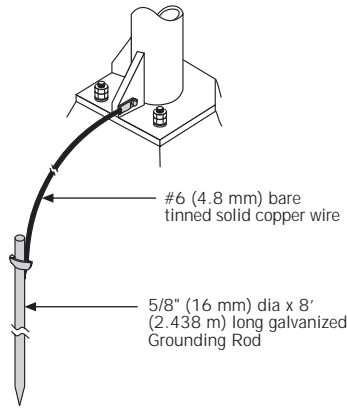
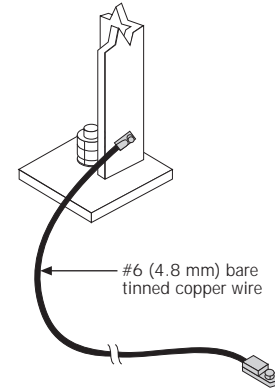


Grounding Kit to EIA Specifications

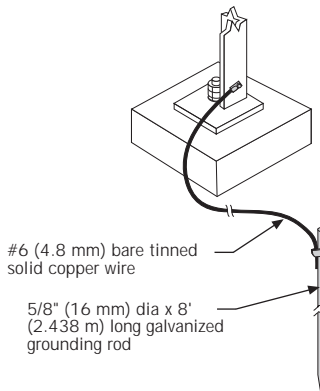
These grounding products conform to the minimum specifications of EIA Standard RS-222-F



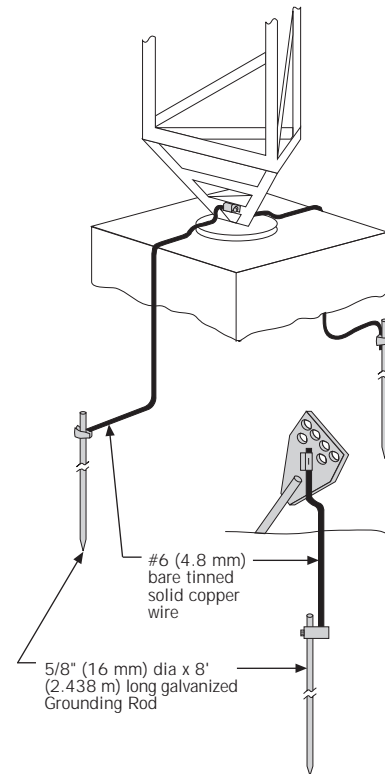
Product Number	Description	Qty Ground Rods	Wire Length, ft (m)
B1010	3-leg tower	3	30 (9.144)
B1011	4-leg tower	4	40 (12.192)
B1014	Monopole	1	10 (3.048)



Product Number	Description	Wire Length, ft (m)
B1013	Roof-Mounted Frame	20 (6.096)



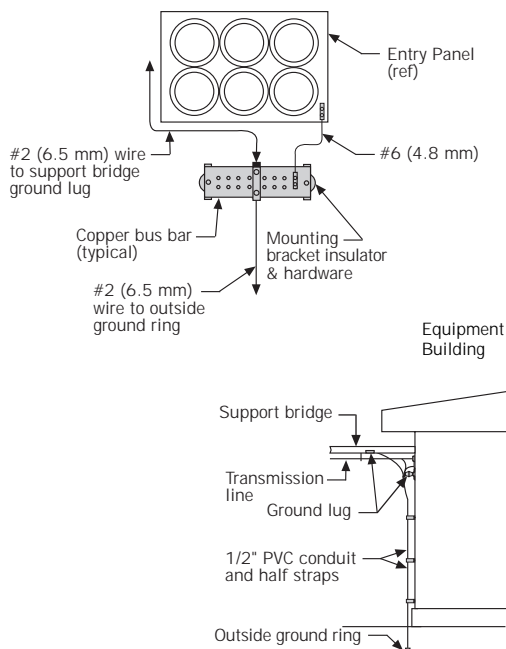
Product Number	Description	Qty Ground Rods	Wire Length, ft (m)
B1012	Narrow-base tower	2	20 (6.096)



Product Number	Description	Qty Ground Rods	Wire Length, ft (m)
B1015	Single-ring guyed tower	5	50 (15.240)
B1016	Double-ring guyed tower	8	80 (24.384)

Grounding Bus Bar Kit at Equipment Building

Grounding Bus Bar Kits provide a common location for grounding the building Entry Panel, the support bridge, and up to 20 transmission lines to an outside ground ring. The copper bus bar size varies depending on the number of runs to be grounded. The Bus Bars and the Mounting Bracket Kit are also sold separately (p. 11.06).

