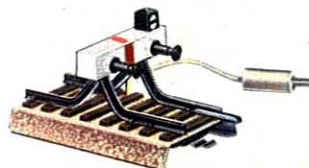
Pair of manually operated switches

Realistically made with frog, guard rails, etc. • Points are held to outside rails by soft springs • Unlighted lanterns • Sizes similar to 3600 MWS.



462 7/9-

Bumper • Stamped Steel • Imitation concrete • Mounted on track section B 3600 • Length 2 1/2 in.



461 B

12/5-

Bumper with illuminated yard block signal • Die-cast buffer support • Mounted on track section of the 3900 type, but also usable with B 3600 track.

The ideal Model Track without Centre Rail with Point Contacts



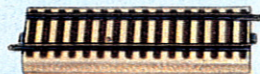
The new track sections combine the many advantages of the 3-rail system with the realistic appearance of 2-rail track. As in the case of prototype track, the ties are laid on the roadbed and are not part of it. There is therefore no electrical connection between the rails and the roadbed. A parallel circle enables the construction of realistic double track lines. The normal track circle consisting of 16 track sections 3900 A $\frac{1}{4}$ has an outside diameter including roadbed of 47 inches. The parallel circle made up of 16 track sections 3800 A $\frac{1}{4}$ has an outside diameter of 43 inches. If a double track line is constructed, therefore, the distance between track centers will be 2 inches and between roadbeds $\frac{3}{8}$ inches. All present locomotives and rolling stock can be used on the new track. This track can be used together with the present 3-rail track 3600 without any difficulty whatsoever.



3900 D $\frac{1}{4}$ 4/11-
Straight Track Section • 9 in. long



3900 DE
Straight Complementary Section • 4 $\frac{5}{8}$ in. long
Complementary section for switches and crossings in parallel circles



3900 D $\frac{1}{2}$ 4/-
Straight Track Section
4 $\frac{1}{2}$ in. long



3900 D $\frac{1}{4}$ 4/-
Straight Track Section
2 $\frac{1}{4}$ in. long



3900 D $\frac{1}{8}$ 3/10-
Straight Track Section
1 $\frac{1}{2}$ in. long



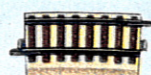
3900 D $\frac{1}{8}$ 3/10
Straight Track Section
1 $\frac{1}{8}$ in. long



3900 A $\frac{1}{4}$ 4/11
Curved Track Section • 9 in. long



3900 A $\frac{1}{2}$ 4/-
Curved Track Section
4 $\frac{1}{2}$ in. long



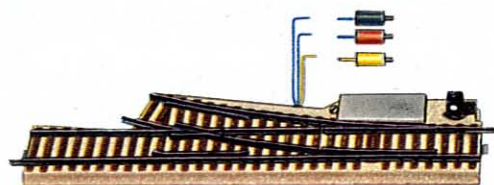
3900 A $\frac{1}{4}$ 4/-
Curved Track Section
2 $\frac{1}{4}$ in. long



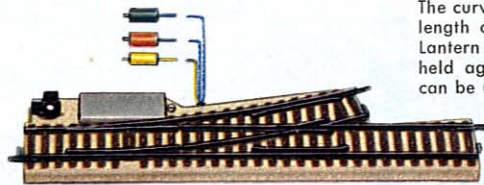
3900 BSD 9/9-
Straight Contact Track Section • 9 in. long



3900 BSA 9/9
Curved Contact Track Section • 9 in. long



3900 MWR *2-14-0*
Right Hand Switch • 9 in. long, remote controlled



3900 MWL *2-14-0*
Left Hand Switch • 9 in. long, remote controlled

The curved part of the switch is equal to $\frac{3}{4}$ the length of a curved track section 3900 A $\frac{1}{2}$. Lantern is lighted by bulb 485; points are held against rail by soft springs; switches can be used as spring switches.



3900 ZL *4/9-*
Supplementary track,
left-hand curved,
 $2\frac{1}{4}$ in. long



3900 ZR *4/9-*
Supplementary track,
right-hand curved,
 $2\frac{1}{4}$ in. long



3900 ZD *4/9-*
Supplementary track,
straight,
 $2\frac{1}{4}$ in. long



3900 K *1-11-6*
Crossing • $7\frac{1}{8}$ in. long

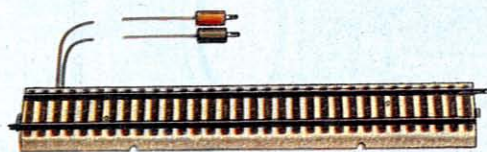
Supplementary tracks are used at crossings and the turn-out of switches where these are connected with straight or curved track sections and not with other crossings or turn-outs of switches.



Curved Terminal Section • 9 in. long



Detailed instructions about the system are supplied with the two terminal track sections



Straight Terminal Section • 9 in. long



3800 A $\frac{1}{2}$ *4/11-*
Curved Track Section • $8\frac{1}{2}$ in. long

Diameter 43 in.



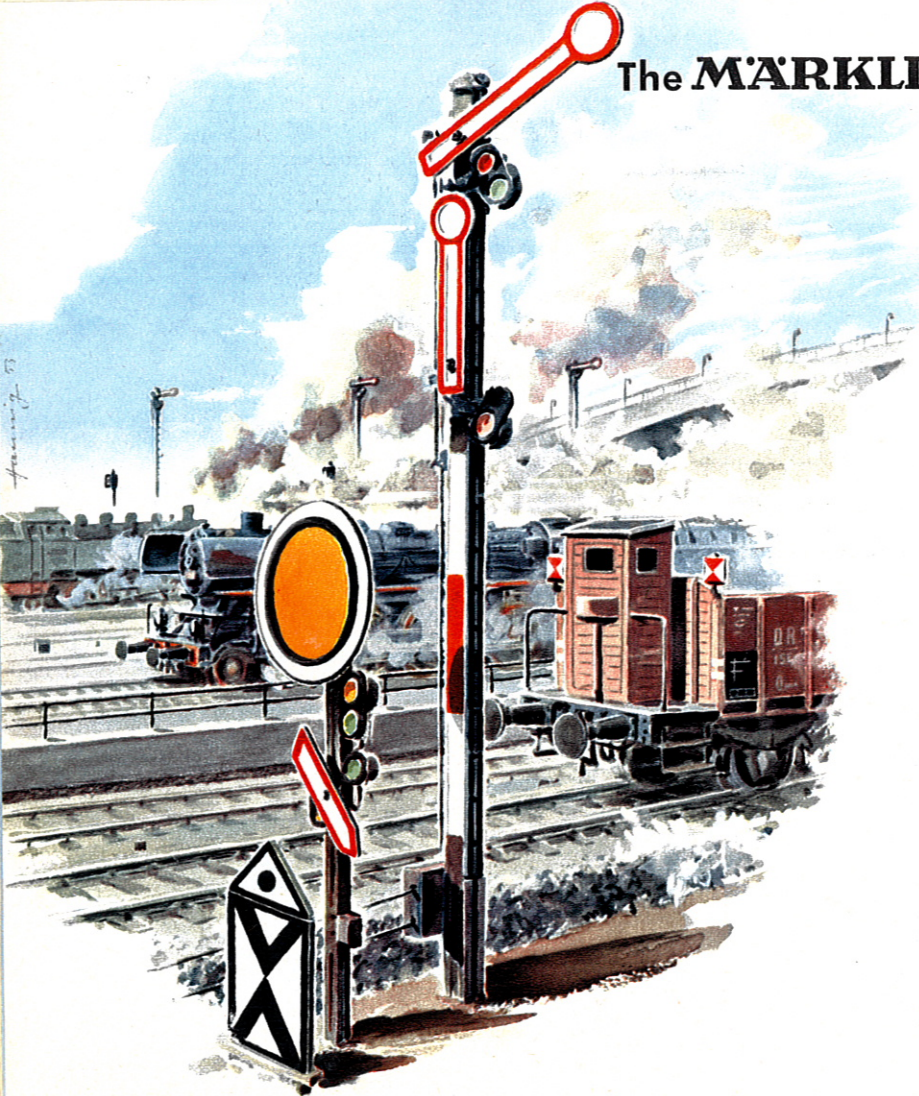
3800 A $\frac{1}{2}$ *4/1-*
Curved Track Section • $4\frac{1}{4}$ in. long



3800 BSA *10/1-*
Curved Contact Track Section • $8\frac{1}{2}$ in. long

The MARKLIN Signal Assortment, 446 Series

HO



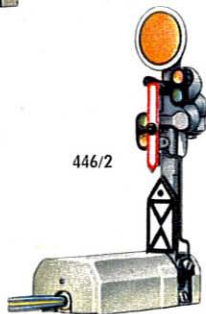
The highly detailed signals have die-cast masts. All details of prototype signals have been painstakingly reproduced. Special care has been taken to insure dependable operation and versatile utilization. The signals can be installed anywhere on the layout; on standard as well as on model track sections; on curves as well as on straight stretches; on the left as well as on the right of the track. The signals have base plates which are included so that signals may be clipped securely to the track. (See illustrations of Signal 446/41). In addition holes have been drilled in the floors of the solenoid boxes so that the signals may be screwed on to permanent layouts. All signals have a ground socket for the return of the illuminating current. This is required primarily when the signal is used with model track sections of the 3900 and 3800 series. All signals are illuminated with bulb 485. The solenoids are especially powerful and sturdy.

Signals without Train Stopping Mechanism



446/1

21-11-6
Warning Signal without arm • Double solenoid • Lights change from orange/orange to green/green • 2 blue cables for automatic operation, may be connected to control plate or set for simultaneous operation with home signal • The three plugs (red, green, and yellow) have cross sockets • Suitable for use with home signals 446/11 or 446/41 • Width 1 in., length 2½ in., height 3 in.



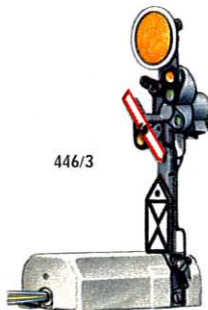
446/2

446/2

21-15-6
Warning Signal with movable arm • Disc fixed • Operation, lighting, and cables same as signal 446/1 • Light changes from orange/orange to orange/orange/green • Suitable for use with home signal 446/12 • Width 1 in., length 2½ in., height 3 in.

446/3

21-17-6
Warning Signal with movable arm and movable disc • Two double solenoid switch machines • Lights can be set as in signal 446/1 or 446/2 • 3 blue cables with red, green, and orange plugs with cross sockets • Suitable for use with home signal 446/13 • Width 1 in., length 2½ in., height 2½ in.



446/3



446/99

MÄRKLIN Signal Book, a detailed and well illustrated book of instructions for signals of the 446 series, in English language.

Signals 446/11, /12, /13, /21, and /41 are equipped with two automatic circuit breakers which, in the case of closed signals, interrupt the current for the overhead wire and center rail. Silver contact tongues are built into the signals, and these are made to withstand heavy loads of electricity. Supplied with these signals are circuit breakers 3600 Z. These are used to interrupt the current to the center rail and create the necessary dead section. The aforementioned signals are activated through double solenoid switch machines except for signal 446/13 which has a three-solenoid switch machine. The switch machines and signal lights receive current through a yellow cable with yellow plug with cross socket. The current is lead away from the signals through the blue cables with red and green plugs with cross sockets. The latter may be connected to a control plate for remote control operation or to a contact track section for fully automatic operation. The two red cables have contact tongues for connection to the center rail. Each signal has two sockets into which plugs from the signal masts may be inserted. This will interrupt the current to the overhead wire if the signal is closed. The masts and solenoids are so placed within each signal that two signals (Semaphore and yard block signal, semaphore and warning signal) may be placed close together as is done on prototype roads.

Detailed instructions about the installation, operation, and use of these signals are contained in the MÄRKLIN Signal Book 446/99.

Signals with Train Stopping Device for operation from central rail or catenary



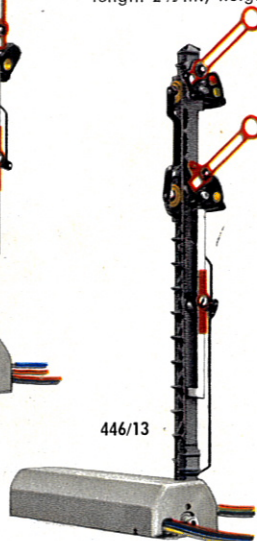
446/11

446/11 $\pm 1-15-0$
Semaphore with single arm • Light changes from red to green • Width 1 in., length $2\frac{1}{2}$ in., height 5 in.



446/12

446/12 $\pm 1-17-6$
Semaphore, double arm, two positions • Light changes from red to green/orange • Width 1 in., length $2\frac{1}{2}$ in., height 5 in.

