INSULATED JUMPERS

INSULATED JUMPERS

FAQ

Q: What are the benefits of the Sure-lok® Jumper clamp?

A: The Salisbury Sure-lok® Jumper clamp is an improvement over other jumper clamps available. The Sure-lok® features a ratchet-type locking mechanism which guarantees the clamp not to loosen once it is installed on a line.

Loose jumper clamps not only jeopardize your safety but can also cause fires and power outages. Even when torqued using wrenches or pliers, traditional clamps will eventually loosen from line vibrations. This clamp tightens with a ratchet action using one hand, with no extra tools, for a secure and positive connection. When you want to loosen or remove the jumper clamp, simply pull and turn the locking knob and it will loosen like a traditional clamp.

SALISBURY ADVANTAGE

Insulated bypass jumper sets consist of three basic components: one pair of clamps, one pair of ferrules and a length of insulated cable. On the following pages, the most popular jumper sets are listed with the types of jumper clamps in which the are associated. When a custom jumper is required, follow this procedure to ensure that a complete and functional jumper is specified.

If you quickly need assembled jumper sets, please contact your local Salisbury Representative for more information.

Let Salisbury professionally assemble your sets for you.

All Salisbury Insulating Jumpers meet ASTM F2321 standards.

INSULATED JUMPER CHECKLIST

1. Specify the style of insulated clamps. All of the clamps are hand installed wearing rubber insulating gloves, accept either shrouded or unshrouded ferrules and accept insulated cable up to 4/0, 35 kV. Insulated jumper clamps are sold in pairs.

2. Specify the size and length of insulated cable. Salisbury offers 15 kV cable from #2 to 4/0. 25 kV and 35 kV cable are both available in sizes 1/0 and 2/0. Be sure to specify the length of the cable chosen.

3. Specify the size and style of ferrules required. The size of the ferrule will be determined by the size of the cable. Specify the appropriate ferrule catalog number for either shrouded or unshrouded ferrules. Both types are sold in pairs.

4. Specify if the jumpers are to be factory assembled. A complete jumper set with crimped ferrules and installed jumper clamps will be supplied. Salisbury has state-of-the-art, computer-controlled crimping available.

5. Specify if there are any special requirements. This could include heat shrink tubing, special assembly instructions, markings, packaging, etc.

SURE-LOK® JUMPER CLAMPS & SALCOR® INSULATED JUMPER CLAMPS

THE SALISBURY SURE-LOK® JUMPER CLAMP is a revolutionary improvement over any other jumper clamp in the world. Featuring a ratchet type locking mechanism.

Loose jumper clamps not only jeopardize your safety but can also cause fires and power outages. This clamp tightens with a ratchet action using one hand, with no extra tools for a secure, positive connection. It can't come loose until you want it to. Pull and turn the locking knob and it loosens like any traditional clamp.

Available in our exclusive SALCOR® material and the industry's most durable single piece clear plastic jumper clamps.

SALCOR® JUMPER CLAMPS are available in two main line sizes with a maximum use voltage of 35 kV.

The **SALCOR® JUMPER CLAMP** not only provides a superior grip, but also resists ozone cutting and tracking. Being molded of rubber, these handles are inherently impact resistant and extremely durable. The body and jaw are made from a copper base alloy. The lower ring contact is made of self lubricating bronze. Assemble jumpers with insulated jumper cable and 5/8"- 11 NC threaded ferrules. Assembled kits are sold with a 10 ft. (3 m) cable and unshrouded ferrules.

Custom built assemblies are available. Contact your local Salisbury Representative for more information.

1786

2261
SALCOR® Sure-lok®

2260

2270

CAT. NO.	DESCRIPTION	MAIN LINE RANGE	MAX AMPS CONTINUOUS	RATING	OAL LENGTH in. (mm)	WEIGHT EA. lbs. (kgs)
2261	SALCOR® Sure-lok® Jumper Clamp	477 MCM (.9"-.162")	400	36 kV Ø-Ø, 21 kV Ø-GRD	11.5 (292 mm)	10 (4.5)
2271	SALCOR® Sure-lok® Jumper Clamp	954 MCM (1.25"-.162")	400	36 kV Ø-Ø, 21 kV Ø-GRD	11.5 (292 mm)	11 (5)
1786	Clear Plastic Sure-lok® Jumper Clamp	477 MCM (.9"-.162")	400	36 kV Ø-Ø, 21 kV Ø-GRD	11.5 (292 mm)	8 (3.6)
2116	Clear Plastic Sure-lok® Jumper Clamp	954 MCM (1.25"-.162")	400	36 kV Ø-Ø, 21 kV Ø-GRD	11.5 (292 mm)	10 (4.5)
2260	SALCOR® Jumper Clamp	477 MCM (.9"-.162")	400	36 kV Ø-Ø, 21 kV Ø-GRD	11.5 (292 mm)	10 (4.5)
2270	SALCOR® Jumper Clamp	954 MCM (1.25"-.162")	400	36 kV Ø-Ø, 21 kV Ø-GRD	11.5 (292 mm)	11 (5)

10 FT. / 3M ASSEMBLED JUMPER SETS WITH UNSHROUDED FERRULES

JUMPER CAT. NO.	CABLE SIZE	CABLE CAT. NO.	FERRULE CAT. NO.	MAX AMPS CONTINUOUS	WEIGHT EA. lbs. (kgs)
10FT./3M ASSEMBLED JUMPER SET WITH 2260 CLAMPS					
2264	#2-15 kV	2754	2022	200	10.9 (4.9)
2265	1/0-15 kV	2755	2023	250	13.5 (6.1)
2266	2/0-15 kV	2756	2024	300	14.8 (6.8)
10FT./3M ASSEMBLED JUMPER SET WITH 2270 CLAMPS					
2274	#2-15 kV	2754	2022	200	11.9 (5.4)
2275	1/0-15 kV	2755	2023	250	14.6 (6.8)
2276	2/0-15 kV	2756	2024	300	15.9 (7.2)

Clear Jumper with Cable

2115

1610

1785

SALISBURY'S SUPERIOR STRESS CRACKING-RESISTANT CLEAR JUMPER CLAMPS are available in two main line sizes with a maximum use voltage of 35 kV. Assemble these clamps with insulated jumper cable and 5/8" - 11 NC threaded ferrules.

CLEAR PLASTIC JUMPER CLAMPS are compact, lightweight, and virtually unbreakable. The transparency allows easy inspection of the ferrule and cable inside of the handle. The body and jaw are made from a copper base alloy. The lower floating ring contact is bronze. These handles should be cleaned only with a mild detergent to maintain the transparency of the handle. Assembled kits are sold with a 10 ft. (3 m) cable and unshrouded ferrules.

FRP JUMPER CLAMPS are designed for maximum loads, voltages and cables. During a temperature rise test at 25% overload, these clamps heated 35% less than 4/0 cu. cable. Blunted points on the handle provide optimum grip, resist impact and will not soften with overloads. The body and jaw are made from a copper based alloy. The lower jaw is made of self lubricating bronze. The assembled jumpers are sold with a 10 ft. (3 m) or 12 ft. (3.7 m) cable and unshrouded ferrules.

Custom built assemblies are available. Contact your local Salisbury Representative for more information.

CAT. NO.	DESCRIPTION	MAIN LINE RANGE	MAX AMPS CONTINUOUS	RATING	OAL LENGTH in. (mm)	WEIGHT EA. lbs. (kgs)
1610	FRP Jumper Clamp	954 MCM (1.25"-.162")	400	36 kV Ø-Ø, 21 kV Ø-GRD	11 (279)	14 (6.4)
1785	Clear Plastic Jumper Clamp	477 MCM (.9"-.162")	400	36 kV Ø-Ø, 21 kV Ø-GRD	11.5 (292)	8 (3.6)
2115	Clear Plastic Jumper Clamp	954 MCM (1.25"-.162")	400	36 kV Ø-Ø, 21 kV Ø-GRD	11.5 (292)	10 (4.5)

10 FT. / 3M ASSEMBLED JUMPER SETS WITH UNSHROUDED FERRULES

JUMPER CAT. NO.	CABLE SIZE	CABLE CAT. NO.	FERRULE CAT. NO.	MAX AMPS CONTINUOUS	WEIGHT EA. lbs. (kgs)
10FT./3M ASSEMBLED JUMPER SET WITH 1785 CLAMPS					
2067	#2-15 kV	2754	2022	200	9.9 (4.5)
2178	2/0-15 kV	2756	2024	300	13.9 (6.3)
10FT./3M ASSEMBLED JUMPER SET WITH 2115 CLAMPS					
2074R1	#2-15 kV	2754	2022	200	10.9 (4.9)
2164	2/0-15 kV	2756	2024	300	14.8 (6.8)
2174R1	1/0-15 kV	2755	2023	250	16.8 (7.6)

ASSEMBLED JUMPER SETS WITH UNSHROUDED FERRULES

JUMPER CAT. NO.	CABLE LENGTH	CABLE SIZE	CABLE CAT. NO.	FERRULE CAT. NO.	MAX AMPS CONTINUOUS	WEIGHT EA. lbs. (kgs)
10FT./3M ASSEMBLED JUMPER SET WITH 1610 CLAMPS						
2772	10'	2/0-15kV	2756	2024	300	5.8 (2.9)
2773	10'	4/0-15kV	2757	2025	400	20.3 (9.2)
2450	10'	1/0-15kV	2755	2023	250	15 (6.8)
2066	12'	1/0-35kV	2059	2023	250	20.3 (9.2)
20876	12'	2/0-35kV	4370	2024	300	21.5 (9.8)

FLEXIBLE INSULATED JUMPER CABLES, STICK INSTALLED FLEXIBLE JUMPERS & FERRULES

FLEXIBLE INSULATED JUMPER CABLES are lightweight and resistant to oil, heat, moisture, ozone and abrasion. The cable is embossed every three feet with the conductor size and kV rating.

All jumper cables use fine stranded conductor and a new EPR low temperature unipass orange CV cured jacket. The fine stranded copper conductor is alloy coated and assembled in a unidirectional rope lay for extra flexibility. The conductor has a semiconducting shield surrounding it to relieve voltage stress and improve dielectric strength and service life.

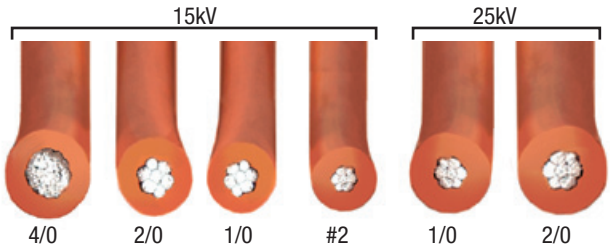
Cable meets requirements of ASTM F2321.

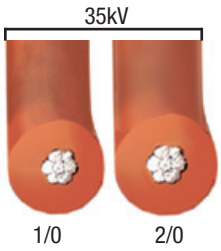
STICK INSTALLED FLEXIBLE JUMPERS can be manufactured for hotstick operations using Salisbury heavy-duty eye clamps. Clamps are rated for continuous current and fit all standard shotgun type hotsticks. For ease of application, a Hanger Stud is recommended. Shrouded ferrules are not recommended for use with eye type clamps.

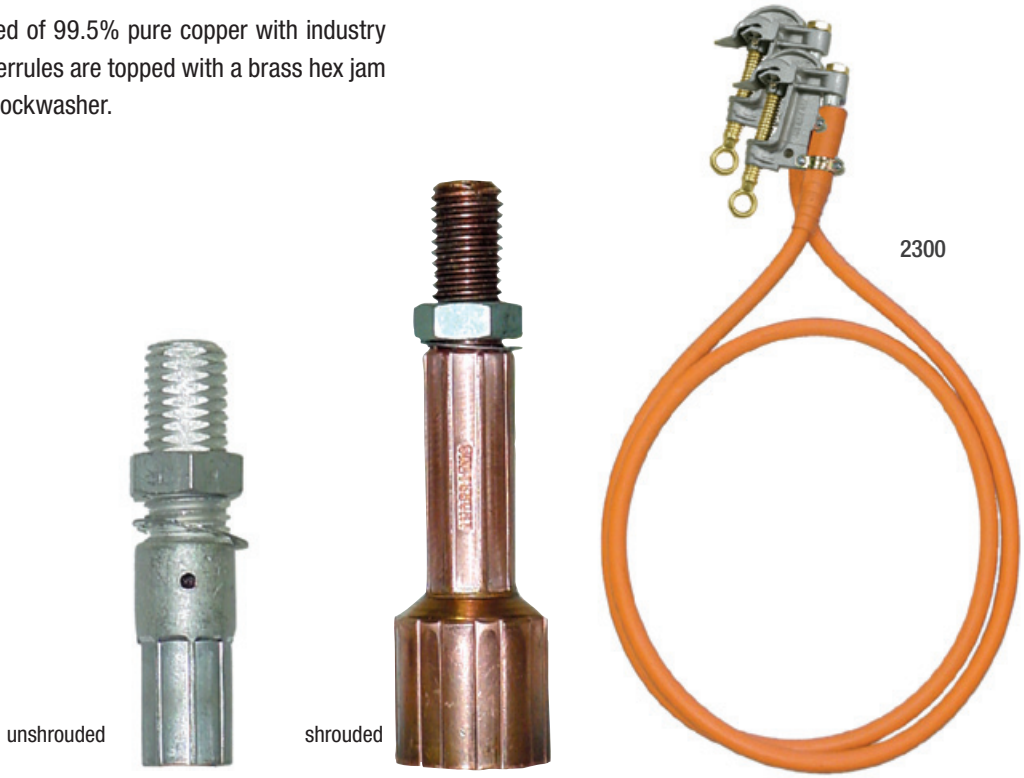
Custom built assemblies are available. Contact your local Salisbury Representative for more information.

FERRULES are manufactured in two different styles: unshrouded and shrouded. Shrouded ferrules are compressed on both the conductor and the insulating jacket of the high voltage EPR cable to reduce bending stress. Shrouded ferrules are designed to be used on glove-installed high voltage jumpers. Unshrouded ferrules are crimped to the conductor strands only and can be used on either stick- or glove-installed jumpers.

FERRULES are manufactured of 99.5% pure copper with industry standard 5/8"-11 NC threads. Ferrules are topped with a brass hex jam nut and toothed stainless steel lockwasher.







FLEXIBLE INSULATED JUMPER CABLES, STICK INSTALLED FLEXIBLE JUMPERS & FERRULES

FLEXIBLE INSULATED JUMPER CABLES

CAT. NO.	SIZE & STR. AWG	KV RATING Ø TO Ø	NOMINAL Ø TO GRD	STR. DIA. in. (mm)	O.A. DIA. in. (mm)	MAX AMPS CONTINUOUS	WEIGHT PER 1000 FT. lbs.	kgs
2754	#2-259W	15	10	.320 (8.1)	.75 (19)	200	440	199
2755	1/0-413W	15	10	.403 (10.2)	.83 (21)	250	600	272
2756	2/0-427W	15	10	.456 (11.5)	.90 (23)	300	710	322
2757	4/0-437W	15	10	.592 (15.0)	1.01 (25.6)	400	1050	476
21300	1/0-413W	25	15	.403 (10.2)	1.06 (27)	250	650	295
21060	2/0-427W	25	15	.456 (11.5)	1.10 (28)	300	750	341
2059	1/0-413W	35	20	.403 (10.2)	1.22 (31)	250	950	431
4370	2/0-427W	35	20	.48 (12.1)	1.31 (33.1)	300	1060	482

STICK INSTALLED FLEXIBLE JUMPERS

CAT. NO.	MAIN LINE RANGE	MAX AMPS CONTINUOUS	COMPONENTS	RATING	WEIGHT EA. lbs. (kgs)
2300	1431 ACSR to #6 Sol., 1.5"- .16"	250	2#1895 Alum "C" Clamp 1#1928 Hanger Stud 1#2027 Alum Ferrule 10' #2755 1/0 15 kV Cable	15 kV Ø-Ø	16 (7.3)
2308	1431 ACSR to #6 Sol., 1.5"- .16"	200	2#1895 Alum "C" Clamp 1#1928 Hanger Stud 1#2026 Alum Ferrule 12' #2754 #2 15 kV Cable	15 kV Ø-Ø	10.8 (4.9)
2317	1431 ACSR to #6 Sol., 1.5"- .16"	250	2#2195 Alum "C" Clamp 1#1928 Hanger Stud 1#2027 Alum Ferrule 12' #2059 1/0 35 kV Cable	35 kV Ø-Ø	16 (7.3)
2318	1431 ACSR to #6 Sol., 1.5"- .16"	300	2#1895 Alum "C" Clamp 1#1928 Hanger Stud 1#2620 Alum Ferrule 12' #2756 2/0 15 kV Cable	15 kV Ø-Ø	15.6 (7.1)
2559	1033 ASCR to #6 Sol., 1.25"- .16"	250	2#1853 Alum Duckbill Clamp 1#1858 Hanger Stud 1#2027 Alum Ferrule 10' #2755 1/0 15 kV Cable	15 kV Ø-Ø	16 (7.3)
2877	795 ASCR to #8 Sol., 1.12"- .12"	250	2#2531 Alum "C" Clamp 1#2537 Hanger Stud 1#2027 Alum Ferrule 10' #2755 1/0 15 kV Cable	15 kV Ø-Ø	11 (5.0)
9976	795 ASCR to #8 Sol., 1.12"- .12"	250	2#9985 Brnz "C" Clamp 1#9983 Hanger Stud 1#2023 Cu Ferrule 10' #2755 1/0 15 kV Cable	15 kV Ø-Ø	12 (5.4)
9977	795 ASCR to #8 Sol., 1.12"- .12"	250	2#2937 Brnz "C" Clamp 1#9983 Hanger Stud 1#2023 Cu Ferrule 10' #2059 1/0 35 kV Cable	35 kV Ø-Ø	12.5 (5.6)

FERRULES

CAT. NO.	CABLE SIZE	STRAND DIE CODES T&B	JACKET DIE CODES T&B	BURNDY DIE NUMBER	WEIGHT EA. PAIR lbs. (kgs)
SHROUDED					
2012	#2-15 kV ERP	66	106	-	1.2 (.5)
2013	1/0-15 kV ERP	66	106	-	1.2 (.5)
2014	2/0-15 kV ERP	66	106	-	1.1 (.5)
2015	4/0-15 kV ERP	66	106	-	0.9 (.4)
21353	1/0-25 kV	66	112	-	1.1(.5)
21354	2/0-25 kV	66	112	-	1.1 (.5)
21356	2/0-35 kV	66	125	-	1.1 (.5)
UNSHROUDED - TIN PLATED					
2022	#2	50	-	U243	0.5 (.2)
2023	1/0	50	-	U243	0.4 (.2)
2024	2/0	60	-	U245	0.4 (.2)
2025	4/0	66	-	U247	0.6 (.3)

INSULATED JUMPER CLAMPS ACCESSORIES

STIRRUP CLAMPS are used to convert a hand installed jumper into a stick installed jumper. The stirrup is designed to accept all conventional jumper heads.

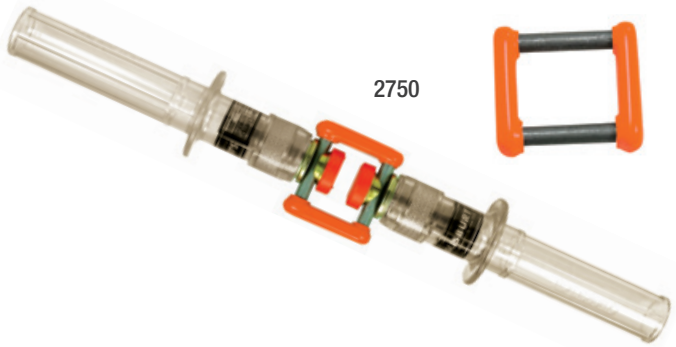
The **HOT JUMPER PARKING STAND** safely holds either glove or stick installed hot bypass jumpers. This insulated tool removes the risk of accidental contact with the uninstalled end of an energized jumper. Installs by hand using rubber insulating gloves or with a standard shotgun stick. The fiberglass jumper hanger bar will accommodate standard size mechanical jumper heads.

The **CONNECTOR LINK** connects two insulated jumpers to create a longer jumper length. After the two clamps are connected to the link, the assembly can be wrapped with a small rubber insulating blanket.

