

## LIONEL SERVICE MANUAL

## NO. TT-100 COUPLER ADAPTER

All standard Lionel cars manufactured since the war (except the 'Scout' line) are equipped with remotely operated railroad knuckle-type couplers. While several types of these couplers have been developed, as described further in this section, all of them will couple with each other. Old style Lionel couplers, manufactured prior to the war can be made to couple with modern knuckle couplers by the use of a recently-designed Coupling Adapters.

Two types are available: Adapter TT-100 for TT trucks which were used with cars of '600' and '2600' series, and Adapter TS-162 for TS trucks used with cars of '800' and '2800' series. You will note that TS-162 has a small step at point 'B' of the neck which enables the higher '800' and '2800' cars to couple with all modern cars.

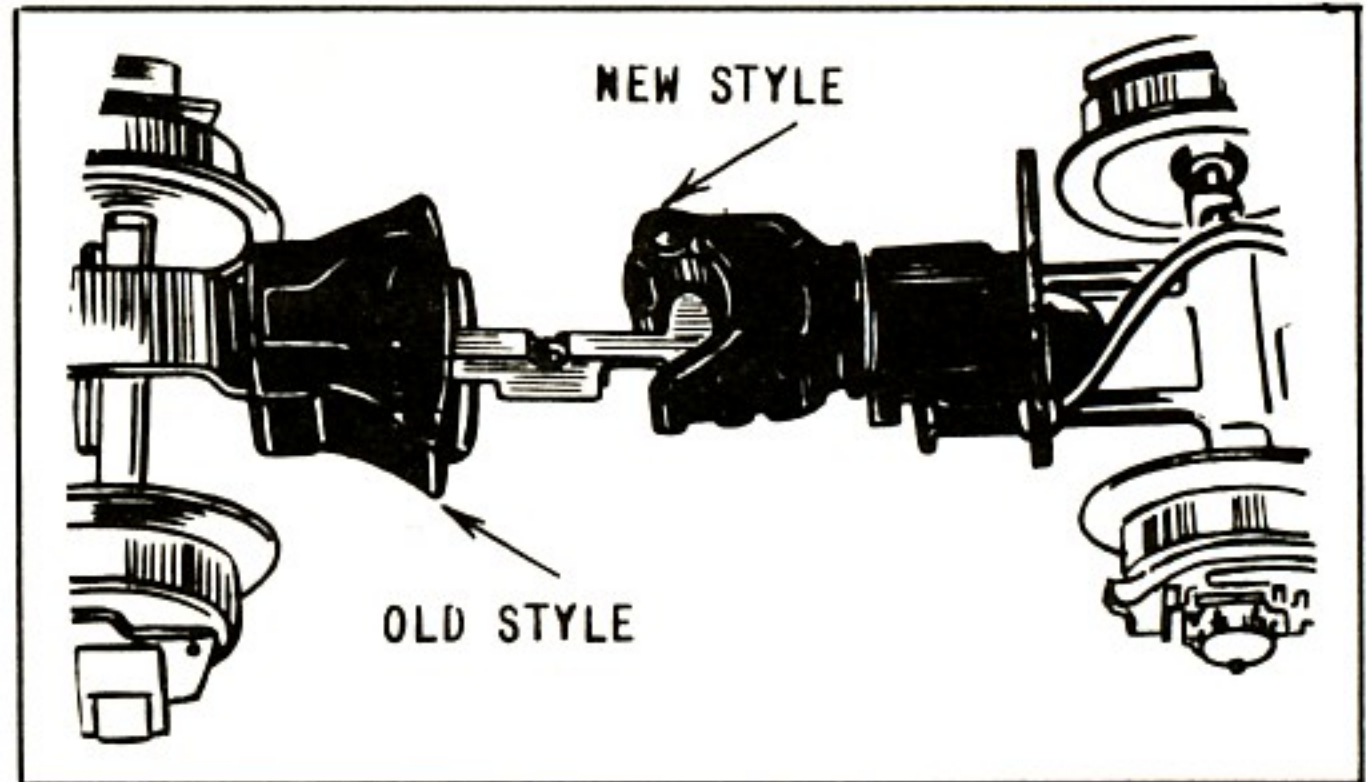


Figure 2 - Coupling Adapter shown in Coupling Position with Old Style and New.

Figure 2 illustrates how the old style coupler equipped with a coupling adapter couples with a modern knuckle coupler. Note that when the two trucks are uncoupled it is the *knuckle coupler* which opens to release the other car. The adapter-equipped coupler becomes inoperative and cannot be opened. It is also obvious that two adapter-equipped cars cannot be coupled together directly but only by having between them a modern car equipped with knuckle couplers.

TT-100 and TS-162 Coupling Adapters provide a working conversion at a minimum of cost but at the sacrifice of remote control uncoupling feature of the converted car. Where a complete conversion is desired the old style coupler trucks can be replaced by standard modern trucks equipped with solid pressed-iron wheels and knuckle type couplers. This conversion can frequently be made merely by replacing the trucks. In some cases minor adaptations of the old car body may be necessary to permit free rotation of the new coupler trucks, such as elimination of protruding guards or relocation of the pivot holes in car body, etc.

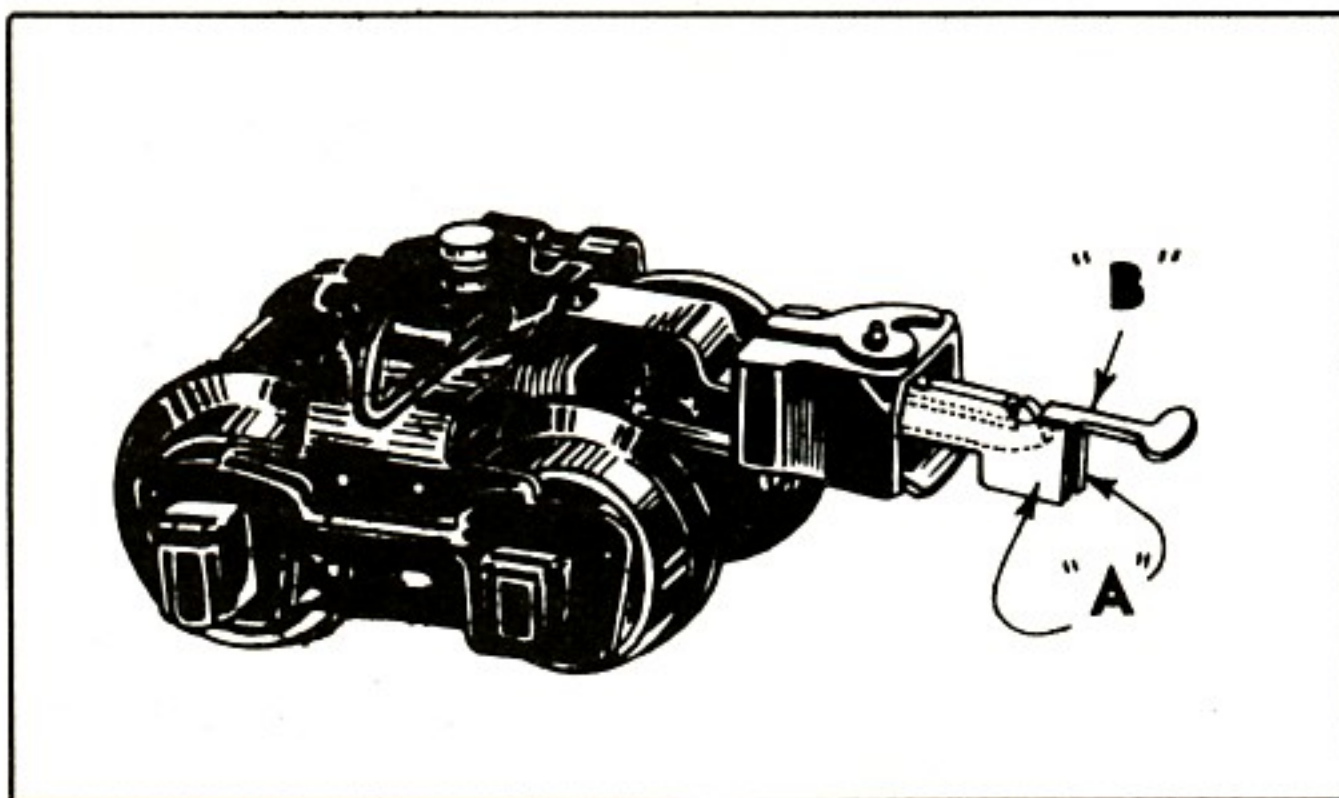


Figure 1 - Old Style 'TT' Truck equipped with Model 'A' TT-100 Coupling Adapter.

Figure 1, illustrates a TT truck equipped with the Coupling Adapter. Note that the adapter is simply fitted over the coupler hook (shown in dotted lines) so that the end of the hook projects through the slot in the adapter, as shown. If the adapter fits loosely it may be secured by squeezing it together at points 'A.' A slight vertical adjustment of the adapter head may be required to make sure it enters the mating knuckle coupler at about the center of its vertical dimension. To make this adjustment bend a step at point 'B' with a pair of pliers.

**COUPLING ADAPTER**  
\$.25 a pair

TT-100

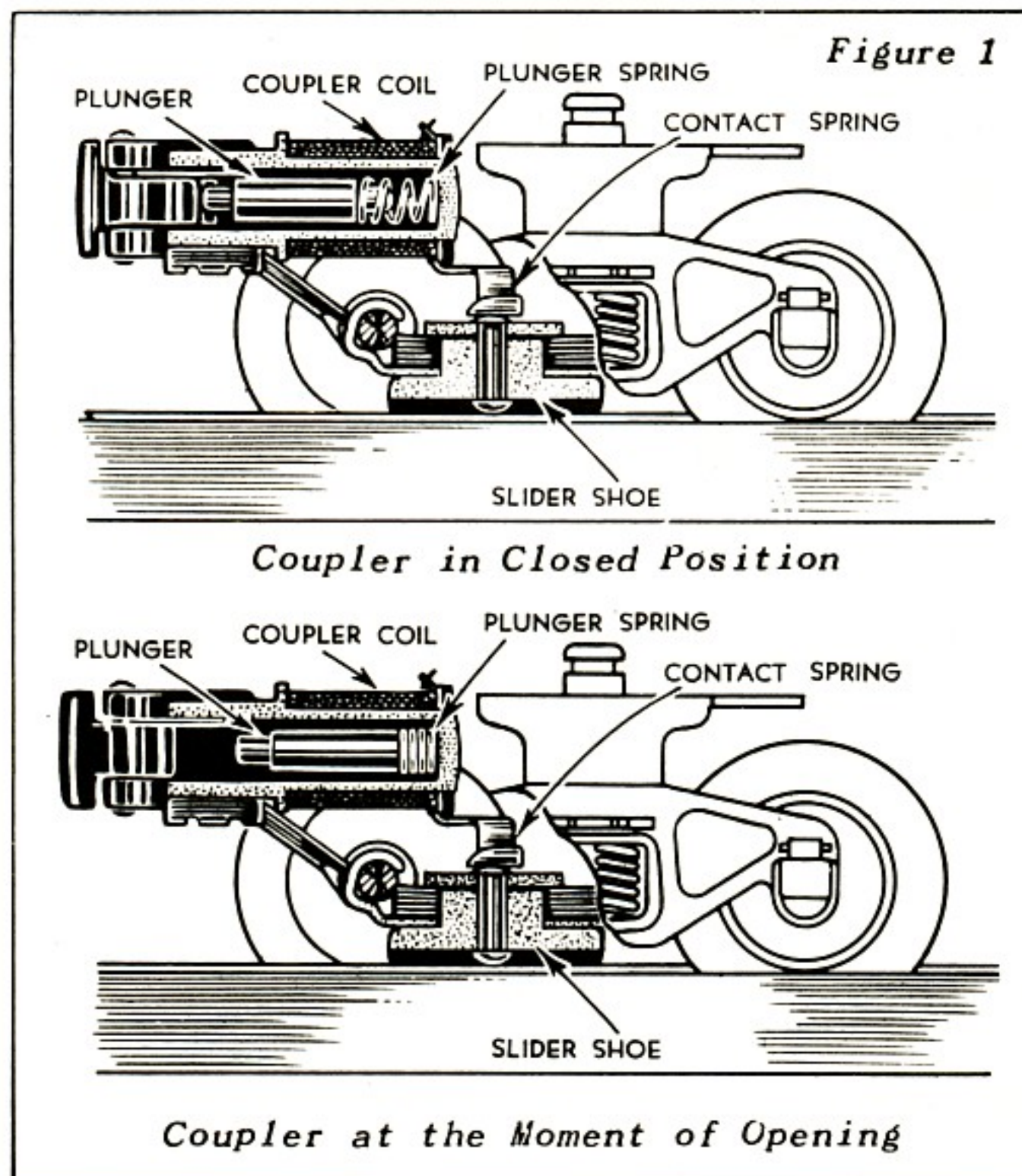
TS-162

NOTE: ORDER IN LOTS OF ONE HUNDRED

## LIONEL SERVICE MANUAL

## REMOTE CONTROL COUPLERS

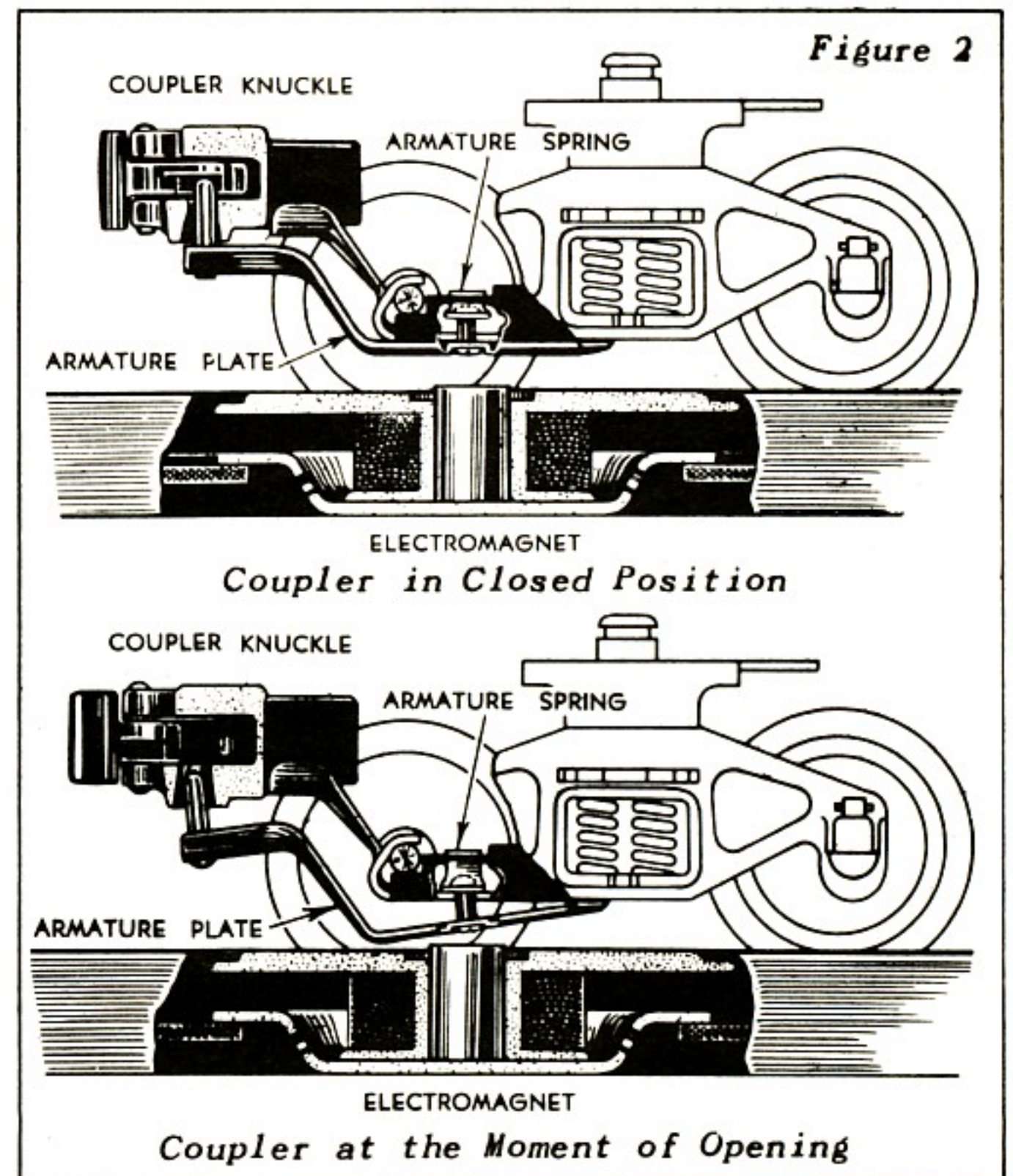
Although, properly speaking, all Lionel remote control operating knuckle couplers work electromagnetically, i.e., through the medium of an electromagnet, whether on the coupler itself or in the uncoupling track section, the name 'electromagnetic' has been reserved for those couplers where the coil is wound on the body of the coupler itself. The operation of these couplers is illustrated in Figure 1.



When coupler is closed, the plunger spring holds the plunger against the inside lip of the coupler knuckle, keeping it latched. When the 'Uncouple' button of the Remote Control Section controller is pressed, the electric

circuit is completed through the slider shoe and the contact spring, and the plunger is pulled into the electrified coil permitting the coupler knuckle spring to snap the knuckle open.

The designation 'magnetic' has been reserved for those trucks which do not have individual coils but are operated by an electromagnet located in the uncoupling track section. The coupler has no electrical connection to the track, but is opened when its movable armature plate is attracted by the energized track electromagnet. See Figure 2.



## SERVICING ELECTROMAGNETIC COUPLERS

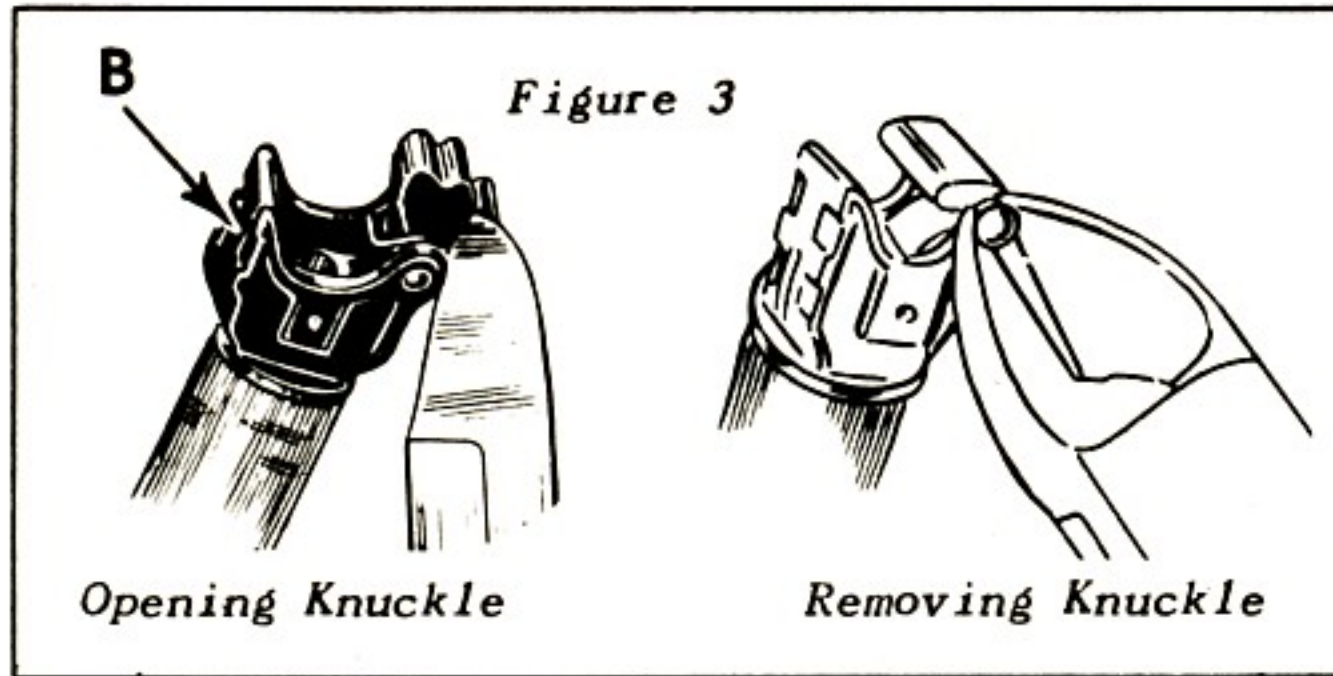
Failure of an electromagnetic coupler to operate may be due either to some failure in the electrical circuit, such as a defective or shorted coil, poor solder connections, poor contact between the contact spring and slide shoe contact rivet or to some mechanical interference or failure.

