

SHIELDED FIGURE-8 ELECTRICAL CONDUCTOR BAR

DANGER

Persons performing installation, service or maintenance activities on, near, or with electrical conductor systems are exposed to electrical hazards that could result in serious injury or death if proper precautions are not followed. Before performing such work, disconnect the electrical power source for the system at the disconnect device and lock it out, following appropriate Lockout/Tagout (LOTO) procedures, to prevent electric power from being applied while work is being performed.

All persons must use safe work practices appropriate to the electrical system, and follow all workplace procedures and policies. This requires specific knowledge, equipment and training beyond the scope of this document. Workplace supervisors are responsible to assure that all persons under their supervision are properly trained, properly equipped, and are following appropriate safety practices.

Shielded Figure-8 Electrification Systems

TC/American Crane Shielded Figure-8 is used for electrification of crane and monorail systems for electrically powered equipment operating at 600 volts or less. This is a highly versatile product which, when installed per the following instructions, will give many years of trouble-free operation.

Shielded Figure-8 conductor bars are available for either “side contact” (“web mounted”) or “bottom contact” (“bottom entry”) mounting positions. These are similar but separate bar systems, and the majority of the parts are not interchangeable.

- **Side Contact:** conductor bars are mounted on brackets that bolt to the web of 200, 325 and 400 Series patented track girder rail (or to the hanger rod of 200 Series 2R3-5T rail). Shoes of electrical collectors enter the conductor bar from the open side position.
- **Bottom Contact:** conductor bars are mounted on brackets that may either be clamped to the top flange or bolted to the web of girder rail (or to the hanger rod of 200 Series 2R3-5T rail). Shoes of electrical collectors enter the conductor bar from the open bottom position.

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General Installation Instructions

The various tasks for installation of electrical conductor bars must be planned in relation to the type of system; i.e., a crane runway, a straight monorail, cranes and monorails with interlocks, a monorail with curves and switches, or some combination of equipment.

Components of a TC/American Crane Shielded Figure-8 Electrical Conductor Bar System are described within the pages of these instructions. Become familiar with each component before attempting to proceed with installation. A sequence of installation listed below is a general guideline only.

- When shipment is received, check all parts for damage. Repair and/or replace as necessary.
- Check packing lists against materials received, identify all parts, correct any shortages and sort all hardware.
- If materials are to be stored for any length of time, either in a shop or at a job site, assure they are secured from loss and protected from damage.
- Assure that persons doing installation are familiar with the parts, have read these instructions, and have proper tools and equipment to accomplish the tasks.
- These instructions assume that the rail has been installed, leveled, aligned and braced.
- Review drawings to become familiar with layout of the system. Plan the installation of conductor bars for most efficient use of the lengths provided (to keep field cutting to a minimum). For a crane runway or straight monorail, start installation at one end and move down the line. For a monorail with switches and curves, mount the curved bars and move outward from there. Install straight bars from the switch straight sections, working outward. For straight bars between two switches, cut bars to fit (allow for length of transfer guides).
- Installation is a logical process of mating conductor bars to the rail system.
 - ✓ Side Contact Conductors: if the rail has been provided with punched web holes for “side contact” mounted bars, begin by installing the mounting brackets. See Chart “B” of these instructions for bracket configurations. If the rail web has not been punched, locate and drill mounting holes per instructions shown in Figure 9.
 - ✓ Bottom Contact Conductors: for systems with “bottom contact” mounted bars, clamp the fabricated mounting brackets to the top flange of the rail at 4'-0” maximum spacing. Place the first bracket approximately 9” in from one end of rail and adjust other bracket locations as needed to avoid rail splices. For brackets designed to bolt to rail web, install at provided web hole locations, or drill web holes as needed.
 - ✓ See additional details for installation or assembly of each component within these instructions.
- Install conductor bar loosely into hanger clamps.
- For systems with switches, interlocks or other non-continuous bars, adjust gaps between bar ends as shown in the instructions and install transfer guides.
- Install Power Feed Assemblies near the location of the building power supply...at a conductor bar splice if possible. If necessary, prep conductor bars for an intermediate location (between splices). Some installations may utilize Transfer Cap Power Feeds.
- After bars are installed and adjusted for position, tighten all hanger clamps. Do not over tighten, Figure-8 bars must be able to slide freely in the clamps to allow for expansion and contraction.
- Verify proper gaging (distance from treadline). Sight along the installed bars and verify that bars are straight with a minimum of rise or sag between support brackets. Correct any bends or misalignment.
- Install end caps.
- After an electrician has connected electrical power to the bars, verify that power is “Locked Out” until after installation of cranes, hoist, drivetractors, etc. is completed.

Shielded Figure-8 Conductors

When a conductor bar “system” is ordered (that is, not ordered as individual piece parts), you will be shipped a quantity of standard length conductor bars with cover, mounting brackets, power feeds and end caps, as determined by engineering, to assemble a power distribution system for a monorail or crane runway. These components are shipped “loose” for field assembly. Conductor bars for monorail switches are normally cut, formed and installed. Bars for monorail curves are normally cut and formed, but shipped loose to avoid shipping damage.

You may also order individual piece parts to make a system, or to repair or replace an existing conductor bar system.

Conductor bar pieces may need to be field cut to fit the layout of the system (i.e., cut bars to fit between two switches, cut end pieces to be flush with end of monorail or runway, etc.).

TC/American Crane Shielded Figure-8 Conductor Bar Assemblies

Figure-8 Bar and Cover Assemblies are provided in 10 foot segments only (see Figure 1). One end of bars provided with connector pins factory installed. Connector pins make the bar joint (see Fig. 1A). Assemble conductor bar pieces together, using the provided connector tool, and field cut to exact length any pieces as required to fit the system.

Figure-8 Bar is provided with either:

- a) Standard Cover (Orange), for ambient temperatures up to 160°F (bar prior to 2000 had red cover)
- b) Hi-Temp Cover (Yellow), for ambient temperatures up to 280°F

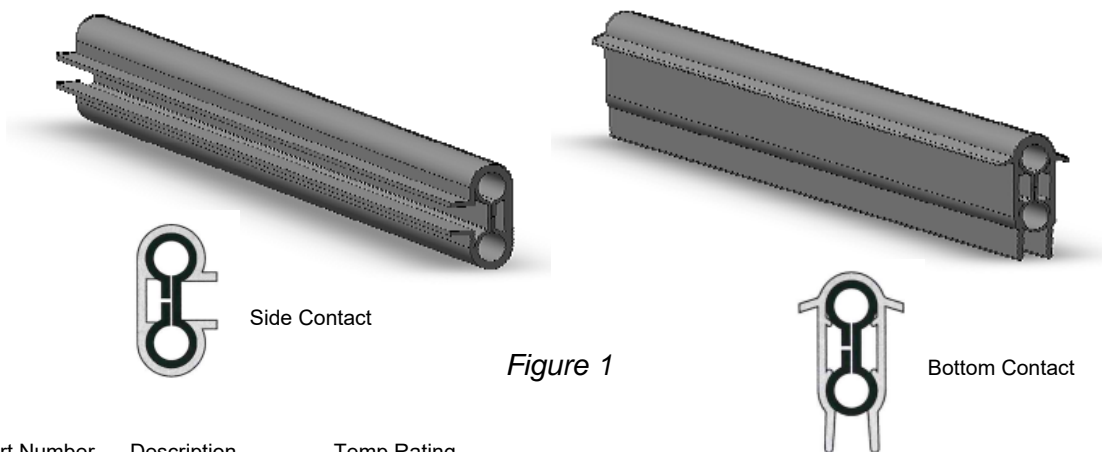


Figure 1

Part Number	Description	Temp Rating
23-1130-00	10' Assembly Side Contact	Standard (160°F)
23-1146-00	10' Assembly Bottom Contact	Standard (160°F)
23-1132-00	10' Assembly Side Contact	Hi-Temp (280°F)
23-1148-00	10' Assembly Bottom Contact	Hi-Temp (280°F)
23-1182-00	Connector Pin, each (loose)	