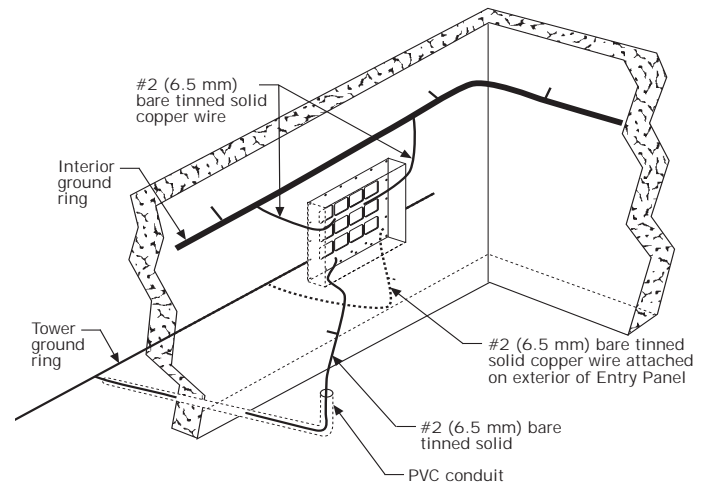


Kits include:

- Copper bus bar, insulators, mounting brackets, and hardware.
- Ground lugs, with two 5/16" (8 mm) diameter holes spaced 5/8" (16 mm) on-center, for ground-wire attachment to support bridge, building Entry Panel, Transmission line runs, and ground ring.
- #6 (4.8 mm) bare tinned solid copper wire for connecting to Entry Panel, 5' (1.524 m) long
- #2 (6.5 mm) bare tinned solid copper wire for connecting to support bridge and ground ring, 20' (6.096 m) long
- 1/2" (13 mm) dia PVC conduit, 10' (3.048 m) long, half straps, and mounting hardware
- CADWELD® Cartridges
- A Crimping Tool for #6 (4.8 mm) wire lug and the following CADWELD® Molds and Handle Clamp are required, but not included, for the installation of this kit: LAC-1CTE (B2483), TAC-1T1T (B2477) & L-160 (B2473)

Product Number	Description
B1389	2 runs
B1390	4 runs
B1391	8 runs
B1392	12 runs
B1393	16 runs
B1394	20 runs

