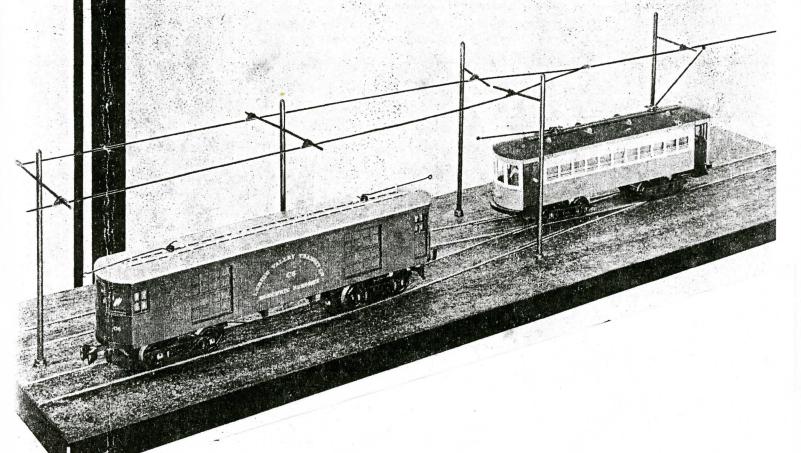


"O" GAUGE MODEL TROLLEY EQUIPMENT



LARGE SCALE REALISM IN SMALL SPACE

COMPLETE CATALOGUE FEB. 1, 1952
PETTMAN ELECTRICAL DEVELOPMENTS CO., SELLERSVILLE, PA.

(orl

MULTI-UNIT

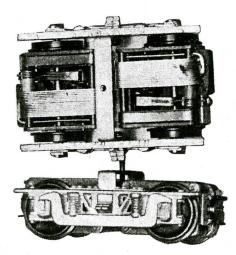
The best in under floor Power

EQUALIZED

POWER

TRUCKS

"O" Gauge



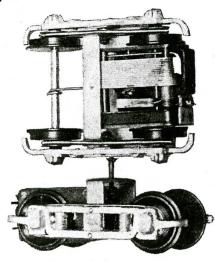
TWIN MOTOR TRUCK*

For heavy duty city and interurban service. Available with three types of wheels; our standard 3/32" wide tread three-rail, 1/8" wide tread two or three-rail. Choice of any side frames shown below.

Price with trailer truck:

With Pittman side frames	\$19.75
With Wagner side frames	20.75

* Brill 27-G trucks are equipped with one motor in each truck.



ECONOMY TRUCK

For all types of light service. Not recommended for hauling trailers. One Motor Unit in a truck with spring belts driving the idler axle. Available only with our standard 3/32" wide tread, threerail wheels. Choice of any side frames shown below.

Price complete with trailer truck \$14.00

PITTMAN ELEC. DEV. CO.

WAGNER CAR CO.

Cast Bronze



BRILL 27-G

BALDWIN 84 45AA

BRILL 27-E





BRILL 27-MCB-1

BALDWIN 84 50AA





AMERICAN A-490 Right

Left

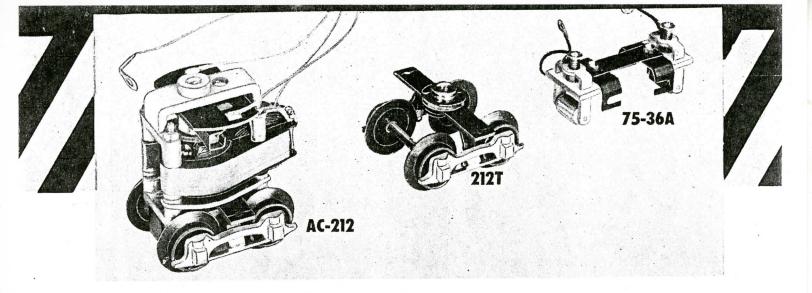
STANDARD C 80P

Trailer Trucks — With Pittman Side Frames \$3.00 a pair With Wagner Side Frames 3.50 a pair

Be sure to specify type of side frames and wheels when placing orders.