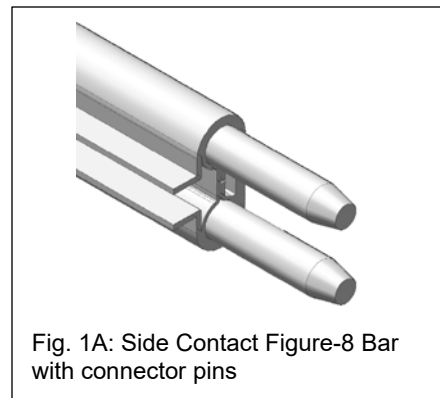


Fig. 1A: Side Contact Figure-8 Bar with connector pins

NOTES:

A) Cutting Bar and Cover to fit: bar and cover may be cut with a hand hacksaw. Cuts must be square. Remove all burrs. Face of bar where the collector shoe rides must be smooth.

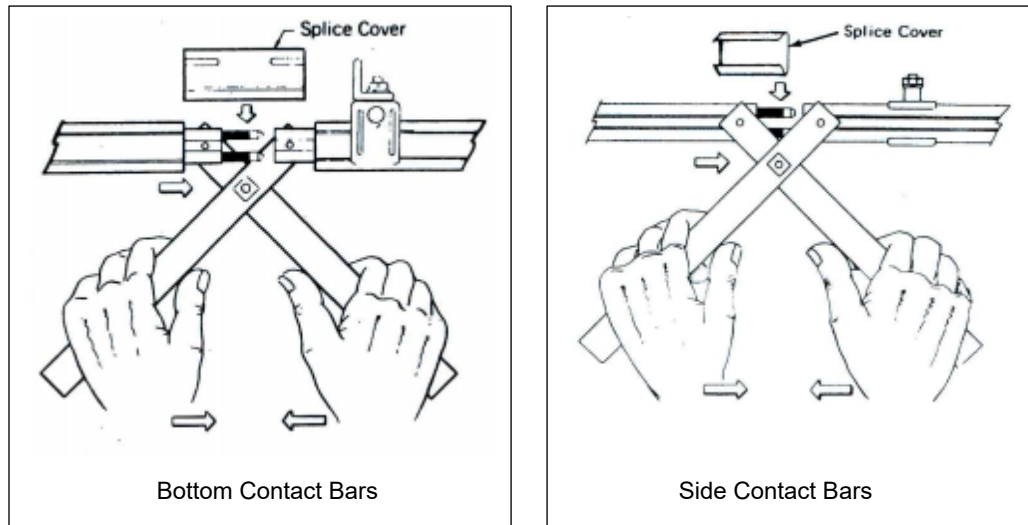
B) Field Prep of Cut Ends for Connector Pins: For TC/A Figure-8 conductor bars that must be field cut for length, use a Letter “M” drill (0.295 in / 7.493 mm) to drill the open ends of the conductor bar to accept the connector pins.

Also, slide the conductor bar cover aside and drill a 1/4” hole in the “web” of the conductor, 11/16” from end of the bar (hole is for pin on the connector tool). Install connector pins into prepared ends by tapping with a hammer.

Note: for Bottom Conduct bars, cut the conductor bar cover so that each end is approximately 3/4” shorter than the overall bar length (to allow access to the 1/4” holes for the pins on the connector tool). Side Contact covers may be left the same length as the bar, since access to the 1/4” hole is through the slot in the side of the cover. Any exposed portion of the conductor bar will be protected by installing a splice cover.

C) Straightness: bar is shipped from the factory in a straight condition. Any bar that becomes bent or kinked in shipping or handling must be straightened or replaced.

Joining Shielded Figure-8 Conductor Bar Sections Together



Note: Connector Tool, Part #23-1143-00

Shielded Figure-8 Splice Covers

Part Number	Description
• 23-1147-00	Splice Cover, Bottom Contact, for Standard Temp bar
• 23-1149-00	Splice Cover, Bottom Contact, for Hi-Temp bar
• 23-1131-00	Splice Cover, Side Contact, for Standard Temp bar
• 23-1132-00	Splice Cover, Side Contact, for Hi-Temp bar

Shielded Figure-8 Center Power Feeds

Part Number	Description
• 23-1154-00	Center Power Feed, Bottom Contact
• 23-1137-00	Center Power Feed, Side Contact

Center Power Feed Assemblies are assembled as shown here.

Side Contact: stagger Power Feed locations as shown in Figure 2 for clearance (minimum). Mark locations on cover.

Notch the conductor bar cover on top and bottom ($1\frac{1}{4}'' \times \frac{1}{2}''$) to expose the conductor bar (see Figure 3). For notching, slide the conductor cover off the bar if possible, or cut in place if necessary with a sharp knife.

Assemble the power feed clamp over the exposed conductor bar as shown in Figure 3. Insert the power feed wire into the lug furnished with the assembly and tighten the screw.

Notch the insulating case halves as required to provide clearance for the wire feed entry.

Assemble the insulating case halves over the exposed power feed parts and secure the case with the two self-tapping screws provided.

Bottom Contact: Separate the ends of the conductor bar cover as shown in Figure 4 at a splice or along the bar to accept the power feed clamp ($1\frac{3}{4}''$). Cut cover as required.

Assemble the power feed clamp over the exposed conductor bar as shown in Figure 4. Insert the power feed wire into the lug furnished with the assembly and tighten the screw.

Assemble the insulating case halves over the exposed power feed parts and secure the case with the two spring clips provided.

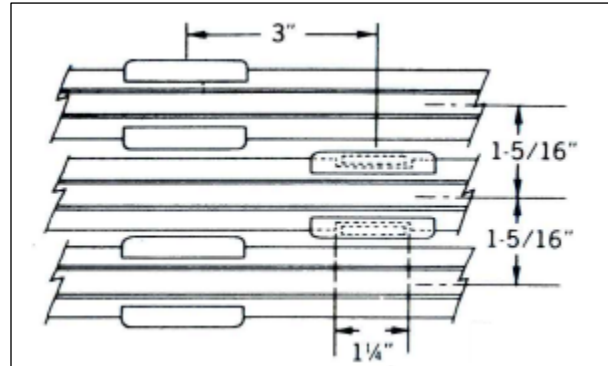


Figure 2: Side Contact Power Feed Locations – alternate as shown, minimum spacing (note: three side contact bars shown).