Grounding Kit for Entry Panel

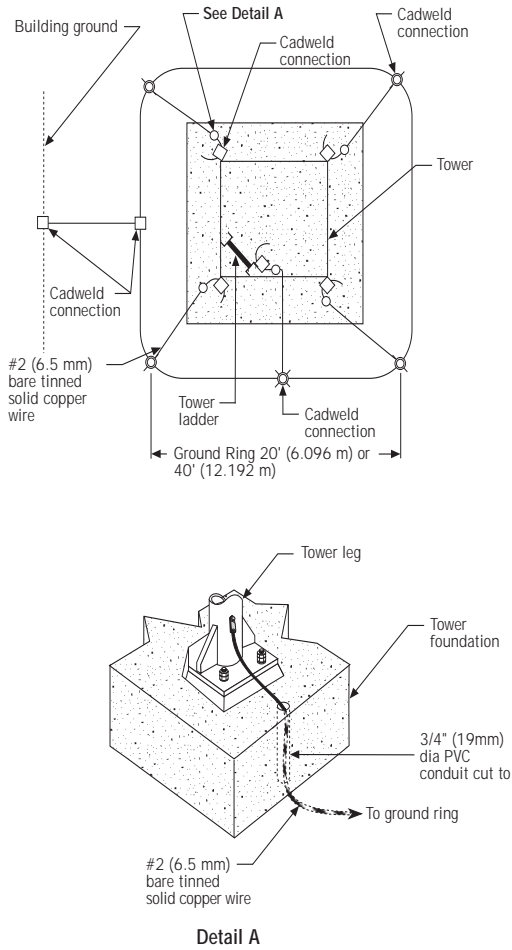


Product Number	Description	Wire Length, ft (m)
B1380	Entry Panel	60 (18.288)

Kits include:

- CADWELD® Cartridges & Lugs
- 1/2" dia hardware, stainless
- #2 (6.5 mm) bare tinned wire, copper
- The following CADWELD® Molds and Handle Camp are required, but not included, for the installation of this kit: LAC-1TCE (B2483), TAC-1T1T (B2477) & L-160 (B2473)

Ground Ring Kit for Tower



Product Number	Ground Ring Size, ft (m)	Qty Ground Rods	Wire Length, ft (m)
B1376	20 (6.096)	5	210 (64.008)
B1375	40 (12.192)	9	300 (91.440)

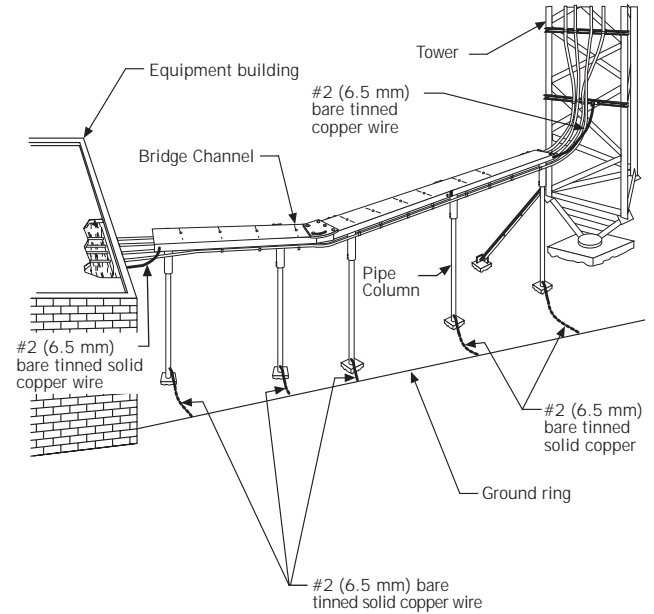
Kits include:

- CADWELD® Cartridges & One-Shots
- 5/8" (16 mm) dia x 10' (3.048 m) long ground rods, stainless
- #2 (6.55 mm) bare tinned solid wire, copper
- 3/4" (19 mm) dia conduit, PVC

The following CADWELD® Molds and Handle Camps are required for the installation of this kit:

- TAC-1T1T (B2477), VSC-1T (B2478),
- VSC-1T-V3C (B2479) for 1-1/2" (38 mm) to 4" (102 mm) dia pipe legs,
- VSC-1T-V5C (B2480) for 4" (102 mm) to 6" (152 mm) dia pipe legs,
- VSC-1T-V8C (B2481) for 6" (152 mm) to 10" (254 mm) dia pipe legs,
- VSC-1T-V21C (B2482) for 1' (305 mm) to 2'6" (762 mm) dia pipelegs,
- L-160 (B2473) & B-160-V (B2474)

Grounding Kit for Support Bridge



Product Number	Support Bridge Length, ft (m)	Wire Length, ft (m)
B1379	10 (3.048)	60 (18.288)
B1378	20 (6.096)	75 (22.860)
B1377	30 (9.144)	90 (27.432)

Kits include:

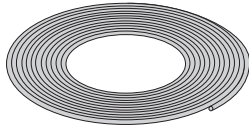
- CADWELD® Cartridges & Lugs
- 1/2" dia hardware, stainless
- #2 (65 mm) bare tinned solid wire, copper

