

TERMINALS AND CONNECTORS

COSES ET CONNECTEURS • TERMINALES Y CONECTORES

BUTT CONNECTORS • MANCHONS CONNECTEURS • CONECTOR DE CABLES A TOPE

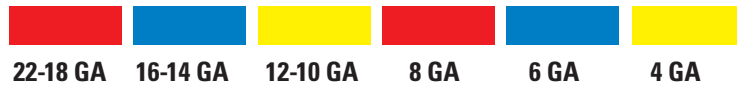


Connect and Protect with Grote's selection of Heat Shrink and Solder, Heat Shrink, Nylon, PVC, OEM - Packard style and Uninsulated wire terminals and connectors.



All Grote terminals and connectors are constructed of copper, and are electro tin-plated to ensure maximum electrical conductivity after crimping unless otherwise stated. Vinyl insulation sleeve provides good dielectric strength and withstands the pressure of crimping. All terminals are color coded by wire range for easy wire identification.

- Maximum electrical conductivity after crimping
- Funnel edged barrel for fast, easy insertion of wire
- Maximum holding power
- Tin plating prevents corrosion
- Wire range clearly stamped on neck of terminal



Uninsulated Butt Connector – Seamless

22-6 gauge

Part No.	Gauge	Pack
88-3110	22-18	1000
83-3110	22-18	100
84-3110	22-18	15
88-3111	16-14	1000
83-3111	16-14	100
84-3111	16-14	15
83-3112	12-10	100
84-3112	12-10	15
83-3103	8	100
83-3104	6	100

Uninsulated Butt Connector – Butted Seam

22-10 gauge

Part No.	Gauge	Pack
88-3100	22-18	1000
83-3100	22-18	100
84-3100	22-18	15
88-3101	16-14	1000
83-3101	16-14	100
84-3101	16-14	15
88-3102	12-10	1000
83-3102	12-10	100
84-3102	12-10	15



Vinyl Butt Connectors

22-6 gauge

Part No.	Gauge	Pack
88-2180	22-16	1000
83-2180	22-16	100
84-2180	22-16	15
88-2380	16-14	1000
83-2380	16-14	100
84-2380	16-14	15
88-2580	12-10	1000
83-2580	12-10	100
84-2580	12-10	15
84-2170	8	5
84-2980	6	10
83-2602	22-10 Assortment Pack	20



Nylon Butt Connectors

22-10 gauge

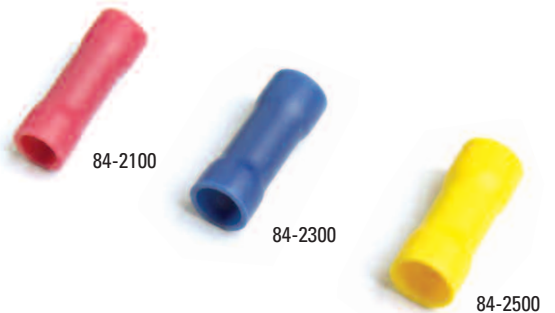
Part No.	Gauge	Pack
83-2190	22-16	100
84-2190	22-16	15
88-2390	16-14	1000
83-2390	16-14	100
84-2390	16-14	15
83-2590	12-10	100
84-2590	12-10	15



Vinyl Parallel Connectors

22-10 gauge

Part No.	Gauge	Pack
84-2100	22-18	15
84-2300	16-14	15
84-2500	12-10	15



Vinyl Step Down Butt Connectors

22-8 gauge

Part No.	Gauge	Pack
84-2114	22-18 to 16-14	10
84-2314	16-14 to 12-10	10
84-2514	12-10 to 8	10



TERMINALS AND CONNECTORS

COSES ET CONNECTEURS • TERMINALES Y CONECTORES

RING TERMINALS • COSSES À ANNEAU • TERMINAL OJILLO

Uninsulated Ring Terminals

22-6 gauge

Part No.	Gauge	Stud Size	Pack
84-3000	22-18	6	50
84-3001	22-18	8	50
84-3002	22-18	10	50
84-3003	22-18	1/4"	50
84-3004	16-14	6	50
84-3005	16-14	8	50
84-3006	16-14	10	50
84-3007	16-14	1/4"	50
84-3022	16-14	5/16"	50
84-3021	16-14	3/8"	50
84-3008	12-10	8	50
84-3009	12-10	10	50
84-3010	12-10	1/4"	50
84-3011	12-10	5/16"	50
84-3012	12-10	3/8"	50
84-3013	8	10	25
84-3014	8	1/4"	25
84-3015	8	5/16"	25
84-3016	8	3/8"	25
84-3017	6	10	25
84-3018	6	1/4"	25
84-3019	6	5/16"	25
84-3020	6	3/8"	25

Vinyl Ring Terminals

22-16 gauge

Part No.	Gauge	Stud Size	Pack
83-2102	22-16	4-6	100
88-2104	22-16	8-10	1000
83-2104	22-16	8-10	100
84-2104	22-16	8-10	15
83-2105	22-16	1/4"	100
84-2105	22-16	1/4"	15
84-2140	22-16	5/16"	15
84-2108	22-16	3/8"	15

Nylon Ring Terminals

22-18 gauge

Part No.	Gauge	Stud Size	Pack
83-2204	22-18	4-6	50
84-2204	22-18	4-6	15
83-2205	22-18	8-10	50
84-2205	22-18	8-10	15
83-2206	22-18	1/4"	50
84-2206	22-18	1/4"	15
83-2207	22-18	5/16"	50
84-2207	22-18	5/16"	15
83-2208	22-18	3/8"	50
84-2208	22-18	3/8"	15



84-3001



84-3012



84-3020



84-2105



84-2204

Vinyl Ring Terminals

16-14 gauge

Part No.	Gauge	Stud Size	Pack
88-2302	16-14	4-6	1000
83-2302	16-14	4-6	100
84-2310	16-14	4-6	15
88-2303	16-14	6-8	1000
83-2303	16-14	6-8	100
84-2303	16-14	6-8	15
88-2304	16-14	8-10	1000
83-2304	16-14	8-10	100
84-2304	16-14	8-10	15
88-2305	16-14	1/4"	1000
83-2305	16-14	1/4"	100
84-2305	16-14	1/4"	15
83-2340	16-14	5/16"	100
84-2340	16-14	5/16"	15
83-2308	16-14	3/8"	100
84-2308	16-14	3/8"	15



84-2305

Nylon Ring Terminals

16-14 gauge

Part No.	Gauge	Stud Size	Pack
83-2209	16-14	4-6	50
84-2209	16-14	4-6	15
83-2210	16-14	8	50
84-2210	16-14	8	15
83-2447	16-14	10	50
84-2211	16-14	10	15
83-2448	16-14	1/4"	50
84-2212	16-14	1/4"	15
83-2213	16-14	5/16"	50
84-2213	16-14	5/16"	15
83-2449	16-14	3/8"	50
84-2449	16-14	3/8"	15



83-2448

Vinyl Ring Terminals

12-10 gauge

Part No.	Gauge	Stud Size	Pack
83-2502	12-10	4-6	100
84-2502	12-10	4-6	15
83-2504	12-10	8-10	100
84-2504	12-10	8-10	15
83-2505	12-10	1/4"	100
84-2505	12-10	1/4"	15
83-2540	12-10	5/16"	100
84-2540	12-10	5/16"	15
83-2507	12-10	3/8"	100
84-2507	12-10	3/8"	15
84-2509	12-10	1/2"	15



84-2505

TERMINALS AND CONNECTORS

COSES ET CONNECTEURS • TERMINALES Y CONECTORES

RING TERMINALS • COSES À ANNEAU • TERMINAL OJILLO

Nylon Ring Terminals

12-10 gauge

Part No.	Gauge	Stud Size	Pack
83-2455	12-10	8-10	50
84-2215	12-10	8-10	15
83-2456	12-10	1/4"	50
84-2456	12-10	1/4"	15
83-2457	12-10	5/16"	50
84-2457	12-10	5/16"	15
83-2458	12-10	3/8"	50
84-2458	12-10	3/8"	15
83-2216	12-10	1/2"	50
84-2216	12-10	1/2"	15

Vinyl Ring Terminals

8 gauge

Part No.	Gauge	Stud Size	Pack
84-2705	8	1/4"	25
84-2740	8	5/16"	25
84-2707	8	3/8"	25
84-2709	8	1/2"	25

Vinyl Ring Terminals

6 gauge

Part No.	Gauge	Stud Size	Pack
84-2941	6	1/4"	25
84-2940	6	5/16"	25
84-2909	6	1/2"	25

Vinyl Ring Terminals

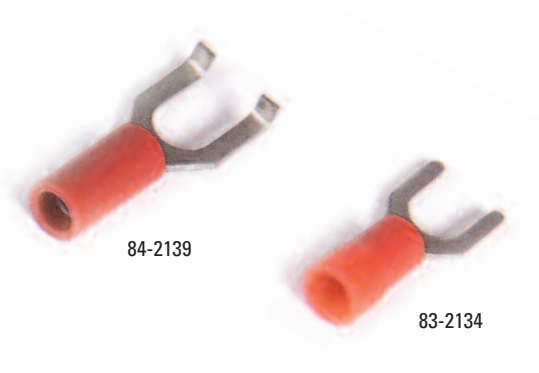
4 gauge

Part No.	Gauge	Stud Size	Pack
84-2910	4	1/4"	10
84-2911	4	5/16"	10
84-2912 NEW	4	3/8"	10
84-2913	4	1/2"	10

Vinyl Spade Terminals

22-16 gauge

Part No.	Gauge	Stud Size	Pack
83-2132	22-16	4-6	100
84-2132	22-16	4-6	15
83-2134	22-16	8-10	100
84-2134	22-16	8-10	15
84-2136	22-16	6 Flanged	15
84-2138	22-16	8 Flanged	15
84-2139	22-16	10 Flanged	15



SPADE TERMINALS • COSSES OUVERTES • CABLES CON TERMINALES DE ESPADA

Nylon Spade Terminals

22-16 gauge

Part No.	Gauge	Stud Size	Pack
83-2217	22-16	4-6	50
84-2217	22-16	4-6	15
83-2218	22-16	8-10	50
84-2218	22-16	8-10	15



84-2218

Vinyl Spade Terminals

16-14 gauge

Part No.	Gauge	Stud Size	Pack
83-2332	16-14	4-6	100
84-2332	16-14	4-6	15
83-2334	16-14	8-10	100
84-2334	16-14	8-10	15
84-2336	16-14	4-6 Flanged	15
84-2338	16-14	8-10 Flanged	15



84-2338



84-2334

Nylon Spade Terminals

16-14 gauge

Part No.	Gauge	Stud Size	Pack
83-2219	16-14	4-6	50
84-2219	16-14	4-6	15
83-2220	16-14	8-10	50
84-2220	16-14	8-10	15



84-2219

Vinyl Spade Terminals

12-10 gauge

Part No.	Gauge	Stud Size	Pack
83-2532	12-10	4-6	100
84-2532	12-10	4-6	15
83-2534	12-10	8-10	100
84-2534	12-10	8-10	15
84-2536	12-10	4-6 Flanged	15
84-2537	12-10	8-10 Flanged	15



84-2537



84-2534

Nylon Spade Terminals

12-10 gauge

Part No.	Gauge	Stud Size	Pack
83-2221	12-10	4-6	50
84-2221	12-10	4-6	15
83-2222	12-10	8-10	50
84-2222	12-10	8-10	15

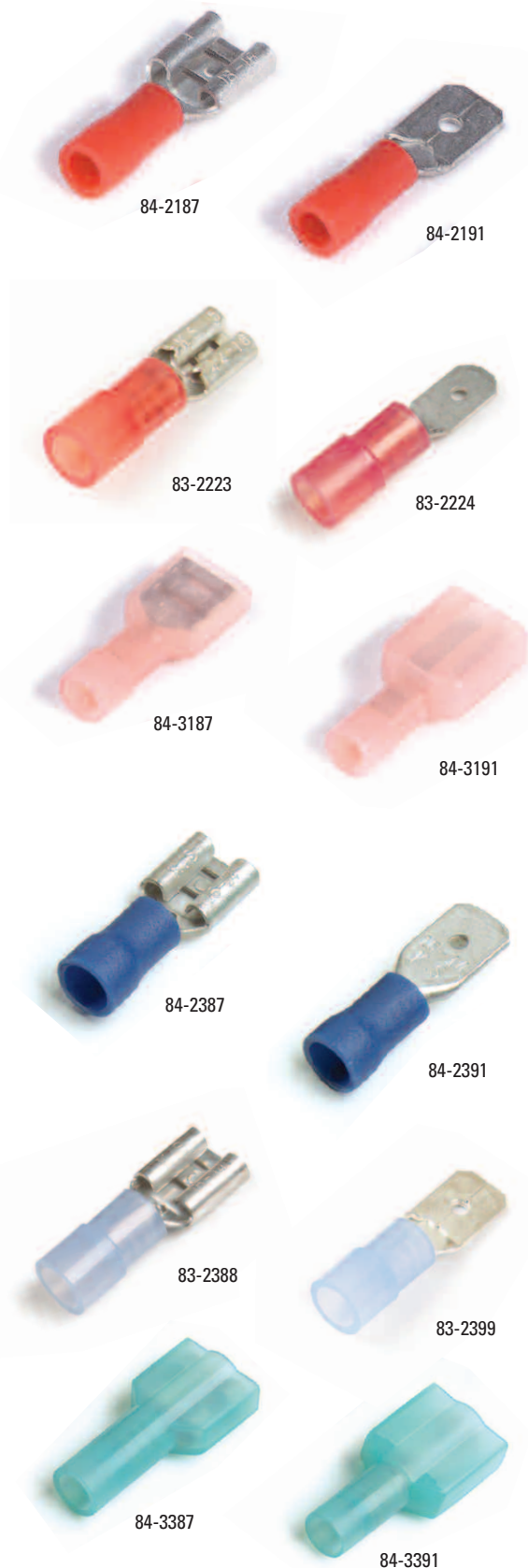


84-2222

TERMINALS AND CONNECTORS

COSSES ET CONNECTEURS • TERMINALES Y CONECTORES

QUICK DISCONNECTS • CONNECTEURS À DÉACCOUPLÉMENT RAPIDE • CONECTORES RAPIDOS



Vinyl Quick Disconnects

22-16 gauge

Part No.	Gauge	Type/Tab Size	Pack
84-2188	22-16	Female .110"	15
84-2186	22-16	Female .187"	15
88-2187	22-16	Female .250"	1000
83-2187	22-16	Female .250"	100
84-2187	22-16	Female .250"	15
84-2198	22-16	Male .110"	15
84-2196	22-16	Male .187"	15
88-2191	22-16	Male .250"	1000
83-2191	22-16	Male .250"	100
84-2191	22-16	Male .250"	15

Nylon Quick Disconnects

22-16 gauge

Part No.	Gauge	Type/Tab Size	Pack
83-2223	22-16	Female .250"	50
84-2223	22-16	Female .250"	15
83-2224	22-16	Male .250"	50
84-2224	22-16	Male .250"	15

Nylon - Fully Insulated

83-3187	22-16	Female .250"	50
84-3187	22-16	Female .250"	15
83-3191	22-16	Male .250"	50
84-3191	22-16	Male .250"	15

Vinyl Quick Disconnects

16-14 gauge

Part No.	Gauge	Type/Tab Size	Pack
84-2302	16-14	Female .110"	15
84-2301	16-14	Female .187"	15
88-2387	16-14	Female .250"	1000
83-2387	16-14	Female .250"	100
84-2387	16-14	Female .250"	15
84-2322	16-14	Male .110"	15
84-2321	16-14	Male .187"	15
88-2391	16-14	Male .250"	1000
83-2391	16-14	Male .250"	100
84-2391	16-14	Male .250"	15

Nylon Quick Disconnects

16-14 gauge

Part No.	Gauge	Type/Tab Size	Pack
83-2388	16-14	Female .250"	50
84-2228	16-14	Female .250"	15
83-2399	16-14	Male .250"	50
84-2399	16-14	Male .250"	15

Nylon - Fully Insulated

88-3387	16-14	Female .250"	1000
83-3387	16-14	Female .250"	50
84-3387	16-14	Female .250"	15
88-3391	16-14	Male .250"	1000
83-3391	16-14	Male .250"	50
84-3391	16-14	Male .250"	15

QUICK DISCONNECTS • CONNECTEURS À DÉSCOUPLEMENT RAPIDE • CONECTORES RAPIDOS

Vinyl Quick Disconnects

12-10 gauge

Part No.	Gauge	Type/Tab Size	Pack
83-2587	12-10	Female .250"	100
84-2587	12-10	Female .250"	15
84-2902	12-10	Female .375"	15
83-2591	12-10	Male .250"	100
84-2591	12-10	Male .250"	15



Nylon Quick Disconnects

12-10 gauge

Part No.	Gauge	Type/Tab Size	Pack
83-2225	12-10	Female .250"	50
84-2225	12-10	Female .250"	15
83-2226	12-10	Male .250"	50
84-2226	12-10	Male .250"	15



Nylon - Fully Insulated

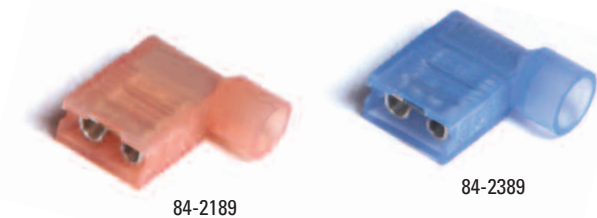
88-3587	12-10	Female .250"	1000
83-3587	12-10	Female .250"	50
84-3587	12-10	Female .250"	15
88-3591	12-10	Male .250"	1000
83-3591	12-10	Male .250"	50
84-3591	12-10	Male .250"	15