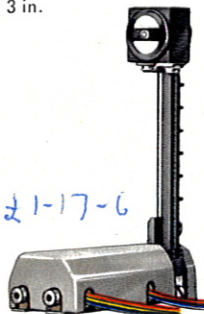


446/13

446/13 $\pm 2-10-6$
Semaphore, double arm, three positions • Operation, connection, and train stopping device similar to all other signals, but with third solenoid • Current is led back from third solenoid through additional blue cable with orange plug with cross socket • The three positions, thanks to the mechanical arrangement, are set by activating only one solenoid in each case • Light changes from red to green, or from red to green/orange • Width 1 in., length $2\frac{1}{2}$ in., height 5 in.



446/41 $\pm 1-17-6$
Color Light Signal • Light changes from red to green • Uses bulbs 485 red and 485 green • Additional lever permits manual operation • Width 1 in., length $2\frac{1}{2}$ in., height 3 in.

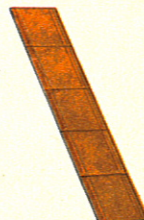


446/21 $\pm 1-17-6$

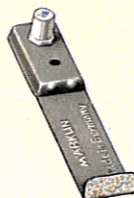
Yard Block Signal • Mast with movable disc at front and rear of signal • Width 1 in., length 3 in., height $3\frac{1}{2}$ in.



3600 AK $2/9-$
Center Rail Connecting Cable, length 30 in.



3600 Z 6
Circuit breaker, center rail, for insulating 5 places.



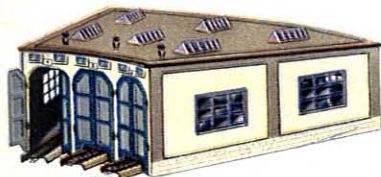
3600 J $1/1-$
Marker for indicating places on the layout where there is a circuit breaker.

Remote Controlled Turntable



410 NG £13-15-0

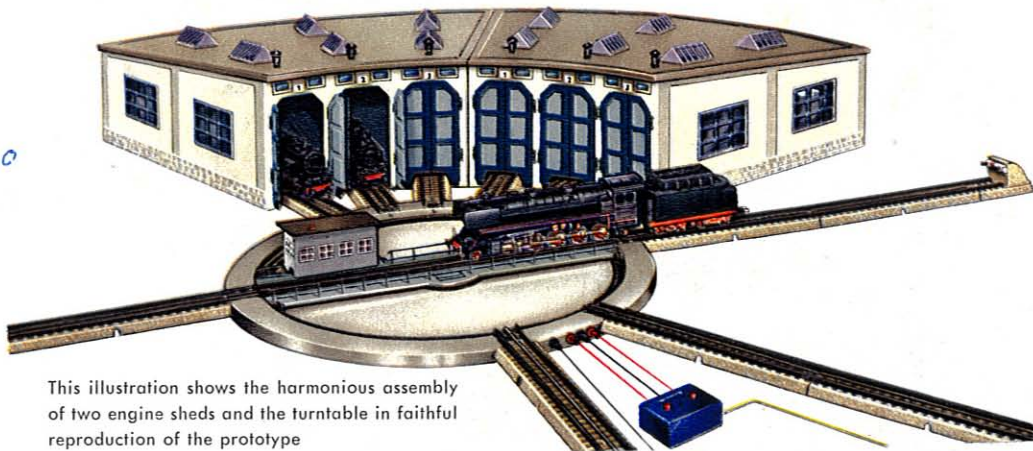
Turntable set, consisting of Turntable 410 N with an outside diameter of 14½ in. operating in both directions • Remote controlled, control plate 410/4, and cable • Suitable for use with two engine sheds 411 B or three engine sheds 412 • Table with guard rails and motor house • When table is turning, a red warning light flashes • Power in the tracks of the engine shed is available only when the turntable is lined up to connect with them.



411 B £8-7-6

Engine shed with 3 tracks, chimneys, sky lights, interior illumination, and 3 automatically closing doors • Colored • Size 18½ x 15 in. • Height 5½ in. • (Track sections not included)

Engine Shed



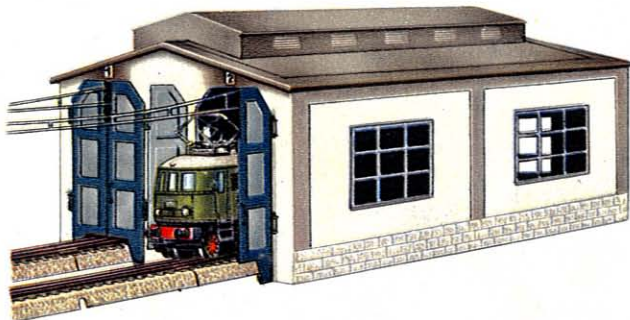
This illustration shows the harmonious assembly of two engine sheds and the turntable in faithful reproduction of the prototype

412 £3-8-6

Engine Shed with automatically closing doors for 2 tracks • With sky lights, cut-out windows (locomotive, tracks, and catenary not included) • Provision for interior lighting through 2 station lights 481 N • Size 13 x 7 x 6 in. • Distance between centre of rails 3¾ in.

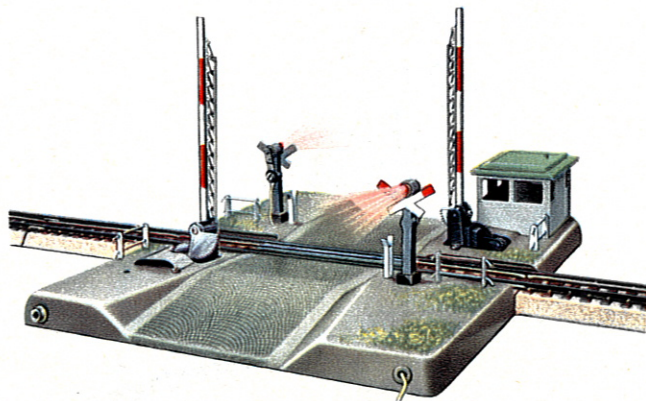
409 LG

Overhead Outfit for Engine Shed 412



Automatic Grade Crossings

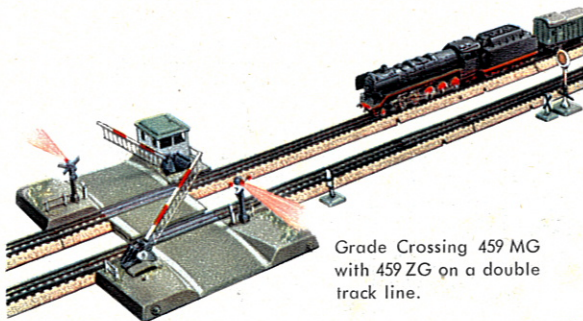
MARKLIN



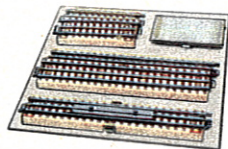
459 MG £7-5-0

Fully Automatic Grade Crossing • The set consists of 2 electromagnetically operated gates with watchman's cabin, warning crosses with lights, and a set of contact track sections. The grade crossing is operated automatically. • When a train approaches, the gates close and the warning lights light up. After the train has passed, the gates again open and the lights extinguish.

With the aid of the double track set 459 ZG, the automatic grade crossing can be used on 2 or more track lines.



Grade Crossing 459 MG with 459 ZG on a double track line.



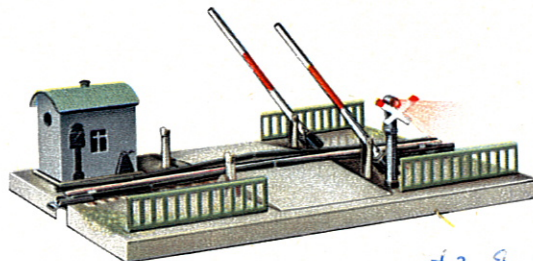
459 ZG £2-11-6

Additional track set for a second track consisting of one set of contact track sections and connecting road piece 459 Z which is placed between the tracks.

Contact Track Sections

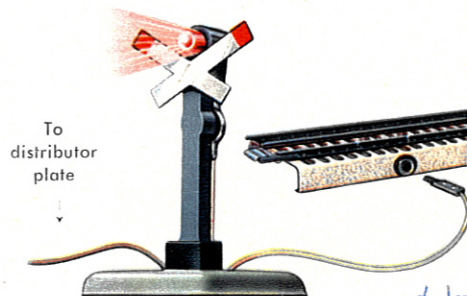
3600 KG straight

3600 KGR curved



457 B £2-8-6

Mechanically operating Grade Crossing for single track line. • Gates operated by the wheels of passing train. • Watchman's cabin and fence. • Warning cross illuminated by a red bulb, which is lighted when gates are closed. • Size $4\frac{1}{4}$ by $7\frac{1}{4}$ in.



450 G £1-1-0

Warning Cross with red blinker light to be placed before grade crossings. • Set consisting of warning cross with 2 cables and plugs, and of contact track section 3600 KS. • When one axle crosses the short center piece of the track, the red light blinks. • Height 2 in. • Base $\frac{3}{4}$ by 1 in. • Length of contact track section $3\frac{1}{4}$ in.

Everything by Remote Control



456 £ 6-17-6

Modern Switch Tower with built-in whistle siren blowing long and short toots • Remote control (20 Volt) • Height about 3 3/4 in. • Base plate 2 1/2 by 4 1/2 in.



438 £ 1-6-6

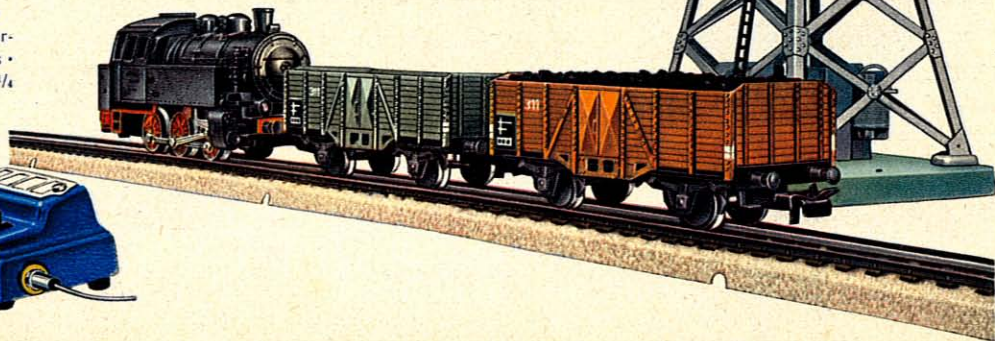
Bell with electromagnetic operation • Cable with metal plugs • Height 2 1/4 in. • Base plate 1 1/4 by 1 1/4 in.



Remote controlled Crane with Electromagnet • 2 motors for turning boom and raising or lowering the load • Remote controlled hook and magnet make it possible to transfer metal objects without help from the human hand • Boom movable by manual lever • Searchlight on

451 G £ 13-15-0

This welcome addition now puts some activity into the sidings where, after the switching manoeuvres are complete, it begins to load or unload the freight cars. It is entirely up to the operator whether the load is transferred into another railroad car, into or from a truck, or into the hold of a ship. A whole world of activity is now possible for the fan because he can operate his freight yard in exact imitation of the prototype by using uncoupling sections.

