



Installation Instructions For DUCT-O-WIRE® Wire Supported Systems

Figure 1 illustrates a typical Duct-O-Wire® stretched wire supported festoon cable system. Component part numbers for all types of the wire supported systems are listed on page 3 of this brochure.

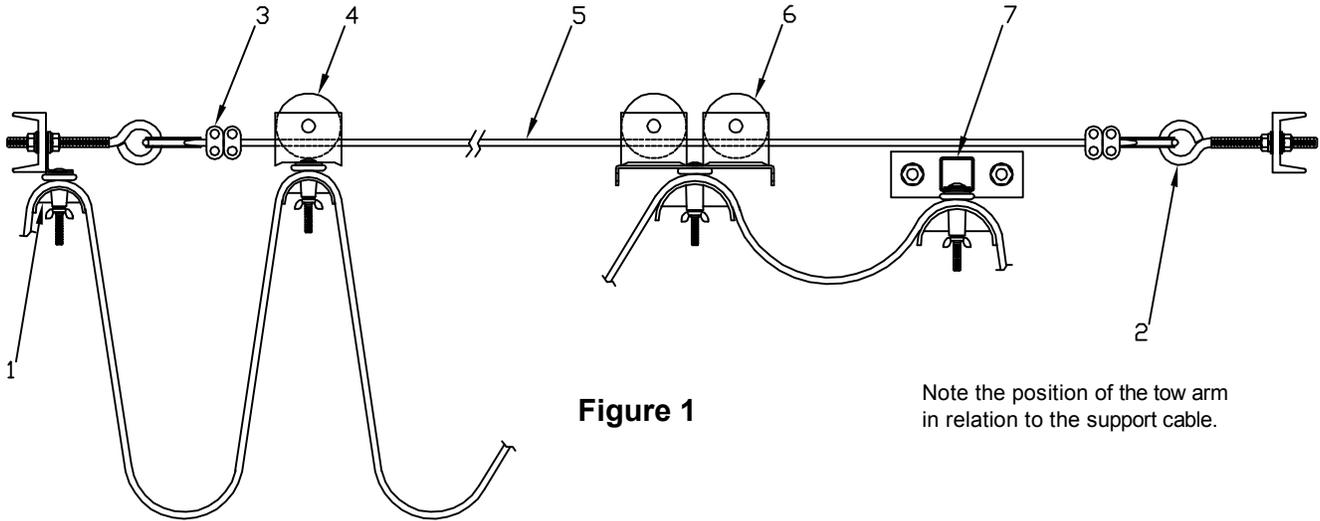


Figure 1

Note the position of the tow arm in relation to the support cable.

Index Number	Catalog Number	Component	Index Number	Catalog Number	Component
1	FC-CS4	End Clamp Assembly	5	FC-SRC2	Nylon Coated Wire Rope, 1/4" dia.
2	FC-SRCE2	Eye Bolt and Thimble	6	FC-TR5	Two-Wheel Lead Trolley
3	FC-SRCC2	U-Clamp, 4 required	7	FC-TB4	Tow Arm Assembly
4	FC-TR4	Single Wheel Trolley			

Note that the support brackets which are normally mounted on each end of the crane bridge to be electrified are not included in the system but are supplied by the purchaser. These brackets must be adequate to support the cable tension applied when the adjustment is made to eliminate the cable sag caused by the weight of the trolleys and festoon cable. Normally this will be 1/4" thick angle or channel iron adequately fastened.

The position of the cable on the bridge is determined by the placement of the tow arm assembly. The tow arm must be located just under the cable to provide push back on the trolleys when returning to the storage end of the system. Be sure that a suitable place is found to install the tow arm and then place the cable just above the tow arm. It will be necessary to drill a hole in each support bracket for the 3/8" eye bolts which will hold the cable ends. One of these eye bolts is in the FC-CS4 or R-CS4 end clamp assembly.

At the end nearest the junction box where the cable connection is to be made, install the FC-CS4 end clamp assembly. (R-CS4A for round cable) The end clamp assembly has an eye bolt for one end of the support cable. Feed the trolleys onto the support cable and tie them near the end clamp until it is time for a running test. Install the FC-SRCE2 eye bolt and thimble at the opposite end. Draw the 1/4" nylon coated cable through the eye bolt at



each end and clamp the end of the cable loop with the FC-SRCC2 U-clamps (2 at each end). Tighten the nuts on the U-clamps to 50 inch-pounds.

