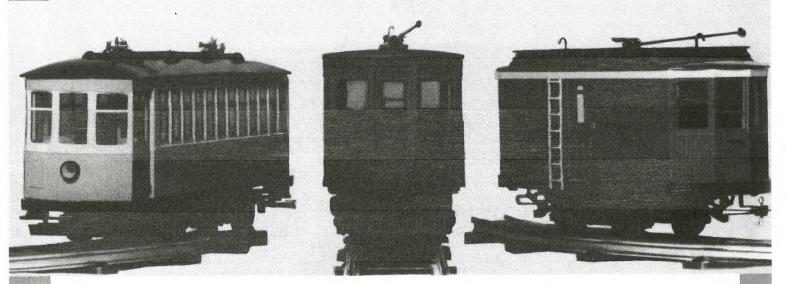
"O" Gauge Model TROLLEY Equipment



Large Scale Realism in Small Space

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 contolled 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.

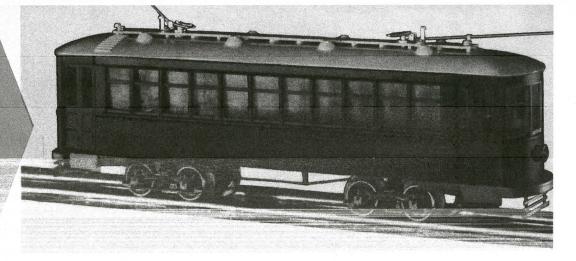
An independent layout of Pittman trolley cars can be set up using ordinary Marx mechanical train track (available at very low cost) and Pittman Erect-A-Wire. Operate your trolleys just like the real ones from live overhead wire. Pittman Erect-A-Wire is easy to install and adjust. Absolutely no soldering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

Pittman trolley equipment is 100 percent 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 by leading hobby dealers everywhere. Repair parts may be obtained at all times from the factory.

September 1, 1954
Prices subject to change without notice.

PASSENGER TROLLEY BODY



Fascinating reproduction of famous Brill prototype built to exact scale of $\frac{1}{2}$ " to the foot. Every part in this authentic assembly kit is prefinished and preformed.

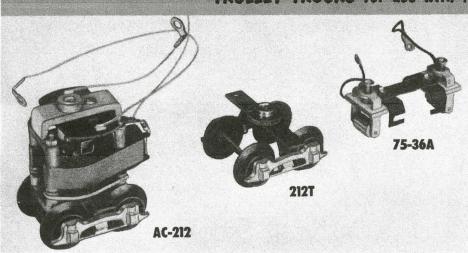
Pittman quality materials and workmanship throughout—including die cast ends and platforms, stamped and formed scribed sides prepainted in cream (add your own trim color

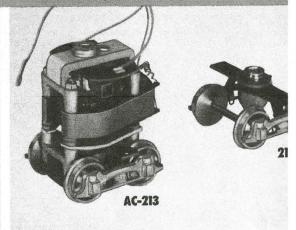
to suit), prepainted stamped doors, working trolley poles, molded one piece styrene roof, metal fenders, etc.

Completely illustrated, tested instructions for assembly enclosed with kit. Length over bumpers 10%", height from rail to roof 3%", width 2%".

MODEL 501 TROLLEY BODY KIT (less trucks)\$ 4.95

TROLLEY TRUCKS for use with Model 501 Body





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, 11/8" 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 501 passenger car bodies or 512 interurban freight car bodies. Does not include center third rail shoe.

Price each
(one motor truck only)\$ 7.50

MODEL 212T TRAIL TRUCK, matching motor truck AC-212 above. For use on tubular "O" gauge track such as Lionel, Mark, etc. 11/16" diameter tin plate wheels mounted on 1/2" axles. Die cast side frames, 11/2" wheelbase. Body mounting bracket (bolster) arranged to mount on either 501 passenger car bodies or 512 interurban 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 11/6", 11/2" or 17/6" and containing 16" diameter axles. Complete with wire leads ready to connect to car body.

Price per set \$ 1.25

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

Price each (one motor truck only) ...\$ 7.70

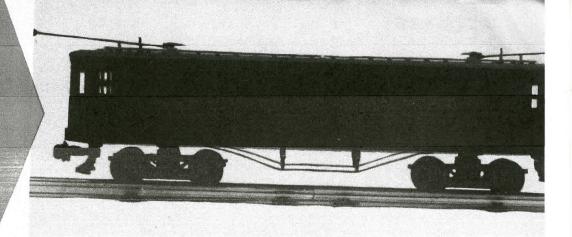
MODEL DC-213 MOTOR TRUCK, same as above except equipped with permanent magnet field motor for use on 12 volts direct current only.

Price each (one motor truck only) ...\$ 8.00

MODEL 213T TRAIL TRUCK, matching motor trucks AC-213 and DC-213 above. For use on scale model track with flat top. Wheels are not insulated for two rail operation.