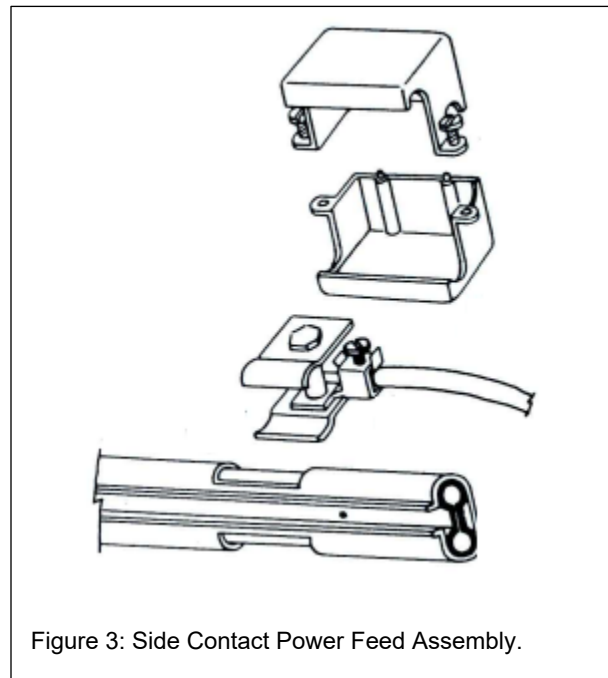


Figure 3: Side Contact Power Feed Assembly.

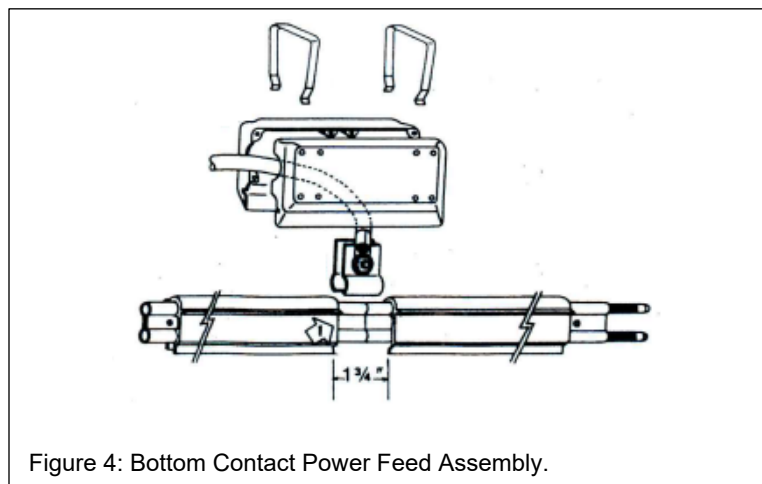
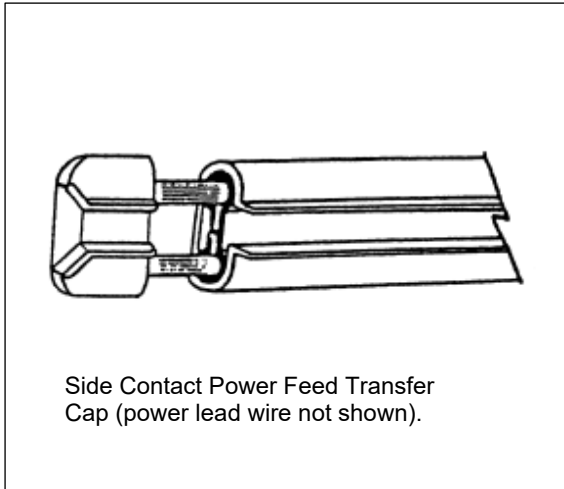


Figure 4: Bottom Contact Power Feed Assembly.

Shielded Figure-8 Transfer Cap Power Feeds

Part Number	Description
• 23-1139-00	Transfer Cap, Power Feed, Side Contact
• 23-1160-00	Transfer Cap, Power Feed, Bottom Contact

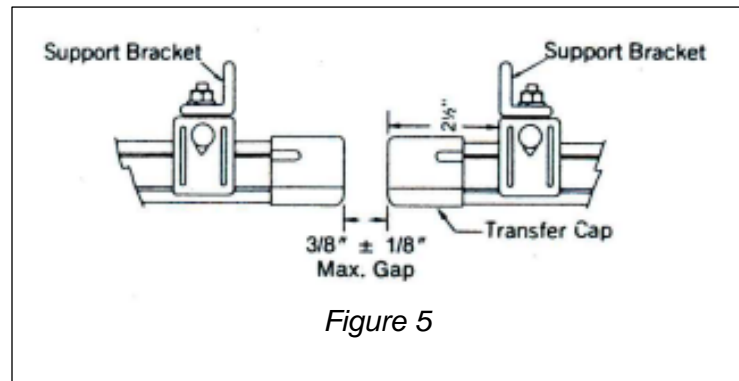


Drill bar ends to 19/64" to accept transfer cap pins.
 Allow for length of Transfer Cap when cutting conductor bar to length.
 Tap the cap into the holes until flush with end of conductor bar and cover.

Instructions for Field Installation of Transfer Caps

Establish the gap between conductor bars as shown in Figure 5 ($3/8" \pm 1/8"$). This allows adequate clearance for a crane to safely pass by a spur rail or for a switch to operate, yet is close enough to allow collector shoes to transition smoothly from bar to bar.

Note recommended location of support brackets (bottom contact shown).



Support Brackets for Shielded Figure-8 Electrical Conductors

When a complete conductor bar system is ordered from TC/American, appropriate hanger brackets will be provided, as needed, for either a Bottom Contact or Side Contact system. See the figures following for typical examples:

A. Side Contact (Web) Mounting Bracket for Girder Rail

Typical assembly of side contact conductor bar mounting bracket bolted to girder rail web. See Figures 6 & 7.

Note: nylon bushings are used as reducer bushings for 1/2" diameter mounting holes factory punched in web of 325 Series rail. Not required for 200 Series rail (holes are factory drilled at 9/32") or if web holes are field drilled to size (9/32"). See Figure 8 for field drilling instructions.

Bracket assemblies may be mounted on the rail while it is on the ground or after it is installed.

Leave all bolts loose until conductor bar is mounted and aligned, then tighten mounting bracket bolts. Hanger Clamp, part #23-1174-00 attaches to mounting brackets as shown (typical). The clamp bolt compresses the hanger to hold the conductor bar. Tighten clamp bolt to "sliding tight" (conductor bar should be able to slide in the hangers and yet be held securely in place).