The following CADWELD® Molds and Handle Camp are required, but not included, for the installation of this kit:

- VSC-1T-V3C (B2479) for 1-1/2" (38 mm) to 4" (102 mm) dia pipe-legs,
- TAC-1T1T (B2477), L-160 (B2473) & B-160-V (B2474)

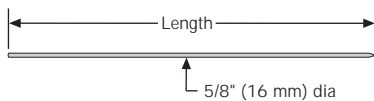
Grounding Wire

Grounding Wire is available by the lineal foot. When ordering, specify the required length.



Product Number	Description	Material
B1091	#6 (4.1 mm) bare solid	copper
B1961	#6 (4.1 mm) bare tinned solid	copper
B2376	#6 (4.8 mm) stranded insulated, green jacket	copper
B1092	#2 (6.5 mm) bare tinned solid	copper
B2377	#2 (7.4 mm) stranded insulated, green jacket	copper
B2378	2/0 (10.6 mm) bare stranded	copper
B2379	2/0 (10.6 mm) stranded insulated, green jacket	copper

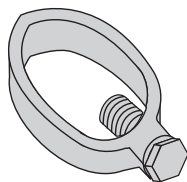
Grounding Rod



Product Number	Description	Material
B1381	8' (2.438 m)	copper - clad steel
B1985	8' (2.438 m)	galvanized steel
B1382	10' (3.048 m)	copper - clad steel
B1383	10' (3.048 m)	stainless steel

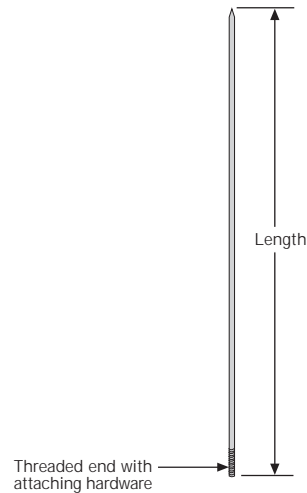
Grounding-Rod Clamp

The Grounding-Rod Clamp is used to connect grounding wire to a Grounding Rod or a Lightning Rod.



Product Number	Size	Description	Qty Per Pkg
B2375	1/2" (13 mm)	copper alloy	10
B1721	5/8" (16 mm)	copper alloy	10
B1986	5/8" (16 mm)	galvanized steel	10

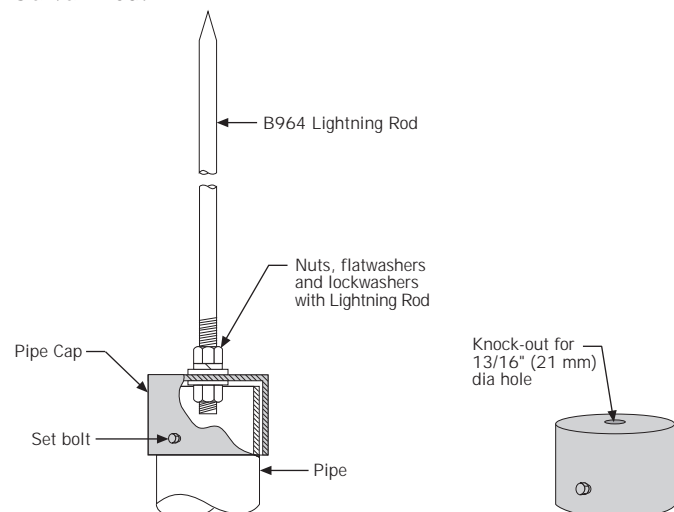
Lightning Rod



Product Number	Diameter in (mm)	Length ft (m)	Material
B1613	1/2 (13)	2 (610 mm)	solid copper
B2092	1/2 (13)	4 (1.219 m)	solid copper
B964	5/8 (16)	4 (3.048 m)	galvanized steel

Pipe Cap

The Pipe Cap, for fitting on a pipe end, is secured with two 1/2" diameter set bolts and is furnished with a knock-out to provide a 13/16" (21 mm) diameter hole for mounting a Lightning Rod. Galvanized.

