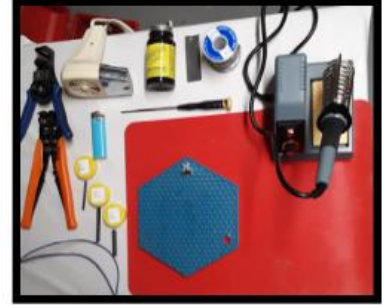


JOINING A WIRE TO A SECTION OF TUBULAR TYPE TRACK

ITEMS NEEDED

Caution: Solder and Soldering Irons are HOT

- Wire Stripper - There are many kinds of them.
- Side Cutter or Wire Cutter (Nickname Dyke)
- Rosen Core Solder (1/16 inch or less in diameter preferred.)
- Heat pad to solder on before track is installed
- Soldering Iron or as also called Soldering Pencil
 - (I prefer to use one with a pointed tip.)
 - (I prefer a variable wattage from about 10 watts up to 40 or 50 watts.)
 - (To solder to the rail takes a minimum of about 25 watts for a good joint.)
 - (Use the higher setting when soldering to the track.)
- Small Straight Screwdriver to open the bottom of the rail.
- Sand Paper or some another way to burnish the track
 - (Burnish is to make shiny or lustrous by rubbing or scraping the metal.)



Notes **

Some people prefer always using soldering paste/flux when soldering.
Using solder paste/flux is a requirement if using solder that not rosin core.

It is best to avoid using soldering guns, but if your use one use one with as low of a wattage as possible so wire insulation is not melted.

Any Procedure is written as a guide that you may adopt or not.
These procedures are all suggestive in nature and not mandatory.

Directions:

The following pages show soldering wire to any brand of tubular track.

First Set:

Pages 2 and 3 are to solder a wire to the underside of the track before installation.

Second Set:

Pages 4 and 5 are to solder a wire to the side of the track or to the bottom flange of the track if the track is already installed on the layout.

Introduction

[Type text]

JOINING A WIRE TO UNDERSIDE OF A SECTION OF TUBULAR TYPE TRACK

ITEMS NEEDED

Caution: Solder and Soldering Irons are HOT

Wire Stripper

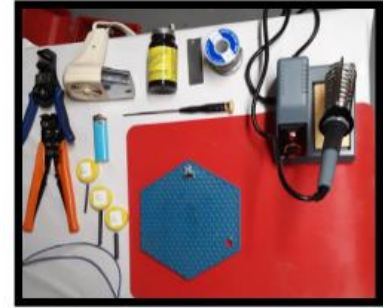
Side Cutter (Nickname Dyke)

Rosen Core Solder (1/16 inch or less in diameter)

Soldering Iron also known as Soldering Pencil

Small Straight Screwdriver

Sand Paper or another way to burnish such as a Dremel Tool
to make the metal shiny or lustrous by rubbing.



Directions

1. Strip about 1/2 inch of insulation off of the wire to be joined to the track.
2. Tightly twist together the strands of the stripped end of the wire.



3. Burnish the bottom of the track to accept solder. Use a piece of sand paper. (A Dremel tool is easier)



4. Burnished - the metal is shiny and now able to accept solder.



5. Take a small screwdriver and insert into the bottom of the track. This will open a gap in the joint to insert the wire.

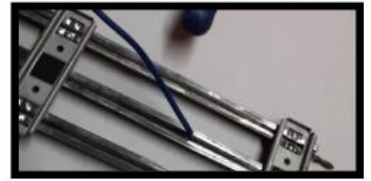


Page 1 - Connect to the underside of tubular track.

[Type text]

JOINING A WIRE TO UNDERSIDE OF A SECTION OF TUBULAR TYPE TRACK

6. Stick the twisted end of the wire into the open joint and remove the screwdriver.



7. Use soldering iron with heat level turned to high. Lay the soldering iron next to the wire in the track joint. Allow the track and wire to heat for a few seconds.



8. Feed solder to the wire in the track joint and it should suck solder into the track.

9. Keep the solder in place, feeding solder until the solder attaches to the track as well as the wire.

10. After the solder has been sucked into the track joint and there is soldered to the track, Set aside the solder. Remove the soldering iron and replace it in the cradle.