A coupler which is in good mechanical condition should open when the back end of the truck is tapped sharply on a bench or table.

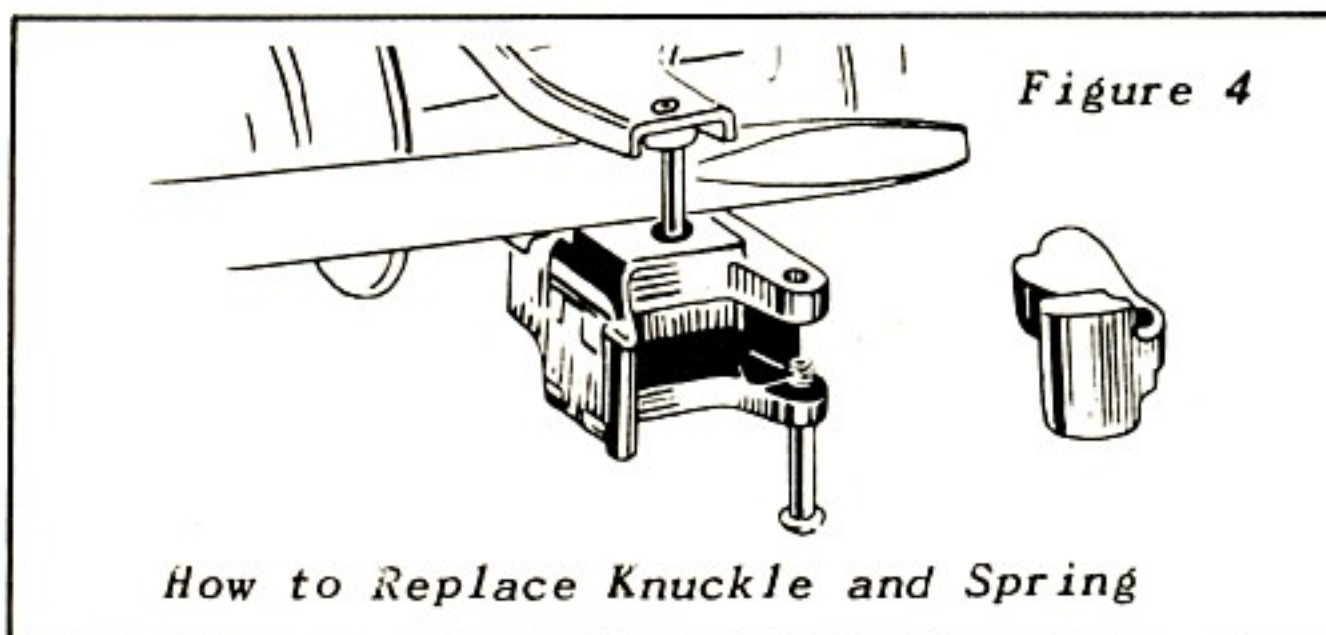
1. If the knuckle opens by itself during operation of train, the plunger spring is too weak. To reach the spring open coupler, then pry open the knuckle using a cutting pliers for better grip, as shown in Figure 3. If knuckle becomes loosened within the coupler and opens too easily tap coupler body lightly at point B.

2. If knuckle or knuckle spring is broken remove by taking out pin with a pair of cutting pliers, as shown in Figure 3. To reassemble, insert new pin partly through coupler hole,

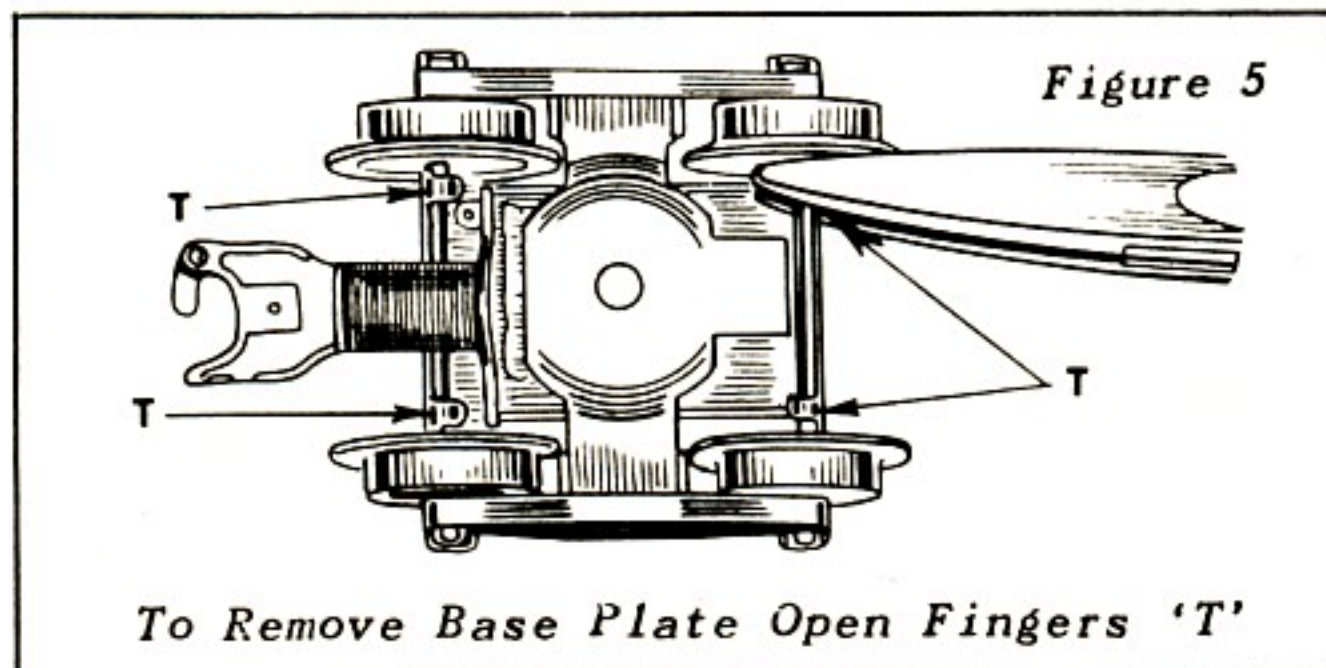
## LIONEL SERVICE MANUAL



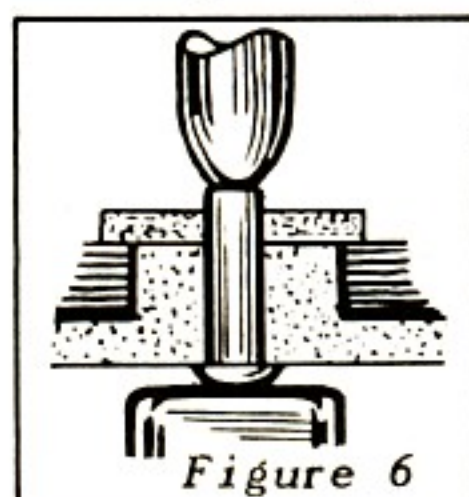
thread the knuckle spring on the projecting end of pin, as shown. Then place the knuckle in position within the coupler and push the pin through. Rivet the end of pin with a small punch or a ball peen hammer. Note that in repairing magnetic trucks the armature and pin should be kept out of the way, as shown in Figure 4.



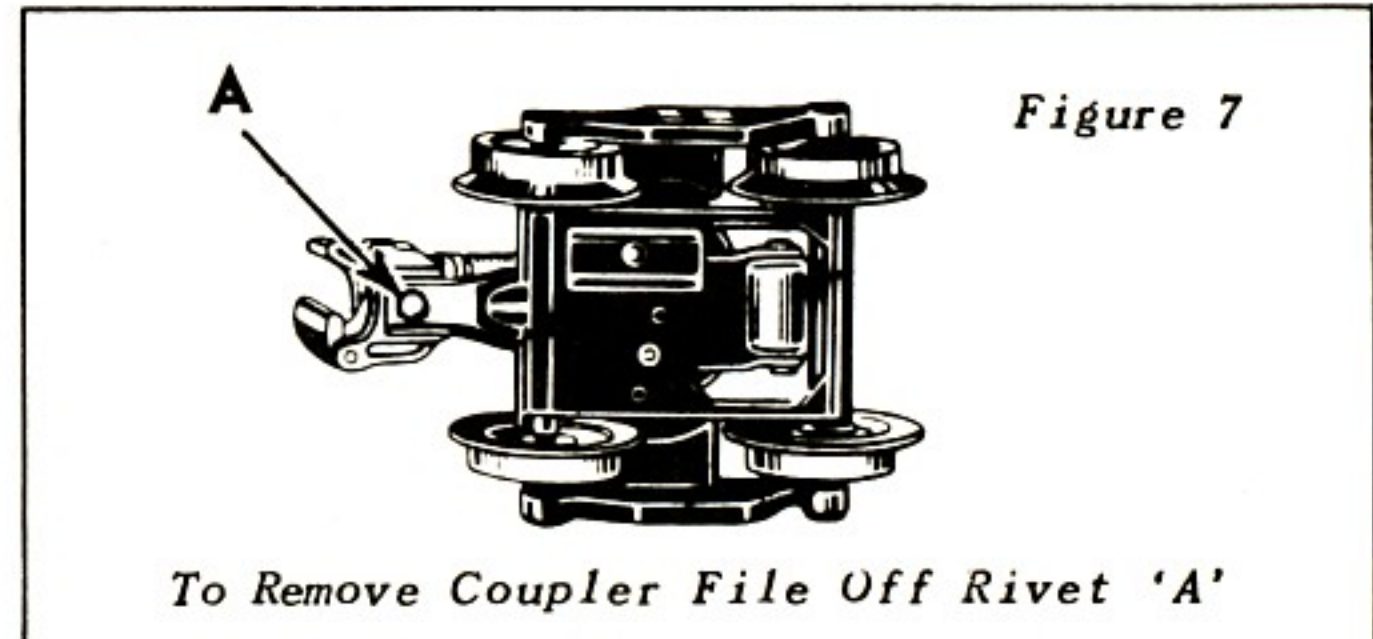
3. To replace a broken slide shoe remove bottom assembly of the truck by straightening the four fingers at the corners of the bottom plate. Bend contact spring out of the way to remove the slide shoe rivet. Reassemble shoe with its fibre plate and rivet tightly with



rivet punch, resting rivet head solidly on a metal block as shown in Figure 6. The straight edge of the shoe must face outside of the truck. After replacing shoe bend contact spring back into place. Be sure there is enough tension.

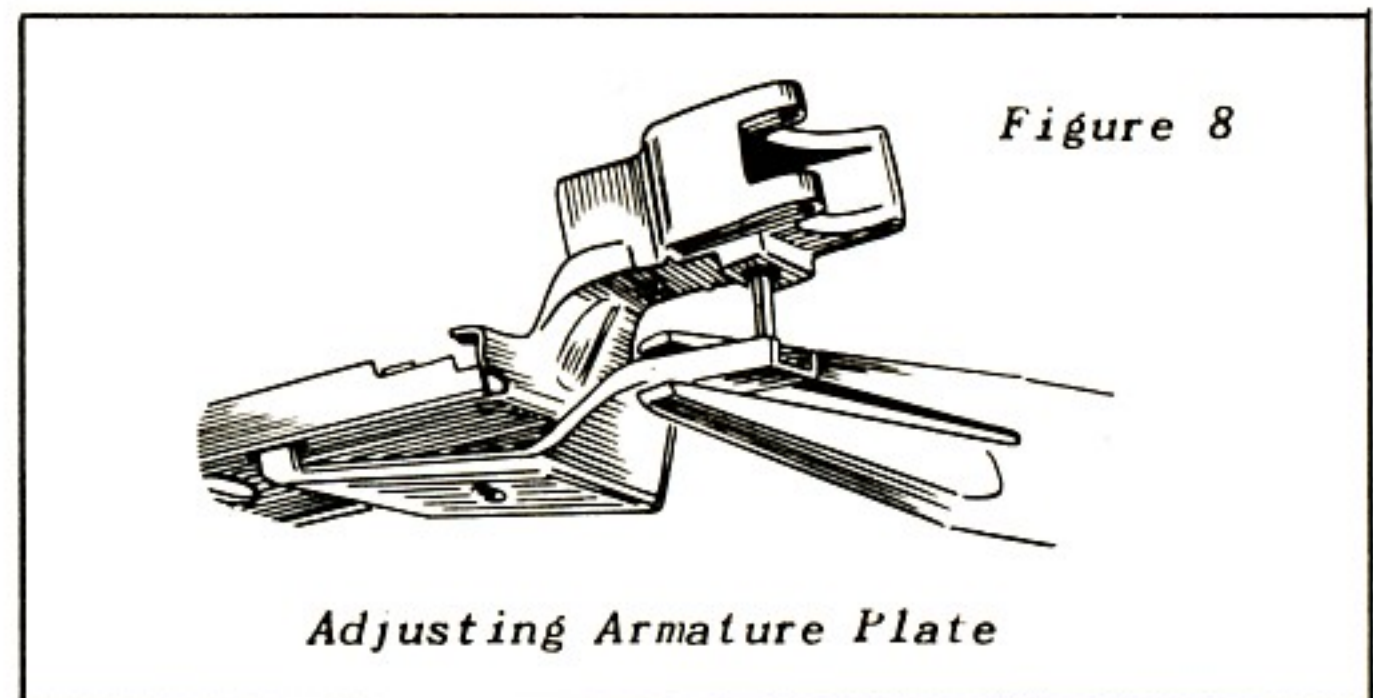


4. If the coupler coil is defective internally, the entire coupler and coil assembly must be replaced by drilling or filing off the riveted nipple at point A.



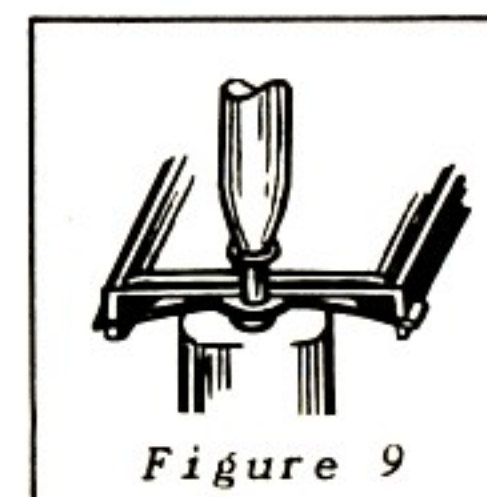
## SERVICING MAGNETIC COUPLERS

A 'magnetic' track which is in good condition should open when held flat and rapped on a bench or table. Check the armature manually to see that it works freely. Failure of the armature to close completely may be due to poor alignment of the pin in the body of the coupler. This can be corrected by adjusting the bend in the armature, as shown.



Incorrect bend in the armature may also result in too great a distance between the armature and the track electromagnet so that the coupler fails to open. In this case the armature can be bent slightly to bring it closer to the track, always being sure that the pin remains properly aligned.

Occasionally the coupler may open by itself while the train is in motion. This may be



caused by insufficient tension of the flat armature spring. This can be increased either by riveting the spring a little more tightly, as shown in Figure 9, or by bending the spring gently.

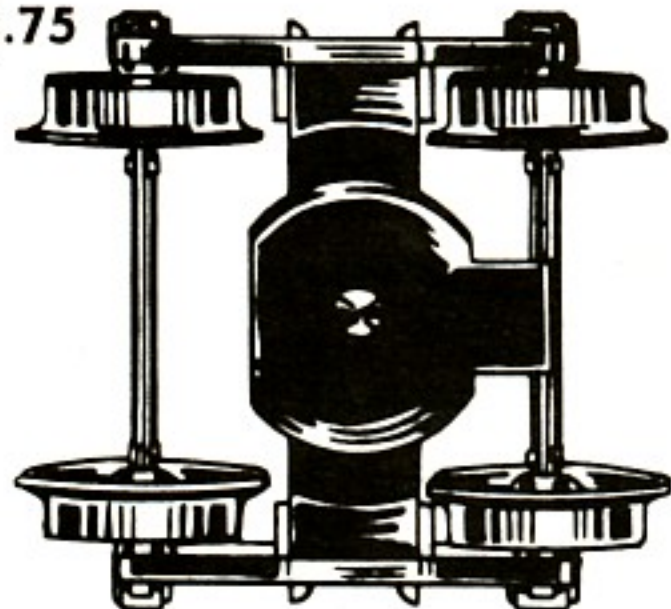
LIONEL SERVICE MANUAL

ELECTROMAGNETIC TRUCKS

PLAIN TRUCK COMPLETE

PT-1

\$0.75



BRACKET  
TC-6  
\$0.20



TRUCK SIDE  
TC-4  
\$0.15



WHEEL  
TC-70  
\$0.05



AXLE  
TC-118  
\$0.05



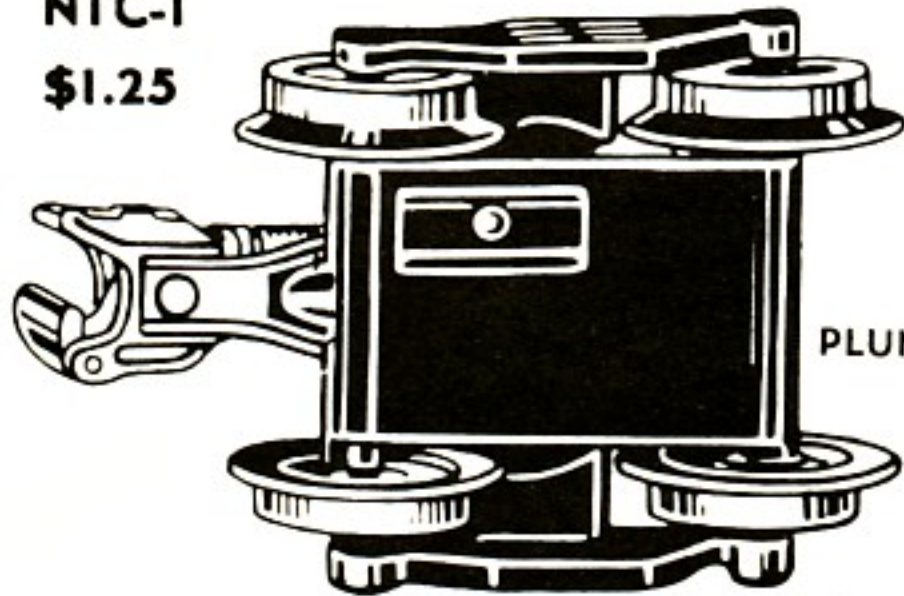
TRUCK STUD  
CP-58  
\$0.02

This is a stripped 4-wheel truck used for the rear of non-illuminated observation cars and cabooses and front of certain non-whistling tenders. Also forms a sub-assembly for certain other trucks of the NTC and 480 series.

COUPLER TRUCK COMPLETE

NTC-1

\$1.25



COUPLER KNUCKLE

TC-21  
\$0.10



KNUCKLE PIN

TC-23  
\$0.02



KNUCKLE SPRING  
TC-22  
\$0.02

PLUNGER  
TC-113  
\$0.05



PLUNGER SPRING  
TC-112  
\$0.02



Coupler Knuckle, spring, pin, plunger and plunger spring are not included in Coupler Head and Coil Assembly, TC-110

BOTTOM FRAME ASSEMBLY

TC-102  
\$0.25



SHOE PLATE  
TC-109  
\$0.02



COLLECTOR SHOE  
TT-208  
\$0.05

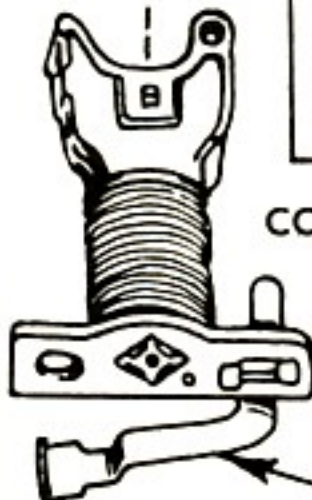


COLLECTOR RIVET  
TT-210  
\$0.02



COUPLER HEAD & COIL ASSY.