Adjust the outside tightening nut on each of the eye bolts until adequate tension is applied. To test for adequate tension, first run the trolleys to the storage end so they are not weighing on the cable. At the center of the system pull down on the cable. If you can pull down more than 1" on a 20 to 60 ft. cable, keep tightening until it does not exceed that amount. The breaking strength of 1/4" nylon covered cable is 4,200#. Then tighten the inside locking nut on the eye bolts at each end of the system.

Untie the trolleys and feed the festoon cable through the saddles until the proper amount for trolley spacing on the system is achieved. Tighten the saddle bolts to hold the cable(s) in place and then run the system back and forth to see that all trolleys run freely.

Run system through several cycles at normal speed to check under operating conditions before applying power.

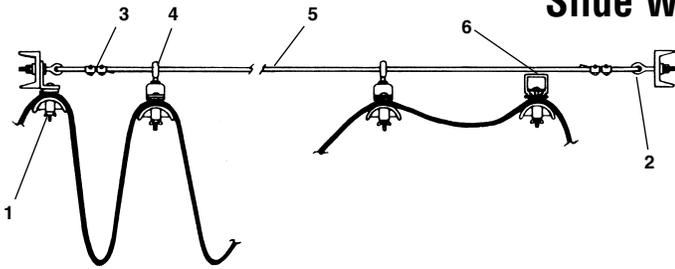
WARNING

MAKE CERTAIN POWER SUPPLY IS DISCONNECTED BEFORE INSTALLING, REPAIRING, OR WORKING IN THE PROXIMITY OF ANY ELECTRICAL SYSTEM. ONLY QUALIFIED ELECTRICAL PERSONNEL SHOULD INSTALL OR REPAIR THESE PRODUCTS.



Wire Supported Systems

Slide Wire Systems

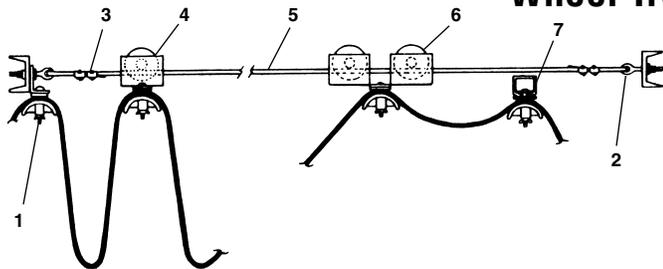


System Catalog Number	Max. Working Travel - Feet	No. of Trolleys (FC-TR9) Required
FC-WS1	20	2
FC-WS2	30	4
FC-WS3	40	6

Each slide wire system includes the parts in the following table. Order cable and connectors separately.

Index Number	Catalog Number	Component	Index Number	Catalog Number	Component
1	FC-CS4	End Clamp Assembly	4	FC-TR9	Slide Wire Trolley
2	FC-SRCE1	Eye Bolt and Thimble	5	FC-SRC1	Wire Rope, 3/16" diameter
3	FC-SRCC1	U-Clamp, 4 required	6	FC-TB4	Tow Arm Assembly

Wheel Trolley Systems

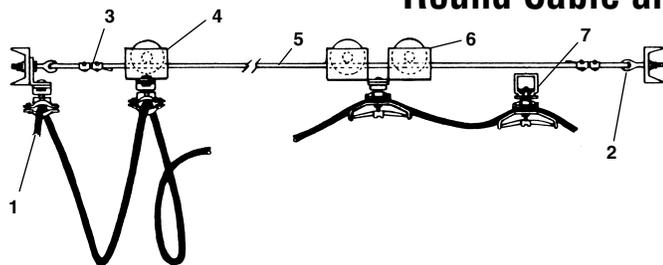


System Catalog Number	Max. Working Travel - Feet	No. of Trolleys (FC-TR4) Required
FC-WS4	20	1
FC-WS5	30	3
FC-WS6	40	5
FC-WS7	50	7
FC-WS8	60	9

Each wheel trolley system includes the parts in the following table. Order cable and connectors separately.

