

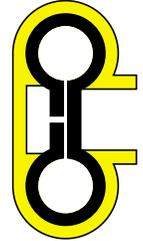


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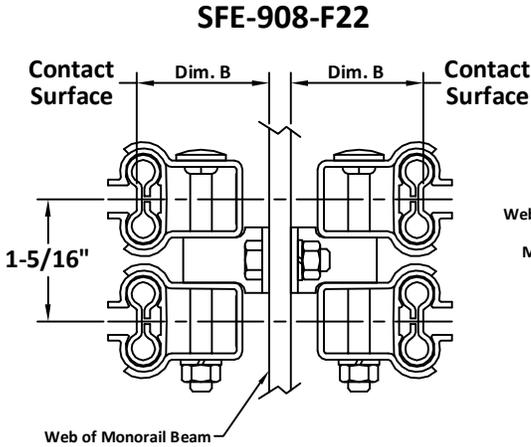
INSTALLATION INSTRUCTIONS

DUCT-O-BAR® SIDE CONTACT FIGURE 8 SYSTEMS

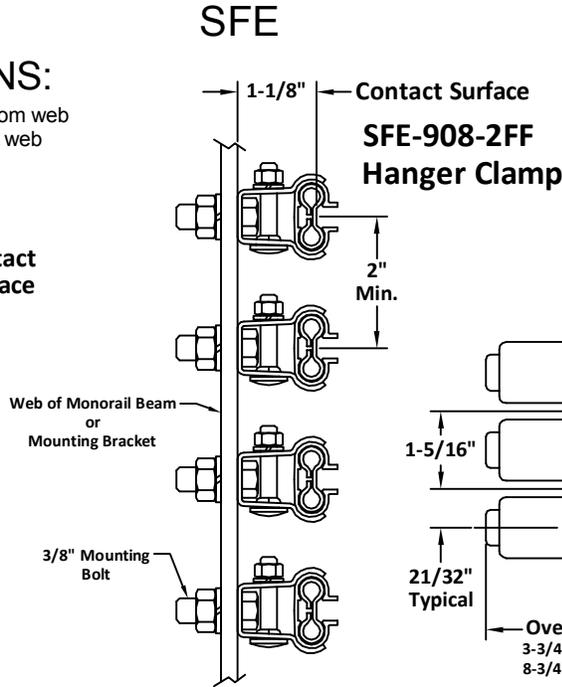


TYPICAL INSTALLATIONS:

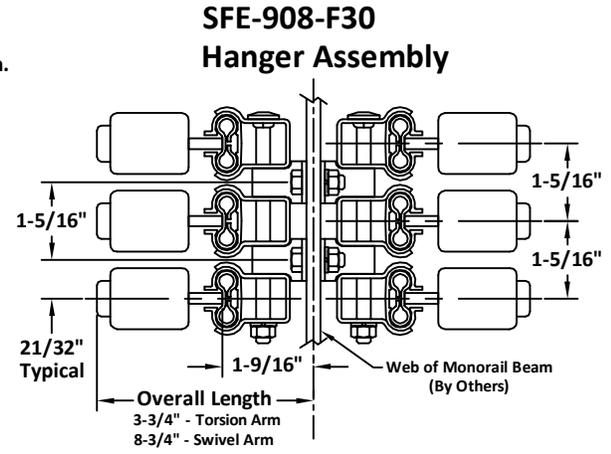
NOTE: Center Power Feed clearance=1.3" from web
 Expansion Gap clearance=1.56" from web