TC-110  
\$0.75



SHOE CONTACT SPRING  
TC-120  
\$0.10

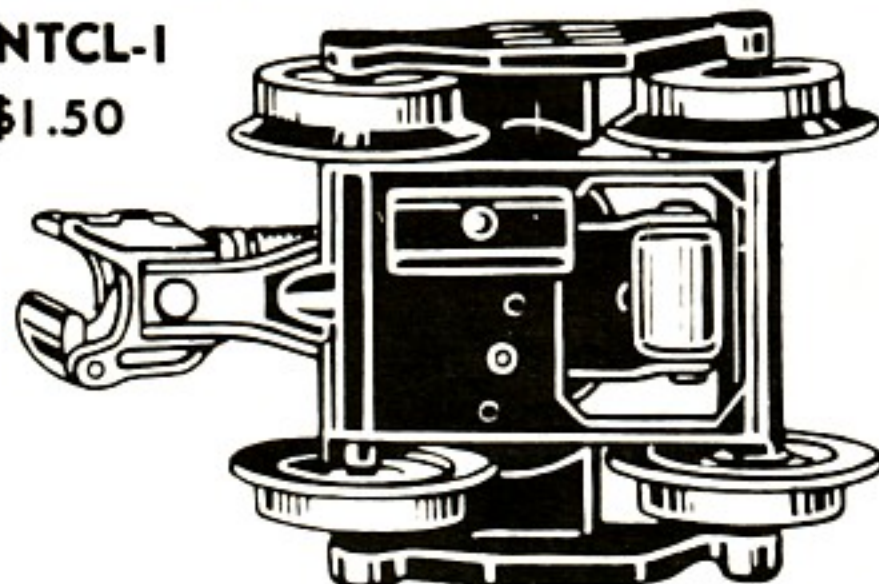


This truck is equipped with a coupler and a sliding contact shoe. Used for most cars made prior to 1948 and for '0' gauge cars made in 1948. For other parts see Plain Truck, PT-1.

LIGHT COUPLER TRUCK COMPLETE

NTCL-1

\$1.50



RIVET  
1214-54  
\$0.02



COLLECTOR ROLLER ASSY.

TCL-42  
\$0.35



This truck is equipped with a coupler, a sliding contact shoe and a light collector roller. Used as rear truck on tenders, also on illuminated passenger cars and cabooses. Its basic truck differs from PT-1 in having a Ground Washer, 9T-16, for better electrical contact. For other parts see PT-1 and NTC-1 trucks.

GROUND WASHER  
9T-16  
\$0.02



RIVET  
TT-234  
\$0.05



CONICAL SPRING  
TCL-45  
\$0.05



COLLECTOR ROLLER  
TCL-44  
\$0.15



BOTTOM FRAME ASSEMBLY  
TCL-40  
\$0.50

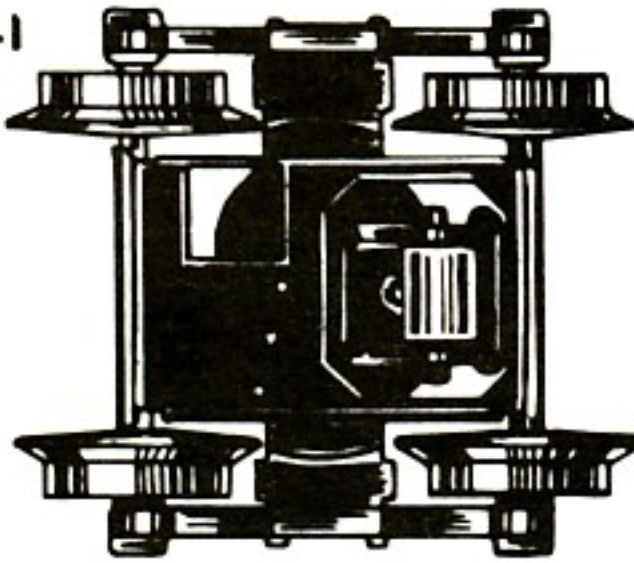


TRUCK STUD  
CP-58  
\$0.02

# LIONEL SERVICE MANUAL

## LIGHT TRUCK COMPLETE

NTCLD-1  
\$1.25



BOTTOM FRAME ASSEMBLY  
TCLD-2  
\$.50



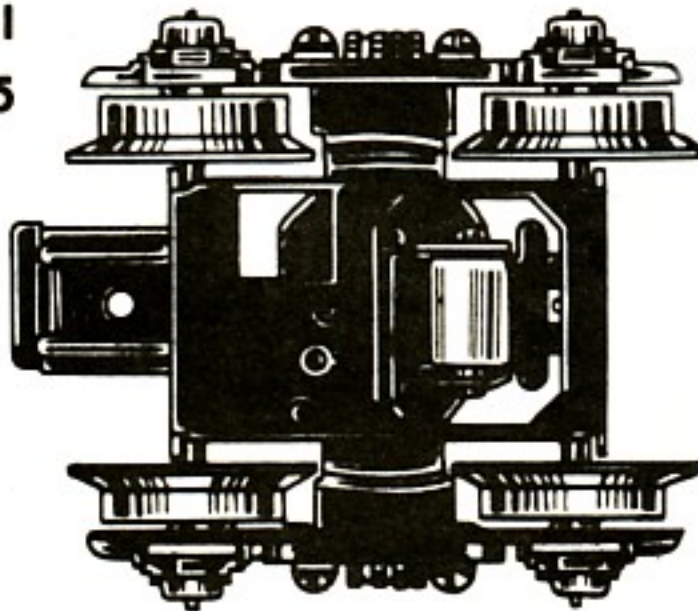
RIVET  
1214-54  
\$.02

COLLECTOR ROLLER  
ASSEMBLY  
TCL-42  
\$.35

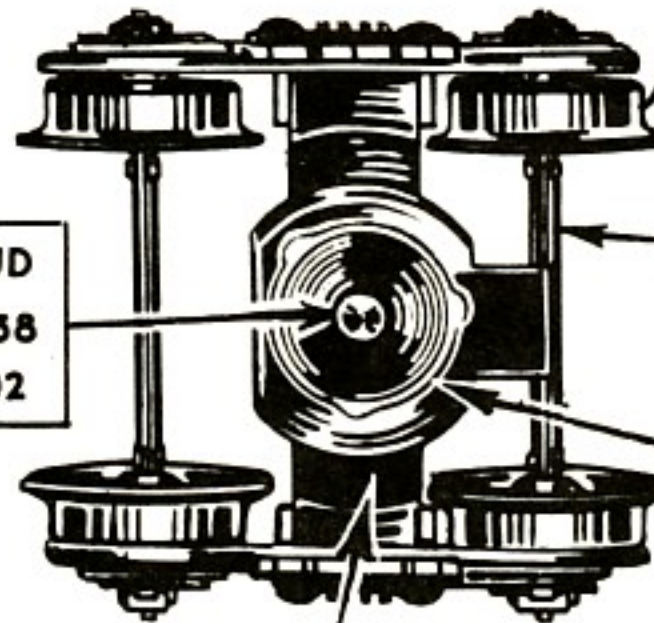
This truck is equipped with light collector roller, but no coupler. Used for rear end of most illuminated observation cars and cabooses and for front end of whistle tenders. Similar to No. 482-1 in the 'Magnetic' series. For breakdown of the Collector Roller Support Assembly see Light Coupler Truck NTCL-1.

## LIGHT TRUCK COMPLETE

522-1  
\$1.25



STUD  
CP-58  
\$.02



WHEEL  
TC-70  
\$.05

AXLE  
TC-118  
\$.05

WASHER  
9T-16  
\$.02

TRUCK BRACKET  
TC-6  
\$.20

TRUCK SIDE  
521-3  
\$.15



BOTTOM FRAME ASSEMBLY  
522-5  
\$.50



RIVET  
1214-54  
\$.02

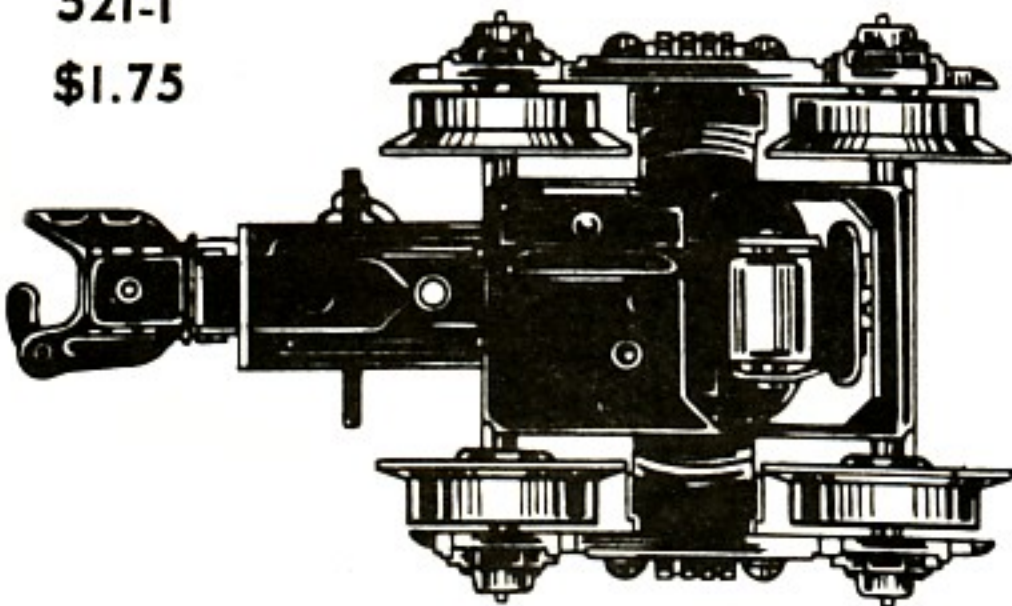


COLLECTOR ROLLER ASSY.  
TCL-42  
\$.35

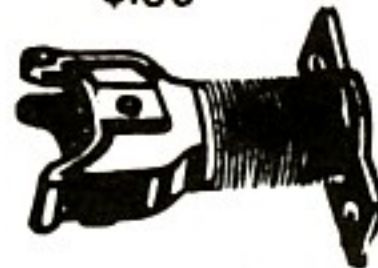
This truck is used on the rear of observation cars of the '2400' series. Note that trucks in this series differ from other four-wheel trucks in using a special Truck Side.

## ARTICULATED LIGHT COUPLER TRUCK COMPLETE

521-1  
\$1.75



COUPLER HEAD & COIL ASSY.  
6TC-10  
\$.60



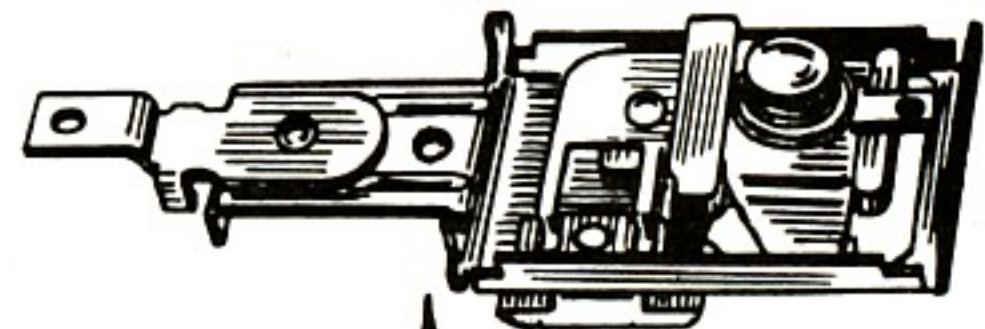
SWIVEL BRACKET  
521-7  
\$.10



PIVOT RIVET  
521-9  
\$.05



BOTTOM FRAME ASSEMBLY  
521-4  
\$.75



ALIGNMENT SPRING  
521-8  
\$.05



EYELET  
483-7  
\$.02



RIVET  
1214-54  
\$.02

SHOE SPRING  
521-6  
\$.10



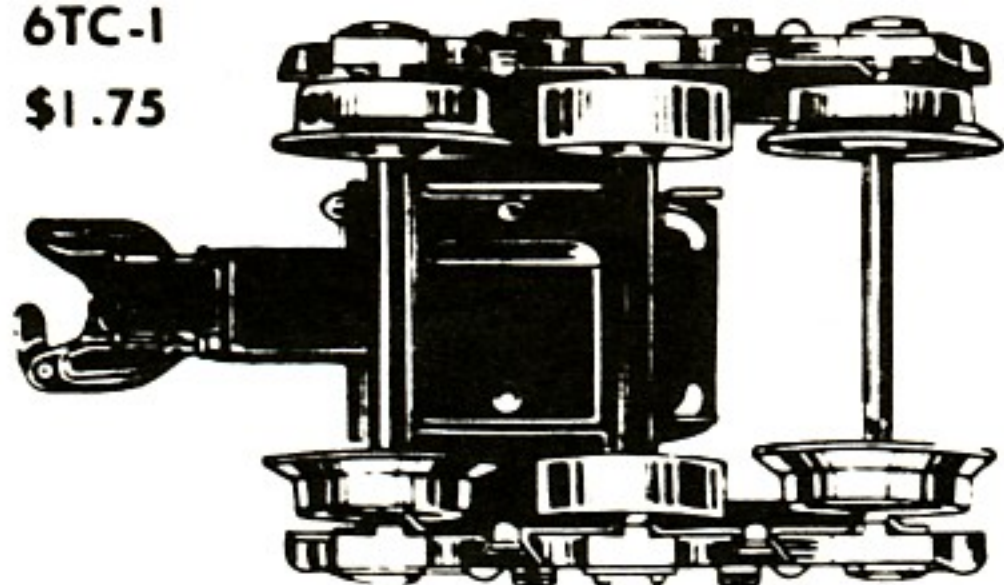
COLLECTOR ROLLER ASSY.  
TCL-42  
\$.35

This truck is used on Pullman cars of the '2400' series. For Coupler Knuckle and Collector Shoe parts see Coupler Truck NTC-1. For Collector Roller breakdown see Light Coupler Truck NTCLD-1.

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COUPLER TRUCK COMPLETE

6TC-1  
\$1.75



This is a 6-wheel truck equipped with a coupler and sliding contact shoe. The coupler is mounted on a rigidly fixed drawbar. This truck is used on No. 2460 Crane Car. For coupler parts see Coupler Truck NTC-1

COUPLER & COIL ASSEMBLY

6TC-10  
\$.60



DRAWBAR  
6TC-20  
\$.10

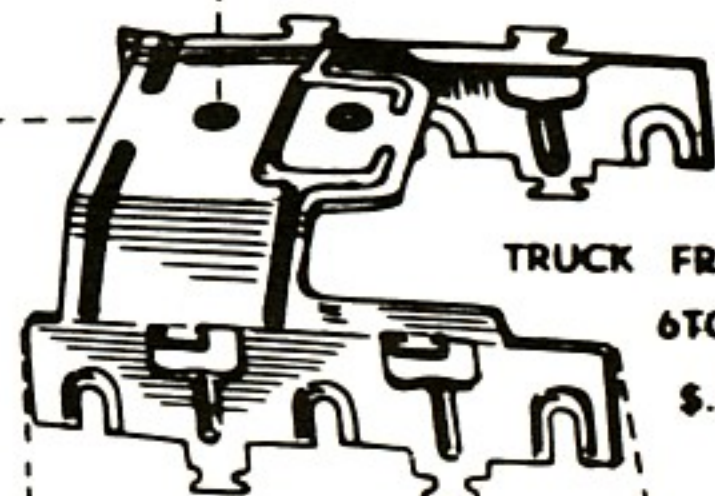


TRUCK STUD

6TC-25  
\$.10



TRUCK FRAME  
6TC-17  
\$.30



COLLECTOR SHOE SPRING  
6TC-12  
\$.10



TRUCK SIDE  
6TC-18  
\$.10



SHOE PLATE  
TC-109  
\$.02



COLLECTOR SHOE  
TT-208  
\$.05



SHOE RIVET  
TT-210  
\$.02



BOTTOM FRAME ASSEMBLY

6TC-21  
\$.40



BOTTOM FRAME

6TC-5  
\$.20



EYELET  
483-7  
\$.02



AXLE  
TC-118  
\$.05



WHEEL  
TC-70  
\$.05

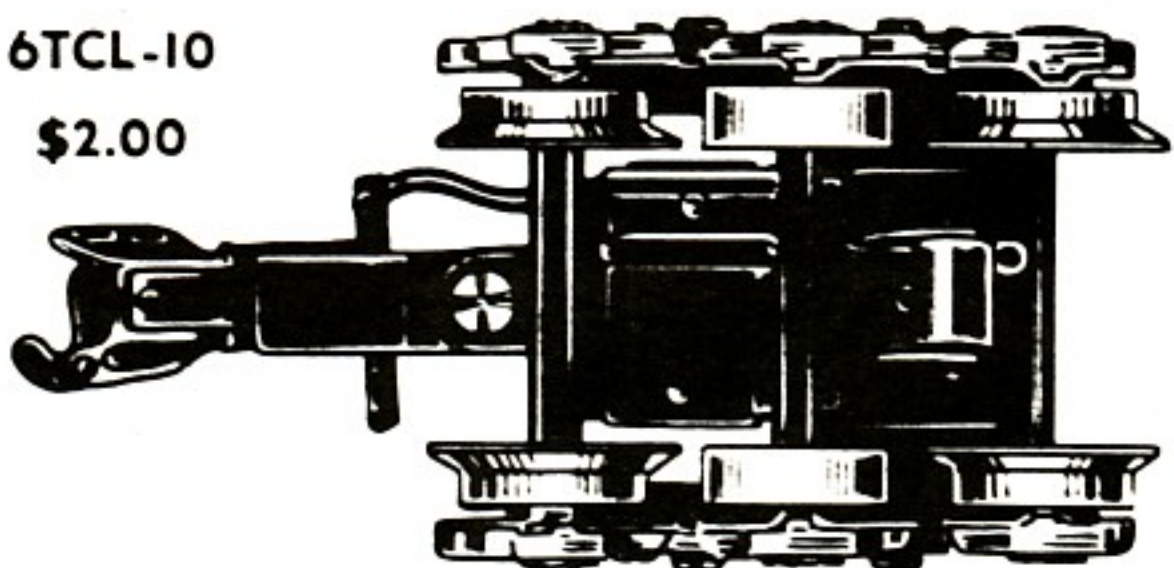


CENTER WHEEL  
6TC-19  
\$.10



ARTICULATED LIGHT COUPLER TRUCK (LONG)

6TCL-10  
\$2.00



This is a 6-wheel truck equipped with a coupler, sliding contact shoe, and a collector roller assembly. The coupler is mounted on a long, swiveled drawbar. This truck is used on pullman cars of the '2625' series. For breakdown of the sliding contact shoe and for truck parts see Coupler Truck 6TC-1, above.

COUPLER & COIL ASSY.

6TC-10  
\$.60

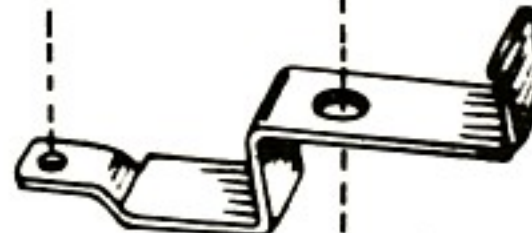


HORSESHOE WASHER  
TS-70  
\$.02



ARTICULATED DRAWBAR

6TCL-11  
\$.10



FIXED DRAWBAR  
6TCL-12  
\$.05



SWIVEL PIN  
CP-43  
\$.05

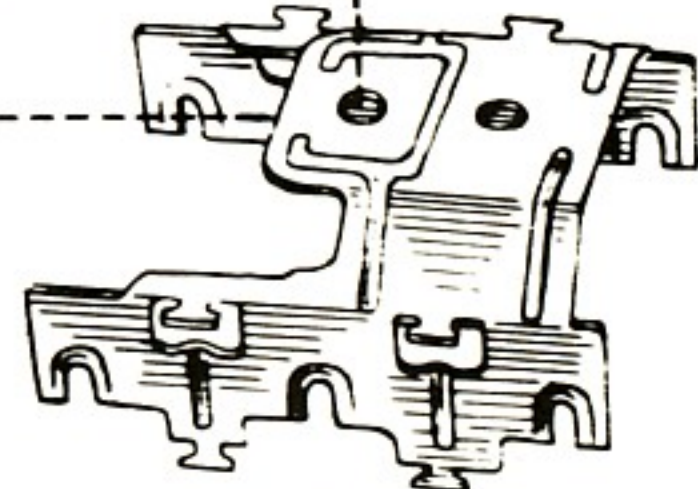


TRUCK STUD

CP-58  
\$.02



WASHER  
6TCL-13  
\$.05



TRUCK FRAME  
6TC-17  
\$.30

BOTTOM FRAME ASSY.