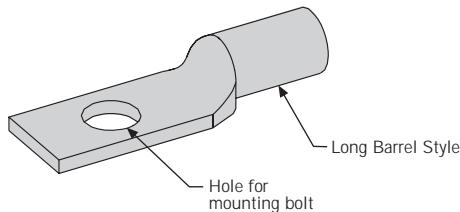


Product Number	Description
B1464	2-3/8" (60 mm) OD pipe
B1471	2-7/8" (73 mm) OD pipe
B1612	3-1/2" (89 mm) OD pipe
B1619	4" (102 mm) OD pipe
B1277	4-1/2" (114 mm) OD pipe
B1620	5-9/16" (141 mm) OD pipe
B1621	6-5/8" (168 mm) OD pipe

Crimp-On Grounding Lug

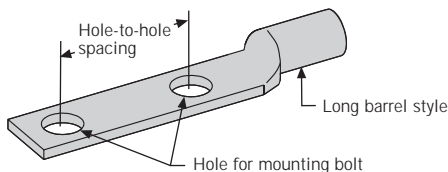
Crimp-On Grounding Lugs, for mechanical termination of grounding wires, are a one hole or a two-hole, long barrel style. The Lugs are crimped to the ground wire using one of the Crimping Tools, following. Stainless Steel mounting hardware (following) is required to mount the lugs to the Bus Bar.

Solid tinned copper.



One Hole Crimp-On Ground Lugs

Product Number	For Wire Size	Mounting Bolt Dia	Qty Per Pkg
B2367	#6 (4.8 mm)	3/8" (10 mm)	1
B2368	#2 (7.4 mm)	3/8" (10 mm)	1
B2369	2/0 (10.6 mm)	1/2" (13 mm)	1

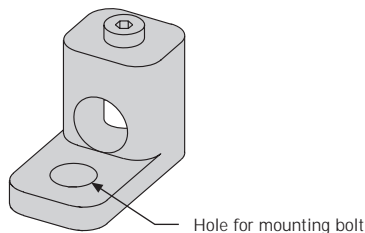


Two Hole Crimp-On Ground Lug

Product Number	For Wire Size	Mounting Bolt Dia in (mm)	Hole-To-Hole Spacing in (mm)	Qty Per Pkg
B1954	#6 (4.8 mm)	3/8 (10)	1 (25)	1
B1955	#2 (7.4 mm)	3/8 (10)	1 (25)	1
B1956	2/0 (10.6 mm)	1/2 (13)	1-3/4 (44)	1

Mechanical Grounding Lugs

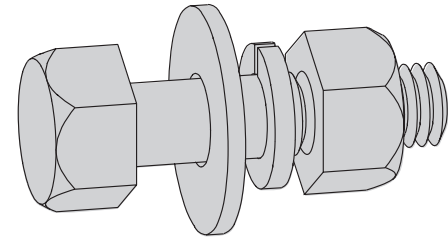
Made of a high copper alloy, Mechanical Grounding Lugs are used for mechanically joining grounding wire to structures, equipment pads or terminal blocks. Stainless steel hardware (following) is required to mount the lug.



Product Number	Cable Range	Ground Wire (Previous Page)	Mounting Bolt Dia in (mm)	Qty Per Pkg
B2490	14 sol.-4 str.	#6 str./sol.	1/4 (6)	1
B2491	4 str.-1/0 str.	#2 str./sol.	3/8 (10)	1
B2492	4 str.-4/0 str.	#2 str./sol.	3/8 (10)	1

Bolt, Nut, Lock Washer & Flat Washer Assembly for Attachment of Ground Lugs

Type 304, 18-8 stainless



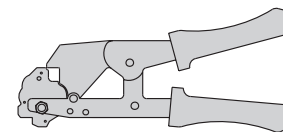
Product Number	Description	Qty Per Pkg
B2406	3/8" dia x 1-1/4" long	5
B2407	1/2" dia x 1-1/2" long	5

Crimping Tool for Grounding Lug Installation

Two Crimping Tools are available for installation of the Grounding Lugs.