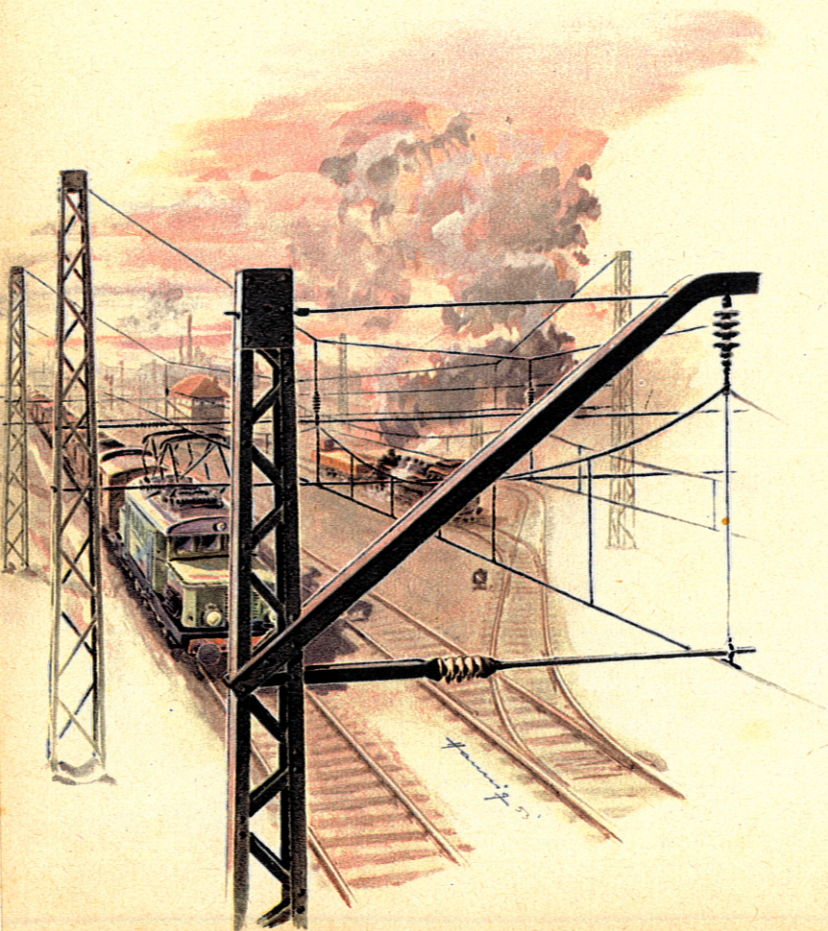


MARKLIN

boom and illumination inside cab, may be turned on or shut off by remote control • Finely enamelled • Height about 3 3/4 by 3 3/4 in. • With one yard of cable and 2 control plates for remote control (Track and rolling stock not included)

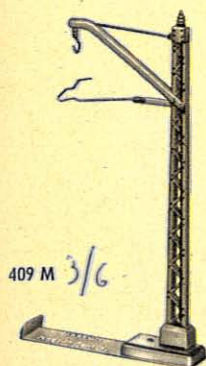
The New **MÄRKLIN** Overhead System

HO



The MÄRKLIN overhead system can be erected with equal ease over the main line, the yards, or stations with any number of parallel tracks. The masts together with the cross suspensions, catenary sections, and other accessories create a most realistic appearance. The masts are made of plastics and are extremely sturdy. The spring clips on the cross suspensions insure good conductivity of the current. The tower masts have been designed in such a manner that even the most extensive station yard can be equipped with overhead wire. The cross suspensions Q/28 and Q/39 can be inserted into the tower masts from 2 sides. Should a single track be located outside a tower mast, it can be equipped with overhead wire if the arm ZA is attached to the tower mast. Thanks to the sturdy connection between the masts and the cross suspensions and between the cross suspensions and the catenary sections, the entire overhead system becomes a solid unit. All catenary sections except 409 R and 409 P can be used with tower masts. The catenary sections are flexible and can be used over curved as well as straight track sections (with the exception of 409 RR).

Parts of the Overhead System

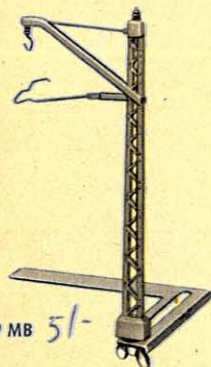
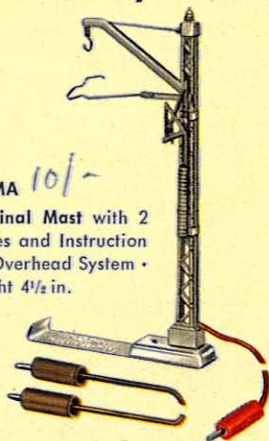


409 M 3/6

Mast • Height $4\frac{1}{2}$ in. •
Basic mast

409 MA 10/1-

Terminal Mast with 2
cables and Instruction
for Overhead System •
Height $4\frac{1}{2}$ in.

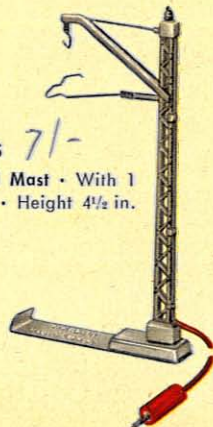


409 MB 5/1-

Bridge Mast •
Height $4\frac{1}{2}$ in.

409 MS 7/1-

Signal Mast • With 1
cable • Height $4\frac{1}{2}$ in.



409 RR



409 R



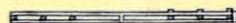
409 P



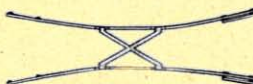
409 PH



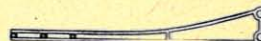
409 Z



409 V



409 K



409 PN



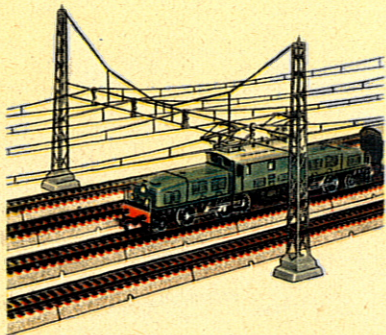
409 U



409 SP

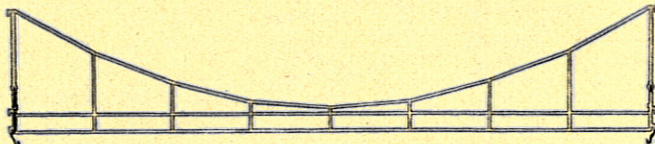
Nickel Plated Catenary Sections

- 1/3- 409 SP Tightening Device
- 1/4- 409 R Catenary Section, flexible $10\frac{3}{8}$ in. of length, basic section
- 1/6- 409 RR Catenary Section, same as 409 R, but length $14\frac{3}{8}$ in.
- 1/4- 409 P Catenary Section, flexible, with connections, $9\frac{7}{16}$ in.
- 1/1- 409 PH Catenary Section, flexible, socket connection, length $4\frac{1}{2}$ in.
- 1/1- 409 PN Catenary Section, plug connection, $4\frac{1}{2}$ in.
- 1/1- 409 V Catenary Circuit Breaker, flexible, with connection, length 4 in.
- 1/11/4- 409 U Catenary Circuit Breaker, flexible, plug connection, length 4 in.
- 1/1- 409 K Catenary Crossover for 3600 K and 3600 DKWS, with connections
- 1/1- 409 Z Catenary Connection to 407, plug connection, length 4 in.
- 1/8- 409 GS Overhead Outfit for Signals which are not within the range of the cross suspension masts, consisting of 2 Signal Masts 409 MS, 2 Catenary Circuit Breakers, and 2 Catenary Sections 409 PH suitable for all signals with train stopping device.



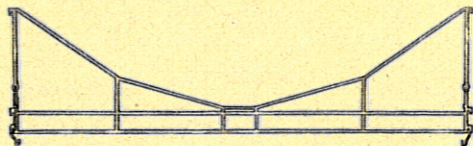
The tower mast is constructed of thermoplastics and is topped with a mast cap and insulator, height $6\frac{3}{4}$ in. Normally two masts are used to hold one cross suspension. On larger layouts, however, 3 masts can be used for 2 cross suspensions, 4 masts for 3 cross suspensions, etc.

Tower Masts and Cross Suspensions



409 Q/39

Cross Suspension, nickel plated, for insertion into the tower masts • Spans about 4 standard track sections (3600) or 6 model track sections (3900) • Width $16\frac{1}{4}$ in.



409 Q/28

Cross Suspension, nickel plated for insertion into the tower masts • Spans about 3 standard track sections (3600) or 4 model track sections (3900)



409 AK

Overhead Connection Cable • For connection of the signals to the overhead wire inside the yards or for conducting current to the overhead wire anywhere on the layout.



409 J

Catenary Insulation • Insulates the catenary sections from the cross suspensions • One piece is required per track and cross suspension.

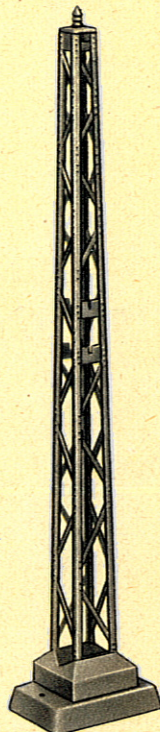


409 ZA

Arm • If a single track is located outside the tower mast, it can be equipped with catenary if arm ZA is attached to the tower mast.

409 BG

Set of Screws and Nuts consisting of 5 screws, 5 nuts, 5 washers • Usually the normal equipment is adequate for the erection of the overhead wire • On rare occasions, however, two catenary sections can be joined only with screws and nuts.



409 T

Tower Mast of thermoplastics • Height $6\frac{3}{4}$ in.

Realistic Bridge Construction

By using the different bridge piers it is possible to construct bridges of any height or length. The bridge piers fit into each other like parts of a construction set. Thus, by placing piers 467 P/6c and 467 P/30c one on top of the other, piers in any height in stages of $\frac{1}{4}$ in. can be constructed. Base plate 467 P/3c is an ideal foundation for the piers.



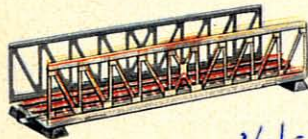
468 A

Curved Ramp Section • Ordinary radius
3600 • Grey • Length $7\frac{1}{4}$ in.



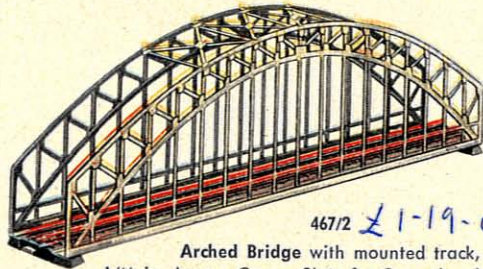
468 D

Straight Ramp Section
Grey • Length $7\frac{1}{4}$ in.



466

Girder Bridge to be combined with standing-
by arched bridge • Grey • Mounted track,
 $7\frac{1}{4}$ in. long • Slot for overhead mast 409 MB •
Height including base $1\frac{3}{4}$ in.



467/2

Arched Bridge with mounted track,
 $14\frac{1}{2}$ in. long • Grey • Slots for 2 overhead
masts 409 MB • Height including base $4\frac{3}{4}$ in.



465

Plate Girder Bridge • Grey • Mounted track, $7\frac{1}{4}$ in.
long • Slots for overhead mast 409 MB • Height
including base 1 in.



467 P/30c

Bridge Pier $1\frac{1}{2}$ in. high, of ther-
moplastics.



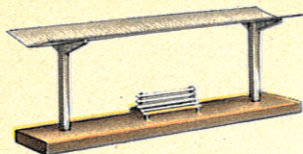
467 P/6c

Pier of $\frac{1}{4}$ in. height, especially
suited to raise height of bridge
piers which are constructed in
stages of $\frac{1}{4}$ in. • Of thermoplastics.

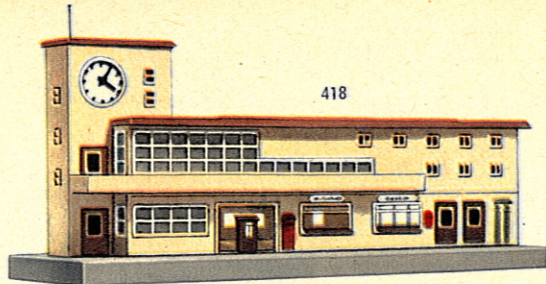


467 P/3c

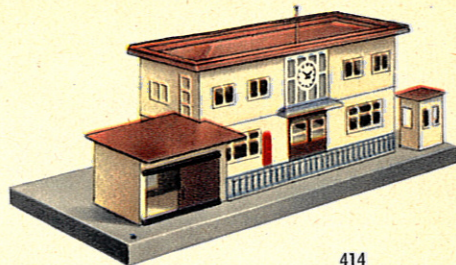
Base Plate to be used for foun-
dation • Green • Height $\frac{1}{8}$ in.,
of thermoplastics.



422
Platform with corrugated roof
and bench • Base 8 by $1\frac{3}{4}$ in. •
Height $3\frac{1}{8}$ in.

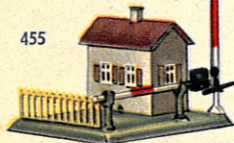


Station with tower and terrace • Cut-out windows • Clock and terrace
windows made of cello glass • Base 14 by $4\frac{3}{4}$ in. • Height $6\frac{1}{4}$ in.

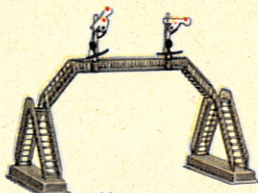


414
Station with freight shed and barrier • Cut-out
windows • Main window with cello glass and
clock • Shed with sliding door • Base $10\frac{1}{4}$ by
5 in. • Height $3\frac{3}{4}$ in.

455



Keeper's Hut with cut-out
windows • Operating signal
and gate • Base 4 by
 $3\frac{1}{4}$ in. • Height with signal
 $4\frac{1}{4}$ in.



444
Foot Bridge with 2 movable
semaphores • Width 8 in. •
Height 4 in., with signals 6 in.



452/1
Tunnel of finely pressed steel • Can
be placed over all straight and curved
track sections including those equip-
ped with overhead wire • Length
 $9\frac{1}{2}$ in., width $5\frac{1}{2}$ in., height 5 in.