6TC-21  
\$.40

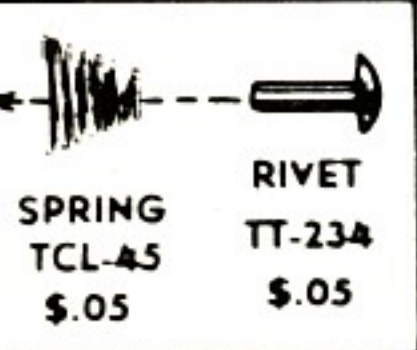


COLLECTOR ROLLER ASSY.

6TC-8  
\$.35



SPRING  
TCL-45  
\$.05



RIVET  
TT-234  
\$.05



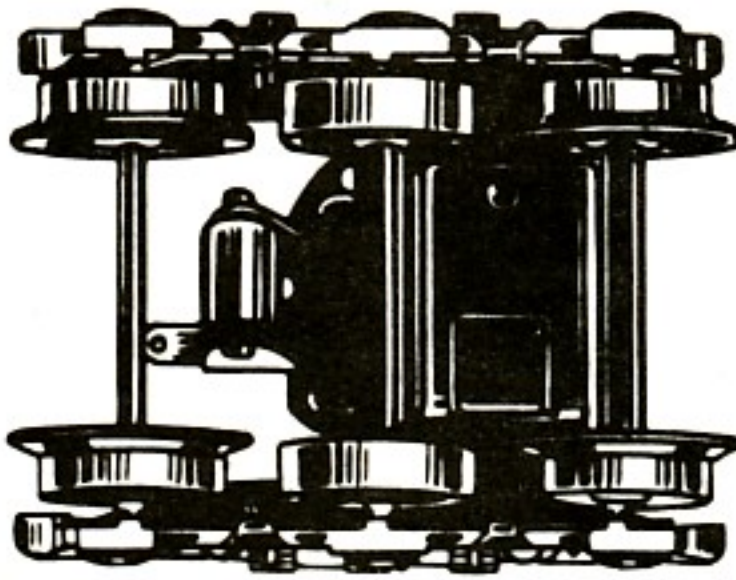
COLLECTOR ROLLER  
TCL-44  
\$.15

Note that in this and following two trucks the position of the truck frame is opposite to that in Coupler Truck 6TC-1, above.

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## LIGHT TRUCK COMPLETE

6 TCLD-1  
\$1.35



### BOTTOM FRAME



6TC-5  
\$.20

### COLLECTOR ROLLER ASSY.

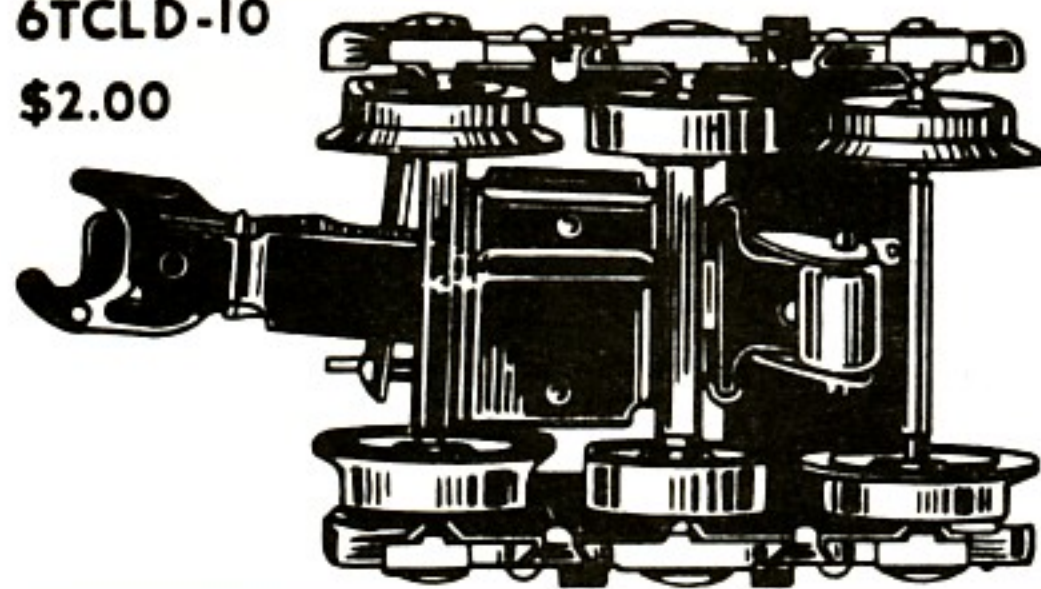


6TC-8  
\$.35

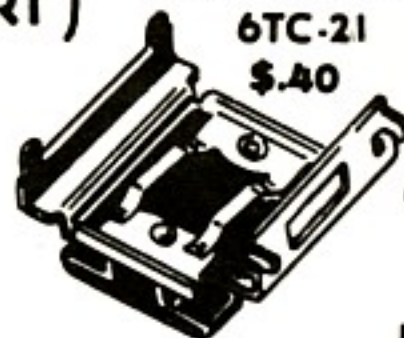
This is a 6-wheel truck equipped with a collector roller assembly, but no coupler. This truck is used on the front of 2671W and 2426W tenders. For breakdown of collector roller assembly and other truck parts see other truck in this series. Note that in this truck the Bottom Frame is fastened to the two rear axles.

## ARTICULATED LIGHT COUPLER TRUCK (SHORT)

6TCLD-10  
\$2.00



### BOTTOM FRAME ASSY.



6TC-21  
\$.40

HORSESHOE WASHER  
TS-70  
\$.02



6TC-8  
\$.35

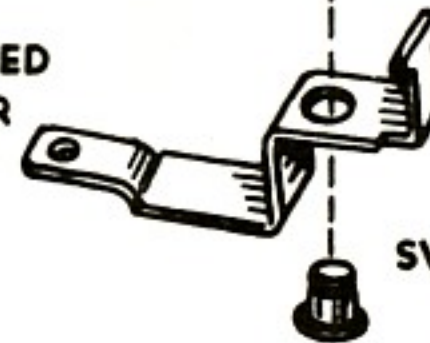
### TRUCK STUD

CP-58  
\$.02

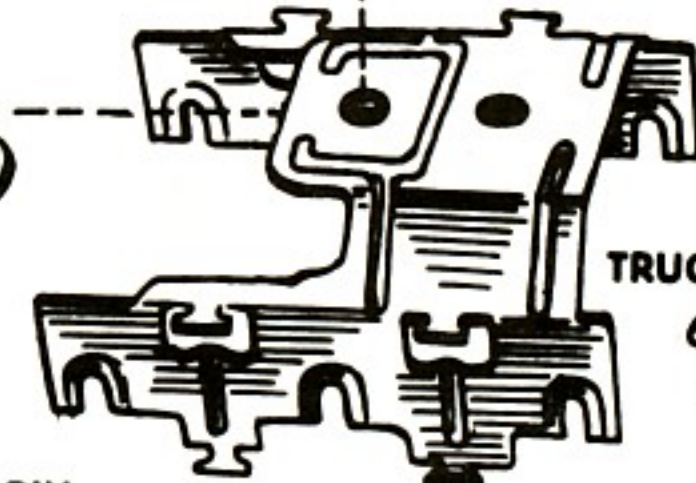
WASHER  
6TCL-13  
\$.05

FIXED DRAWBAR  
6TC-29  
\$.05

ARTICULATED  
DRAWBAR  
6TC-28  
\$.10



SWIVEL PIN  
CP-43  
\$.05

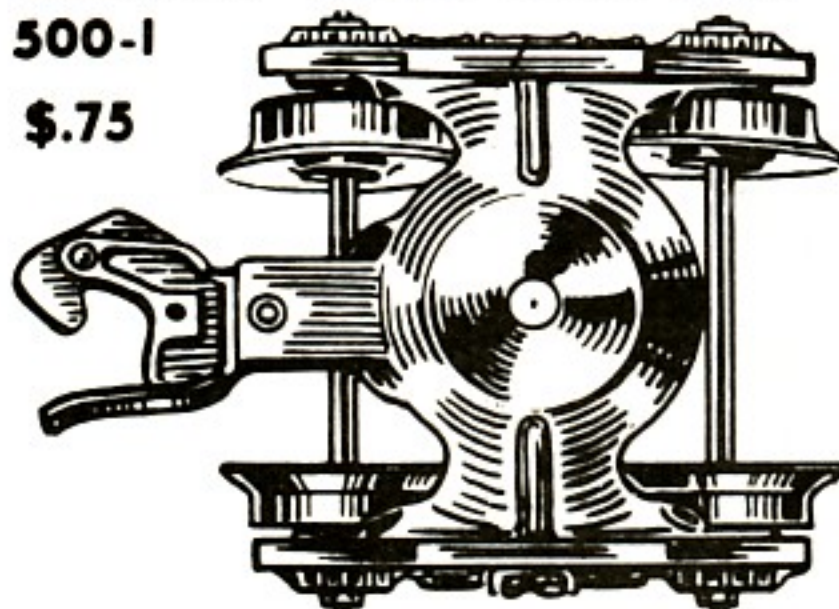


TRUCK FRAME  
6TC-17  
\$.30

This 6-wheel truck is used on the rear of 2671W and 2426W tenders. With the exception of the Fixed and Articulated Drawbars, it is identical with Articulated Light Coupler Truck 6TCL-10, above. For other parts see previous trucks in this series.

## COUPLER TRUCK COMPLETE

500-1  
\$.75

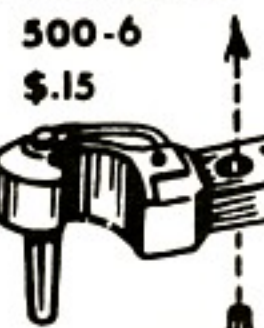


TRUCK SIDE  
500-5  
\$.10

## "SCOUT" TRUCKS

These two trucks are used only on Lionel 'Scout' outfits. Coupler Truck, 500-1, is used on the cars equipped with couplers while Plain Truck, 501-1, is used on the front of tender and the rear of caboose.

### COUPLER HEAD



500-6  
\$.15

### COUPLER SPRING



500-9  
\$.02

### SHOULDER EYELET



500-8  
\$.05

WHEEL  
TC-70  
\$.05



### TRUCK MOUNTING EYELET



1002-5  
\$.02

AXLE  
TC-118  
\$.05

## PLAIN TRUCK COMPLETE

501-1  
\$.50

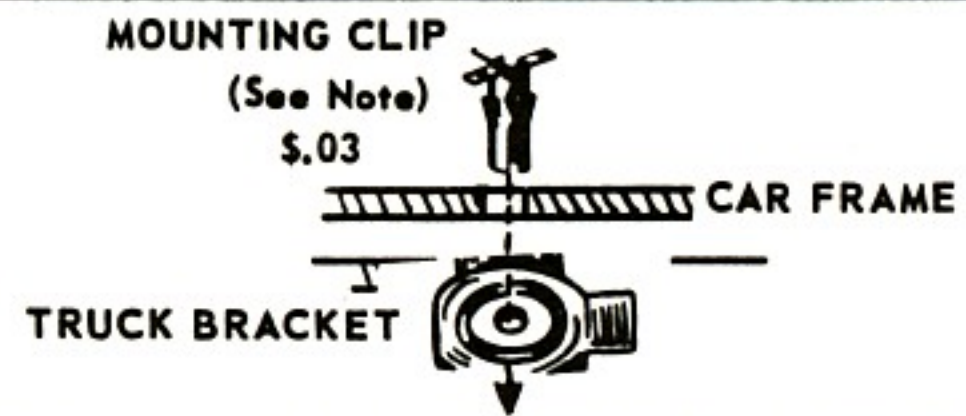
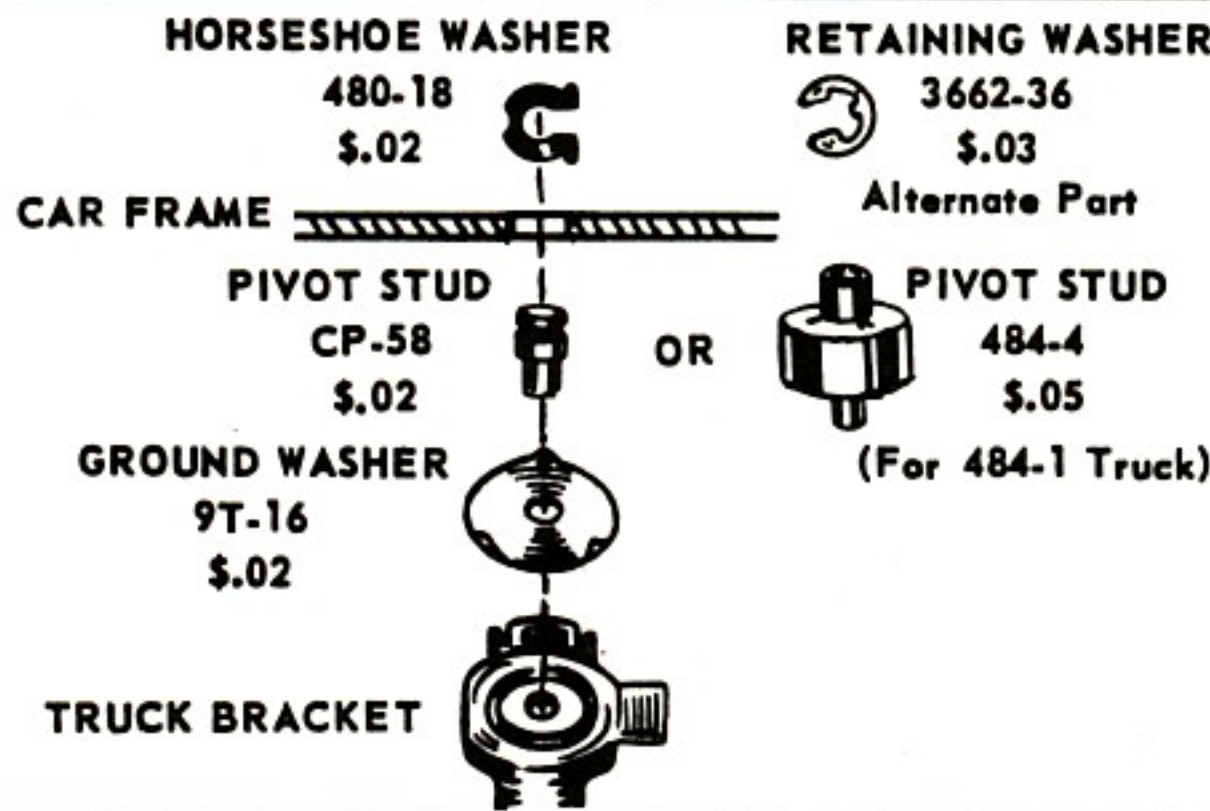


NOTE: "Scout" Trucks may be converted to couple with conventional Lionel Knuckle couplers by installing 480-25 Base Plate and Coupler Assembly.

# LIONEL SERVICE MANUAL

## IMPORTANT NOTICE

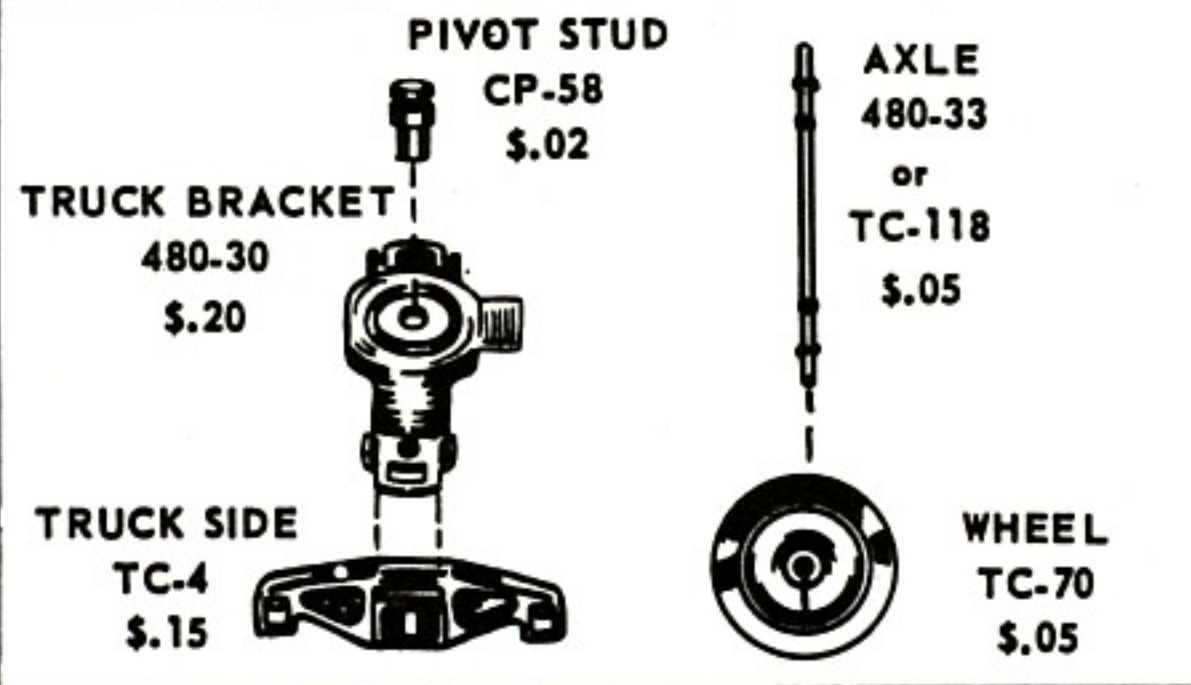
In order to eliminate duplication of parts and excessive inventories, complete trucks numbers 480-1, 481-1, 482-1 and 483-1 will no longer be available. Instead, the basic trucks listed below can be combined with any of the several base plate assemblies to form any desired truck type.



Truck Mounting Clips are made in three sizes to fit different car frames. For easy identification they are colored as shown



PART NO.	COLOR	"A"
6257-10	GREEN	.085
600-15	ALUMINUM	.100
1002-6	BLACK	.145



Although Basic Truck PT-1 can be easily made up by riveting Pivot Stud CP-58 to the Basic Truck 479-1, it will continue to be sold as a unit as long as stock is available. Trucks using Basic Truck PT-1 are mounted to the car frames by means of Horseshoe Washers 480-18, while trucks using Basic Truck 479-1 are mounted to the cars by means of one of the Mounting Clips illustrated. The two types of trucks cannot be used interchangeably because of the difference in the diameter of the mounting holes in car frames. A special use of the Pivot Stud CP-58 is to hold Ground Washer 9T-16. Trucks equipped with this ground washer should be used on illuminated cars and other cars requiring good ground connection to the outside rails. A special case is Truck 484-1, used on several crane cars. This truck is equipped with Pivot Stud 484-4 and Base Plate 480-25 will also be available as a unit.