WEB MOUNTED SYSTEM

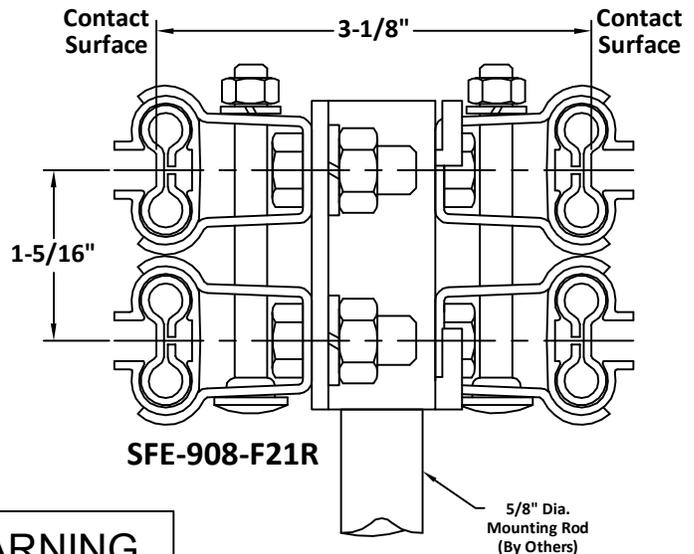
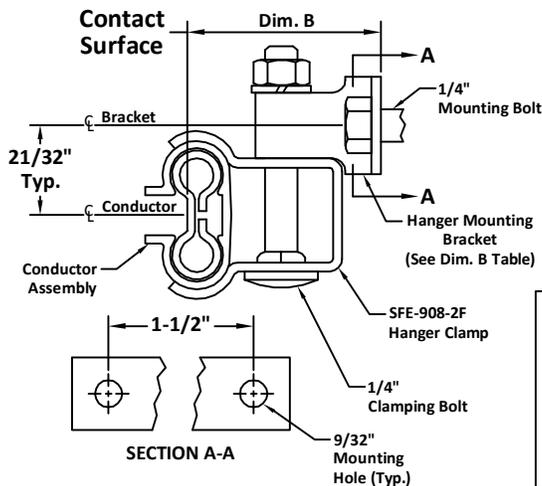


ALTERNATE WEB MOUNTED SYSTEM



SPECIAL WEB MOUNTED SYSTEM USING TWO SFE-908-F30

Dim. B Table	
The S & I designations are part number suffixes. i.e. SFE-908-F22S or SFE-908-F21L	
Standard Mounting "V" Bracket	1-1/2"
Short Mounting "V" Bracket (S)	1-3/16"
Long Mounting "V" Bracket (L)	1-15/16"

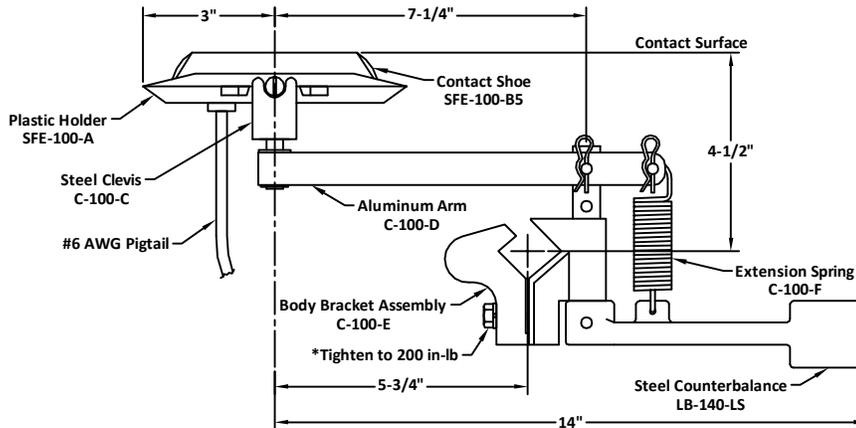


ROD MOUNTED SYSTEM

⚠ 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.