481 N
Station Light with bulb 499 clear and cable •
Used for illumination of stations, sheds, etc.



432
Signal Board, for
use with warning
signal 435 •
Height 1 in.



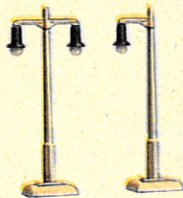
431
Signal Boards
Set of 3 • Height
of each $1\frac{1}{4}$ in.



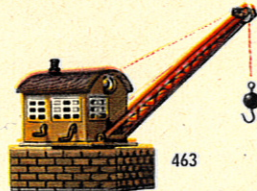
435
Warning Signal
with operating
lever •
Height $2\frac{1}{4}$ in.



440
Semaphores
with operating
lever •
Height $4\frac{1}{4}$ in.



Arc Lamps
Height 5 in.
448/2 2 bulbs
448/1 1 bulb
with bulbs 499, cables
and plugs



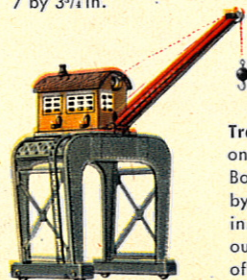
463
Revolving Crane • Cab turns
on base • Boom and hook
operated by crank • Base $2\frac{1}{4}$
by $2\frac{1}{4}$ by 1 in. • Length of
boom $5\frac{1}{4}$ in.



428
Freight Station with 2 sliding
doors • Height $3\frac{3}{4}$ in • Base
7 by $3\frac{1}{4}$ in.



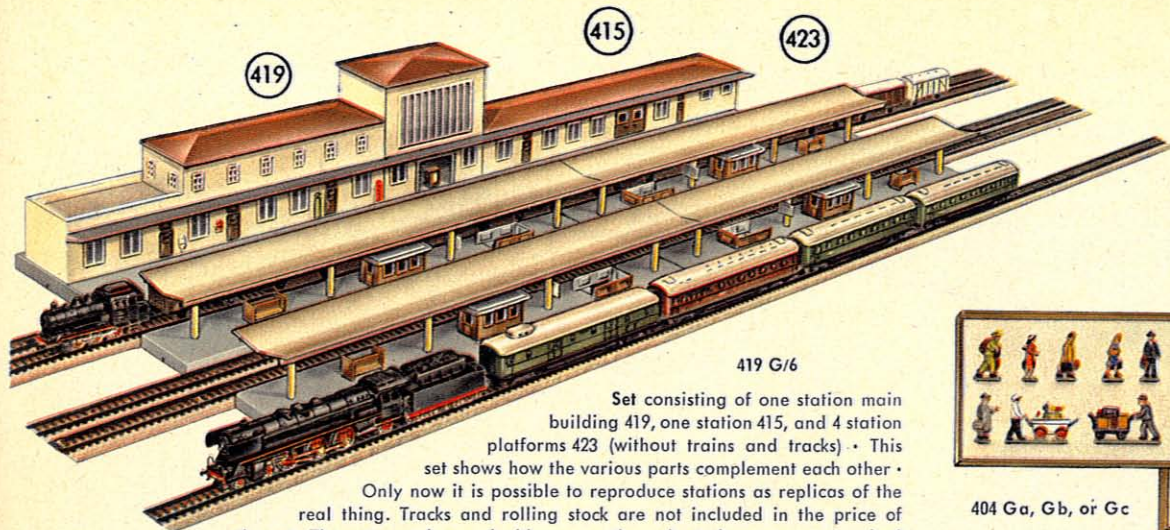
429
Loading Platform
with movable
crane • Base $5\frac{1}{2}$
by $3\frac{1}{4}$ in.



464
Travelling Crane • Travels
on rollers • Revolving cab •
Boom and hook operated
by crank • Base 4 by $3\frac{1}{2}$
in. • Overall height with-
out boom $6\frac{1}{4}$ in. • Length
of boom $5\frac{1}{4}$ in.

MARKLIN

The Modern Station Set



419 G/6

Set consisting of one station main building 419, one station 415, and 4 station platforms 423 (without trains and tracks). This set shows how the various parts complement each other.

Only now it is possible to reproduce stations as replicas of the real thing. Tracks and rolling stock are not included in the price of the set. The set may be used either as a through station or as a terminal station. It can be enlarged as desired. All parts of the set can also be used independently of each other. In order to create realism and life, sets 404 G are recommended. These sets contain pretty little figures of railroad personnel, passengers, etc.



419

Main Station Building with mezzanine and terrace roof • Cut-out windows with cello glass • Operating doors • Dummy clock • Removable roofs • Provision for interior illumination with light socket 481 N • Tastefully colored • Height 6 1/4 in. • Length 20 1/4 in. • Width 5 1/2 in.



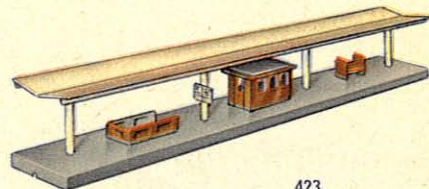
415

Station Building (street side) • May be used independently or as an extension to station 419 • Cut-out windows with cello glass • Operating doors • Provision for interior illumination with light socket 481 N • Height 3 1/4 in. • Base 17 1/4 by 5 1/2 in.



404 Ga, Gb, or Gc

Sets of Figures available in three different sets a and b = Travellers and railroad personnel, c = construction workers • 10 figures per carton • Figures about 3/4 in. high.

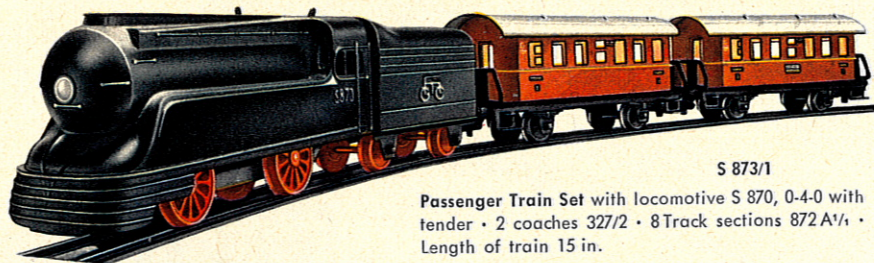


423

Station Platform with roof • Designed for use with stations 415 and 419, but may also be used independently • With waiting room, underpass with stairs, bulletin board, and bench • Length 20 1/4 in. • Width 3 1/4 in. • Height 3 1/4 in.



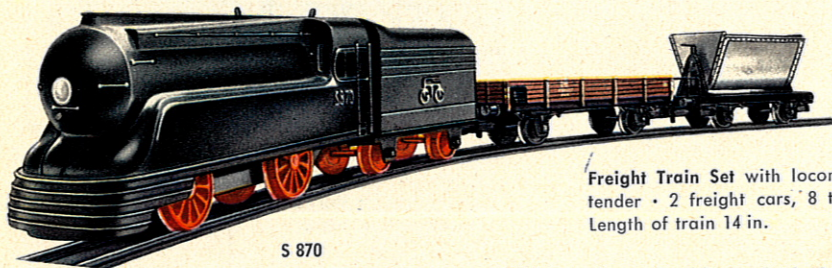
The New Miniature Mechanical Train in H0 Gauge



S 873/1

Passenger Train Set with locomotive S 870, 0-4-0 with tender • 2 coaches 327/2 • 8 Track sections 872 A $\frac{1}{4}$ • Length of train 15 in.

Mechanical trains have always been very popular. They are noted for their long running ability and pulling power. The locomotive and tender have plastic bodies and follow modern streamlined lines. The cars have the same couplers as are used with electric trains. The track sections are easily converted so that they can be used by electric locomotives.



S 873/2

Freight Train Set with locomotive S 870, 0-4-0 with tender • 2 freight cars, 8 track sections 872 A $\frac{1}{4}$ • Length of train 14 in.

327/1

Local Coach • 4 wheels • Green • Length 4 $\frac{1}{4}$ in.

327/2

Local Coach, same as 327/1, but red

S 870

Mechanical Locomotive • Dull black • Streamlined body • 0-4-0 • Streamlined tender • Plastic cab • Manual control for stop and go as well as forward and backward drive • Sturdy clockwork motor • Length including tender 7 $\frac{3}{4}$ in • Weight including tender about 6 oz.

Track Sections, diameter 24 in. • A circle consists of 8 sections 872 A $\frac{1}{4}$



872 A $\frac{1}{4}$
Curved Track Section, length 9 in.



872 D $\frac{1}{4}$
Straight Track Section, length 7 in.



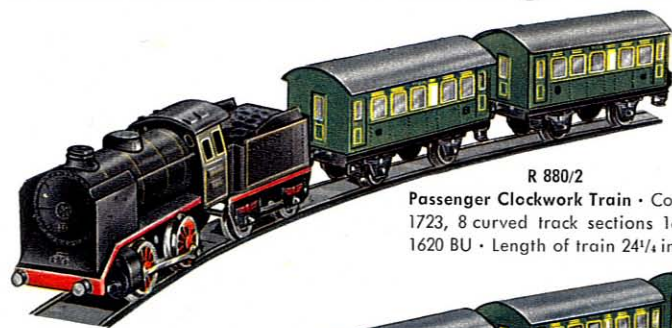
872 MDG

Set for converting straight track sections 872 D $\frac{1}{4}$ to electrical operation • Consists of 1 straight center rail, 2 contact tongues, 4 insulating plates

872 MAG

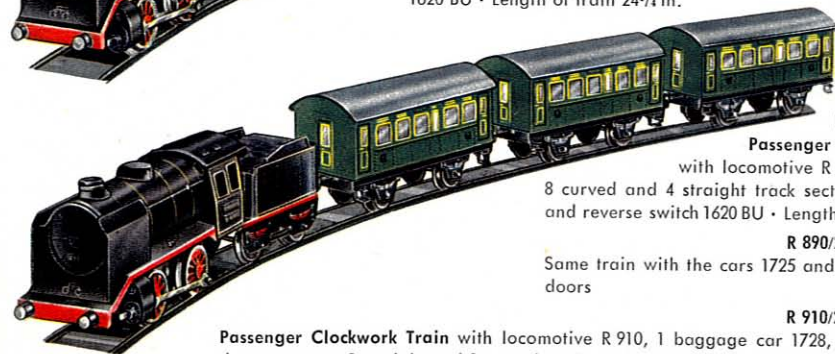
Set for converting curved track sections 872 A $\frac{1}{4}$ to electrical operation • Consists of 1 curved center rail, 2 contact tongues, 4 insulating plates

Mechanical Trains of the large O Gauge



R 880/2

Passenger Clockwork Train • Consists of locomotive R 880, 2 coaches 1723, 8 curved track sections 1620, and brake and reverse switch 1620 BU • Length of train 24 1/4 in.



R 890/3

Passenger Clockwork Train with locomotive R 890, 3 cars 1723, 8 curved and 4 straight track sections, and brake and reverse switch 1620 BU • Length of train 32 1/4 in.

R 890/25/3

Same train with the cars 1725 and 1726, operating doors

R 910/27/3

Passenger Clockwork Train with locomotive R 910, 1 baggage car 1728, 2 coaches 1727, doors to open, 3 straight and 8 curved track sections, 1 half straight track section, 1 brake and reversing section 1620 DAU • Length of train 37 1/4 in.

Those interested in further information about O gauge should ask their dealer for the special catalog O.

R 880

Locomotive with tender • Black • 0-4-0 • Solid clockwork • Runs forwards and backwards • With brake • Smoke deflectors • With rails and side rods • Length including tender 10 in.

R 890

Locomotive with tender • Dull black • May be operated either from the cab or automatically from the rail • Length with tender 11 in.

R 910

Locomotive with tender • Dull black • With especially powerful clockwork • Cylinders with valve gear • Reversing from cab or rail • Tender loaded with coal • Length including tender 12 1/2 in.

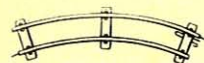


RV 890

Mechanical Locomotive •

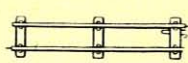
0-4-0 • Electric type • Goes forward and backward with manual reverse or automatically from track • With brake • Cut-out windows • Green • Length 7 1/2 in.