**BASE PLATE & COUPLER**  
480-25  
\$.55



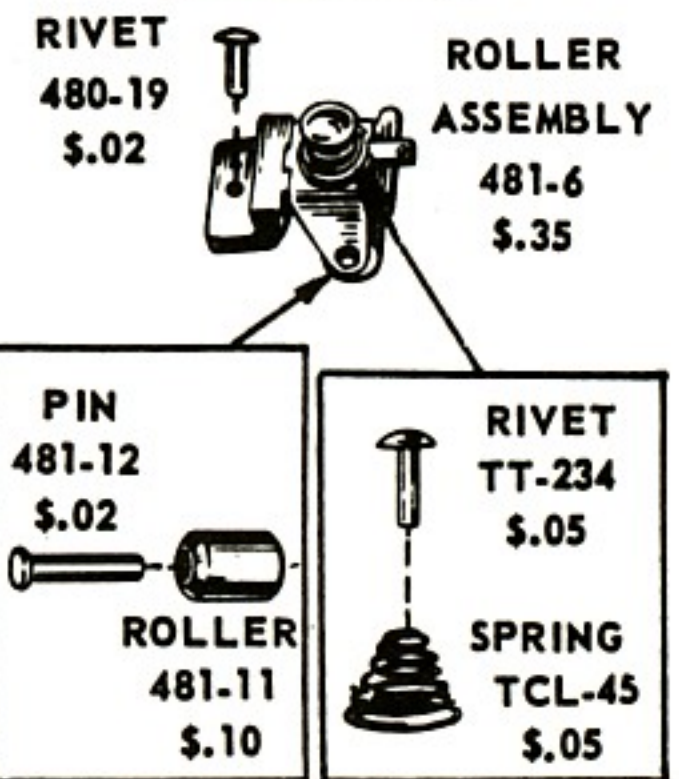
**BASE PLATE, COUPLER & SLIDE SHOE**  
483-2  
\$.75



**BASE PLATE, COUPLER & ROLLER**  
481-10  
\$.75



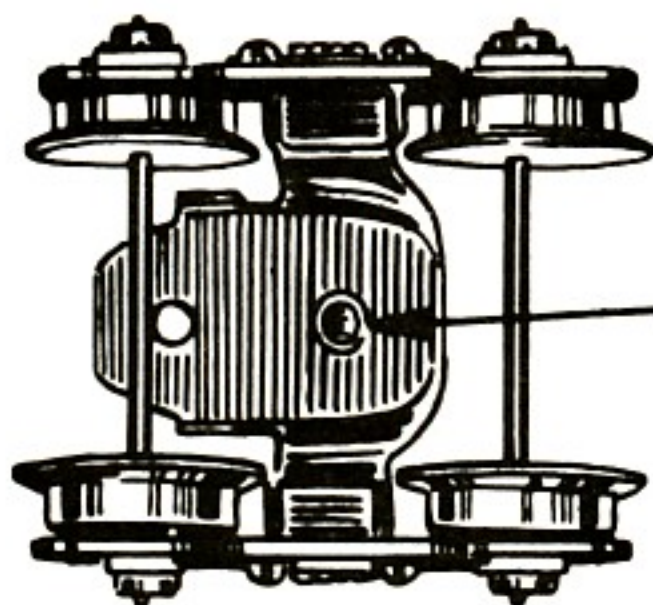
**BASE PLATE & ROLLER**  
482-3  
\$.50







# LIONEL SERVICE MANUAL

**PLAIN TRUCK**  
489-1  
\$.75



	PIVOT STUD 487-26 \$.02
	GROUND WASHER 9T-16 \$.02



TRUCK SIDE  
487-3  
\$.25

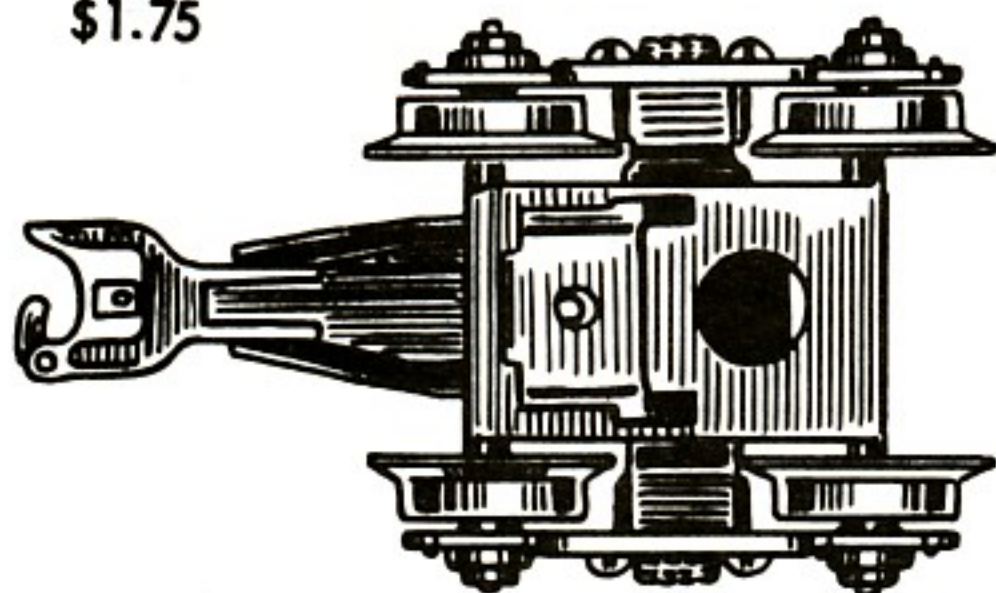
AXLE  
TC-118  
\$.05











	WHEEL TC-70 \$.05
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No. 489-1 Plain Truck is used on the rear end of the "2400" series observation cars and is also the basic truck used in other trucks of this series, listed below.

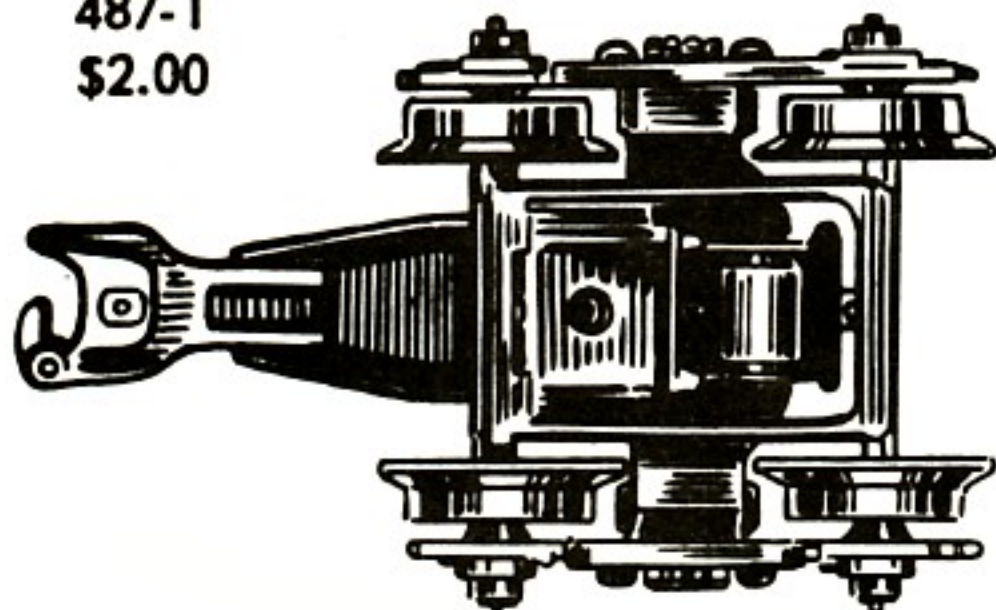
**COUPLER TRUCK**  
488-1  
\$1.75










	RETAINING WASHER 480-18 \$.02
	DRAWBAR & COUPLER ASSEM. 487-9 \$.50
	CENTERING SPRING 487-22 \$.05
	LOCK LINK 487-20 \$.05
	LOCK LINK SPRING 487-21 \$.05
	BOTTOM FRAME ASSEM. 487-12 \$.40
	KNUCKLE RIVET TC-23 \$.02
	KNUCKLE SPRING 480-16 \$.02
	KNUCKLE TC-21 \$.10
	ARMATURE PLATE 487-16 \$.15

No. 488-1 Coupler Truck is used on all cars of the Coaches and Dome Cars of the "2400" series and is similar to No. 487-1 but without the collector roller.

**LIGHT COUPLER TRUCK**  
487-1  
\$2.00

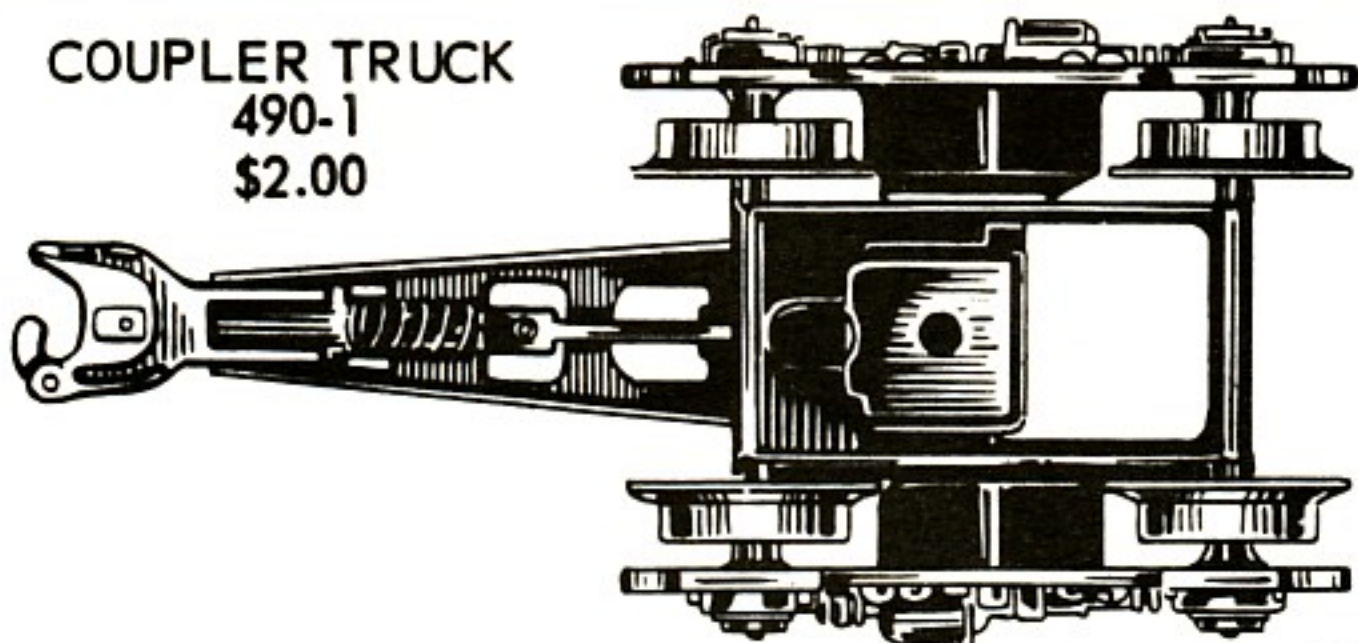


	BOTTOM FRAME ASSEMBLY 488-4 \$.75
	CONICAL SPRING RIVET TT-234 \$.05
	CONICAL SPRING TCL-45 \$.05
	ROLLER SUPPORT RIVET 480-19 \$.02
	ROLLER 481-11 \$.10
	ROLLER PIN 481-12 \$.02
	COLLECTOR ASSEMBLY 481-6 \$.35

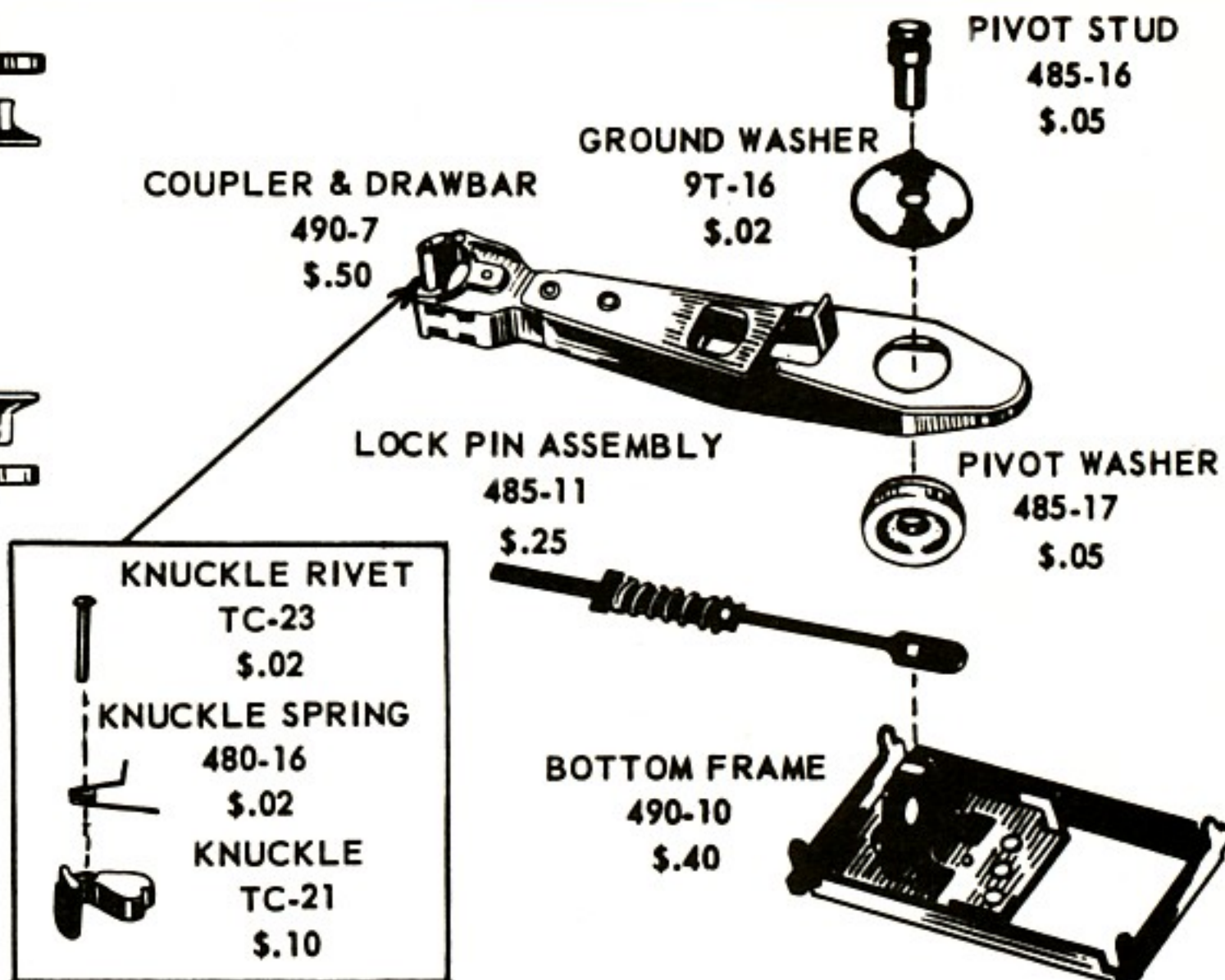
No. 487-1 Light Coupler Truck is used on all cars of the "2400" series and is equivalent to the solenoid-type No. 521-1 Light Coupler Truck.

# LIONEL SERVICE MANUAL

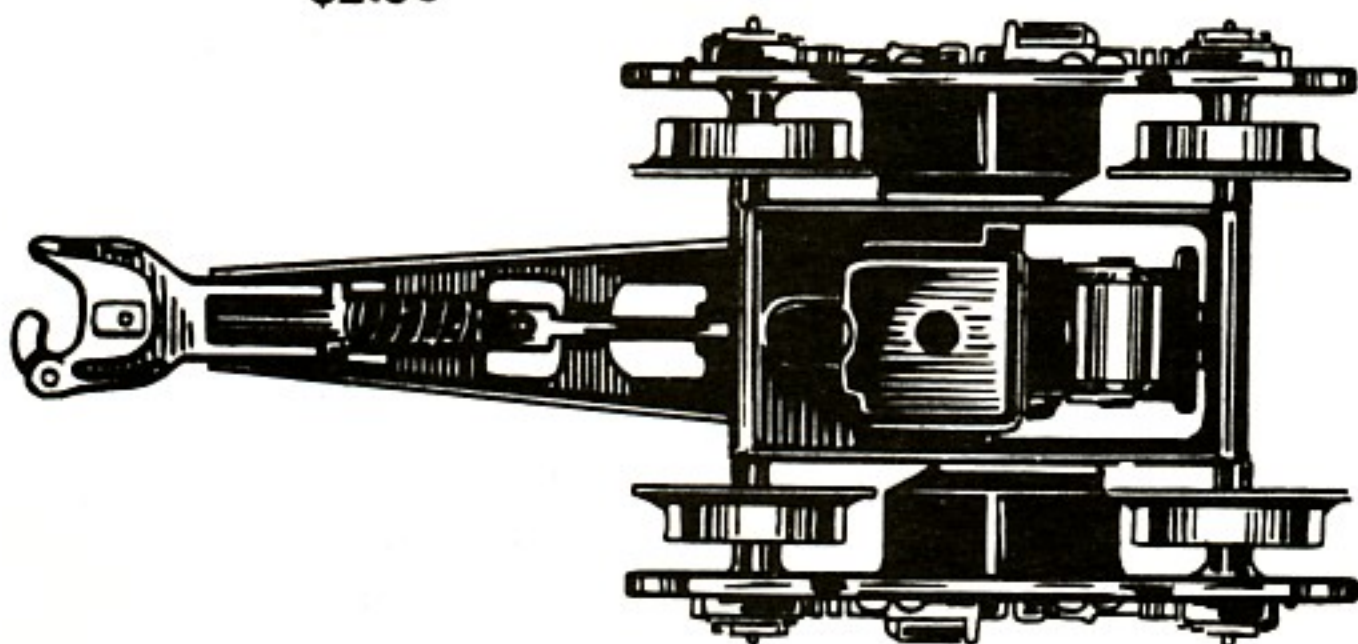
**COUPLER TRUCK**  
490-1  
\$2.00



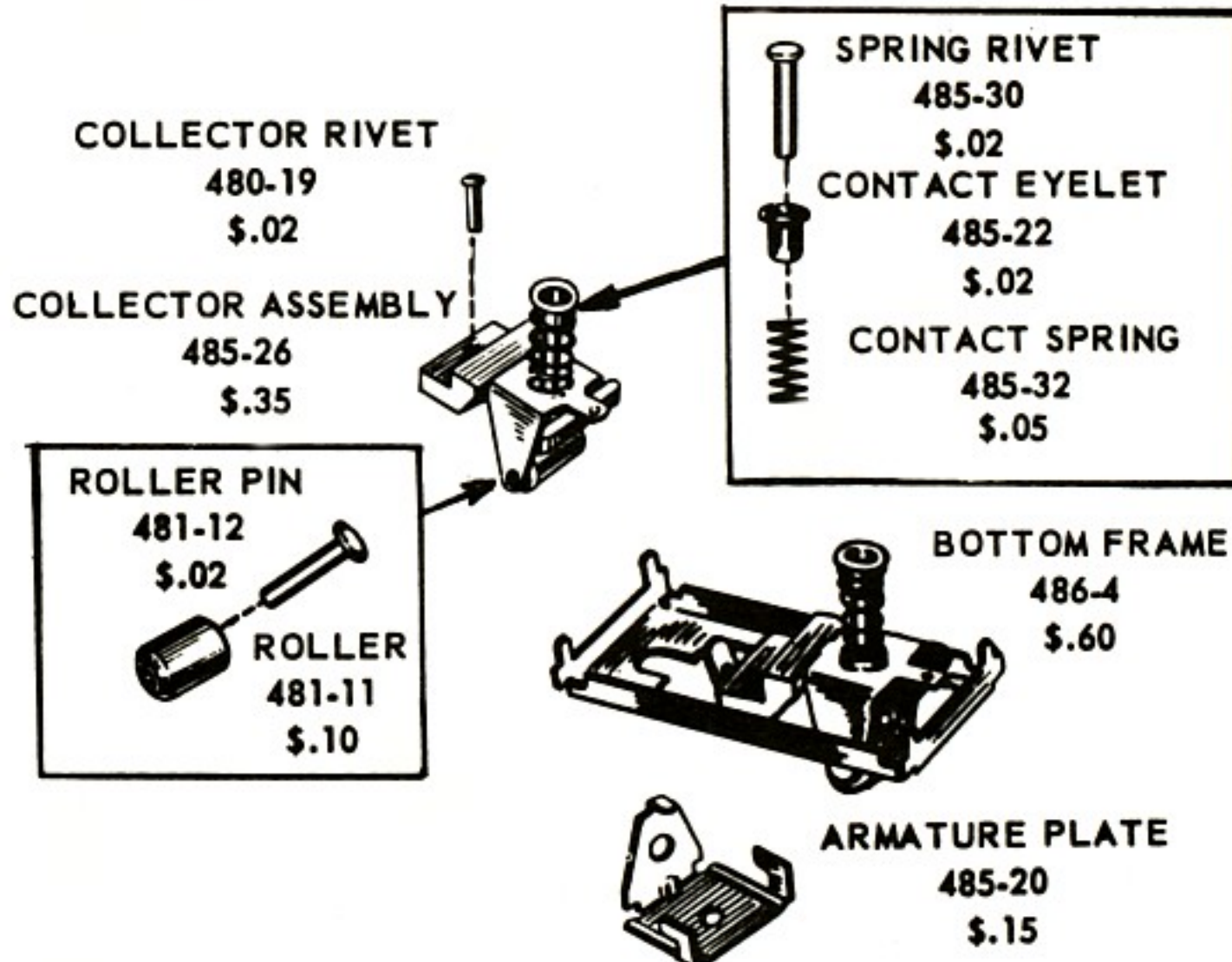
No. 490-1 Coupler Truck does not include a collector roller assembly and is used on non-illuminated No. 2530 Railway Express Car.