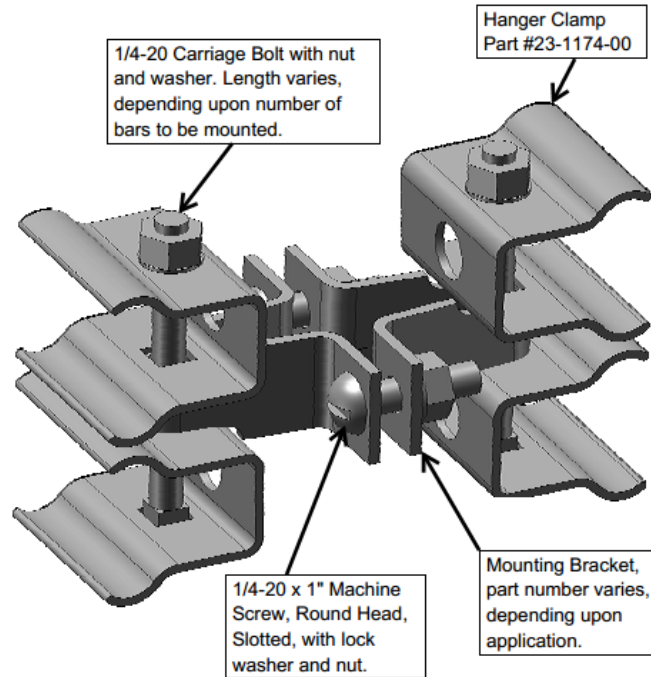


Figure 6

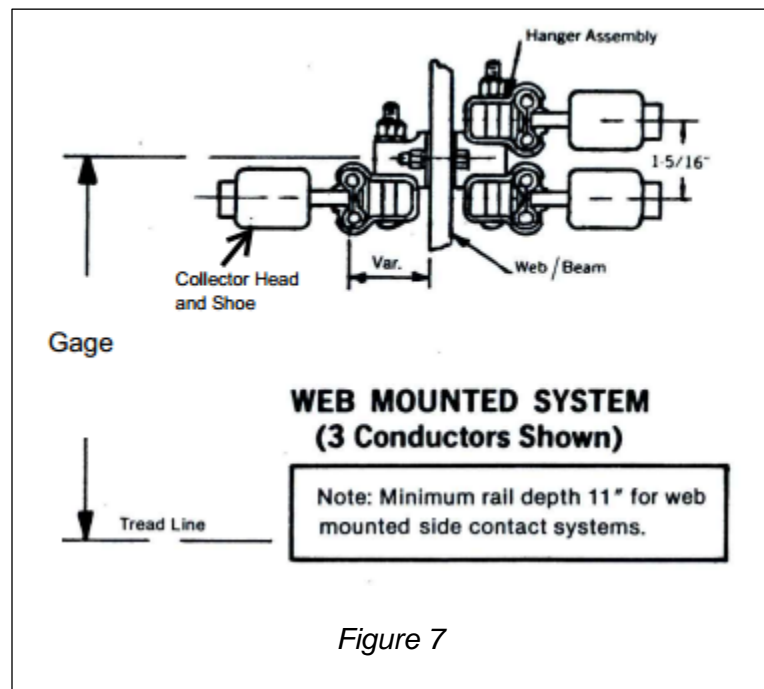


Figure 7

Locations for field drilled web holes for side contact conductor bar mounting brackets.

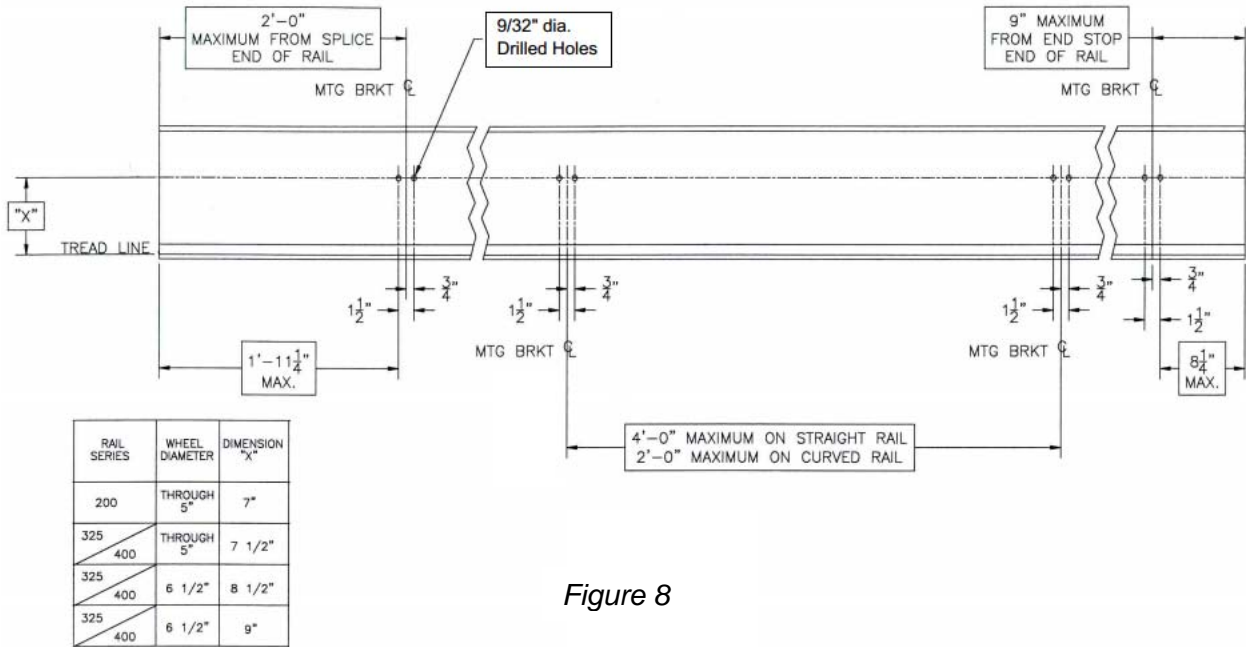


Figure 8

B. Side Contact (Rod) Mounting Bracket, 200 Series, 2R3-5T Rail

Typical assembly of side contact conductor bar mounting bracket on rod supported rails (see Figure 9 and Figure 10). A support bracket is required on every hanger on 2R3-5T rail. Figure 10 shows a top view of the interlocking Rod Mounting Brackets.