Nylon Female Quick Disconnect Flag - Fully Insulated

22-14 gauge

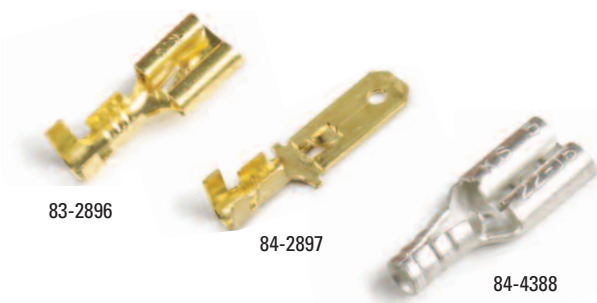
Part No.	Gauge	Type/Tab Size	Pack
84-2189	22-18	Female .250"	15
84-2389	16-14	Female .250"	15



Uninsulated Quick Disconnects

20-14 gauge

Part No.	Gauge	Type/Tab Size	Pack
83-2896	20-14	Female .250"	50
83-2898	20-14	Male .250"	50
84-2897	20-14	Male .250"	25
84-4388	16-14	Female .187"	15



TERMINALS AND CONNECTORS

COSES ET CONNECTEURS • TERMINALES Y CONECTORES

BULLET AND RECEPTACLE CONNECTORS

• CONNECTEURS À FICHE ET À RÉCEPTACLE • CONECTORES DE CÁPSULA Y DE RECEPTÁCULO



Vinyl Male Bullet Connectors

22-10 gauge

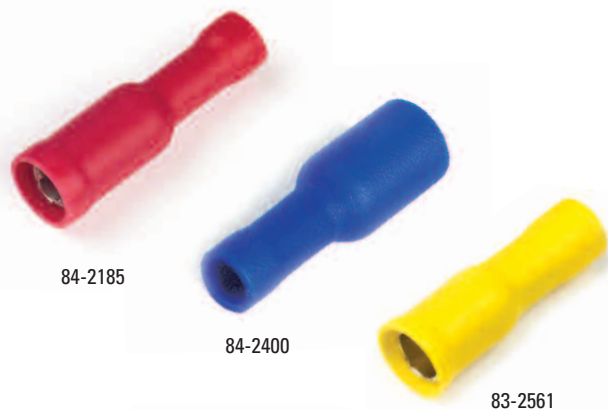
Part No.	Gauge	Bullet Size	Mate	Pack
84-2194	22-16	.157"	84-2185	15
83-2394	16-14	.157"	83-2400	100
84-2394	16-14	.157"	84-2400	15
83-2250	16-14	.176"	83-2251	100
84-2250	16-14	.176"	84-2251	15
83-2395	16-14	.195"	83-2396	100
84-2395	16-14	.195"	84-2396	15
83-2560	12-10	.195"	83-2561	100



Nylon Male Bullet Connectors

16-14 gauge

Part No.	Gauge	Bullet Size	Mate	Pack
83-2398	16-14	.157"	83-2401	50
84-2398	16-14	.157"	84-2401	15
83-2227	16-14	.176"	83-2402	50
84-2397	16-14	.176"	84-2402	15



Vinyl Female Receptacle Connectors

- Fully Insulated

22-10 gauge

Part No.	Gauge	Receptacle Size	Mate	Pack
84-2185	22-16	.157"	84-2194	15
88-2400	16-14	.157"	88-2394	1000
83-2400	16-14	.157"	83-2394	100
84-2400	16-14	.157"	84-2394	15
83-2251	16-14	.176"	83-2250	100
84-2251	16-14	.176"	84-2250	15
83-2396	16-14	.195"	83-2395	100
84-2396	16-14	.195"	84-2395	15
83-2561	12-10	.195"	83-2560	100



Nylon Female Receptacle Connectors

- Fully Insulated

16-14 gauge

Part No.	Gauge	Receptacle Size	Mate	Pack
83-2401	16-14	.157"	83-2398	50
84-2401	16-14	.157"	84-2398	15
83-2402	16-14	.176"	83-2227	50
84-2402	16-14	.176"	84-2397	15



Double Female Bullet Receptacles

Part No.	Features	Pack
84-2388	Double Female Bullet Receptacle .157"	15

Vinyl and Nylon Terminal & Connector Assortment Kit

- Kit contains 650 of the most popular automotive electrical terminals and accessories
- Assorted gauges (22-18, 16-14, 12-10) & stud sizes (#6 – 1/4")
- Matrix chart on inside lid describes piece parts, provides illustrations and details individual re-order part numbers

Part No.	Kit Contents	Quantity
83-6540	Butt Connectors (115)	650
	Ring Terminals (200)	
	Spade Terminals (40)	
	Male Disconnects .250" (80)	
	Female Disconnects .250" (90)	
	Bullet Connectors .157" (30)	
	Bullet Receptacles .157" (30)	
	Tap Connectors (15)	
	Cable Ties - Natural (50)	
	Wire Terminal Crimper (1)	



83-6540

PVC

Part No.	Kit Contents	Quantity
83-6554	Butt Connectors (34)	99
	Ring Terminals (51)	
	Male Disconnects .250" (6)	
	Female Disconnects .250" (8)	
	* Includes Hang Tab	



83-6554

PVC

Part No.	Kit Contents	Quantity
83-2608	Retail Clam Pack	37
	Butt Connectors (10)	
	Ring Terminals (24)	
	Female Disconnects .250" (3)	



83-2608

TERMINALS AND CONNECTORS

COSES ET CONNECTEURS • TERMINALES Y CONECTORES

ASSORTMENT KITS • ENSEMBLES ASSORTIMENT • JUEGOS SURTIDO



83-6538

Nylon Terminal & Connector Assortment Kit

22-10 gauge

- Includes the most popular Nylon terminals and connectors
- Includes rings, butts, spades and quick disconnects
- 22-18, 16-14 and 12-10 gauges
- 12 compartment re-closable plastic box with re-order chart on the inside cover

Part No.	Kit Contents	Quantity
83-6538	Butt Connectors (40)	120
	Ring Terminals (50)	
	Spade Terminals (10)	
	Male Disconnects .250" (10)	
	Female Disconnects .250" (10)	



NEW

83-6555

NYLON

Part No.	Kit Contents	Quantity
83-6555	Butt Connectors (24)	70
	Ring Terminals (26)	
	Male Disconnects .250" (10)	
	Female Disconnects .250" (10)	
	* Includes Hang Tab	

NYLON

Part No.	Kit Contents	Quantity
83-2609	Retail Clam Pack	37
	Butt Connectors (13)	
	Ring Terminals (15)	
	Male Disconnects .250" (3)	
	Female Disconnects .250" (6)	



NEW

83-2609

Vinyl Multi-Stack Disconnects

22-14 gauge

Part No.	Gauge	Type/Tab Size	Pack
84-2192	22-16	Piggyback Disconnect	.250" 15
84-2392	16-14	Piggyback Disconnect	.250" 15

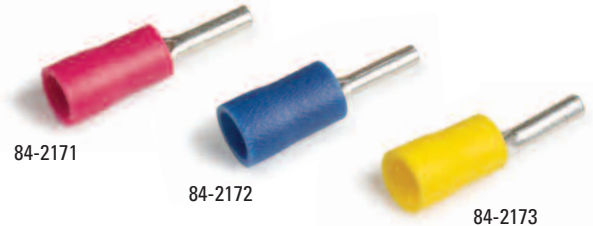


84-2392

Vinyl Pin Terminal Connectors

22-10 gauge

Part No.	Gauge	Pin Diameter	Pack
84-2171	22-16	.075"	15
84-2172	16-14	.075"	15
84-2173	12-10	.110"	15



84-2171

84-2172

84-2173

Vinyl 3-Way "Y" Connectors

22-10 gauge

Part No.	Gauge	Pack
84-2181	22-16	5
84-2381	16-14	5
84-2581	12-10	5



84-2381

Vinyl 4-Way "X" Connectors

16-10 gauge

Part No.	Gauge	Pack
84-2382	16-14	5
84-2582	12-10	5



84-2382

Closed End Connectors

22-10 gauge

Part No.	Gauge	Features	Pack
83-3182	22-16	Closed End	100
84-3182	22-16	Closed End	15
83-3382	16-14	Closed End	100
84-3382	16-14	Closed End	15
83-3582	12-10	Closed End	100
84-3582	12-10	Closed End	15

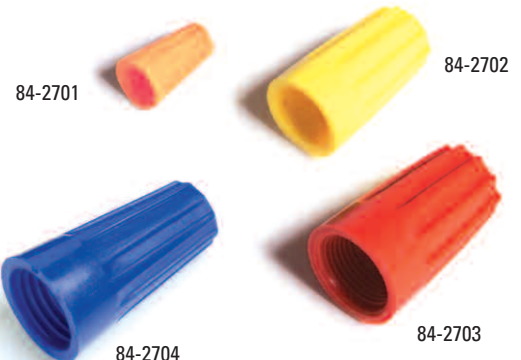


84-3382

Twist On Wire Connectors - Thermoplastic

22-8 gauge

Part No.	Gauge	Min/Max	Color/Voltage	Pack
84-2704	22-14	2 #22; 3 #16	Blue 300V	15
84-2701	22-14	1 #18 + 1 #20; 4 #16 + 1 #20	Orange 600V	15
84-2702	22-10	3 #20; 1 #10 + 2 #14 + 1 #16	Yellow 600V	5
84-2703	22-8	3 #18; 3 #10	Red 600V	5



84-2701

84-2702

84-2704

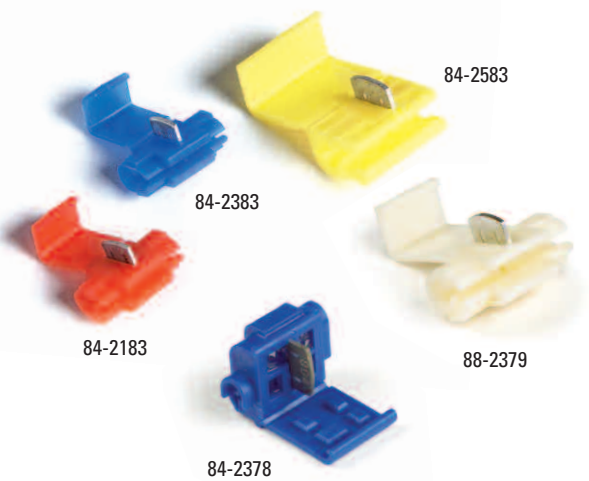
84-2703

TERMINALS AND CONNECTORS

COSSES ET CONNECTEURS • TERMINALES Y CONECTORES

SPECIALTY CONNECTORS AND ADAPTERS

• CONNECTEURS ET ADAPTATEURS SPÉCIALISÉS • CONECTORES Y ADAPTADORES ESPECIALES



Quick Splice Connectors - Self Stripping Tap Connectors

22-10 gauge

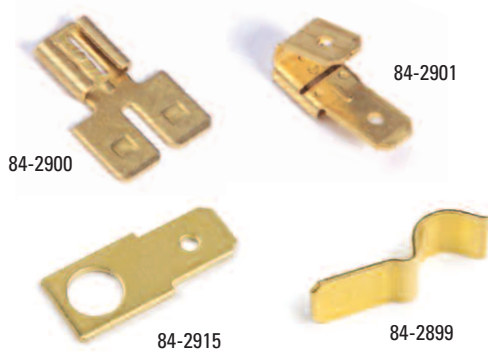
Part No.	Gauge	Color	Pack
88-2183	22-18	Red	1000
84-2183	22-18	Red	5
88-2383	18-14	Blue	1000
83-2383	18-14	Blue	25
84-2383	18-14	Blue	5
84-2378	18-16	Blue (moisture resistant)	5
88-2379	18-14	White	1000
83-2583 NEW	12-10	Yellow	25
84-2583	12-10	Yellow	3



Quick Splice Connectors - Self-Stripping Special Adapters

22-10 gauge

Part No.	Gauge	Color	Features	Pack
84-2906	22-18	Red	Female Tap	25
83-2904	18-14	Blue	Female Tap	100
84-2904	18-14	Blue	Female Tap	5
84-2384	18-14	Black	Bullet Tap .157"	3
84-2905	12-10	Yellow	Female Tap	25
84-2903	18-14	Blue	ATO Fuseholder 20 Amp	3
84-2907	18-14	Blue	16-14 Male Disconnect (25) 18-14 Female Tap (25)	25 pair



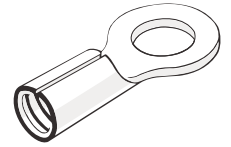
Uninsulated Special Adapters

Part No.	Style/Tab Size	Pack
84-2900	Female - Double .250"	15
84-2901	Male- Double .250"	15
84-2915	Male .250"	10
84-2899	Fuse Clip .250"	25

Standard Stud Size	Stud Dia.	Hole Dia.	
● #0	.060"	.094"	2.39mm
● #1	.073"		
● #2	.086"		
● #3	.099"	.120"	3.02mm
● #4	.112"		
● #5	.125"	.146"	3.71mm
● #6	.138"		
● #8	.164"		
● #10	.190"	.198"	5.03mm
● #12	.216"	.265"	6.75mm
● #14	.242"		
● 1/4"	.250"		
● 5/16"	.312"	.328"	8.33mm
● 3/8"	.375"	.390"	9.92mm
● 7/16"	.437"	.453"	11.51mm
● 1/2"	.500"	.515"	13.10mm
● 5/8"	.625"	.656"	16.67mm
● 3/4"	.750"	.781"	19.84mm
● 7/8"	.875"	.906"	23.02mm
● 1"	1.000"	1.031"	26.19mm

Uninsulated Butted Seam Terminal

- Constructed of electrolytic (ETP) copper
- Wire Range: 8 - 4/0 AWG
- Continuous Operating Temperature Range: 75°C (167°F)
- Voltage Rating: 300V / 600V



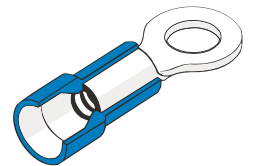
Uninsulated Brazed Seam Terminal

- Constructed of electrolytic (ETP) copper
- Wire Range: 22 - 10 AWG
- Continuous Operating Temperature Range: 75°C (167°F)
- Voltage Rating: 300V / 600V



Pre-insulated Funnel Entry Vinyl Terminal

- Vinyl insulation sleeve withstands the pressure of crimping
- Colour coded for easy identification
- Wire Range: 22 - 4/0 AWG
- Continuous Operating Temperature Range: 75°C (167°F)
- Voltage Rating: 300V / 600V



Pre-insulated Funnel Entry Nylon Terminal

- Nylon insulation sleeve provides high dielectric strength
- Colour coded for easy identification
- Wire Range: 22 - 10 AWG
- Continuous Operating Temperature Range: 105°C (221°F)
- Voltage Rating: 300V / 600V



Terminal & Connector Identification

Polyvinyl Chloride (PVC) and Nylon insulated connectors are colour coded for quick wire identification. The National Electrical Manufacturers Association's (NEMA) Standard for colour coding is as follows:

Wire Size (AWG)	Insulation Colour Coding	Stud Size	Tab Size	Bullet/Snap Plug Size
26-24	Yellow	#4	.110"	.157"
22-18	Red	#6	.187"	.176"
16-14	Blue	#8	.205"	.180"
16-12 H.D.	Yellow	#10	.250"	.197"
12-10	Yellow	1/4"	.375"	
8	Red	5/16"		
6	Blue	3/8"		
4	Yellow	1/2"		
2	Red	3/4"		
1/0	Blue			
2/0	Yellow			
3/0	Red			
4/0	Blue			

TERMINALS AND CONNECTORS

COSES ET CONNECTEURS • TERMINALES Y CONECTORES

HEAT SHRINKABLE BUTT CONNECTORS • MANCHONS CONNECTEURS THERMORÉTRÉCISSABLES
• CONECTORES DE TOPE TERMOCONTRAÍBLES



CRIMP & SHRINK TERMINALS

PRODUCT CHARACTERISTICS

- Operating Temperature:** -55°C (-67°F) to 125°C (257°F)
Shrink Ratio: Approximately 2:1
Physical Properties:
- Cut through resistance 70 lbs. (31 kg)
 - Wire pullout after crimping and recovery; red: 25lb; blue: 50lb; yellow: 60lb
 - No cracking after heat aging for 168 hours at 160°C (320°F)
 - Solvent resistance: isopropyl alcohol, trichloroethylene, gasoline, battery acid, diesel fuel, motor oil, antifreeze, brake fluid, 5% salt water
- Chemical Properties:**
- Protects splices from water, corrosion, salt and moisture, provides strain relief
 - Protects against added vibration in rugged environments
 - Completely insulates and protects electrical connections
 - Adhesive lining for protection that is more reliable than conventional splices
- Features/Benefits:**
- UL listed



Heat Shrinkable Butt Connectors

22-8 gauge

Part No.	Gauge	Pack
88-2150	22-18	1000
83-2150	22-18	100
84-2150	22-18	15
88-2350	16-14	1000
83-2350	16-14	100
84-2350	16-14	15
88-2550	12-10	1000
83-2550	12-10	50
84-2550	12-10	15
84-2750	8	10



Heat Shrinkable Step-Down Butt Connectors

20-8 gauge

Part No.	Gauge	Color	Pack
83-2624	20-14	Blue	100
84-2624	20-14	Blue	15
83-2625	16-10	Yellow	100
84-2625	16-10	Yellow	15
83-2626	12-8	Red	100
84-2626	12-8	Red	15