118 Maple Street, New Haven 11, Connecticut



ALL PURPOSE MOTOR and TRAIL TRUCKS

MODEL AC-212 MOTOR TRUCK, for use on tubular "O" gauge tin plate track such as Lionel, Marx, etc. Three pole A.C., D.C. universal motor, operates on toy transformer, power pack or batteries—12 to 15 volts. Worm drive to 11/16" diameter tin plate wheels through completely enclosed gears running in lubricant. Die cast main frame with oil retaining armature bearings and

bronze axle bearings. Die cast side frames, 1 1/8" wheelbase. Long life brushes, easily replaced when worn. Flexible lead wires attached, ready to connect to car body. Body mounting bracket (bolster) arranged to mount on either 500 series passenger car bodies or 510 series freight car bodies. Does not include center third rail shoe.

Price each (one motor truck only) \$6.95

model 2121 TRAIL TRUCK, matching motor truck AC-212 above. For use on tubular "O" gauge track such as Lionel, Marx, etc. 11/16" diameter tin plate wheels mounted on 1/8" axles. Die cast side frames, 11/8" wheelbase.

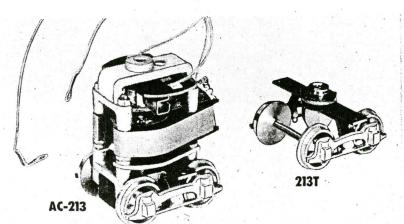
Body mounting bracket (bolster) arranged to mount on either 500 series passenger car bodies or 510 series freight car bodies. Does not include center third rail shoe.

Price each (one trail truck only) \$1.25

PART NO. 75-36A CENTER THIRD RAIL SHOE KIT, required when using 212 trucks on tin plate track such as Lionel or Marx, when current is not being collected from overhead wire. Shoes mount on 212T or 213T trail trucks or on any trail truck with wheelbase of $1\frac{1}{8}$ ", $1\frac{1}{2}$ " or $1\frac{1}{8}$ " and containing $\frac{1}{8}$ " diameter axles. Complete with wire leads ready to connect to car body.

Price per set \$1.00

Wiring Diagram And Instructions Included With All Above Items

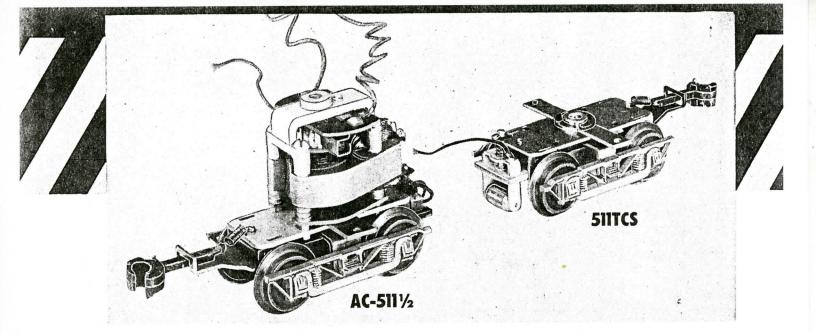


MODEL AC-213 MOTOR TRUCK, same sp cifications as AC-212 except equipped with scale whee for use on scale model track with flat top. Wheels a not insulated for two rail operation.

Price each (one motor truck only) . . \$7.2

MODEL 213T TRAIL TRUCK, matching mot truck AC-213. For use on scale model track with flat to Wheels are not insulated for two rail operation.

Price each (one trail truck only) . . \$1.4



HEAVY DUTY TIN PLATE MOTOR and TRAIL TRUCKS

MODEL AC-511½ MOTOR TRUCK, for use on tubular "O" gauge tin plate track such as Lionel, Marx, etc. in connection with freight trolley body kit Model 511-1. Heavy duty three pole universal motor, worm geared to 13/16" tin plate wheels.

MODEL 511TCS TRAIL TRUCK, matches above motor truck. Includes integrally mounted dummy

Die cast side frames with 1% wheelbase. Truck comes complete with integrally mounted dummy couplers to match Lionel automatics, and center third rail shoe.

Price each (one motor truck only) \$9.00

coupler and third rail shoe.

Price each (one trail truck only) \$2.50

Pittman Trolley Cars may be operated on any "O" gauge toy train track. When used with the Pittman Erect-A-Wire overhead trolley system, they can be run on the same track as your railroad train and each may be controlled independently of the other by using two transformers, one side of each transformer being connected to the outer or running rails and the other side of each transformer connected to the third rail and overhead wire respectively. In doing this be sure to mount your Erect-A-Wire poles on a wood baseboard to insulate them from the track.