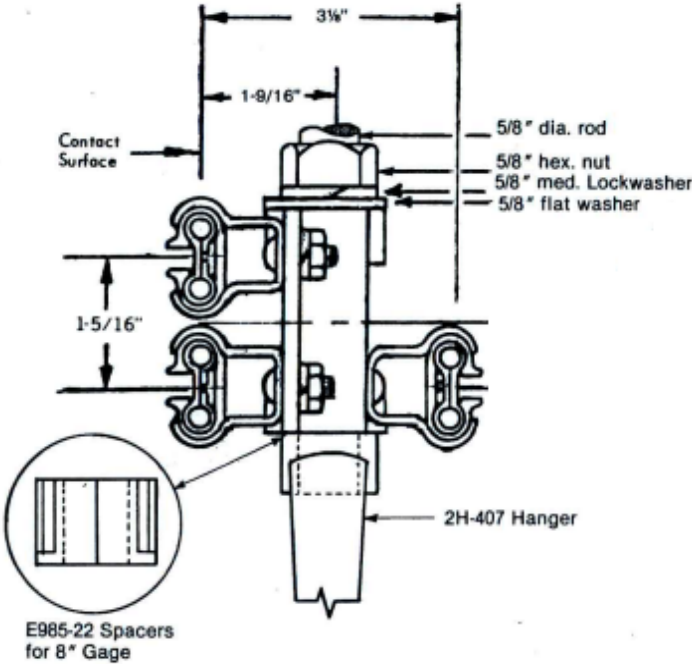


Figure 9

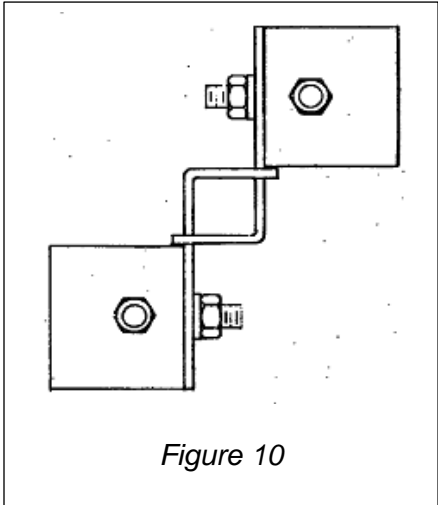


Figure 10

C. Bottom Contact Mounting Bar and Clips

1. Hanger Clamp Assemblies – Bolt Type

Hanger assemblies bolt to Mounting Bracket. A cross bolt (clamp bolt) compresses the hanger and holds the conductor bar securely.

Part Number	Description
23-1151-00	Single Hanger (see Fig. 11)
23-1153-00	Double Hanger (see Fig. 12)
23-1152-00	Triple Hanger (see Fig. 12)

Leave all bolts loose until conductor bar is mounted, then tighten mounting bolt firmly. Tighten clamp bolt to "sliding tight" (conductor bar should be able to slide freely through the hangers and yet be held securely in place). See Figure 13.

Note: Mounting Brackets are provided by TC/A as required.

Minimum Conductor Bar Spacing:
(see Figure 15)

- S = 1½" if collectors are staggered
- S = 2" if collectors are adjacent
- S = 3" with curves

Note: distance from web to first conductor bar will vary, depending upon trolley, end truck, clearances req'd, etc. (see Dim. "C", Fig. 14).

For monorails, conductor bars should usually be equally divided on each side of the rail (to "balance" the collector spring forces, particularly on light weight hoists).