21132RG

Parking Stand Installation with Shotgun Stick

4245



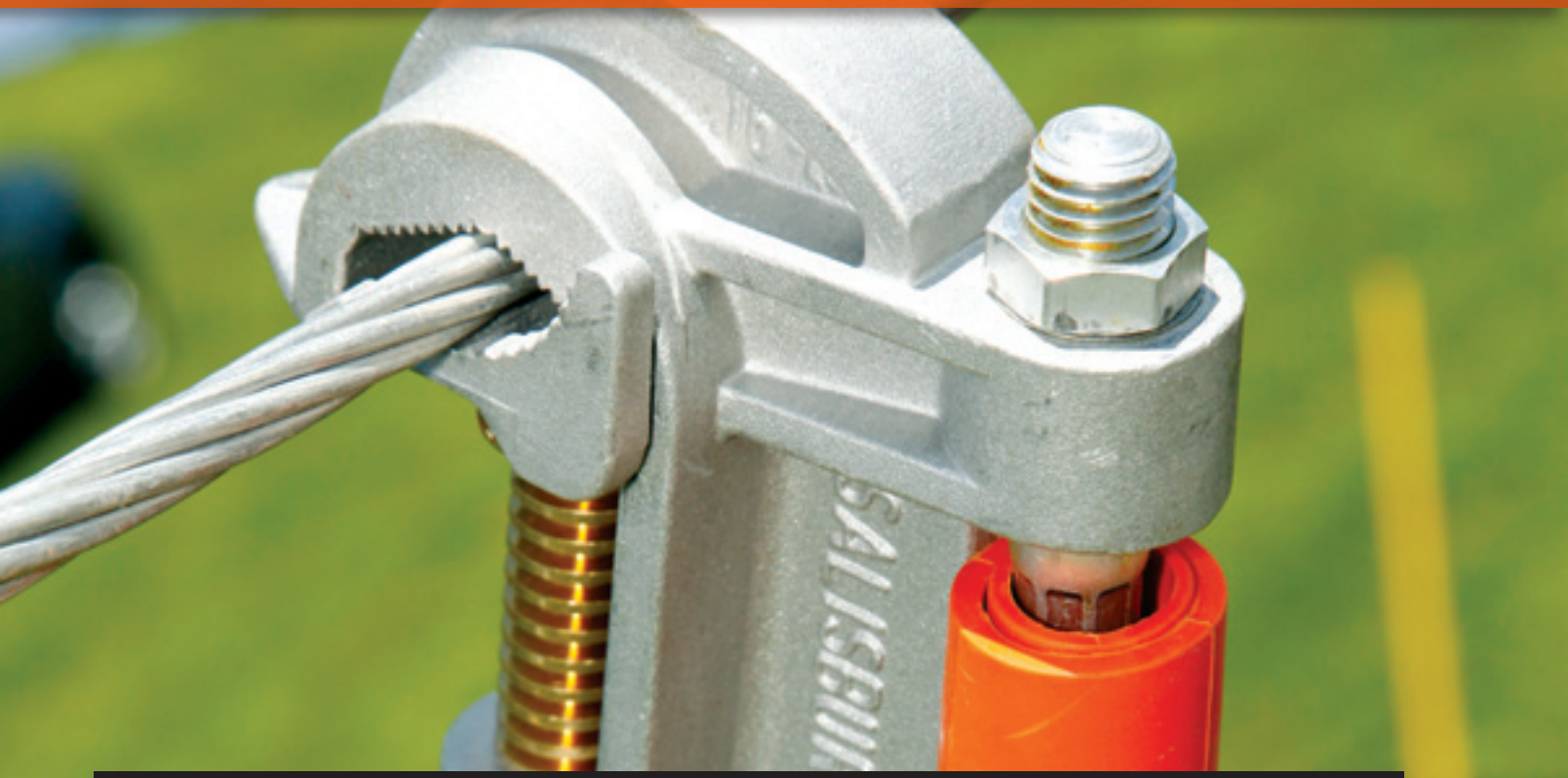
2750

INSULATED JUMPER CLAMPS ACCESSORIES

CAT. NO.	MAIN LINE RANGE	DESCRIPTION	MAX. AMPS CONTINUOUS	WEIGHT EA. lbs. (kgs)
2750	--	Connector Link	400	.3 (.1)
21132RG	1033 MCM ASCR to #6 Sol., 1.25"-.16" (32-4.1mm)	Hot Jumper Stirrup Clamp	400	3.0 (1.4)
4245	954 MCM ACSR to #6 Sol., 1.14"- .16" (29- 4.1 mm)	Parking Stand for Hot Jumpers	n / a	3.5 (1.6)

TEMPORARY PROTECTIVE GROUNDING EQUIPMENT

TEMPORARY PROTECTIVE GROUNDING EQUIPMENT



NOTE:

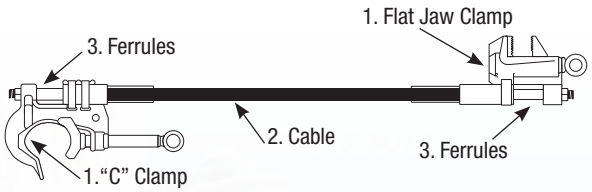
When ordeing assemblies of grounding products, please make sure all items included in the assembly are only from the product line found within this section. Including items from other grounding equipment sections of this book will add additional shipping time.

Grounding Configurator™

The Grounding Configurator™ makes ordering grounding equipment simple and easy. This interactive web tool allows you to easily build the proper temporary grounding equipment for your specific needs. The step by step process takes out the guess work, and makes it easy to change components until the most appropriate ground set is developed.

Just go to our web site www.salisburybyhoneywell.com and give it a try. You will be prompted from start to finish. All you need to know is the maximum fault current, its duration and the size of cable required on the fault, and the configurator will do the rest. No more second guessing quantities or parts to be sure that you have put together a ground set that will function just as you expect. When you finish, enter your personal information and the configurator will instantly provide you with the bill of materials including part numbers. All that's left to do is to place the order!

GROUND SET CHECKLIST



1. Specify the clamps. Two are required for a complete assembly. The maximum amperage of the clamp is designated by the ASTM grade of each clamp. Be sure that the clamp will meet or exceed the maximum amperage rating of the ground cable that it will be used with.

2. Specify the cable. Once the short circuit capacity of the system has been determined, choose the appropriate size cable. Specify the cable length, and the color of the jacket desired.

3. Specify the ferrules. One pair of ferrules is required per assembly. The size of the ferrule must match the size of the cable that it will be used with. Specify copper or aluminum and shrouded or non-shrouded.

4. Specify the options. List any optional equipment that is desired. This can include hanger studs, contact studs, heat shrink tubing, markings, clear strain relief, etc.

Options also include a ground set label. These optional labels include the date of manufacture and are available upon request when ordering.

HOW TO SPECIFY TEMPORARY PROTECTIVE GROUNDING ASSEMBLIES.

A grounding assembly in its basic form consists of two clamps, one pair of ferrules and a length of cable.

The clamps can be identical to each other or quite different depending on each grounding application. Because of this, ground clamps are sold individually, not in pairs. Salisbury offers a wide variety of clamps including C-clamps, flat jaw clamps, socket clamps, duckbill clamps and specialty clamps for unique situations. Clamps are offered in either bronze or aluminum alloys and are manufactured to meet the current specifications of ASTM F 855.

To attach a clamp to the grounding cable requires the use of a ferrule. Ferrules are compressed on the strands of the cable to provide a low resistance permanent connection. The size of the ferrule is determined by the size of the cable. Ferrules are available in aluminum or plated copper. Plated copper ferrules can be used with either aluminum or bronze clamps. Two ferrules are required for each assembly therefore they are sold in pairs. Ferrules are manufactured to the specifications of ASTM F 855.

The final component that makes up a ground set is the grounding cable itself. The size of the cable is dependent on the short circuit current capacity of the system being grounded. Once this is determined, only the length of the cable and the color of the jacket need to be specified to complete the assembly.

Salisbury by Honeywell is your complete source for grounding equipment and assemblies.

DUCK BILL GROUNDING CLAMPS

.96", 1.1" AND 1.66" SIZES

1853

21030

1793

21754

1855 - Stick Mounted Duck Bill Clamp.

CAT. NO.	EYE & CLAMP DESCRIPTION	ASTM GRADE / CLASS	MAIN LINE RANGE	CONTINUOUS CURRENT RATING	WEIGHT EA. lbs. (kgs)
.96" SMOOTH JAW BRONZE DUCK BILL -- GRAVITY ACTUATED - "V" THREAD					
1793	Eye w/ strain relief sleeve, Smooth Jaw	4 / A	556 MCM ACSR to #6 .96" - .16" (24 mm - 4 mm) Dia.	350 RMS Amps, 60 Hz	1.3 (.6)
21080	Eye w/ strain relief sleeve, Smooth Jaw	4 / A		350 RMS Amps, 60 Hz	1.1 (.5)
1797*	Mounted w/ strain relief sleeve, Smooth Jaw	4 / A		350 RMS Amps, 60 Hz	4.3 (2)
2093	Hanger Stud only				.4 (.1)
1.1" SMOOTH JAW ALUMINUM DUCK BILL -- SPRING LOADED - "V" THREAD					
21030	Eye w/ strain relief sleeve, Smooth Jaw	5 / A	795 MCM ACSR to #6 1.1" - .16" (28 mm - 4 mm) Dia.	400 RMS Amps, 60 Hz	1.1 (.5)
21059	Eye w/o strain relief sleeve, Smooth Jaw	5 / A		400 RMS Amps, 60 Hz	1.0 (.5)
21081*	Mounted w/ strain relief sleeve, Smooth Jaw	5 / A		400 RMS Amps, 60 Hz	4.3 (2)
21754	Hanger Stud only				.3 (.1)
1.66" SERRATED JAW ALUMINUM DUCK BILL -- SPRING LOADED - "V" THREAD					
2553	Eye w/o strain relief sleeve, Serrated Jaw	5 / B	1590 MCM ACSR to #6 1.66" - .16" (42 mm - 4 mm) Dia.	400 RMS Amps, 60 Hz	1.4 (.6)
1855*	Eye w/ strain relief sleeve, Serrated Jaw	5 / B		400 RMS Amps, 60 Hz	4.7 (2.1)
21754	Hanger Stud only				.3 (.1)
1.66" SERRATED JAW ALUMINUM DUCK BILL -- ACME THREAD					
1853	Eye w/ strain relief sleeve, Serrated Jaw	5 / B	1590 MCM ACSR to #6 1.66" - .16" (42 mm - 4 mm) Dia.	400 RMS Amps, 60 Hz	1.5 (.7)

*Mounted 1.25" dia X 6' fiberglass hotstick permanently mounted.

4388

2531

4200

4260

2537

CAT. NO.	EYE & CLAMP DESCRIPTION	ASTM GRADE / CLASS	MAIN LINE RANGE	CONTINUOUS CURRENT RATING	WEIGHT EA. lbs. (kgs)
.83” BRONZE “C” CLAMP W/ CURVED LOWER JAW - “V” THREAD					
4200	Eye w/strain relief sleeve, Smooth Jaw	5 / A	477 MCM 18 x 1 ACSR to #8 .83” - .12” (21 mm - 3 mm) Dia.	400 RMS Amps, 60 Hz	1.1 (.5)
21067	Eye w/o strain relief sleeve, Smooth Jaw	5 / A		400 RMS Amps, 60 Hz	1.0 (.4)
4260	Eye w/strain relief sleeve, Smooth Upper Jaw w/Curved Lower Serrated Jaw	5 / B		400 RMS Amps, 60 Hz	1.1 (.5)
21068	Eye w/o strain relief sleeve, Smooth Upper Jaw w/Curved Lower Serrated Jaw	5 / B		400 RMS Amps, 60 Hz	1.0 (.4)
2093	Hanger Stud only				.4 (.2)
1.12” ALUMINUM “C” CLAMP - ACME THREAD					
2531	Eye w/strain relief sleeve, Smooth Upper Jaw w/Flat Lower Jaw	5 / A	795 MCM 26 x 7 ACSR to #8 1.12” - .12” (29 mm - 3 mm) Dia.	400 RMS Amps, 60 Hz	1.1 (.5)
2532	Eye w/o strain relief sleeve Smooth Upper Jaw w/Flat Lower Jaw	5 / A		400 RMS Amps, 60 Hz	1.1 (.5)
2533*	Mounted w/ strain relief sleeve Smooth Upper Jaw w/Flat Lower Jaw	5 / A		400 RMS Amps, 60 Hz	4.2 (19)
4388	Eye w/strain relief sleeve, Smooth Upper Jaw w/Curved Lower Jaw	5 / B		400 RMS Amps, 60 Hz	1.5 (.7)
4389	Eye w/o strain relief sleeve, Smooth Upper Jaw w/Curved Lower Jaw	5 / B		400 RMS Amps, 60 Hz	1.1 (.5)
2537	Hanger Stud only			400 RMS Amps, 60 Hz	.2 (.1)

*Mounted: 1.25” dia x 6’ Fiberglass Hotstick permanently mounted

"C" TYPE GROUNDING CLAMPS

1.12" SIZES

9985

4187

9993

4242

2537

CAT. NO.	EYE & CLAMP DESCRIPTION	ASTM GRADE / CLASS	MAIN LINE RANGE	CONTINUOUS CURRENT RATING	WEIGHT EA. lbs. (kgs)
1.12" BRONZE "C" CLAMP - ACME THREAD					
9985	Eye, w/ strain relief sleeve, Smooth Jaw	5 / A	795 MCM 26" x 7" ACSR to #8 1.12" - .12" (29 mm - 3 mm) Dia.	400 RMS Amps, 60 Hz	1.9 (.9)
2937	Eye, w/o strain relief sleeve, Smooth Jaw	5 / A		400 RMS Amps, 60 Hz	1.8 (.8)
4280*	Mounted, w/ strain relief sleeve, Smooth Jaw	5 / A		400 RMS Amps, 60 Hz	4.9 (2.2)
4187	Eye, w/ strain relief sleeve, Serrated Jaw	5 / B		400 RMS Amps, 60 Hz	1.9 (.9)
2537♦	Aluminum Hanger Stud only				.4 (.2)
1.12" "T" / EYE "C" CLAMP - ACME THREAD					
4242	Bronze "T" w/ strain sleeve & "T", eye screw, Smooth Jaw	5 / A	795 MCM 26" x 7" ACSR to #6 1.12" - .16" (29 mm - 4 mm) Dia.	400 RMS Amps, 60 Hz	1.9 (.9)
9993	Aluminum "T" w/ strain sleeve & "T", eye screw, Smooth Jaw	5 / A		400 RMS Amps, 60 Hz	1.9 (.9)

* Mounted: 1.25" dia x 6' Fiberglass Hotstick permanently mounted

♦ Hanger Stud 2537 compatible with above clamp parts on this page only.

9984

24410

1895

21099

2195

9983

CAT. NO.	EYE & CLAMP DESCRIPTION	ASTM GRADE / CLASS	MAIN LINE RANGE	CONTINUOUS CURRENT RATING	WEIGHT EA. lbs. (kgs)
1.25" BRONZE "C" CLAMP - ACME THREAD					
9984	Eye, w/ strain relief sleeve Smooth Jaw w/ Flat Lower Jaw	5 / A	1035.5 MCM ACSR to #6 1.25" - .16" (32 mm - 4mm) Dia.	400 RMS Amps, 60 Hz	2.2 (1.0)
1897	Eye, w/o strain relief sleeve Smooth Jaw w/ Flat Lower Jaw	5 / A		400 RMS Amps, 60 Hz	2.1 (.9)
4255	Eye, w/ strain relief sleeve Smooth Jaw w/ Curved Lower Jaw	5 / A		400 RMS Amps, 60 Hz	2.2 (1.0)
21069	Eye, w/o strain relief sleeve Smooth Jaw w/ Flat Lower Jaw	5 / A		400 RMS Amps, 60 Hz	2.1 (.9)
4279	Eye, w/ strain relief sleeve Serrated Jaw w/ Curved Lower Jaw	5 / B		400 RMS Amps, 60 Hz	2.2 (1.0)
21070	Eye, w/o strain relief sleeve Serrated Jaw w/ Flat Lower Jaw	5 / B		400 RMS Amps, 60 Hz	2.1 (.9)
9983♦	Brass Hanger Stud only				.4 (.2)
1.25" ALUMINUM "C" CLAMP - ACME THREAD					
24410	Eye, w/ strain relief sleeve Smooth Jaw w/ Flat Lower Jaw	5 / A	1035.5 MCM ACSR to #6 1.25" - .16" (32 mm - 4mm) Dia.		2.2 (1.0)
1.5" ALUMINUM "C" CLAMP, W/ FLAT LOWER JAW - ACME THREAD					
1895	Eye, w/ strain relief sleeve, Serrated Jaw	5 / B	1431 MCM ACSR to #6 1.5" - .16" (38 mm - 4mm) Dia.	400 RMS Amps, 60 Hz	1.7 (.8)
2195	Eye, w/o strain relief sleeve, Serrated Jaw	5 / B		400 RMS Amps, 60 Hz	1.5 (.7)
1896*	Mounted, w/ strain relief sleeve, Serrated Jaw	5 / B		400 RMS Amps, 60 Hz	4.8 (2.1)
21099	"T", w/ strain relief sleeve, Serrated Jaw	5 / B		400 RMS Amps, 60 Hz	1.7 (.8)
1928	Hanger Stud only				.2 (.1)

* Mounted: 1.25" dia x 6' Fiberglass Hotstick permanently mounted

♦ Hanger Stud 9983 compatible with above clamps parts on this page only.

"C" TYPE GROUNDING CLAMPS

2" AND 2.4" SIZES

21074

21075

20882

1923

1924 - Stick Mounted "C" Type Clamp

4377

1921

4295

1928

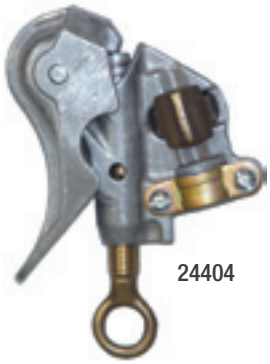
CAT. NO.	EYE & CLAMP DESCRIPTION	ASTM GRADE / CLASS	MAIN LINE RANGE	CONTINUOUS CURRENT RATING	WEIGHT EA. lbs. (kgs)
2" ALUMINUM "C" CLAMP W/ CURVED LOWER JAW - ACME THREAD					
21074	Eye, w/ strain relief sleeve, Smooth Jaw	5H / A	3000 MCM ACSR to #6 2"-.16" (51 mm - 4 mm)Dia.	400 RMS Amps, 60 Hz	2.1 (1.0)
21075	Eye, w/o strain relief sleeve, Smooth Jaw	5H / A		400 RMS Amps, 60 Hz	2 (.9)
20882	Eye, w/ strain relief sleeve, Serrated Jaw	5H / B		400 RMS Amps, 60 Hz	2.1 (1.0)
21077	Eye, w/o strain relief sleeve, Serrated Jaw	5H / B		400 RMS Amps, 60 Hz	2 (.9)
2.4" ALUMINUM "C" CLAMP W/ FLAT LOWER JAW - ACME THREAD					
1923	Eye, w/ strain relief sleeve, Smooth Jaw	5 / A	2.0" I.P.S. to #6 2.4" - .16" (61 mm - 4 mm) Dia.	400 RMS Amps, 60 Hz	2.1 (1.0)
4377	Oval Eye, w/ strain relief sleeve, Smooth Jaw	5 / A		400 RMS Amps, 60 Hz	2.1 (1.0)
4240	Eye, w/o strain relief sleeve, Smooth Jaw	5 / A		400 RMS Amps, 60 Hz	2.0 (1.0)
1924*	Mounted, w/ strain relief sleeve Smooth Jaw	5 / A		400 RMS Amps, 60 Hz	5.1 (2.3)
1921	Eye, w/ strain relief sleeve, Serrated Jaw	5 / B		400 RMS Amps, 60 Hz	2.2 (1.0)
4390	Oval Eye, w/ strain relief sleeve, Serrated Jaw	5 / B		400 RMS Amps, 60 Hz	2.2 (1.0)
1922*	Mounted, w/ strain relief sleeve Serrated Jaw	5 / B		400 RMS Amps, 60 Hz	5.2 (2.3)
1928♦	Hanger Stud only				.2 (.1)
2.4" BRONZE "C" CLAMP W/ FLAT LOWER JAW - ACME THREAD					
4295	Eye, w/ strain relief sleeve, Smooth Jaw	5H / A	2.0" I.P.S. to #6 2.4" - .16" (61 mm - 4 mm) Dia.	400 RMS Amps, 60 Hz	4.1 (1.8)
4311	Eye, w/o strain relief sleeve, Smooth Jaw	5H / A		400 RMS Amps, 60 Hz	4.0 (1.7)

* Mounted: 1.25" dia x 6' Fiberglass Hotstick permanently mounted

♦ Hanger Stud 1928 Compatible with above clamps parts on this page only.

24407 - Stick Mounted Duck Bill Clamp

24466



24404

24405

24406

These **DUCKBILL** and **"C" CLAMPS** feature pressure terminations for use with plain ferrules. Made of high strength aluminum with bronze eye-screws, these Grade 5 clamps are designed for smooth operation and long service life. Use Duckbill clamps for all grounding applications from .16 to 1.1" diameter and "C" clamps for all grounding applications from .06 to 1.26" diameter.

FLAT JAW GROUNDING CLAMPS are now available with pressure terminals for use with plain cable ferrules. These clamps are made of a high strength aluminum and a bronze eye screw or "T" handle for durability and smooth operation. Also featured is a hardened aluminum alloy serrated insert. This insert is designed to grip tightly to flat surfaces and cut through surface contamination and oxidation for low resistance contact. The pressure termination is designed on an angle keeping the cable out of the way during installation. The cable termination is angled to minimize interface with the "T" handle or eye when installing or removing the clamp.

Salisbury's 24438 Plain Ferrule 4-way Connector is available on page I-20.