An independent layout of Pittman trolley cars can be set up using ordinary Marx mechanical train track (available at very low cost) and Pittman Erect-A-Wire. Amaze your friends by operating your trolleys just like the real ones from live overhead wire. Pittman Erect-A-Wire is easy to install and adjust. Absolutely no soldering required. Can be taken apart and re-erected.

Pittman trolley equipment is 100 per cent American made from high grade materials and is guaranteed to give satisfactory performance over a long period of time when used in accordance with recommendations. The Pittman Company maintains at all times an adequate service department at the factory for the maintenance of your Pittman model trolley equipment at reasonable prices.

Products listed in this catalog are sold only through established retail hobby shops. Repair parts, however, may be obtained at all times direct from the factory.

Pt. No.	Description	Used in Kit #	Price
20-112	Car Side	500-1	\$1.50 pi
95-21	Car Side	510-1, 511-1	1.50 ed
95-34	Car Side	520	1.00 ed
95-11	Car Front	500-1	.50 ed
95-22	Car Front	510-1, 511-1	.65 ed
95-32	Car Front	520	.50 ed
22-60A	Roof Assembly	500-1	1.50 ed
28-2	Roof	510-1	.75 ed
28-3	Roof	511-1	.75 ed
V 95-27	Roof Walk	510-1, 511-1	.50 pr
28-4-5-6-7	Roof Parts	520	1.25 se
95-10	Platform	500-1	.50 ed
95-12	Hood Brace	500-1	.35 ed
20-120	Door Assembly	500-1	.50 ed
95-23	Pilot	510-1, 511-1	.50 ed
20-133	Pilot Bracket	510-1, 511-1	.15 P
TC15X	Scale Coupler (Dummy)	510-1	.20 p
TP9X	Tinplate Coupler (Dummy)	511-1	.40 p
95-6	Sideframe, Brill 27G		.35 e
95-15	Sideframe, Brill 27MCB		.40 e
95-16L	Sideframe, American A-490 (left hand)		.25 e
95-16R	Sideframe, American A-490 (right hand)		.25 e
95-17	Sideframe, St. Louis #47		.15 e
95-31	Sideframe, Brill 21E		.50 e
82-4	Trolley Pole Hook		.10 p
OF 5058	Ladder		.15 p

--- PITTMAN ---

TROLLEY SELECTOR CHART

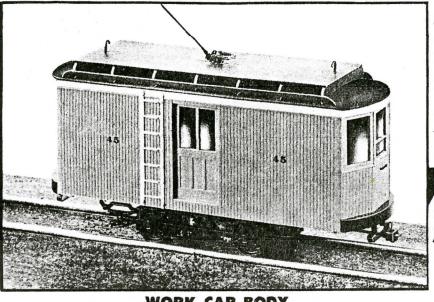
PASSENGER CA For Tinplate Track—Cent Third Rail #501 Car Body AC212 Motor Truck 212T Trail Truck 75-36A Third Rail Shoe		For Tinplate Track—Center Third Rail—One Motor Long Wheelbase Truck—With Couplers #511-1 Car Body AC5111/2 Motor Truck 511TCS Trail Truck	_	For Scale Track—Overhead or Erect-A-Wire, or Two I D.C. Motor—Dummy Scal Couplers #510-1 Car Body DC209 Motor & Trail Truck 11	Rail-
Total Cost For Tinplate Track—Over or Erect-A-Wire #501 Car Body AC212 Motor Truck 212T Trail Truck	\$13.95 rhead \$ 4.75 6.95 1.25	Total Cost For Tinplate Track—Cent Third Rail—Two Motor With Couplers #511-1 Car Body AC511 Twin Motor True	rs— \$ 8.95	For Scale Track—Overhead or Erect-A-Wire, or Two 8 Wheel Drive—A.C. Mo #510-1 Car Body 510-2 Geared Trucks AC510 Motor	Rail-
Total Cost For Scale Track—Overhea or Erect-A-Wire—Motor Body to Run on A.C. or #501 Car Body	in D.C. \$ 4.75	Total Cost For Tinplate Track—Over or Erect-A-Wire—One M Short Wheelbase Truck—	otor	For Scale Track—Overhead or Erect-A-Wire, or Two 8 Wheel Drive—D.C. Mo #510-1 Car Body 510-2 Geared Trucks DC510 Motor	Rail—
AC213 Motor Truck 213T Trail Truck Total Cost	7.25 1.45 \$13.45	Dummy Scale Couplers #510-1 Car Body AC212 Motor Truck 212T Trail Truck	\$ 7.95 6.95 1.25	Total Cost WORK CAR	\$25.65
For Scale Track—Overhea or Erect-A-Wire—under Floor Motor to Run on D.C. only (Rectifier) #501 Car Body DC204 Motor & Trail Truck	\$ 4.75 14.95	Total Cost For Tinplate Track-Ove or Erect-A-Wire-Two N Short Wheelbase Truck- Dummy Scale Couplers	Motors –	For Tinplate Track—Central Rail #520 Car Body AC221 Motor Truck 75-36A Third Rail Shoe Total Cost (Note—75-36 Shoe May be	\$ 6.95 7.95 1.00 \$15.90
Total Cost	\$19.70	#510-1 Car Body (2) AC212 Motor Truck	\$ 7.95 ks 13.90	Substituted in This Comb	ination)
FREIGHT CA	R	Total Cost	\$21.85	For Tinplate Track-Ove or Erect-A-Wire	
For Tinplate Track—Cer Third Rail—One Moto Short Wheelbase Truck No Couplers	or—	For Scale Track—Overheator Erect-A-Wire, or Two A.C. Motor—Dummy Sc	Rail-	#520 Car Body AC221 Motor Truck *	\$ 6.95 7.95 \$14.90
#511-1 Car Body AC212 Motor Truck 212T Trail Truck 75-36A Third Rail Sho	\$ 8.95 6.95 1.25 e 1.00	Couplers #510-1 Car Body AC209 Motor & Trail Truck	\$ 7.95 11.95	For Scale Track—Overhea or Erect-A-Wire #520 Car Body AC220 Motor Truck	\$ 6.95 7.95
Total Cost	\$18.15	Total Cost	\$18.90	Total Cost	\$14.90