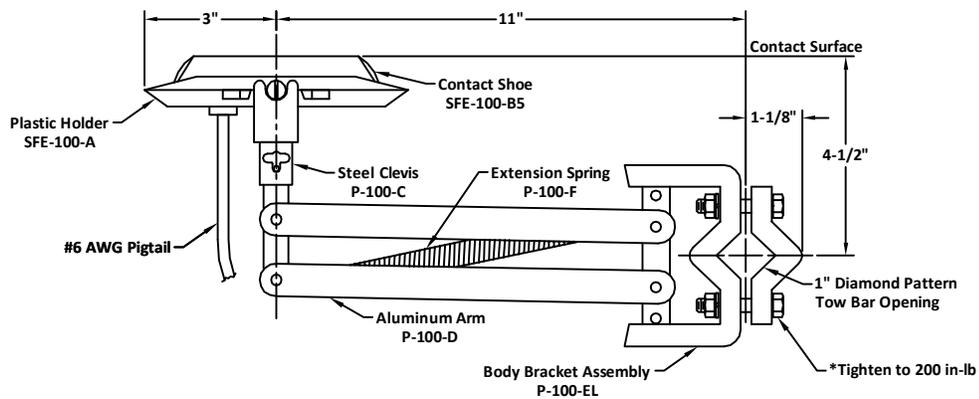
I. SWIVEL ARM COLLECTORS

A. STANDARD ARM COLLECTOR - CAT. #SFE-100-C5

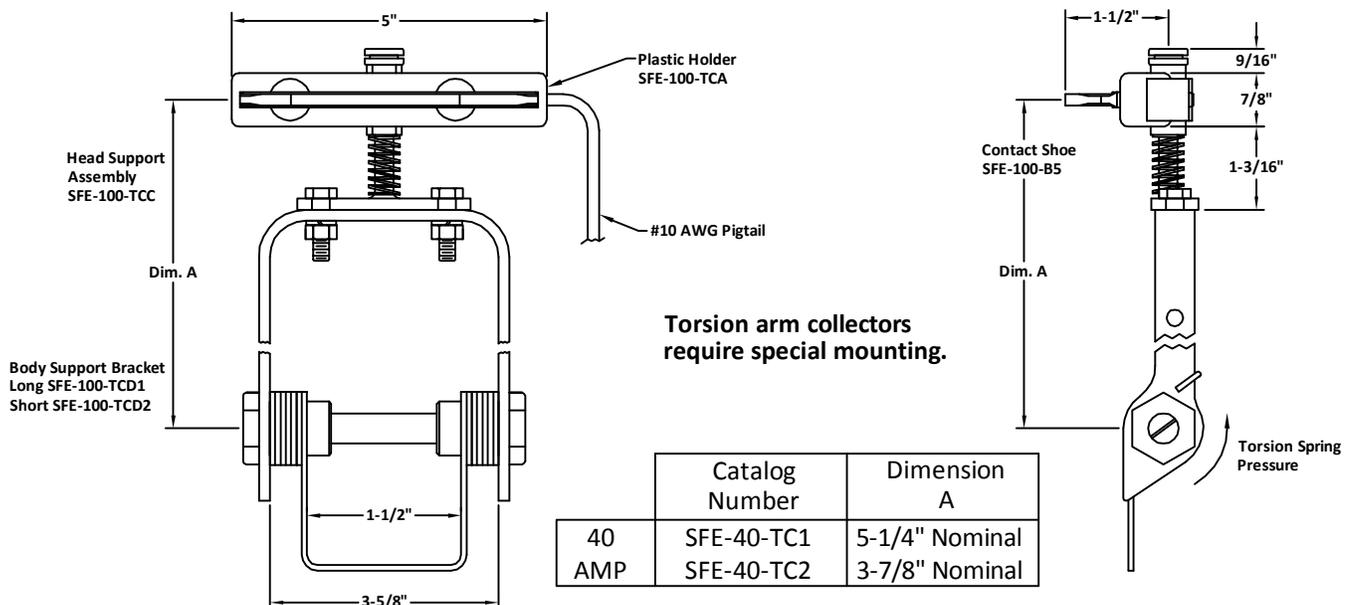


Be sure to check collector spacing required for the hangers selected.

B. PANTOGRAPH ARM COLLECTOR - CAT. #SFE-100-PC5



II. TORSION ARM COLLECTORS



	Catalog Number	Dimension A
40 AMP	SFE-40-TC1	5-1/4" Nominal
	SFE-40-TC2	3-7/8" Nominal

Step 1 - Hanger Clamp Installation

Refer to Page 1 for drawings which show typical rod or web mounting. Fasten the hanger clamps and brackets as shown and leave the conductor clamping bolts loose.