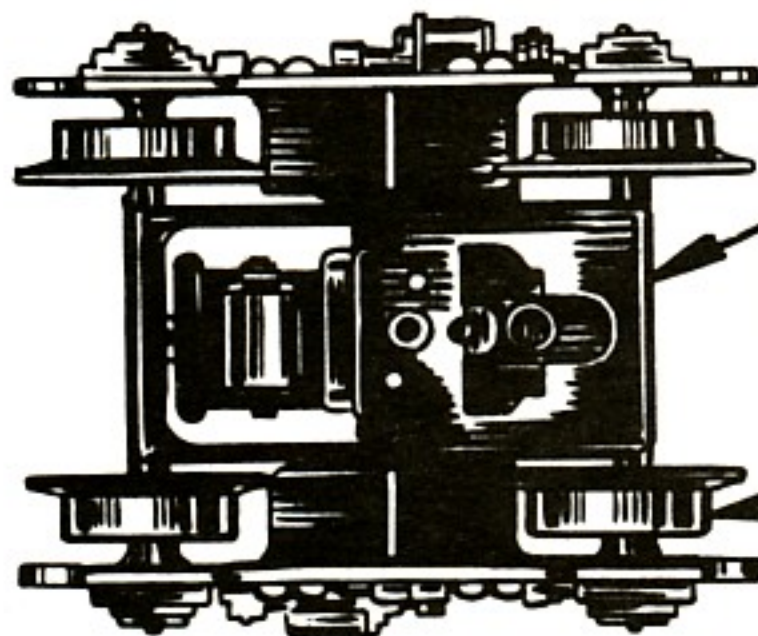
**LIGHT COUPLER TRUCK**  
492-1  
\$2.50



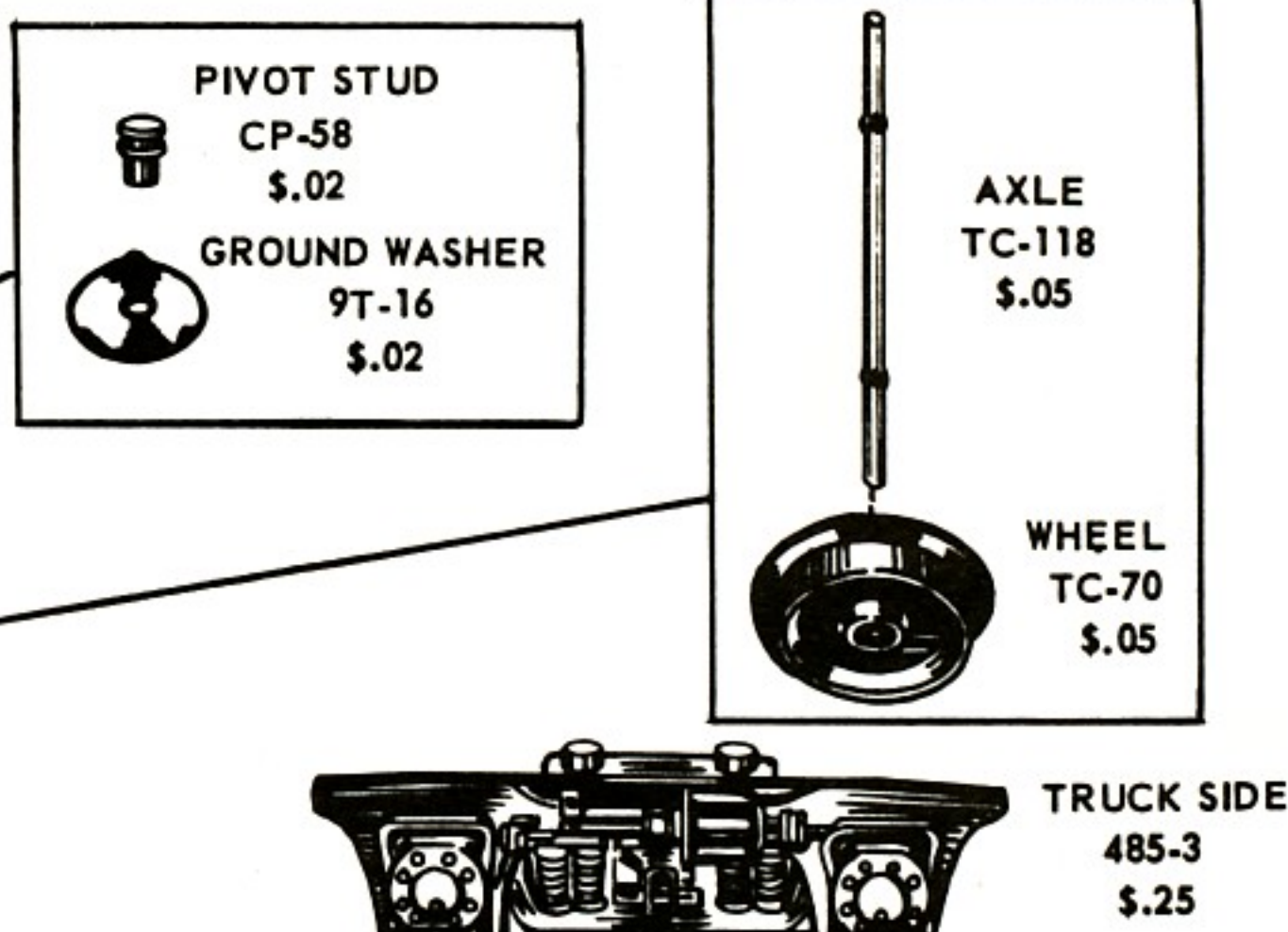
No. 492-1 Light Coupler Truck is used on all illuminated cars of the "2500" series. This truck replaces No. 485-1 Truck which has a slightly different drawbar stamping.



**LIGHT TRUCK**  
486-1  
\$1.50



No. 486-1 Light Truck has a contact roller assembly but no drawbar and coupler. It is used on the rear end of "2500" series Observation Cars.



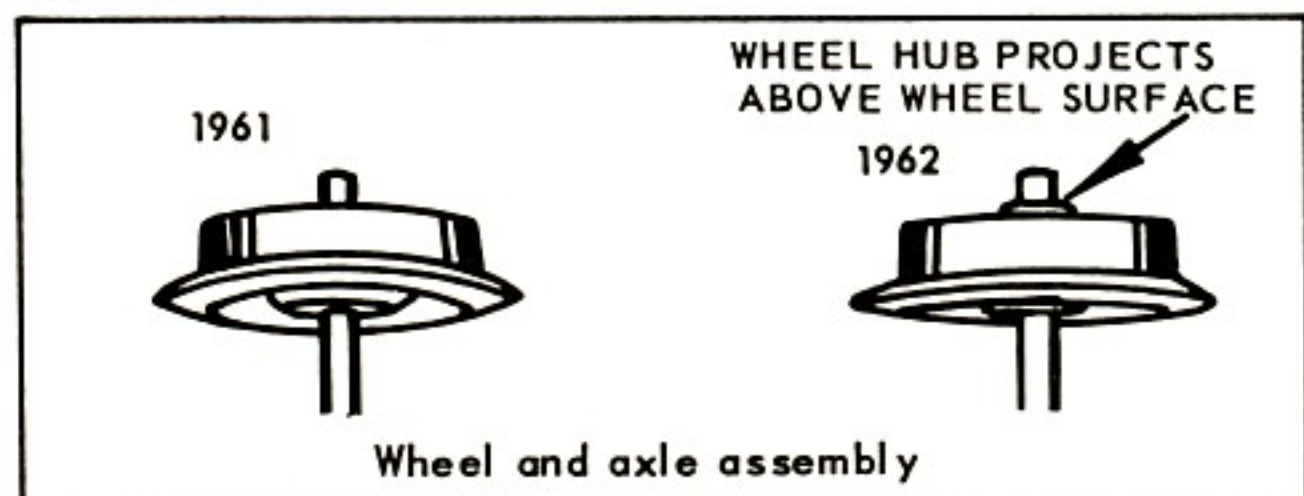
# LIONEL SERVICE MANUAL

## "560" SERIES TRUCKS

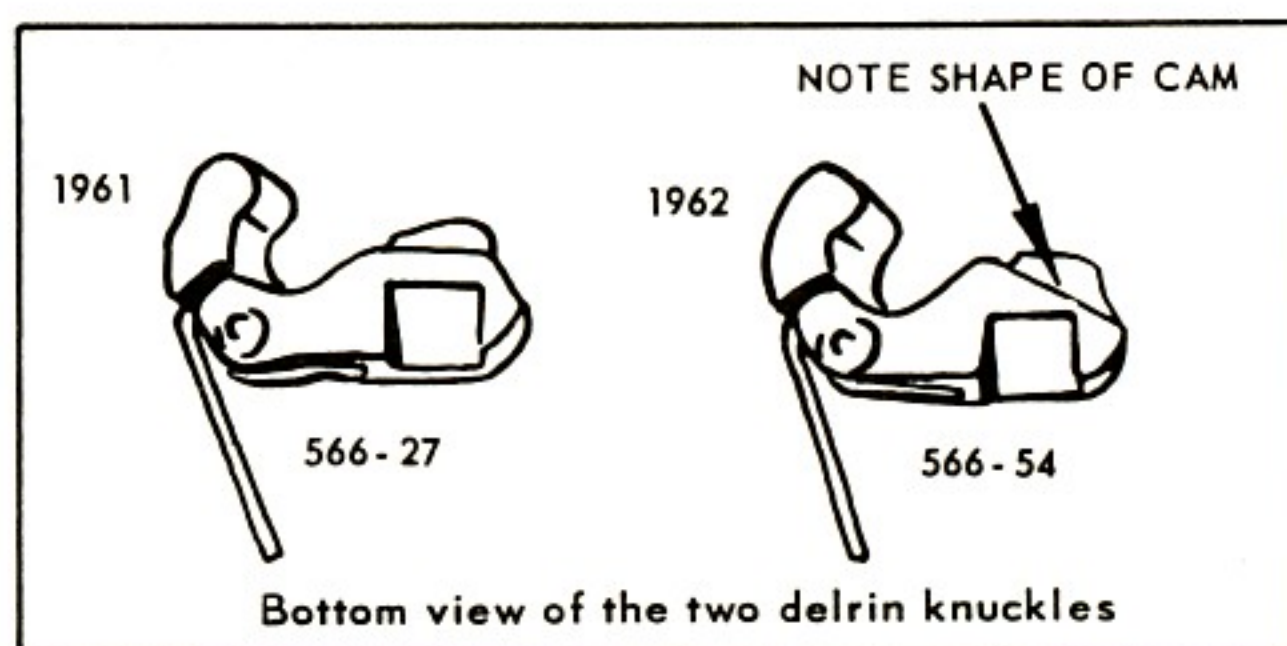
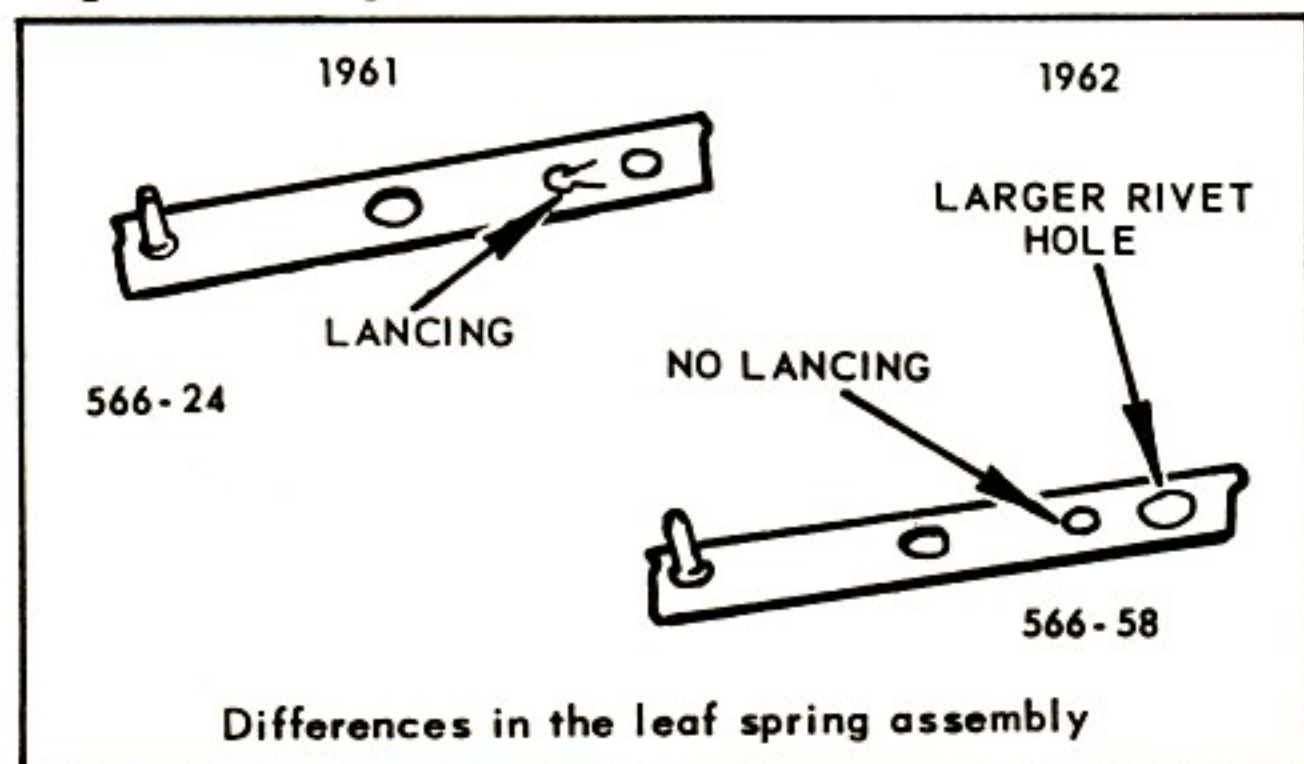
Trucks in the "560" series are distinguished by their unit construction with the track frame being molded in one piece with the truck sides. Trucks with sides of two different designs have been included in this series: one patterned on a modern A.A.R. truck with Timken bearings and used for modern freight cars; the other modeled on an old-fashioned archbar coil spring truck and used on cars of the Civil War period.

Most of the trucks in the "560" series were re-designed late in 1961 for 1962 production and were assigned "-50" suffix numbers. There are several important differences between the "-1" and the "-50" series which make their components non-interchangeable. The most important differences are listed below.

To improve molding procedure the pads on the inner surfaces of the truck sides were eliminated so that the inside surfaces are perfectly flat. To fit the new increased dimension between the truck sides and to provide the necessary clearance for the wheels, the wheel hubs were raised above the edges of the wheels, as shown below. Also the wheel treads were slightly (by approximately .010") to improve their operation on switches.



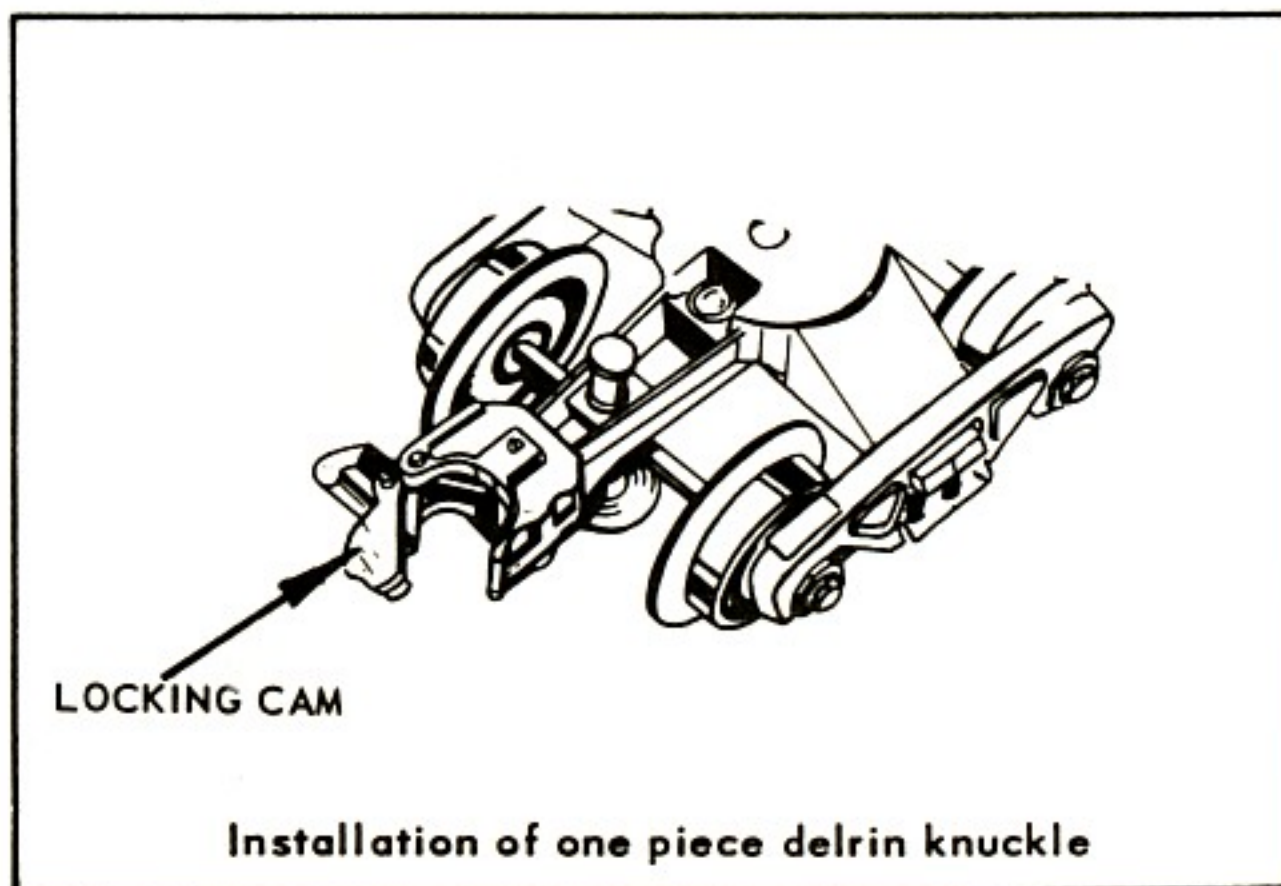
To improve the locking and release of the coupler knuckles both the knuckles and the leaf spring and pin assembly were changed in several respects. The position of the pin was changed slightly; the lancing near the spring mounting hole was eliminated; the mounting hole itself was enlarged to accommodate a larger mounting rivet.



The shape of the knuckle was changed as illustrated above to conform to the new position of the pin and to provide more positive locking action.

Initially all operating trucks in this and in the previous series used a die-cast knuckle, which used a knuckle spring and was mounted by means of a knuckle pin or rivet. Late in 1961 a new molded Delrin knuckle was developed which has an integrally-molded leaf spring and pivot points and which replaced the previous three-piece assembly. Two of these molded knuckles were produced: No. 566-27 for the "-1" series and No. 566-54 for the later "-50" series. These knuckles are perfect replacements for the previously used die-cast knuckle assemblies but are not interchangeable.

