

# SPEED RAIL™



THE TRAIN OF TOMORROW . . . THE WORLD'S FASTEST

## INSTRUCTIONS

for **ASSEMBLY, OPERATION  
AND SERVICE**

### SPEEDRAIL ACCESSORIES AND EXPANSION KITS

These expansion kits and accessories can be purchased separately to add to basic figure-8 layouts. Buy them at your SPEEDRAIL dealer.

#### SET #7130

2 straight tracks, 2 curved tracks, all necessary stanchions and braces included. When added to your basic figure-8 it will make this layout. (See Fig. 1)

#### SET #7131

6 straight tracks, 4 curved tracks. All necessary stanchions, braces and other parts included. When added to your basic figure-8 it will make this multi-level layout. (See Fig. 2)

#### SET #7132

10 straight tracks, 6 curved tracks. All necessary stanchions, braces and other parts. When added to your basic figure-8 it will make this super multi-level layout. (See Fig. 3)

#### #7125 AUTOMATIC FREIGHT STATION

Loads log on moving train . . . automatically. Can be used in any freight layout.

#### #7128 TALKING PASSENGER STATION

Makes six different announcements. Can be installed at any straight track section. Operates on flashlight batteries.

#### #7126 PASSENGER STATION

Same as above but without talking mechanism.

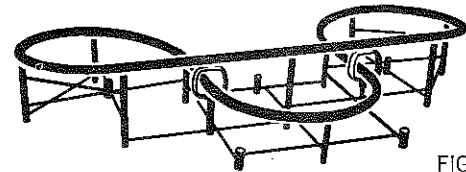


FIGURE 1

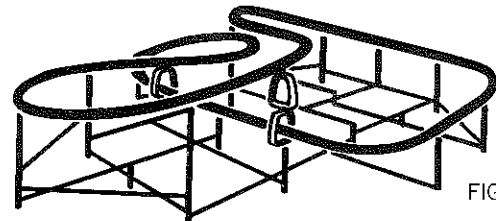


FIGURE 2

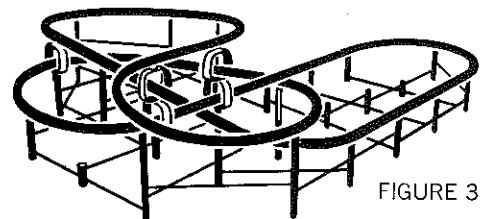
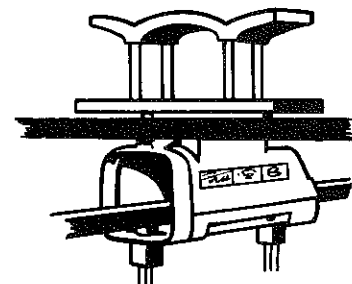
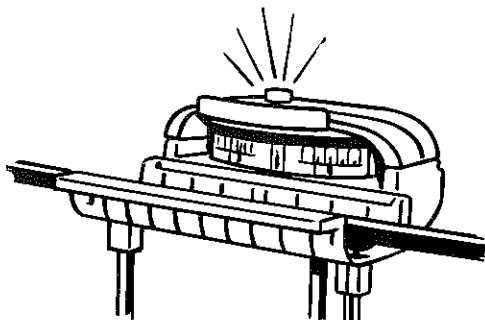


FIGURE 3



# YOUR EQUIPMENT

The first thing to do after you have unpacked your Speedrail set is to check that you have all the needed parts. When checking, learn the part names so that you can follow the instructions. The Basic No. 7110 and No. 7120 Sets contain the following parts:

## TRACK PARTS

- 4 sections of straight track
- 6 sections of curved track
- 1 bag of 20 brass track clips

## TRESTLE PARTS

- 6 3-hole braces
- 2 2-hole braces
- 3 "A" stanchions (vertical supports)
- 2 "B" stanchions
- 2 "C" stanchions
- 2 "D" stanchions
- 2 brace connectors
- 1 stanchion stub
- 1 tunnel bottom
- 1 tunnel top
- 1 tunnel clamp top
- 1 tunnel clamp bottom
- 9 rubber feet (in the bag with track clips)
- 5 screw-down stanchion bases

## POWER SUPPLY PARTS

- 1 power pack
- 2 connecting wires (with spade lugs and connectors)
- 1 power pack front support
- 1 power pack rear support
- 2 power pack holders