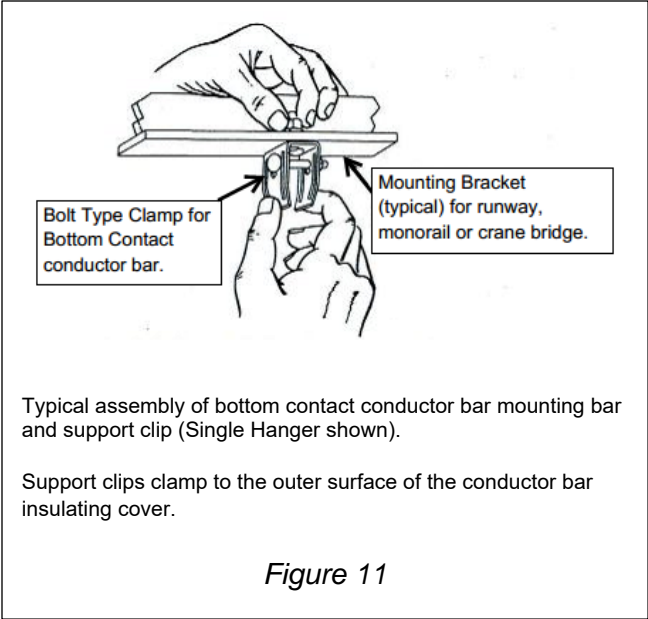


Figure 11

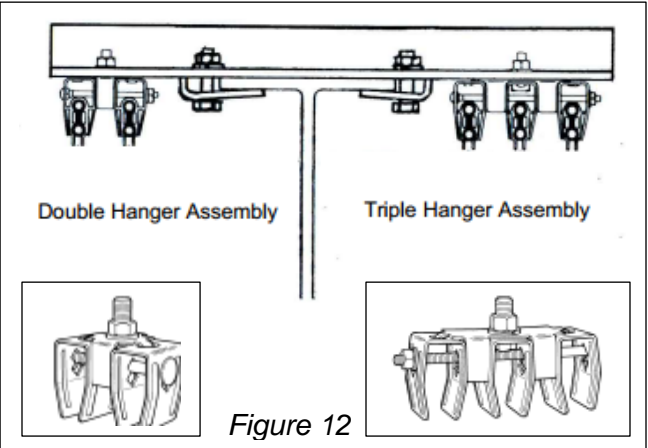


Figure 12

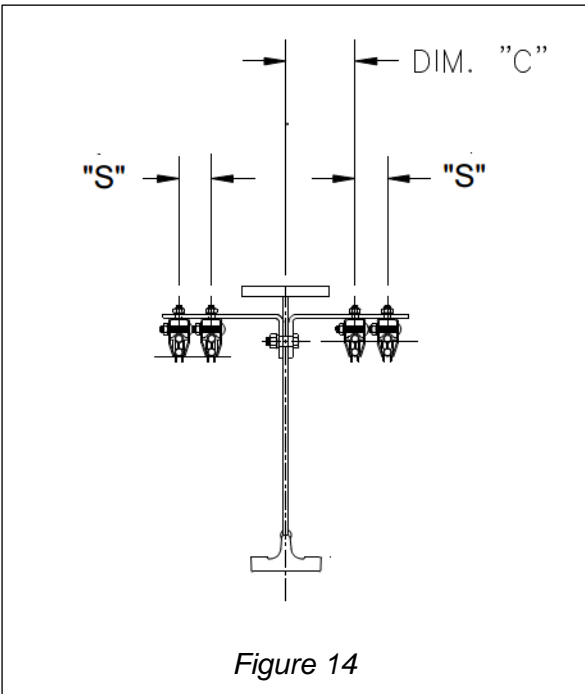


Figure 14

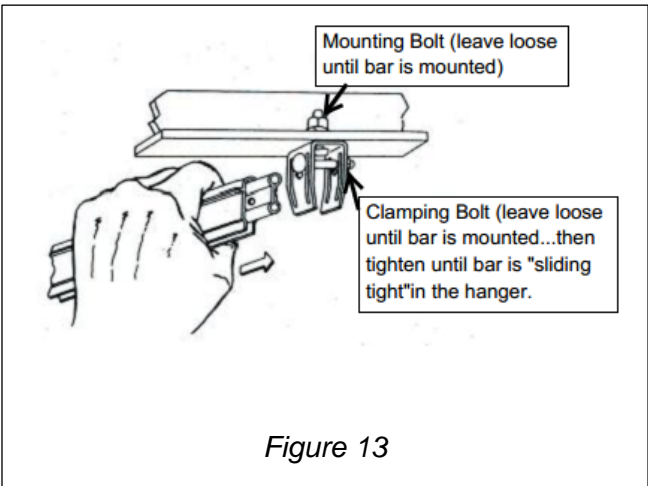


Figure 13

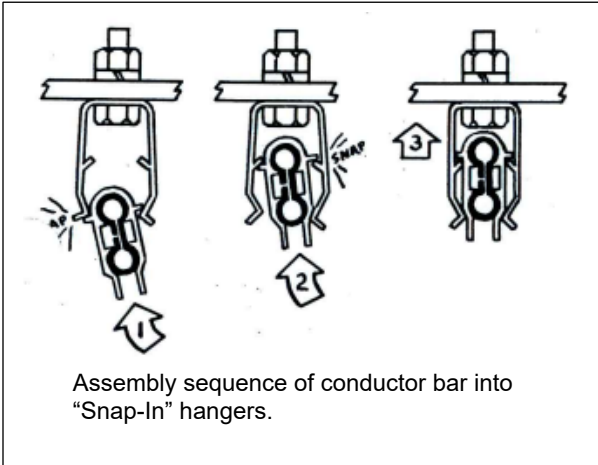
2. Hanger Clamp Assemblies – “Snap-In” Type

Hanger assembly bolts to Mounting Bracket.
Conductor bar is installed by pushing the bar up into the hanger where it “snaps” into place.



Part Number	Description
23-1150-00	“Snap-In” Hanger

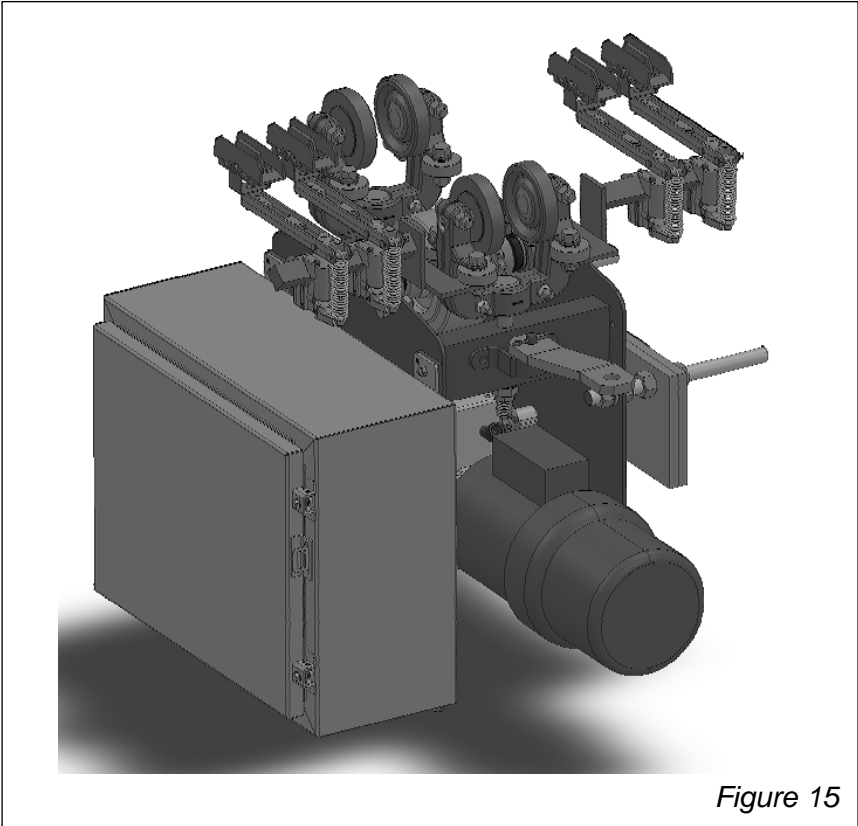
Note: not recommended for curves, switches or runs less than 30’ long.



Assembly sequence of conductor bar into “Snap-In” hangers.

Bottom Contact Collector Mounting Bracket

When a crane, drivetractor or hoist carrier is ordered from TC/American Crane with collectors, appropriate brackets for the collectors to match the conductor bar will be provided. See typical example below in Figure 15.



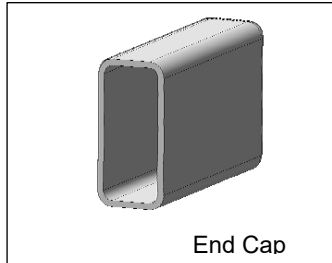
Typical Bottom Contact Collectors and Mounting Bracket on a D4000 Drivetractor.

Note: Collector Mounting Bracket is a 1” square bar with an appropriate mounting plate attached to the drivetractor, end truck or hoist carrier.

Figure 15

Shielded Figure-8 Conductor Bar End Caps, Transfer Caps and End Power Feeds

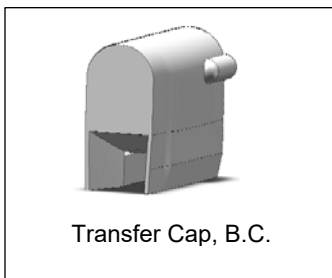
Part Number	Description
• 23-1155-00	End Cap, Bottom Contact (B.C.)
• 23-1159-00	Transfer Cap, Bottom Contact (B.C.)
• 23-1138-00	Transfer Cap, Side Contact (S.C.)
• 23-1139-00	Power Feed Transfer Cap (S.C.)
• 23-1160-00	Power Feed Transfer Cap (B.C.)



End Cap, 23-1155-00: provides protection from accidental contact with end of conductor bar. Made of flexible PVC. Slip on over square cut end of bar and cover.

For Bottom Contact only. See #23-1138-00 for side contact End Cap.

NOTE: assure there is sufficient length of conductor bar at end of runs so collectors do not contact the end caps.



Transfer Cap, Bottom Contact, 23-1159-00: used for electrified monorail systems with switches, interlocks, cross-overs or other applications with dis-continuous bars. Internal pins engage the open ends of the conductor bar.

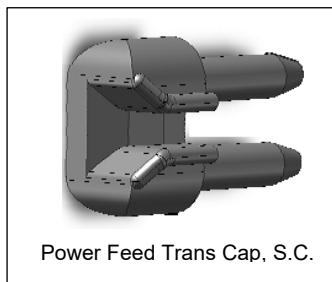
Facilitates smooth transition of the sliding collector shoe across conductor bar gaps.



Transfer Cap, Side Contact, 23-1138-00: used for electrified monorail systems with switches, interlocks, cross-overs or other applications with dis-continuous bars. Plastic pins engage the open ends of the conductor bar.

Facilitates smooth transition of the sliding collector shoe across conductor bar gaps.

Also used as an End Cap for Side Contact applications.



Power Feed Transfer Cap, Side Contact, 23-1139-00: used for electrified monorail systems with switches, interlocks, cross-overs or other applications with dis-continuous bars. Steel pins engage the open ends of the conductor bar. Back side has hole for power lead, with set screw.