Heat Shrinkable Ring Terminals

22-18 gauge

Part No.	Gauge	Stud Size	Pack
83-2415	22-18	6	50
84-2415	22-18	6	15
84-2423	22-18	8	10
83-2416	22-18	10	50
84-2416	22-18	10	15
83-2417	22-18	1/4"	50
84-2417	22-18	1/4"	15

Heat Shrinkable Ring Terminals

16-14 gauge

Part No.	Gauge	Stud Size	Pack
84-2424	16-14	6	10
83-2408	16-14	8	50
84-2408	16-14	8	15
83-2410	16-14	10	50
84-2410	16-14	10	15
83-2412	16-14	1/4"	50
84-2412	16-14	1/4"	15
83-2413	16-14	5/16"	50
84-2413	16-14	5/16"	15
83-2414	16-14	3/8"	50
84-2414	16-14	3/8"	15



84-2412

Heat Shrinkable Ring Terminals

12-10 gauge

Part No.	Gauge	Stud Size	Pack
83-2501	12-10	8	50
84-2501	12-10	8	15
83-2510	12-10	10	50
84-2510	12-10	10	15
83-2511	12-10	1/4"	50
84-2511	12-10	1/4"	15
83-2512	12-10	5/16"	50
84-2512	12-10	5/16"	15
83-2513	12-10	3/8"	50
84-2513	12-10	3/8"	15
84-2425	12-10	1/2"	10



84-2511

Heat Shrinkable Ring Terminals

8 gauge

Part No.	Gauge	Stud Size	Pack
84-2426	8	1/4"	10
84-2441	8	5/16"	10
84-2427	8	3/8"	10
84-2442	8	1/2"	10



84-2426

Heat Shrinkable Spade Terminals

22-10 gauge

Part No.	Gauge	Stud Size	Pack
84-2421	22-18	6	15
84-2428	22-18	8	10
84-2422	22-18	10	15
84-2429	16-14	6	10
84-2418	16-14	8	15
84-2420	16-14	10	15
84-2518	12-10	8	15
84-2520	12-10	10	15
84-2521	12-10	1/4"	15



84-2422

84-2420

84-2520

TERMINALS AND CONNECTORS

COSES ET CONNECTEURS • TERMINALES Y CONECTORES

HEAT SHRINKABLE QUICK DISCONNECTS • RACCORDS RAPIDES THERMORÉTRÉCISSABLES
• CONECTORES RÁPIDOS TERMOCONTRAÍBLES



Heat Shrinkable Quick Disconnects 22-10 gauge

Part No.	Gauge	Type/Tab Size	Pack
84-2436	22-18	Male .250"	15
84-2437	22-18	Female .250" FI	15
83-2430	16-14	Male .250"	50
84-2430	16-14	Male .250"	15
83-2432	16-14	Female .250" FI	50
84-2432	16-14	Female .250" FI	15
84-2439	12-10	Male .250"	15
84-2440	12-10	Female .250" FI	15

FI = Fully Insulated

Heat Shrinkable Bullet & Receptacle Connectors 22-14 gauge

Part No.	Gauge	Type/Bullet Size	Pack
84-2460	22-18	Male .180"	15
84-2431	16-14	Male .157"	10
84-2433	16-14	Female .157" FI	10
84-2447	16-14	Male .180"	15
84-2448	16-14	Female .180" FI	15
83-2434	16-14	Male .197"	50
84-2434	16-14	Male .197"	15
83-2435	16-14	Female .197" FI	50
84-2435	16-14	Female .197" FI	15

FI = Fully Insulated

Heat Shrinkable Pin Terminal 22-18 gauge

Part No.	Gauge	Pin Size	Pack
84-2151	22-18	.075" Diameter	15

Heat Shrink Terminal Crimping Tool

- Ratchet Style

22-8 Gauge

- Ratchet style tool properly crimps Heat Shrink and Crimp Solder & Seal Terminals
- Specially designed die ensures a clean crimp that protects the Heat Shrink jacket from over crimping
- 22-8 gauge is the largest crimp range industry wide
- Ergonomic design for easy use; a must have for any mechanic, installer or repair professional

83-6519

Heavy Duty Heat Shrink Crimping Tool

22-10 Gauge

- Crimps heat shrink and crimp solder and seal terminals and connectors 22-10 Gauge
- Ratchet style is easy to use and provides a superior crimp
- Makes a clean crimp without damaging the conductor
- Ergonomic design for comfort
- 10" long

83-6524



Heat Shrinkable Terminal & Connector Assortment Kit

22-10 gauge

- Includes the most popular heat shrinkable crimp splices and terminals
- Includes rings, butts, spades and quick disconnects
- 22-18, 16-14 and 12-10 gauges
- 12 compartment plastic box with re-order chart on the inside cover

Part No.	Kit Contents	Quantity
83-6503	Butt Connectors (40)	120
	Ring Terminals (50)	
	Spade Terminals (10)	
	Male Disconnects (10)	
	Female Disconnects (10)	



83-6503

Part No.	Kit Contents	Quantity
83-6556	Butt Connectors (30)	85
	Ring Terminals (44)	
	Male Disconnects (5)	
	Female Disconnects (6)	
	* Includes Hang Tab	



83-6556

Part No.	Kit Contents	Quantity
83-2610	Retail Clam Pack	34
	Butt Connectors (9)	
	Ring Terminals (22)	
	Female Disconnects (3)	



83-2610

TERMINALS AND CONNECTORS

COSES ET CONNECTEURS • TERMINALES Y CONECTORES

HEAT SHRINK AND SOLDER BUTT CONNECTORS • MANCHONS CONNECTEURS

THERMORÉTRÉCISABLES ET À SOUDER • CONECTORES DE TOPE TERMOCONTRAÍBLES Y DE SOLDADURA



SOLDER & SEAL TERMINALS

PRODUCT CHARACTERISTICS

Operating Temperature: -55°C (-67°F) to 110°C (230°F)

Tensile Strength: 2200 PSI

Melting Point for Solder: 146°C (295°F)

- Physical Properties:**
- Environmentally Sealed Solder Connectors consist of a precisely engineered, fluxed solder ring within a heat-shrinkable jacket which, when heated, provides a completely soldered, strain relieved, encapsulated connection
 - One-piece design simplifies installation
 - Translucent, adhesive-lined polyolefin tubing

- Features/Benefits:**
- Transparent insulation sleeve makes inspection easy
 - Prevents wire corrosion and provides a waterproof seal
 - Easy installation with pre-measured solder
 - Soldered electrical connection provides superior current flow and tensile strength
 - Color-coded tubing with wire gauge imprint provides easy identification

Flameless Heat Gun
83-6508

See page 90



Heat Shrink & Solder Splice Connectors

22-10 gauge

- Maximum Operating Temperature: -55°C (-67°F) to 125°C (257°F)
- UL and CUL Recognized



Part No.	Gauge	Color Stripe	Pack
88-2618 NEW	22-18	Red	1000
83-2618	22-18	Red	100
84-2618	22-18	Red	15
88-2614	16-14	Blue	1000
83-2614	16-14	Blue	100
84-2614	16-14	Blue	15
88-2612	12-10	Yellow	1000
83-2612	12-10	Yellow	100
84-2612	12-10	Yellow	15

Heat Shrink & Solder Ring Terminals

20-18 gauge



Part No.	Gauge	Stud Size	Pack
84-2803	20-18	8	25
84-1901	20-18	8	6
84-2804	20-18	10	25
84-1902	20-18	10	6
84-2805	20-18	1/4"	25
84-1903	20-18	1/4"	6
84-2806	20-18	5/16"	25
84-1904	20-18	5/16"	6
84-2807	20-18	3/8"	25
84-1905	20-18	3/8"	6

Heat Shrink & Solder Ring Terminals

16-14 gauge

Part No.	Gauge	Stud Size	Pack
84-2809	16-14	8	25
84-1908	16-14	8	6
84-2810	16-14	10	25
84-1909	16-14	10	6
84-2811	16-14	1/4"	25
84-1910	16-14	1/4"	6
84-2455	16-14	5/16"	25
84-1911	16-14	5/16"	6
84-2813	16-14	3/8"	25
84-1912	16-14	3/8"	6



84-2811

Heat Shrink & Solder Ring Terminals

12-10 gauge

Part No.	Gauge	Stud Size	Pack
84-2814	12-10	10	25
84-1913	12-10	10	6
84-2438	12-10	1/4"	25
84-1914	12-10	1/4"	6
84-2815	12-10	5/16"	25
84-1915	12-10	5/16"	6
84-2816	12-10	3/8"	25
84-1916	12-10	3/8"	6
84-2818	12-10	1/2"	25
84-1917	12-10	1/2"	6



84-2438

Heat Shrink & Solder Quick Disconnects

20-10 gauge

Part No.	Gauge	Stud Size	Pack
84-2822	20-18	Female .250" FI	25
84-1922	20-18	Female .250" FI	6
84-2823	20-18	Male .250"	25
84-1921	20-18	Male .250"	6
84-2824	16-14	Female .250" FI	25
84-1924	16-14	Female .250" FI	6
84-2825	16-14	Male .250"	25
84-1923	16-14	Male .250"	6
84-2826	12-10	Female .250" FI	25
84-1926	12-10	Female .250" FI	6
84-2827	12-10	Male .250"	25
84-1925	12-10	Male .250"	6

FI = Fully Insulated



84-2822



84-2823



84-2824



84-2825



84-2826



84-2827

TERMINALS AND CONNECTORS

COSES ET CONNECTEURS • TERMINALES Y CONECTORES

HEAT SHRINK AND SOLDER ASSORTMENT KITS • ENSEMBLES D'ACCESSOIRES ASSORTIS

THERMORÉTRÉCISABLES ET À SOUDER • JUEGOS SURTIDOS TERMOCONTRAÍBLES Y DE SOLDADURA



83-6539

Heat Shrink & Solder Terminal & Connector Assortment Kit 22-10 gauge

- Includes the most popular heat shrink solder and seal terminals and connectors
- Includes rings, butts, spades and quick disconnects
- 22-18, 16-14 and 12-10 gauges
- 12 compartment re-closable plastic box with re-order chart on the inside cover

Part No.	Kit Contents	Quantity
83-6539	Butt Connectors (40)	120
	Ring Terminals (50)	
	Spade Terminals (10)	
	Male Disconnects .250" (10)	
	Female Disconnects .250" (10)	



83-6557

Part No.	Kit Contents	Quantity
83-6557	Butt Connectors (24)	70
	Ring Terminals (36)	
	Male Disconnects .250" (4)	
	Female Disconnects .250" (7)	
	* Includes Hang Tab	



83-2611

Part No.	Kit Contents	Quantity
83-2611	Retail Clam Pack	37
	Butt Connectors (10)	
	Ring Terminals (24)	
	Female Disconnects .250" (3)	

HEAT SHRINK CRIMP, SOLDER AND SEAL BUTT CONNECTORS • MANCHONS CONNECTEURS THERMORÉTRÉCISSABLES À SERTIR, À SOUDER ET À SCELLER • CONECTORES DE TOPE A PRESIÓN, DE SOLDADURA Y DE SELLADO TERMOCONTRAÍBLES

CRIMP, SOLDER & SEAL TERMINALS

PRODUCT CHARACTERISTICS

Operating Temperature: -55°C (-67°F) to 110°C (230°F)

Tensile Strength: 2200 PSI

Melting Point for Solder: 146°C (295°F)

Physical Properties:

- The ultimate solution in a one piece crimped, soldered and sealed termination
- Uncompromised integrity and durability

Features/Benefits:

- Crimped for maximum reliability; soldered for strength
- Environmentally sealed with an adhesive-lined heat shrinkable jacket
- Translucent heat shrink tubing jacket allows for visual inspection
- Color-coded connectors with wire gauge imprint for easy identification
- Meets or exceeds the most stringent OEM standards



Crimp, Solder & Seal Butt Connectors

20-10 gauge

Part No.	Gauge	Pack
83-2929	20-18	100
84-2929	20-18	15
83-2930	16-14	100
84-2930	16-14	15
83-2931	12-10	100
84-2931	12-10	15



Crimp, Solder & Seal Ring Terminals

20-18 gauge

Part No.	Gauge	Stud Size	Pack
83-1932	20-18	10	25
84-1932	20-18	10	6
83-1933	20-18	1/4"	25
84-1933	20-18	1/4"	6
83-1934	20-18	5/16"	25
84-1934	20-18	5/16"	6
83-1935	20-18	3/8"	25
84-1935	20-18	3/8"	6



TERMINALS AND CONNECTORS

COSES ET CONNECTEURS • TERMINALES Y CONECTORES

HEAT SHRINK CRIMP, SOLDER AND SEAL RING TERMINALS • COSES À ANNEAU THERMORÉTRÉCISSABLES À SERTIR, À SOUDER ET À SCELLER • TERMINALES DE ANILLO A PRESIÓN, DE SOLDADURA Y DE SELLADO TERMOCONTRAÍBLES



84-1939

Crimp, Solder & Seal Ring Terminals

16-14 gauge

Part No.	Gauge	Stud Size	Pack
83-1937	16-14	8	25
84-1937	16-14	8	6
83-1938	16-14	10	25
84-1938	16-14	10	6
83-1939	16-14	1/4"	25
84-1939	16-14	1/4"	6
83-1940	16-14	5/16"	25
84-1940	16-14	5/16"	6
83-1941	16-14	3/8"	25
84-1941	16-14	3/8"	6

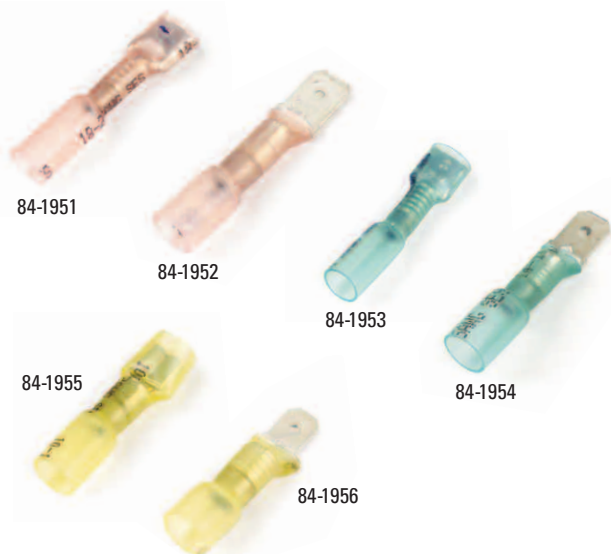


84-1944

Crimp, Solder & Seal Ring Terminals

12-10 gauge

Part No.	Gauge	Stud Size	Pack
83-1942	12-10	8	25
84-1942	12-10	8	6
83-1943	12-10	10	25
84-1943	12-10	10	6
83-1944	12-10	1/4"	25
84-1944	12-10	1/4"	6
83-1945	12-10	5/16"	25
84-1945	12-10	5/16"	6
83-1946	12-10	3/8"	25
84-1946	12-10	3/8"	6
83-1947	12-10	1/2"	25
84-1947	12-10	1/2"	6



Crimp, Solder & Seal Quick Disconnects

20-10 gauge

Part No.	Gauge	Stud Size	Pack
83-1951	20-18	Female .250" FI	25
84-1951	20-18	Female .250" FI	6
83-1952	20-18	Male .250"	25
84-1952	20-18	Male .250"	6
83-1953	16-14	Female .250" FI	25
84-1953	16-14	Female .250" FI	6
83-1954	16-14	Male .250"	25
84-1954	16-14	Male .250"	6
83-1955	12-10	Female .250" FI	25
84-1955	12-10	Female .250" FI	6
83-1956	12-10	Male .250"	25
84-1956	12-10	Male .250"	6

FI = Fully Insulated

HEAT SHRINK CRIMP, SOLDER AND SEAL ASSORTMENT KITS • ENSEMBLES D'ACCESSOIRES ASSORTIS THERMORÉTRÉCISSABLES À SERTIR, À SOUDER ET À SCELLER • JUEGOS SURTIDOS DE CONECTORES DE PRESIÓN, DE SOLDADURA Y DE SELLADO TERMOCONTRAÍBLES

Crimp Solder and Seal Terminal & Connector Assortment Kit 20-10 gauge

- Includes the most popular heat shrink crimp, solder and seal terminals and connectors
- Includes rings, butts, spades and quick disconnects
- 20-18, 16-14 and 12-10 gauges
- 12 compartment plastic box with re-order chart on the inside cover

Part No.	Kit Contents	Quantity
83-6542	Butt Connectors (40)	120
	Ring Terminals (50)	
	Spade Terminals (10)	
	Male Disconnects (10)	
	Female Disconnects (10)	



83-6542

Part No.	Kit Contents	Quantity
83-6558	Butt Connectors (24)	70
	Ring Terminals (36)	
	Male Disconnects (4)	
	Female Disconnects (6)	
	* Includes Hang Tab	



83-6558

Part No.	Kit Contents	Quantity
83-2613	Retail Clam Pack	36
	Butt Connectors (9)	
	Ring Terminals (24)	
	Female Disconnects (3)	

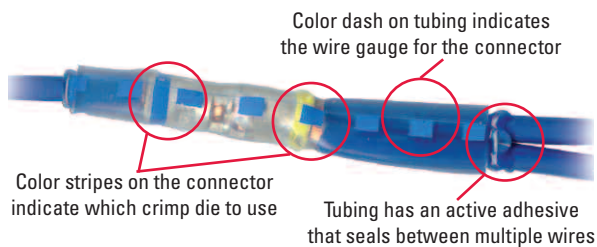
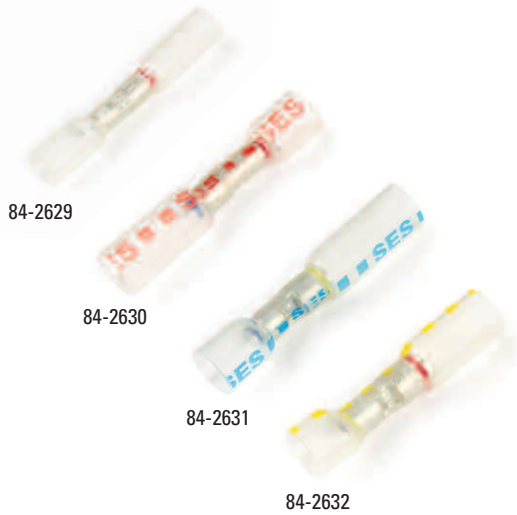


83-2613

TERMINALS AND CONNECTORS

COSSES ET CONNECTEURS • TERMINALES Y CONECTORES

SEALED MULTIPLE WIRE HEAT SHRINK CONNECTORS • CONNECTEURS THERMORÉTRACTABLES SCÉLLÉS POUR PLUSIEURS FILS • CONECTORES TERMORETRACTABLES HERMÉTICOS DE VARIOS HILOS



Sealed Multiple Wire Heat Shrink Connectors

Multiple wire connectors enable an in-line butt or a closed end-style connector. When connecting multiple wires protection from moisture and corrosion are crucial. The heat shrink moisture seal provides superior protection and replaces the unsealed, tap style connector.