Track sections for Clockwork Trains • Diameter of circle: 30 in. • 8 sections 1620A comprise a circle • Length of the full, straight track section 10 1/2 in.



curved

1620 A 1/1 full
1620 A 1/2 half
1620 A 1/4 quarter

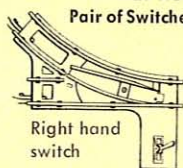


straight

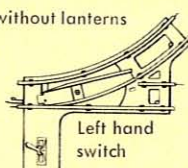
1620 D 1/1 full
1620 D 1/2 half
1620 D 1/4 quarter
1620 D 1/10 tenth

1620 WB

Pair of Switches without lanterns



Right hand switch



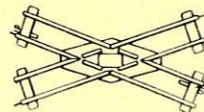
Left hand switch

1620 BU

Brake and Reversing Switch

1620 DAU

Brake and Reversing Track Section (1/2 section)



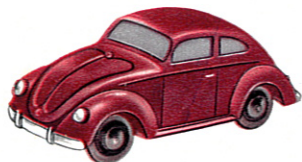
1620 K
Crossing

The large O gauge

This booklet shows the entire O gauge collection of locos, cars, rolling stock, and accessories (also for electric operation). Published in German only. Available from all authorized dealers.

Miniature Automobiles of Thermoplastics for Use with H0 Gauge

Scale Reproductions of their prototypes. Each model is available in several colors. These autos have been designed specifically for decorating, detailing, and completing model railroad layouts.



860/3 Volkswagen • Length 2 in.



860/2 Porsche • Length 1 3/4 in.



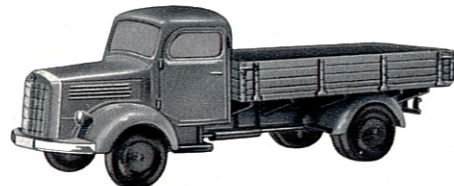
860/1 Mercedes 300 • Length 2 1/2 in.



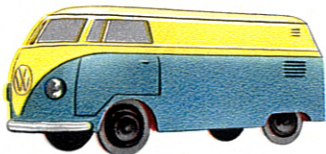
860/6 DKW • Length 2 in.



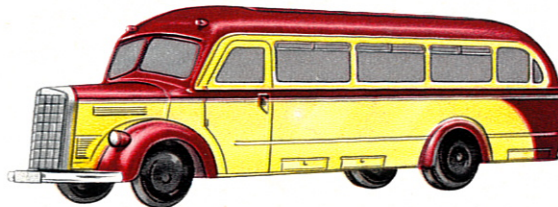
860/4 German Ford "Taunus 12M" •
Length 2 in.



860/7 Mercedes Truck, 3 1/2 ton •
Length 2 3/4 in.



860/5 E Volkswagen Delivery Van, 1 tone • Length 2 in.
860/5 M Volkswagen Delivery Van, 2 tone • Length 2 in.



860/8 E Mercedes Bus,
1 tone • Length 4 in.
860/8 M Mercedes Bus,
2 tone • Length 4 in.

Die-cast Miniature Autos, Suitable for Use with 0 Gauge

MARKLIN

Scale models with all prototype details reproduced • Available in various colors • Rubber tires

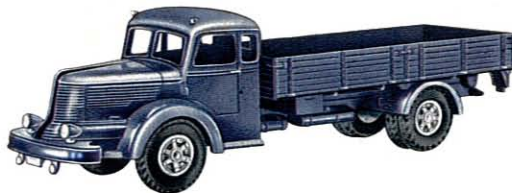


5524/1 S

Mercedes 300 • Die-cast • Length 4½ in.

5524/1 P

Same model, but in thermoplastics and with seat of metal • Length 4½ in.



5524/10

Truck • Die-cast • Length 6 in.



5524/12

Trailer • Die-cast • For use with truck or farm tractor • Length 4 in.



5521/27

Semi-trailer tank truck • 6 wheels • Type BV Aral • Trailer detachable • Plastic tank • Length 6½ in.



5521/71 F

Farm tractor with driver • Plastic body • Rubber tires • Realistic details • Length 3 in.



5521/52 P

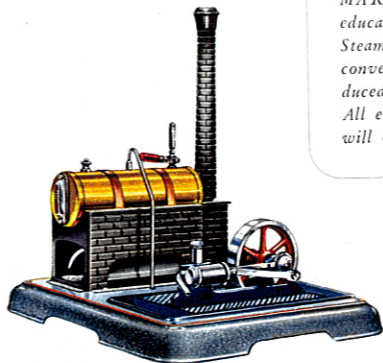
Sedan • Reproduction of 1949 Buick Super Sedanette • Plastic Body • Length 4¾ in.

5521/52 S

Same model as 5521/52 P, but die-cast and without seats.

MARKLIN

MARKLIN Steam Engines have always been among the most eagerly sought educational toys. They illustrate the conversion of heat to mechanical energy. Steam engines equipped with dynamos take us one step further and show the conversion of mechanical energy into electrical energy so that light can be produced. By using a transmission it is possible to operate several working models. All engines are equipped with a safety valve and tested under pressure. They will operate forwards or backwards depending on how the flywheel is started.



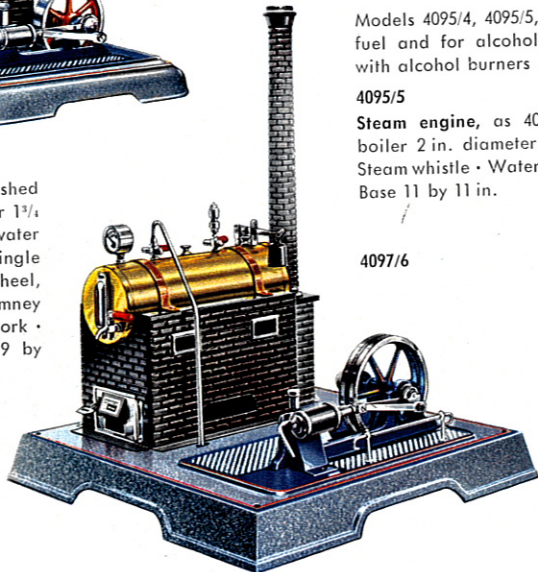
4095/4

Steam Engine • Polished Brass Boiler, diameter $1\frac{3}{4}$ in., safety valve, water gauge, steam whistle, single acting cylinder, flywheel, grooved pulley, chimney with imitation brickwork • Height 10 in., base 9 by 10 in. • Weight 3 lbs.

4097/6

Steam Engine • Polished Brass Boiler, $2\frac{1}{2}$ in. diameter • With steam cock • Weight and lever safety valve • Steam whistle • Pressure gauge • Water gauge • Water drain tap • Check tap • Stationary single acting cylinder with lubricating can • Reversible • Grooved flywheel • Grooved pulley • Height with stack $15\frac{1}{4}$ in. • Base 12 by 12 in.

4097/92/6 Same as Steam engine 4097/6, but with dynamo 3392 (see page 53) and arc lamp

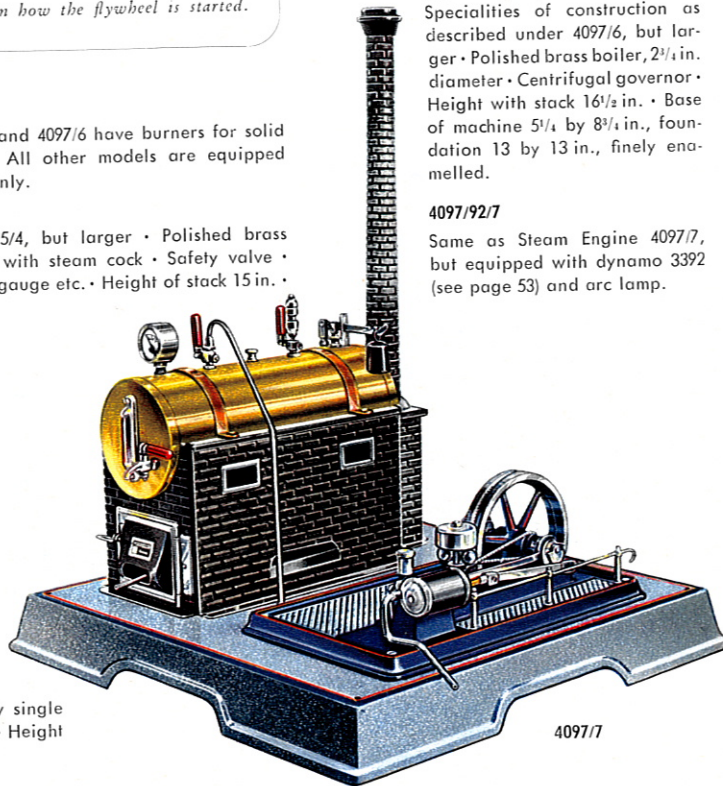


Models 4095/4, 4095/5, and 4097/6 have burners for solid fuel and for alcohol. All other models are equipped with alcohol burners only.

4095/5

Steam engine, as 4095/4, but larger • Polished brass boiler 2 in. diameter, with steam cock • Safety valve • Steam whistle • Water gauge etc. • Height of stack 15 in. • Base 11 by 11 in.

4097/6



4097/7

Steam Engine, as shown below • Specialities of construction as described under 4097/6, but larger • Polished brass boiler, $2\frac{1}{4}$ in. diameter • Centrifugal governor • Height with stack $16\frac{1}{2}$ in. • Base of machine $5\frac{1}{4}$ by $8\frac{3}{4}$ in., foundation 13 by 13 in., finely enameled.

4097/92/7

Same as Steam Engine 4097/7, but equipped with dynamo 3392 (see page 53) and arc lamp.