CAT. NO.	EYE & CLAMP DESCRIPTION	ASTM GRADE / CLASS	MAIN LINE RANGE	CONTINUOUS CURRENT RATING	WEIGHT EA. lbs. (kgs)
1.1" SMOOTH JAW ALUMINUM --SPRING LOADED - "V" THREAD					
24404	Duckbill, Eye w/o strain relief sleeve, Smooth Jaw	5 / A	795 MCM ACSR to #6 1.1"-.16" (28 mm - 4 mm)Dia.	400 RMS Amps, 60 Hz	1.5 (.68)
24407	Stick mounted duckbill clamp	5 / A		400 RMS Amps, 60 Hz	4.5 (2.05)
1.25" SMOOTH JAW ALUMINUM - ACME THREAD					
24466	"C" Type, Eye w/o strain relief sleeve, Serrated Jaw	5 / B	1035.5 MCM ACSR to #6 1.25"-.16" (32 mm - 4 mm)Dia.	400 RMS Amps, 60 Hz	2.2 (1.0)
21754	Hanger Stud only				0.3 (0.1)
2" SMOOTH JAW ALUMINUM - ACME THREAD					
21942	"C" Type, Eye w/o strain relief sleeve Serrated Jaw	5 / B	1035.5 MCM ACSR to #6 2"-.16" (32 mm - 4 mm)Dia.	400 RMS Amps, 60 Hz	2.2 (1.0)
ALUMINUM FLAT JAW GROUNDING CLAMP - ACME THREAD					
24405	"T" screw, w/o strain relief sleeve, Serrated Jaw	5 / B	1.5" -.06" Flat or Square 1.26"-.06" (32 mm - 1.5 mm)Dia.	400 RMS Amps, 60 Hz	2.1 (.9)
24406	Eye screw, w/o strain relief sleeve Serrated Jaw	5 / B		400 RMS Amps, 60 Hz	2.0 (.9)

GROUNDING CLAMPS FOR SUBSTATION BUSES

3.5" AND 6.62" SIZES

4341

4282

21985

21953

2991

CAT. NO.	EYE & CLAMP DESCRIPTION	ASTM GRADE / CLASS	MAIN LINE RANGE	CONTINUOUS CURRENT RATING	WEIGHT EA. lbs. (kgs)
3.5" ALUMINUM "C" CLAMP FOR SUBSTATION BUSES - ACME THREAD					
4282	Eye, w/ strain relief sleeve, Smooth Jaw w/ Flat Lower Jaw	5 / A	3" - 1.5" I.P.S. 3.5" - 1.75" (89 mm - 44 mm) Dia.	400 RMS Amps, 60 Hz	2.8 (1.3)
4283*	Mounted, w/ strain relief sleeve Smooth Jaw w/ Flat Lower Jaw	5 / A		400 RMS Amps, 60 Hz	5.8 (2.5)
21953	Eye, w/ strain relief sleeve Smooth Jaw w/ Flat Lower Jaw	5H / A		400 RMS Amps, 60 Hz	2.9 (1.4)
4341	Long Eye Screw, w/strain relief sleeve Smooth Upper Jaw w/ Flat Lower Serrated Jaw	5 / A	3" I.P.S. to #6 3.5" - .16" (89 mm - 4 mm) Dia.	400 RMS Amps, 60 Hz	2.9 (1.4)
21985+	Long Eye Screw, w/strain relief sleeve Serrated Jaw, w/ Flat Lower Jaw	6 / B		450 RMS Amps, 60 Hz	3.0 (1.5)
6.62" ADJUSTABLE ALUMINUM " C " CLAMP FOR ROUND, SQUARE, RECTANGLE OR "H" SECTION SUBSTATION BUSES - ACME THREAD					
2991	Eye, w/ strain relief sleeve Smooth Jaw w/ Flat Lower Jaw	5H / A	6.12" I.P.S 6.62" - .4" (168 mm - 40 mm) Dia.	400 RMS Amps, 60 Hz	6.9 (3.1)
2993**	Eye, w/ welded single contact stud, Smooth Jaw w/ Flat Lower Jaw	5 / A		400 RMS Amps, 60 Hz	7.0 (3.2)
9967**	Eye, w/ welded double contact stud Smooth Jaw w/ Flat Lower Jaw	5 / A		450 RMS Amps, 60 Hz	7.3 (3.3)
4378	Oval Eye, w/ strain relief sleeve Smooth Jaw w/ Flat Lower Jaw	5 / A		400 RMS Amps, 60 Hz	6.9 (3.1)

*Mounted: 1.25" dia x 6' Fiberglass Hotstick permanently mounted

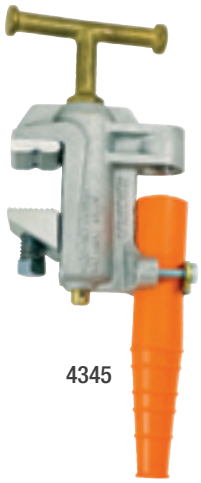
**No Ferrule Connection

+Accepts 3/4 - 10 ferrule threads

1814

1815

24442


4345

4369

24441

FLAT JAW GROUNDING CLAMPS are available with either a large "T" handle or with an eye for clampstick application. The handles and eyes are designed so that the cable will not interfere with the torquing of the clamp. The set screw that secures the clamp to a flat surface is located on the movable jaw on all designs. When tightened, the set screw forces the fixed jaw of the clamp firmly against the flat ensuring a consistent low resistance current path directly through the body of the clamp to the cable connection. With other designs having a set screw on the fixed jaw, current is required to flow through mechanical connections between the movable jaw, the eye screw and the body of the clamp before passing to the cable connection.

CAT. NO.	EYE & CLAMP DESCRIPTION	ASTM GRADE / CLASS	MAIN LINE RANGE	CONTINUOUS CURRENT RATING	WEIGHT EA. lbs. (kgs)
GRADE 3 BRONZE FLAT JAW GROUNDING CLAMPS - "V" THREAD					
1814	"T" screw w/ strain relief sleeve Serrated Jaw	3 / B	1.5" - .06" Flat or Square 1.26" - .06" (32 mm - 1.5 mm) Dia.	300 RMS Amps, 60 Hz	1.7 (.8)
1815	Eye Screw w/ strain relief sleeve Serrated Jaw	3 / B		300 RMS Amps, 60 Hz	1.6 (.7)
GRADE 5 ALUMINUM FLAT JAW GROUNDING CLAMP - ACME THREAD					
4345	"T" screw w/ strain relief sleeve, Serrated Jaw	5 / B	1.5" - .06" Flat or Square 1.26" - .06" (32 mm - 1.5 mm) Dia.	400 RMS Amps, 60 Hz	2.1 (.9)
24442	"T" screw w/ strain relief sleeve Serrated Jaw	5 / B		400 RMS Amps, 60 Hz	2.1 (.9)
4369	Eye Screw w/ strain relief sleeve Serrated Jaw	5 / B		400 RMS Amps, 60 Hz	2.0 (.9)
24441	Eye Screw w/ strain relief sleeve Serrated Jaw	5 / B		400 RMS Amps, 60 Hz	2.0 (.9)

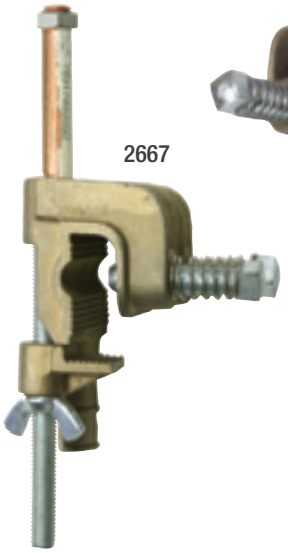
*Mounted: 1.25" dia x 6' Fiberglass Hotstick permanently mounted

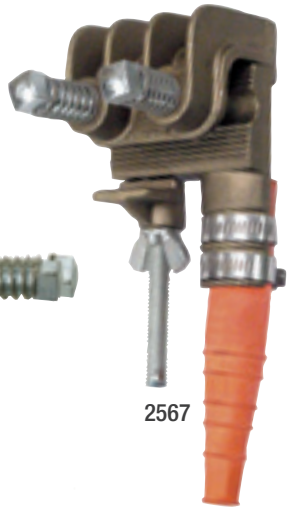
HEAVY DUTY DUAL-PURPOSE CLAMPS & SPECIALTY CLAMPS

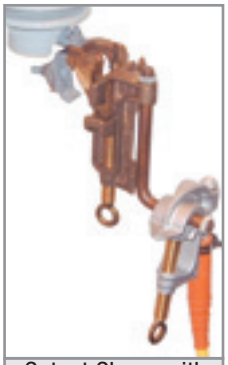
The **HEAVY DUTY BRONZE "C" TYPE FLAT JAW CLAMP** with anti-blow off keeper is made to fit structural angles, flats and copper or copperweld stranded grounding assemblies. To install, first use an abrasive cloth or wire brush to clean the surface to be clamped. Then, wipe the surface clean, position the clamp, finger tighten and set the screws. Use a wrench to secure and tighten. A 2667 clamp with contact stud offers greater versatility.

CUTOUT CLAMPS are applied with a clampstick into the bottom hinge contact of a cutout. This clamp can be used as part of a ground assembly or by using a contact stud using a standard grounding assembly with "C" clamps from the stud to ground.

Lightweight, heavy duty **STRINGING GROUND** installs anywhere along the length of conductor to provide a continuous grounding bond, even if the conductor is slack. Constructed of high-strength aluminum alloy with large diameter sheaves and bronze bushing bearings. Features a side opening for quick, easy installation. Adjustable compression spring assures proper contact for different sizes of conductors and for easy passage of splices. In tests, this clamp withstood a 25 kA, 28 cycle short circuit. The three options for a ground tap connection are: termination for ground cables, contact/hanger stud and connector for ground wire.


2667


2567


Cutout Clamp with Contact Stud

Cutout Clamp Jumper Assembly

4373

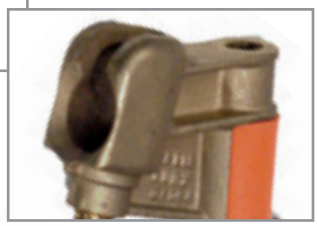
4310

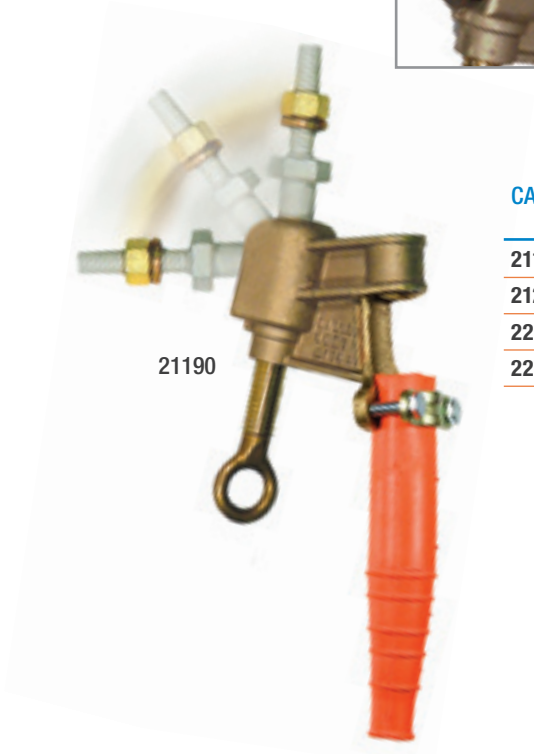
2155

CAT. NO.	EYE & CLAMP DESCRIPTION	ASTM GRADE / CLASS			WEIGHT EA. lbs. (kgs)
HEAVY DUTY BRONZE "C" TYPE FLAT JAW CLAMP			**MAIN LINE RANGE**	**TAP SIZE**	
2567	5/8"-11NC Connection, w/ strain relief sleeve Serrated Jaw	5H / B	Angles & Flats: 2.5"-4" WX (64-101 mm x 3-19 mm)	5/8 - 11 UNC Max. Cable Size 4/0 Type V Compression Ferrules	4 (1.8)
2667	2567 Clamp, w/ Contact Stud Serrated Jaw	5 / B			5 (2.3)
2577	3/4"-10NC Connection, w/ strain relief sleeve Serrated Jaw	6 / B	Rounds: .25"-.75" (6 mm-19 mm) Dia.	3/4 - 10 UNC Max. Cable Size 250 MCM Type V Compression Ferrules	4 (1.8)

BRONZE CUTOUT CLAMPS - "V" THREAD			TAP SIZE	CONTINUOUS CURRENT RATING	
4310	Eye, w/ ferrule connection	Grade 5	5/8 - 11 UNC Max. Cable Size: 470 Type VI Threaded Stud Compression Ferrule	400 RMS Amps, 60 Hz	2.1 (1.1)
4373	Eye, w/ contact stud	Grade 5		400 RMS Amps, 60 Hz	3.3 (1.5)
4379	Contact stud only	Grade 5		400 RMS Amps, 60 Hz	1.2 (.5)

STRINGING GROUND			MAIN LINE RANGE	CONTINUOUS CURRENT RATING	
2155	Stringing ground, w/ Alloy Rollers & Smooth Contacts	5 / A	1033.5 MCM ACSR to #2 Sol 1.26"-.25" (32 mm - 6 mm) Dia Splice: 1.5" (38 mm) Dia	300 RMS Amps, 60 Hz	5.3 (2.4)





The **BALL AND SOCKET GROUNDING SYSTEM** allows for variable angle accessibility. This system is compact and lightweight. There are fixed grounding points on the socket clamp. The 21190 Socket Clamp, made from bronze alloy, has a socket size of 1 inch (25.4 mm) and a threaded bore boss of 5/8"-11 UNC. The socket clamp has an integral cable support with strain relief sleeve.

THE BALL STUD "C" CLAMP is a universal clamp that can be used in substations and on overhead lines. This universal clamp can be used as a socket clamp on a 1 inch (25.4 mm) Ball Stud and as a 1 ½ inch (38 mm) C-Clamp on overhead lines. The eye screw is not extended beyond the body of the clamp, minimizing possible thread damage during handling. Double lead V-thread allows for faster installation, minimizing worker fatigue. External and internal ball studs assembly can be used as a current carrying contact stud.

SPECIFICATIONS FOR BALL STUD "C" CLAMP

- Aluminum clamp body
- Double lead V-thread eye screw is bronze alloy
- ASTM Type 1, Class A, Grade 5 rating
- Fault current ratings:
  - 43,000 Amps – 15 cycles
  - 30,000 Amps – 30 cycles
- Ferrule attachment:5/8" x 11 UNC for Grade 5 rating
- Grounding cable: #2 min size to 4/0 max size

See page K-3 for ball socket studs and accessories available for both Ball & Socket clamps and Ball Stud "C" Clamps.

CAT. NO.	DESCRIPTION	ASTM GRADE	CONTINUOUS CURRENT RATING	WEIGHT EA. lbs. (kgs)
21190	w/ strain relief sleeve	5	400 Amps	1.2 (.54)
21277	w/o strain relief sleeve	5	400 Amps	1.1 (.5)
22675	1" Ball Stud C-Clamp w/ strain relief	5H	400 Amps	2.7 (1.22)
22704	1" Ball Stud C-Clamp w/o strain relief	5H	400 Amps	2.6 (1.18)

SALISBURY GROUNDING CABLES are made with extra flexible strand of soft drawn #30 AWG (.01") copper and are available in three different jackets.

Salisbury yellow and black ground cable now include permanent embossed markings.

The yellow thermoplastic elastomer jacketed cable is the standard for grounding service. It provides a combination of economy, flexibility and durability. The service temperature ranges from 200º to -50ºF. ASTM F 855 Type I.

The black thermoplastic elastomer jacketed cable has a smaller diameter and thinner jacket material giving it better flexibility than the yellow cable. The service temperature ranges from 200º to -50ºF. ASTM F 855 Type I.

The PVC transparent flexible thermoplastic jacketed cable allows easy inspection for strand breakage. The flexibility decreases with low temperatures. The service temperature ranges from 140º to -40ºF per ASTM F 855, Type III requirements.

SALISBURY GROUNDING CABLES

CAT NO.	SIZE	STRAND DIA. in. (mm)	JACKET in. (mm)	SHORT CIRCUIT WITHSTAND AMPS, RMS, 60HZ 15 CYCLES	SHORT CIRCUIT WITHSTAND AMPS, RMS, 60HZ 30 CYCLES	CONTINUOUS CURRENT AMPS,RMS, 60HZ	WT./1000FT. lbs. (kgs)
YELLOW							
YELLOW JACKET							
2136	#2-665W	.35 (8.9)	.50 (12.7)	14500	10000	200	282 (127)
2137	1/0-1064W	.45 (11.4)	.62 (15.7)	21000	15000	250	488 (221)
2138	2/0-1330W	.49 (12.4)	.65 (16.5)	27000	20000	300	537 (243)
2139	4/0-2109W	.62 (1.7)	.83 (21.1)	43000	30000	400	836 (379)
BLACK							
BLACK JACKET							
2636	#2-665W	.35 (8.9)	.47 (12)	14500	10000	200	263 (119)
2637	1/0-1064W	.45 (11.4)	.58 (14.7)	21000	15000	250	404 (183)
2638	2/0-1330W	.49 (12.4)	.63 (16)	27000	20000	300	497 (225)
2649	3/0-1672W	.55 (14)	.72 (18.3)	36000	25000	350	680 (308)
2639	4/0-2109W	.62 (1.7)	.78 (19.8)	43000	30000	400	770 (349)
CLEAR PVC							
CLEAR PVC JACKET							
2128	#2-665W	.35 (8.9)	.53 (13.5)	14500	10000	200	289 (131)
2129	1/0-1064W	.45 (11.4)	.64 (16.3)	21000	15000	250	520 (235)
2133	2/0-1330W	.49 (12.4)	.70 (17.8)	27000	20000	300	546 (247)
2288	4/0-2109W	.62 (1.7)	.84 (21.3)	43000	30000	400	841 (381)

ALUMINUM PLAIN SHROUDED

COPPER PLAIN SHROUDED

ALUMINUM PLAIN UNSHROUDED

COPPER PLAIN UNSHROUDED

PLAIN SHROUDED & UNSHROUDED FERRULES
Plain ferrules are designed for use with all grounding clamps that feature pressure terminals including the 1" duckbill and 1.5" flat jaw clamp.

COPPER FERRULES are available in two different styles: unshrouded and shrouded. Shrouded ferrules are compressed on both the conductor and the jacket of the cable to reduce bending stress. Unshrouded ferrules are crimped on the conductor strands only. These ferrules are manufactured of tin plated, 99.5% pure copper.

ALUMINUM FERRULES are available in two different styles: unshrouded and shrouded. Shrouded ferrules are compressed on both the conductor and the jacket of the cable to reduce bending stress. Unshrouded ferrules are crimped on the conductor strands only.

CAT. NO.	CABLE SIZE	STRAND DIE CODES T&B	JACKET DIE CODES T&B	BURNDY DIE NUMBER	WEIGHT EA. PAIR lbs. (kgs)
COPPER SHROUDED					
24424	#2	50	71	-	0.30 (.14)
24425	1/0	50	71	-	0.35 (.16)
24426	2/0	60	76	-	0.40 (.18)
24427	4/0	66	106	-	0.45 (.20)
COPPER UNSHROUDED					
24420	#2	50	-	-	0.30 (.14)
24421	1/0	50	-	U243	0.30 (.14)
24422	2/0	60	-	U245	0.35 (.16)
24423	4/0	66	-	U247	0.35 (.16)
ALUMINUM SHROUDED					
24434	#2	50	71	-	0.1 (.045)
24436	2/0	60	76	-	0.15 (.07)
24437	4/0	71	106	-	0.15 (.07)
ALUMINUM UNSHROUDED					
24430	#2	50	-	-	0.12 (.54)
24431	1/0	50	-	-	0.12 (.54)
24432	2/0	60	-	-	0.16 (.073)
24433	4/0	71	-	-	0.16 (.073)

*Add suffix "A" to the end of the catalog number when requesting a custom built grounding set.

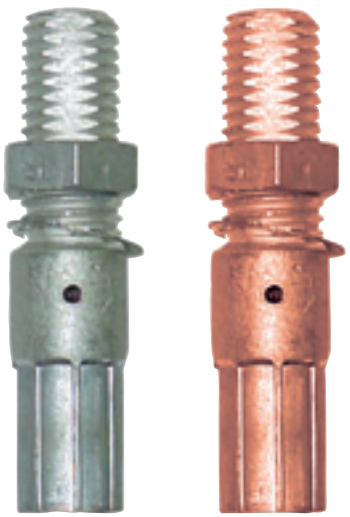
THREADED GROUNDING FERRULES & STRAIN RELIEF SLEEVES

Salisbury compression **THREADED GROUNDING FERRULES** provide low resistant connection to cable strands with a threaded stud that securely screws into a clamp. Nut and lock washers increase contact pressure and secure the assembly.

Tin plated copper ferrules can be used on either bronze or aluminum body clamps. All Salisbury threaded grounding ferrules are unshrouded and manufactured with a 5/8-11 UNC threaded stud and meets the requirements of ASTM F855.

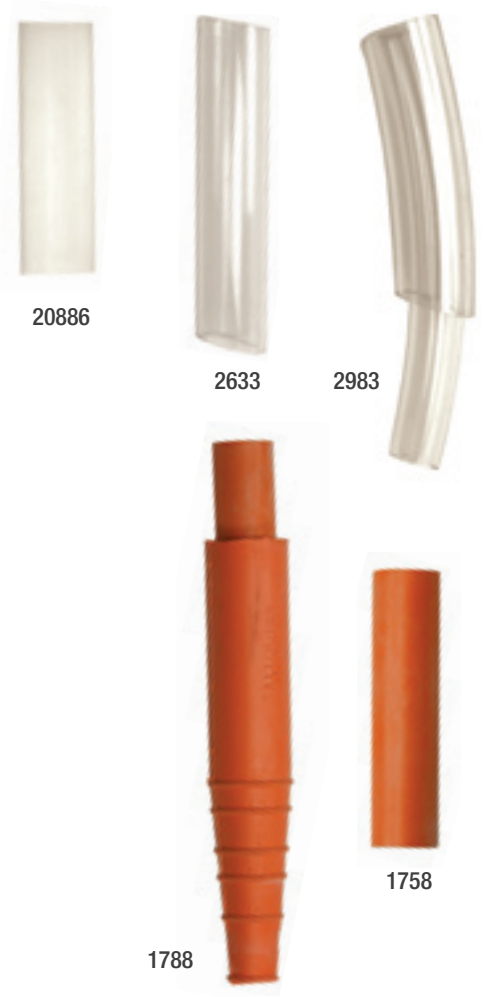
CAT. NO.	ASTM GRADE	SIZE	INSTALLING DIE CODES T&B	BURNDY DIE NUMBERS	WEIGHT EA. PAII lbs. (kgs)
ALUMINUM THREADED GROUNDING FERRULES					
2026	1	#2	50	-	.2 (.1)
2027	2	1/0	50	-	.2 (.1)
2620	3	2/0	60	-	.3 (.1)
2640	5	4/0	71	-	.3 (.1)
COPPER THREADED GROUNDING FERRULES					
2022	1	#2	50	U243	.5 (.2)
2023	2	1/0	50	U243	.4 (.2)
2024	3	2/0	60	U245	.4 (.2)
4277	4	3/0	66	-t	.6 (.3)
2025	5H	4/0	66	U247	.6 (.3)

Add suffix "A" to the catalog number when requesting a custom insulated grounding set.