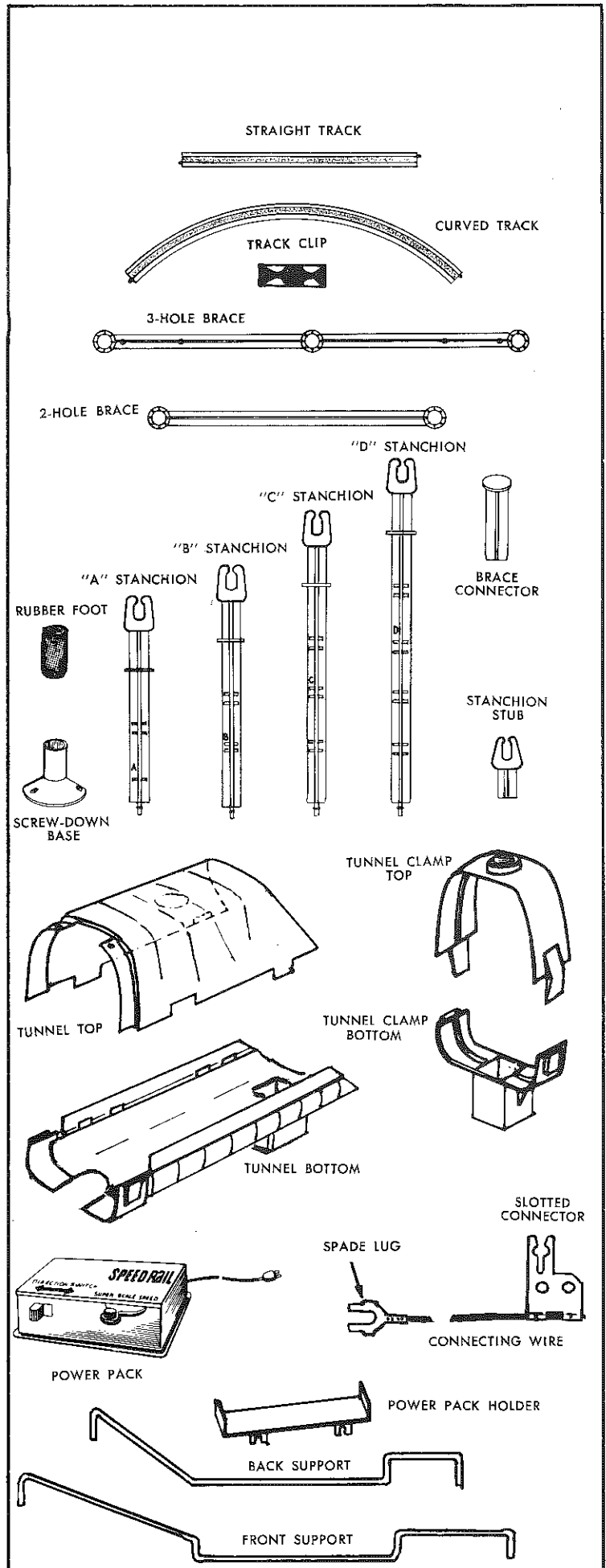
## ROLLING STOCK

No. 7110 Passenger Set includes:

- 1 locomotive
- 2 passenger cars
- 1 observation car
- 1 set of decorative strips

No. 7120 Freight Set includes:

- 1 locomotive
- 1 box car
- 1 car carrier with car
- 1 log carrier
- 1 set of decorative strips



## TRESTLE ASSEMBLY

Assembling a Speedrail layout is a bit tricky but can be as much or more fun than running the train itself. Here is how to put together the figure-8 layout that comes with the basic sets. See picture on box. The braces for this layout are arranged in a pattern shown in Figure 1. They are in three levels.

□ Set down the two 2-hole braces on the floor about 39 inches (one long step) apart. Set a 3-hole brace diagonally about halfway between them. This is the first level. (Fig. 2)

□ Set the three 3-hole braces on top of the first level so that the end holes line up. This is the second level. (Fig. 3)

□ Set the last two 3-hole braces on top of the second level. Move the braces around until the holes line up. This is the third level. (Fig. 4)

□ Now insert the three "A" stanchions through the holes in the braces. Make sure you turn the stanchions so that the slots on top of the stanchions line up exactly as shown. (Fig. 5) Insert the two round-topped brace connectors through the holes where the braces cross each other.

□ Next, insert the two "B" stanchions through the two diagonal corner holes. The two "C" stanchions fit through the two remaining corner holes. (Fig. 6) Again make sure that the stanchion slots line up as shown in the illustration. The two "D" stanchions fit the two remaining sets of holes. Again observe the direction of the stanchion slots.