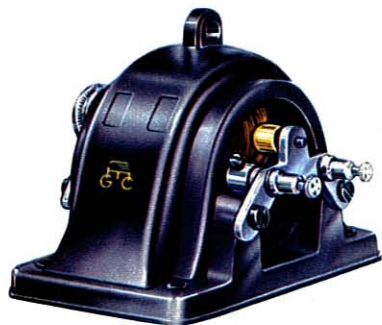
4097/7

Steam Engines

MARKLIN

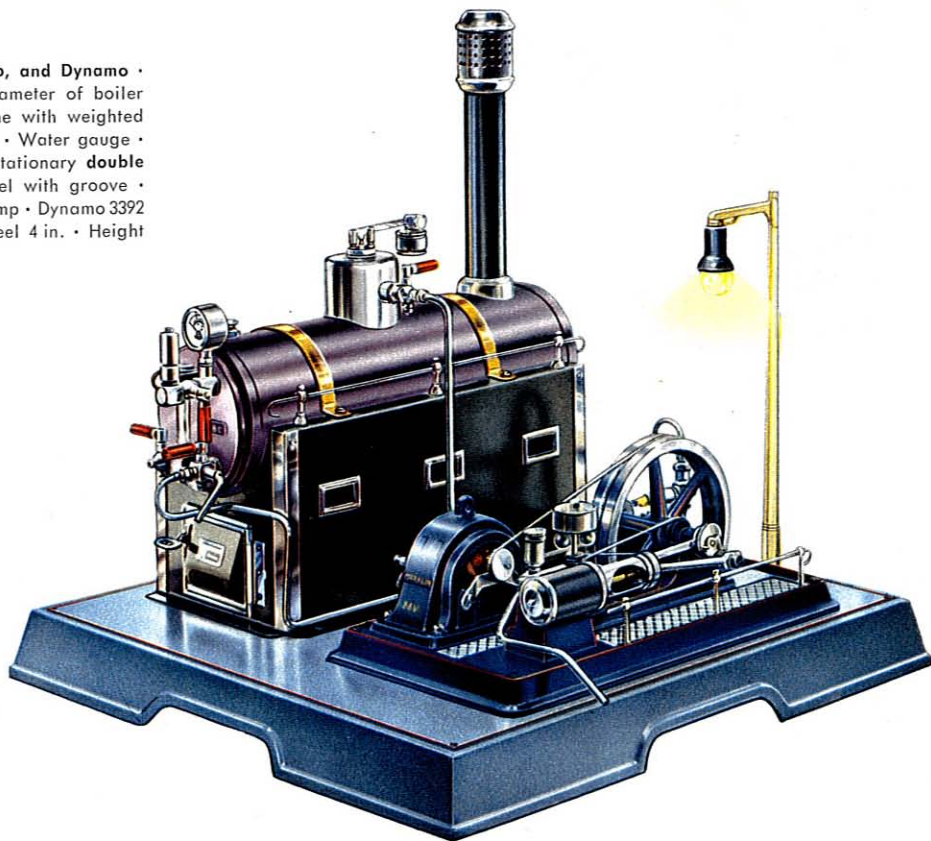
4098/92/8

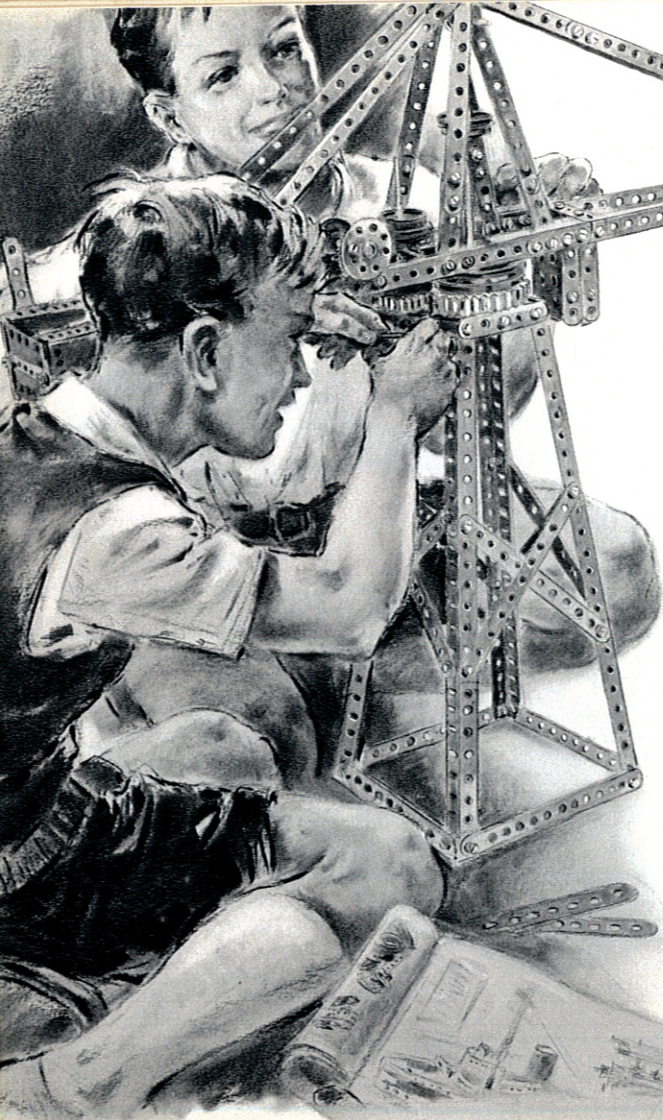
Model Steam Engine with Fire Tube Boiler, Feed Pump, and Dynamo • Fire tube boiler of brass, oxidized in steel-blue • Diameter of boiler $3\frac{1}{4}$ in. • Length $10\frac{1}{4}$ in. • Steam whistle • Steam dome with weighted safety valve • Check tap • Pressure gauge • 3 way cock • Water gauge • Drain cock • Safety alcohol burner • Filling screw • Stationary **double** acting cylinder with lubricator • Reversible • Flywheel with groove • Grooved pulley • Centrifugal speed regulator • Feed pump • Dynamo 3392 and arc lamp • Base 15 by 15 in. • Diameter of flywheel 4 in. • Height with stack $13\frac{1}{2}$ in.



3392

Dynamo, generates alternating current • Field magnet • Two piece armature • Grooved pulley • Brush holders • Cast housing • Generates 2,5 volts, 0,2 amperes at 4000 revolutions per minute • Base $3\frac{3}{4}$ by $2\frac{1}{4}$ in. • Height $2\frac{1}{2}$ in.



A detailed black and white illustration of a young boy and girl working together on a complex metal construction set. The boy, in the foreground, is focused on adjusting a gear mechanism. The girl, behind him, looks on with interest. The structure they are building is tall and intricate, made of perforated metal beams and gears, with a pulley system at the top. An open instruction manual lies on the floor near the boy's feet.

METAL

MÄRKLIN

The MÄRKLIN Metal Construction Set, following the latest scientific developments contains many parts each of which has many varied uses. It opens to the youngster the gates to scientific knowledge creating a drive to invent and design.

MÄRKLIN Metal Construction Sets make especially welcome gifts because of the possibility of constantly adding to their size. With a minimum of tools a wealth of realistic models can be constructed. These can be set into motion using the motors shown on page 62. A richly illustrated book of instructions is supplied with every set. This simplifies the assembly of models and encourages the youngster to experiment and design models of his own.

This is one of the great achievements of MÄRKLIN construction sets: to awaken and give an outlet to a youngster's inventive drive. Many a great engineer has discovered his talents through these sets. The size and capabilities of each set can be increased through supplementary sets (see page 63) and additional single parts.

Construction Sets

Shown here are the smaller starting sets. The many parts contained in these sets are of equal quality with the parts of larger sets. The instruction books contained in each set illustrate numerous realistic models some of which are shown here.



99

Basic Set No. 99

Contains 124 construction parts plus 27 metal clips, totalling 151 parts • Size of box 15½ by 10½ by 1 in. • Weight 3 lbs.

To be increased to basic set 100 by supplementary set 99 A

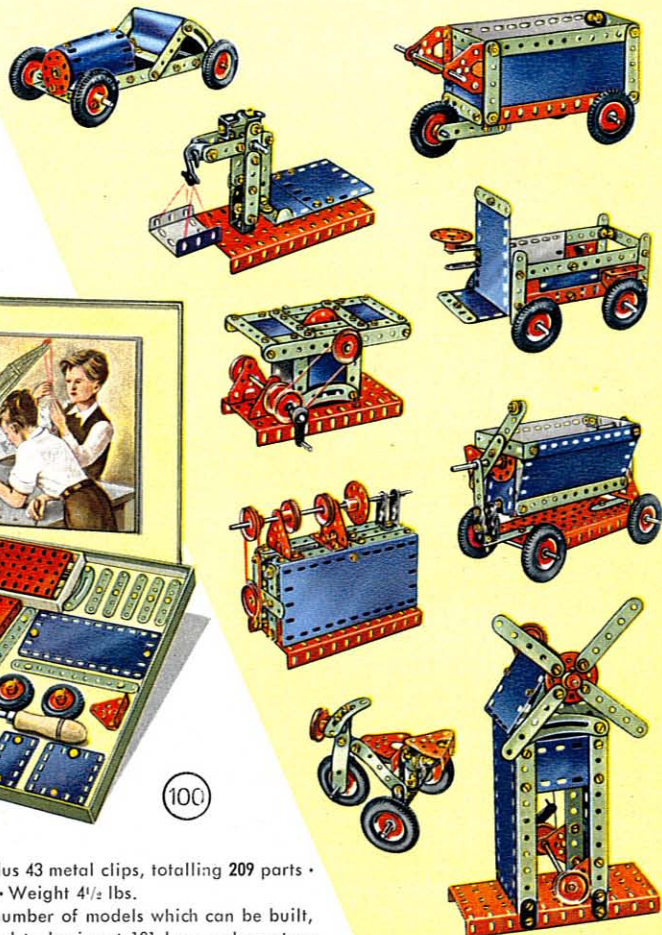


100

Basic Set No. 100

Contains 166 construction parts plus 43 metal clips, totalling 209 parts • Size of box 16¼ by 12¼ by 1 in. • Weight 4½ lbs.

With this set the versatility and number of models which can be built, starts to increase. To be increased to basic set 101 by supplementary set 100 A.





Basic Set No. 101

Contains 232 construction parts plus 51 metal clips, totalling **283 parts** • Size of box $20\frac{1}{2}$ by $14\frac{1}{2}$ by $1\frac{1}{4}$ in. • Weight 5 lbs.

One of the most popular basic sets • Numerous models of all kinds such as buses, trucks, steamers, cranes, machine tools, tractors, and many others are easily constructed with the aid of the illustrated instruction book.

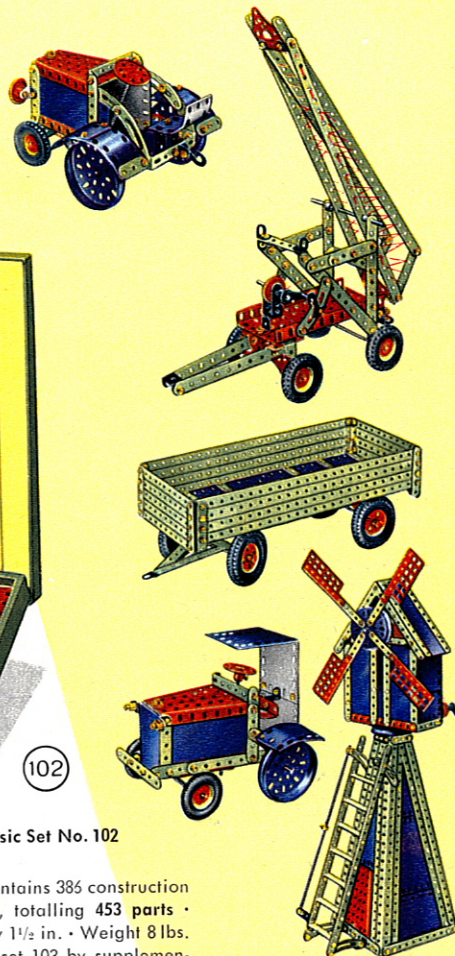
To be increased to basic set 102 by supplementary set 101 A.

With set No. 102 the number of models which can be constructed is increased considerably. Some of the models like a Diesel locomotive, a street car, wire maintenance car, truck, bus, and tractor with trailer represent modern traffic. All kinds of cranes as harbor cranes, tower cranes etc. may be used for loading and unloading, whereas eccentric presses, high speed drills, machine saws, show the ways of working materials, and windmills illustrate the utilization of wind and steam power.



Basic Set No. 102

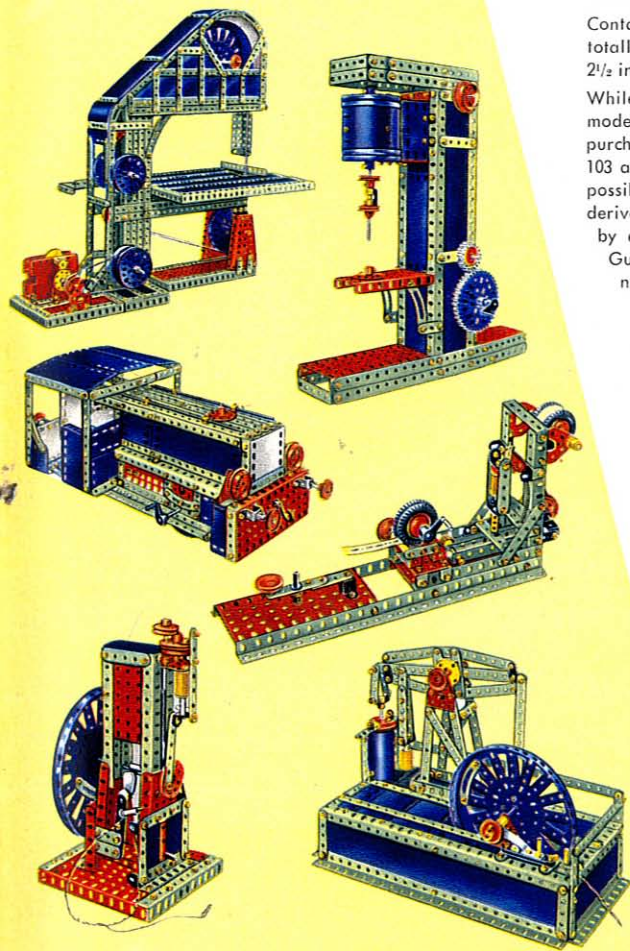
Contains 386 construction parts plus 67 metal clips, totalling **453 parts** • Size of box $20\frac{1}{2}$ by $14\frac{1}{4}$ by $1\frac{1}{2}$ in. • Weight 8 lbs. To be increased to basic set 103 by supplementary set 102 A.



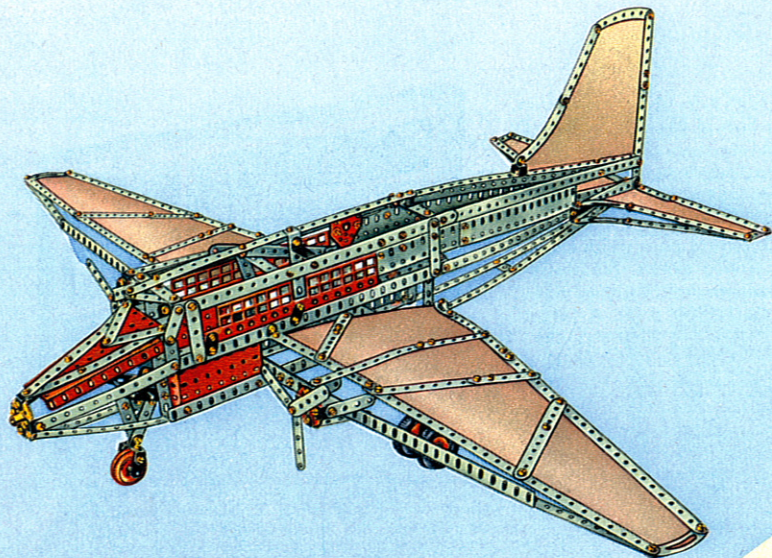
Basic Set No. 103

Contains 656 construction parts plus 136 metal clips, totalling **792 parts** • Size of box $20\frac{1}{2}$ by $14\frac{1}{2}$ by $2\frac{1}{2}$ in. • Weight $11\frac{1}{2}$ lbs.