In-Line Heat Shrink Butt Connectors

24-10 gauge

- Color dash on tubing identifies the proper gauge sizes
- Color dash on the connector identifies the proper crimp gauge
- Heat shrink tubing has an active adhesive that seals multiple wires

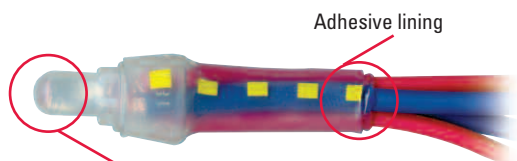
Connector Gauge	Markings	End Color	Wire Range	Pack	Part No.
24-22	White	Red	24-22 x 2	15	84-2629
20-18	Red	Blue	20-18 x 2	15	84-2630
16-14	Blue	Yellow	16-14 x 2	15	84-2631
12-10	Red	Red	12-10 x 2	15	84-2632

Closed-End Heat Shrink Butt Connectors

22-10 gauge

- Color dash on tubing identifies the proper gauge sizes
- Color dash on the connector identifies the proper crimp gauge
- Heat shrink tubing has an active adhesive that seals multiple wires
- Excellent replacement for wire nuts and where moisture and corrosion is a problem

Connector Gauge	Markings	Wire Range	Pack	Part No.
22-14	Blue	Multiple	15	84-2627
18-10	Yellow	Multiple	15	84-2628



Closed-end connectors are crimped here. In environments where corrosion and/or vibration are a problem, the closed-end connector can be used to replace wire nuts.

OEM replacement terminals and housings offer an alternative solution to the costly replacement of the entire electrical wiring harness. OEM replacement connection systems are ideal for low energy electronic circuits and are available in sealed and unsealed formats. These connectors have been internationally standardized for universal under-the-hood vehicle applications.

- Exact match for specific O.E.M. styles
- Male connectors are packaged in clam shell recloseable blisters
- Female receptacles are packaged in polybags
- OEM terminals and housings are packaged in economical 10-packs
- Also available in Bulk quantities



Weather Pack Terminals

- Tin plated brass terminals
- Use Grote 84-9449 weather pack crimping tool for a solid crimp
- Use Grote 84-9450 weather pack terminal extractor tool for easy removal of terminals

Male Terminals

Part No.	Gauge	OEM #	Pack
88-2000	22-18	12089040	1000
84-2000	22-18	12089040	10
84-2048	16-14	12124582	10
84-2049	12-10	12124587	10

Female Terminals

Part No.	Gauge	OEM #	Pack
88-2001	22-18	12089188	1000
84-2001	22-18	12089188	10
84-2047	16-14	12124580	10
84-2050	12-10	12124581	10



Male Connector Assembly

Part No.	Cavity #	OEM #	Pack
84-2004	One	12010996	10
84-2006	Two	12010973	10
84-2008	Three	12010717	10
84-9459	Four-Flat	12010974	5
84-2033	Four-Square	12015024	10
84-2053	Six	12010975	5

Female Connector Assembly

Part No.	Cavity #	OEM #	Pack
84-2005	One	12015791	10
84-2007	Two	12015792	10
84-2009	Three	12015793	10
84-9460	Four-Flat	12015797	5
84-2034	Four-Square	12015798	10
84-2052	Six	12015799	5



TERMINALS AND CONNECTORS

COSSES ET CONNECTEURS • TERMINALES Y CONECTORES

O.E.M. ELECTRONIC TERMINALS & HOUSINGS

COSSES ÉLECTRONIQUES ET BOÎTIERS OEM • TERMINALES Y CONEXIONES CON ESPECIFICACIONES DE OEM



Cable Seals - Silicone

Part No.	Gauge	Color	OEM #	Pack
88-2002	20-18	Green	12015323	1000
84-2002	20-18	Green	12015323	10
88-2082	16-14	Grey	12010293	1000
84-2082	16-14	Grey	12010293	10
88-2081	12-10	Blue	12015193	1000
84-2081	12-10	Blue	12015193	10

Cable Plug - Silicone

Part No.	Color	OEM #	Pack
84-2003	Green	12010300	10

OEM "Packard Style" Open Barrel Crimping Tool

- Used for open barrel O.E.M. Packard Style connectors
- Can crimp uninsulated Packard Style terminals 22-10 Gauge
- Heavy duty construction
- Ergonomic design
- 10"

84-9449

OEM "Packard Style" Terminal Extractor Tool

- Used to remove Weather Pack male & female terminals from their housings
- Clear yellow handle
- OEM # 12014012

84-9450

OEM "Weather Pack" Terminal & Connector Installation & Repair Kit

- 185 male and female weather pack OEM terminals, cable seals and plugs
- Includes an OEM ratchet style crimping tool and extractor tool for a complete repair and installation kit
- Sturdy plastic container keeps all the connectors in one convenient location
- Easy to use reference re-order chart included

83-6546

OEM "Weather Pack" Terminal & Connector Repair Kit

- Kit Includes 250 assorted pieces; assorted 22-14 GA terminals; 1, 2 and 4 cavity nylon housings and 22-18 & 16-14 GA cables seals
- Sturdy plastic container keeps all the connectors in one convenient location
- Easy to use reference re-order chart included
- Use Grote OEM crimping tool 84-9449 and extractor tool 84-9450 for superior connection and repair. Tools sold separately

83-6536

Metri-Pack 150 Series

Male Terminals



Part No.	Gauge	OEM #	Pack
84-2023	20-18 unsealed	12047581	10

Female Terminals

Part No.	Gauge	OEM #	Pack
84-2036	24	12052466	10
84-2037	20-18 sealed	12103881	10
84-2024	20-18 unsealed	12047767	10



Metri-Pack 280 Series

Male Terminals

Part No.	Gauge	OEM #	Pack
84-2026	20-18	12034047	10
84-2025	18-14	12020116	10
84-2078	5 cavity	12086400	1
84-2079	Tab for 84-2078	12084673	5

Female Terminals

Part No.	Gauge	OEM #	Pack
84-2027	20-18	12034046	10
84-2035	18-14	12066214	10
84-2075	5 cavity	12084891	5
84-2076	Tab for 84-2075	15300017	5



Metri-Pack 480 Series

Male Terminals

Part No.	Gauge	OEM #	Pack
84-2028	16-14	12020120	10

Female Terminals

Part No.	Gauge	OEM #	Pack
84-2041	16-14	12124304	10



Metri-Pack 630 Series

Female Terminals

Part No.	Gauge	OEM #	Pack
84-2029	16-14	12015870	10



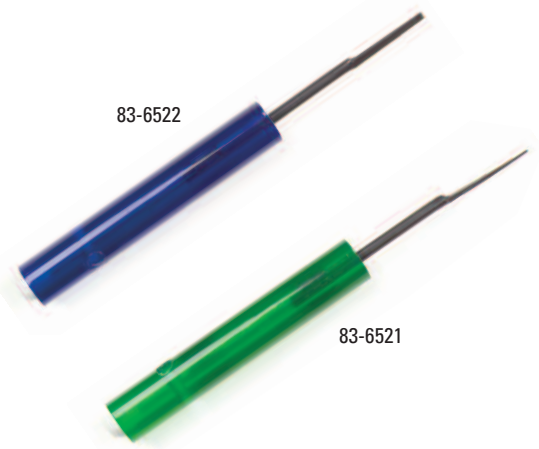
OEM "Metri-Pack" Terminal Removal Tool

- Used to remove 56 Series, 280, 480, 630 and 800 Metri-Pack Series male terminals from their housings
- Wide blade with blue handle
- OEM # 12094430

83-6522

- Used to remove GT 150 and 280; 150, 280 & 800 Metri-Pack Series female terminals; 280 tangless and 280 Bus bar; 630 Pull-To-Seat; Lamp socket bases, B-1 & W-3 from their housings
- Narrow blade with green handle
- OEM # 12094429

83-6521



TERMINALS AND CONNECTORS

COSSES ET CONNECTEURS • TERMINALES Y CONECTORES

O.E.M. ELECTRONIC TERMINALS & HOUSINGS

COSSES ÉLECTRONIQUES ET BOÎTIERS OEM • TERMINALES Y CONEXIONES CON ESPECIFICACIONES DE OEM

Micro-Pack Terminals

Male Terminals

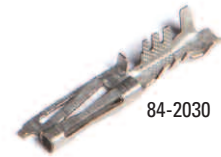
Part No.	Gauge	OEM #	Pack
84-2031	22	12040902	10



84-2031

Female Terminals

Part No.	Gauge	OEM #	Pack
84-2030	16-14	12020758	10



84-2030

56 Series

Male Terminals

Part No.	Gauge	OEM #	Pack
84-2011	16-14	2962987	10



84-2011

Female Terminals

Part No.	Gauge	OEM #	Pack
84-2013	16-14	2962447	10



84-2013

Ford and Chrysler Terminals

Female Terminals

Part No.	Gauge	OEM #	Pack
84-2032	20-18	2965470, 2096466, C5AB-14474-B	10
84-2072	14-12	GM: 2965580, Ford: C1SF-14474-A, Chrysler: 2096467 (.250")	10



84-2032



84-2072



83-6516



83-6517

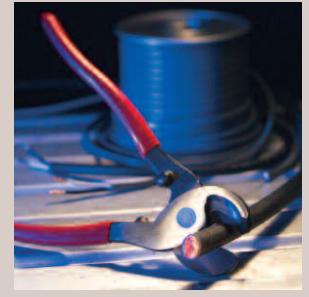
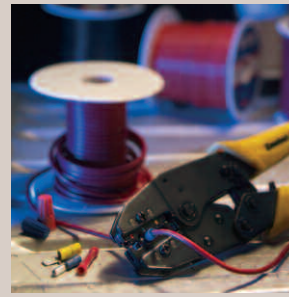
Deutsch Connectors Crimping Tools

83-6516 Production Style 20-12 Gauge Solid Contacts

83-6517 Field Repair Style 20-12 Gauge Solid Contacts

WIRE/CABLE DISPLAYS • PRÉSENTOIRS POUR FILS/CÂBLES • EXPOSITORES DE HILOS METÁLICOS/CABLES

For all vehicle wiring maintenance and repairs, Grote offers a wide variety of spooled wire and cable products. These are available in all popular gauges and colors.



Primary Wire Dispenser

- A rugged, well constructed wire dispenser made of high grade steel
- Easy top-loading display eliminates re-stocking hassles
- Only 23" wide x 18" high x 12" deep
- Perfect for storing wire or used as a retail display – all in one convenient unit
- Can accommodate up to 78 spools of wire 36 (25') and 42 (100') covering 20-12 gauges
- Wire not included

00871



00871

Wire & Cable Display

- Constructed of heavy-duty steel, painted powder blue
- Can accommodate a variety of primary wire, battery cable or welding cable assortments in one display
- Steel bars can be removed to accommodate larger spools
- Mounting brackets included for mounting, safety and functionality
- Can be mounted or used as a stand alone display
- No assembly required
- Made in North America
- 27" wide x 18 1/4" tall x 6 1/4" deep; 11 lbs
- Wire not included

00870



00870



87-7000



87-7001



87-7002



87-7006



87-7007

GPT-General Purpose Thermo Plastic Wire

- Primary wire is single conductor based PVC jacketed wire
- PVC insulation resists heat up to 85°C (185°F) and provides protection from weather conditions and abrasives
- Maximum temperature rating -40°C (-40°F) to 85°C (185°F)
- Used for automotive, truck and marine applications
- Meets SAE code J1128 specifications
- Available in 25', 100' and 1000' spools
- Bulk sizes available
- Custom length wires available by special order only



6 Gauge

Color	25'	100'	1000'
Red	89-3000	87-3000	-
Black	89-3002	87-3002	-

8 Gauge

Color	25'	100'	1000'
Red	89-4000	87-4000	-
Black	89-4002	87-4002	-
White	89-4007	87-4007	-

10 Gauge

Color	25'	100'	1000'
Red	89-5000	87-5000	88-5000
Brown	89-5001	87-5001	-
Black	89-5002	87-5002	88-5002
Green	89-5006	87-5006	-
White	89-5007	87-5007	88-5007
Blue	89-5010	87-5010	-
Yellow	89-5011	87-5011	-

12 Gauge

Color	25'	100'	1000'
Red	89-6000	87-6000	88-6000
Brown	89-6001	87-6001	88-6001
Black	89-6002	87-6002	88-6002
Green	89-6006	87-6006	88-6006
White	89-6007	87-6007	88-6007
Blue	89-6010	87-6010	88-6010
Yellow	89-6011	87-6011	88-6011

Gauge	Outside Diameter	Stranding
6	.300"	7 x 19 x .014"
8	.231"	6 x .024", 13 x .031"
10	.178"	19 x .024"
12	.145"	19 x .018"
14	.113"	19 x .014"
16	.105"	19 x .011"
18	.091"	16 x .010"
20	.087"	7 x .012"



83-6512
Wire Stripper
See page 118

14 Gauge

Color	25'	100'	1000'
Red	89-7000	87-7000	88-7000
Brown	89-7001	87-7001	88-7001
Black	89-7002	87-7002	88-7002
Green	89-7006	87-7006	88-7006
White	89-7007	87-7007	88-7007
Blue	89-7010	87-7010	88-7010
Yellow	89-7011	87-7011	88-7011
Orange	89-7012	87-7012	88-7012
Purple	-	87-7013	-
Pink	-	87-7014	-

16 Gauge

Color	25'	100'	1000'
Red	89-8000	87-8000	88-8000
Brown	89-8001	87-8001	88-8001
Black	89-8002	87-8002	88-8002
Green	89-8006	87-8006	88-8006
White	89-8007	87-8007	88-8007
Blue	89-8010	87-8010	88-8010
Yellow	89-8011	87-8011	88-8011
Orange	89-8012	87-8012	88-8012
Purple	-	87-8013	-
Pink	-	87-8014	-

18 Gauge

Color	25'	100'	1000'
Red	89-9000	87-9000	88-9000
Brown	89-9001	87-9001	-
Black	89-9002	87-9002	88-9002
Green	89-9006	87-9006	-
White	89-9007	87-9007	88-9007
Blue	89-9010	87-9010	-
Yellow	89-9011	87-9011	-

20 Gauge

Color	25'	100'	1000'
Red	-	87-2010	-
Blue	-	87-2017	-
White	-	87-2015	NEW



87-7010



87-7011



87-7012



87-7013



87-7014



87-7002



Gauge	Outside Diameter	Stranding
14	.151"	19 x .014"
16	.129"	19 x .011"

Type SXL Heavy Duty Primary Wire

- SXL wire is designed to withstand harsher environments than general purpose primary wire
- SXL has an annealed copper conductor that is insulated with cross linked polyethylene base
- XLPE insulation provides a thicker jacket that resists heat up to 125°C (257°F) and provides protection from weather conditions and abrasives
- Maximum temperature rating: -45°C (-49°F) to 125°C (257°F)
- Resistant to grease, oil, gasoline and acids
- Meets all SAE code J1128 specifications

14 Gauge

Color	25'	100'	1000'
Red	-	87-0000	-
Black	-	87-0002	-

16 Gauge

Color	25'	100'	1000'
Red	-	87-2000	-
Black	-	87-2002	-



82-5514



Gauge	Overall Diameter	Stranding
14	.476"	19 x .014"
16	.464"	19 x .010"
18	.372"	16 x .010"

Parallel Bonded Wire

- GPT - General Purpose Thermo Plastic Wire
- Clear, PVC jacket insulation
- Ideal for RV, boat and utility trailers

4 Conductor

Gauge	Color	Length	Part No.
14	White, Brown, Yellow, Green	25'	82-5515
14	White, Brown, Yellow, Green	100'	82-5514
16	White, Brown, Yellow, Green	25'	NEW 82-5524
16	White, Brown, Yellow, Green	100'	NEW 82-5525
18	White, Brown, Yellow, Green	25'	NEW 82-5527
18	White, Brown, Yellow, Green	100'	NEW 82-5526