Facilitates smooth transition of the sliding collector shoe across conductor bar gaps.



Power Feed Transfer Cap, Bottom Contact, 23-1160-00: used for electrified monorail systems with switches, interlocks, cross-overs or other applications with dis-continuous bars. Steel pin engages the open ends of the conductor bar. With integral power lead.

Facilitates smooth transition of the sliding collector shoe across conductor bar gaps.

NOTES:

- a) **Transfer Caps installed either at the factory or in the field:** Transfer Caps are factory installed on interlocking crane bridge conductors, bars on moveable switch sections and other factory assembled conductor systems as required.

Conductor bars curved at the factory for mounting on switch curves (the curve that completes the bend from the switch) are typically shipped loose for field mounting. Transfer Caps for these bars are not assembled to the conductor bar (to reduce shipping damage) and must be field installed. Transfer Caps for all loose straight conductor bars must be field installed.

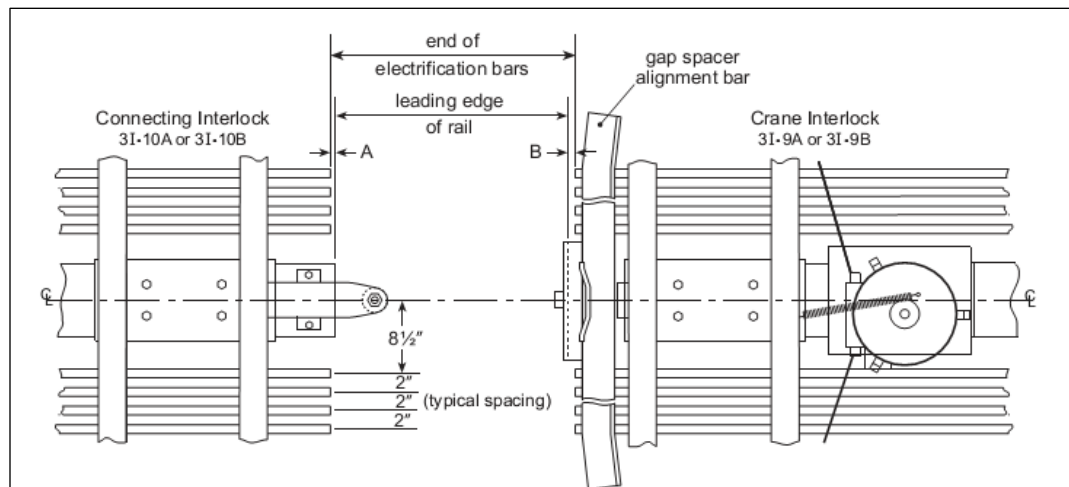
- b) **Conductor Bar Alignment and Gaging:** for smooth transition of collectors across a gap, conductor bars must be aligned vertically and horizontally, and accurately gaged (measure of distance) from tread line of the rail.
- c) **Hangar Clamp Bracket location at either side of gap:** see Figure 5 for recommended dimension from transfer cap to first support bracket.
- d) **Single or Dual Head Collectors:** depending upon the length of the gap and how well the conductor bars are aligned, a “single head” collector may not be able to maintain electrical contact (continuity) between bars as the collector shoe crosses the gap. This may cause a problem for motorized carriers with variable frequency controls.

For conductor bar systems with interlocks, switches or other devices with a gap in the conductor bar, TC/American Crane recommends the use of “dual head collectors” or “tandem single head collectors.”

Set-Back of Conductor Bars from End of Rails with Interlock

Figure 16 shows the typical “set-back” of conductor bars when installed with an interlocking system.

Position bar and transfer guide assemblies as required.



**Set-Back of Conductor Bars from End of Rail with Interlock
(Bottom Contact Bars Shown)**

A = 1/8" – 3/16" for either Bottom or Side Contact
 B = 1/8" – 3/16" if Side Contact, 1/2" if Bottom Contact

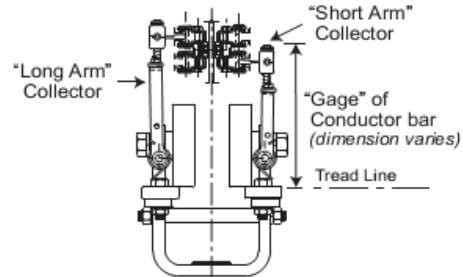
Figure 16

CHART "A"

Trolley Side Contact Electrification Chart

Applications shown for current TC/American trolleys only.
(For old or obsolete trolleys, contact the factory.)

Note: Order collectors by part number only.



Typical Web Mounted Conductor Bar with Side Contact Collectors

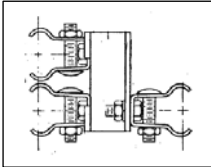
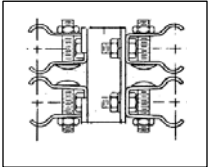
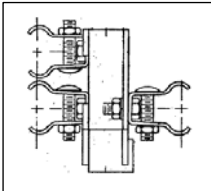
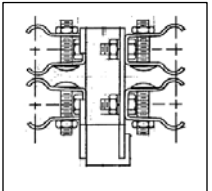
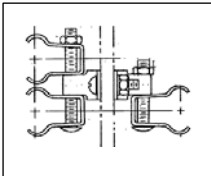
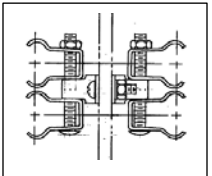
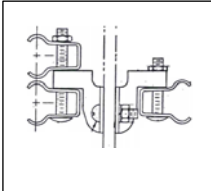
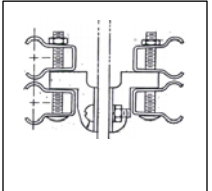
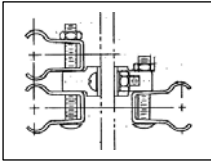
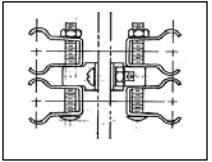
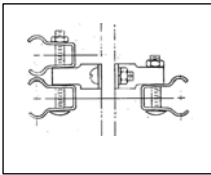
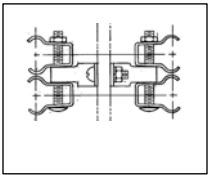
Trolleys	Channel-Bar				Figure-8				Elec Gage	Trolley Wheel Dia.
	Single Head 35 amp		Dual Head 70 amp		Single Head 100 Amp		Dual Head 200 amp			
	short arm	long arm	short arm	long arm	short arm	long arm	short arm	long arm		
200 Series										
2T-750-2 2T-1150-4 These require one #10-2125-00 collector mounting bracket per collector.	10-1872-00 E-988-SA (fig. 1)	10-1873-00 E-989-LA	10-3500-00 E-988-SAD (fig. 8)	10-3501-00 E-989-LAD	10-1880-00 8E-988-SA	10-1879-00 8E-989-LA	10-3534-00 8E-988-SAD	10-3535-00 8E-989-LAD	7"	3"
2T-850-2 2T-1200-4	none	none	none	none	none	none	none	none	-	3"
2T-2000-2/2SR 2T-2800-4/4SR 2T-3100-4/SR -4CC 2T-5600-8/8SR -8CC	10-1872-00 E-988-SA (fig. 1)	10-1873-00 E-989-LA	10-3500-00 E-988-SAD (fig. 8)	10-3501-00 E-989-LAD	10-1880-00 8E-988-SA	10-1879-00 8E-989-LA	10-3534-00 8E-988-SAD	10-3535-00 8E-989-LAD	7"	4"
2T-3000-2 2T-4000-4	none	none	none	none	none	none	none	none	-	5½"
325 Series										
3T-750-2 3T-1150-4 These require one #10-2125-00 collector mounting bracket per collector.	10-1854-00 E-6988-SA (fig. 2)	10-1855-00 E-6989-LA	10-3502-01 E-6988-SAD (fig. 9)	10-3503-01 E-6989-LAD	10-1883-00 8E-6988-SA	10-1885-00 8E-6989-LA	10-3536-01 8E-6988-SAD	10-3537-01 8E-6989-LAD	7½"	3"
3T-850-2 3T-1200-4	none	none	none	none	none	none	none	none	-	3"
3T-2000-2/2SR 3T-2800-4/4SR 3T-3100-4/SR -4CC	10-1854-00 E-6988-SA (fig. 2)	10-1855-00 E-6989-LA	10-3502-01 E-6988-SAD (fig. 9)	10-3503-01 E-6989-LAD	10-1883-00 8E-6988-SA	10-1885-00 8E-6989-LA	10-3536-01 8E-6988-SAD	10-3537-01 8E-6989-LAD	7½"	4"
3T-2700-2/2SR 3T-5400-4/4SR	10-1867-00 E-7988-SA (fig. 3)	10-1866-00 E-7989-LA	10-3504-00 E-7988-SAD (fig. 10)	10-3505-00 E-7989-LAD	10-1882-00 8E-7988-SA	10-1881-00 8E-7989-LA	10-3538-00 8E-7988-SAD	10-3539-00 8E-7989-LAD	7½"	4½"