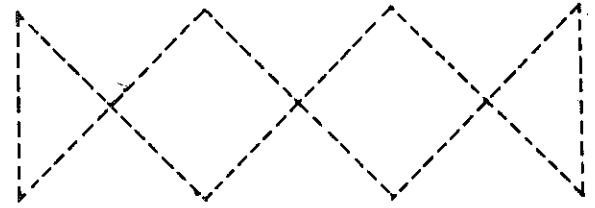


FIGURE 1

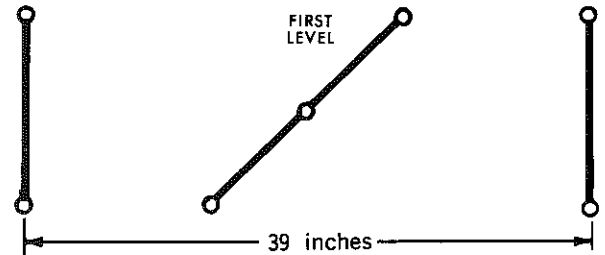


FIGURE 2

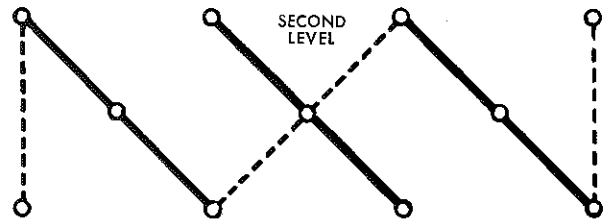


FIGURE 3

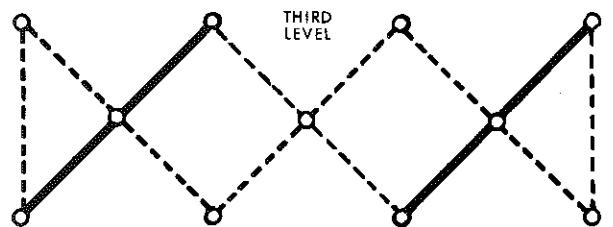


FIGURE 4

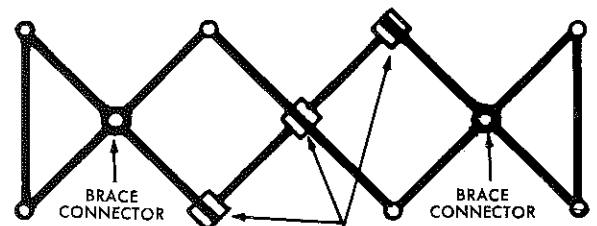


FIGURE 5

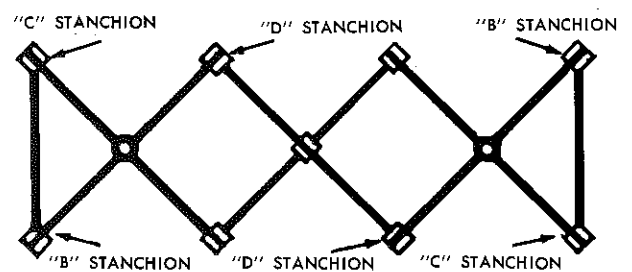


FIGURE 6

□ Fit the tunnel clamp bottom over the center "A" stanchion and set the tunnel bottom so that it slides over one of the outside "A" stanchions. (Fig. 7) The other end of the tunnel is supported by the center "A" stanchion.

□ Next, fit the tunnel top over the tunnel bottom. Then lower the tunnel clamp top over the tunnel. Position it so that the little knobs on its bottom surface fit into holes in tunnel top. Press it into the slots in the tunnel clamp bottom until the two pieces snap together. Last, fit the stanchion stub into the hole in the top of the tunnel clamp. (Fig. 8) The layout trestle is now complete.

□ **Note:** If the layout is going to stand freely on the floor, a rubber foot should be pressed on the bottom of each of the stanchions to keep the layout from sliding around. If the layout is to be screwed down permanently to a piece of plywood, then the center and the four corner stanchions are snapped into the plastic stanchion bases which are equipped with screw holes. (Figs. 9A and 9B)

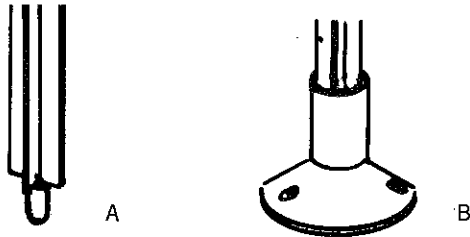


FIGURE 9

## TRACK ASSEMBLY

□ Fit a brass track clip into one of the holes at the end of a section of track (see Fig. 10). Press the end of the clip firmly against a hard surface until the clip slides into the hole as far as it will go. Repeat with another clip in the second hole.

On straight track, it doesn't matter which end you put the clips in as long as they're both in the same end. On curved track it makes a difference — can you tell why? If you keep putting the clips in the same end of curved sections you will end up with a complete circle. To make a figure-eight layout you have to put the clips in one end of half the number of curved tracks, and in the opposite end of the remainder. Try it and see for yourself.