Speaker Wire

- Positive identification with one strand tinned copper and the other bare copper
- Bonded parallel wires with clear PVC coated jacket
- Use for general audio applications in home, marine, RV, truck and automobiles

2 Conductor

Gauge	Outside	Stranding	Length	Part No.
16	.225"	26 x .010"	100'	87-2016
18	.195"	16 x .010"	100'	87-2018
20	.143"	10 x .010"	100'	87-2020



87-2018



PVC Jacketed Brake Cable

- PVC jacketed wire resists grease, oil, gasoline and acids
- Used for automotive, truck and marine applications
- Maximum temperature rating -40°C (-40°F) to 85°C (185°F)
- Internal wires meet SAE J1128 specifications
- Custom lengths also available



82-5502

2 Conductor

Gauge	Strand	Overall Diameter	Color	Length	Part No.
10	19 x .023"	.246 x .432"	Yellow, Green	50'	82-5509
10	19 x .023"	.246 x .432"	Yellow, Green	100'	82-5508
10	19 x .023"	.246 x .432"	Yellow, Green	1000'	82-5507
12	19 x .017"	.206 x .348"	Black, White	50'	82-5512
12	19 x .017"	.206 x .348"	Black, White	100'	82-5511
12	19 x .017"	.206 x .348"	Black, White	1000'	82-5510
14	19 x .014"	.181 x .298"	Black, White	20'	82-5504
14	19 x .014"	.181 x .298"	Black, White	100'	82-5502
14	19 x .014"	.181 x .298"	Black, White	1000'	82-5503
16	19 x .011"	.168 x .272"	Black, White	100'	82-5500
16	19 x .011"	.168 x .272"	Black, White	1000'	82-5501

3 Conductor

Gauge	Strand	Overall Diameter	Color	Length	Part No.
14	19 x .014"	.200 x .430"	Red, Green, Black	100'	82-5520
16	19 x .011"	.170 x .380"	Red, Green, Black	100'	82-5522

4 Conductor

Gauge	Strand	Overall Diameter	Color	Length	Part No.
14	19 x .014"	.200 x .550"	Red, Green, Black, White	100'	82-5521
16	19 x .011"	.185 x .525"	Red, Green, Black, White	100'	82-5519



Split Flex Tubing
See page 79

Portable Extension Cable- Type SJ00W

- Chlorinated Polyethylene (CPE) oil resistant neoprene jacket protects from outside conditions and abrasives
- Rated at 300 Volt
- -40°C (-40°F) to 90°C (194°F)
- UL # 46194 – meets UL and CSA requirements
- Industrial equipment, heavy tools and power extension applications
- All extension cord cable is spooled



82-5907

2 Conductor

Gauge	Strand	Overall Diameter	Color	Length	Part No.
14	44 x .010"	.340"	Black, White	50'	82-5902
14	44 x .010"	.340"	Black, White	100'	82-5901

3 Conductor

Gauge	Strand	Overall Diameter	Color	Length	Part No.
14	44 x .010"	.365"	Black, White, Green	50'	82-5905
14	44 x .010"	.365"	Black, White, Green	100'	82-5904
16	26 x .010"	.330"	Black, White, Green	50'	82-5908
16	26 x .010"	.330"	Black, White, Green	100'	82-5907



Molded Connectors
82-1025

See page 53



82-5703



82-6703

Gauge	Outside Diameter	Stranding
6	.310"	7 x 19 x .0157"
4	.370"	7 x 27 x .0142"
2	.468"	19 x 16 x .0142"
1	.495"	19 x 21 x .0142"
1/0	.550"	19 x 26 x .0142"
2/0	.595"	19 x 21 x .0179"
3/0	.700"	19 x 35 x .0156"
4/0	.760"	19 x 54 x .0142"

Battery Cable - Type SGR

- 100% Copper Cable
- Chlorinated Polyethylene (CPE) Jacket rated at -40°C (-40°F) to 90°C (194°F)
- Meets all SAE code J1127 specifications
- All battery cable is spooled
- 1000'+ custom size spools also available
- Rated @ 60 Volt



6 Gauge

Color	25'	50'	100'
Black	82-5722	82-5725	82-5726
Red	82-6722	82-6725	82-6726

4 Gauge

Color	25'	50'	100'
Black	82-5714	82-5713	82-5712
Red	82-6717	82-6713	82-6712

2 Gauge

Color	25'	50'	100'
Black	82-5711	82-5710	82-5709
Red	82-6718	82-6710	82-6709

1 Gauge

Color	25'	50'	100'
Black	82-5708	82-5707	82-5706
Red	82-6719	82-6707	82-6706

1/0 Gauge

Color	25'	50'	100'
Black	82-5705	82-5704	82-5703
Red	82-6720	82-6704	82-6703

2/0 Gauge

Color	25'	50'	100'
Black	82-5702	82-5701	82-5700
Red	82-6721	82-6701	82-6700

3/0 Gauge

Color	25'	50'	100'
Black	82-5723	82-5715	82-5733
Red	82-6723	82-6715	82-6733

4/0 Gauge

Color	25'	50'	100'
Black	82-5743	82-5716	82-5753
Red	82-6743	82-6716	82-6753

Welding Cable



- Made from fine stranded copper with a water resistant thermoplastic rubber compound jacket
- Ideal product for routing cables where a tight fit/flexing is needed
- Voltage Rating: 600 Volt
- Remains flexible in colder climate
- Maximum temperature rating -50°C (-58°F) to 105°C (221°F)
- Resistant to flame, salt, chemicals, grease and abrasion
- Available as tinned copper and custom lengths as a special order

4 Gauge

Color	Outside Diameter	Stranding	Length	Part No.
Black	.376"	378 x .010"	25'	82-5724
Red	.376"	378 x .010"	25'	82-6727

2 Gauge

Color	Outside Diameter	Stranding	Length	Part No.
Black	.430"	636 x .010"	25'	82-5721
Red	.430"	636 x .010"	25'	82-6728

2/0 Gauge

Color	Outside Diameter	Stranding	Length	Part No.
Black	.600"	1254 x .010"	25'	82-5730
Red	.600"	1254 x .010"	25'	82-6730



82-5730

Heavy Duty Cable Slitter/Stripper Tool 8 - 4/0 Gauge

- Slits & strips round battery & trailer cables
- Can strip 8 GA to 4/0 GA wire, battery and trailer cables
- Self-adjusting cutting depth
- Makes a clean strip without damaging wire strands
- Blade swivels for longitudinal/spiral cuts
- Ergonomic design

83-6515



BEFORE

AFTER



83-6515

9" Hand Held Cable Cutter

- Cuts cables up to 2/0 Gauge
- Ergonomic design with insulated grips
- 6 month limited warranty
- 9" long

84-9088



84-9088

84-9089

22" Cable Cutter

- Cuts cables 22 GA to 250 mcm (6/0 GA)
- 22" handle for easy cutting
- 1075 Carbon steel blade, hardened for long life; can be sharpened
- 6 month limited warranty
- Made in North America

84-9089

Hand Held

84-9090

Bench Mount

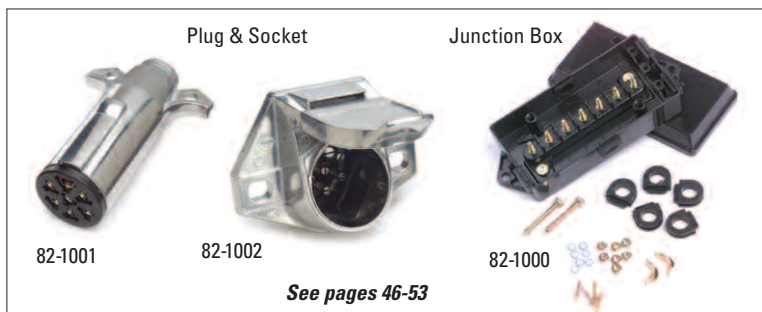


82-5606



Trailer Cable

- PVC insulation resists temperature ratings of -40°C (-40°F) to 60°C (140°F)
- Black vinyl outer jacket provides protection from weather conditions and abrasive materials
- Used for wiring trucks and trailers
- Designed for 12V and 24V systems
- To view our complete line of Trailer Plugs and Sockets please refer to pages 46-53



4 Conductor

Gauge	Outside Dia.	Stranding	Color	Length	Part No.
14	.441"	19 x .0142"	Yellow, Green, Brown, White	100'	82-5602
				500'	82-5603
14	.441"	19 x .0142"	Yellow, Green, Brown, Red	100'	82-5600
				500'	82-5601

6 Conductor

Gauge	Outside Dia.	Stranding	Color	Length	Part No.
14	.591"	19 x .0142"	Yellow, Green, Brown, White, Red, Black	100'	82-5604
				500'	82-5605
16	.440"	29 x .011"	Yellow, Green, Brown, White, Red, Black	100'	82-5623
				500'	82-5620



7 Conductor

Gauge	Outside Dia.	Stranding	Color	Length	Part No.
14	.535"	19 x .0142"	Yellow, Green, Brown, White, Red, Black, Blue	50'	82-5610
				100'	82-5609
				NEW 250'	82-5619
				500'	82-5614
6/14, 1/12	.543"	41 x .010", 65 x .010"	Yellow, Green, Brown, White, Red, Black, Blue	50'	82-5612
				100'	82-5611
				500'	82-5615
6/12, 1/10	.685"	19 x .017", 19 x .023"	Yellow, Green, Brown, White, Red, Black, Blue	100'	82-5606
				500'	82-5607



82-5622

ABS

Gauge	Outside Dia.	Stranding	Color	Length	Part No.
4/12, 2/10 1/8	.685"	24 x .010", 19 x .023", 19 x .017"	Yellow, Green, Brown, White, Red, Black, Blue	50'	82-5622
				100'	82-5621

DETERMINING WIRE AND CABLE GAUGE SIZE BY CIRCUIT AMPS AND LENGTH													
Total Circuit Amps	Wire Gauge for Length in Feet (Total circuit length)												
	12V	3'	5'	7'	10'	15'	20'	25'	30'	40'	50'	75'	100'
1	18	18	18	18	18	18	18	18	18	18	18	18	18
3	18	18	18	18	18	18	18	18	18	18	18	14	14
5	18	18	18	18	18	18	18	18	18	16	14	12	12
7	18	18	18	18	18	18	18	16	16	14	14	10	10
10	18	18	18	18	18	16	16	16	14	12	12	10	10
15	18	18	18	18	18	14	14	12	12	12	10	8	8
20	16	16	16	16	16	14	12	10	10	10	10	8	6
24	14	14	14	14	14	12	12	10	10	10	8	6	6
30	12	12	12	12	12	10	10	10	10	10	6	4	4
40	10	10	10	10	10	10	10	8	8	6	6	4	2
50	8	8	8	8	8	8	8	8	8	6	6	2	2
100	4	4	4	4	4	4	4	4	4	4	2	1	1/0
150	2	2	2	2	2	2	2	2	2	2	1	2/0	2/0
200	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	4/0	4/0

HOW TO MATCH CABLE & EQUIPMENT	
TYPE OF EQUIPMENT	TYPICAL WIRE GA.
Garden Tractor	8, 6, 4
Compact Car, RV	6, 4
Standard Car	4, 2
Full-size Car, Van	2, 1
Tractor, Light Truck, Construction	1/0
HD Tractor, Truck, Bus, Construction	2/0, 3/0
Extra Heavy Duty	4/0, 250 MCM

Metric and AWG wire size																
Metric values are expressed as a range and vary by country																
mm ²	0.35	0.50	0.75	1	2	3	4-5	6-8	9-13	14-21	22-35	36-42	43-53	54-68	69-86	87-107
AWG	22	20	18	16	14	12	10	8	6	4	2	1	1/0	2/0	3/0	4/0



RoHS Compliance

The RoHS Directive stands for "the restriction of the use of certain hazardous substances in electrical and electronic equipment". This Directive bans the placing on the EU market of new electrical and electronic equipment containing more than agreed levels of lead, cadmium, mercury, hexavalent chromium, polybrominated biphenyl (PBB) and polybrominated diphenyl ether (PBDE) flame retardants.

TRAILER CONNECTORS

CONNECTEURS DE REMORQUES • CONEXIÓN DE TRAILERS Y REMOLQUES

HEAVY DUTY 7-WAY CONNECTORS • CONNECTEURS ROBUSTES À 7 VOIES • CONECTORES DE 7 HILOS REFORZADOS



Grote's Trailer Connectors and Communication products insure sufficient power is delivered to the entire vehicles lighting and safety system.

Heavy Duty 7-Way Connectors

No.	Color	Circuits	Recommended Wire Gauge
1	White	Ground Return	8 ga
2	Black	Clearance, Side Marker and Identification Lamps	12 ga
3	Yellow	Left Turn Signal and Hazard Signal	12 ga
4	Red	Stop Lamps and Anti-Lock Devices	10 ga
5	Green	Right Turn Signal and Hazard Signal	12 ga
6	Brown	Tail, Rear Clearance, Marker and License Plate Lamps	12 ga
7	Blue	Auxiliary Circuit/ABS	10 ga

- Die-cast housing for superior corrosion resistance
- Solid brass pin terminals for best conductivity
- Terminals accept 16-10 gauge wires; 8 gauge ground wire
- 40 amp. @ 6-28V DC
- 2, 1/2" mounting holes
- Plated steel cable guard prevents cable chafing
- Circuit identification on the back of the plug & socket
- Meets and exceeds SAE J560
- Stainless steel spring

Plug #	Material	Description	Part #
7	Zinc Die-Cast	Plug only - N.A.	82-1007
7	Zinc Die-Cast	Plug only	82-1001
7	Nylon	Plug only - N.A.	82-2140
7	Zinc Die-Cast	Plug with guard - N.A.	82-1037
7	Zinc Die-Cast	Plug with guard	82-1019
7	Stainless Steel	Guard only	82-2141
7	Nylon	Plug Interior – enclosed	82-1003

Socket #	Material	Terminals	Part #
7	Zinc Die-Cast	Exposed, solid pin - N.A.	82-1005
7	Zinc Die-Cast	Exposed, split pin - N.A.	82-1047
7	Zinc Die-Cast	Enclosed, split pin	82-1002
7	Nylon	Enclosed, solid pin - N.A.	82-2145
7	Zinc Die-Cast	Enclosed, split pin with 20 amp. circuit breaker	82-0850

N.A. = North American



82-1001



82-2140



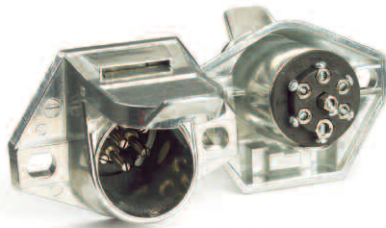
82-1037



82-2141



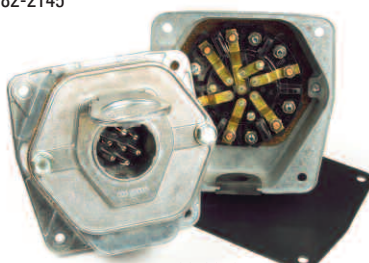
82-1003



82-1002



82-2145

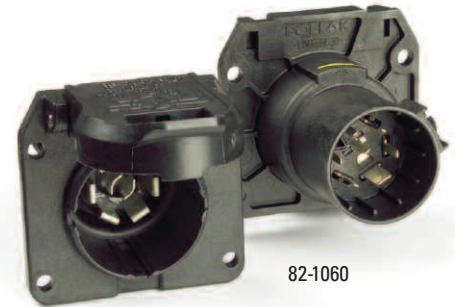


82-0850

7 Way R.V. Connectors

No.	Color	Circuits	Recommended Wire Gauge
1	White	Ground Return	10 ga
2	Blue	Electric Brake	12 ga
3	Green	Tail, License, Running Lights	14 ga
4	Black	Battery Charge	10 ga
5	Red	Stop and Left Hand Turn Signal	14 ga
6	Brown	Stop and Right Hand Turn Signal	14 ga
7	Yellow	Auxiliary Circuit	14 ga

- Made of lightweight, high impact nylon with a stainless steel spring and rubber gasket
- Socket lid has a slot for proper drainage, tin plated copper alloy terminals
- 82-1060 fits Ford style and universal mount brackets (Grote part # 43402)



82-1060

Plug/Socket #	Material	Description	Part #
7	Nylon	R.V. Socket Only - N.A.	82-1060
7	Nylon	R.V. Socket Only	82-1058
7	Nylon	R.V. Plug Only	82-1056
7	Nylon	R.V. Plug & Socket Kit (includes 82-1056 & 82-1058)	82-1050



82-1056

82-1058

Twist-in and Lock Connector

- Easy twist-in and lock assembly for factory installed brackets and hitches
- Fits GM and Nissan trucks and SUV's

Plug #	Material	Description	Part #
7	Nylon	Twist-In & Lock Socket - N.A.	82-1059



82-1059

Combination 7 Way & 4 Pole Sockets

- Combines an R.V. 7 way and 4 pole flat socket connection into one part (not to be used simultaneously)
- Made of lightweight, high impact nylon material for superior corrosion resistance
- Easy snap-in assembly designed for truck and sport utility vehicles and when hauling multiple trailers
- Eliminates the need for an adapter
- Will plug into any Ford or GM vehicle built after 2001 (selected Nissan models 2004+)
- Mounting bracket included

Plug #	Material	Description	Part #
7	Nylon	7-Way R.V. and 4 pole flat - N.A.	82-1055