CHART "A" (cont.)

cont'd Trolley/Side Contact Collector Application Chart

Trolleys	Channel-Bar				Figure-8				Elec Gage	Trolley Wheel Dia.
	Single Head 35 amp		Dual Head 70 amp		Single Head 100 amp		Dual Head 200 amp			
	short arm	long arm	short arm	long arm	short arm	long arm	short arm	long arm		
325 Series										
*3T-6200-2/2SR	10-1846-00 E-83-SA (fig. 4)	10-1847-00 E-84-LA	10-3506-00 E-83-SAD (fig. 11)	10-3507-00 E-84-LAD	10-1884-00 8E-83-SA	10-1886-00 8E-84-LA	10-3540-00 8E-83-SAD	10-3541-00 8E-84-LAD	7½"	5"
*3T-12400-4/4SR	10-3494-00 E-783-SA (fig. 6)	10-3495-00 E-784-LA	10-3544-00 E-783-SAD (fig. 13)	10-3545-00 E-784-LAD	10-3498-00 8E-783-SA	10-3499-00 8E-784-LA	10-3548-00 8E-783-SAD	10-3549-00 8E-784-LAD	7½"	5"
<p>* Note: For 3T-6200-2/-2SR and 3T-12400-4/-4SR Trolleys used with 325H or 400 Series Rail (including Switches with 325H or 400 Series Rail), use E-83SA/E-84LA or 8E-83SA/8E-84LA collectors.</p> <p>For 3T-6200-2/-2SR and 3T-12400-4/-4SR Trolleys used with 325L Series Rail (including Switches with 325L Series Rail), use E-783SA/E-784LA or 8E-783SA/8E-784LA collectors.</p>										
3T-24800-8/8SR	10-1846-00 E-83-SA (fig. 4)	10-1847-00 E-84-LA	10-3506-00 E-83-SAD (fig. 11)	10-3507-00 E-84-LAD	10-1884-00 8E-83-SA	10-1886-00 8E-84-LA	10-3540-00 8E-83-SAD	10-3541-00 8E-84-LAD	7½"	5"
3T-8000-2/2SR 3T-16000-4/4SR	10-3419-00 E-85-SA (fig. 5)	10-3420-00 E-86-LA	10-3510-00 E-85-SAD (fig. 12)	10-3511-00 E-86-LAD	10-3532-00 8E-85-SA	10-3533-00 8E-86-LA	10-3542-00 8E-85-SAD	10-3543-00 8E-86-LAD	9"	6½"
3T-10000-2SR 3T-20000-4SR	none		none		none		none		-	9"
400 Series										
4T-4100-2SR (drivetractors)	10-1846-00 E-83-SA (fig. 4)	10-1847-00 E-84-LA	10-3506-00 E-83-SAD (fig. 11)	10-3507-00 E-84-LAD	10-1884-00 8E-83-SA	10-1886-00 8E-84-LA	10-3540-00 8E-83-SAD	10-3541-00 8E-84-LAD	7½"	5"
4T-4200-2SR (bolted yoke)	none		none		none		none		-	5"
4T-6600-2SR (bolted yoke)	none		none		none		none		-	6½"
450 Series										
45T-15000-2SR 45T-30000-4SR	none		none		none		none		-	9" 9"
Motorized Trolleys										
3MT5-6200-A1		10-3508-00 E-84-LAT (fig. 7)		10-3553-00 E-84-LATD (fig. 14)		10-3550-00 8E-84-LAT		10-3555-00 8E-84-LATD	7½"	5"
3MT5-6200-A2		10-3509-00 E-84-LAMT (fig. 7)		10-3556-00 E-84-LAMTD (fig. 14)		10-3551-00 8E-84-LAMT		10-3558-00 8E-84-LAMTD	7½"	5"
3MT6-8000-A2		10-3512-00 E-86-LAMT (fig. 7)		10-3559-00 E-86-LAMTD (fig. 14)		10-3552-00 8E-86-LAMT		10-3561-00 8E-86-LAMTD	9"	6½"
3MT9-10000-B	none		none		none		none		-	9"
45MT-15000-C	none		none		none		none		-	9"

Chart "B"
Shielded Figure-8 Side Contact Mounting Brackets

200 Series, 2R3-5T	3 Bar	4 Bar
7" Gage (Rod Mounted)	23-1166-00 	23-1167-00 
8" Gage (Rod Mounted)	10-1850-00 	10-1851-00 
200 Series, Girder Rail	3 Bar	4 Bar
7" Gage (Web Mounted)	23-1168-00 	23-1169-00 
8" Gage (Web Mounted, drill rail at 7" gage)	10-1852-00 	10-1853-00 
325 Series	3 Bar	4 Bar
7½" Gage (3", 4" & 4½" Wheel Dia.)	23-1168-00 	23-1169-00 
7½" Gage (5" Wheel Dia.)	23-1170-00 	23-1171-00 
9" Gage (6½" Wheel Dia.)		