Index Number	Catalog Number	Component	Index Number	Catalog Number	Component
1	FC-CS4	End Clamp Assembly	5	FC-SRC2	Nylon Coated Wire Rope, 1/4" dia.
2	FC-SRCE2	Eye Bolt and Thimble	6	FC-TR5	Two-Wheel Lead Trolley
3	FC-SRCC2	U-Clamp, 4 required	7	FC-TB4	Tow Arm Assembly
4	FC-TR4	Single Wheel Trolley			

Round Cable and Air Hose Systems



System Catalog Number	Max. Working Travel - Feet	No. of Trolleys (R-TR4A) Required
R-WS1	20	1
R-WS2	30	3
R-WS3	40	5

Each round cable and air hose system includes the parts in the following table. Order cable and connectors separately.

Index Number	Catalog Number	Component	Index Number	Catalog Number	Component
1	R-CS4A	End Clamp Assembly	5	FC-SRC2	Nylon Coated Wire Rope, 1/4" dia.
2	FC-SRCE2	Eye Bolt and Thimble	6	R-TR5A	Two Wheel Lead Trolley
3	FC-SRCC2	U-Clamp, 4 required	7	R-TB4A	Tow Arm Assembly
4	R-TR4A	Single Wheel Trolley			



TAG LINE ELECTRIFICATION KITS

Catalog No.	Description
FC-WS1	Slide Wire Kit -20' Travel for Flat Cables up to #10 AWG
FC-WS2	Slide Wire Kit -30' Travel for Flat Cables up to #10 AWG
FC-WS3	Slide Wire Kit -40' Travel for Flat Cables up to #10 AWG
FC-WS4	Wheel Trolley Kit-20' Travel for Flat Cables up to #10 AWG
FC-WS5	Wheel Trolley Kit-30' Travel for Flat Cables up to #10 AWG
FC-WS6	Wheel Trolley Kit-40' Travel for Flat Cables up to #10 AWG
FC-WS7	Wheel Trolley Kit-50' Travel for Flat Cables up to #10 AWG
FC-WS8	Wheel Trolley Kit-60' Travel for Flat Cables up to #10 AWG
R-WS1	Wheel Trolley Kit-20' Travel for Round Cables (.45"-.91" diameter)
R-WS1A	Slide Wire Kit -20' Travel for Round Cables (.45-.91" diameter)
R-WS2	Wheel Trolley Kit-30' Travel for Round Cables (.45"-.91" diameter)
R-WS2A	Slide Wire Kit -30' Travel for Round Cables (.45"-.91" diameter)
R-WS3	Wheel Trolley Kit-40' Travel for Round Cables (.45"-.91" diameter)

Individual Components for Tagline Kits

FC-TR4	Single Wheel Trolley/Saddle Assembly
FC-TR5	Two Wheel and Lead Trolley/Saddle Assembly
FC-TB4	Tow Arm/Saddle Assembly
FC-CS4	End Clamp Assembly/Saddle Assembly
FC-TR9	Slide Wire Trolley/Saddle Assembly for use on FC-SRC1 Bare Wire Rope only
FC-SRC1	3/16" Diameter Bare Steel Wire Rope for FC-TR9 Slide Wire Trolley
FC-SRC2	1/4" Diameter Nylon Coated Wire Rope
FC-SRCC1	U-Bolt for 3/16" Bare Cable
FC-SRCC2	U-Bolt for 1/4" Nylon Coated Cable
FC-SRCE1	Eye Bolt for End Strain with Hardware & one FC-SRCT1 Thimble
FC-SRCE2	Eye Bolt for End Strain with Hardware & one FC-SRCT2 Thimble
R-TR4A	Single Wheel Trolley for Round Cable (.45"-.91" diameter)
R-TR4B	Single Wheel Trolley for Round Cable (.91"-1.25" diameter)
R-TR5A	Two Wheel Trolley & Lead Trolley for Round Cable (.45"-.91" diameter)
R-TR5B	Two Wheel Trolley & Lead Trolley for Round Cable (.91"-1.25" diameter)
R-TR9A	Slide Wire Trolley for Round Cable (.45"-.91" diameter)
R-TR9B	Slide Wire Trolley for Round Cable (.91"-1.25" diameter)
R-TB4A	Tow Arm with Swivel for Round Cable (.45"-.91" diameter)
R-TB4B	Tow Arm with Swivel for Round Cable (.91"-1.25" diameter)
R-CS4A	End Clamp Assembly for Round Cable (.45"-.91" diameter)
R-CS4B	End Clamp Assembly for Round Cable (.91"-1.25" diameter)



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