□ To assemble the track to the trestle, start with two straight sections. Push the two track sections together so that the clips at the end of one slip into the holes in the other. Slip the two joined sections into the tunnel and fit them over the three "A" stanchions. Press the joint between the two track sections into the slot of the center stanchion until it snaps all the way in. (Fig. 11)

□ Next, join a curved track section to one of the two straight sections you just assembled and press the joint into the slot of an outside "A" stanchion. Continue joining the curved sections and pressing the joints down into the tops of the "B" and "C" stanchions. Work from the "A" stanchions around both ends of the layout. When you get to the last two straight sections, stop. The layout is almost complete (does it look like the picture on the box?) but electrical connections must be made next.

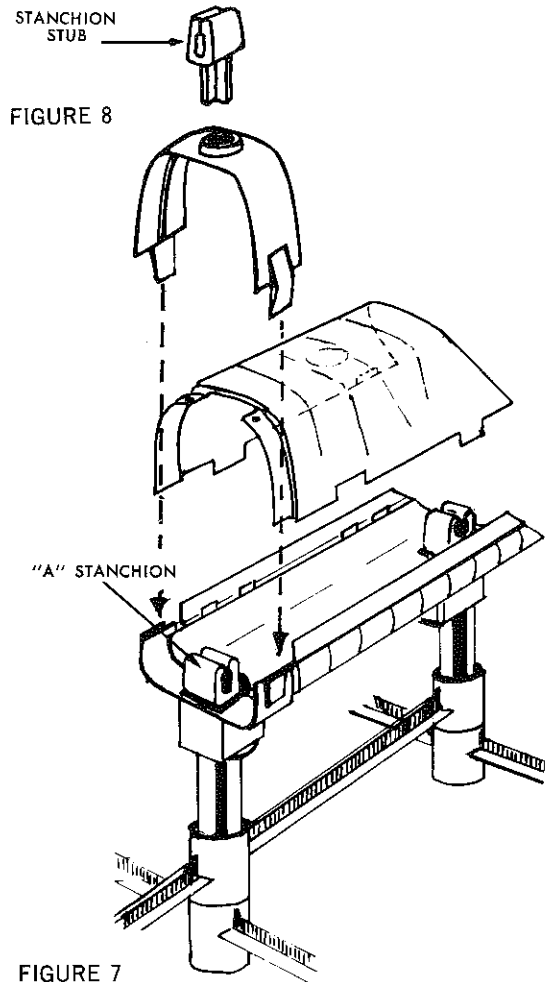


FIGURE 7

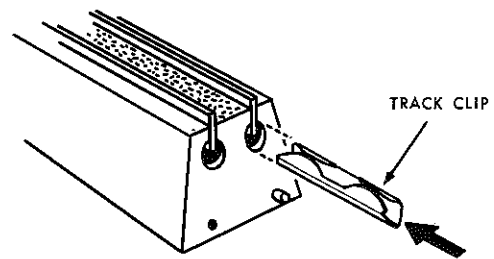


FIGURE 10

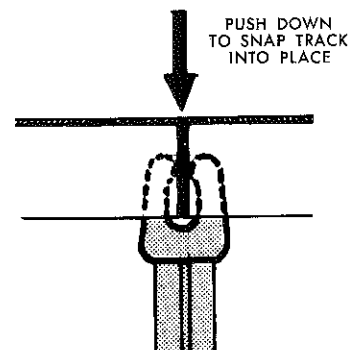


FIGURE 11

## ELECTRICAL CONNECTIONS

Before fitting the last two straight track sections into the layout, you must take care of the electrical connections between the power pack and the track rails. The electrical connections should be made to the two straight sections on top of the layout.

□ Note that the connecting wires have a spade lug at one end and a special slotted brass connector at the other. Fit one of these connectors to the end of the track section so that the slot in the connector snaps over the track clip. The little knob in the track end should fit through one of the holes in the connector. (Fig. 12)

□ Turn the connector of the second wire in the opposite direction to the first. (Fig. 13) Fit the connector to the next piece of straight track so that the slot snaps on the **opposite rail**. **The two connectors must not fit on the same rail**, or the train will not operate. Join the tracks so that the connectors are clamped in the joints between the back sections. Then press them in to the "D" stanchion and the stanchion stub.

□ Loosen the two screws in the back of the power pack. Slip the two spade lugs under the screw heads and tighten them in place with a screw driver. The order of the wires does not matter.

□ Now slip the two power pack supports into holes in the braces (Fig. 14) and snap the two plastic power pack holders over the supports.

□ Set the power pack on the holders. (Fig. 15) When you are ready to run the train, plug the power pack cord into a wall outlet and you're ready to go.

**Note:** The power pack can be set in any convenient place but placing it on the wire supports helps to keep the trestle steady when the train is running.

## TRAIN OPERATION

### DECORATING THE TRAIN

To decorate your rolling stock, peel an adhesive strip from the backing paper and press on the side of the car. The two longer strips in the set furnished with the passenger outfit are for the observation car.