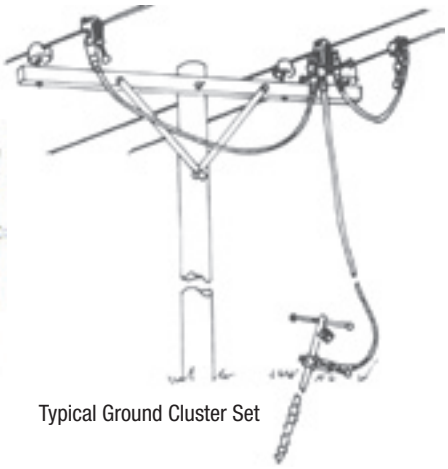


STRAIN RELIEF SLEEVES reinforce cables at the termination points when used with the cable support system. This decreases strand damage to cables from age or mishandling which reduces current carrying capacity and service life. SALCOR® Strain Relief Sleeves accept all grounding cables #2 through 4/0. Sleeve assembly consists of two parts: the inner sleeve, which is discarded if the cable diameter exceeds .72" and tapered outer sleeve, 6.5" long, which can be cut to match the diameters. Clear strain relief sleeves and heat shrink are available to fit ground clamps.

CAT. NO.	DESCRIPTION	WEIGHT EA. lbs. (kgs)
CABLE STRAIN RELIEF SLEEVES		
1758	Inner SALCOR® Sleeve Only	.1 (.04)
1788	Complete SALCOR® Strain Relief Assembly	.1 (.04)
2633	Clear Sleeve for 4/0 Grounding Cable	.1 (.04)
2983	Clear Sleeve for #2 to 2/0 Grounding Cable	.1 (.04)
20886	Clear Heat Shrink, 5"(127 mm) for All Grounding Cables	.1 (.04)



SINGLE GROUNDING ASSEMBLIES & SETS



Typical Ground Cluster Set

Salisbury offers a variety of single grounding versatility to the user when performing temporary grounding.

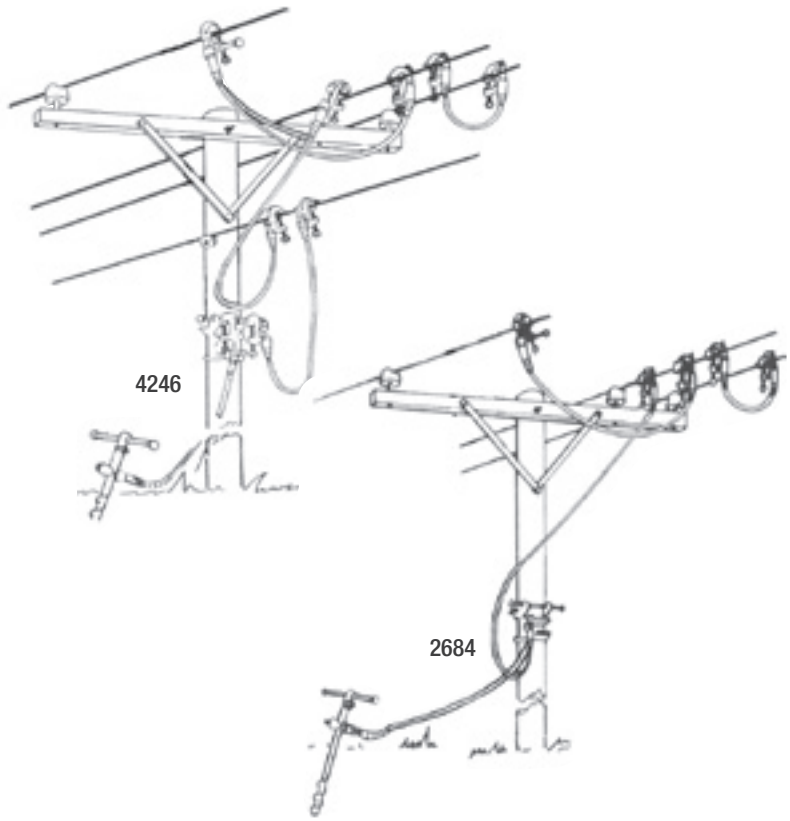
For ordering convenience, completed **SINGLE GROUNDING ASSEMBLIES** are listed which cover many standard application needs. Modification to these sets to meet specific needs can be made. Contact your local Salisbury representative for assistance or visit www.salisburybyhoneywell.com to use our helpful online grounding configurator.

CAT. NO.	DESCRIPTION	ASTM GRADE	WEIGHT EA. lbs. (kgs)
SINGLE GROUNDING ASSEMBLIES			
24309	2 ea. #1895 Serrated Aluminum "C" Clamp 1.5" 1 pr. #2024 Ferrules 6 ft. #2138 2/0 Cu. Yellow Cable	3	5.9 (2.7)
2299	2 ea. #1895 Serrated Aluminum "C" Clamp 1.5" 1 ea. #1928 Hanger Stud, 1 pr. #2027 Ferrules 6 ft. #2137 1/0 Cu. Yellow Cable	2	5.9 (2.7)
2319	2 ea. #1923 Smooth Aluminum "C" Clamp 2.4" 1 ea. #1928 Hanger Stud, 1 pr. #2620 Ferrules 10 ft. #2138 2/0 Cu.Yellow Cable	3	8.7 (3.9)
2320	1 ea. #1923 Smooth Aluminum "C" Clamp 1 ea. #4345 Aluminum Flat Jaw "T" Handle Clamp 1 pr. #2620 Ferrules 15 ft. #2138 2/0 Cu. Yellow Cable	3	7.4 (3.4)
2321	2 ea. #1793 Bronze Duck Bill 556 MCM 1 ea. #2093 Hanger Stud, 1 pr. #2023 Ferrules 6 ft. #2137 1/0 Cu. Yellow Cable	2	5.4 (2.5)
2329	2 ea. #1921 Serrated Aluminum "C" Clamp 2.4" 1 ea. #1928 Hanger Stud, 1 pr. #2620 Ferrules 10 ft. #2138 2/0 Cu. Yellow Cable	3	9 (4.1)
2556	2 ea. #1853 Smooth Aluminum Duck Bill Clamp 1.66" 1 ea. #1858 Hanger Stud, 1 pr. #2027 Ferrules 6 ft. #2137 1/0 Cu. Yellow Cable	2	5.2 (2.4)
2876	2 ea. #2531 Smooth Aluminum "C" Clamp 1.0" 1 ea. #2537 Hanger Stud, 1 pr. #2027 Ferrules 6 ft. #2137 1/0 Cu. Yellow Cable	2	4.9 (2.2)
9975	2 ea. #9985 Smooth Bronze "C" Clamp 1.0" 1 ea. #9983 Hanger Stud, 1 pr. #2023 Ferrules 6 ft. #2137 1/0 Cu. Yellow Cable	2	6.9 (3.1)
9982	2 ea. #9984 Smooth Bronze "C" Clamp 1.25" 1 ea. #9983 Hanger Stud, 1 pr. #2023 Ferrules 6 ft. #2137 1/0 Cu. Yellow Cable	2	8.3 (3.7)

Optional ground set label available upon request when ordering.

A **SINGLE POINT DISTRIBUTION GROUNDING SET** creates an equal potential zone on the working structure. This is accomplished by bonding all conductors and the structure to a ground source using individual assemblies as shown in the adjacent drawing.

The **SPECIAL APPLICATIONS GROUNDING SETS** listed are some typical complete personal protection ground sets for common line construction. These sets, although practical for many applications, are shown as a guide to help determine individual system needs and for ease of ordering. Variations of these sets may be requested to meet specific situations or user preferences. Your local Salisbury representative can answer any questions you have on personal protection grounding needs and applications.



CAT. NO.	DESCRIPTION	ASTM GRADE	WEIGHT EA. lbs. (kgs)
SINGLE POINT GROUNDING ASSEMBLIES			
4246	Complete Distribution Grounding Set 10 ea. #2531 Smooth Aluminum "C" Clamps 795 MCM 1 ea. #9998 Aluminum Pole Mount Contact Bar 5 pr. #2026 Ferrules 3 ea. #2537 Hanger studs 60 ft. #2636 # Cu. Cable 1 ea. #2103 Screw Ground Rod w/ Connector	1	45.5 (20.6)

Additional Single Point Sets are Available, Contact your local Salisbury representative.

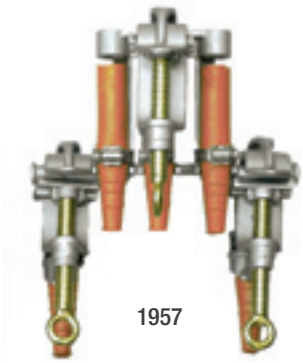
Optional ground set label available upon request when ordering.

SPECIAL APPLICATIONS GROUNDING SETS

COMPLETE 3 PHASE DELTA			
2684	2 ea. #20880 Contact Bar 7 ea. #1895 Serrated Aluminum "C" Clamp 1.5" 84 ft. #2637 1/0 Cu. Black Cable, 4 pr. #2027 Ferrules 2 ea. #1928 Hanger Studs, 1 ea. #2654 Storage Bag 1 ea. #2103 Screw Ground Rod	2	63.5 (28.8)
4249	2 ea. #20880 Contact Bar 7 ea. #2531 Smooth Aluminum "C" Clamp 795 MCM 86 ft. #2637 1/0 Cu. Cable, 4 pr. #2027 Ferrules 2 ea. #2537 Hanger Studs, 1 ea. #2654 Storage Bag 1 ea. #2103 Screw Ground Rod	2	63.5 (28.8)
COMPLETE 4 WIRE WYE			
4276	1 ea. #20880A Contact Bar 7 ea. #2531 Smooth Aluminum "C" Clamp 795 MCM 32 ft. #2637 1/0 Cu. Cable, 4 pr. #2027 Ferrules 3 ea. #2537 Hanger Studs, 1 ea. #2654 Storage Bag	2	34 (15.4)

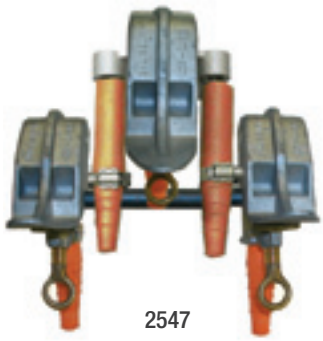
Optional ground set label available upon request when ordering.

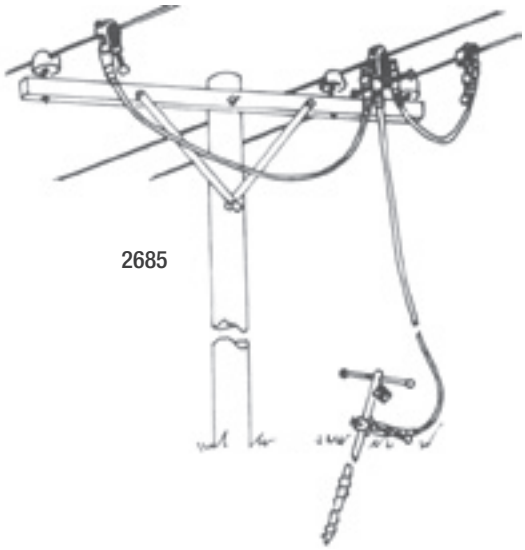
1790


1957

GROUNDING CLUSTERS are used to make it easy for a single line worker to apply multiple grounding assemblies on a three phase system. All clusters have an option of a ground lead by using the extra connection point on each cluster. Three wire clusters are recommended for three phase Delta systems. Complete grounding cluster assemblies are available from the factory. By specifying the cable size and length required, the assembly will be made to your specifications.

2534


2547


2685

CAT. NO.	DESCRIPTION	ASTM GRADE	WEIGHT EA. lbs. (kgs)
1790	Cluster w/ 3 #1793 Smooth Jaw 556 MCM Bronze Duck Bill Clamps	4	6 (2.7)
1957	Cluster w/ 3 #1895 Serrated Jaw 1.5" Aluminum "C" Clamps	5	6.4 (2.9)
2534	Cluster w/ 3 #2531 Smooth Jaw 1" Aluminum "C" Clamps	5	4.9 (2.2)
2547	Cluster w/ 3 #1853 Serrated Jaw 1.66" Aluminum Duck Bill Clamps	5	5.4 (2.5)
2685	Assembled Ground Cluster Set 1 ea. #2516 Serrated Aluminum "C" Clamp 1.5" Cluster 74 ft. #2637 1/0 Cu. Cable 3 pr. #2027 Ferrules, 1 ea. #2103 Screw Ground Rod 1 ea. #2654 Storage Bag 1 ea. #1895 "C" Clamp, 1.5"	2	54.2 (24.6)
4248	Assembled Ground Cluster Set 1 ea. #1790 Smooth Bronze Duck Bill Cluster 76 ft. #2636 #2 Cu. Cable 3 pr. #2022 Ferrules, 1 ea. #2103 Screw Ground Rod 1 ea. #2654 Storage Bag	1	54.2 (24.6)

Clusters are also available with Mounted Clamps, consult the factory for more information.
Optional ground set label available upon request when ordering.

GROUNDING SETS & 4-WAY CONNECTORS

4 WIRE UNIVERSAL GROUNDING CLUSTERS & SETS

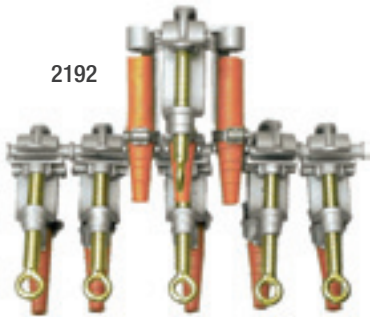
GROUNDING CLUSTERS make it easy for a single line worker to apply multiple grounding assemblies. All clusters have an option of a ground lead by using the extra connection point on each cluster. Four wire clusters are recommended for three phase Wye systems. Complete grounding cluster assemblies are available from the factory. By specifying the cable size and length required, the assembly will be made to your specifications.

The **2680 4-WAY CONNECTOR** ground set provides an excellent system for the grounding of a 3 phase system (Fig. A & B pg. I-21).

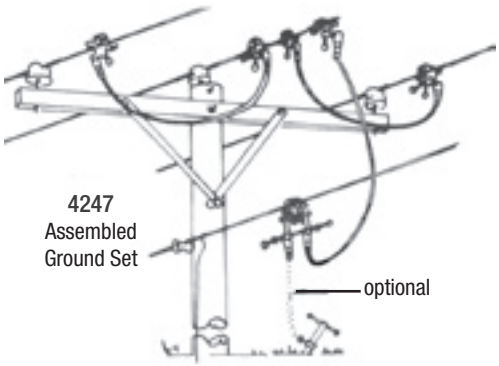
4-WAY CONNECTORS are used to create a common connection between the conductor leads and the ground lead of a ground set.

2536

2192



1794



CAT. NO.	DESCRIPTION	ASTM GRADE	WEIGHT EA. lbs. (kgs)
4 WIRE UNIVERSAL GROUNDING CLUSTERS & SETS			
1794	Cluster w/ 6 #1793 Smooth Jaw 556 MCM Bronze Duck Bill Clamps	4	9 (4.1)
2192	Cluster w/ 6 #1895 Serrated Jaw 1.5" Aluminum "C" Clamps	5	11.8 (5.4)
2536	Cluster w/ 6 #2531 Smooth Jaw 1" Aluminum "C" Clamps	5	8.8 (4)
2604	Cluster w/ 6 #1853 Serrated Jaw 1.66" Aluminum Duck Bill Clamps	5	6.2 (2.8)
2682	Assembled Ground Cluster 1 ea. #1794 Smooth Bronze Duck Bill Cluster 18 ft. #2636 #2 Cu. Cable 3 pr. #2022 Ferrules 1 ea. #2654 Storage Bag	1	14.5 (6.6)
4247	Assembled Ground Cluster 1 ea. #2536 Smooth Aluminum "C" Cluster 18 ft. #2637 1/0 Cu. Cable 3 pr. #2027 Ferrules 1 ea. #2654 Storage Bag	2	18 (8.2)
4-WAY CONNECTOR GROUND SET			
2680	Four Way Connector Ground Set - Grade 2, 21 kA 15 cycles 1 #2374 Four Way Connector w/ Sleeves 4 #1895 1.5" Serrated Jaw Clamps w/ Sleeves 1 #2427 Double Hanger Stud, 1 #2402 Contact Stud 34 ft. #2137 1/0 Cu. Cable 4 pr. #2027 Ferrules	2	28 (12.7)
2374	Threaded Ferrule Four Way Connector	5	1.8 (.8)
21702	Threaded Ferrule Four Way Connector 1 ¾ long x 2 ¼ dia.	5	.5 (.23)
24438	Plain Ferrule Four Way Connector	5	2 (.9)

Optional ground set label available upon request when ordering.

24438

21702

2374

DEAD FRONT GROUND SETS are supplied with an insulated grounding elbow, yellow jacketed copper grounding cable and a 1815 bronze flat jaw ground clamp for the ground connection. **GROUNDING ELBOWS** are equipped with arc quenching tips as provided on standard load break elbows.

Both 15 kV and 25 kV elbows are available with connectors for 1/0 or 2/0 cable. Assembled sets for 15 kV and 25 kV are available for single phase or three phase grounding requirements. The fault duty rating for 200 amp grounding elbows is 10 kA for 10 cycles per IEEE 386. Standard three phase sets have a 4 ft. tail connecting to a 2374 four wire connector with 2 ft. leads for the elbows. Sets can be factory assembled to customer specifications.

CAT. NO.	DESCRIPTION	WEIGHT EA. lbs. (kgs)
COMPLETE 3 PHASE DELTA		
2910	15 kV Elbow w/ 1/0 Cable Connector	1.7 (.7)
2912	15 kV Elbow w/ 2/0 Cable Connector	1.7 (.7)
2935	25 kV Elbow w/ 1/0 Cable Connector	2 (.9)
2936	25 kV Elbow w/ 2/0 Cable Connector	2 (.9)

Elbow

COMPLETE 3 PHASE DELTA		
2961	15 kV Single Phase, 6 ft. 1/0 Cable w/ Bag	10 (4.5)
2962	15 kV Single Phase, 6 ft. 1/0 Cable w/o Bag	8 (3.6)
2963	15 kV Three Phase, 1/0 Cable w/ Bag	22 (10)
22630	15 kV Three Phase, 1/0 Cable w/o Bag	20 (9)
2971	25 kV Single Phase, 6 ft. 1/0 Cable w/ Bag	13 (5.9)
22631	25 kV Single Phase, 6 ft. 1/0 Cable w/o Bag	11 (5)
2973	25 kV Three Phase, 1/0 Cable w/ Bag	24 (10.9)
22632	25 kV Three Phase, 1/0 Cable w/o Bag	22 (10)

Optional ground set label available upon request when ordering.

