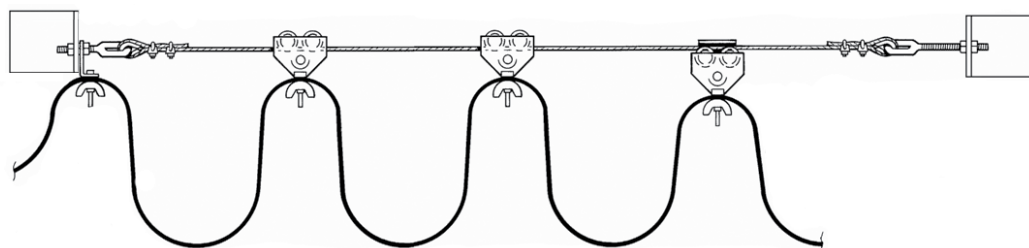


# Festoon Manual Stretch Wire



## Conductix Incorporated

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## 1.0 Safety

### 1.1 Electrical Warnings

- 1.1.1 Properly ground all electrical connections in accordance with the National Electric Code and local codes and ordinances.
- 1.1.2 Disconnect the electrical power from the system before any service is performed.
- 1.1.3 Do not use cable for loads greater than the voltage and current rating. The ampacity rating of the cable should be in accordance with the National Electric Code.

### 1.2 Operational Warnings

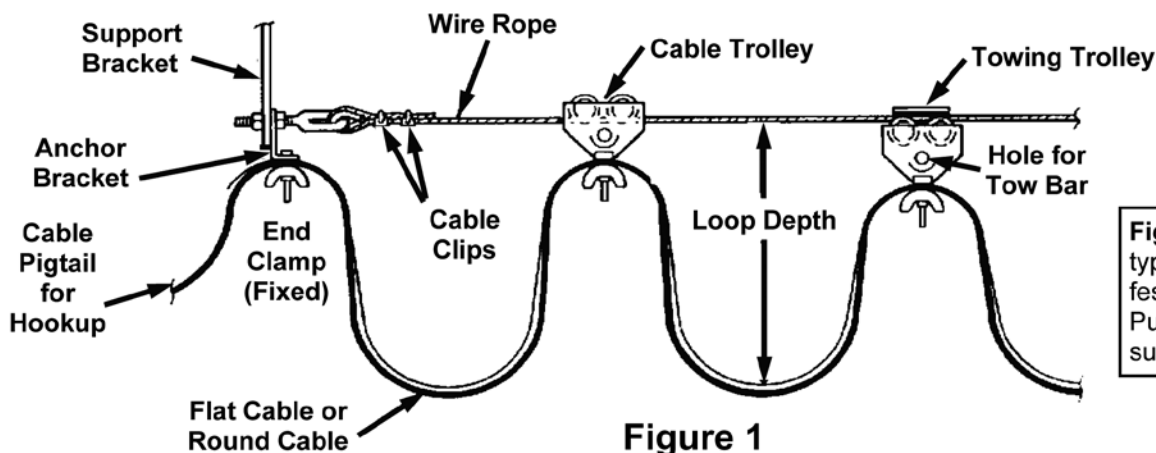
- 1.2.1 Exercise care when handling the festoon system during normal operation.
- 1.2.2 Do not use cable not intended for use with the system. Changes in diameter, weight per foot, length of cable or flexibility will affect the operation of the system.
- 1.2.3 Mounting hardware and fasteners should be installed to maintain tightness under vibration and checked periodically to insure tightness.

### 1.3 Maintenance Warnings

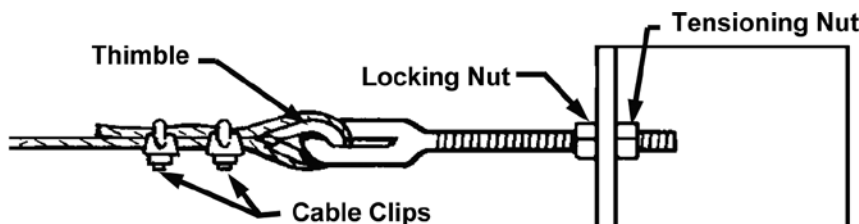
- 1.3.1 **WARNING:** Modification of this equipment may cause excessive wear and will void the warranty. Contact the manufacturer regarding changes or modifications of equipment which could affect reliability or safety.