Price each (one trail truck only)....\$ 1.45

Interurban FREIGHT BODY



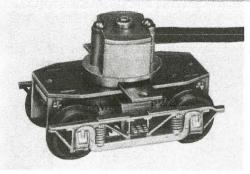
Meticulous copy of romantic Lehigh Valley Transit interurban freight prototype—a real Screwdriver Assembly Kit with every part prefinished and preformed. No drilling or tapping necessary.

Extreme authenticity and precise detail in exact ½" scale. Optional extra details can be added easily. Pittman quality features include die cast sides, ends and pilots, non-operating doors, preshaped wood roof, working trolley poles on die cast roof walk.

Dimensions: Body width $2\frac{1}{4}$ ", length bumper to bumper $12\frac{1}{4}$ ", height rail to roof walk $3\frac{1}{4}$ ".

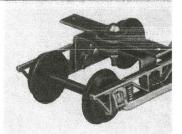
MODEL 512 INTERURBAN FREIGHT BODY KIT (less trucks & couplers) \$7.50 COUPLERS for above—mount under pilot brackets #75-39, to mate with scale automatics \$.60 pr. #75-40, to mate with Lionel automatics \$.60 pr.

INTERURBAN FREIGHT TRUCKS for use with Model 512 Body

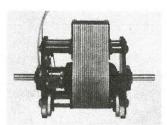


MODEL 230G GEARED TRUCK (less motor) with new gear ratio for higher speed, for use on scale model track with flat top. Die cast American Locomotive A-490 side frames, 1%" wheelbase. Fully enclosed die cast worm gear box swivels on king pin, driving crown gear, thence to spur gears to axles. Connects to #230 motors with neoprene coupling supplied. Wheel diameter ¾", bolster width 2¼", extreme height above rail 1½", Insulated for 2-rail; can be used with overhead trolley. Use one geared truck and one trail truck for 4 wheel drive; two geared trucks for 8 wheel drive.

Price each (one geared truck only)\$ 4.95



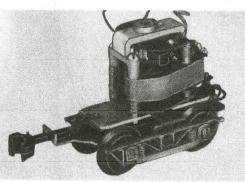
MODEL 209T (trail truck of to match 230G) \$ 1.5



NEW HEAVY DUTY MOTORS FOR ABOVE, similar to type 95 motors except with double end shaft and special rubber insulated mounting brackets to fit Model 512 body. 7 pole armatures.

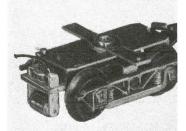
MODEL AC-230 MOTOR 12-17 v. A.C., D.C.	
(Wound Field)\$	8.00
MODEL DC-230 MOTOR 12 v. D.C. only	
(Permanent Magnet Field)\$	8.00

MOTOR TRUCKS FOR TIN PLATE, center 3rd rail track



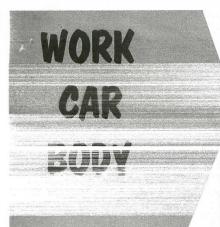
MODEL AC-511½ MOTOR TRUCK, for use on tubular "O" gauge tin plate track such as Lionel, Marx, etc. in connection with freight trolley body kit Model 512. Heavy duty 3-pole universal motor, worm geared to $^{13}/_{16}$ " tin plate wheels. Die cast side frames with 1%" wheelbase. Truck comes complete with integrally mounted dummy couplers to match Lionel automatics, and center third rail shoe.

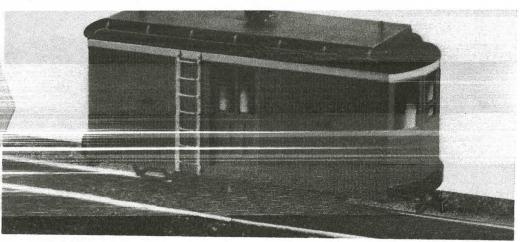
Price each (one motor truck only) \$ 9.00



MODEL 511TCS TRAIL TR matches AC-511½ motor truck cludes integrally mounted di coupler and third rail shoe.

Price each (one trail truck only) \$





Die Cast Sides and Ends—completely machined.

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

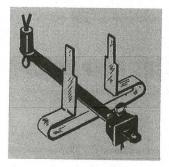
Working radial drawbars (link and pin couplers).

Pole reversing mechanism for use with either scale or tin plate truck. Fully working pole.

Acetate supplied for windows and door openings.

Body width 2", length over bumpers 61/2".

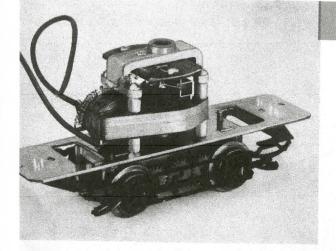
MODEL 520 WORK CAR BODY KIT (less truck) \$ 6.95



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 No. 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 8½ to 1 ratio. Width of motor 111/16", wheelbase 1%". Truck mounts with end ears to #520 body above.