Fig. A 2680

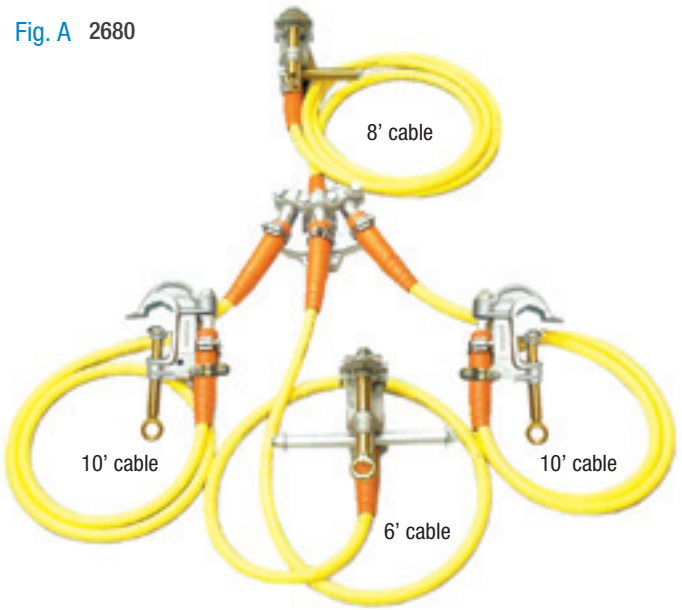
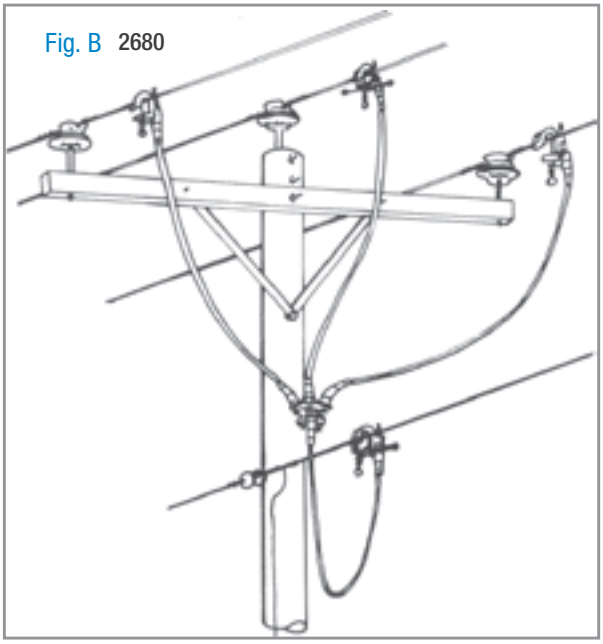


Fig. B 2680



SALISBURY by Honeywell

ASTM F855-09 TABLE 1 - PROTECTIVE GROUNDING CLAMP RATINGS

TABLE 1 Protective Ground Cable, Ferrule, Clamp and Assembly Ratings for Symmetrical Current

Grade	Grounding Clamp Torque Strength, min				Short Circuit Properties[A]							Continuous Current Rating, A RMS, 60 Hz
	Yield[B]		Ultimate		Withstand Rating, Symmetrical kA RMS, 60 Hz			Ultimate Rating Capacity[CD], Symmetrical kA RMS, 60 Hz				
	lbf·in.	n·m	lbf·in.	n·m	15 cycles (250 ms)	30 cycles (500 ms)	Copper Cable Size	15 cycles (250 ms)	30 cycles (500 ms)	60 cycles (1 s)	Maximum Copper Test Cable Size	
1	280	32	330	37	14	10	#2	18	13	9	2/0	200
2	280	32	330	37	21	15	1/0	29	21	14	4/0	250
3	280	32	330	37	27	20	2/0	37	26	18	4/0	300
4	330	37	400	45	34	25	3/0	47	33	23	250 kcmil	350
5	330	37	400	45	43	30	4/0	59	42	29	250 kcmil	400
6	330	37	400	45	54	39	250 kcmil or 2 2/0	70	49	35	350 kcmil	450
7	330	37	400	45	74	54	350 kcmil or 2 4/0	98	69	48	550 kcmil	550

[A] Withstand and ultimate short circuit properties are based on performance with surges not exceeding 20 % asymmetry factor (see 9.1 and 12.3.4.2).
[B] Yield shall mean no permanent deformation such that the clamp cannot be reused throughout its entire range of application.
[C] Ultimate rating represents a symmetrical current which the assembly or individual components shall carry for the specified time.
[D] Ultimate values are based upon application of Onderdonk's equation to 98 % of nominal circular mil area allowed by Specifications B 172 and B 173.

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ASTM F855-09 TABLE 2 - GROUNDING CABLE FERRULE AND ASSEMBLY RATINGS

TABLE 2 Ultimate Assembly Rating for High *X/R* Ratio Applications

Grade	Size	High Asymmetrical Test Requirements			
		Rating Rated Current (kA)	*X/R* = 30 1st Cycle Current Peak (kA) X 2.69	Last Cycle Current Peak (kA)	Test Duration (cycles)
1H	No. 2	15	41	23	15
2H	1/0	25	65	37	15
3H	2/0	31	84	46	15
4H	3/0	39	105	58	15
5H	4/0	47	126	70	15
6H	250 MCM	55	148	82	15
7H	350 MCM	68	183	101	15

NOTE 1—The above current values are based on electromechanical test values.
NOTE 2—Assemblies that have been subjected to these shall not be re-used.
NOTE 3—For use with currents exceeding 20 % asymmetry factor.
NOTE 4—See X4.7.2 for additional information.
NOTE 5—Alternate testing circuits are available for laboratories that cannot achieve the above requirements. See Appendix X4 for details.

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TEMPORARY PROTECTIVE GROUNDING EQUIPMENT

safety line

TEMPORARY PROTECTIVE GROUNDING EQUIPMENT

safety line

ADDITIONAL SCREW OPTIONS AVAILABLE WHERE DESIGNATED

B	E	EB	PG	QC	RT	T	TB
Bayonet	Stainless Steel Eye	Bronze Eye	Posigrip	Quick Change	Removable T-Handle	Stainless Steel T-Handle	Bronze T-Handle

Bayonet Ferrule

Installs/removes ground heads equipped with bayonet studs.

98B Quick Change 1 lbs. (0.45 kgs)

Add suffix "U" for Universal, "Q" for Quick Change

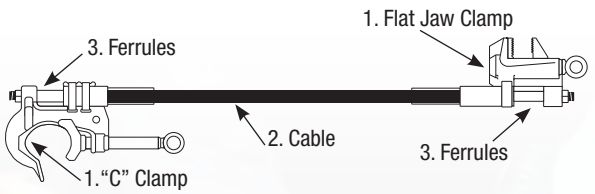
NOTE:

Salisbury by Honeywell's Safety Line grounding equipment offers solutions for all applications. This line of temporaty protective grounding equipment offers a wide variety of products to meet many individual needs. These products are available in complete assemblies or individual components.

PLEASE NOTE: When ordering assemblies of grounding products, please make sure all items included in the assembly are only from the product line found within this section. Including items from other grounding equipment sections of this book will add additional shipping time.

SAFETY LINE TEMPORARY PROTECTIVE GROUNDING EQUIPMENT

GROUND SET CHECKLIST



1. Specify the clamps. Two are required for a complete assembly. The maximum amperage of the clamp is designated by the ASTM grade of each clamp. Be sure that the clamp will meet or exceed the maximum amperage rating of the ground cable that it will be used with.

2. Specify the cable. Once the short circuit capacity of the system has been determined, choose the appropriate size cable. Specify the cable length and the color of the jacket desired.

3. Specify the ferrules. One pair of ferrules is required per assembly. The size of the ferrule must match the size of the cable that it will be used with. Specify copper or aluminum and shrouded or non-shrouded.

4. Specify the options. List any optional equipment that is desired. This can include hanger studs, contact studs, heat shrink tubing, markings, clear strain relief, etc.

Options also include a ground set label. These optional labels include the date of manufacture and are available upon request when ordering.

HOW TO SPECIFY TEMPORARY PROTECTIVE GROUNDING ASSEMBLIES.

A grounding assembly in its basic form consists of two clamps, one pair of ferrules and a length of cable.

The clamps can be identical to each other or quite different depending on each grounding application. Because of this, ground clamps are sold individually, not in pairs. Salisbury offers a wide variety of clamps including C-clamps, flat jaw clamps, socket clamps, duckbill clamps and specialty clamps for unique situations. Clamps are offered in either bronze or aluminum alloys and are manufactured to meet the current specifications of ASTM F 855.

To attach a clamp to the grounding cable requires the use of a ferrule. Ferrules are compressed on the strands of the cable to provide a low resistance permanent connection. The size of the ferrule is determined by the size of the cable. Ferrules are available in aluminum or plated copper. Plated copper ferrules can be used with either aluminum or bronze clamps. Two ferrules are required for each assembly therefore they are sold in pairs. Ferrules are manufactured to the specifications of ASTM F855.

The final component that makes up a ground set is the grounding cable itself. The size of the cable is dependent on the short circuit current capacity of the system being grounded. Once this is determined, only the length of the cable and the color of the jacket need to be specified to complete the assembly.

Salisbury by Honeywell is your complete source for grounding equipment and assemblies.

DUCK BILL GROUNDING CLAMPS

1.13" AND 1.63" SIZES

767E

768E

Open Duck Bill Clamp: Includes springs that keep jaw open for easy application.

760SRS6E

Strain Relief System

CAT. NO.	EYE & CLAMP DESCRIPTION	ASTM GRADE / CLASS	MAIN LINE RANGE	CONTINUOUS CURRENT RATING	WEIGHT EA. lbs. (kgs)
1.13" SMOOTH JAW ALUMINUM DUCK BILL CLAMPS - THREADED - W/O STRAIN RELIEF SYSTEM					
767E	Stainless Steel Eye, Smooth Jaw	3 / A	795 MCM ACSR to #6 .19" - 1.13" (4.8 mm - 28.7 mm) Dia.	300 RMS Amps, 60Hz	1.4 (0.63)
768E	Stainless Steel Eye, Open Clamp, Smooth Jaw	3 / A		300 RMS Amps, 60Hz	1.4 (0.63)
1.63" SMOOTH JAW ALUMINUM DUCK BILL CLAMPS - THREADED					
760006E	Stainless Steel Eye, Smooth Jaw	5 / A	954 MCM ACSR to #6 .19" - 1.63" (4.8 mm - 41 mm) Dia.	400 RMS Amps, 60Hz	3.0 (1.36)
760SR6E	Stainless Steel Eye, Smooth Jaw w/ strain relief system	5 / A		400 RMS Amps, 60Hz	2.2 (1.00)
760SR6PSE	Stainless Steel Eye, Smooth Jaw, w/ AL Parking Stand & Strain Relief System	5 / A		400 RMS Amps, 60Hz	1.6 (0.73)
760SRS6E	Stainless Steel Eye, Serrated Jaw w/ Strain Relief System	5 / B		400 RMS Amps, 60Hz	2.2 (1.00)
1.63" SMOOTH JAW ALUMINUM DUCK BILL CLAMPS - PIN - W/O STRAIN RELIEF SYSTEM					
761E	Stainless Steel Eye, Smooth Jaw w/ AL Parking Stand	3 / A	954 MCM ACSR to #6 .19" - 1.63" (4.8 mm - 41 mm) Dia.	300 RMS Amps, 60Hz	1.4 (0.63)

Additional screw options available. See page J-2 or contact your local Salisbury Representative for more information.

7640001E

7640001EB

7640CMS1E

760001E

760001EB

760CM1E

Strain Relief System

CAT. NO.	EYE & CLAMP DESCRIPTION	ASTM GRADE / CLASS	MAIN LINE RANGE	CONTINUOUS CURRENT RATING	WEIGHT EA. lbs. (kgs)
0.75" ALUMINUM "C" CLAMP - THREADED - W/O STRAIN RELIEF SYSTEM					
7640001E	Stainless Steel Eye, Smooth Jaw	5 / A	2 Ø MCM ACSR to #6 .19" - .75" (4.8 mm - 19 mm) Dia.	400 RMS Amps, 60Hz	1.0 (0.45)
7640001EB	Bronze Eye, Smooth Jaw	5 / A		400 RMS Amps, 60Hz	1.0 (0.45)
76400S1E	Stainless Steel Eye, Serrated Jaw	5 / B		400 RMS Amps, 60Hz	1.0 (0.45)
76400S1EB	Bronze Eye, Serrated Jaw	5 / B		400 RMS Amps, 60Hz	1.0 (0.45)
0.75" BRONZE "C" CLAMP - THREADED - W/O STRAIN RELIEF SYSTEM					
7640CM1E	Stainless Steel Eye, Smooth Jaw	5 / A	2 Ø MCM ACSR to #6 .19" - .75" (4.8 mm - 19 mm) Dia.	400 RMS Amps, 60Hz	3.0 (1.40)
7640CMS1E	Stainless Steel Eye, Serrated Jaw	5 / B		400 RMS Amps, 60Hz	3.0 (1.40)
1.25" ALUMINUM "C" CLAMPS - THREADED - W/O STRAIN RELIEF SYSTEM					
760001E	Stainless Steel Eye, Smooth Jaw	5 / A	900 MCM ACSR to #6 .19" - 1.25" (4.8 mm - 131.8 mm) Dia.	400 RMS Amps, 60Hz	1.0 (0.45)
760001EB	Bronze Eye, Smooth Jaw	5 / A		400 RMS Amps, 60Hz	1.0 (0.45)
760001RT	Stainless Steel Removable T, Smooth Jaw	5 / A		400 RMS Amps, 60Hz	1.0 (0.45)
760001T	Stainless Steel T-Handle, Smooth Jaw	5 / A		400 RMS Amps, 60Hz	1.0 (0.45)
760001PSE	Stainless Steel Eye, w/ Parking Stand, Smooth Jaw	5 / A		400 RMS Amps, 60Hz	1.3 (0.59)
760001CS	Stainless Steel Eye, w/ Steel Parking Stand, Smooth Jaw	5 / A		400 RMS Amps, 60Hz	1.3 (0.59)
7600S1EB	Bronze Eye	5 / B		400 RMS Amps, 60Hz	- -
1.25" BRONZE "C" CLAMPS - THREADED - W/O STRAIN RELIEF SYSTEM					
760CM1E	Stainless Steel Eye, Smooth Jaw	5 / A	900 MCM ACSR to #6 .19" - 1.25" (4.8 mm - 31.8 mm) Dia.	400 RMS Amps, 60Hz	3.3 (1.50)
760MS1E	Stainless Steel Eye, Serrated Jaw	5 / B		400 RMS Amps, 60Hz	3.3 (1.50)

"C" TYPE GROUNDING CLAMPS

2.13" AND 2.5" SIZES

76600S1PG

7660001E

7512B

CAT. NO.	EYE & CLAMP DESCRIPTION	ASTM GRADE / CLASS	MAIN LINE RANGE	CONTINUOUS CURRENT RATING	WEIGHT EA. lbs. (kgs)
2.13" ALUMINUM "C" CLAMP - THREADED - W/O STRAIN RELIEF SYSTEM					
7660001E	Stainless Steel Eye, Smooth Jaw	5 / A	3000 MCM ACSR to #6 .25" - 2.13" (6.4 mm - 54 mm) Dia.	400 RMS Amps, 60Hz	2.0 (0.91)
76600S1E	Stainless Steel Eye, Serrated Jaw	5 / B		400 RMS Amps, 60Hz	2.0 (0.91)
76600S1PG	Posigrip, Stainless Steel, Serrated Jaw	5 / B		400 RMS Amps, 60Hz	2.0 (0.91)
2.5" ALUMINUM "C" CLAMP - THREADED - W/O STRAIN RELIEF SYSTEM					
7512B	Stainless Steel Bayonet, Smooth Jaw	5 / A	2.0" I.P.S. to #6 0.5" - 2.5" (12.7 mm - 63.5 mm) Dia.	400 RMS Amps, 60Hz	4.0 (1.82)
7512E	Stainless Steel Eye, Smooth Jaw	5 / A		400 RMS Amps, 60Hz	4.0 (1.82)

Additional screw options available. See page J-2 or contact your local Salisbury Representative for more information.

7575FE

7542E

7542B

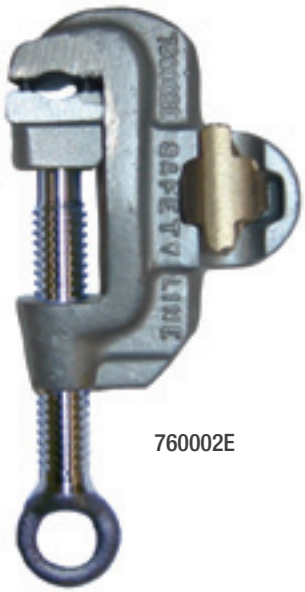
7541T

CAT. NO.	EYE & CLAMP DESCRIPTION	ASTM GRADE / CLASS	MAIN LINE RANGE	CONTINUOUS CURRENT RATING	WEIGHT EA. lbs. (kgs)
0.5" BRONZE BUS BAR ALLIGATOR CLAMPS - THREADED - W/O STRAIN RELIEF SYSTEM					
7575FE	Stainless Steel Eye, Smooth Jaw	2 / A	.0234" - .05" (6 mm - 12.7 mm) Dia.	250 RMS Amps, 60 Hz	2.0 (0.91)
7575FEST	Stainless Steel Eye-T, Smooth Jaw	2 / A		250 RMS Amps, 60 Hz	2.0 (0.91)
7575FGA	Grip-All, Stainless Steel, Smooth Jaw	2 / A		250 RMS Amps, 60 Hz	2.0 (0.91)
7575FPSE	Stainless Steel Eye, w/ Parking Stand, Smooth Jaw	2 / A		250 RMS Amps, 60 Hz	2.0 (0.91)
0.5" BRONZE BUS BAR ALLIGATOR CLAMPS WITH TEETH - THREADED - W/O STRAIN RELIEF SYSTEM					
7575FTGA	Stainless SteelGrip-All, Serrated Jaw	2 / B	0.234" - .05" (6 mm - 12.7 mm) Dia.	250 RMS Amps, 60 Hz	2.0 (0.91)
4.4" ALUMINUM BUS BAR CLAMPS - THREADED - W/O STRAIN RELIEF SYSTEM					
7541E	Stainless Steel Eye, Serrated Jaw	5 / B	0.31" - 4.25" (7.9 mm - 112 mm) Dia.	400 RMS Amps, 60Hz	2.0 (0.91)
7541T	Stainless Steel T-Handle, Serrated Jaw	5 / B		400 RMS Amps, 60Hz	2.0 (0.91)
4.4" ALUMINUM BUS BAR CLAMPS - PIN - W/O STRAIN RELIEF SYSTEM					
7542B	Stainless Steel Bayonet, Serrated Jaw	5 / B	0.31" - 4.25" (7.9 mm - 112 mm) Dia.	400 RMS Amps, 60Hz	2.0 (0.91)

Additional screw options available. See page J-2 or contact your local Salisbury Representative for more information.

GROUNDING CLAMPS FOR FLATS & ANGLES

1.4” AND 1.5” SIZES



760002E

760CM3E

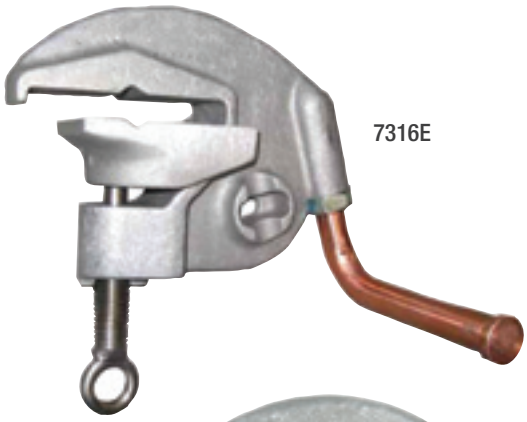
760CMSR3E

CAT. NO.	EYE & CLAMP DESCRIPTION	ASTM GRADE / CLASS	MAIN LINE RANGE	CONTINUOUS CURRENT RATING	WEIGHT EA. lbs. (kgs)
1.4” ALUMINUM FLAT FACE CLAMPS - PIN - W/O STRAIN RELIEF SYSTEM					
760002E	Stainless Steel Eye, Serrated Jaw	5 / B	0.19” - 1.4” (4.8 mm - 35.6 mm) Dia.	400 RMS Amps, 60Hz	1.0 (0.45)
760002T	Stainless Steel T-Handle, Serrated Jaw	5 / B		400 RMS Amps, 60Hz	1.0 (0.45)
1.4” BRONZE FLAT FACE CLAMPS - THREADED					
760CMSR3E	Stainless Steel Eye, W/ Strain Relief System Serrated Jaw	5 / B	0.19” - 1.4” (4.8 mm - 35.6 mm) Dia.	400 RMS Amps, 60Hz	4.5 (2.0)
1.5” ALUMINUM FLAT FACE CLAMPS - THREADED - W/O STRAIN RELIEF SYSTEM					
760003E	Stainless Steel Eye, Serrated Jaw	5 / B	0.19” - 1.5” (4.8 mm - 38 mm) Dia.	400 RMS Amps, 60Hz	1.2 (0.54)
1.5” BRONZE FLAT FACE CLAMPS - THREADED - W/O STRAIN RELIEF SYSTEM					
760CM3T	Stainless Steel T-Handle, Serrated Jaw	5 / B	0.19” - 1.5” (4.8 mm - 38 mm) Dia.	400 RMS Amps, 60Hz	3.2 (1.40)
760CM3E	Stainless Eye, Serrated Jaw	5 / B		400 RMS Amps, 60Hz	3.2 (1.40)

Additional screw options available. See page J-2 or contact your local Salisbury Representative for more information.

73025T

7315PG


7316E

7304DE

CAT. NO.	EYE & CLAMP DESCRIPTION	ASTM GRADE / CLASS	MAIN LINE RANGE	CONTINUOUS CURRENT RATING	WEIGHT EA. lbs. (kgs)
2.5" ALUMINUM ALL ANGLE CLAMPS - THREADED - W/O STRAIN RELIEF SYSTEM					
7315E	Stainless Steel Eye, Serrated Jaw	5 / B	2" I.P.S. to #4 0.25" - 2.5" (6.4 mm - 54 mm) Dia.	400 RMS Amps, 60Hz	4.3 (2.00)
7315PG	Bronze Posigrip, Serrated Jaw	5 / B		400 RMS Amps, 60Hz	4.3 (2.00)
2.5" ALUMINUM TOWER ANGLE CLAMPS - THREADED - W/O STRAIN RELIEF SYSTEM					
73025T	Stainless Steel T-Handle, Smooth Jaw	5 / A	0.3" - 1.6" (8-41 mm) Dia.	400 RMS Amps, 60Hz	2.5 (1.14)
4" ALUMINUM TOWER ANGLE CLAMPS - THREADED - W/O STRAIN RELIEF SYSTEM					
7304T	Stainless Steel T-Handle, Smooth Jaw	5 / A	0.25" - 0.94" (6-24 mm) Dia.	400 RMS Amps, 60Hz	3.3 (1.50)
4" ALUMINUM TOWER ANGLE CLAMPS - PIN + THREADED - W/O STRAIN RELIEF SYSTEM					
7314T	Stainless Steel T-Handle, Smooth Jaw	5 / A	0.25" - 0.94" (6-24 mm) Dia.	400 RMS Amps, 60Hz	3.3 (1.50)
4" ALUMINUM TOWER ANGLE CLAMPS WITH COPPER PARKING STAND - RATED FOR 49KA FOR 15 CYCLES W/ X/R=25					
7316E	Stainless Steel Eye, Smooth Jaw	Exceeds Grade 5	Outside Angle Clamp 4" max.	-	-
7304DE	Stainless Steel Eye, Smooth Jaw	Exceeds Grade 5	Inside Angle Clamp 4" max.	-	-

Additional screw options available. See page J-2 or contact your local Salisbury Representative for more information.