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Pt. No.	Description	Used in Kit #	Price	
20-112	Car Side	500-1	\$1.50 pr.	
95-21	Car Side	510-1, 511-1	1.50 ea.	
95-34	Car Side	520	1.00 ea.	
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95-22	Car Front	510-1, 511-1	.65 ea.	
95-32	Car Front	520	.50 ea.	
22-60A	Roof Assembly	500-1	1.50 ea.	
28-2	Roof	510-1	.75 ea.	
28-3	Roof	511-1	.75 ea.	
95-27	Roof Walk	510-1, 511-1	.50 pr.	
28-4-5-6-7	Roof Parts	520	1.25 set	
95-10	Platform	500-1	.50 ea.	
95-12	Hood Brace	500-1	.35 ea.	
20-120	Door Assembly	500-1	.50 ea.	
V 95-23	Pilot	510-1, 511-1	.50 eα.	
20-133	Pilot Bracket	510-1, 511-1	.15 pr.	
TC15X	Scale Coupler (Dummy)	510-1	.20 pr.	
TP9X	Tinplate Coupler (Dummy)	511-1	.40 pr.	
95-6	Sideframe, Brill 27G		.35 ea.	
95-15	Sideframe, Brill 27MCB		.40 ea.	
95-16L	Sideframe, American A-490 (left hand)		.25 ea.	
95-16R	Sideframe, American A-490 (right hand)	9	.25 ea.	
95-17	Sideframe, St. Louis #47		.15 ea.	
95-31	Sideframe, Brill 21E		.50 ea.	
82-4	Trolley Pole Hook		.10 pr.	
OF 5058	Ladder		.15 pr.	





ITTMAN

WORK CAR BODY

Die Cast Sides and Ends-completely machined.

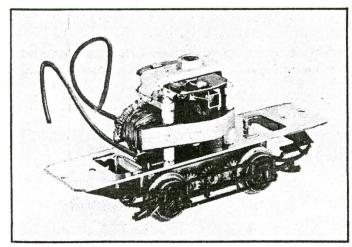
Wood Roof—all parts cut to size and shape; drilled ready for gluing together.

Working radial drawbars (couplers).

Pole reversing mechanism for use with either scale or tinplate truck — Fully working pole.

Acetate supplied for window and door openings.

Body width 2", length over bumpers 6½".



RADIAL DRAWBARS (COUPLERS)

Consist of die cast heads and stamped bar and carry iron, together with pins for assembly, as illustrated on work car above. Mounting dimensions included.

Part #75-37 (not assembled) . . .