82-1055

N.A. = North American

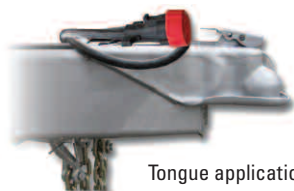
TRAILER CONNECTORS

CONNECTEURS DE REMORQUES • CONEXIÓN DE TRAILERS Y REMOLQUES

R.V. CONNECTOR ADAPTERS • ADAPTATEURS DE CONNECTEUR POUR VR
• ADAPTADORES DE CONECTORES PARA VEHÍCULOS RECREATIVOS



Bumper application



Tongue application

7 Way Plug and Socket Protectors

NEW

- Designed to reduce 7-way electrical plug connector malfunction or damage caused by corrosion, dust, moisture and debris
- RV, Horse, Boat and Utility Trailer Applications
- Two piece product for application on the trailer and towing vehicle
- Fits most 7 way connectors
- Made in North America

1267

T Connector Adapter

- Adapter for 5th wheel & bumper mount sockets
- Quickly installs a second R.V. socket; plug and play into the existing OEM harness
- Fits GM and Ford trucks and SUV's; fits Chrysler trucks and SUV's with 82-1062 adapter
- Mates with Grote 7 Way socket # 82-1060 & 82-1055 (page 47)
- Installation instructions included

Plug #	Material	Description	Part #
7	Nylon	7 Way R.V. 5th Wheel T-Connector - N.A.	82-1063

Rectangular-to-Round Harness Adapter

- Adapter for OEM harnesses
- Mates with Grote socket # 82-1060, 82-1055, 82-1059 (page 47) and T-Connector # 82-1063 (above)

Plug #	Material	Description	Part #
7	Nylon	Harness Adapter - N.A.	82-1062

Harness Extension Adapter

- Adapter mates with socket # 82-1060, 82-1055 (page 47)
- 4' harness extension plug into the socket and splices into an existing OEM harness
- Installation hardware included

Plug #	Material	Description	Part #
7	Nylon	4' Harness Extension - N.A.	82-1061

N.A. = North American



82-1063



82-1062



82-1061

Step-Down R.V. Adapters

- Provides 6 & 7 pole trailer plug to allow 4,5 and 6 pole conversion
- Made of lightweight, nylon material for superior corrosion resistance
- Simply plug into the matching socket and your ready to go
- Ideal for boat trailers, campers and utility vehicles
- Mounting brackets also available – see below

Plug #	Material	Description	Part #
7	Nylon	7 Way R.V. to 4 Pole Flat	82-2146
7	Nylon	7 Way R.V. to 5 Pole Flat	82-2148
7	Nylon	7 Way R.V. to 6 Pole Round, Centre Pin - Brake	NEW 82-2149
7	Nylon	7 Way R.V. to 6 Pole Round, Centre Pin - Auxiliary	NEW 82-2154
6	Nylon	6 Pole Round to 4 Pole Flat	82-2147



82-2146



82-2148



82-2149



82-2154

R.V. Power Outlet Adapter, 12 Volt

- Designed to adapt the trailer connector at the rear of the vehicle to a 12V Plug (20 amp max.) or AC-DC converter (110 Volt plug outlet)
- Made of lightweight, nylon material for superior corrosion resistance
- Terminals are tin plated copper alloy for higher conductivity and less resistance
- Fits OEM 7 Way R.V. style sockets 82-1055, 82-1058, 82-1059 & 82-1060 and can be easily stored in a glove box
- Provides a power source for T.V.'s, Cell Phones, Electric Coolers or 12V power tools



82-2153

Plug #	Material	Description	Part #
7	Nylon	12 Volt Adapter, AC-DC Converter	82-2153



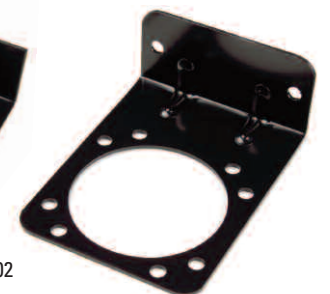
Mounting Brackets

- Can accommodate from 4 pole up to 9 pole socket requirements
- Made of anti-corrosive steel, painted black

Plug #	Material	Description	Part #
4, 5, 6	Steel	4, 5 and 6 pole socket bracket	43942
7, 9	Steel	7 and 9 pole socket bracket	43402



43942



43402

Plug and Socket Boot

Plug / Socket #	Description	Part #
7	Plug Boot - complete protection - N.A.	82-2142
7	Socket Boot - complete protection - N.A.	82-2144



82-2142



82-2144

TRAILER CONNECTORS

CONNECTEURS DE REMORQUES • CONEXIÓN DE TRAILERS Y REMOLQUES

HEAVY DUTY 6-WAY CONNECTORS • CONNECTEURS ROBUSTES À 6 VOIES • CONECTORES DE 6 HILOS REFORZADOS

Heavy Duty 6-Way Connectors

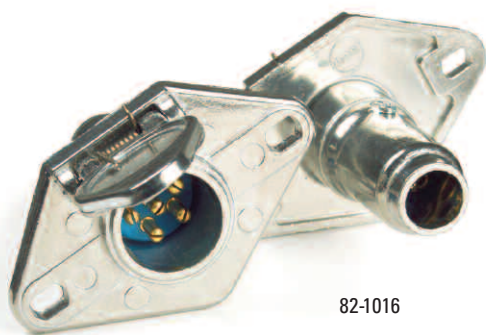
No.	Color	Circuits
1	White	Ground Return
2	Brown	Tail Lights
3	Yellow	Left Turn
4	Red	Stop
5	Green	Right Turn
6	Blue	Auxiliary Circuit



82-1011



82-2006



82-1016



82-1012

- Die-cast housing for superior corrosion resistance
- Brass pin terminals for best conductivity
- Terminals accept up to #12 gauge wires
- 2, 1/2" mounting holes
- Replaceable plug & socket interiors help reduce maintenance costs
- Plated steel cable guard prevents cable chafing
- Circuit identification on the back of the plug & socket

Plug #	Material	Description	Part #
6	Zinc Die-Cast	Plug only	82-1011
6	Zinc Die-Cast	Plug with guard - N.A.	82-2006
6	Zinc Die-Cast	Plug with guard	82-1010

Socket #	Material	Terminals	Part #
6	Zinc Die-Cast	Exposed, split pin - N.A.	82-1015
6	Zinc Die-Cast	Enclosed, split pin	82-1016
6	Zinc Die-Cast	Enclosed, split pin - N.A.	82-4006

Plug & Socket Kit	Material	Terminals	Part #
6	Zinc Die-Cast	Enclosed, split pin (includes 82-1011 & 82-1016)	82-1018

Socket Boot

Plug/Socket #	Description	Part #
6	Socket Boot - Complete protection - N.A.	82-1012

Heavy Duty 4-Way Connectors

No.	Color	Circuits
1	White	Ground Return
2	Green	Right Turns and Brake Lights
3	Yellow or Red	Left Turn and Brake Lights
4	Brown	Tail Lights

- Die-cast housing for corrosion resistance
- Brass pin terminals for best conductivity
- 2, 1/4" mounting holes

Plug #	Material	Description	Part #
4	Zinc Die-Cast	Plug with spring	NEW 82-1022
4	Zinc Die-Cast	Plug	82-1021
4	Stainless Steel	Spring	NEW 82-1023

Socket #	Material	Terminals	Part #
4	Zinc Die-Cast	Enclosed, split pin	82-1020

Plug & Socket Kit	Material	Terminals	Part #
4	Zinc Die-Cast	Enclosed, split pin (includes 82-1020 & 82-1021)	82-1040

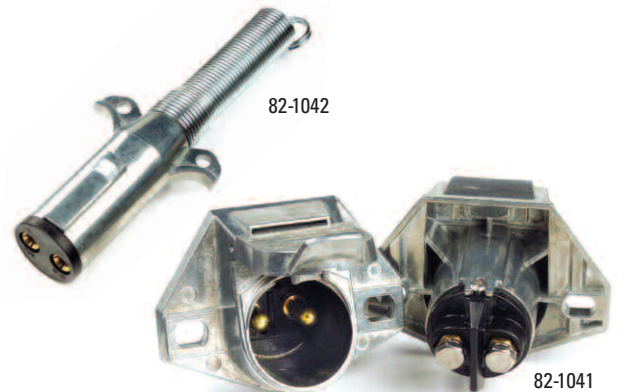


Heavy Duty 2-Way Connectors

- Ideal for lift-gate applications
- Accepts 4 gauge cables
- 2, 1/4" mounting holes
- 200 amp; Heavy duty die-cast construction

NEW

Plug #	Material	Description	Part #
2	Zinc Die-Cast	Plug with spring	82-1042
2	Zinc Die-Cast	Socket	82-1041
2	-	Socket Boot	82-2144



Heavy Duty 1-Way Connectors

- Ideal for power applications on trucks, utility, agricultural equipment and winches
- Continuous duty capacity of 300 amps
- Heavy duty, corrosion resistant, zinc die cast housing
- 2, 1/4" mounting holes
- Provides power for auxiliary equipment from the battery

Plug #	Material	Description	Part #
1	Zinc Die-Cast	Plug	82-0852

Socket #	Material	Terminals	Part #
1	Zinc Die-Cast	Enclosed, with Boot	82-0851

Plug & Socket Kit	Material	Terminals	Part #
1	Zinc Die-Cast	Enclosed (includes 82-0852 & 82-0851)	82-0950



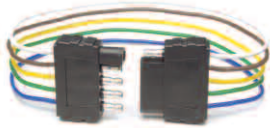
TRAILER CONNECTORS

CONNECTEURS DE REMORQUES • CONEXIÓN DE TRAILERS Y REMOLQUES

TRAILER CONNECTORS • CONNECTEURS DE REMORQUES • CONEXIÓN DE TRAILERS Y REMOLQUES



82-1028



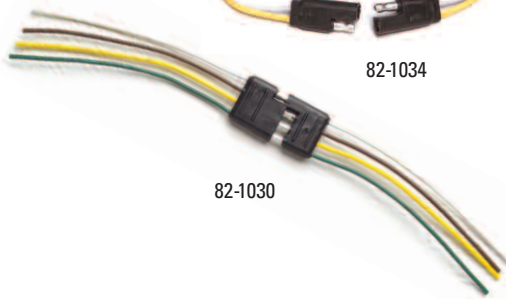
82-1029



82-1033



82-1034



82-1030



68420



68540-5

- Automotive, marine, recreational and truck applications
- PVC wire
- Operating temperature 105°C (221°F)
- Weather resistant molded head
- Male = vehicle end
- Female = trailer end



Plug #	Gauge	Connector Head	Wire Colors	Connector End	Part #
6	16	Square	White, Yellow, Brown, Green, Blue, Red	Male & Female	82-1028
5	16	Flat	White, Yellow, Brown, Green, Blue	Male & Female	82-1029
4	18	Square	White, Yellow, Brown, Green	Male & Female	82-1036
4	16	Flat	White, Yellow, Brown, Green	Male & Female	82-1030
4	16	Flat	White, Yellow, Brown, Green	Female - blunt cut	82-1031
4	16	Flat	White, Yellow, Brown, Green	Male - blunt cut	82-1032
3	16	Flat	White, Yellow, Brown	Male & Female	82-1033
2	16	Flat	White, Yellow	Male & Female	82-1034
2	10	Flat	White, Yellow	Male & Female	82-1035

25' Split Y Harness

Plug #	Gauge	Connector Head	Wire Colors	Connector End	Part #
4	18	Flat	White, Yellow, Brown, Green	Male	68420

Boat & Utility Trailer Wiring Kit

- For durable rewiring of a boat, bike, snowmobile or utility trailer
- Comes complete with a 25' trailer harness, 4' trunk harness and 6 18-14 GA tap connectors
- Retail packaged

Plug #	Gauge	Connector Head	Wire Colors	Connector End	Part #
4	18	Flat	White, Yellow, Brown, Green	Male & Female	68540-5

Seven Terminal Junction Box

- Corrosion resistant molded cover and housing
- Two-bolt mounting 7 3/8" (18.73) centre to centre
- Access slot grommets included, four open-four closed
- 7, #10-32 studs

82-1000



Dri-Seal Circuit Box

- Entrances stay dry by using the new "push-in" choke seals and threaded fittings – comes with 4 choke seals
- 18 brass circuit studs and full hardware; entry from 4 sides
- All components are corrosion resistant
- Numbered label for fast circuit I.D.
- No tools - easy access by 4 wing-nut fasteners that are retained in the cover
- Ample area for wire and cable – 1 cable entrance fitting
- North American

351044



Molded Connector Assemblies

- PVC sleeve provides ultimate protection
- 20 amp @ 12-24V DC
- Split pin terminals

82-1027 2 Pole

82-1025 4 Pole



82-1025

7-Way System Checker

- Solid brass pin
- LED light source
- Lexan housing
- North American

920273

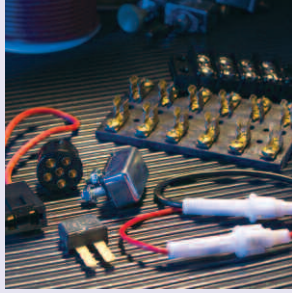
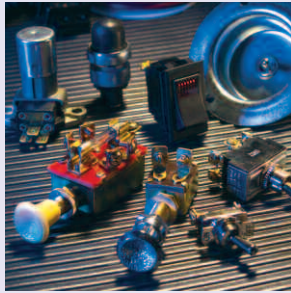


920273

SWITCHES AND ELECTRICAL ASSEMBLIES

COMMUTATEURS ET ASSEMBLAGES ÉLECTRIQUES • APAGADORES Y ENSAMBLES ELÉCTRICOS

FUSE HOLDERS • PORTE-FUSIBLES • PORTA FUSIBLES



*Protection for all vehicles
lighting and electrical systems.*

ATO/ATC, Maxi and Mini Style Fuse Holders

- Versatile fuse holders for ATO/ATC, Mini and Maxi Blade Fuses & Plug-In Circuit Breakers
- GPT wire
- Plug-in style circuit breakers available on page 56



Mini Fuse Holder

82-2208
20 amp., 14 Ga, 7",
Red with protective cap



ATO/ATC Fuse Holder

82-2209
20 amp., 14 Ga, 7",
Red with protective cap
& 20 amp fuse



82-2207
20 amp., 16 Ga, 7",
Red with protective cap



82-2166
30 amp., 12 Ga, 10",
Orange with protective
cap and mounting tab



82-2165
30 amp., 12 Ga, 8",
Orange, continuous loop



82-2164
20 amp., 14 Ga, 7",
Black, blunt cut

Maxi Fuse Holder

82-2211
60 amp., 8 Ga, 12",
Red blunt cut



"Add-A-Fuse" ATO/ATC & Mini Fuse Holder

- Turns one fuse slot into two – while providing protection for both circuits
- 10 amp @ 12V DC; fuse not included
- 5", 16 GA lead with 16-14 Ga crimp style coupler



82-2212 ATO/ATC Standard
82-2213 ATM/Mini Fuse **NEW**

Self Stripping ATO/ATC Fuse Holder

20 amp., 18-14 Ga
84-2903



Panel Mount Fuse

- Provides circuit protection for electrical systems
- 20 AMP, .250" quick disconnect contacts, glass fuse
- Round fuseholder mounts easily into any dashboard



82-2215

Fuse Taps - Uninsulated

Part No.	Size	Pack
84-2916		
Fuse Tap	.250"	25
84-2918		
Fuse Tap	.250"	8
84-2917		
Mini Fuse Tap	.187"	25
84-2919		
Mini Fuse Tap	.187"	8



In-Line Fuse Holders

- Nylon fuse holders for glass tube fuses
- Protects electrical equipment
- Includes glass fuse
- GPT wire

82-2160
20 amp. 18 Ga,
7", Black



82-2160

82-2161
15 amp. 16 Ga,
7", Red



82-2161

82-2162
10 amp. 18 Ga,
7", White



82-2162

82-2163
30 amp. 14 Ga,
7", Black



82-2163

Bayonet Style Fuse Holder

- Provides full protection of electrical equipment
- GPT wire

82-2167
30 amp. 12 Ga,
7", Black



82-2167

82-2168
20 amp. 14 Ga,
7", Black



82-2168

82-2169
20 amp. 14 Ga,
12", Black



82-2169

Glass Fuse Clip Adapter

84-2899
.250", 25 pack



84-2899

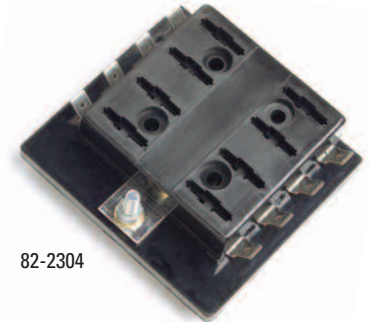
Fuse Panel – ATO/ATC Blade Fuses

- Compact, lightweight and rugged construction
- Will accept ATO/ATC Blade Fuses or Plug-In Blade Circuit Breakers
- 30 amp per circuit; 150 amp max
- 100 amp. @ 12V DC maximum rating for all circuits
- Recessed mounting holes, 0.218" x 4, for #10 screws
- Stud: #10-32 steel and nickel-plated

82-2303 6 Position

82-2304 8 Position

82-2305 10 Position



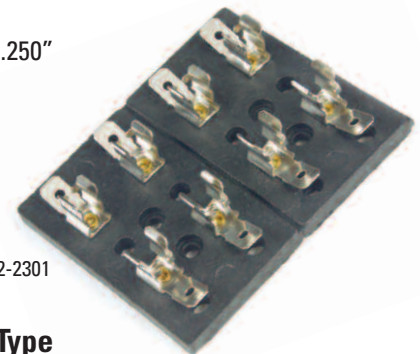
82-2304

Fuseblock – Glass Fuses

- For use with glass fuses
- Quick disconnect take off, .250"
- 4 Fuse - 3" x 2 1/2"
- 6 Fuse - 4 1/2" x 2 1/2"

82-2301 4 Fuse

82-2302 6 Fuse



82-2301

Terminal Strips – Stud Type

- Anti-corrosive nuts and washers
- 30 amp. @ 12V DC
- Stud: #10-32 brass, mounted on 5/8" centers

82-2311 4 Stud

82-2312 6 Stud

82-2313 8 Stud

82-2314 10 Stud



82-2313

Barrier Strips – Screw Type

- Black phenolic base
- 30 amp. @ 12V DC
- Brass screws with 3/8" centers; #8 mounting screw
- Temperature rating: 150°C (302°F)

82-2332 4 Position

82-2334 6 Position

82-2338 10 Position



82-2338

SWITCHES AND ELECTRICAL ASSEMBLIES

COMMUTATEURS ET ASSEMBLAGES ÉLECTRIQUES • APAGADORES Y ENSAMBLES ELÉCTRICOS

UNIVERSAL CIRCUIT BREAKERS • DISJONCTEURS UNIVERSELS • INTERRUPTOR ELÉCTRICO UNIVERSAL

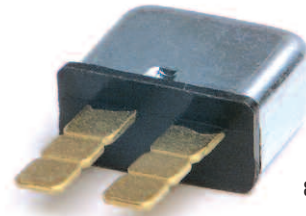


82-2176

High Amperage Thermal Circuit Breakers

- Can be used in auxiliary and accessory circuits – trucks, buses, R.V. and marine applications
- Also used as battery chargers and DC audio systems
- Thermoplastic; UL Rated 94V housing
- Surface Mount, Type III
- Complies with SAE J1625 standards
- Operating Temperature -32°C (-25°F) to 82°C (180°F)
- Manual Reset
- Stud insulators provided; 1/4" studs
- North American

82-2177	Single Rate	80 amp.
82-2178	Single Rate	100 amp.
82-2176	Single Rate	150 amp.