LARGE SUBSTATION BUS CLAMPS & CUTOUT CLAMPS

CUTOUT CLAMPS are applied with a clampstick into the bottom hinge contact of a cutout. This clamp can be used as part of a ground assembly or by using a contact stud using a standard grounding assembly with "C" clamps from the stud to ground.

7640002PSE

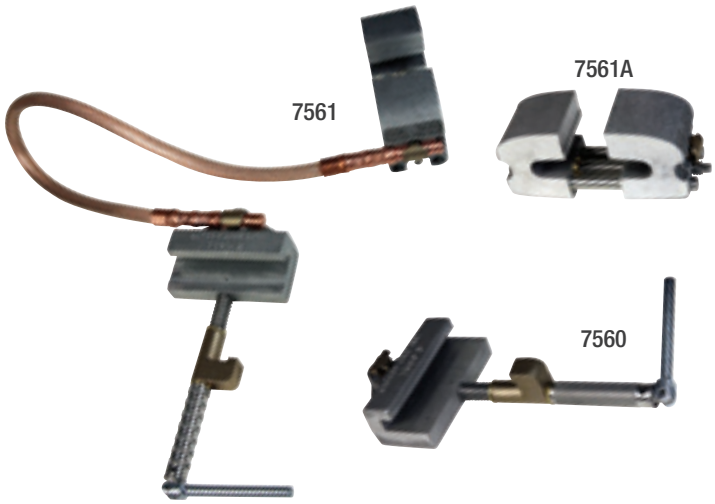
73065E

R101DE

7310E

CAT. NO.	EYE & CLAMP DESCRIPTION	ASTM GRADE / CLASS	MAIN LINE RANGE	CONTINUOUS CURRENT RATING	WEIGHT EA. lbs. (kgs)
4.5" ALUMINUM SUBSTATION BUS CLAMPS - THREADED - W/O STRAIN RELIEF SYSTEM					
7311E	Stainless Steel Eye, Smooth Jaw	5 / A	0.5" - 4.5" (12.7 mm - 114 mm) Dia.	400 RMS Amps, 60Hz	4.0 (1.82)
4.5" ALUMINUM SUBSTATION BUS CLAMPS - PIN - W/O STRAIN RELIEF SYSTEM					
7310E	Stainless Steel Eye, Smooth Jaw	5 / A	1/2" I.P.S., 0.5"-4.5" (12.7 mm -114 mm) Dia.	400 RMS Amps, 60Hz	4.0 (1.82)
6" ALUMINUM SUBSTATION BUS CLAMPS - THREADED - W/O STRAIN RELIEF SYSTEM					
R101DE	Stainless Steel Eye, Serrated Jaw	5 / B	1 Ø I.P.S., 0.5" - 6" (12.7 mm - 152 mm) Dia.	400 RMS Amps, 60Hz	4.0 (1.82)
7" ALUMINUM SUBSTATION BUS CLAMPS - THREADED - W/O STRAIN RELIEF SYSTEM					
73065E	Stainless Steel Eye, Smooth Jaw	5 / A	0.4" - 7" (10.2 mm - 178 mm) Dia.	400 RMS Amps, 60Hz	6.7 (3.00)
1.63" ALUMINUM CUTOUT CLAMPS - THREADED - W/O STRAIN RELIEF SLEEVE					
7640002E	Stainless Steel Eye, Smooth Jaw	3 / A	0.188" - 1.63" (4.77 mm - 41.4mm) Dia.	300 RMS Amps, 60Hz	1.0 (0.45)
7640002PSE	Stainless Steel Eye, w/ Al. Dbl. Parking Stand, Smooth Jaw	3 / A		300 RMS Amps, 60Hz	1.2 (0.5)
7640002PSEB	Bronze Eye, w/ Al. Dbl. Parking Stand, Smooth Jaw	3 / A		300 RMS Amps, 60Hz	1.2 (0.5)

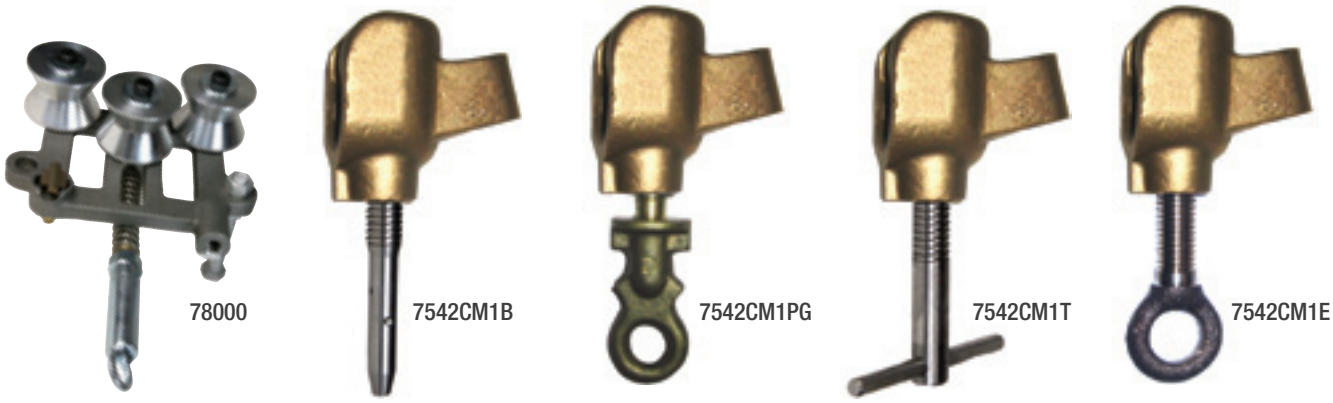
Additional screw options available. See page J-2 or contact your local Salisbury Representative for more information.



The **RUNNING POWER RAIL GROUND SET** is made up of 7561A power rail clamp and 7560 running rail clamp connected with three feet (91.4 cm) of 4/0 PVC-jacketed copper cable. Set includes one 10024BC, 1" x 24" (2.5 x 61 cm) fiberglass handle with bayonet to operate the power rail clamp.

The **BALL AND SOCKET GROUNDING SYSTEM** has a lightweight compact design and allows for variable angle accessibility. These clamps are made from bronze alloy and have a socket size of 1" (25.4 mm) with a threaded bore boss of 5/8"-11 UNC. There are fixed grounding points on the socket clamp.

See page K-3 for ball socket studs and accessories available.



CAT. NO.	EYE & CLAMP DESCRIPTION	ASTM GRADE / CLASS	MAIN LINE RANGE	CONTINUOUS CURRENT RATING	WEIGHT EA. lbs. (kgs)
5.75" ALUMINUM RUNNING RAIL CLAMP - PIN					
7560	Stainless Steel Toggle Handle, Smooth Jaw	5 / A	5" - 5.75"	400 RMS Amps, 60Hz	5.0 (2.27)
4" ALUMINUM POWER RAIL CLAMP - PIN					
7561A	Stainless Steel Bayonet, Smooth Jaw	5 / A	0" - 4"	400 RMS Amps, 60Hz	7.0 (3.17)
TRAVELING GROUND					
7561	Running Power Rail Ground Set	5	-	-	15 (6.80)
1.63" ALUMINUM TRAVELING GROUND CLAMPS - PIN/THREADED					
78000	Stainless Steel Eye, w/ Contact Stud, Smooth Jaw	3 / A	0.125" - 1.63"	300 RMS Amps, 60Hz	10 (4.54)

CAT. NO.	DESCRIPTION	ASTM GRADE	CONTINUOUS CURRENT RATING	WEIGHT EA. lbs. (kgs)
BALL & SOCKET SYSTEM				
7542CM1B	Smooth Jaw, Threaded, w/ Stainless Steel Bayonet	5	400	1.5 (.68)
7542CM1E	Smooth Jaw, Threaded, w/ Stainless Steel Eye	5	400	1.5 (.68)
7542CM1PG	Smooth Jaw, Threaded, w/ Bronze Posigrip	5	400	1.5 (.68)
7542CM1T	Smooth Jaw, Threaded, w/ Stainless Steel T-Handle	5	400	1.5 (.68)

Additional screw options available. See page J-2 or contact your local Salisbury Representative for more information.

THREADED & PIN FERRULES FOR SAFETY LINE SETS

For **THREADED FERRULES** (Terminals) the recommended torque applied during installation of jam nut for threaded ferrules is 20 ft.-lb. These threaded ferrules include one brass jam nut and one lock washer. For **PIN TERMINALS** the recommended torque applied during installation of pin ferrule eye bolts is 28 ft.-lb.

GROUNDING CABLES are made with extra flexible strand of soft drawn #30 AWG (.01") copper and are available in three different jackets.

CAT. NO.	CONDUCTOR SIZE	STYLE	STUD SIZE	BODY DIE CODES	SHROUD DIE CODES	LENGTH STRIPPED INCHES
COPPER SHROUDED						
760001CT40	#2	Threaded	5/8-11	U27RT	U27ART	1-5/8
7600011CT41	1/0	Threaded	5/8-11	T&B 66	B75-AH	1-15/16
7600011CT42	2/0	Threaded	5/8-11	T&B 66	B75-AH	2
76CT43	4/0	Threaded	5/8-11	T&B 66	B75-AH	2
760001PT40	#2	Pin	11/16	U27RT	U27ART	1-5/8
7600011PT41	1/0	Pin	11/16	T&B 66	B75-AH	1-15/16
7600011PT42	2/0	Pin	11/16	T&B 66	B75-AH	2
76PT43	4/0	Pin	11/16	T&B 66	B75-AH	2
Add suffix "T" to the catalog number when requesting tin-plated copper.						
COPPER UNSHROUDED						
98132022	#2	Threaded	5/8-11	U243	-	1-5/16
98132023	1/0	Threaded	5/8-11	U243	-	1-5/16
98132024	2/0	Threaded	5/8-11	T&B 60	-	1-5/16
98132025	4/0	Threaded	5/8-11	T&B 62	-	1-5/16
98132022P	#2	Pin	11/16	U243	-	1-5/16
98132023P	1/0	Pin	11/16	U243	-	1-5/16
98132024P	2/0	Pin	11/16	T&B 60	-	1-5/16
98132025P	4/0	Pin	11/16	T&B 62	-	1-5/16

SINGLE POINT DISTRIBUTION GROUNDING SET & BALL SOCKET 4-WAY CONNECTOR SETS

Grounding Sets

SETS FOR GROUNDED "Y" SYSTEMS provide all the equipment required to safely ground a variety of structures on grounded "Y" distribution systems. Factory assembled kits are for conductors ranging from #6 to 1-1/2" (3.8 cm) diameter, with serrated jaw "C" clamps with threaded terminals. All clamps are supplied with eye screws for installation with clampstick (not included). Other lengths and configurations are available.

STANDARD EQUIPOTENTIAL GROUNDING SETS provide all the equipment required to safely ground a variety of structures on delta distribution systems. Factory assembled kits are for conductors ranging from #6 to 1-1/2" (3.8 cm) diameter, with smooth or serrated jaw clamps with threaded terminals. All clamps are supplied with eye screws for installation with grip-all clampsticks (not included). Other lengths and configurations are available.

BALL SOCKET 4-WAY CONNECTOR SETS are designed for variable angle accessibility, three-phase grounding. It is supplied with three-foot leads and six feet of cable from a common connection to ground. Upper heads are ball socket clamps (7542CM1E). Lower ground head is a standard "C" type ground head (760001E) with a range of #6 to 1-1/4" (32 mm). Ball studs needed but not included.

75420010236

CAT. NO.	CABLE SIZE	FAULT DUTY 15 CYCLES	ASTM GRADE	WEIGHT EA. lbs. (kgs)
GROUNDED "Y" SYSTEMS				
763S011	2/0	27 kA	3	69 (31.3)
763S45	4/0	43kA	5	110 (49.9)
	Complete Grounded "Y" Set Includes 3 - 6' (1.83 m) Line Jumpers 1 - 12' (3.66 m) Line to Ground Jumper 1 - 60' (18.3 m) Ground Lead 1 - Pole Band 1 - Pole Band Extension 1 - Flat Face Clamp (760003E) 1 - Protective Bag			
EQUIPOTENTIAL DELTA				
7600011	2/0	27 kA	3	62 (28.1)
760045	4/0	43 kA	5	100 (45.4)
	Complete Delta Set Includes 2 - 6' (1.83 m) Line Jumpers 1 - 12' (3.66 m) Line to Ground Jumper 1 - 60' (18.3 m) Ground Lead 1 - Pole Band 1 - Pole Band Extension 1 - Flat Face Clamp (760003E) 1 - Protective Bag			
BALL SOCKET 4-WAY CONNECTOR SETS				
75420010236	#2	14.5 kA	1	9 (4.08)
75420011036	1/0	21 kA	2	12 (5.44)
75420012036	2/0	27 kA	3	14 (6.35)

Optional ground set label available upon request when ordering.

GROUNDING SETS

4 WAY CONNECTOR SET, 4 WAY CONNECTOR AND SQUEEZE-ONS

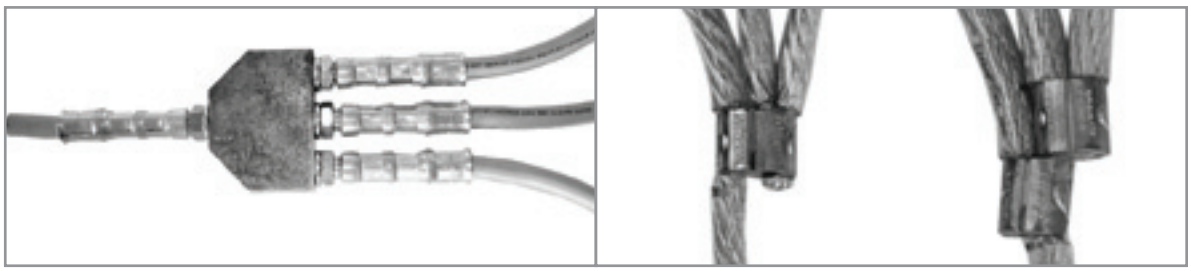
The **4-WAY CONNECTOR SETS** are made with #2 clear-jacketed, extra flexible cable, three 8-foot (2.44 m) leads from the heads to the common connection and one 50-foot (15.25 m) lead from the common connection to the ground connection. The grounding 4-way connector set has a fixture to raise and lower the set which can be easily tied onto the pole. The 752076 grounding 4-way connector set is also supplied with 3 fiberglass handles (10078BC) and a bag. The 752576 grounding 4-way connector set requires a clampstick. Sets come with bags. Other lengths and configurations available. Meets ASTM F 855 Grade 1 specifications. Maximum fault duty is 14.5 kA for 15 cycles.

4-WAY CONNECTORS are used to create a common connection between the conductor leads and the ground lead of a ground set.

Grounding Sets

76630882

CB36



CAT. NO.	DESCRIPTION	MAX. OPENING in. (cm)	ASTM GRADE	WEIGHT EA. lbs. (kgs)
4 WAY CONNECTOR SETS				
752076	4-Way Connector Set w/ "C" Type Clamps, Bayonet	1 1/4 (3.2)	1	32 (14.5)
752576	4-Way Connector Set w/ "C" Type Clamps, Eye	1 1/4 (3.2)	1	39 (17.9)

CAT. NO.	DESCRIPTION	QTY. REQUIRED	WEIGHT lbs. (kgs)
CONNECTORS FOR GROUND SETS			
76630882	Squeeze-on for #2 Cable	1	0.25 (0.113)
76630782	Squeeze-on for 1/0 - 4/0 Cable	2	0.25 (0.113)
CB36	4-Way Set Block , Copper	1	0.187 (0.085)
CA36	4-Way Set Block, Aluminum	1	0.125 (0.056)

QUICK GRIP GROUND CLAMPS & GROUNDING SETS

VG01

VG01GA

VG11034

QUICK GRIP CLAMPS are specifically designed and ideally suited for temporary grounding where spacing and orientation of components limit the use of traditional ground clamps. The Quick Grip Ground Clamp is available with a Grip-All eye or a Bayonet fitting for installation with a live line tool.

- Available in both the traditional style (VG0I) and a hotstick operated version (VG01GA and VG01B).
- Available in a single lead ground jumper or grounding set with 1, 3 or 4 leads for grounding of single or three-phase secondary terminals.
- Fitted with a copper overlay, riveted to the stationary jaw and connected to a grounding jumper with a one hole NEMA connector to assure a low resistance connection.
- The grounding set connection is made using standard copper compression connectors and all connections are covered with a heat-shrink tube to reduce fatigue at stress points.
- The locking jaw pliers are equally suited for flat or rounded terminals.

Optional flat jaw available.

CAT. NO. STANDARD	CAT. NO. FLAT JAW	DESCRIPTION	CABLE LENGTH FT. (M)	ASTM GRADE	WEIGHT lbs. (kgs)
QUICK GRIP GROUND CLAMPS & GROUNDING SETS, CLAMP OPENING: MIN. 0.125" - MAX. 1.5"					
VG01	**VGF01**	Locking Pliers, Cu Overlay	N/A	3	1.5 (0.68)
VG01B	**VGF01B**	Locking Pliers, Cu Overlay. Bayonet	N/A	3	1.6 (0.73)
VG01GA	**VGF01GA**	Locking Pliers, Cu Overlay. Grip-All	N/A	3	1.6 (0.73)
VG01033	**VGF01033**	Grounding Set, 3 Leads, 1/0 x 3' with VG01	9 (2.743)	3	10.5 (4.77)
VG01034	**VGF01034**	Grounding Set, 4 Leads, 1/0 x 3' with VG01	12 (3.657)	3	13.2 (5.99)
VG11013	**VGF11013**	Single Lead, 1/0 x 3' with VG01GA	3 (0.914)	3	3.7 (1.68)
VG11033	**VGF11033**	Grounding Set, 3 Leads, 1/0 x 3' with VG01GA	9 (2.743)	3	10.8 (4.9)
VG11034	**VGF11034**	Grounding Set, 4 Leads, 1/0 x 3' with VGF01F	12 (3.657)	3	13.6 (6.17)
VG11034B	**VGF11034B**	Grounding Set, 4 Leads, 1/0 x 3' with VG01GB	12 (3.657)	3	13.6 (6.17)

Optional ground set label available upon request when ordering.

GROUNDING SETS

INDUSTRIAL GROUND 4-WAY GROUND SETS

The **INDUSTRIAL GROUND SET** consists of three upper ground heads, one lower head, visible trifurcation, six-foot (1.83 m) leads to common connections and a twenty foot lead from common to ground connection. All ground heads (7541B and 7541T) will accept 4"x 4"(10.2 x 10.2 cm) copper or aluminum bus configurations.

Also includes a bag for installation at the main disconnect point. The 7551 includes a one-foot fiberglass handle (10012BC) for installing upper heads.

NOTE: *8106C clampstick (not included) must be used to apply 7551GA grounds. Other lengths available. Conductor size is 2/0 copper. Meets ASTM F-855 Grade 3 specifications. Maximum fault duty is 27kA for 15 cycles.*

LIGHTWEIGHT INDUSTRIAL GROUND SETS are designed for smaller conductor size applications. Clamps used include screws with eyes (GA attachments) for use with a clampstick. A #2 extra flexible copper ground cable is used throughout. The 75FGT0266 has six-foot (1.83m) leads to the common connection and a six-foot lead from the common connection to ground. The 7640244GA uses 4' (1.22 m) leads throughout. Sets include a bag. Other lengths and configurations are available.

7551

75FGT0266

CAT. NO.	DESCRIPTION	ASTM GRADE	WEIGHT lbs. (kgs)
INDUSTRIAL GROUND SETS			
7551	Industrial Ground Set - with Bayonet	1	35 (15.8)
7551GA	Industrial Ground Ser - with Grip-All	3	35 (15.8)

CAT. NO.	DESCRIPTION	CLAMP USED	FAULT DUTY 15 CYCLES	ASTM GRADE	WEIGHT EA. lbs. (kgs)
LIGHTWEIGHT INDUSTRIAL GROUND SETS					
7640244GA	Ultra Lightweight	7640001E	14.5 kA	1	13 (5.90)

Optional ground set label available upon request when ordering.

GROUND SETS include three upper heads and are easily and safely attached to the line with the fiberglass handles. The ground heads have a maximum opening of 1-3/4" (4.4 cm) and can be applied to angle irons, flat buses as well as on-line wires. A tight, four-point contact is made with the quick adjusting screw. The handles are easily removed when necessary. The lifting fixture provides ease when raising and lowering the set and eliminates hanging the entire ground set's weight on the conductor. Other lengths and configurations available.

PARKING STUDS provide a temporary location to attach ground clamps when raising or lowering multiple ground leads.

SHRINK TUBE for terminal connection strain relief fits #2 through 4/0 terminals and ground cable.