. Per Pair \$.75

SINGLE MOTOR TRUCK

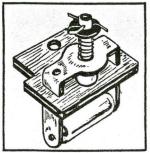
Brill 21E Prototype—Die Cast Sideframes—Motor in body, wound split field series type, 3 pole armature, worm drive $8\frac{1}{2}$ to 1 ratio. Width of motor 1 11/16", wheelbase $1\frac{1}{6}$ ", Truck mounts with end ears to #520 body above.

Model AC220, with scale wheels . \$7.95 ea.

Model AC221, with tinplate wheels

(no center third rail shoe inclu-

ded — see below) \$7.95 ea.

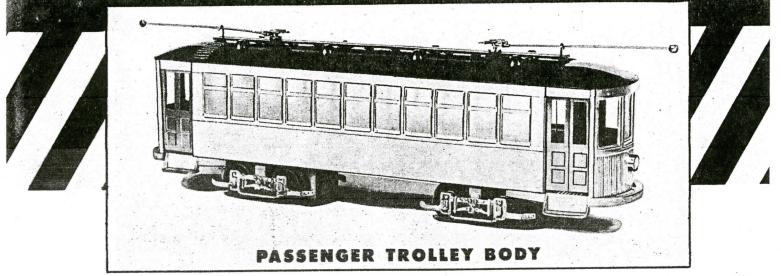


SINGLE THIRD RAIL SHOES

Mount on AC220 or AC221 truck by two screws provided. Long wearing, foolproof contact shoes for current pickup on center third rail tinplate track.

Part #75-36 . Per Pair \$.90

TITTMAN FIFETDICAL DEVELOPMENTS CO. SELLEDSVILLE D



Built to exact 1/4" scale from a Brill Prototype, this trolley body kit is really an ASSEMBLY KIT, with every part prefinished and preformed. Any model builder can easily install extra interior detail.

Pittman Quality throughout—die cast ends, stamped and formed sides and doors, working trolley poles, molded plastic roof. And a wealth of authentic detail everywhere. Completely illustrated, tested instructions enclosed. Body width 2-1/16", length bumper to bumper 10-9/16", height rail to roof walk 3-3/16", truck centers 4-13/16".

MODEL 500-1 Trolley Body Kit, less trucks 5

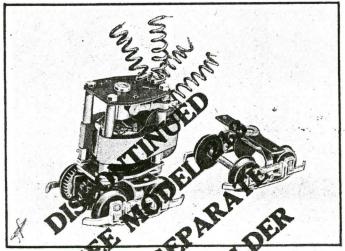
PASSENGER TROLLEY TRUCKS

for use with Model 500-T body

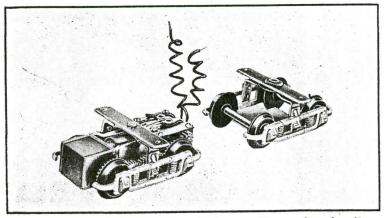
Semilie on the semilier of the

MODEL AC207 —Brill 27G Prototype Die Cast Side Frames—Motor in body, wound field series type, 3 pole armature, 3/4" tin plate wheels. Bolster width 2", extreme height above rail 2-17/32", width of motor in pody 13/8", 11/8" wheelbase. Trailer truck equipped with tanker 3rd-rail shoe.

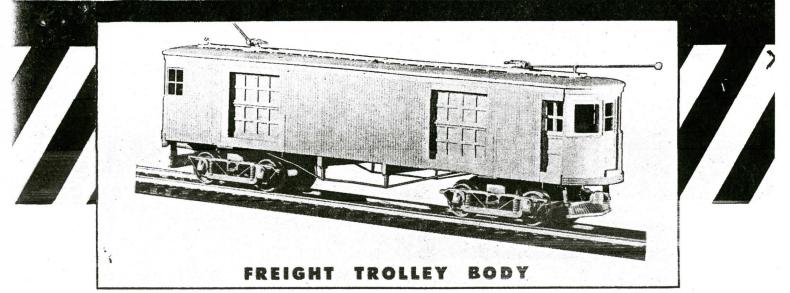
MODEL 2071 Trail Truck only, less shoeea. 1.50



MODEL ACADE Same a bove except equipped with 7 pole armature and 11/16" scale when insulated for 2-rail. No 3rd-rail shoe included.