82-2197

Universal Circuit Breaker - Plug-In Style

- 12V DC
- Continuous self-resetting
- Replacement for ATO/ATC blade type fuses
- Dimensions: .840" x .4000" (10.2mm) x 1.500" (38.1mm)
- See ATO/ATC fuse holders and fuse panels on pages 54 and 55

82-2195	10 amp.
82-2196	15 amp.
82-2197	20 amp.
82-2199	25 amp.
82-2198	30 amp.
82-2200	35 amp.
82-2201	40 amp.



82-2183



82-2186

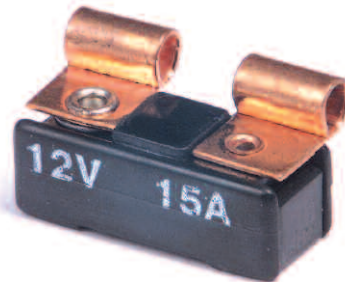


82-2191

Universal Circuit Breaker

- 12V DC
- Continuous self-resetting
- 2, #10-32 stud terminals (hex nuts and washers included)

W/O BRACKET MOUNTING BRACKET		WITH RIGHT ANGLE	
82-2179	10 amp.	82-2189	10 amp.
82-2180	15 amp.	82-2190	15 amp.
82-2181	20 amp.	82-2191	20 amp.
82-2182	25 amp.	82-2192	25 amp.
82-2183	30 amp.	82-2193	30 amp.
82-2184	35 amp.	82-2187	35 amp.
82-2210	40 amp.	82-2186	40 amp.
			molded bracket
		82-2194	40 amp.
82-2185	50 amp.	82-2188	50 amp.

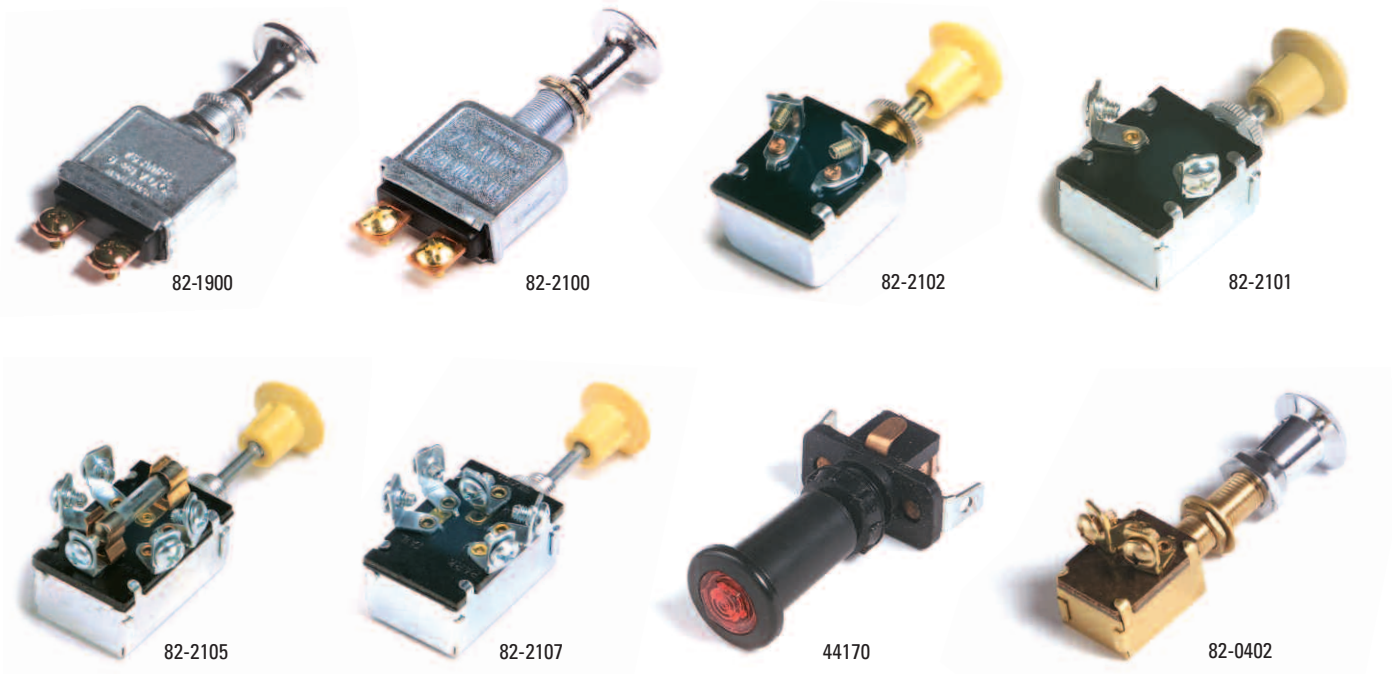


82-2171

Universal Circuit Breaker - Snap-In Style

- 12V DC automatic reset
- Opens automatically on overload
- Replaces round glass-style fuses
- Fits 1 1/4" Long x 1/4" fuse clips

82-2170	10 amp.
82-2171	15 amp.
82-2172	20 amp.
82-2173	30 amp.
82-2174	40 amp.



Push/Pull Switches

- For Heavy Duty Truck, Off-Road, Automotive, Marine and Recreational Vehicles
- Durable materials protect from breakage and corrosive materials
- Quick and easy installation

S.P.S.T. = Single Pole Single Throw

D.P.S.T. = Double Pole Single Throw

S.P.D.T. = Single Pole Double Throw

D.P.D.T. = Double Pole Double Throw

Extra Heavy Duty

Part No.	Position	Rated	Type	Terminal	Handle	
82-1900	On/Off	75 amp. @ 6-28V D.C.	S.P.S.T.	2 Screw	5/8" Long x 15/32" diameter	N.A.
82-2100	On/Off	75 amp. @ 6-28V D.C.	S.P.S.T.	2 Screw	5/8" Long x 15/32" diameter	

Heavy Duty

Part No.	Position	Rated	Type	Terminal	Handle	
44170	On/Off	10 amp. @ 12V D.C.	S.P.S.T.	2 Blade		N.A.
82-2102	On/Off	15 amp. @ 12V D.C.	S.P.S.T.	2 Screw	5/8" Long x 7/16" diameter	
82-2101	On/Off	15 amp. @ 12V D.C.	S.P.S.T.	2 Screw	5/8" Long x 7/16" diameter	N.A.
82-2107	Off/On/On	15 amp. @ 12V D.C.	S.P.S.T.	5 Screw	5/8" Long x 7/16" diameter	
82-2105*	On/Off/On	15 amp. @ 12V D.C.	S.P.S.T.	5 Screw	5/8" Long x 7/16" diameter	

(* Includes 15 amp glass fuse)



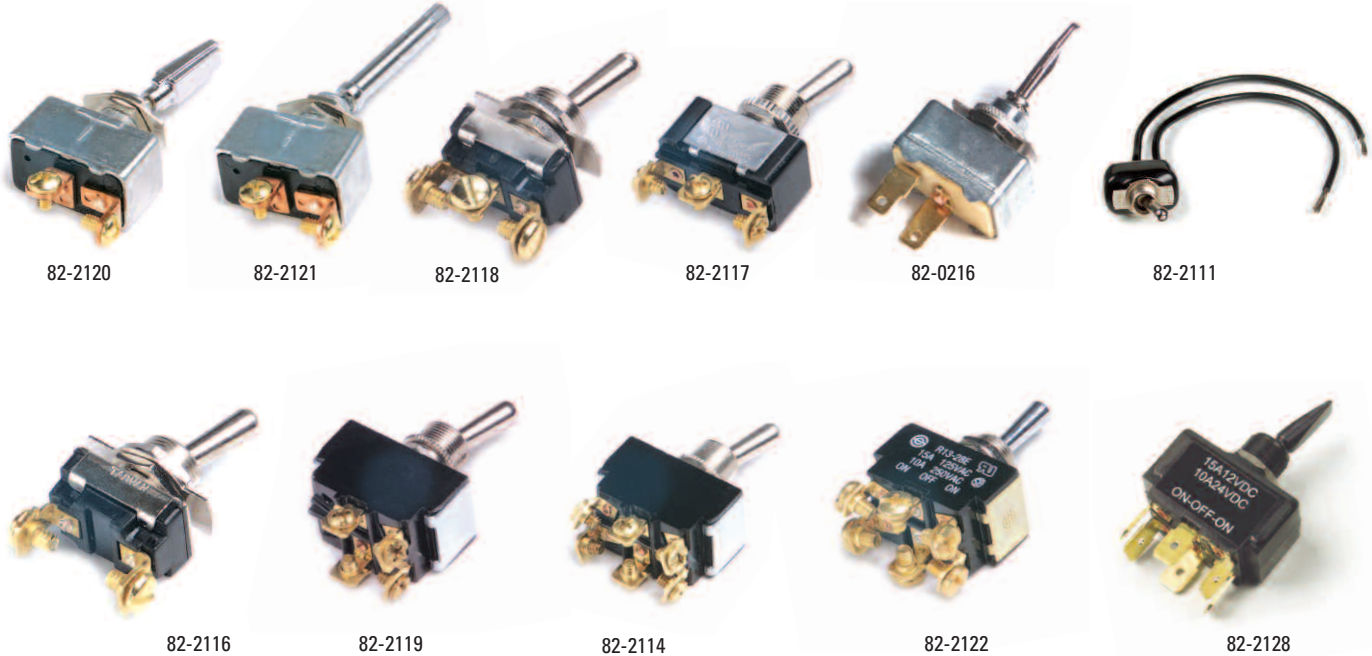
Part No.	Position	Rated	Type	Terminal	Handle	
82-0402	On/Off	15 amp. @ 12V D.C.	S.P.S.T.	2 Screw	1 1/4" Long x 7/16" diameter	N.A.

N.A. = North American

SWITCHES AND ELECTRICAL ASSEMBLIES

COMMUTATEURS ET ASSEMBLAGES ÉLECTRIQUES • APAGADORES Y ENSAMBLES ELÉCTRICOS

TOGGLE SWITCHES • INTERRUPTEURS À LEVIER • APAGADOR DE PALANCA



Toggle Switches

- For Heavy-Duty Truck, Off-Road, Automotive, Marine and Recreational Vehicles
- Durable materials protect from breakage and corrosive materials
- Quick and easy installation

S.P.S.T. = Single Pole Single Throw
S.P.D.T. = Single Pole Double Throw

D.P.S.T. = Double Pole Single Throw
D.P.D.T. = Double Pole Double Throw

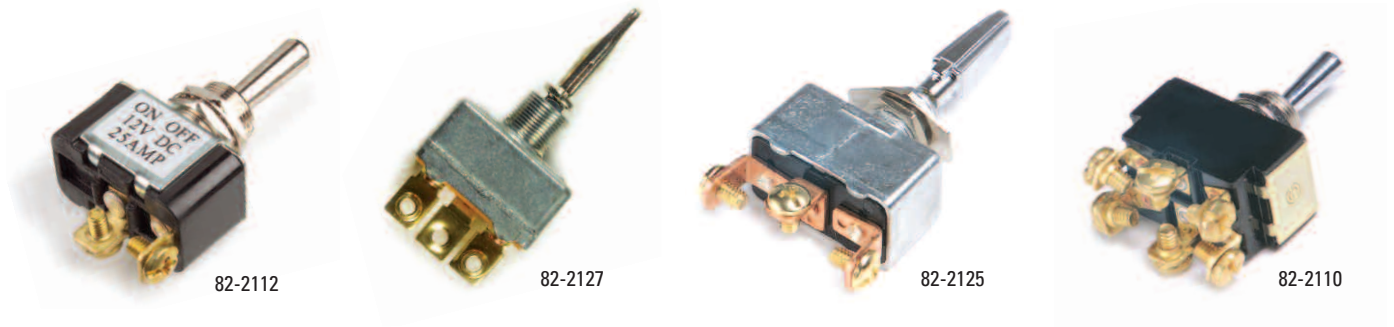
Extra Heavy Duty

Part No.	Position	Rated	Type	Terminal	Handle
82-2120	On/Off	35 amp. @ 12V D.C.	S.P.S.T.	2 screw	11/32" Long x 15/32" dia.
82-2121	On/Off	35 amp. @ 12V D.C.	S.P.S.T.	2 screw	1 1/2" Long x 15/32" dia.
82-0216	On/Off	30 amp. @ 12V D.C.	S.P.S.T.	2 blade	1" Long x 15/32" dia. N.A.

Heavy Duty

Part No.	Position	Rated	Type	Terminal	Handle
82-2114	On/On	25 amp. @ 12V D.C.	D.P.D.T.	6 screw	3/8" Long x 15/32" dia. N.A.
82-2117	On/On	25 amp. @ 12V D.C.	S.P.D.T.	3 screw	3/8" Long x 15/32" dia. N.A.
82-2111	On/Off	20 amp. @ 12V D.C.	S.P.S.T.	2 screw	3/8" Long x 15/32" dia. N.A. Sealed with 8" leads
82-2116	On/Off	15 amp. @ 12V D.C.	S.P.S.T.	2 screw	3/8" Long x 15/32" dia.
82-2119	On/Off	15 amp. @ 12V D.C.	D.P.S.T.	4 screw	3/8" Long x 15/32" dia. N.A.
82-2118	On/Off/On	15 amp. @ 12V D.C.	S.P.D.T.	3 screw	3/8" Long x 15/32" dia.
82-2122	On/Off/On	15 amp. @ 12V D.C.	D.P.D.T.	6 screw	3/8" Long x 15/32" dia.
82-2128	On/Off/On	15 amp. @ 12V D.C.	D.P.D.T.	6 blade	3/4" Long x 1/4" dia.

N.A. = North American



Momentary Toggle Switches

Part No.	Position	Rated	Type	Terminal	Handle
82-2112	Mom On/Off	25 amp. @ 12V D.C.	S.P.S.T.	2 screw	11/16" x 15/32" dia.
82-2127	Mom On/Off/Mom On	50 amp. @ 12V D.C.	S.P.D.T.	3 screw	1" x 15/32" dia. N.A.
82-2125	Mom On/Off/Mom On	35 amp. @ 12V D.C.	S.P.D.T.	3 screw	11/32" x 15/32" dia.
82-2110	Mom On/Off/Mom On	20 amp. @ 12V D.C.	D.P.D.T.	6 screw	11/32" x 15/32" dia. N.A.