### SETTING UP

To set the locomotive on the track, press it down on a straight track section. It fits snugly and must be snapped in place. To remove the locomotive, move it to a straight track, squeeze the sides of the track slightly together, and lift locomotive off. The observation car (the one with the slanted back) is attached and removed in the same way as the locomotive. All other cars are simply set on the track.

### COUPLING

The cars can be coupled to the train in any order, except for the observation car which must always be last. Drawing at right shows method of coupling cars together.

### OPERATION

After the train is on the track and the electrical connections are made, plug the power pack cord into a wall outlet and move the speed control lever slowly from left to right until you get the "feel" of controlling the train. Top scale speed of the Speedrail is 250 mph — about twice as fast as the fastest real train can go today. To make the train move backwards, use the Direction Switch.

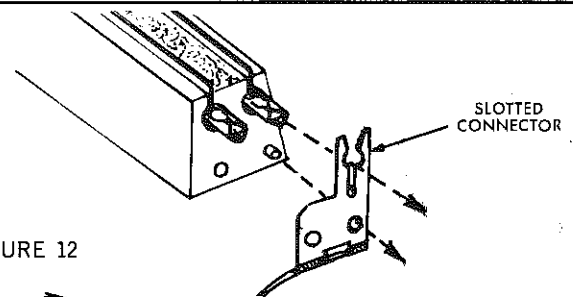


FIGURE 12

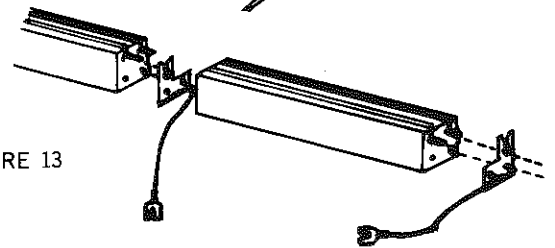


FIGURE 13

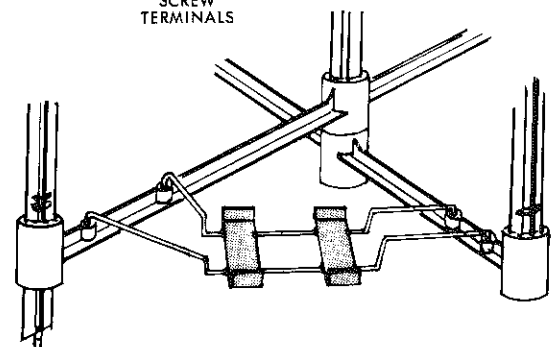
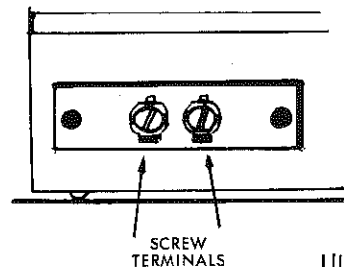


FIGURE 14

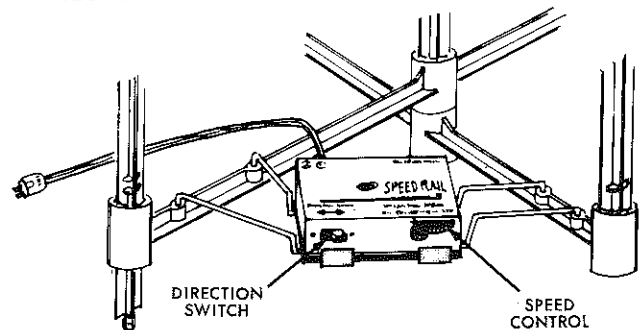
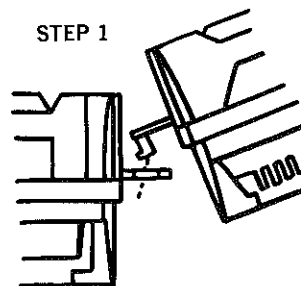


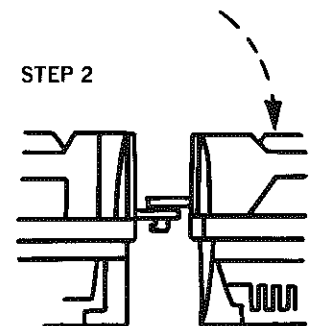
FIGURE 15

### COUPLING CARS

#### STEP 1



#### STEP 2



## TROUBLE SHOOTING

All the electrical connections are made. The train is on the track. The power pack cord is plugged into the wall outlet. The speed control is moved all the way on. The train does not move. What is the trouble? There can be five possible reasons: (1) power pack not getting current from the wall outlet, (2) a short circuit, (3) an open circuit, (4) a defective locomotive, (5) a defective power pack. Here is how to find the trouble.

(1) Listen to the power pack. Is there a humming sound? If there is, then the power pack is connected to the household power lines. If there is no sound, the power pack is not properly connected. Possible trouble: (a) broken or disconnected wire inside the cord, (b) bent or loose blade on the wall plug, (c) no power in the wall outlet itself.