While the smaller sets enable the owner to build models which are operated by hand or separately purchased electrical or mechanical motors, sets 103 and up contain electrical parts which make it possible to build operating motors. The pleasure derived from the operation of self designed models by electromagnets is not less great. A "Short Guide Through Electricity" illustrates the nature and laws of electricity in easily understandable terms.

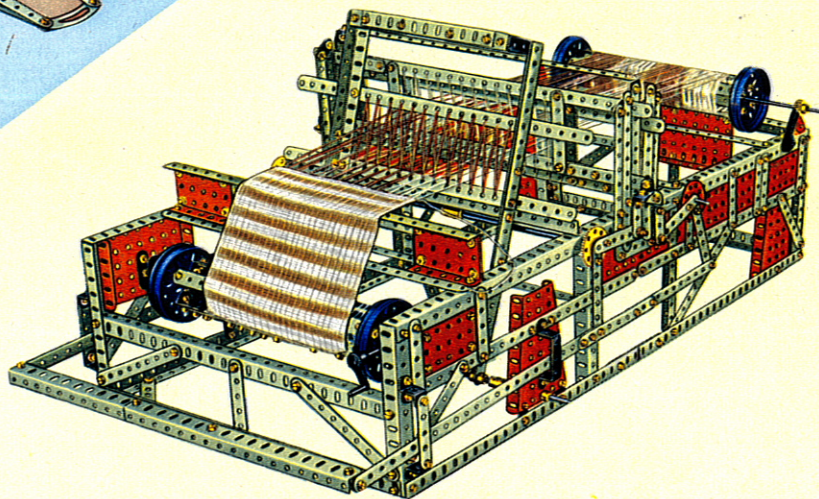


To be increased to basic set 104
by supplementary set 103 A



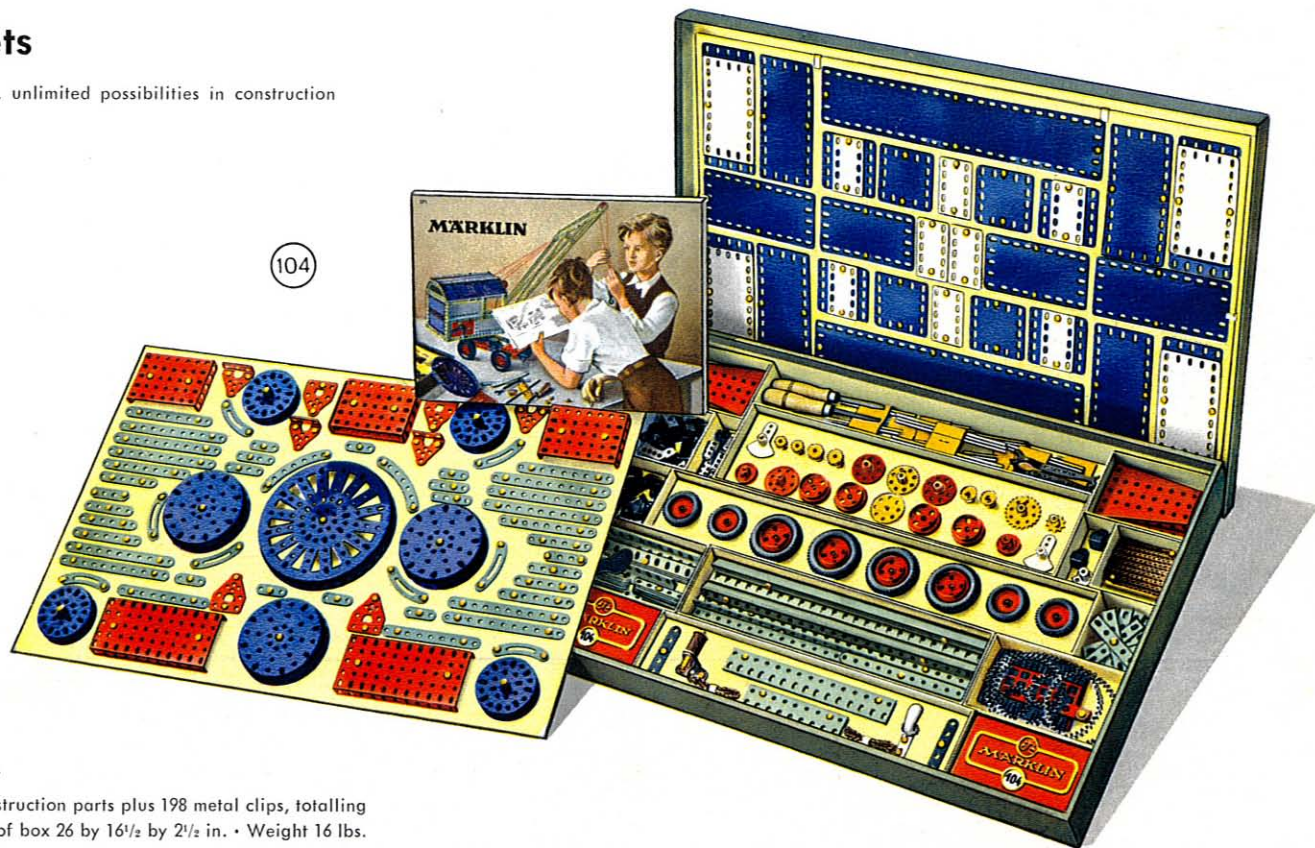
Air Liner with retractable landing gear •
Built with metal construction set 104

Hand Loom, enables manufacture of real
cloth • An educational model built with
metal construction set 105



Basic Sets

Great versatility, unlimited possibilities in construction

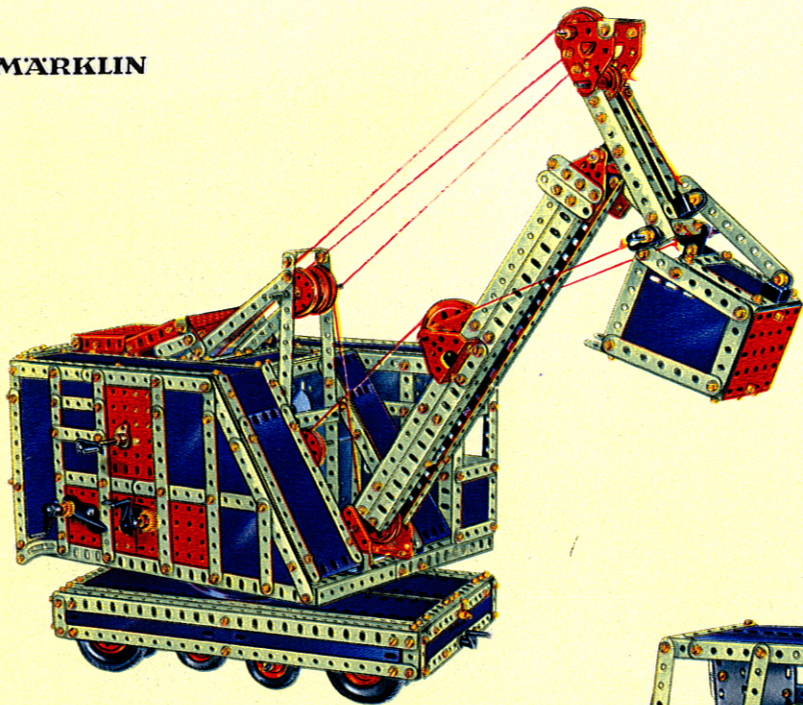


Basic Set No. 104

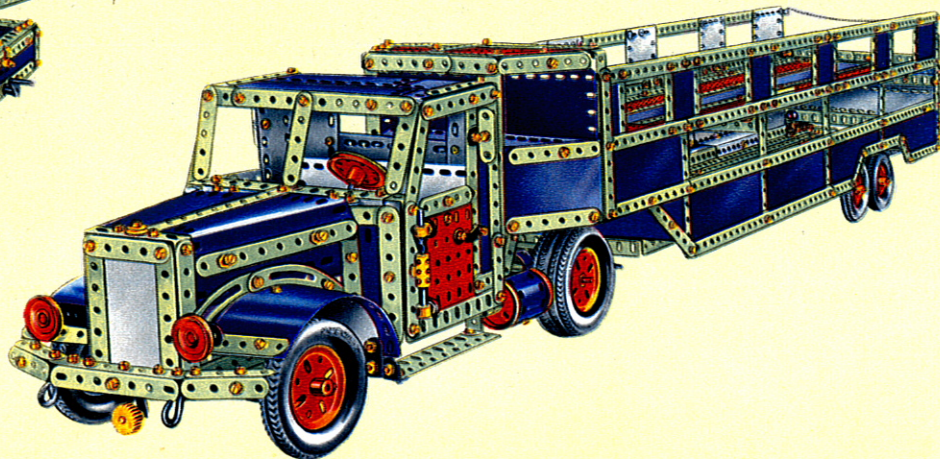
Contains 953 construction parts plus 198 metal clips, totalling
1151 parts • Size of box 26 by 16½ by 2½ in. • Weight 16 lbs.

The accuracy and versatility of the models which can be built with the various sets begins to reach a peak in set 104. As an almost perfect scale reproduction of its prototype, every model necessitates several illustrations and detailed sketches to show all details that can be built without difficulty by the versatility of the parts. The number of examples shown for this set in the instruction book will make it difficult for the owner to decide which model to build first since the possibilities of this set are almost unlimited. To increase to basic set 105 by supplementary set 104 A.

MARKLIN



Bucket Dredger, most modern construction • All movements of the prototype are reproduced • This model, a challenge to the young engineer, is built with metal construction set 105.



Auto Transport for Volkswagen cars • Model about 32 in. long • Built with metal construction set 105.

Basic Set No. 105

Contains 2035 construction parts plus 139 metal clips, totalling 2174 parts • Size of box: 25 1/2 x 16 1/2 x 3 1/2 in. • Weight 30 1/2 lbs.

With MÄRKLIN metal construction set 105 the last word in completeness is reached. Large models present no difficulties in regard to parts. For instance, who would not like to erect a tower crane and then put his own creation into operation? This can be done merely by carefully following the series of drawings and diagrams depicting the construction of the frame and mechanism.

MÄRKLIN



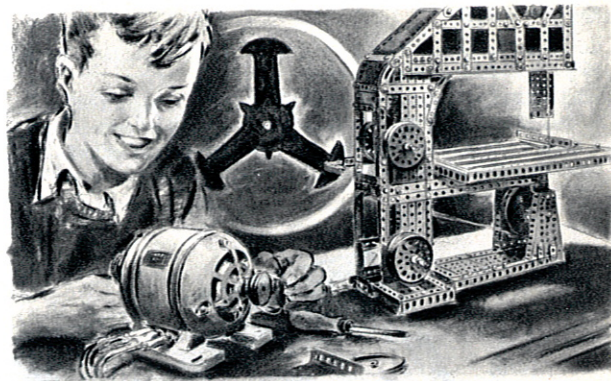
Number of Parts
in MÄRKLIN Metal Construction Sets

Basic Sets	Number of Parts without with Metal Clips		Supplementary Sets	Number of Parts without with Metal Clips	
No. 99	124	151	No. 99 A	42	61
No. 100	166	209	No. 100 A	67	97
No. 101	232	283	No. 101 A	154	185
No. 102	386	453	No. 102 A	273	324
No. 103	656	792	No. 103 A	295	342
No. 104	953	1151	No. 104 A	1082	1175
No. 105	2035	2174			

The blue and white parts on the cover are the flexible cover plates which materially add to the completeness of the models. They are attached to the constructions with the same metal clips with which they are attached to the box.

Motors for operating models built from Metal Construction Sets

While it is an exciting experience for the youngster to build the many models shown in the instruction book so that part fits on part, and gear on gear, and move them by hand, imagine the fun of setting them in motion by using motors, electrical or mechanical. The three motors shown below are built so that they can easily be fitted into any of the models constructed. The smaller models use the mechanical and small electrical motors, while the universal electric motor is built for the largest types of models. Here is another example of the high educational value of MÄRKLIN Metal Construction Sets and their unlimited possibilities of construction and operation.

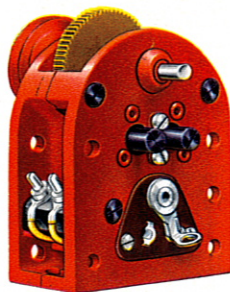


Mechanical Motor



201 F

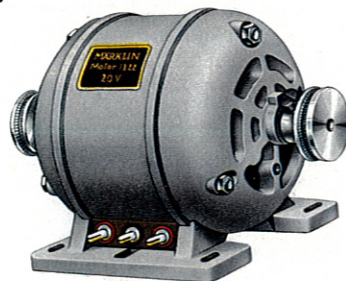
Mechanical Motor operates forwards and backwards • 2 speeds • Main axle with set screw • Brake lever • With key and manual packed in carton • Height 4½ in., width 3¾ in., depth 1 in., weight 17 oz.