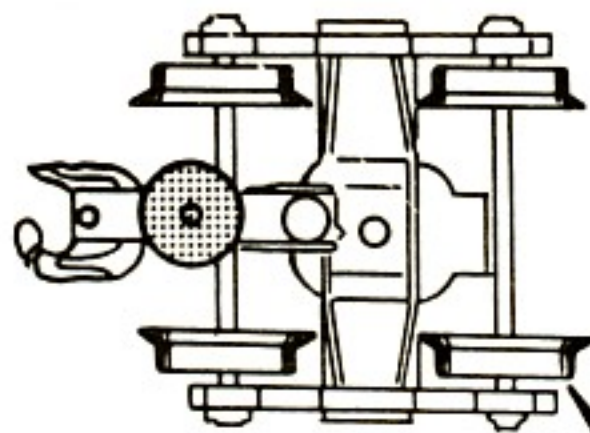
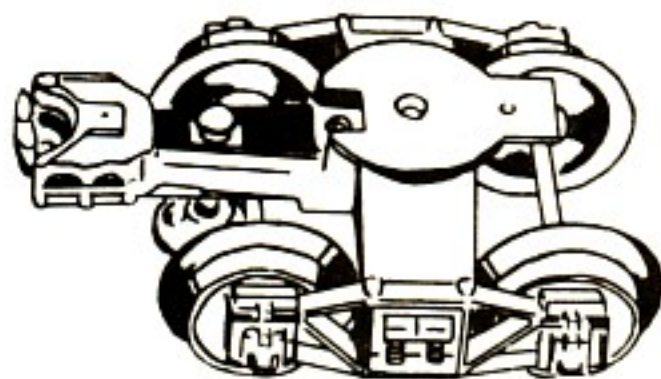
*Installation of Delrin couplers.* To install Delrin knuckle hold it by its locking cam and insert one of the pivot points in the pivot hole in the coupler body. Then compress the pivot point brackets so that the second pivot point snaps into position in the second hole in the coupler body. Next, pull down the leaf spring to allow the coupler knuckle spring to enter freely into the recess and snap the locking cam of the coupler by pressing it in with your thumb. To avoid possible breakage of the pivot point brackets it is advisable to increase the flexibility of the material by soaking the knuckle in hot water before assembly.



# LIONEL SERVICE MANUAL

## OPERATING COUPLER TRUCKS

560-1  
560-50



WHEELS & AXLE  
566-32 (FOR-1)  
566-51 (FOR-50)

These trucks are used on freight cars of the Civil War period. They are usually mounted with No. 566-16 Pivot Rivets.



KNUCKLE  
566-27 (FOR-1)  
566-54 (FOR-50)

ARMATURE PIN  
566-60

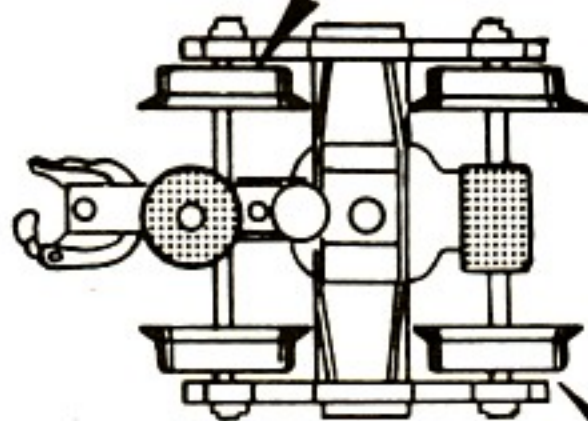
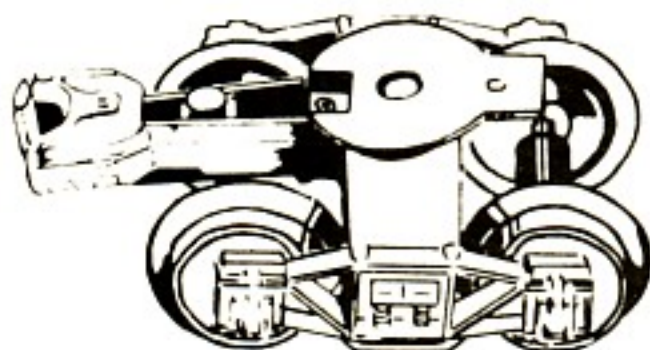
ARMATURE  
566-14

SPRING ASSEMBLY  
566-24 (FOR-1)  
566-58 (FOR-50)

SPRING RIVET  
566-18 (FOR-1)  
566-53 (FOR-50)

## OPERATING COUPLER TRUCK W/CAM

560-150



WHEELS & AXLE  
566-32 (FOR-1)  
566-51 (FOR-50)

WHEELS, CAM & AXLE  
566-151

One of these trucks is used on the No. 3370 Sheriff & Outlaw Car supplied with a "General" locomotive outfit.

KNUCKLE  
566-27



ARMATURE PIN  
566-60

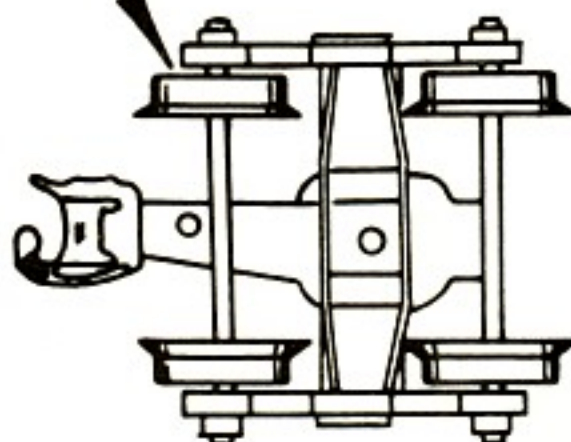
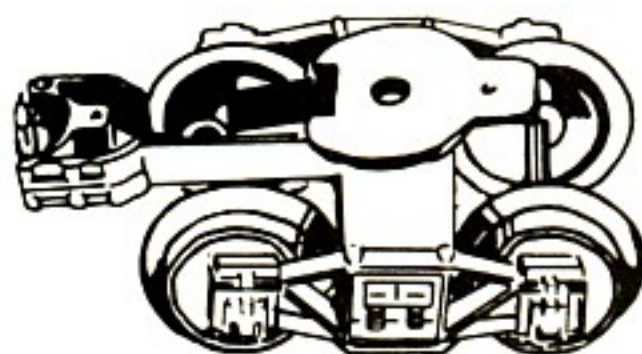
ARMATURE  
566-14

SPRING ASSEMBLY  
566-58

SPRING RIVET  
566-18

## DUMMY COUPLER TRUCKS

561-1  
561-50

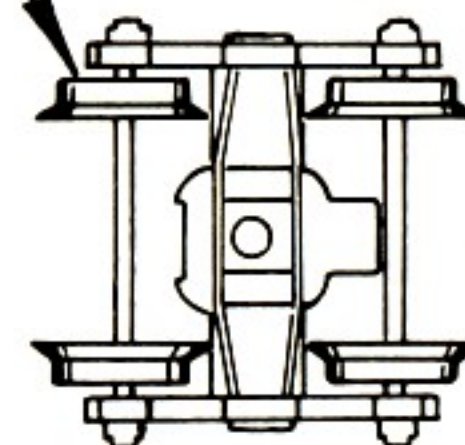


WHEELS & AXLE  
566-32 (FOR-1)  
566-51 (FOR-50)

These trucks have dummy couplers and are used for freight cars in low-priced outfits.

## PLAIN TRUCKS

562-1  
562-50

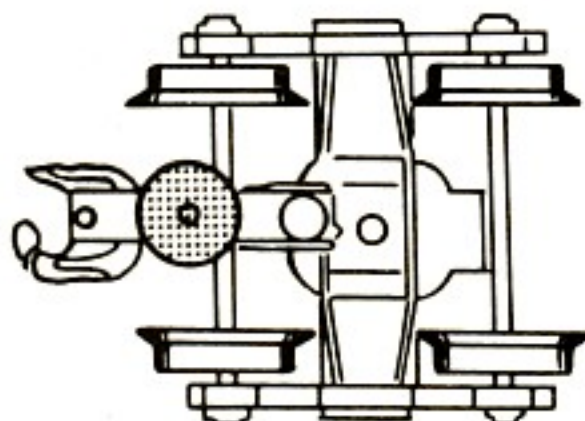


WHEELS & AXLE  
566-32 (FOR-1)  
566-51 (FOR-50)

These trucks have no couplers. They are used for fronts of "General" tenders and for passenger cars of the Civil War period.

## OPERATING COUPLER TRUCKS

566-1  
566-50



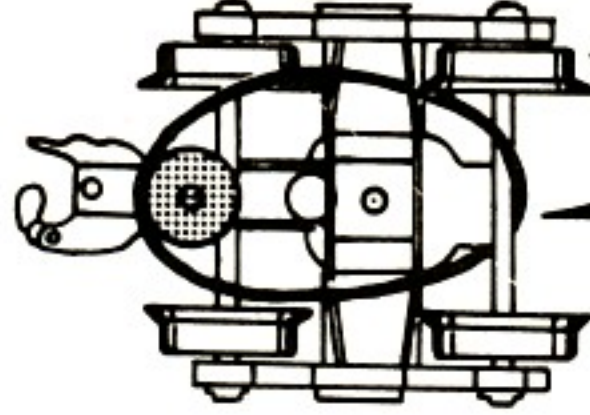
All component parts with the exception of the truck frame are identical with those used for trucks Nos. 560-1 and 560-50.

These trucks are used for all conventional non-operating freight cars and are usually mounted to the car frames by means of No. 566-16 Pivot Rivets. These trucks are also basic units on which special purpose trucks are frequently designed and assembled.

# LIONEL SERVICE MANUAL

## OPERATING COUPLER TRUCK W/DRIVE BELT

566-125



DRIVE WHEELS AND AXLE  
3512-27

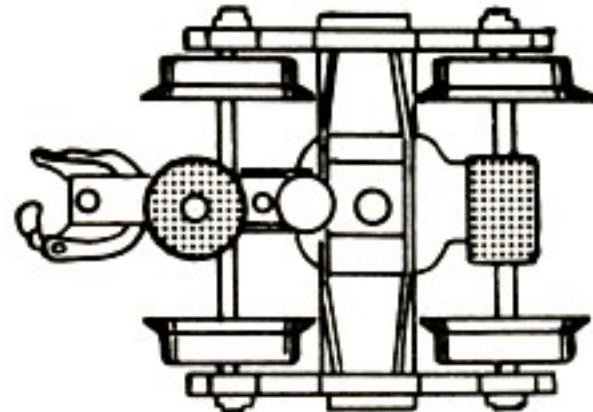
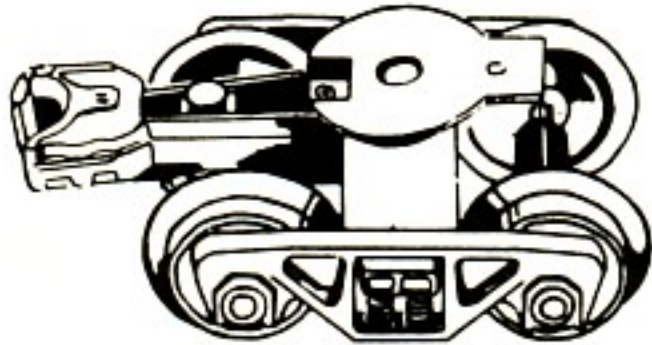
DRIVE BELT  
3512-26

All other components are identical to those used on trucks 566-1 or 566-50, depending on the year of manufacture.

These trucks have wheels mounted rigidly on the axles. They are assembled with a drive belt and used on cars similar to Fireman & Ladder, TV Camera, etc.

## OPERATING COUPLER TRUCK W/CAM

566-150

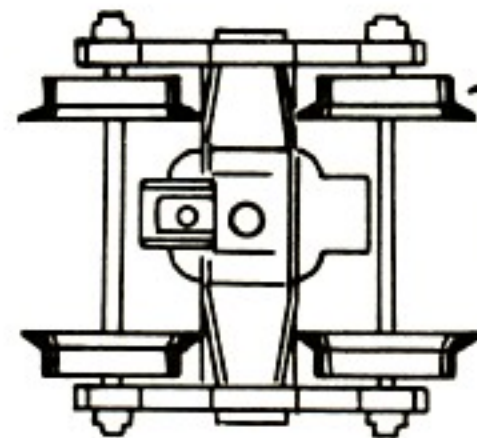


All component parts with the exception of the truck frame are identical with those used on truck No. 560-150. Trucks made after 1961 will use components of truck No. 566-50.

One of these trucks is used on the No. 3370 Sheriff & Outlaw Car supplied with train outfits containing cars of conventional modern appearance.

## PLAIN TRUCK

567-1  
567-50

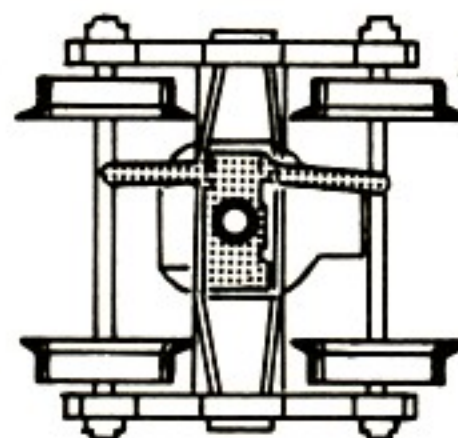


WHEELS & AXLE  
566-32 (FOR-1)  
566-51 (FOR-50)

These trucks have no couplers. They were used for the fronts of tenders and for the rear of cabooses of various types.

## PLAIN GROUND TRUCK

571-1  
571-50

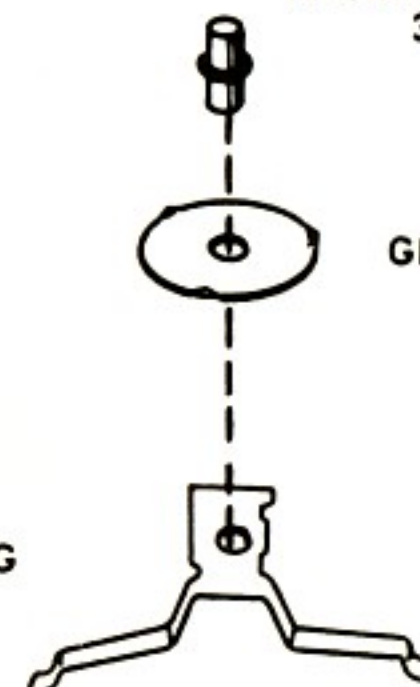


WHEELS & AXLE  
566-32 (FOR-1)  
566-51 (FOR-50)

TRUCK PIVOT EYELET  
3540-22

GROUND WASHER  
9T-16

GROUND SPRING  
581-9

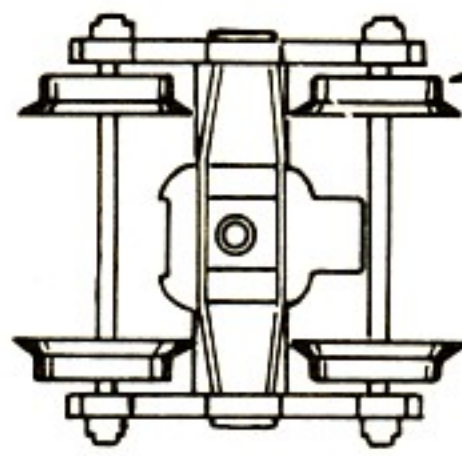
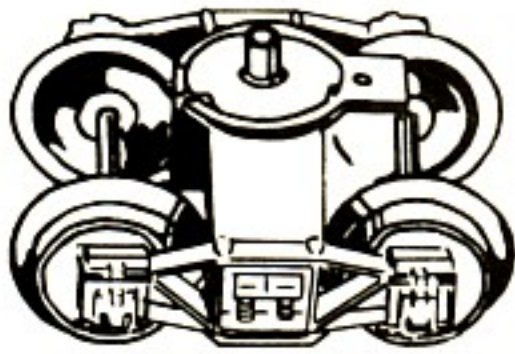


One of these trucks is used on illuminated passenger cars of the Civil War period. To provide center rail pickup No. 581-10 Pickup Roller Carriage is snapped on the axles. Two of these trucks are used on whistle car No. 1875W.

# LIONEL SERVICE MANUAL

## PLAIN TRUCK

572-1  
572.50



WHEELS & AXLE  
566-32 (FOR-1)  
566-51 (FOR-50)

TRUCK PIVOT EYELET  
3540-22

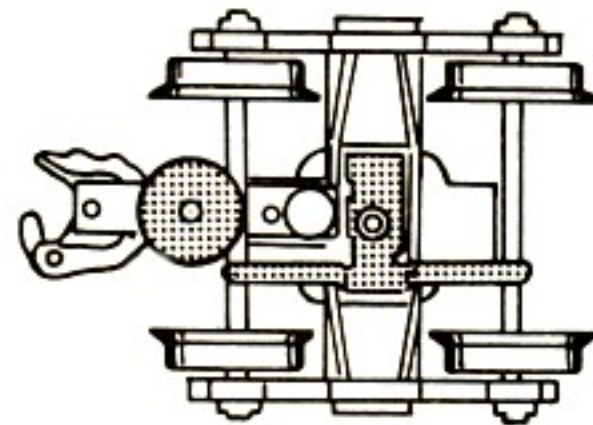


GROUND WASHER  
9T-16

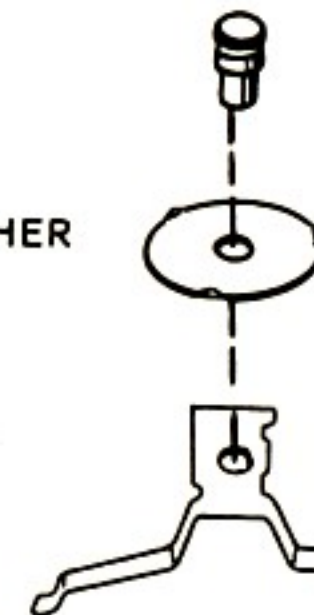
One of these trucks was used on the illuminated passenger cars of the Civil War period. It is not used for ground contact and the ground washer is used simply as a space.

## COUPLER GROUND TRUCK

581-25



GROUND WASHER  
9T-16



TRUCK STUD  
485-16

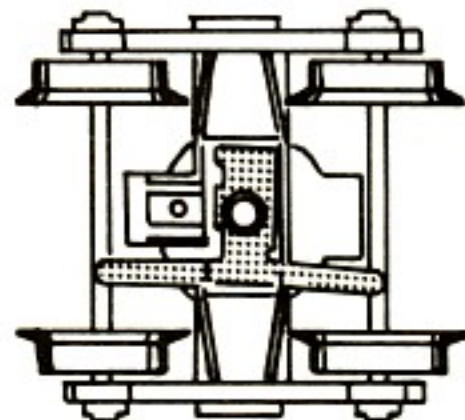
GROUND SPRING  
581-9

With the addition of No. 581-10 Collector Roller Carriage this truck is used on whistle tenders and illuminated cabooses.

Other components are identical with those used on trucks Nos. 566-1 or 566-50 depending on the year of manufacture.

## PLAIN GROUND TRUCK

582-25



TRUCK STUD  
582-3



GROUND WASHER  
9T-16

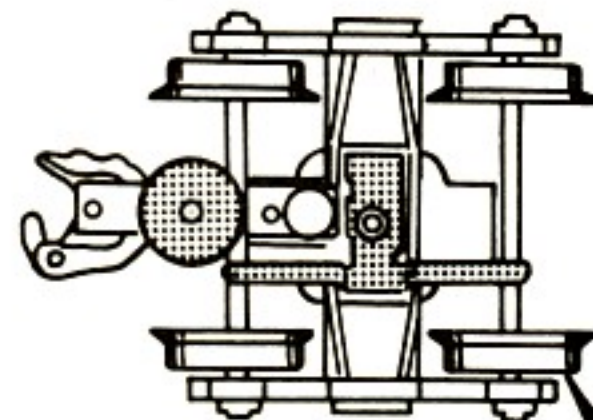
GROUND SPRING  
581-9

These trucks have no couplers. They are equipped with grounding washers and springs and are used on front ends of whistle tender, and illuminated cabooses.

Other components of this truck are identical with those used on 567-1 or 567-50 depending on year of manufacture.