(2) Short circuit. Pick up the pack while it is still connected to the track and to the wall outlet and peek into the little holes at the screw terminals. Do you see a light inside the power pack? If you do, there is a short circuit somewhere — an improper or accidental connection which causes the power pack to supply an excessive amount of current. A short circuit causes a protective circuit breaker inside the power pack to open automatically to protect the power pack from damage. Possible causes: (a) both slotted connectors placed on the **same** instead of **opposite** rails, (b) a piece of metal or metal foil (such as a Christmas tree "icicle") lying across the track and connecting opposite rails, (c) the two spade lugs touching each other. (Fig. 16)

(3) Open circuit. This means simply that the electric path from the power pack to the train is not complete. Check as follows. Take the train off the track. Connect a metal screwdriver across the track rails momentarily. (Fig. 17) Do you see sparks? Then the electric circuit is all right but the trouble is with the locomotive. **Note:** By making a direct connection between the two rails you are really creating a short circuit. If this short circuit exists for more than a second or two, the circuit breaker will snap the current off — so you won't get any more sparks. In this case set the circuit breaker back on as described in the Note.

**Note:** When the cause of the short circuit is removed, the light inside the power pack will go out but the circuit breaker will remain off. To set it back on, move the speed control to zero (or pull out the power pack cord) wait 15-20 seconds, then move the speed control back to full speed. If a short circuit still exists, the circuit breaker will snap off and the light inside the power pack will go back on automatically.

If there are no sparks at the track rails, place the screwdriver blade across the screw terminals of the power pack. If you do get sparks at that point then the trouble is somewhere between the power pack and the track rails. Possible causes: (a) one of the connecting wires is broken, (b) the wire is loose in the spade lug or the slotted connector, (c) some of the track clips are missing. **Note:** If only one track clip is missing, electric current will reach all parts of the rail anyway. Can you see how? If two track clips are missing from the same rail then the portion of track between the missing clips will be "dead."

(4) If the trouble seems to be in the locomotive, check it by touching two wires connected to the power pack to the main contact strips on the locomotive bottom, then to the two brass eyelets. (Fig. 18) If the locomotive driving wheel turns slowly or not at all, the locomotive motor may be worn out and will have to be replaced, as explained in the next section.

(5) If the trouble seems to be in the power pack return it to Remco Service Department for repair or replacement.

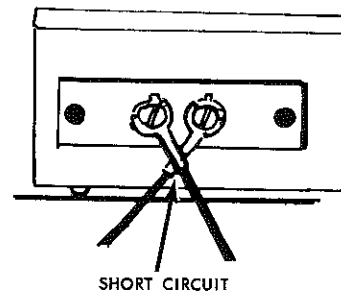
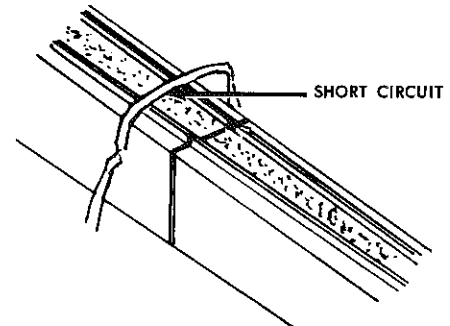
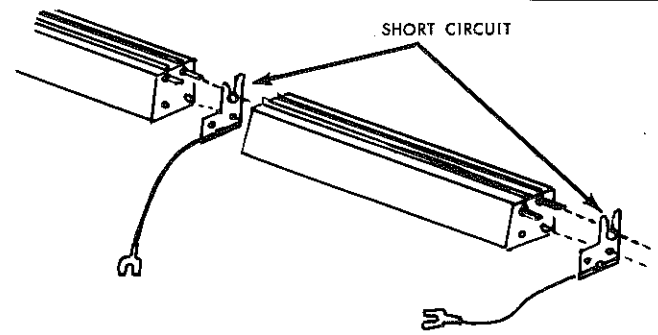