The **B1959** is a small tool for crimping the Grounding Lugs on #6 (4.8 mm) and #2 (7.4 mm) wires. This Crimping Tool is mechanical and does not require dies.

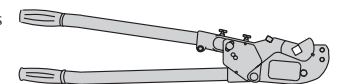
The **B1960** is a heavier duty tool for crimping Grounding Lugs on #6 (4.8 mm)–4/0 (13.3 mm) wires. This Crimping Tool is mechanical and includes the necessary dies.



B1959 Crimping Tool

Use for installing lugs on #6 (4.8 mm) & #2 (7.4 mm) wire

Use for installing lugs on #6 (4.8 mm) – #4/0 (13.3 mm) wire

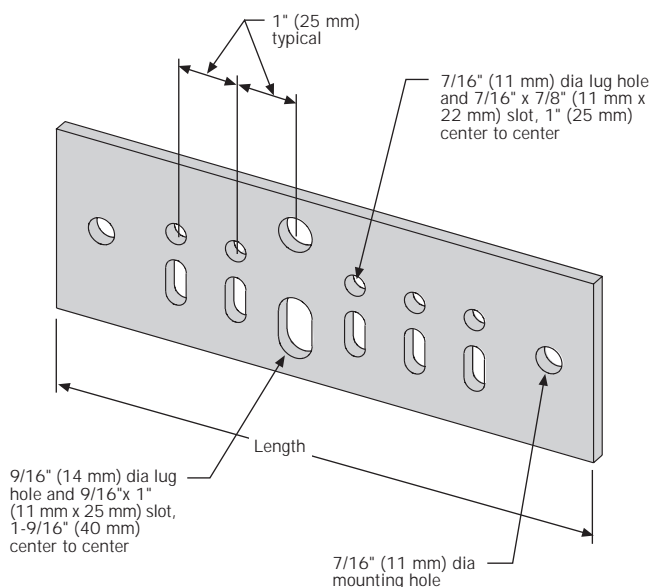


B1960 Crimping Tool with dies

Product Number	Description
B1959	Crimping Tool for #6–#2 wires
B1960	Crimping Tool with dies for #6–4/0 wires

Grounding Bus Bar

Grounding Bus Bars enable grounding lug connections for two to twenty transmission lines and an Entry Panel. The copper Bus Bars are 1/4" (6 mm) thick x 3" (76 mm) wide and vary in length depending on the number of runs to be grounded. The Mounting Bracket Kit is sold separately (following). The 7/16" (11 mm) hole/slot will accommodate #6 and #2 lugs. The 9/16" (14 mm) hole/slot will accommodate 2/0 lugs. Grounding lugs are shown on page 11.05.



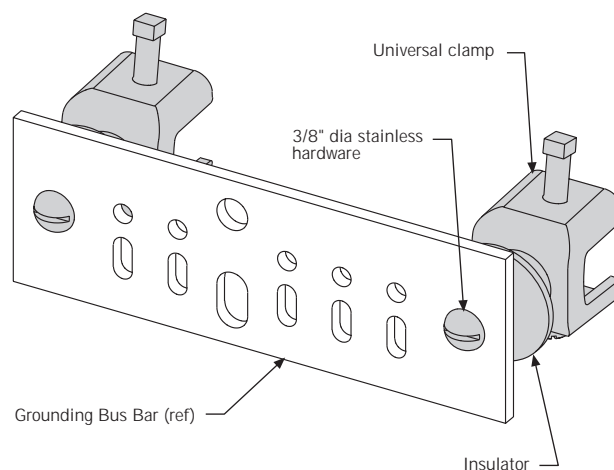
B1773 Bus Bar shown

Product Number	Bus Bar For	Sets of 7/16" (11 mm) Lug-Hole/slot	Length
B1772	2 runs	3	7" (178 mm)
B1773	4 runs	5	9" (229 mm)
B1774	8 runs	9	1' 1" (330 mm)
B1775	12 runs	13	1' 5" (432 mm)
B1776	16 runs	17	1' 9" (533 mm)
B1777	20 runs	21	2' 1" (635 mm)