MODEL DC204—Brill 27MCB underfloor trolley truck and trailer. For use in light interurban cars. Insulated for 2-rail, and can be used with overhead trolley. Permag field for 12 volt D.C. operation only, 5 pole armature. Detailed pressure die cast side frames, 15/8" wheelbase. Wheel dia. 11/16", overall length 23/4", height from rail to top of body bolster 15/16".

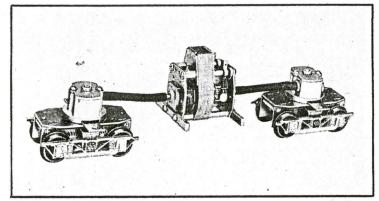


Built to exact ½" scale, Lehigh Valley Transit Freight Trolley Prototype, this body kit is truly an ASSEMBLY KIT, with every part prefinished and preformed. No drilling or tapping necessary—A Real Screwdriver Kit. Extra details can easily be added. Pittman Quality brings you: Die Cast Sides, Ends, and Pilots, Non-Operating Doors, Pre-Shaped Wood Roof, Working Trolley Poles on Die Cast Roof Walk, Dummy M.C.B. Couplers, to complete a well detailed and authentic model. Body width 2½", length bumper to bumper 12½", height rail to roof walk 3½", total wheel base 9½".

Same as above except dummy trolley poles actuating manual reversing switches under roof for use with type AC511 trucks for operation on tin plate center 3rd-rail track. Couplers not furnished. Complete with switches and wiring diagram.

FREIGHT TROLLEY TRUCKS

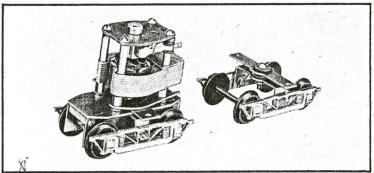
for use with Model 510-1 body



MODEL 510-2 Geared Trucks (less motor) Per Pair 10.95 Die Cast American Locomotive A-490 Side Frames, $1\frac{7}{8}$ " wheelbase. Fully enclosed die cast Worm Gear Box swivels on king pin, driving pinion to crown gear, thence to spur gears to axle. Connects to #510 motors with neoprene coupling supplied, and offers eight wheel drive for maximum traction. Wheel dia. $\frac{3}{4}$ ", bolster width $\frac{21}{4}$ ", extreme height above rail 1-13/16". Insulated for 2-rail, can be used with overhead trolley or outside 3rd-rail.

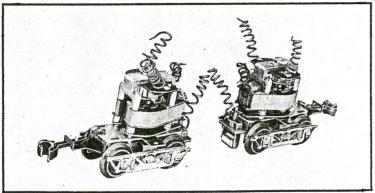
MOTORS FOR ABOVE (Illustrated between trucks), similar to type 94 motors except with Double End Shaft and Special Mounting Brackets to fit #510-1 Body.

AC510 Motor 12-17 v. A.C. - D.C. (Wound Field) 6.75 DC510 Motor 12 v. D.C. only (Permanent Magnet Field) 6.75



MODEL 209—Same truck frames as #510-2, 2-rail, etc. For use with MU and heavy interurban cars or #510-1 Body for light service. 7 pole armature, permag field 12 v D.C. motor, or universal A.C. - D.C. motor. Wheel dia. 3/4", insulated for 2-rail, bolster width 2-7/32", extreme height above rail 23/4", width motor in body 13/8", overall length 2-11/16".

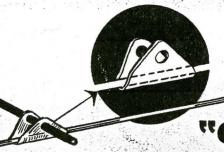
MODEL DC209 Per Pair, one motor and one trailer
(Permanent Magnet Field)11.95



MODEL AC511—For tin plate center 3rd-rail track. Twin motor trucks equipped with roller 3rd-rail shoes and dummy tin plate couplers swiveling with truck. 3 pole armatures; worm drive. Simplified long life brush rigging. Use with Model 511-1 Body.

MODEL AC511 Per Pair (2 motor trucks) 17.95

We recommend two motor trucks for use on tin plate rail for maximum traction



"O" GAUGE ERECT-A-WIRE

Erect-A-Wire is a dependable simple-to-erect overhead trolley wire for "O" Gauge layouts. Requires no soldering, just clip together assembly with ready-to-mount poles, prefinished in black oxide. Readily adapts itself to tin plate layouts. Poles mount in 3/16" hole in baseboard up to 3/4" thick. Operates with #75-26 trolley pole contained in Model 500-1 and 510-1 Body Kits, or sold separately (Illustrated below). Not recommended for use with Pantograph Collectors.

