

MTH Part Numbering - Decoded

MTH O Gauge, Railking One Gauge & HO Scale part numbers all follow the same numbering protocol. This protocol is defined below. MTH HO, O & One Gauge part numbers typically have 2 letters and 7 digits comprising the part number (** There are some exceptions to this rule).

The HO scale part numbers have 2 letters and 10 digits comprising the part number, this was done to prevent overwriting or duplicating existing 7 digit part numbers. The methodology behind the numbering system is identical, meaning the first & second letters and the first 3 digits of the part number follow the same protocol outlined below. The last 7 digits are merely sequential and have little bearing on the actual part itself.

Tinplate parts follow a different protocol than HO, O and G gauge parts. Their definitions are explained at the end of this document.

MTH Part Numbering Protocol (HO, S, O & One Gauge Part Numbers)

The First 2 letters of a Part Number sets the "Category & Item Type"

Category	Item Type	Category: Item Type Definitions
		Electronics I = Whistle/Horn, Protosound 1, Locosound, Smoke units (PS1 & beyond)
A	A	<i>Electronics I:</i> Fan Driven Smoke Unit, Smoke Stack, Smoke Wick, Smoke Deflector, Smoke Funnel, Brass Cup (for smoke unit)
A	B	<i>Electronics I:</i> Seuthe Smoke unit
A	C	<i>Electronics I:</i> Reverse Unit (DCRU), Slave Board
A	D	<i>Electronics I:</i> Power Board, PS1 Bottom Board, Control Boards
A	E	<i>Electronics I:</i> PS 1 Top Boards, Protosound 2 & 3, Locosound, Software
A	F	<i>Electronics I:</i> Whistle & horn boards, Sound Boards
A	G	<i>Electronics I:</i> Constant Voltage Boards, Flashing lights, Crossover Boards, Voltage Regulators, Tach Boards, Patch Boards, Mux Boards
A	H	<i>Electronics I:</i> Factory top board
A	I	<i>Electronics I:</i> Heat sinks, Resistors, Whistle Base & Connectors, Impellers, Ferrite Beads, Heat Shields, Protosound 1 chips
		Electronics II = Protosound 2, Protosound 3
B	A	<i>Electronics II:</i> Coupler Board
B	B	<i>Electronics II:</i> Switches, Plugs, Circuit Breakers, Fuses, PC Boards
B	C	<i>Electronics II:</i> Number Board Lights

B	D	<i>Electronics II: Pick ups, Pick up insulators, Fans</i>
B	E	<i>Electronics II: Motors, Flywheels, Solenoid, Tach Tape, Coils</i>
B	F	<i>Electronics II : Speakers, Speaker Enclosures</i>
B	G	<i>Electronics II : Batteries, Transformers, Inductors, Battery Jack</i>
B	H	<i>Electronics II : Contact Spring Boards, Firebox Glow</i>
B	I	<i>Electronics II : Volume Pots, Motor Mounts, Motor Covers, Throttle Pots, Gearbox Covers</i>
C	A	<i>Lighting : Headlights</i>
C	B	<i>Lighting : Mars Lights</i>
C	C	<i>Lighting : Number Board Lights</i>
C	D	<i>Lighting : Ditch Lights, Driver Lights, End of Train Lights</i>
C	E	<i>Lighting : LED, Flourescent Lights, LED Marker Lights</i>
C	F	<i>Lighting : Reverse / back up lights</i>
C	G	<i>Lighting: Cab / Interior Lights, Firebox glow</i>
C	H	<i>Lighting : Lamp Holders, Sockets, Lamp Guides (Passenger Cars)</i>
C	I	<i>Lighting : Reflective Tape, Light Reflectors, Light Shields, Red Lamps for Bridge</i>
D	A	<i>Chassis: Truck Assembly</i>
D	B	<i>Chassis : Truck Side Frames</i>
D	C	<i>Chassis: Axle Bearings, Axle Bushings, Wheels</i>
D	D	<i>Chassis: Couplers (Electrical & Mechanical)</i>
D	E	<i>Chassis : Traction Tires</i>
D	F	<i>Chassis : Motor Frame Asseblies, Drive Blocks, Frame Details</i>
D	G	<i>Chassis : Pilot Assemblies</i>
D	H	<i>Chassis: Diesel Chassis, Electric Chassis</i>
E	A	<i>Mechanical : Motion system, Drive Rod Guides, Motion Hangers</i>
E	B	<i>Mechanical : Mechanical smoke units</i>
E	C	<i>Mechanical : Side Rods, Main Rod & Crosshead assemblies,</i>
E	D	<i>Mechanical : Eccentric Rod Assemblies</i>
E	E	<i>Mechanical: Electric Engine, Bumper Assemblies, Spring Loaded</i>
E	F	<i>Mechanical : Steam Chests</i>
E	G	<i>Mechanical : Gears, Pulleys, Drive belts</i>
E	H	<i>Mechanical : Worm Gears</i>
F	A	<i>Body / Trim: Lenses, Body Parts, Tender Drawbars</i>
F	B	<i>Body / Trim : Boiler Body Parts, Locomotive Drawbars, Wireless Drawbars</i>
F	C	<i>Body / Trim : Diesel Shell Parts, Repair Posts (diesel / electric), Fuel Tanks</i>