MODEL AC-220, with scale wheels \$7.95 ea.

MODEL AC-221, with tin plate wheels (no center third rail shoe included, see #75-36A, page 2) \$7.95 ea.



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 Pittman Body Kirs or sold securities. "Musical Lada"

NA PERMITTANCE WE SEE WITH PERMITTER SHOWS AND ADDRESS OF THE PERMITTER SHOWS AND ADDR

#75-31 Erect-A-Pole, single armea.	4
#75-32 Erect-A-Pole, double arm ea.	\$.45
THE PARTY OF THE P	AND THE PARTY OF T

#20-136 Extra Hanger Clips. Pkg. of 6 \$.35

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



"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



KICHI MANU PRECI-A-PRUG

#75-33 for Right Hand turnoutsea. \$.35



LEFT HAND ERECT-A-FROG

#75-34 for Left Hand turnoutsea. \$.35

'O' GAUGE TROLLEY POLE

Pittman Trolley Poles have set new standards for quality! All-American made, all-N.M.R.A. 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.



TROLLEY SELECTOR CHART

PASSENGER CAR

For	Ting	late	Track	-	Center
T	hird	Rail			

#501 Car Body	\$ 4.95
AC-212 Motor Truck	7.50
212T Trail Truck	1.25
75-36A Third Rail Shoe	1.25
Total Cost	\$ 4.95

Above also available in single package—Model PT1 \$14.95

For Tinplate Track—Overhead or Erect-A-Wire

#501 Car Body	\$ 4.95
AC-212 Motor Truck	7.50
212T Trail Truck	1.25
Total Cost	\$13.70

For Scale Track—Overhead or Erect-A-Wiro Motor in Bady to Run on A.C. or D.C.

#501 Car Body	\$ 4.95
AC 010 Makey Tour	7 70
210T Trust Trush	1.45
Total Cost	\$14.10

to Run on DC only (Rectifier)

DE -7	13 6		Truck	8.00
DC-2	10 14	10101	HUCK	0.00
213T	Trail	Truck	(1.45

FREIGHT CAR

For Tinplate Track — Center Third Rail — One Motor — Short Wheelbase Truck — No Couplers

#512 Car Body	\$ 7.50
AC-212 Motor Truck	7.50
212T Trail Truck	1.25
75-36A Third Rail Shoe	1.25
Total Cost	\$ 17.50

For Tinplate Track — Center Third Rail — One Motor — Long Wheelbase Truck — With Couplers

#512 Car Body	\$ 7.50
AC-5111/2 Motor Truck	9.00
511TCS Trail Truck	2.50
Total Cost	\$19.00

Above also available in one package—Model FT1 \$18.95

For Tinplate Track — Center

With Couplers

,	40-51	ì	i win	Motor	Trucks	17.95
Total Cost		\$	25.45			

or Erect-A-Wire-One Motor

No Couplers

100				
A-1		0.0.	HUCK	1.00
212T	Trail	Truc	:k	1.25

For Scale Track—Overhead or Erect-A-Wire, or Two Rail— 8 Wheel Drive—A.C. Motor

#512 Car Body	\$	7.50
Two 230G Geared	Trucks	9.90
AC-230 Motor		8.00
Total Cost	\$2	25.40

For Scale Track—Overhead or Erect-A-Wire, or Two Rail— 8 Wheel Drive—D.C. Motor

#512 Car Body	\$	7.50
Two 230G Geared	Trucks	9.90
DC-230 Motor		8.00
Total Cost	\$:	25.40

WORK CAR

For	Tinplate		Track	_	Center
T	hird	Rail			

#520 C	520 Car Body			\$ 6.95
AC-221 Motor Truck			7.95	
75-36A	Third	Roil	Shoe	1.25
To	Total Cost			\$ 16 15

The Timplate Treats Overhead or Erect-A-Wire

Total Cost	\$14.90
AC-221 Motor Truck	7.95
#320 Car Body	\$ 5.55

For Scale Track—Overhead or Erect-A-Wire

# 320	Car	bouy	4	0.75
AC-22	0 M	otor Truck		7.95

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.
- 4. 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.
- 8. 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.
- Fasten inside bulkhead to hood brace at each end with 2 fine thread drive 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

- 1. 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 for .10
20-112	Car Side	.7 5
95-10	Platform	
95-11	Front	.50
95-12	Hood Brace	
82-4	Trolley Hook	2 for .10
22-65	Plastic Window Strip	.25
	#2 x 3/16 type Z coarse thread screws	.10 s for .10
	#2-56 x 3/16 type F fine thread .crews	6 for .10
20-120	Door Assembly	

MANUF ICTURED BY

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