#75-31 Erect-A-Pole, single armea.	.35
#75-32 Erect-A-Pole, double armea.	
#16BS36 Erect-A-Wire, trolley wire	
Pkg. of 10 - 3 ft. pcs	.75
#20-136 Extra Hanger Clips, Pkg. of 6.	.50

"O" GAUGE ERECT-A-FROGS

Used in conjunction with Erect-A-Wire poles, gives solderless wire frog for #4 or smaller radius switches, or tin plate track.

RIGHT	HAND	ERECT-A-FROG
Marie I		The state of the s

#75-33 for Right Hand turnoutsea. .35 Packaged 3 in box.



#75-35 for Wye turnoutsea. .3!
Packaged 3 in box.



#75-34 for Left Hand turnoutsea. .35
Packaged 3 in box.

O AND HO GAUGE SCALE TROLLEY FROGS



Stamped brass to Standards in N.M.R.A. Handbook Fits #24 B & S gauge wire or smaller. Will not operate with Erect-A-Wire above.

#20-129 Frogspkg. of 2 .15

Pittman Trolley Poles have set new standards for quality! All-American made, all-NMRA standard. Complete, easy-to-assemble kits that look and act like the real thing. Die stamped base and pole socket, double springs, steel pole, brass contact shoe and perfect performance.

"O" GAUGE TROLLEY POLE



INSTRUCTIONS

MODEL 500-1 TROLLEY CAR BODY KIT

Study Carefully Before Attempting to Assemble This Kit

Recommended Tools

Thir blade screw driver with at least 3" blade and preferably with screw holding attachment.

Long nose pliers. Set of needle files. Bench vise.

Procedure

1. File flash from die castings and roof edge.

2. Paint all metal parts as desired. If roof is to be painted use Floquil Model R. R. paints as they are designed to adhere to the plastic used in this roof.

3. Insert pole bushings through roof walk and roof in large holes provided. Attach solder lug and #8-32 nut.

 Holding trolley hooks in end of pliers, press into small holes in trolley boards and roof. Twist as you force in place.

5. Screw 2 hood braces to top of fronts with fine thread drive screws.

6. Screw 2 platforms to under side of fronts with 2 fine thread drive screws.

7. Snap door assembly between hood brace and platform, inserting celluloid for front windows between sheet metal and die cast end.

Place car sides on platform knees and secure with fine thread drive screw from inside at each corner of body. Doors engage slots in bulkheads.

9. Fasten inside bulkhead to hood brace at each end with 2 fine thread dive screws

from inside body.

10. Screw roof to car sides at center of body from inside. Use coarse thread drive screw with round head. Screw also holds plastic window strip. Screw hood braces to roof thru holes provided in braces with coarse thread round head screws. Fasten remaining roof mounts and plastic window strip with 4 binding head coarse thread screw provided.

11. If overhead wire is to be used for pickup, wire as per diagram. CAUTION—when soldering to lugs at base of pole either remove lug or use very little heat, as plastic

roof melts at a lower temperature than solder.

 Trucks may be installed in holes provided. If Pittman trucks are used, the truck bolsters are placed inside the car side flanges, and secured with drive screws from outside of flange.

Assembly of Poles

- Place brass escutcheon pin through ears on stampings, ears on part affixed to pole going on outside. Crimp pin outside outer stamping by placing between vise jaws and squeezing. Cut off excess pin.
- 2. Hook springs in holes provided in pole socket and pole base.

3. Poles screw into bushings in car roof.

	MODEL 500-1 PARTS LIST	
PT. #	NAME	PRICE EACH
22-60A	Roof Assembly	1.50
75-26	Trolley Pole, complete	
10-80	Trolley Wheel	2 for .10
85-15	Trolley Pole Spring	2 tor .10
20-112	Car Side	/5
95-10	Platform	.50
95-11	Front	.50
95-12	Hood Ryace	35
82-4	Trolley Hook	2 for .10
22-65	Plastic Window Strip	
	#2 x 3/16 type Z coarse thread screws	.10 sof 8
	#2-56 x 3/16 type F fine thread crews	6 for .10
20-120	Door Assembly	.25

MANUF ICTURED BY

PITTMAN ELECTRICAL DEVELOPMENTS CO., SELLERSVILLE, PA., U. S. A.