CAT. NO.	DESCRIPTION	WEIGHT lbs. (kgs.)
PARKING STUDS		
76000APS	Single Stud	0.187 (0.085)
SHRINK TUBE		
761ST	6" (15 cm) for Shrouded Ferrules	0.375 (0.170)

CAT. NO.	CABLE SIZE	FAULT DUTY 15 CYCLES	ASTM GRADE	WEIGHT EA. lbs. (kgs)
766FG	#2	14.5 kA	1	42 (19.0)
7661FG	1/0	21 kA	2	43 (19.5)

Standard Ground Set Includes
3 - Upper Heads
1 - Lower Head
1 - Leather, Lace and Lifting Ring
74 - Cable only with 8-Foot leads to common connection and 50' from common connection to ground connection
3 - 6'6" (1.98 m) Fiberglass Handles
1 - Bag for Handles
1 Bag for Ground Set

URD ASSEMBLY, NEUTRAL JUMPER ASSEMBLY & UNDERGROUND DEAD BREAK SET

The **CONCENTRIC NEUTRAL JUMPER ASSEMBLY** is used for bonding purposes on non-jacketed cable. It is usually installed across a portion of cable to be cut, repaired or spliced. The assembly is left in place until the concentric neutral is spliced. As a safety precaution, follow all of your organization's applicable rules and/or policies pertaining to faulted cable, spiking and grounding.

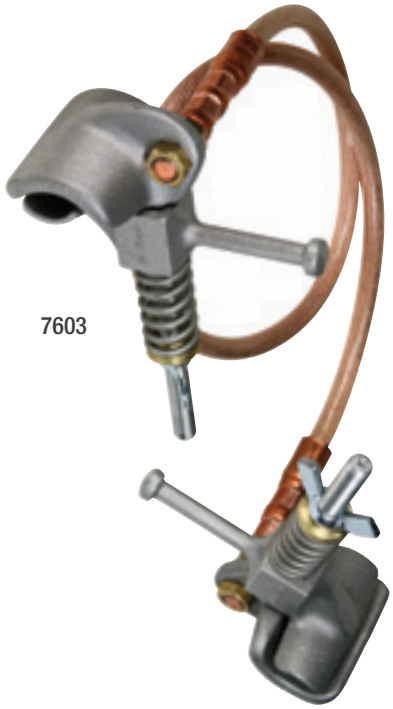
Made with two ground clamps and 4 feet (1.22 m) of 1/0 clear jacketed extra flexible copper cable, the concentric neutral ground clamp is spring pressured. The assemblies have a continuous current rating of 250 amps and fault rated to ASTM Grade 1, 14 KA for 15 cycles. Other lengths are available. Bag not included.

The components of the **UNDERGROUND DEAD BREAK GROUND SET** provide safe and simple grounding methods on padmount transformers or any related URD equipment. These grounds can be ordered in complete sets or individual components. The jumpers are made with 6 foot (1.83m) lengths of #2, clear-jacketed, extra flexible cable. Clamps (7640001E) supplied include an eye for a grip-all insulating stick application.

The **URD GROUNDING ASSEMBLY** is used for underground personal protective grounding elbow used for grounding pad-mounted equipment, switches and transformers when performing de-energized maintenance on URD distribution systems, and draining DC capacitive charges from de-energized URD cables.

CAT. NO.	DESCRIPTION	FOR CABLE DIAMETER in. (cm)	WEIGHT lbs. (kgs)
CONCENTRIC NEUTRAL JUMPER ASSEMBLY			
7603	Assembly	3/4 to 2 (1.9 - 5.1)	12 (5.44)
7603GA	Grip-All Assembly	3/4 to 2 (1.9 - 5.1)	12 (5.44)
PARTS			
7603C	Clamp with Wing Nut		4 (1.81)
7603CGA	Clamp with Grip-All		4 (1.81)
7604C	Clamp with Wing Nut		4 (1.81)
7604CGA	Clamp with Grip-All		4 (1.81)
15 KV UNDERGROUND DEAD BREAK GROUND SET			
LOCAL LOOP			
764156STGESO	Full Assembly with Bag		21 (9.52)
ASSEMBLY INCLUDES:			
764156234H	3 - Ground Jumper, 6' (1.83 m)		6 (2.72)
764000ST	3 - Ground Stud for Low Profile Transformer		1 (0.45)
764015GE	3 - 15 kV Ground Elbow		1 (0.45)
764015SO	3 - 15 kV Ground Standoff with Spring Bail		1 (0.45)
B1715	1 - Protective Bag		2 (0.91)
UNDERGROUND GROUNDING ASSEMBLY			
ES10Y615LB	Single, 15 kV		9 (4.08)
ES1Y21015LB	Set, 15 kV		22 (9.98)
ES10Y625LB	Single, 25 kV		10 (4.53)
ES1Y21025LB	Set, 25 kV		23 (10.43)

Optional ground set label available upon request when ordering.



7603

ES10YB615LB

764156STGESO

EB100615

The **SINGLE GROUNDED BUSHING SET** is a single lead made from 6 feet (1.83 m) of 1/0 cable. The bushing set consists of 3 bushing assemblies connected together with 3-foot (0.92 m) leads to a common connection, and 10 feet (3.05 m) from common connection to ground. The conductor is made of 1/0 clear jacketed copper stranded cable. The ground clamp (7640001E) can be applied with a clampstick. Sets come complete with bag; single leads do not. All sets are rated for 10 kA for 10 cycles. Other lengths and configurations are available.

EB1021015

GROUND BUSHINGS WITH CONNECTIONS (parking stands for 'J' boxes or padmounts) provide a safe, convenient ground for elbows and a "positive" test to ensure a de-energized elbow.

EB1021015LB

The **ELBOW GROUNDING SET** includes a single lead made from 6 feet (1.83 m) of 1/0 cable. This set consists of 3 elbow assemblies connected together with 3-foot (0.92 m) leads to a common connection, and 10-feet (3.05 m) from a common connection to ground. The conductor is made of 1/0 clear jacketed copper stranded cable. A ground clamp (7640001E) can be applied with a clampstick. Sets are rated for a maximum fault current of 10,000 amps for 10 cycles. Sets come complete with bag; single leads do not. Other lengths and configurations are available.

764015SO

764150025LSO

CAT. NO.	DESCRIPTION	WEIGHT lbs. (kgs)
200 AMP ELBOW GROUNDING SETS		
DEAD BREAK		
ES100615	Single, 15 kV	8 (3.63)
ES1021015	Set, 15 kV	20 (9.30)
LOAD BREAK		
ES100615LB	Single, 15 kV	9 (4.08)
ES1021015LB	Set, 15 kV	22 (9.98)
ES3LY635	Set, 35 kV	23 (10.43)
ES100625LB	Single, 25/35 kV	10 (4.53)
ES1021025LB	Set, 25/35 kV	23 (10.43)
200 AMP GROUNDED BUSHING SETS		
DEAD BREAK		
EB100615	Single, 15 kV	8 (3.63)
EB1021015	Set, 15 kV	20 (9.30)
LOAD BREAK		
EB100615LB	Single, 15 kV	9 (4.08)
EB1021015LB	Set, 15 kV	22 (9.98)
EB100625LB	Single, 25 kV	10 (4.53)
EB1021025LB	Set, 25 kV	23 (10.43)
200 AMP GROUNDED BUSHINGS WITH CONNECTIONS		
DEAD BREAK		
764015SO	15 kV	1 (0.45)
LOAD BREAK		
764150015LSO	15 kV	2 (0.91)
764150025LSO	25 kV	4 (1.81)

Optional ground set label available upon request when ordering.

ES1021015LB

SALISBURY by Honeywell

ASTM F855-09 TABLE 1 - PROTECTIVE GROUNDING CLAMP RATINGS

TABLE 1 Protective Ground Cable, Ferrule, Clamp and Assembly Ratings for Symmetrical Current

Grade	Grounding Clamp Torque Strength, min				Short Circuit Properties[A]							Continuous Current Rating, A RMS, 60 Hz
	Yield[B]		Ultimate		Withstand Rating, Symmetrical kA RMS, 60 Hz			Ultimate Rating Capacity[CD], Symmetrical kA RMS, 60 Hz				
	lbf·in.	n·m	lbf·in.	n·m	15 cycles (250 ms)	30 cycles (500 ms)	Copper Cable Size	15 cycles (250 ms)	30 cycles (500 ms)	60 cycles (1 s)	Maximum Copper Test Cable Size	
1	280	32	330	37	14	10	#2	18	13	9	2/0	200
2	280	32	330	37	21	15	1/0	29	21	14	4/0	250
3	280	32	330	37	27	20	2/0	37	26	18	4/0	300
4	330	37	400	45	34	25	3/0	47	33	23	250 kcmil	350
5	330	37	400	45	43	30	4/0	59	42	29	250 kcmil	400
6	330	37	400	45	54	39	250 kcmil or 2 2/0	70	49	35	350 kcmil	450
7	330	37	400	45	74	54	350 kcmil or 2 4/0	98	69	48	550 kcmil	550

[A] Withstand and ultimate short circuit properties are based on performance with surges not exceeding 20 % asymmetry factor (see 9.1 and 12.3.4.2).
[B] Yield shall mean no permanent deformation such that the clamp cannot be reused throughout its entire range of application.
[C] Ultimate rating represents a symmetrical current which the assembly or individual components shall carry for the specified time.
[D] Ultimate values are based upon application of Onderdonk's equation to 98 % of nominal circular mil area allowed by Specifications B 172 and B 173.

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ASTM F855-09 TABLE 2 - GROUNDING CABLE FERRULE AND ASSEMBLY RATINGS

TABLE 2 Ultimate Assembly Rating for High *X/R* Ratio Applications

Grade	Size	High Asymmetrical Test Requirements			
		Rating Rated Current (kA)	*X/R* = 30 1st Cycle Current Peak (kA) X 2.69	Last Cycle Current Peak (kA)	Test Duration (cycles)
1H	No. 2	15	41	23	15
2H	1/0	25	65	37	15
3H	2/0	31	84	46	15
4H	3/0	39	105	58	15
5H	4/0	47	126	70	15
6H	250 MCM	55	148	82	15
7H	350 MCM	68	183	101	15

NOTE 1—The above current values are based on electromechanical test values.
NOTE 2—Assemblies that have been subjected to these shall not be re-used.
NOTE 3—For use with currents exceeding 20 % asymmetry factor.
NOTE 4—See X4.7.2 for additional information.
NOTE 5—Alternate testing circuits are available for laboratories that cannot achieve the above requirements. See Appendix X4 for details.

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TEMPORARY PROTECTIVE GROUNDING EQUIPMENT & ACCESSORIES

ASTM TABLES

ASTM INTERNATIONAL
Standards Worldwide

SALISBURY
by Honeywell

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	Yield[B]		Ultimate		Withstand Rating, Symmetrical kA RMS, 60 Hz			Ultimate Rating Capacity[CD], Symmetrical kA RMS, 60 Hz				
	lbf·in.	n·m	lbf·in.	n·m	15 cycles (250 ms)	30 cycles (500 ms)	Copper Cable Size	15 cycles (250 ms)	30 cycles (500 ms)	60 cycles (1 s)	Maximum Copper Test Cable Size	
1	280	32	330	37	14	10	#2	18	13	9	2/0	200
2	280	32	330	37	21	15	1/0	29	21	14	4/0	250
3	280	32	330	37	27	20	2/0	37	26	18	4/0	300
4	330	37	400	45	34	25	3/0	47	33	23	250 kcmil	350
5	330	37	400	45	43	30	4/0	59	42	29	250 kcmil	400
6	330	37	400	45	54	39	250 kcmil or 2 2/0	70	49	35	350 kcmil	450
7	330	37	400	45	74	54	350 kcmil or 2 4/0	98	69	48	550 kcmil	550

[A] Withstand and ultimate short circuit properties are based on performance with surges not exceeding 20 % asymmetry factor (see 9.1 and 12.3.4.2).
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2H	1/0	25	65	37	15
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5H	4/0	47	126	70	15
6H	250 MCM	55	148	82	15
7H	350 MCM	68	183	101	15

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21192

21191

24082

21228

24087

21846

7542905BST

21236

7542123BS

7542123BST

7542K

7542001BSF

The **BALL STUDS** and the **OFFSET NEMA PAD BALL STUDS** are made from tin-plated copper alloy or copper. They each have a 1" (25.4 mm) diameter ball. Recommended installation torque of 300 in. lbs. The short stud is used conventionally. The long stud can also be used as the grounding point for "C" or Duck bill clamps that have a jaw width of 2.75" or less. The Offset Nema Pad Ball Stud has the standard Nema bolt hole spacing and also comes in both long and short lengths.

The **BALL STUD COVER** is made from orange SALCOR® which allows for multiple angle application when installed using a clampstick.

CAT. NO.	DESCRIPTION	DIMENSIONS in. (mm) OAL	THREAD	SHANK	ASTM GRADE	WEIGHT EA. lbs. (kgs)
THREAD SIZE - 1/2" - 13 UNC - 2A						
21191	Ball Stud Short, Tin-Plated Copper Alloy	4.38 (111)	2.12 (54)	1 (25)	5	.53 (.24)
7542121BS	Ball Stud, Copper Alloy	4.7 (119)	2.25 (57)	1 (25)	5	.56 (.25)
21192	Ball Stud Long, Tin-Plated Copper Alloy	6.13 (156)	2.12 (54)	2.75 (70)	5	.81 (.37)
7542123BST	Ball Stud, Tin-Plated Copper Alloy	6.78 (172)	2.5 (64)	2.875 (73)	5	.81 (.37)
7542123BS	Ball Stud, Copper Alloy	6.78 (172)	2.5 (64)	2.875 (73)	5	.81 (.37)
7542905BST	900 Ball Stud, Tin-Plated Copper Alloy	7 (178)x 5.2 (132)	2.12 (54)	5.5 (140), 2 (51)	3	1.25 (.57)
THREAD SIZE - 3/8" - 16 UNC - 2A						
7542385BST	Ball Stud, Tin-Plated Copper Alloy	9 (229)	2.12 (54)	5.5 (140)	5	1 (.45)
NEMA PADS AND POTHEAD STUD						
21846	90° Offset Nema Pad, Tin-Plated Copper Alloy	5.75 (147)	-	2.7 (69)	5	1 (.45)
21228	Offset NEMA Pad Short, Tin-Plated Copper Alloy	5.14 (131)	-	1 (25)	5	.84 (.38)
24087	Offset NEMA Pad Long, Tin-Plated Copper Alloy	6.9 (175)	-	2.7 (69)	5H	1 (.45)
INTERNAL THREAD - 1/2" - 13 UNC - 2A						
24082	Internal Thread Ball Stud, Tin-Plated Copper Alloy	3.85 (98)	1.5 (38)	.75 (19)	5	.54 (.25)
7542K	3/4" Ground Knob, Brass	1.4 (36)	1 (25)	.75 (19)	3	.38 (.17)
7542001BSF	Female Ball Stud, Brass	-	1.5 (38)	1 (25)	2	.88 (.40)
21236	Cover for Ball Stud	3 (76)	n / a	n / a	n / a	.09 (.04)

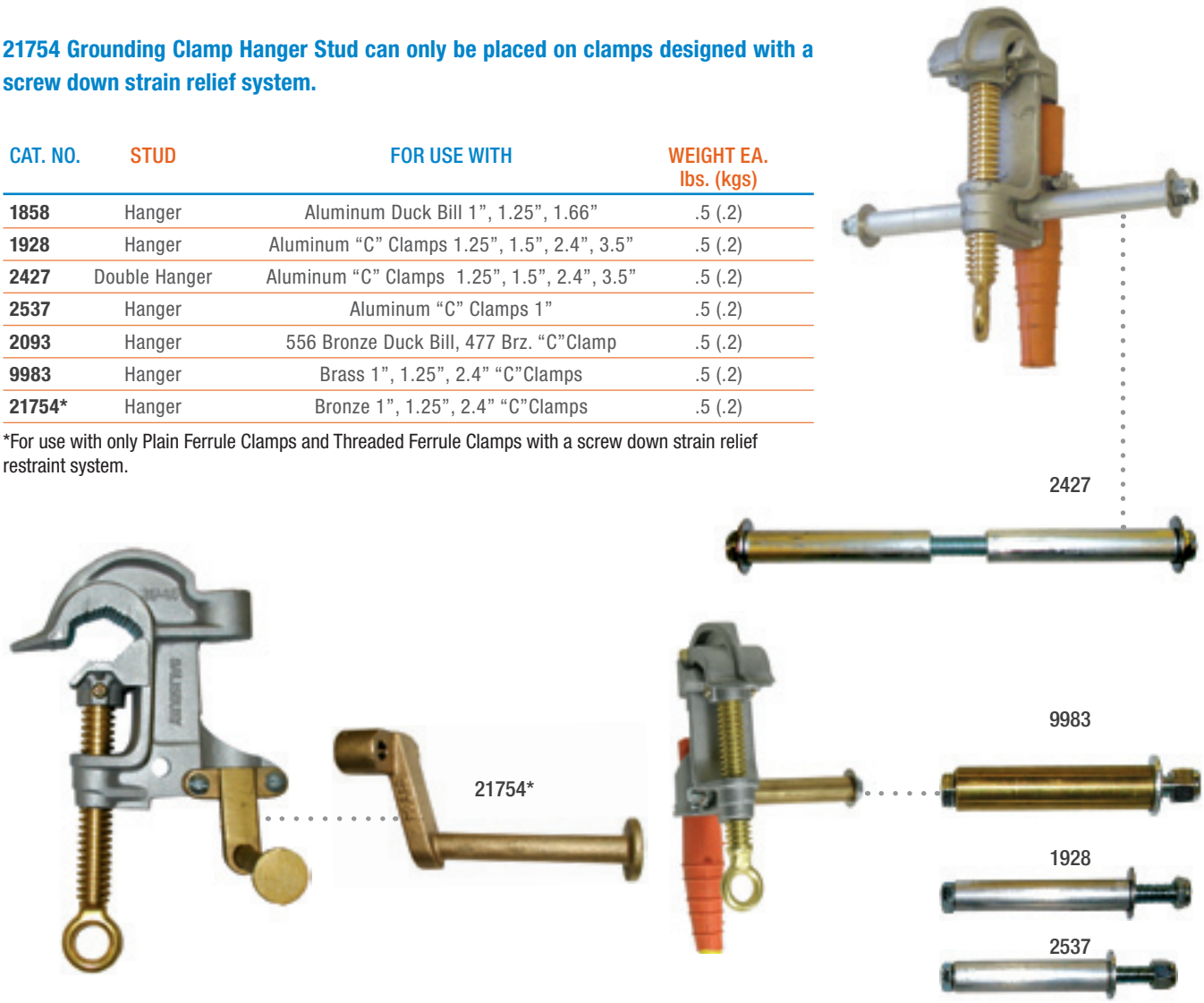
GROUNDING CLAMP HANGER STUDS

HANGER STUDS are designed to be used with all “C” and Duck Bill ground clamps. Hanger Studs are used to hold one clamp of a set while the other is being installed on the de-energized line. Hanger Studs are not designed or tested to carry current.

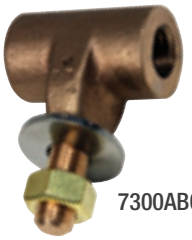
21754 Grounding Clamp Hanger Stud can only be placed on clamps designed with a screw down strain relief system.

CAT. NO.	STUD	FOR USE WITH	WEIGHT EA. lbs. (kgs)
1858	Hanger	Aluminum Duck Bill 1”, 1.25”, 1.66”	.5 (.2)
1928	Hanger	Aluminum “C” Clamps 1.25”, 1.5”, 2.4”, 3.5”	.5 (.2)
2427	Double Hanger	Aluminum “C” Clamps 1.25”, 1.5”, 2.4”, 3.5”	.5 (.2)
2537	Hanger	Aluminum “C” Clamps 1”	.5 (.2)
2093	Hanger	556 Bronze Duck Bill, 477 Brz. “C”Clamp	.5 (.2)
9983	Hanger	Brass 1”, 1.25”, 2.4” “C”Clamps	.5 (.2)
21754*	Hanger	Bronze 1”, 1.25”, 2.4” “C”Clamps	.5 (.2)

*For use with only Plain Ferrule Clamps and Threaded Ferrule Clamps with a screw down strain relief restraint system.



760001HDL



7300ABC

7310G

7300AET

The **"T" HANDLE ADAPTER** allows the user to quickly and easily change an eye screw into a "T" handle screw.

ADAPTERS are used on any pin type ground clamps. Meets ASTM F-855 Grade 5 specifications. Maximum fault duty is 43 kA for 15 cycles.

CAT. NO.	DESCRIPTION	WEIGHT lbs. (kgs)
ADAPTERS		
7300ABC	Pin to Threaded Adapter	0.5 (0.21)
7310G	Eye Bolt Assembly	0.5 (0.21)
7300AET	Pin to Threaded Adapter	0.5 (0.21)
"T" HANDLE ADAPTER		
760001HDL	"T" Handle Adapter	0.5 (0.21)

HCR0250

TRUCK GROUNDING REELS are designed to provide a secure and efficient way to ground trucks and equipment when working on or near energized lines. Bolt-down design allows easy removal of reels for installation on vehicles. Heavy duty construction for rugged field use. Independently tested to 14.5 kA for 30 cycles. Reels with factory installed cable include 6-foot equal gauge and frame bonding jumper. Other end must be attached to frame of vehicle.

CAT. NO.	CABLE LENGTH	CABLE SIZE	FAULT DUTY 15 CYCLES	ASTM F-855 GRADE	WEIGHT lbs. (kgs)
TRUCK GROUNDING REEL SPRING REWIND, 760001E CLAMP					
HSCR0250	50' (15.2 m)	#2	14.5 kA	1	42 (19.0)
HSCR1040	40' (12.2 m)	1/0	21 kA	2	48 (21.7)
HSCR1050	50' (15.2 m)	1/0	21 kA	2	53 (24.0)
TRUCK GROUNDING REEL HAND REWIND, 760001E CLAMP					
HCR0240	40' (12.2 m)	#2	14.5 kA	1	36 (16.3)
HCR0250	50' (15.2 m)	#2	14.5 kA	1	39 (17.7)
HCR1050	50' (15.2 m)	1/0	21 kA	2	51 (23.1)
REELS WITHOUT CABLE					
HCR1	Reel only, hand rewind		21 kA	2	25 (11.3)

NOTE:

- Reel model HCR1 will store a maximum length of 150 feet (45.8 m) of #2 cable and 85 feet (25.9m) of 1/0 cable.