## 2.0 Installation

- 2.1 Install the eyebolts (one on each of the support brackets which are located at each end of the system), positioning the tension adjusting nut near the end of the threaded bolt (see Figure 2). The anchor bracket, supplied with the system, may be mounted from the same bolt (see Figure 1).
- 2.2 Anchor the catenary wire to the eyebolt at the fixed end using the thimble and cable clips. (See Figure 2.)
- 2.3 Pass the wire rope through all the cable trolleys starting at the anchor bracket end and working toward the tow trolley end. Note: Place the wire rope on the lower side of the trolley roller and upper side of the tow trolley roller. By feeding the tow trolley onto the wire rope in this manner the tow trolley is used to support the wire rope. (See Figure 1.)



**Figure 1** illustrates a typical stretched wire festoon system. (Note: Purchaser supplies the support brackets.)



**Figure 2**

## 2.0 Installation

- 2.4 Tie the trolleys temporarily to the fixed end bolt so that the weight of the trolleys does not contribute to the sag of the wire rope.
- 2.5 Anchor the other end of the wire rope to the eyebolt at the mobile end keeping the wire rope as taut as possible.
- 2.6 Tighten the tension adjusting nut on the eyebolts to achieve a cable sag in the wire rope (at the center point) of approximately 3/8", or 0.2% of the stretch wire length.
- 2.7 Tighten the locking nuts on the eyebolts located at both ends of the system.
- 2.8 Release the trolleys and check to see that they run freely across the length of the wire rope.
- 2.9 Attach the tow bar to the hoist and engage the tow trolley by passing the tow bar through the hole in the tow trolley.
- 2.10 The festoon system is now installed. Before hook-up and application of power, cycle the carriers manually to check that the system is operating satisfactorily.
- 2.11 Apply power and cycle the system at the slowest possible speed while verifying that the system is functioning properly.
- 2.12 Note: Purchaser is responsible for supplying and ensuring that the supporting brackets are secured properly to the structure. The support brackets should be mounted at an appropriate elevation as required by the system layout.

## 3.0 Operation

### 3.1 Pre-Operation Inspection

- 3.1.1 Check for proper mounting of support brackets and installation of eyebolts and clamps.
- 3.1.2 Check for obstruction of path of trolley system.
- 3.1.3 Check cable clearances, that cables are hanging properly and are not tangled.

### 3.2 Operation Instructions

- 3.2.1 Do not exceed the voltage or amperage rating of the cable. Overheating, fire, damage to equipment, or personal injury could result.
- 3.2.2 Operate the festoon system within the electrical and mechanical limits for which it was designed.

## 4.0 Maintenance

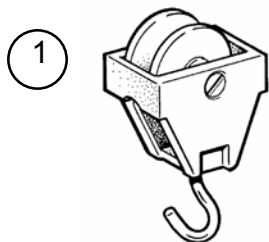
### 4.1 Maintenance Instructions

- 4.2 Customer should conduct periodic inspections of the system. Determine the inspection intervals based on severity of duty cycle and environment. We recommend the following checks during inspection:
  - 4.2.1 Check all rollers for wear.
  - 4.2.2 Check tightness of all hardware.
  - 4.2.3 Check cable clamp of all trolleys, making sure cables remain secure.
  - 4.2.4 Inspect cable insulation for any cuts or cracks.
  - 4.2.5 Check stretched wire for wear and proper sag.