11. Let joint cool off a few seconds.

12. The joint is completed and it looks good.



Page 2 - Connect to the underside of tubular track.

[Type text]

JOINING A WIRE TO TUBULAR TYPE TRACK ALREADY INSTALLED

ITEMS NEEDED

Caution Solder and Soldering Irons are HOT

Wire Stripper
Side Cutter (Nick Name Dyke)
Rosen Core Solder (1/16 inch or less in diameter)
Soldering pencil preferred or small soldering gun
Small Straight Screwdriver
Sand Paper or another way to burnish the metal



1. Strip about 1/2 inch of the insulation off of the wire to be joined to track.

2. Twist the stripped end of the wire tightly.



3. Burnish the bottom flange or side of the track to accept solder.



4. Tin the wire or wires to solder to the track (that is to apply solder to the wires before attaching).



5. Tin the burnished area of the track to have a 3/16 inch bubble of solder.



6. Hold the tinned wire to the bubble of solder on the track

7. Using the soldering iron turned up high press to the wire until the solder melts and sinks into the bubble on the track.



[Page 1 - Connect to already installed tubular track.](#)

[Type text]

JOINING A WIRE TO UNDERSIDE OF A SECTION OF TUBULAR TYPE TRACK

8. Remove the soldering iron and replace in cradle.
9. Hold wire in place for a few seconds until the solder cools and the wire is attached.
10. Let the joint cool off a few seconds.



11. The joint is completed and it looks good.



Page 2 - Connect to already installed tubular track.

[Type text]

JOINING A WIRE TO UNDERSIDE OF A SECTION OF GARGRAVES TRACK

ITEMS NEEDED

Caution: Solder and Soldering Irons are HOT

Wire Stripper

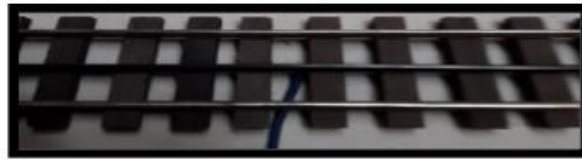
Side Cutter (Nick Name Dyke)

Rosen Core Solder (1/16 inch or less in diameter)

Soldering pencil preferred or small soldering gun

Small Straight Screwdriver

Sand Paper or another way to burnish the metal

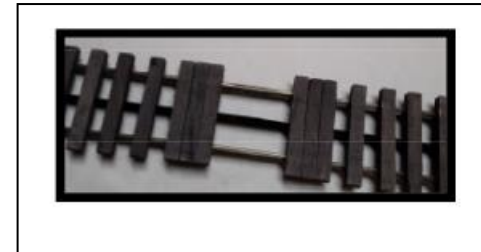


Directions:

There are only a few items that are different for Gargraves Track.

Please note items that are in **BOLD** print.

1. **SLIDE 4 TIES APART**
2. Strip about 1/2 inch of insulation off of the wire to be joined to the track.
3. Tightly twist together the strands of the stripped end of the wire.
4. Burnish the bottom of the track to accept solder. Use a piece of sand paper (A Dremel tool is easier)
5. Burnished the metal is made shiny and now able to accept solder
6. Take a small screwdriver and insert into the bottom of the track. This will open a gap in the joint to insert the wire.
(WIRE MUST BE PLACED IN THE CENTER OF THE OPENING MADE BY THE SCREWDRIVER)
7. Stick the twisted end of the wire into the open joint and remove the screw driver.



Page 1 - Connect to the underside of Gargraves Track.

[Type text]

JOINING A WIRE TO UNDERSIDE OF A SECTION OF GARGRAVES TRACK

8. Use the soldering iron with the heat level turned to high.
Lay the soldering iron next to the wire in the track joint. Allow the track and wire to heat for a few seconds.
9. Feed solder to the wire in the track joint and it should suck solder into the track.
10. Keep the solder in place, feeding solder until the solder attaches to the track as well as the wire.
11. After the solder has been sucked into the track joint and there is solder on the track, Set aside the solder. Remove the soldering iron and replace it in the cradle.
12. Let the joint cool off a few seconds.
13. **SLIDE THE TIES BACK TO THEIR ORIGINAL POSITION**
14. The joint is completed and it looks good.