## COUPLER GROUND TRUCK

584-25



KNUCKLE  
566-27

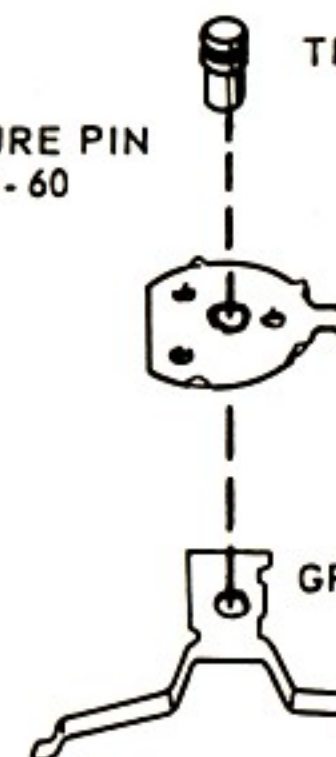


SPRING ASSEMBLY  
566-58

ARMATURE  
566-14

ARMATURE PIN  
566-60

SPRING RIVET  
566-18



TRUCK STUD  
582-3

GROUND WASHER  
584-26

GROUND SPRING  
581-9

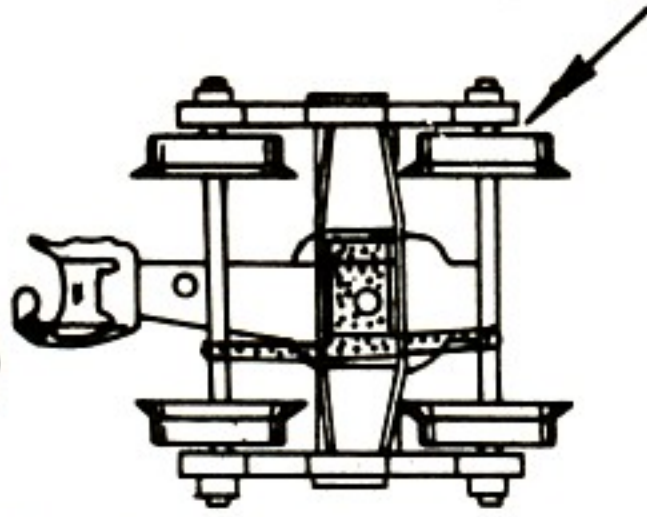
This truck was used for illuminated cabooses Nos. 6357 and 6437. The basic truck is either 566-1 or 566-50, depending of the year of manufacture.

WHEELS & AXLE  
566-32

# LIONEL SERVICE MANUAL

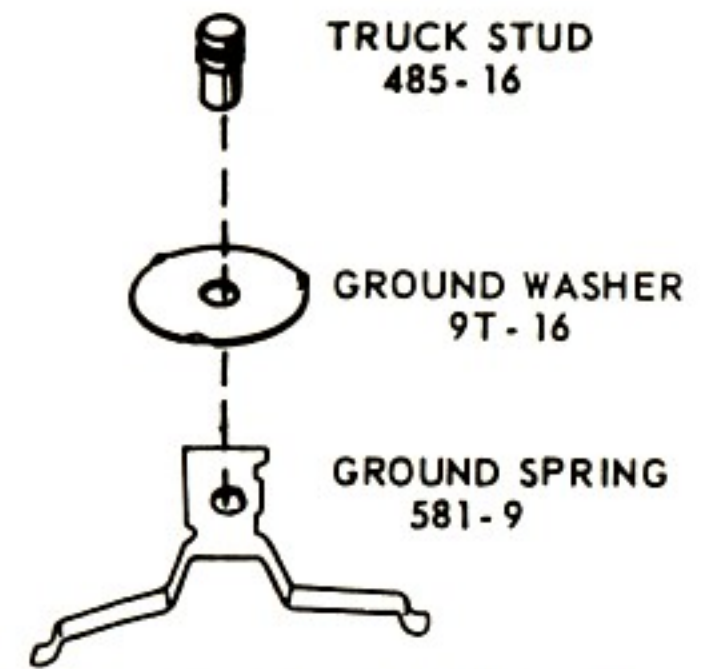
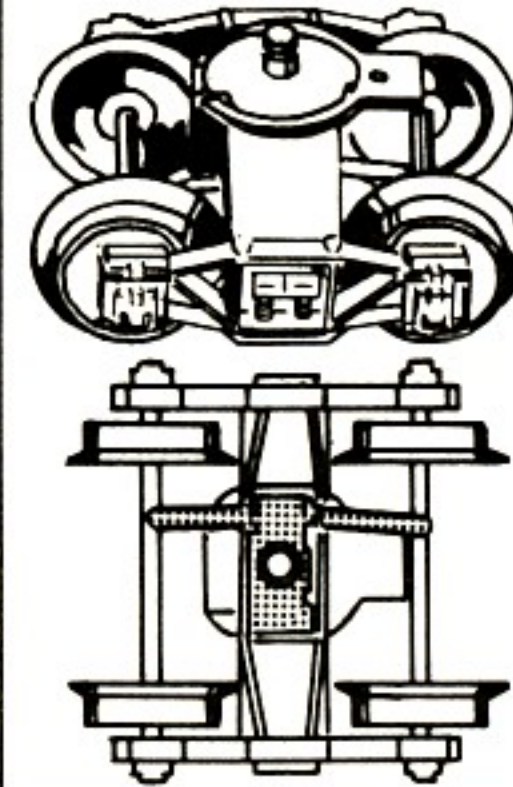
## DUMMY COUPLER GROUND TRUCK 585-25

WHEELS & AXLE  
566-32



With the addition of No. 581-10 Pick-up Roller Carriage this truck is used on 234W whistle tender. The basic truck used is either 561-1 or 561-50 depending of the year of manufacture. For other parts see No. 586-25.

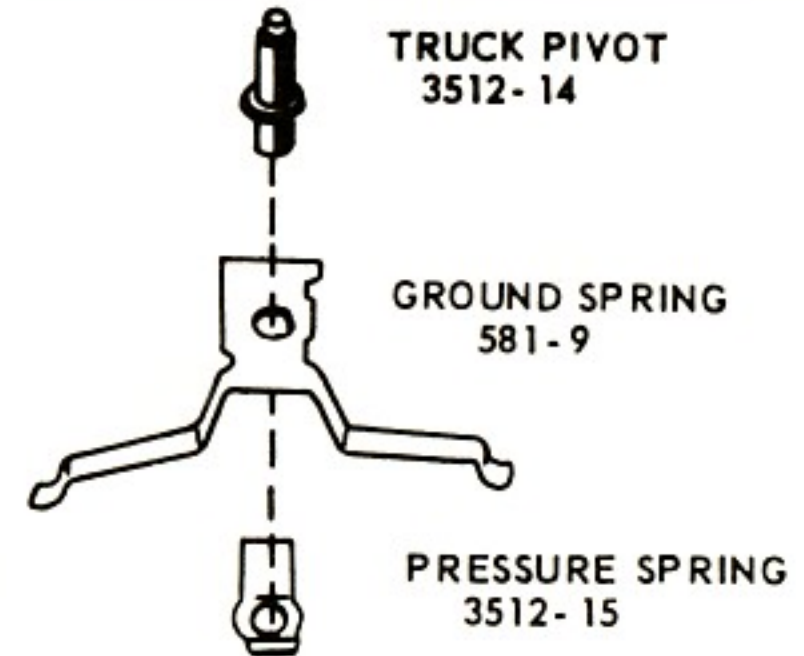
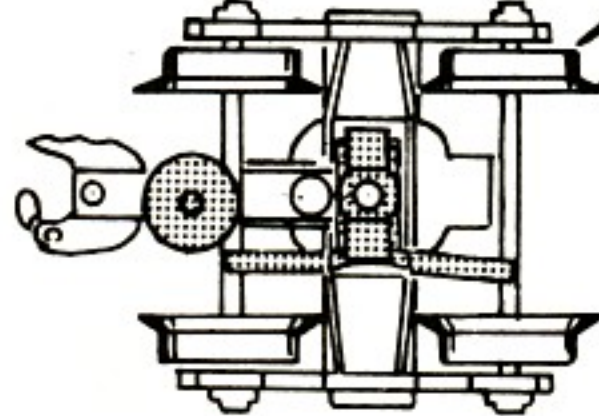
## PLAIN GROUND TRUCK 586-25



This truck is used on 234W whistle tender and consists of 562-1 or 562-50 plus parts illustrated.

## GROUND COUPLER TRUCK 3512-20

WHEELS & AXLE  
566-32

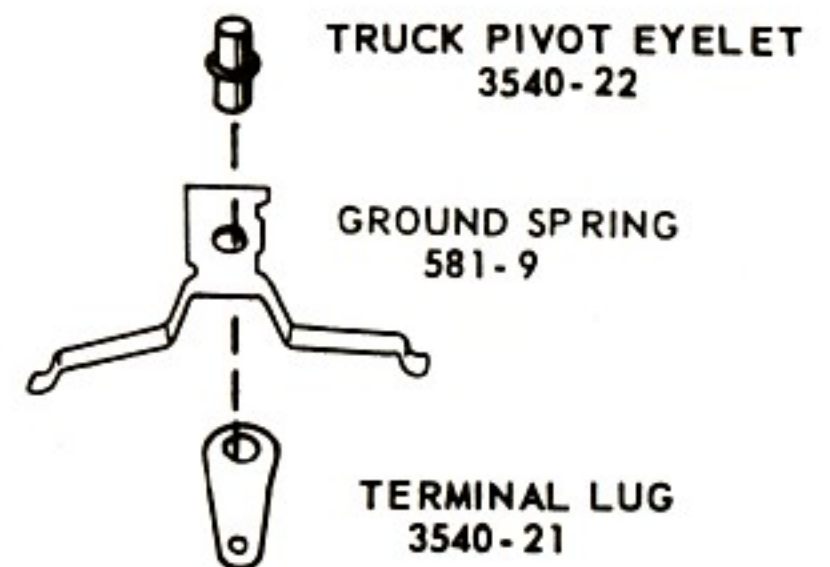
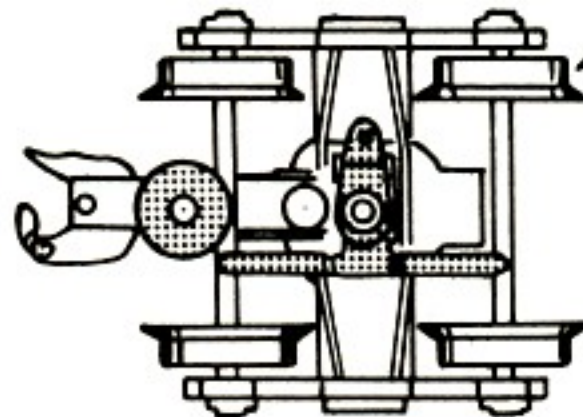


These trucks have a contact spring and a special pressure spring. This truck was used on Car No. 3512.

Other components are identical with those illustrated on truck No. 566-1

## GROUND COUPLER TRUCK 3540-40

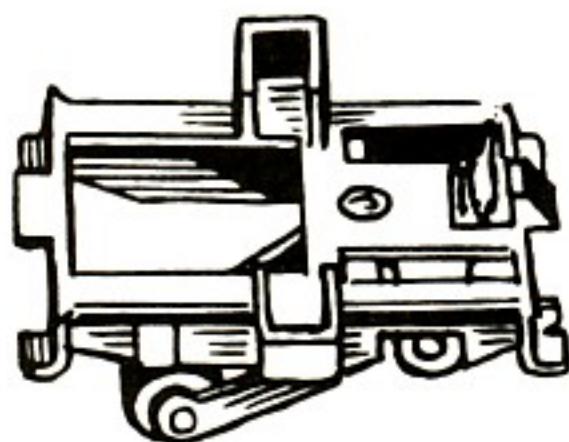
WHEELS & AXLE  
566-32



These trucks are equipped with a contact spring and an extra terminal solder lug all held by a long terminal eyelet. One of these trucks is used on No. 3540.

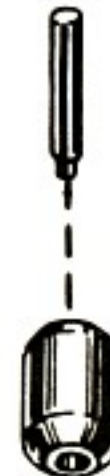
Other components are identical with those illustrated under truck No. 566-1 or 566-50 depending on the year of manufacture.

## PICKUP ROLLER CARRIAGE 581-10



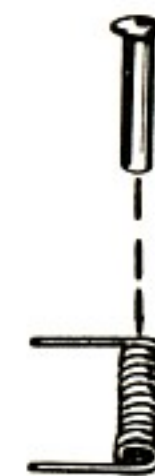
ROLLER PIN  
2328-96

ROLLER  
2328-95



ROLLER ARM RIVET  
2367-198

ROLLER ARM SPRING  
581-5



No. 581-10 Pick-up Roller Carriage may be snapped on the axles of any truck and is used to contact the center rail. This part is also a perfect replacement for obsolete No. 482-3 Base Plate Assembly.

## LIONEL SERVICE MANUAL

### TRUCKS AND TRUCK PARTS

Part No.	Bin	Description	List Price	Part No.	Bin	Description	List Price
6TC-1	J-21	Coupler Truck	2.00	485-30	I-51	Rivet	.02
6TC-5	P-51	Bottom Frame	.20	485-32	K-70	Contact Spring	.05
6TC-8	P-51	Coll. Roller Assem.	.50	486-1	P-15	Light Truck	1.50
6TC-10	P-61	Coupler Head & Coil	.75	486-4	I-41	Bottom Frame	.75
6TC-12	P-71	Shoe Spring	.05	487-1	G-19	Light Coupler Truck	1.75
6TC-17	*	Truck Frame	Obs.	487-3	M-55	Truck Side	.30
6TC-18	P-71	Truck Side	.15	487-9	M-55	Drawbar W/Coupler	.75
6TC-19	P-81	Wheel	.15	487-12	M-55	Bottom Frame	.50
6TC-20	P-81	Drawbar	.15	487-16	M-55	Armature Plate	.15
6TC-21	*	Bottom Frame	Obs.	487-20	M-55	Lock Link	.05
				487-21	M-55	Lock Link Spring	.05
6 TC-25	P-91	Truck Stud	.15				
6TC-28	P-91	Articulated Drawbar	.15	487-22	M-55	Centering Spring	.05
6TC-29	P-91	Fixed Drawbar	.10	487-26	K-60	Truck Stud	.02
6TCL-10	*	Light Coupler	Obs.	488-1	P-43	Coupler Truck	2.00
6TCL-11	*	Articulated Drawbar	Obs.	488-4	P-53	Bottom Frame	.75
6TCL-12	*	Fixed Drawbar	Obs.	489-1	P-22	Plain Truck	.75
6TCL-13	P-81	Ground Washer	.05	490-1	P-32	Coupler Truck	2.00
6TCLD-1	J-36	Light Truck	1.50	490-7	K-52	Coupler & Drawbar	.75
6TCLD-10	*	Light Coupler Truck	Obs.	490-10	K-33	Bottom Frame	.40
9T-16	P-72	Ground Washer	.02	492-1	LD	Light Coupler Truck	2.50
				500-1	P-32	Coupler Truck	.75
61-14	G-95	Eyelet	.02				
479-1	C-18	Basic Truck	.90	500-5	P-82	Truck Side	.10
480-4	P-51	Substitute 480-42	.25	500-6	P-82	Coupler Head	.15
480-8	P-62	Knuckle	.15	500-8	P-92	Shoulder Eyelet	.05
480-16	P-62	Knuckle Spring	.02	500-9	P-92	Coupler Spring	.02
480-18	G-52	Retaining Washer	.03	501-1	*	Plain Truck	Obs.
480-19	I-51	Rivet	.02	521-1	I-13	Light Coupler Truck	2.50
480-20	P-72	Rivet	.02	521-3	P-68	Truck Side	.20
480-25	D-14	Base Plate & Coupler	.55	521-4	P-68	Bottom Frame	.75
480-30	P-51	Bracket	.25	521-6	*	Shoe Spring	Obs.
				521-7	P-92	Swivel Bracket	.15
480-31	P-51	Coupler Head Assem.	.40	521-8	P-92	Pivot Rivet	.05
480-33	P-73	Substitute TC-118	.05	521-9	*	Spring	Obs.
480-38	P-62	Armature Spring	.05	522-1	H-16	Light Truck	1.50
480-42	P-51	Armature Assem.	.25	522-5	P-75	Bottom Frame	.75
481-6	A-23	Roller Assem.	.40	560-1	P-42	Oper. Coupler Trk.	1.50
481-10	E-13	Base Plate W/Roller	.75	560-50		Oper. Coupler Trk.	1.50
481-11	K-57	Roller	.15	560-150		Coupler Trk. W/Cam	1.50
481-12	K-57	Roller Pin	.02	561-1	B-24	Dummy Coupler Trk.	1.00
482-3		Substitute 581-10		561-50		Dummy Coupler Trk.	1.00
483-2	P-41	Base Plate W/Shoe	.75	562-1	B-45	Plain Truck	.75
483-7	P-62	Knuckle Eyelet	.02	562-50		Plain Truck	.75
484-4	*	Pivot Stud	Obs.	566-1	B-55	Oper. Coupler Trk.	1.50
485-3	I-51	Truck Side	.30	566-14	P-87	Armature	.05
485-11	I-61	Lock Pin Assem.	.30	566-16	P-87	Truck Pivot Rivet	.02
485-16	I-51	Pivot Stud	.05	566-18	P-87	Spring Rivet	.05
485-17	I-51	Pivot Washer	.05	566-24		Leaf Spring Assem.	.25
485-20	I-61	Armature Plate	.30	566-27	P-87	Delrin Knuckle	.20
485-22	K-70	Eyelet	.02	566-32	P-56	Wheels & Axle	.25
485-26	P-32	Coll. Roller Assem.	.50	566-50		Oper. Coupler Trk.	1.50

\* These items are obsolete and no longer available.



## LIONEL SERVICE MANUAL

## TRUCKS AND TRUCK PARTS

Part No.	Bin	Description	List Price	Part No.	Bin	Description	List Price
566-51	P-77	Wheels & Axle	.25	TC-23	P-61	Knuckle Pin	.02
566-53	P-87	Spring Rivet	.05	TC-70	D-13	Wheel	.10
566-54	P-87	Delrin Knuckle	.20	TC-102	*	Bottom Frame Assem.	Obs.
566-58	P-87	Leaf Spring Assem.	.15	TC-109	P-63	Shoe Plate	.02
566-60	P-87	Armature Pin	.05	TC-110	*	Coupler Head & Coil	Obs.
566-100	A-11	Drive Coupler Trk.	1.50	TC-112	P-63	Plunger Spring	.02
566-150		Coupler Trk. W/Cam	1.50	TC-113	P-73	Plunger	.10
566-151		Wheels, Cam & Axle	.30	TC-118	P-73	Axle	.05
567-1	I-28	Plain Truck	.75	TC-120	P-73	Shoe Contact Spring	.10
567-50		Plain Truck	.75	TCL-40	*	Bottom Frame	Obs.
571-1	I-28	Plain Ground Trk.	.75	TCL-42	P-22	Coll. Roller Assem.	.35
571-50		Plain Ground Trk.	.75	TCL-44	P-15	Roller	.20
572-1	P-63	Plain Truck	.75	TCL-45	P-93	Conical Spring	.05
572-50		Plain Truck	.75	TCLD-2	*	Bottom Frame	Obs.
581-9		Ground Spring	.15	TS-70	G-52	Substitute 480-18	.03
581-10	P-64	Coll. Roller Carriage	.50	TT-208	P-93	Collector Shoe	.10
581-25	P-21	Coupler Ground Trk.	1.50	TT-210	P-72	Substitute 480-20	.02
582-3	P-87	Truck Pivot	.05	TT-234	P-93	Rivet	.05
582-25	P-46	Plain Ground Trk.	.75				
584-25		Coupler Ground Trk.	1.50				
584-26		Ground Washer	.05				
585-25		Dummy Coupler Trk.	1.00				
586-25		Plain Truck	.75				
600-15	P-65	Mounting Clip	.03				
1002-5	P-92	Eyelet	.02				
1002-6	N-71	Mounting Clip	.02				
1214-54	P-92	Rivet	.02				
2328-95	F-81	Roller	.15				
2328-96	F-81	Roller Pin	.05				
3512-2		Drive Wheels & Axle	.30				
3512-15	L-45	Pressure Spring	.10				
3512-20	L-26	Coupler Drive Trk.	1.50				
3512-26	L-25	Drive Belt	.35				
3512-27		Drive Wheels & Axle	.30				
3540-21	L-72	Terminal Lug	.05				
3540-22	L-72	Truck Pivot	.05				
3540-40	Q-43	Coupler Truck	1.50				
3662-36	N-63	Retaining Washer	.02				
6257-10	A-62	Mounting Clip	.03				
CP-43	P-92	Swivel Pin	.05				
CP-58	P-92	Truck Stud	.02				
NTC-1	*	Coupler Truck	Obs.				
NTCL-1	N-47	Light Coupler Truck	1.75				
NTCLD-1	*	Light Truck	Obs.				
PT-1	H-21	Basic Truck	1.00				
TC-4	P-53	Truck Side	.15				
TC-6		Substitute 480-30					
TC-21	P-71	Coupler Knuckle	.15				
TC-22	P-93	Knuckle Spring	.02				

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