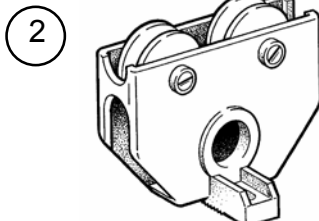


## 5.0 Replacement Parts

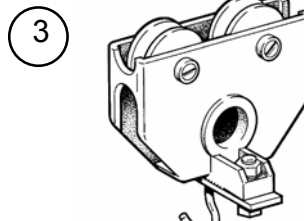
### 5.1 Replacement Part Descriptions



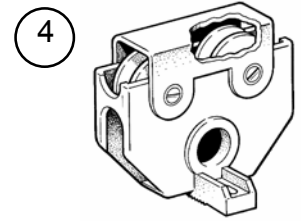
**1-Roller  
Round or Narrow  
Flat Cable Trolley**



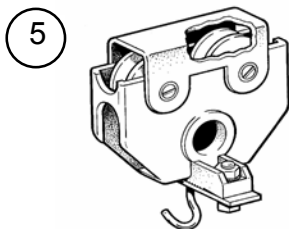
**2-Roller  
Wide Flat Cable  
Trolley**



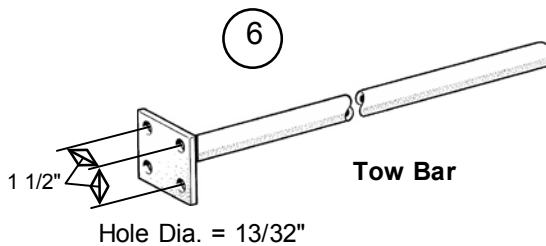
**2-Roller  
Round or Narrow  
Flat Cable Trolley**



**Wide Flat Cable  
Tow Trolley**

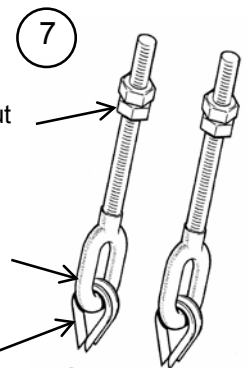


**Wide Flat Cable  
Tow Trolley**



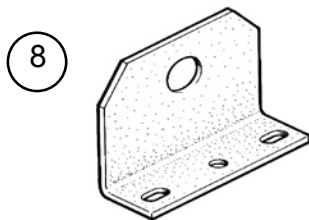
**Tow Bar**

Tension Adjusting Nut  
M12 Thread Size

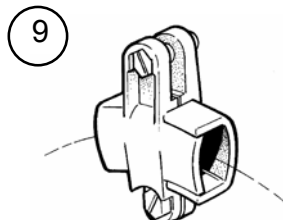


Cable Clip

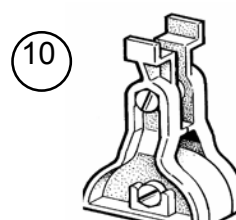
**Hardware Kit**



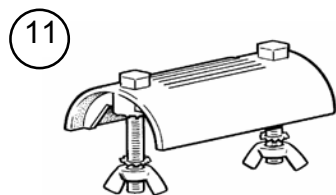
**Anchor Bracket  
Wide Flat Cable**



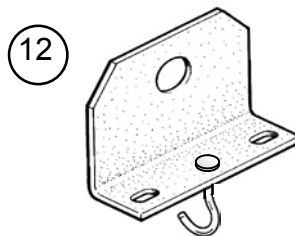
**Round Cable Clip**



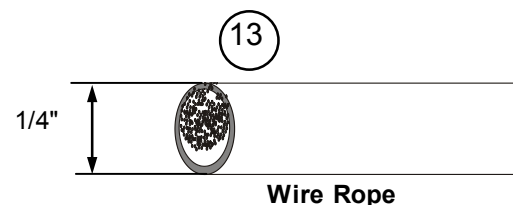
**Narrow Flat Cable Clip  
up to 3/4" Width**



**Wide Flat Cable Clip  
3/4" to 1-3/4" Width**



**Anchor Bracket  
Round or Narrow  
Flat Cable**



**Wire Rope**

# Notes

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