FIGURE 16

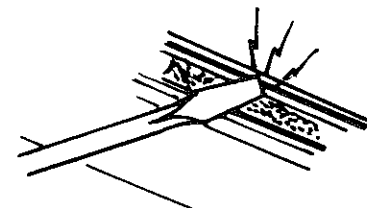


FIGURE 17

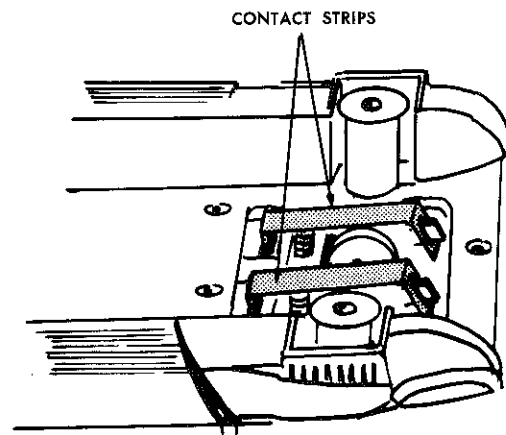


FIGURE 18

## SERVICE INFORMATION

Your Speedrail set was designed and built with top-quality materials and craftsmanship to give you many hours of fun and enjoyment. Even so, the great speeds at which Speedrail travels (scale speed 250 mph maximum) means that certain parts eventually will wear out and need replacing. Some of the parts you may have to replace are the brass contact strips on the underside of the locomotive, the rubber drive wheel tire, the motor, and the drive gears inside the locomotive. Prices and ordering information for these and other parts are on the back page of this booklet. Replacement instructions are listed below.

You will get more miles from your Speedrail, and have to replace fewer parts, if you follow the cleaning tips below.

### REPLACING CONTACT STRIPS

When the brass contact strips on the locomotive become badly grooved or worn through, they should be replaced. To remove the strips, pry loose the front of each strip from its plastic locking lug with a screwdriver (see Fig. 19). Be careful not to lose the coil spring that is under the strip. Now unhook the back of the strips from the metal slots. To replace, hook the back end of the strip into the metal slot, put the coil spring in place, and press the front of the strip until the slot in the strip snaps over the locking lug.

### REPLACING RUBBER TIRE

Take out the two metal screws in the bottom of the locomotive. You will need to use a small "Phillips" screwdriver. Take off the cover of the locomotive. Remove the square metal shaft which holds the single gear and the driving wheel. Replace the rubber tire (Fig. 20) and re-assemble all the parts.

### REPLACING THE MOTOR

Remove the locomotive cover, as before. Gently bend the metal tab which holds the motor bearing just enough to release the bearing. (Fig. 21) The motor can then be lifted out. Insert the new motor into position. Make sure that the side with the soldered bump and the paint mark is on top. Then bend the metal tab back to the original position to hold the bearing in its slot.

### CLEANING

- Periodically remove the brass contact strips from the locomotive and scrape clean with the tip of a screwdriver on the surface shown in Fig. 19.
- Periodically clean all six rollers on each car, and the rubber tire and brass contact strips on the locomotive, with paper toweling.
- Periodically wipe all track surfaces with paper toweling.
- Cars may be cleaned with a damp cloth. *Do not* allow water to get inside locomotive or cars.
- If rails rust, polish them lightly with fine sandpaper (grade 3-0 or 4-0).

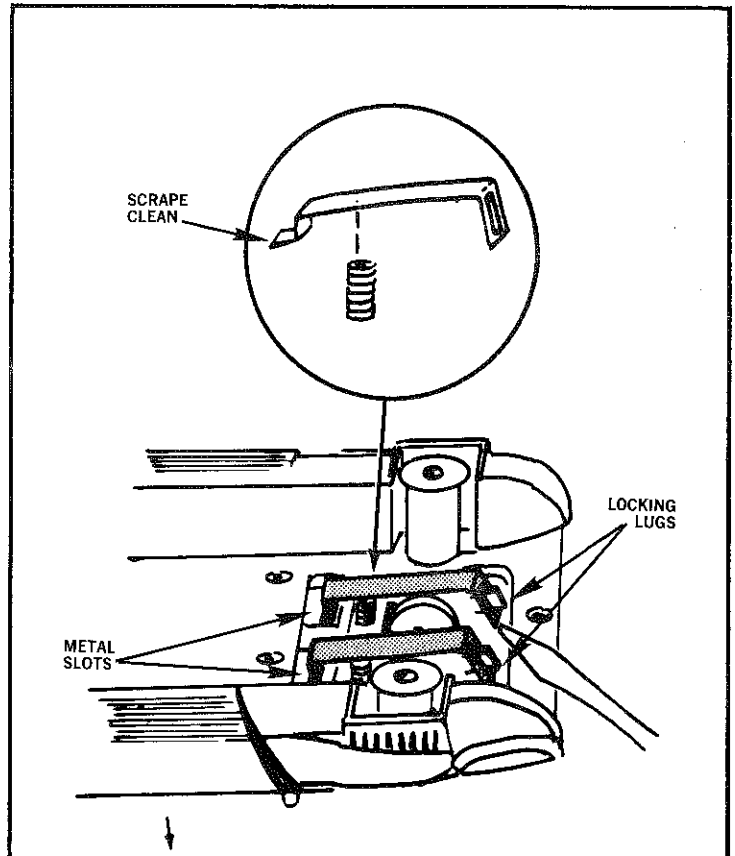


FIGURE 19

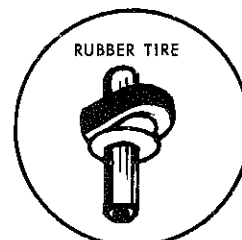


FIGURE 20

DO NOT OPERATE LOCOMOTIVE WHILE TOP IS REMOVED.