F	D	<i>Body / Trim</i> : Handcars, Smoke Deflectors
F	E	<i>Body / Trim</i> : Subway (powered & cars)
F	F	<i>Body / Trim</i> : Electrics, Trolleys
F	G	<i>Body / Trim</i> : Decals, Plates, Number Boards
F	H	<i>Body / Trim</i> : Snowplows
F	I	<i>Body / Trim</i> : Diaphragms, Wire Shields, Engineer/Fireman/Conductor stands
G	A	Passenger Cars: Tender Body Parts, Tender Drawbar
G	B	Passenger Cars: Chassis / Frame
G	C	Passenger Cars: Madison Passenger Cars
G	D	<i>Passenger Cars</i> : Streamlined Passenger Cras
G	E	<i>Passenger Cars</i> : Amfleet, Superliner & Turbo Trains
G	F	<i>Passenger Cars</i> : Overton Passenger Cars
G	G	Passenger Cars: Transformers, Wifi Module
G	H	<i>Passenger Cars</i> : DCS
H	A	<i>Freight Cars</i> : Crane Tender, Caboose, Test Car, Snow Plow, Jordan Spreader
H	B	<i>Freight Cars</i> : Boxcar, Stockcar
H	C	<i>Freight Cars</i> : Ore Car, Gondola, Hopper Car, Coil Car, Slag Car
H	D	<i>Freight Cars</i> : Reefers, Log Cars
H	E	<i>Freight Cars</i> : Tank Car, Flat Car, Auto Carrier, Center I-Beam, Hot Metal Car, Flat w/Trailers, Husky Stack
H	F	<i>Freight Cars</i> : Operating Cars
H	G	<i>Freight Cars</i> : Plastic & Die-Cast vehicles
H	H	<i>Freight Cars</i> : Accessories, A/F Coaling Tower, Clocks, Semaphores
H	I	<i>Freight Cars</i> : String, Circus Animals, Wooden Animals
I	A	<i>Hardware</i> : Screws & Bolts
I	B	<i>Hardware</i> : Gaskets / seals, Rubber insulators, Fiber Insulators, Repair Kits
I	C	<i>Hardware</i> : Nuts, Hardware kits
I	D	<i>Hardware</i> : Washers, Spacers
I	E	<i>Hardware</i> : Springs
I	F	<i>Hardware</i> : E-Clips, Track Clips
I	G	<i>Hardware</i> : Rivets, Pins, T-Bars, Air Hoses
I	H	<i>Hardware</i> : Wire Strap, Wire Ties, Grommets, Covers, Lamp Holder Brackets, Elastic Straps, Plates
I	I	<i>Hardware</i> : Ground Straps, Weight, Chain, Foam Pads, PS 1 & PS 2 Test Fixtures, Magnets

The first 2 to 3 digits of a part number define what it is

1st Digit		2nd Digit		3rd Digit				
0	=	Not Applicable	0	=	Not Applicable	0	=	Not Applicable
1	=	Steam Locomotive	1	=	Premier	1	=	Right Hand Side
2	=	Diesel Locomotive	2	=	RailKing	2	=	Left Hand Side
3	=	Electric Locomotive	3	=	Tinplate	3	=	Front
4	=	Other	4	=	Rugged Rails	4	=	Rear
5	=	Accessories	5	=	Railking One Gauge	5	=	Both (Front & Rear)
6	=	Freight	6	=	HO Scale	6	=	All (Left, Right, Front, Rear)
7	=	Passenger	7	=	S-Gauge	7	=	Left Front / Right Rear
						8	=	Right Front / Left Rear

As a rule of thumb the last 4 digits are merely sequential and really have no bearing on defining anything about the part

****Note:** There are some parts that use letters in the last 4 digit positions. This was done to try to keep the original part number (or most of the original part number intact. This primarily pertains to electronics for items that need to be EMI compliant (for use in Europe). It is most probable that a good percentage of electronic board part numbers will have letters, or in some cases more than 7 digits. The best approach to electronics is to use keywords like "Protosound 1", "Protosound 2", "Protosound 3", "Tender Board", "Boiler Board", etc.