1321 G

Electric Motor • Reversible • Speed about 15 r.p.m. • Operates on 20 volts, hence usable with any MÄRKLIN transformer • 2 cables 489/1 (red and brown) included • Size 2½ by 2 in. • Weight 4 oz.

Electric Motors

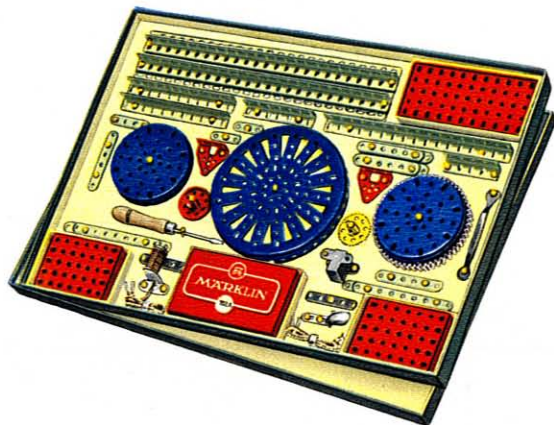


1322 G

Universal Electric Motor • 20 volts • With cable and control plate for reversing by remote control • 2 pulleys operation at different speed controlled from transformer • Speeds approximately 3000 and 1100 r.p.m. • Extremely powerful motor suitable for the largest models and for dynamos and miniature tools of all types • 3 plugs • Size 2½ x 4 x 2½ in. • Distance between pulley 3½ in. • Weight 16 oz.

Supplementary Sets

Any basic set can be transformed into the next higher basic set through the purchase of a supplementary set whose contents, when combined with the smaller basic set, equal those of the next higher basic set. Thus if set 101 is owned, and it is desired to improve it to the level of set 102, one needs to purchase set 101 A.



Supplementary Set No. 102 A

In short:

Basic Set No. 99 plus Supplementary Set 99 A equal Basic Set 100
Basic Set No. 100 plus Supplementary Set 100 A equal Basic Set 101
Basic Set No. 101 plus Supplementary Set 101 A equal Basic Set 102
Basic Set No. 102 plus Supplementary Set 102 A equal Basic Set 103
Basic Set No. 103 plus Supplementary Set 103 A equal Basic Set 104
Basic Set No. 104 plus Supplementary Set 104 A equal Basic Set 105

Individual parts

If the parts contained in MÄRKLIN sets do not suffice to construct a planned model, or if the sets are to be completed by special parts not contained therein, supplementary parts may also be purchased individually. A special list illustrating all parts, if not the parts themselves, is available from every MÄRKLIN dealer.

Some of the individual parts of the great parts assortments. These parts are available through any MÄRKLIN dealer.



Electrical Experimentation Sets

MARKLIN

MARKLIN-ELEX are low voltage electrical experimentation sets of great educational value. They have easily surpassed all expectations. Through them the youngster is introduced in to the secrets of magnetism and electricity in a fascinating way. The special parts contained in sets 502 A or 503 make it possible to construct volt meters and even complete telephone systems. Detailed richly illustrated instruction book. As a source of power, a flashlight battery, transformer 13470 UG with taps from 4 to 20 volts or a regular model railroad transformer may be used. The smaller sets may be increased to the size of the next larger sets in a manner similar to MARKLIN Metal Construction Sets.



ELEX 501
Basic Set with instruction book for about 60 experiments • Size of box 13 x 8 in.

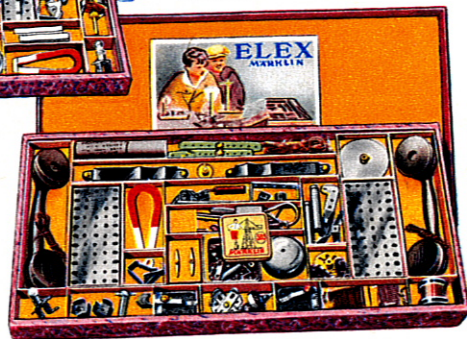
ELEX 501 A
Supplementary Set transforms the set into basic set ELEX 502



13470 UG
Experimentation transformer • Connections for 4 to 20 volts (AC) • Capacity 12VA • Red control lamp • When ordering, please specify voltage of house current

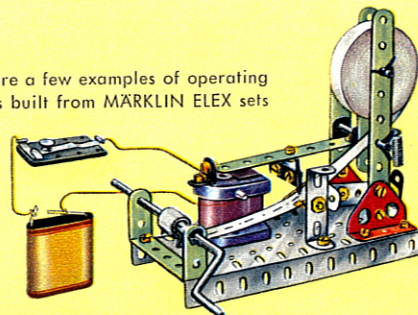


ELEX 502
Basic Set with instruction book for about 100 experiments • Size of box 17 by 9 in.
Supplementary Set ELEX 502 A
transforms the set into basic set ELEX 503

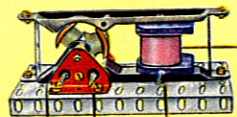


ELEX 503
Basic Set with enlarged instruction book for over 160 experiments • Size of box 22 1/2 by 11 in.

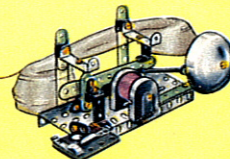
Here are a few examples of operating models built from MARKLIN ELEX sets



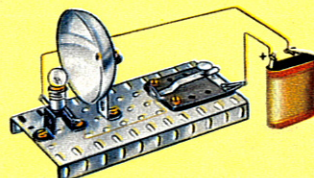
Morse Telegraph



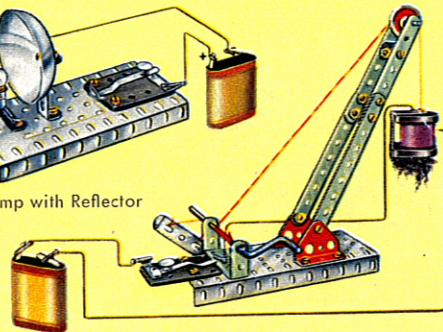
Electric Motor



Telephone



Lamp with Reflector

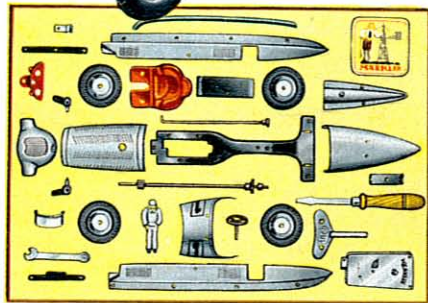
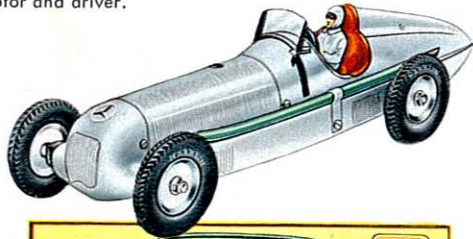


Crane with electric magnet

The Popular MARKLIN Auto Construction Kits

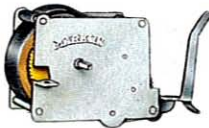
This set contains all the necessary parts for the construction of the Mercedes-Benz racing car shown below, including the clockwork motor and driver • Realistic appearance • Steered from wheel • Knee action • Powerful clockwork motor • Length of car 11½ in.

Racing Car • Built from set 1133 • Finished model with clockwork motor and driver.

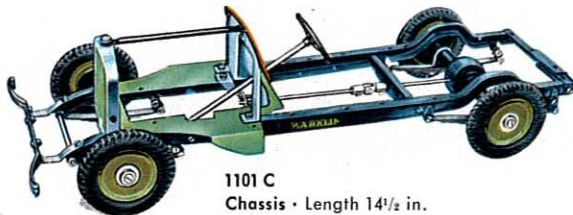


1133 Racing Car Construction Set • Disassembled car • In carton • With clockwork motor, driver, and full instruction for the construction of the illustrated racing car.

Those interested in a larger auto construction kit, should purchase the chassis kit 1101 C which will serve as a basic kit for the various models. With it a realistic chassis 14½ in. long can be assembled piece for piece.



1109 M Mechanical Motor, specially designed for chassis 1101 C



1101 C Chassis • Length 14½ in.

All important components, such as the frame, springs, differential housing, universal joints, steering mechanism, etc. are present and can be easily assembled as shown in the detailed and richly illustrated instruction book which is furnished with every chassis kit. The motor 1109 M provides long steady power. It is not furnished with the chassis kit and must be purchased separately.

Any of the bodies shown at the right can be built on the completed chassis. A clever boy, however, can also design and build his own bodies from cardboard, wood, or other materials. The auto construction sets, therefore, will provide versatile entertainment for a long time.



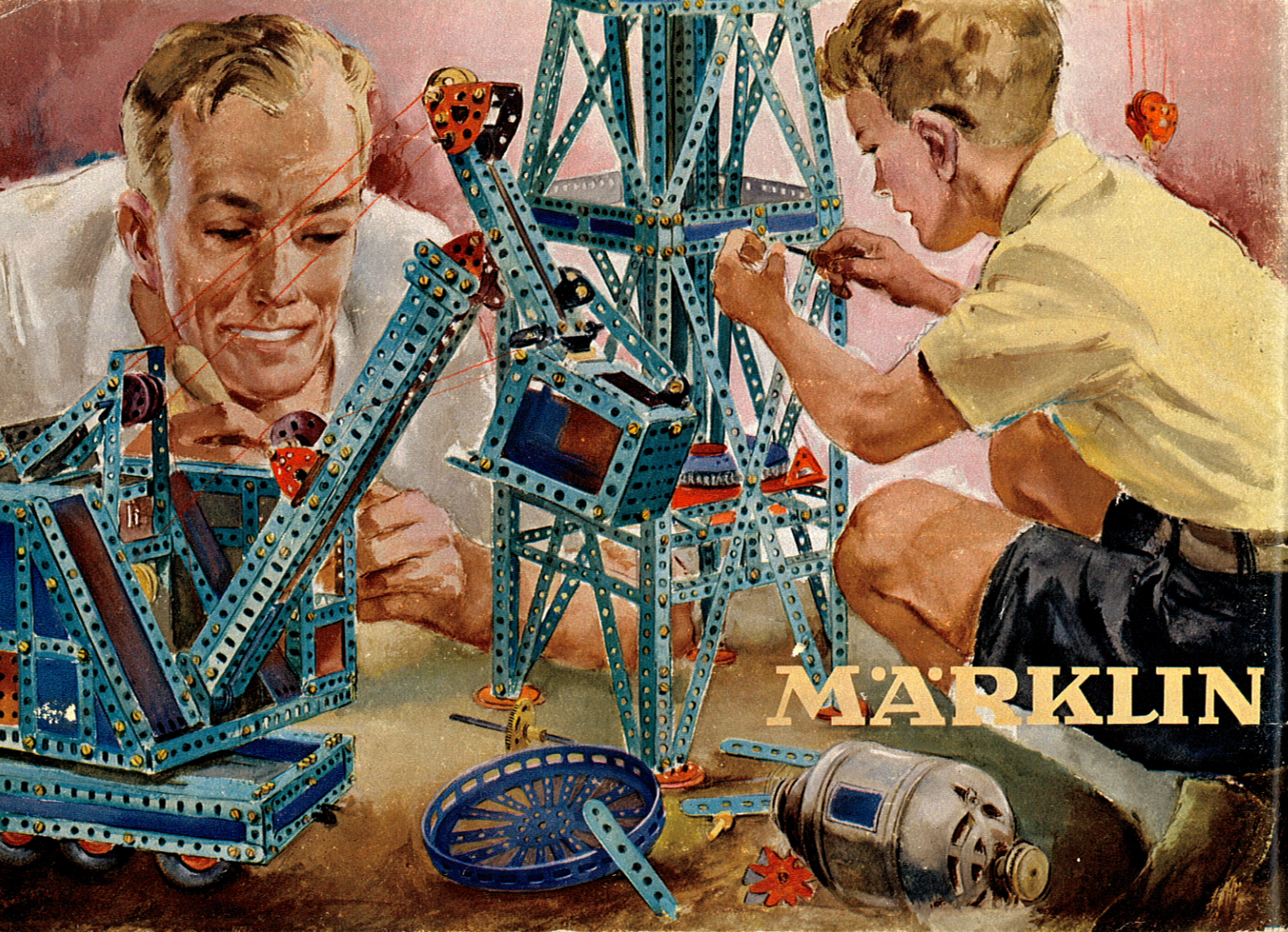
1107 R Racing Car Body



1103 ST Streamlined Body



1105 L Truck Body



MARLIN