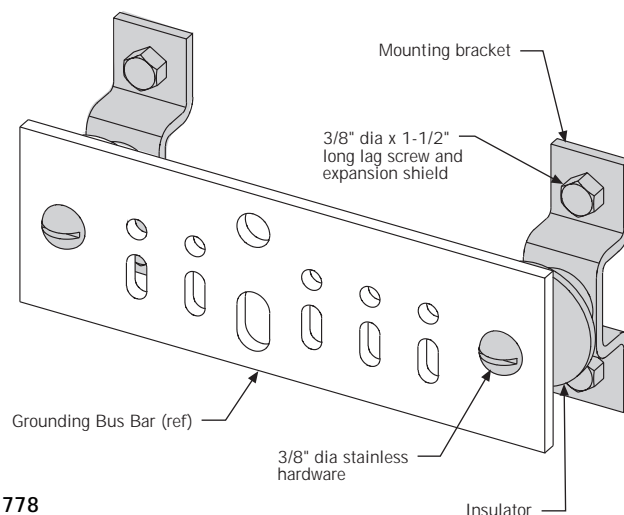
Mounting Bracket Kit

for Grounding Bus Bar

The Mounting Bracket Kit provides two insulators and two brackets for mounting a Grounding Bus Bar with the included 3/8" diameter stainless steel hardware. Depending on the Kit ordered, the Brackets can be wall-mounted with included 3/8" diameter lag screws and expansion shields, or mounted to a tower member with included universal clamps.



B2372

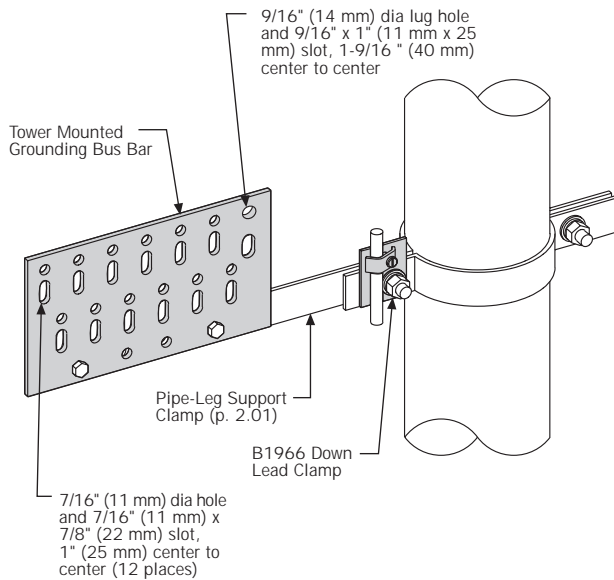


B1778

Product Number	Description
B1778	Mounting Bracket Kit for attachment to building wall
B2372	Mounting Bracket Kit for attachment to tower member
B2373	Insulator only with attaching hardware, 2 per package

Tower Mounted Grounding Bus Bar

Grounding Bus Bar for tower leg attachment enables grounding lug connections for twelve transmission lines and one down lead. The copper Bus Bar is 1/4" (6 mm) thick x 6" (152 mm) wide and 10-3/4" (273 mm) long. The Bus Bar mounts to a Pipe-Leg Support Clamp (p. 2.01) with included hardware.