****Note Also:** In an attempt to not run out of part numbers moving forward we have implemented the use of an eighth character in the part numbering system. These characters are letters; A, B, C, D, E and so on. This is typically implemented when there are multiple colors of the same part. For instance, a boiler front for a Premier GS-4 4-8-4. This part has up to as many as 8 different decoration schemes, so instead of creating 7 different part numbers we use the original part number followed by an A, B, C and so on. The great part about this approach is that when you search for the original part number you also return all the original part numbers that now include suffixes.

Tinplate Part Numbering Explained

The Tinplate Part numbering system is very different from the O gauge and Railking One Gauge part numbering system. The chart below shows how the tinplate part numbering breaks down.

The first two letters (TP) define a "Tinplate Part". The next two letters define what type of product the part goes to. See below:

TP MS Tinplate - Miscellaneous Parts

TP	SE	Tinplate - Standard Gauge Electrics
TP	SF	Tinplate - Standard Gauge Freight Cars
TP	SL	Tinplate - Standard Gauge Steam Locomotives
TP	SP	Tinplate - Standard Gauge Passenger Cars
TP	ST	Tinplate - Standard Gauge Steam Tenders
TP	OE	Tinplate - O Gauge Steam Locomotives & Electrics
TP	OF	Tinplate - O Gauge Freight Cars
TP	OH	Tinplate - O Gauge Hiawatha Steam Locomotive, Hiawatha & Rail Chief Passenger Cars & UP M10,000
TP	OP	Tinplate - O Gauge Passenger Cars
TP	OT	Tinplate - O Gauge Steam Tenders
TP	BT	Tinplate #44 Boat & #45 Boat
TP	RC	Tinplate - Race Car
TP	35	Tinplate - #35 Lamp
TP	115	Tinplate #115 & #116 Station
TP	155	Tinplate - #155 Freight Shed
TP	300	Tinplate - #300 Hellgate Bridge
TP	436	Tinplate - #436 Power Station
TP	437	Tinplate - #437 Switch Tower
TP	438	Tinplate - #438 Signal Bridge
TP	440	Tinplate - #440 Signal Bridge & Panel
TP	441	Tinplate - #441 Weigh Scale
TP	444	Tinplate - #444 Roundhouse
TP	840	Tinplate - #840 Powerhouse
TP	46	Tinplate - #46 & #47 Crossing Gate
TP	56	Tinplate - #56 Lamp
TP	89	Tinplate - #89 Flag
TP	92	Tinplate - #92 Floodlight Tower
TP	94	Tinplate - #94 High Tension Tower
TP	153	Tinplate - #153 Semaphore
TP	200	Tinplate - #200 Turntable

The trailing digits are again sequential and have no bearing on the part itself. The letter suffix (the letters at the end of the part number) does apply to parts that have never been in the system previously, parts that have different decoration schemes, etc.

Examples

FB1110080 BRAKE SHOE / BLACK / RH / LONG TAB / 25.65mm TALL / PLASTIC / PREMIER STEAM

FB = Body / Trim: Boiler Body Parts, Locomotive Drawbars, Wireless Drawbars

111 = Steam / Premier / RH

0080 = Nothing, it is merely the 80th part in a running series meaning there is part 0079 behind it and 0081 beyond it.

DA6150004 TRUCK / FREIGHT / 70-TON / W/HIDDEN TAB / W/BRAKE AIR LINE / BLACK / PREMIER 60' FREIGHT CARS

DA = Chassis: Truck Assembly

615 = Freight / Premier / Both (Front & Rear)

0004 = Nothing, aside from it's the 4th truck in the sequence. So there is 0004 in front of it and 0005 beyond it.

FC2603005014 AIR TANK / BLACK / SHORT / HO SCALE SD70ACE

FC = Body / Trim: Diesel Shell Parts, Repair Posts (diesel / electric), Fuel Tanks

260 = Diesel / HO Scale / Not Applicable

3005014 = Nothing, aside from running in sequence.

TPSL00014 BELL & BRACKET / BRASS / TINPLATE STANDARD GAUGE 400E / 390

TPSL = Tinplate - Standard Gauge Steam Locomotive

00014 = Nothing, aside from running in sequence.

TPSL00014A BELL / BRASS / W/O BRACKET / INCLUDES YOKE / TINPLATE STANDARD GAUGE 400E / 390

Notice the part number ends in "A". This is because it is the same as above part, but there is something different about it.

TPSL = Tinplate - Standard Gauge Steam Locomotive

00014 = Nothing, aside from running in sequence.

A = Something similar BUT different (in this instance it does not include a bracket)