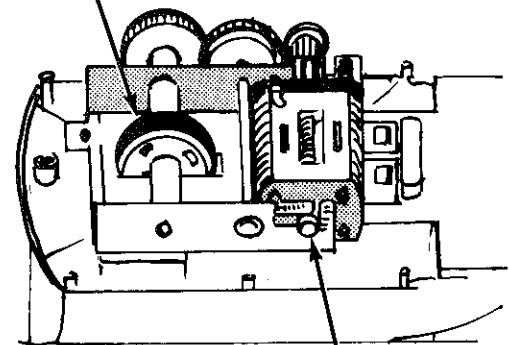
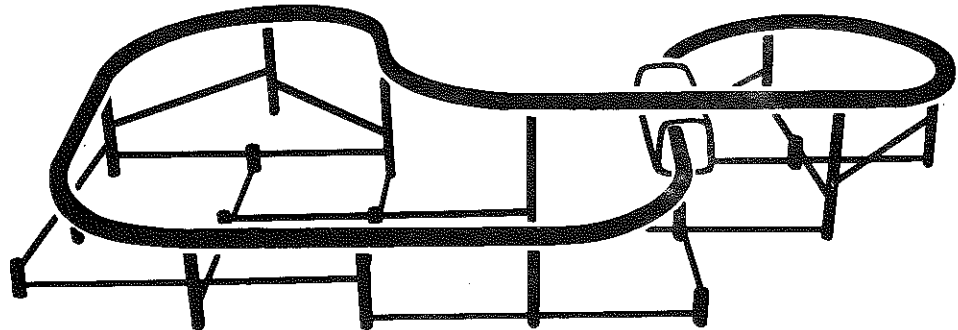


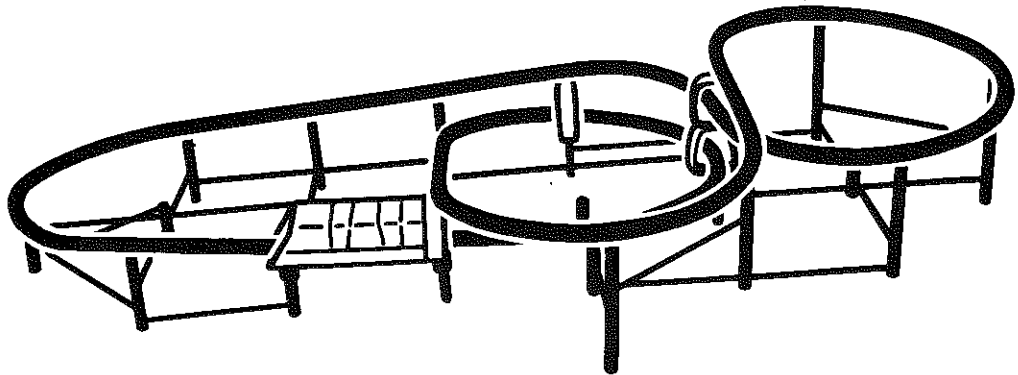
FIGURE 21

# MAKE THESE AND OTHER EXCITING LAYOUTS WITH THE EXPANSION SETS LISTED ON THE FRONT PAGE OF THIS BOOKLET

MAKE THIS LAYOUT WITH BASIC SET PLUS #7130 EXPANSION SET.



MAKE THIS LAYOUT WITH BASIC SET PLUS #7132 EXPANSION SET.



## REPLACEMENT PARTS

This order blank lists the replacement parts available. Please add 50c to the total cost of parts to pay for handling and postage. The minimum charge is \$1.00. A check or money order made out to Remco Industries, Inc. should be sent with your order to:

Service Department  
Remco Industries, Inc.  
Cape May Street  
Harrison, N. J. 07029

PLEASE PRINT YOUR NAME AND ADDRESS CLEARLY

Name \_\_\_\_\_

Address \_\_\_\_\_

### REPLACEMENT PARTS ORDER

Part No.	Quantity	Description	Price	Extension
MS-904		Bag of 20 track clips (including rubber feet)	\$.80	
SA7110-610		Set of two connecting wires with terminals	.50	
SPG207 and ST313		Set of 2 locomotive contact strips and 2 coil springs	.50	
RB53		Rubber drive tire	.20	
7115-6 and 7115-9		Set of 2 gears	.70	
SA7115-603		Locomotive motor with pinion	2.50	
7115		Replacement locomotive (with old locomotive)	6.75	
ELPS-350		Replacement power pack (with old power pack)	9.00	

Total cost of parts

Add for postage

\$.50

Amount of check or money order \_\_\_\_\_