Product Number	Description
B1965	Tower Mounted Grounding Bus Bar

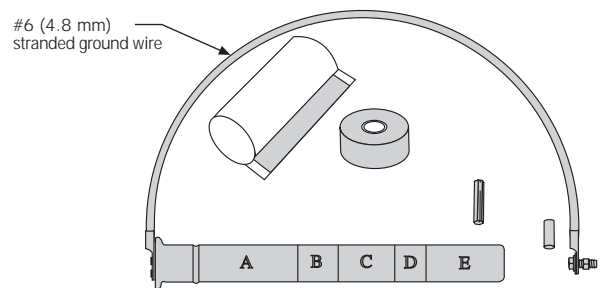
Down Lead Clamp

Allows for the attachment of a #2 to a 4/0 down lead wire. Down Lead Clamp mounts to a Pipe-Leg Support Clamp (p. 2.01)

Product Number	Description
B1966	Down Lead Clamp

Universal Grounding Kit for Transmission Line

Universal Grounding Kit for transmission line enables the grounding of coax or elliptical waveguide. The Kit fits coax sizes from 1/2" (13 mm) to 3" (76 mm) and elliptical sizes from EW43 to WE220 and EW61 to WE191. Kit includes a universal copper ground strap, #6 (4.8 mm) stranded copper ground wire with lug, Butyl rubber tape and electrical tape, hardware and installation tool.

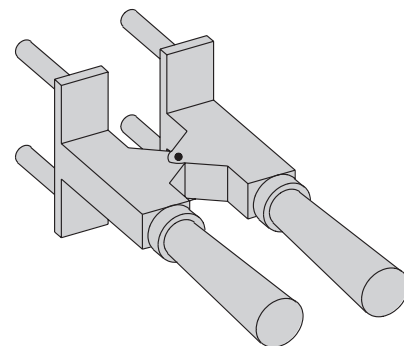


B2138 Shown

Product Number	Ground Strap Length	Lug type
B2137	2' (610 mm)	2 hole for 3/8" hardware
B2138	3' (914 mm)	1 hole for 3/8" hardware
B2139	3' (914 mm)	2 hole for 3/8" hardware
B2140	5' (1.524m)	1 hole for 3/8" hardware
B2141	5' (1.524m)	2 hole for 3/8" hardware

Cadweld® E-Z Change Handle Clamps

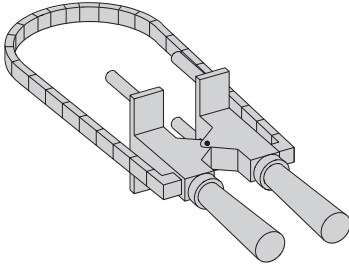
L-160 handle Clamp is required for the installation of the Grounding Kits offered on pages 11.02 and 11.03. Flint igniters are included with each Handle Clamp.



Product Number	Description
B2473	L-160 E-Z Change Handle Clamp

Cadweld® Mold Pipe Clamp

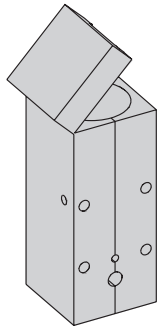
Cadweld molds can be securely held to a pipe using the combination E-Z Change Handle Clamp and Pipe Clamp. The Clamp will mount on a pipe up to 4" (102 mm) diameter. Additional 20" (508 mm) lengths of chain, B2475, is available to fit up 10" (254 mm) pipes. Pipe Clamps are required for the installation of Grounding Kits for Support Bridges and Towers (p. 11.03)



Product Number	Description
B2474	B-160-V Cadweld® Mold Support Clamp
B2475	B-158 Extra Chain

Cadweld® Molds

Required for the installation of the Grounding Kits offered on pages 11.02 and 11.03



Product Number	Cadweld® Mold
B2477	TAC-1T1T for tee connection of wires
B2478	VSC-1T for wire to flat vertical steel
B2479	VSC-1T-V3C for 1-1/2" (38 mm) to 4" (102 mm) dia pipe
B2480	VSC-1T-V5C for 4" (102 mm) to 6" (152 mm) dia pipe
B2481	VSC-1T-V8C for 6" (152 mm) to 10" (254 mm) dia pipe
B2482	VSC-1T-V21C for 1' (305 mm) to 2'6" (762 mm) dia pipe
B2483	LAC-1TCE for splice of wire to lug

All molds listed above are for use with #2 (6.5 mm) solid grounding wire.