Recommended Support Spacing

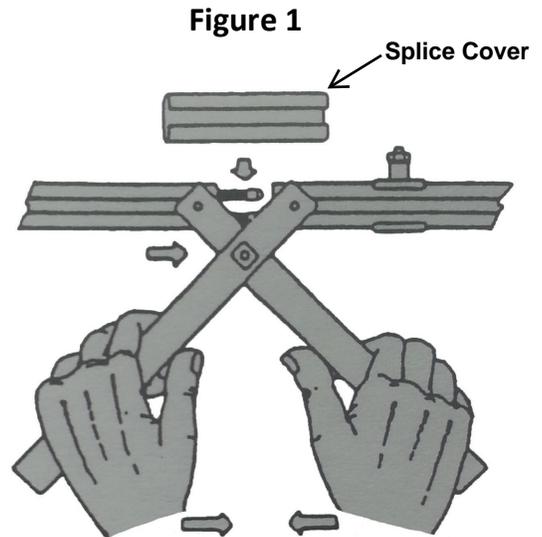
Straight Runs - 4'-0"
Curves - 2'-0"

Step 2 - Conductor Assembly Installation

Snap the conductor sections into the hanger clamps and tighten the cross bolts until conductor is secure but able to expand freely.

Step 3 - Joining Conductor Bar Sections (Figure 1)

Draw the adjacent conductor bars together with the connector tool. Place splice cover over the completed joint leaving the collector slot open to allow passage of the collector.



Step 4 - Hanger Clamp Tightening and Adjusting

Tighten the clamping bolts to secure the conductor bar sections. Adjust the clamps to obtain a **Sliding Tight** condition to allow for expansion of the conductors during temperature variation.

Step 5 - Center Power Feed Installation (Figure 2 & Figure 3)

Alternate the power feed locations as shown in Fig. 2. Notch the conductor insulating cover on top and bottom (1-1/4" x 1/2") to expose the conductor as shown in Fig. 3. Assemble the power feed clamp over the exposed conductor. Place the power feed wire into the lug furnished with assembly and tighten the screw. Notch the insulating case halves to provide the feed wire entry and assemble the over the exposed power feed parts. Secure the insulating case with 2 self-tapping screws furnished.

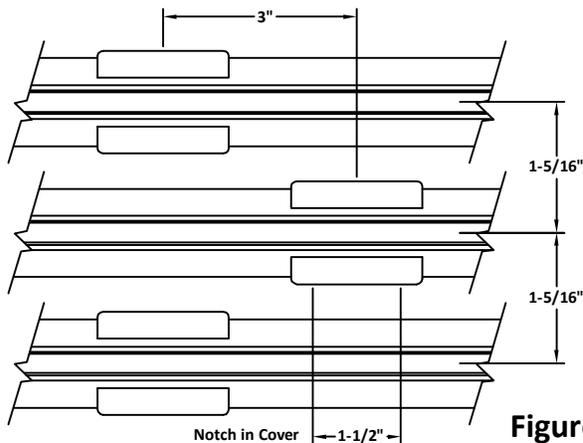


Figure 2

Step 6 - Transfer Cap/End Power Feed Installation

All bar ends must be drilled with 19/64" drill to accept the pins of the transfer cap or end power feed shown in Fig. 4. Tap the transfer cap or end power feed into the holes until flush with the conductor and cover. If using an end power feed, it is now ready for the power wiring connection.