POLE MOUNTED CONTACT BARS are designed to act as a convenient common point for electrical connections and also as a hanger for grounding sets during installation and removal. Supplied with a chain and an adjustable wheel binder that will accommodate most common pole diameters. Catalog #20880 has one 5/8-11UNC tapped hole for the permanent connection of a ground lead. The Salisbury 21840 is a lighter-weight pole mounted contact bar.

The **POLE BAND** is lightweight and easy to install. It is a required component of equiotential zone grounding systems.

TRUCK GROUNDING KIT contains 2/0 cable, 24 inches (61 cm) long, with a chassis/frame attachment on one end and a grounding stud on the other for Cat. No. 7542TGK. Brings body and chassis to the same ground potential. Other lengths are available. Meets ASTM F-855 Grade 3 specifications.

The Salisbury 2103 **SCREW TYPE TEMPORARY GROUND ROD** is used when an adequate system ground is not available. The design incorporates a copperweld rod with bronze fittings screwed and pinned on both ends. The terminal on the handle is designed to accept cables equipped with a 5/8-11 UNC threaded ferrule. As an alternative, a "C" clamp may also be attached directly to the ground rod shaft.

2103

9998

21840

760001PB

7542TGK

760045PB

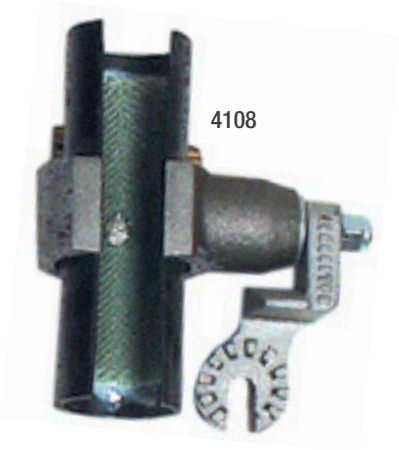
CAT. NO.	DESCRIPTION	WEIGHT lbs. (kgs)
TRUCK GROUNDING KIT		
7542TGK	Truck Grounding Kit w/ Stud	2 (0.91)
SCREW GROUND ROD		
2103	75" (1.9m)long	8 (3.6)

CAT. NO.	DESCRIPTION	FAULT DUTY 15 CYCLES	GRADE	WEIGHT lbs. (kgs)
POLE BAND				
760001PB	Aluminum Bar	27 kA	3	4 (1.81)
760045PB	Copper Bar	43 kA	5	5 (2.27)

CAT. NO.	ASTM GRADE	DESCRIPTION	WEIGHT EA. lbs. (kgs)
POLE MOUNTED CONTACT BARS			
9998	5	Contact Bar No Connection 40" Chain w/ Adjustable Wheel Binder	9.1 (4.1)
21840	5	Contact Bar No Connection 40" Chain w/ Adjustable Wheel Binder	7 (3.3)
20880	5	Contact Bar One Connection 40" Chain w/ Adjustable Wheel Binder	9.1 (4.1)

4110

4337



4108

4113

4112

4111

TUBULAR BRUSHES are preferred when rubber gloving or when working on de-energized conductors. The steel bristles are internal to prevent damaging rubber gloves. The 2.5" tubular brush is used in confined areas such as between two connectors or clamps.

The **"V" TYPE WIRE BRUSHES** are available with epoxy-coated handle or universal attachment that can be used with hotsticks. Replacement brushes are available.

CAT. NO.	DESCRIPTION in. (mm)	WEIGHT EA. lbs. (kgs)
4108	Universal Tubular	1.3 (0.6)
4110	5" (127)Tubular	0.4 (0.2)
4111	Universal "V" Line Cleaner	1 (0.5)
4112	"V" Type handle w/ brushes	1.2 (0.6)
4113	"V" Type carton of 10 replacement brushes	3 (1.4)
4337	2.5" (63.5)Tubular	0.2 (0.1)

GROUND ELBOW & ACCESSORIES

200 AMP & 600 AMP

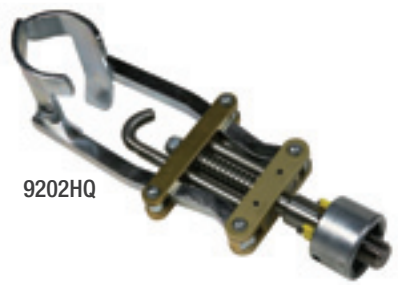
The **200 AMP GROUND ELBOW WITH CONNECTIONS** may be used on single phase or three phase installations. Grounding sets come complete with extra flexible cable and connections. Elbows are rated for a maximum fault current of 10,000 amps for 10 cycles. All the clamps come with grip-all eyes for use with a clampstick.

764150015LGE

The **200 AMP AND 600 AMP ELBOW CONNECTOR TOOLS** are designed to fit all of the 15 kV and 25 kV rated loadbreak and non-loadbreak elbows. The jaws are contoured to provide a positive grip and not interfere with the contact interface area, allowing the elbow to operate properly while connecting or disconnecting.

9206GAS

The **INSULATED ELBOW REMOVER** is used by inserting a hook in the loop on the back of any elbow while applying a hammering action. This tool can also be used to seal elbows when installing them. Other lengths may be available upon request.



9202HQ

CAT. NO.	DESCRIPTION	WEIGHT lbs. (kgs)
200 AMP GROUND ELBOW WITH CONNECTIONS DEAD BREAK		
764015GE	15 kV	1 (0.45)
200 AMP GROUND ELBOW WITH CONNECTIONS TLOAD BREAK		
764150015LGE	15 kV	1 (0.45)
764150025LGE	25/35 kV Small Interface	2 (0.91)
200 AMP ELBOW CONNECTOR TOOL		
9202Q	Quick Change Fitting	2 (0.91)
9202GA	Grip-All Fitting	2 (0.91)
600 AMP ELBOW CONNECTOR TOOL		
9206Q	Quick Change	2 (0.91)
9206U	Universal	2 (0.91)
9206GA	Grip-All	2 (0.91)
9206GAS	With Insert Pair for 200 AMP Elbows	2 (0.91)
9202I	Insert Pair	8 (0.22)
INSULATED ELBOW REMOVER		
9206HIP	6' (1.83 m) with 9202HQ	11 (4.99)
9208HIP	8' (2.44 m) with 9202HQ	12 (5.44)
PARTS		
9202HQ	Elbow Remover Head with Quick Change	2 (0.91)
12524HH	Insulated Stick for 2' (0.61 m) Remover	2 (0.91)
12548HH	Insulated Stick for 4' (1.22 m) Remover	3 (1.36)

17250003

17250004

1735

5900CS

The 1712 and 1725 grounding stud series are used for grounding when the fault duty on the 600 amp Deadbreak elbow/ "T" body exceeds the rating of a 200 amp grounding elbow, as rated by IEEE 386 at 10kA for 10 cycles. Grounding studs consist of a 10" conductor stud with male or female threads for replacing 200 amp bushing wells and/or insulating plugs and a ground clamp bar for use with regular grounding jumper assemblies. After the cable has been proven de-energized, the stud is installed and a ground is applied.

The **1725001** grounding stud is made of 7/8" diameter copper with a 5/8-11 female thread on one end and a 1" (2.5 cm) hex drive on the other end. This stud is fitted with a tapered guide and a 3/8" diameter copper cross bar perch used for installing the ground. A socket drive is used for installation. For application, use catalog number 5900CS captured socket.

The **17250003, 17250004** and **17250005** are steel grounding plugs and studs with one 5/8" diameter perch. The perch has a sturdy lip to ensure clamp contact during faults. These models are supplied with grip-all attachments for application with insulated clampstick tools and connectors. These studs are used for grounding equipment such as non load-break connectors or power distribution connectors.

The **1735** grounding stud is made of 7/8" diameter copper with a 5/8-11 female thread on one end and a 1" (2.5 cm) hex drive on the other end for application with a socket drive. The cross bar perch is 3/4" diameter copper, providing heavy duty service. This ground plug also comes equipped with a tapered guide and the yellow protective cap.

CAT. NO.	DESCRIPTION	THREADS	MATERIAL (Stud)	ASTM F855 GRADE	ASTM F855 FAULT DUTY 15 Cycles	WEIGHT lbs. (kgs)
UNDERGROUND GROUNDING STUDS						
1725001	Copper Electrode, Female, Hex Drive, w/Guide	5/8-11 (F)	Cu	1	17 kA	2.2 (1.0)
17250003	Steel Electrode, Male, Grip-All, w/Guide	5/8-11 (M)	Steel	3	27 kA	2.0 (0.9)
17250004	Steel Electrode, Female, Grip-All, w/Guide	5/8-11 (F)	Steel	3	27 kA	2.0 (0.9)
17250005	Steel Electrode, Male, Grip-All	3/4-10 (M)	Steel	3	27 kA	1.8 (0.8)
1735	Copper Electrode, Female, Hex Drive, w/Guide	5/8-11 (F)	Cu	4	35 kA	3.5 (1.6)
5900CS	Captured Socket for 1725001 and 1735	-	-	-	-	-

UNDERGROUND TOOLS & GROUND ADAPTER DEVICE KIT

The **PADMOUNT SWITCH HOOK** is designed to operate the secondary switch on a padmount transformer. Also used as a standard switch hook for cutouts. Weight - 1 lbs. (0.45 kgs).

The **UNDERGROUND SPANNER WRENCH** is designed for installing and removing the connector bushing, and reducing bushing inserts. Can be used when the conductor is de-energized, but not grounded. The tool is used one way for installation, and turned over for removal. A universal toggle and spring is used with this tool and should be ordered separately (5900Q). Weight -1 lbs. (0.45 kgs).

The **PLUG INSTALLING TOOL** is used to install or remove 600 amp reducing plugs. Weight:2 lbs. (0.91 kgs).

The **GROUND ADAPTER DEVICE KIT** enables application of personal grounds up to a 600 amp separable pre-molded component system when used with a clampstick.

1720

190UGU

172300

76174459

CAT. NO.	DESCRIPTION
PADMOUNT SWITCH HOOK	
190UGQ	With Quick Change
190UGU	With Universal
UNDERGROUND SPANNER WRENCH	
1720	For 600 AMP Connector
PLUG INSTALLING TOOL	
172300	1/2" (1.3 cm) Female Square Drive
172300Q	Quick Change

CAT. NO.	DESCRIPTION	QTY	WEIGHT lbs. (kgs)
GROUND ADAPTER DEVICE KIT - NON-LOAD BREAK			
76174459	Ground Adapter Device Kit with Bag	1	15 (6.8)
EACH SET INCLUDES THE FOLLOWING:			
44C	Ratchet Wrench with Ball and Ring	1	2 (0.91)
5900Q	Universal Toggle and Spring	1	1 (0.45)
5900CS	Captured Socket with Friction Balls	1	8 oz (0.22 kgs)
9206GAS	Elbow Connector Tool with Inserts	1	2.5 (1.1)
1725001	Ground Stud	3	2.5 (1.1)
B1715	Protective Bag with Zipper	1	1 (0.45)

24320

2607

The **HYDRAULIC CABLE SPIKE** is designed to verify that underground cable, up to 1000 MCM, is de-energized before cutting, repairing, splicing or replacing.

The cable spike, a solid brass body with a stainless steel piercing tip, is fitted to hydraulic compression tools so that the cable can be accurately spiked from a safe distance. An anodized aluminum insert is included to position the cable precisely.

The **CABLE PENETRATING GROUND CLAMP** is designed to be used either as a tool for "spiking" jacketed cable or as a part of a grounding assembly used to bond both ends of an opened cable. The 7/8" long plated steel point is inserted into the eye screw making a low resistant one piece spear. If one point becomes blunted it may be sharpened or replaced with a new spear. Clamps are aluminum body with either smooth or serrated upper jaws. The hard aluminum serrated insert makes optimum contact with the stranded neutral shield.

Adapter fits the following tools:

- Huskie EP610H
- Burndy Y46
- Brock 13-H

WARNING: ELECTRIC SHOCK HAZARD
THIS TOOL IS NOT INSULATED. USE ONLY CERTIFIED, NON-CONDUCTIVE HOSES, DIELECTRIC FLUIDS, AND PROPER PERSONAL PROTECTIVE EQUIPMENT WHEN USING THIS UNIT. FAILURE TO DO SO COULD RESULT IN SEVERE INJURY OR DEATH.

CAT. NO.	CABLE LENGTH ft (m)	DESCRIPTION SPIKING TOOL & GROUNDING ASSEMBLY:	WEIGHT EA. lbs. (kgs)
24320	6 (1.8)	Cable Spiking Tool & Insert 4388 C Clamp 2139 4/0 Cu Cable 2025 4/0 Cu Ferrules (Pair) 616 Bag US Patent # 544 7450	9.5 (4.3)
24321	8 (2.4)		11.2 (5.1)
24322	10 (3)		12.9 (5.86)
RPT1	-	Replacement Piercing Tip	1 oz (28 g)

CABLE PENETRATING GROUND CLAMP - ACME THREAD - POINTED LOWER JAW

2607	-	Aluminum 1.5" Opening, Class B, Serrated Jaw	1.7 (.8)
20867	-	Aluminum 2.40" Opening, Class B, Serrated Jaw	2.2 (1)
4290	-	Aluminum 2.40" Opening, Class A, Smooth Jaw	2.1 (1)

HYDRAULIC GROUND, BLADE, & CABLE SPIKE CLAMPS

1715EPP

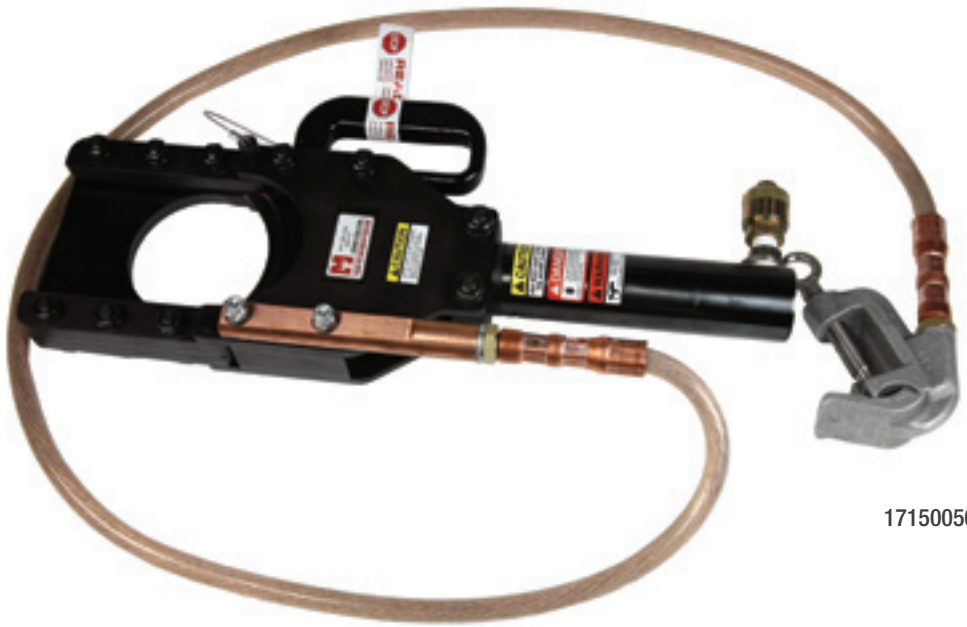
17150066

CAT. NO.	DESCRIPTION	PUMP MDL / P.S.I.	CABLE ASSEMBLY CABLE	ASTM FAULT / DUTY CYCLES / GRADE	WEIGHT lbs. (kgs)
HYDRAULIC GROUND SPIKE CLAMPS: CLAMP CAT. NO. 760001E, SPIKE DEPTH 1 5/8", CONDUCTOR MIN. 1" - MAX. 3"					
1715EPP	Spike Point w/ Eye Screw	1715PE / 1200	1/0 Clear	14.5 kA / 15 / 1	28 (12.7)
17150060EPP	Spike Point w/ Eye-T Screw	1715PE / 1200	1/0 Clear	14.5 kA / 15 / 1	28 (12.7)
17150060PFP	Spike Point w/ Eye-T Screw	1715PE / 1200	1/0 Clear	14.5 kA / 15 / 1	32 (14.5)

CAT. NO.	PUMP MDL / P.S.I.	SPIKE DEPTH IN. (CM)	CONDUCTOR MAX CYCLES / GRADE	CABLE ASSEMBLY CABLE	ASTM FAULT / DUTY	WEIGHT lbs. (kgs)
HYDRAULIC BLADE SPIKE CLAMPS: SPIKE BLADE W/ EYE SCREW, CLAMP CAT. NO. 760001E						
17150063EPP	1715EP25 / 2500	3"	2 1/4 (5.7)	1/0 Clear	14.5 kA / 15 / 1	30 (13.6)
17150063PFP	1715PF25 / 2500	3"	2 1/4 (5.7)	1/0 Clear	14.5 kA / 15 / 1	34 (15.4)
17150066	1715P392 / 10000	6"	4 1/2 (10.8)	1/0 Clear	14.5 kA / 15 / 1	85 (38.6)

NOTE: Suffix EPP = Enerpac Pump Suffix PFP = Porter Ferguson Pump

1712GA



17150050

CAT. NO.	DESCRIPTION	CABLE ASSEMBLY CABLE / CLAMP CAT. NO.	ASTM FAULT / DUTY CYCLES / GRADE	WEIGHT lbs. (kgs)
HAND OPERATED GROUND SPIKE: SPIKE DEPTH 1 3/4", CONDUCTOR MIN. 1" - MAX. 3 1/2"				
1712CS	3' FG Hndl, Toggle /GA	1/0 Clear / 760001E	14.5 kA / 15 / 1	15 (6.8)
1712U	Spike Point w/U	1/0 Clear / 760001E	14.5 kA / 15 / 1	10 (4.5)
1712GA	Spike Point w/GA	1/0 Clear / 760001E	14.5 kA / 15 / 1	10 (4.5)

CAT. NO.	DESCRIPTION	PUMP MDL / P.S.I.	CABLE ASSEMBLY CABLE CYCLES / GRADE	ASTM FAULT / DUTY	WEIGHT lbs. (kgs)
HYDRAULIC CUTTER SPIKE: CLAMP CAT. NO. 760001E, CONDUCTOR MIN. 0" - MAX. 3 1/2"					
17150050	Huskie Head	N/A / N/A	#2 Clear	14.5 kA / 15 / 1	23 (10.5)
17150050WPH	Huskie Head	1715P392 /10,000	#2 Clear	14.5 kA / 15 / 1	52 (23.6)

ACCESSORIES FOR UNDERGROUND SPIKE TOOLS

CAT. NO.	DESCRIPTION
SPIKES, BLADES AND TOOL HEADS	
1710E	Spike Point Complete for 1710
1712E	Carbide Spike Point Only
1715E	Spike Point Complete for 1715
1715GS	Ground Shaft Complete for 1715 (Includes Shaft and Spike Point)
171550SP100A	Huskie Cutter Head Only
HYDRAULIC PUMP ASSEMBLIES AND PUMPS	
1715PE	Enerpac Pump w/ Fittings, 1200 psi
1715P142	Enerpac Pump Only, 1200 psi
1715PE25	Enerpac Pump w/ Fittings, 2500 psi
1715PE14225	Enerpac Pump Only, 2500 psi
1715PE100	Enerpac Pump w/ Fittings, 10000 psi
1715P392	Enerpac Pump Only, 10000 psi
1715PF	Porter Ferguson Pump w/ Fittings, 1200 psi
1715SM0033	Porter Ferguson Pump Only, 1200 psi
1715PFSD	Porter Ferguson Pump w/ 1/4" Fittings, 1200 psi
1715PF25	Porter Ferguson Pump w/ Fittings, 2500 psi
1715SM003325	Porter Ferguson Pump Only, 2500 psi
HYDRAULIC HOSE ASSEMBLIES AND HOSES	
1715H	30' Non-conductive Hose w/ Fittings, 3000 psi
1715H1	30' Hose Only, 3000 psi
1715HSD	30' Non-conductive Hose w/ 1/4" Fittings, 3000 psi
1715HSD1	30' Hose Only, 3000 psi
HYDRAULIC RAM ASSEMBLIES AND RAMS	
1715R	Enerpac Ram w/ Fittings, 1 5/8" Stroke
1715RCH121	Enerpac Ram Only, 1 5/8" Stroke
1715RSD	Enerpac Ram w/ 1/4" Fittings, 1 5/8" Stroke
171561RCH123	Enerpac Ram Only, 3" Stroke
17150066R	Enerpac Ram w/ Fittings, 6" Stroke
1715RCH306	Enerpac Ram Only, 6" Stroke
PROTECTIVE BAGS	
B1710	Bag for 1710: 52" x 15" Yellow Vinyl Strap Tie Bag, 4 Tool Compartments, Outer Pocket
B1715	Bag for 1712, 1715, 17150060: 20" x 14" x 5" Yellow Vinyl, Zipper, Outer Pocket, Straps
B17150050	Bag for 17150050, 17150063: 26" x 12" x 8" Yellow Vinyl, Zipper, Outer Pocket, Straps
1370BF1	Storage Box for 17150066: 44" x 12" x 15" Wooden, Hinged, Latched, Forklift Stringers

1710E

1715GS

1715PF

1715H

B1715