Figure 3

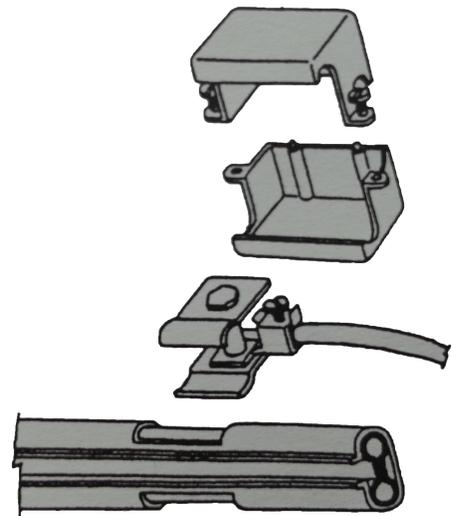
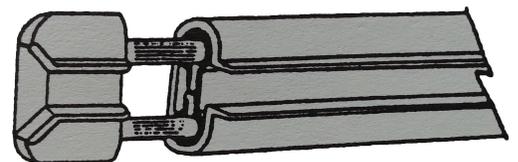


Figure 4



SFE-908-GCT Transfer Cap

SFE-908-GCTP
End Power Feed has
a lead wire attached.

Step 7 - End Cap Installation (Figure 5)

On conductor ends that have no transfer caps or end power feeds, install the SFE-1GC flexible PVC end cap. Remove connector pins, if any. Slip on until flush with the end of the conductor and cover.

Figure 5



**SFE-1GC
(END CAP)**

Step 8 - Collector Installation

Refer to Collector installation dimensions on page 2. Swivel type collectors are mounted on vertical tow bars. The Standard and Pantograph arm collectors mount on 1 inch diamond pattern tow bars.

Step 9 - Final Inspection

Sight down the installed conductors and straighten any chance bends or misalignment. Make sure that the hanger clamps are not drawn too tight. Check to make sure that the collector brushes pass freely between the lips of the conductor cover without excess friction and that they make good contact with the metal surface.

CAUTION

Do not over tighten the hangers. Duct-O-Bar must be able to expand freely due to temperature variations in the ambient air. If the bar slides out of position due to friction of the collectors during operation of the system, there are anchors which can be installed to prevent that condition.

Spray Painting

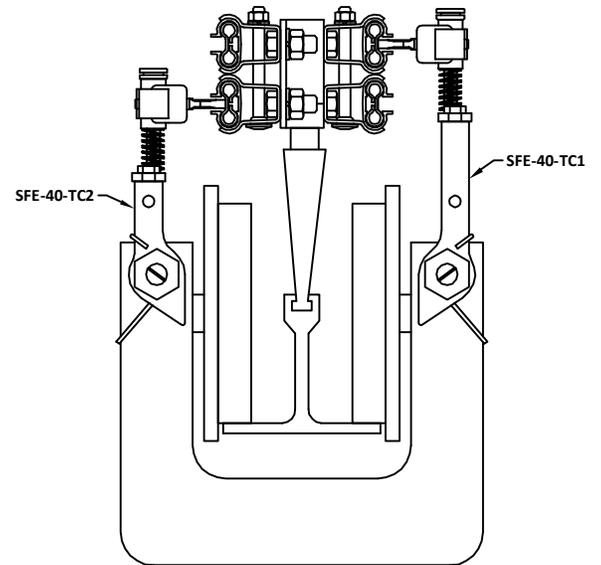
If possible, all spray painting of the beams and surrounding equipment should be done prior to installation of the conductors. If spray painting must be done after the installation has been made, care must be taken by the use of masking tape or similar methods, to protect the contact surfaces of the conductors. Paint on these surfaces will cause operating difficulty.

Field Cutting

Conductor bar ends must be drilled as follows to accept proper connector pins:

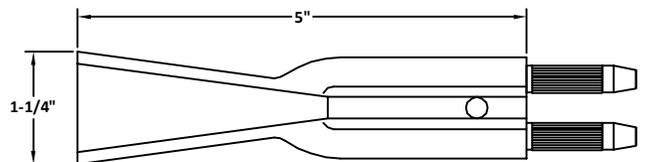
SFE-758	Letter "M" Drill
SFE-908	
SFE-3008	17/64" Drill
SFE-1608	
SFE-2008	1/4" Drill

De-burr all conductor ends.



Torsion collectors mounted on a monorail Hoist/Trolley unit. The collector for the third conductor (TC1) will mount on the rear trolley hub, left side.

SFE-908-JN



Pickup Guides or Transfer Caps are required for discontinuous circuit systems.