Recessed Plate Toggle Switch

- On/Off; 2 screw terminals
- 10 amp. @ 12V D.C.
- Single Pole Single Throw
- 3/8" Long x 2 3/4" recess hole

82-2123

82-2124 toggle plate only



82-2123

Toggle Switch Boot

- Rubber boot with 15/32" thread
- Used with 15/32" mounting stem
- Provides protection from weather conditions

82-2106



82-2106

Toggle Switch Guard

- Spring loaded cover holds the guard cover in the up or down position
- Face plate is steel with black glossy finish
- Accepts standard 11/16" bat handles and 15/32" diameter mounting stem
- Used where accidental switch activation may cause an undesired or hazardous condition

82-2108



82-2108

SWITCHES AND ELECTRICAL ASSEMBLIES

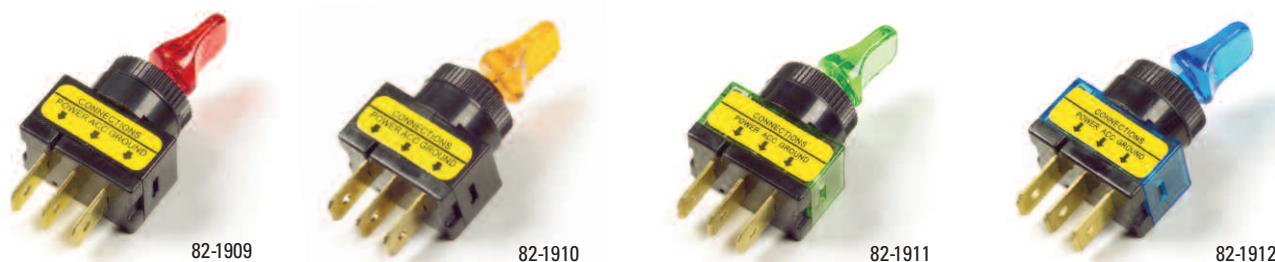
COMMUTATEURS ET ASSEMBLAGES ÉLECTRIQUES • APAGADORES Y ENSAMBLES ELÉCTRICOS

TOGGLE SWITCHES • INTERRUPTEURS À LEVIER • APAGADOR DE PALANCA



Illuminated

Part No.	Position	Rated	Type	Terminal	Handle	Color
82-2113	On/Off	30 amp. @ 12V D.C.	S.P.S.T.	4 blade	11/16" x 15/32" dia.	Red
82-1905	On/Off	20 amp. @ 12V D.C.	S.P.S.T.	3 blade	1" x 15/32" dia.	Red
82-1906	On/Off	20 amp. @ 12V D.C.	S.P.S.T.	3 blade	1" x 15/32" dia.	Yellow
82-1907	On/Off	20 amp. @ 12V D.C.	S.P.S.T.	3 blade	1" x 15/32" dia.	Green
82-1908	On/Off	20 amp. @ 12V D.C.	S.P.S.T.	3 blade	1" x 15/32" dia.	Blue



Illuminated - Duckbill

Part No.	Position	Rated	Type	Terminal	Handle	Color
82-1909	On/Off	20 amp. @ 12V D.C.	S.P.S.T.	3 blade	9/16" x 15/32" dia.	Red
82-1910	On/Off	20 amp. @ 12V D.C.	S.P.S.T.	3 blade	9/16" x 15/32" dia.	Yellow
82-1911	On/Off	20 amp. @ 12V D.C.	S.P.S.T.	3 blade	9/16" x 15/32" dia.	Green
82-1912	On/Off	20 amp. @ 12V D.C.	S.P.S.T.	3 blade	9/16" x 15/32" dia.	Blue



Rocker Switch - LED

Part No.	Position	Rated	Terminal	Dimensions	LED Color
82-2130	On/Off	25 amp. @ 12V D.C.	3 blade (.250")	Fits 15/16" mounting hole	Red
82-2131	On/Off	25 amp. @ 12V D.C.	3 blade (.250")	Fits 15/16" mounting hole	Yellow
82-2132	On/Off	25 amp. @ 12V D.C.	3 blade (.250")	Fits 15/16" mounting hole	Green
82-2136	On/Off	25 amp. @ 12V D.C.	3 blade (.250")	Fits 15/16" mounting hole	Blue
82-2133	On/Off	30 amp. @ 12V D.C.	3 blade (.250")	Fits 1/2" mounting hole	Red
82-2134	On/Off	30 amp. @ 12V D.C.	3 blade (.250")	Fits 1/2" mounting hole	Yellow
82-2135	On/Off	30 amp. @ 12V D.C.	3 blade (.250")	Fits 1/2" mounting hole	Green
82-2137	On/Off	30 amp. @ 12V D.C.	3 blade (.250")	Fits 1/2" mounting hole	Blue

ROCKER SWITCHES • INTERRUPTEURS BASCULANTS • INTERRUPTORES OSCILANTES

Sealed Rocker Switch - LED

- Provides complete protection from dust and moisture
- LED bulb; .250" quick disconnect contacts
- Single and modular mounting brackets also available
- 82-1915 and 82-1916 can be mixed together in various sequences to make larger panels

NEW



82-0309

Part No.	Position	Rated	Terminal	Dimensions	Color
82-0309	On/Off	20 amp. @ 12V D.C. S.P.S.T	4 blade	Fits 13/16" x 1 7/8" mounting hole	Green/Amber
82-0310	Mom On/Off	20 amp. @ 12V D.C. S.P.S.T	4 blade	Fits 13/16" x 1 7/8" mounting hole	Green/Amber



82-0303



82-1901



82-1902



82-1903



82-1904

Rocker Switch - Illuminated

Part No.	Position	Rated	Terminal	Dimensions	Color
82-0302	On/Off	20 amp. @ 12V D.C.	3 screw	Fits .830" x 1.45" mounting hole	Red
82-0303	On/Off	20 amp. @ 12V D.C.	3 screw	Fits .830" x 1.45" mounting hole	Yellow
82-0304	On/Off	20 amp. @ 12V D.C.	3 screw	Fits .830" x 1.45" mounting hole	Green
82-1901	On/Off	20 amp. @ 12V D.C.	3 blade	Fits .500" x 1.00" mounting hole	Red
82-1902	On/Off	20 amp. @ 12V D.C.	3 blade	Fits .500" x 1.00" mounting hole	Yellow
82-1903	On/Off	20 amp. @ 12V D.C.	3 blade	Fits .500" x 1.00" mounting hole	Green
82-1904	On/Off	20 amp. @ 12V D.C.	3 blade	Fits .500" x 1.00" mounting hole	Blue



82-1913



82-1914



82-1915



82-1916

NOTE: Switches not included.

Rocker Switch Panel

Part No.	Dimensions	Fits Rocker Switch
82-1914	Single Unit Fits 1" x 1 15/16" mounting hole	82-0309, 82-0310
82-1915	End Unit Fits 1 1/8" x 1 15/16" mounting hole	82-0309, 82-0310
82-1916	Middle Unit Fits 1 1/8" x 1 15/16" mounting hole	82-0309, 82-0310
82-1913	Single Unit Fits 1" x 1 15/16" mounting hole	82-1901, 82-1902, 82-1903, 82-1904

SWITCHES AND ELECTRICAL ASSEMBLIES

COMMUTATEURS ET ASSEMBLAGES ÉLECTRIQUES • APAGADORES Y ENSAMBLES ELÉCTRICOS

IGNITION & STARTER SWITCHES • INTERRUPTORES DE DÉMARRAGE ET D'ALLUMAGE
• INTERRUPTORES DE ENCENDIDO Y ARRANQUE



82-2151

Momentary Starter Switch

- Miniaturized H.D. panel switch for Diesel Trucks, Tractor, Farm and Marine
- Neoprene Cap to seal out weather
- 60 amp. @ 12V DC
- 5/8" Long x 15/16" Diameter
- 2 screw

82-2151 With Cap

82-2152 Without Cap



82-0600

Momentary Push Switch

- 10 amp. @ 12V DC
- 2 screw terminals
- Mounting stem 7/8"
- North American

82-0600



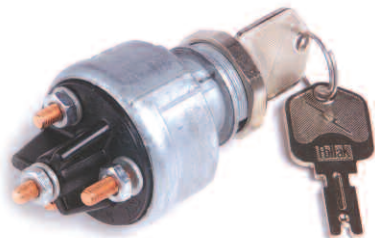
82-2150

Ignition Starter Switches

- Momentary start
- Universal die cast housing; includes 2 keys
- 4 position (ACC, OFF, ON/ACC, START – spring return to "ON")
- Key removable key in "OFF" position
- 50,000 life cycle
- North American

Product Rating

Rating @ 14V D.C.: Ignition Terminal – 8 Amps, Accessory Terminal – 30 Amps (inductive), Start Terminal – 75/20 Amps make/break



82-2156

Part No.	Connection Type	Starter Lockout	Keycode	# of Lip Seals
82-2150	Screw	No	Various	0
82-2156	Screw	No	Universal	1



82-2158

Spring Return Auxiliary – Glow Plug Warmer

Part No.	Connection Type	Starter Lockout	Keycode	# of Lip Seals
82-2158	Screw	-	D250	2

* Housing tied to ground terminal

MARINE Ignition Starter Switch

- Special "Push to Choke" feature eliminates need for separate electronic choke switch
- Magneto grounded in "off" position
- Glass filled delrin housing, stainless steel terminals and molded velox base
- 13/16" diameter mounting bushing special weather proofing seal and drain hole
- Comes complete with terminal hardware, mounting nuts and two keys
- Switch mounts in panels up to 1/4" thick; includes 2 keys
- Stainless steel terminals; 13-16" diameter mount
- Special weather proofing seal and drain hole
- 3 position (OFF - Magneto Grounded, ON/ACC & BATT, START/ACC BATT & SOL – spring return to "ON")
- Made in North American

Product Specifications

Replaces - Johnson-Evinrude Numbers 388173, 390129, 390133
Rating: Off/Magneto grounded – 10 Amps inductive, On – 5 Amp., Start – 10 Amp, Choke – 1 Amp

Part No.	Connection Type
82-2306	Screw

Starter Solenoid Switch

- 85 amps continuous duty, 150 amps in rush
- Single Pole Single Throw
- Normally open contacts – Off-On
- Ignition and ground terminals, #10-32 thread
- Contact terminals 5/16"-24 thread
- Made in North America

Product Specifications

- 82-0307 replaces Prestolite15-132, 15-133, 15-236, 15-311, SAS-4201, 4213, 5203; Delco 1114218
- 82-0311 replaces Prestolite15-141, 15-196, 15-310, SAS-4401, 4408, 5401
- 82-0308 replaces Prestolite15-139, SAS-4208

Part No.	Type	Termination	Rated
82-0307	S.P.S.T.	4 terminal ground	12V D.C.
82-0311 NEW	S.P.S.T.	4 terminal ground	24V D.C.
82-0308	S.P.S.T.	3 terminal ground	12V D.C.



82-2306



82-0307



82-0308



82-2103

Master Battery Disconnect Switch

- Designed for 12V DC vehicles (Truck, Automotive, Marine, RV)
- For battery circuit (82-2103); for alternator or generator field circuit (82-2155)
- Disconnects all circuitry to reduce possibility of theft and accidental electrical fires (82-2103)
- Designed to break alternator generator circuit prior to battery circuit disconnect (82-2155)
- 3/4" and #10-32 copper alloy stud terminals with hex nuts and lock washers included
- Large die cast lever for ease of operation
- Fits panel up to 1/4" thick
- 10,000 life cycle
- Meets U.L. #558 (82-2103)



82-2157

Product Rating

Rating: Continuous Rating (Make Break), Large Studs -180 Amps, Small Studs - 20 Amps (82-2155), Intermittent Rating (Carrying), Large Studs - 1000 Amps (20 sec. "On" - 5 Minutes "Off")

Part No.	Position	Type	Termination	Dimensions
82-2103	Off/On	S.P.S.T.	2 stud terminal ground	4 3/8" L x 2 5/8" Dia.
82-2155	Off/On	D.P.S.T.	4 stud terminal ground	4 1/8" L x 2 5/8" Dia.
NEW 82-2157	Faceplate			2 1/2" w x .032" thick



82-2104

Battery Isolator Switch

- Prevents unauthorized use
- Eliminates battery discharge
- Waterproof body with removable key and protective cap
- Rated at 500 amps at 12V

82-2104



82-2203

Floor Dimmer Switch

- 3 terminals for plug connection
- Mounting Holes; 1-6/8" on center, 9/32" diameter
- Floor mounted
- Dimmer Switch harness available on page 71
- North American

82-2203

Brake and Back-Up Precision Ball Switches

- Leak proof
- 0-5 amp. operating current, 5-24V DC
- 500,000 electrical life cycles
- 7/8" hex nut; 9/16"-18 thread
- Temperature Rating: -40°C (-40°F) to 121°C (250°F)
- North American



82-2234

82-2234 2 stud terminals; normally open

82-0456 2 screw terminals; normally open



82-0456

82-0458 2, .250" blade terminals; normally closed
Replaces Kenworth (K30133), Mack (IMR2297), Freightliner (06-10525) and others



82-0458

Door Switch - Universal

- 5 amp. @ 12V DC
- 2 screw terminals
- "ON" when plunger is out
- Dual mounting holes 1 3/8" x 2 1/16"
- Replaces Chrysler 882943, KF-204229

82-2230



82-2230

Stop Light Switch

- 1/4" - 18NPTF threads
- Meets DOT 121 requirements
- Brass body resists corrosion
- Installs with a deep socket
- North American

82-2159



82-2159

Axle Switch

- High-low axle ranges
- Die-cast with rubber protection
- 3 female terminals to receive male bullets
- Large red knob to use with Eaton 2 speed rear axle

82-2236



82-2236

Pilot Light

- 12V DC; 15 AMP
- Red 1/2" diameter faceted lens
- For panel mounting through 5/16" hole
- North American

82-0115

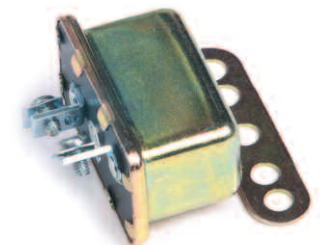


82-0115

Universal Buzzer

- 842 Buzzer use as low air pressure or Bus rear door warning buzzer
- 76 db
- 12V DC
- 2 screw terminals
- North American

82-2238



82-2238

SWITCHES AND ELECTRICAL ASSEMBLIES

COMMUTATEURS ET ASSEMBLAGES ÉLECTRIQUES • APAGADORES Y ENSAMBLES ELÉCTRICOS

PIGTAILS & SOCKETS • SPIRALES DE RACCORD ET DOUILLES • CABLES FLEXIBLES DE CONEXIÓN Y ENCHUFES

1 WIRE

Socket Repair Assembly

- Fits 63, 67, 81, 87, 93, 97, 209, 1003, 1073, 1129, 1133, 1141, 1156 bulbs

68080



68080

Socket Repair Assembly

- For 5/8" socket
- Fits 63, 67, 81, 87, 93, 97, 209, 1003, 1073, 1129, 1133, 1141, 1156 bulbs

68170



68170

Socket Repair Assembly

- For base sockets; universal
- Fits 63, 67, 81, 89, 93, 1003, 1073, 1129, 1133, 1141, 1156 bulbs

84-1075



84-1075

Socket Repair Assembly

- Stop tail & turn lamps
- Neoprene cover; universal
- Fits 63, 67, 81, 87, 89, 93, 209, 1003, 1073, 1129, 1133, 1141 bulbs

84-1063



84-1063

Instrument Panel & Dome Light Socket Repair Assembly

- Ceramic washer
- Fits 53, 55, 57, 1895 bulbs

68100



68100

License & Utility Socket Assembly

- Fits 63, 67, 81, 89, 93, 97, 1003, 1141, 1156 bulbs

84-1003



84-1003

Instrument Panel & License Assembly

- 5/8" hole; snap-in mount
- 16 Gauge
- Fits 51, 53, 57, 57X bulbs

84-1060



84-1060

Instrument Panel & License Assembly

- 1 1/8" hole; universal
- GM: 2978302
- Ford: D00Z-15536A
- Chrysler: 3513162, 3780745
- AMC: 4486949, 4489412
- Fits 63, 67, 81, 87, 89, 93, 209, 1003, 1073, 1129, 1133, 1141, 1156 bulbs

84-1062



84-1062

Coolant Temperature Sensor Assembly

- Radiator fan temperature switch
- Fits MATS sensor
- GM: 12051234, 12102621

84-1059



84-1059

Molded Sensor Receptacle

- Oil pressure switch; thermostat & brake sensors
- 90 degree; 16 gauge
- Mates with .157" to .159" male terminals or stud; #8 + M4 terminals

84-1069



84-1069

2 WIRE

Socket Repair Assembly

- Stop, tail, turn, license & side marker lamps
- Twist-in mount
- Includes 194 bulb
- Fits 194 bulbs

68380



68380

Socket Repair Assembly

- License & side marker lamps
- Twist-in mount
- Ford: E1FZ-13410A; D5VY-15442A
- GM: 6298892; 6298886
- Fits 131, 168, 194, 194NA bulbs

84-1008



84-1008

Socket Repair Assembly

- Front & rear side marker lamps
- GM: 12037105, 12083460
- Fits 194 bulbs

84-1032



84-1032

Socket Repair Assembly

- Front & rear side marker lamps
- Chrysler: 3588314, 4400147, 4400588, 4400899, 4450821
- Ford: E25Y-13410B
- Fits 67, 158, 168, 194, 194NA bulbs

84-1031



84-1031

Socket Repair Assembly

- Stop, tail, turn, park & license lamps
- GM: 12001470, 12078187, 12116169
- Ford: E0SZ-15A442B
- Fits 161, 168, 194, 194NA bulbs

84-1054



84-1054

Instrument Panel Socket Assembly

- For 5/8" mounting hole; vinyl housing
- GM, Ford, Chrysler vehicles
- Fits 168, 194, 194NA bulbs

84-1052

84-1052



Socket Repair Assembly

- Ceramic washer and waterproof boot
- Fits 1034, 1154, 1158, 1176 bulbs

68150

68150



Socket Repair Assembly

- Ceramic washer
- Fits 1034, 1154, 1158, 1176, 1178 bulbs

68110

68110



Socket Repair Assembly

- Stop, tail, turn & park lamps
- Fits 198, 1016, 1034, 1154, 1157 bulbs

84-1004

84-1004



Socket Repair Assembly

- Stop, tail, turn & park lamps
- Fits 198, 1016, 1034, 1154, 1157 bulbs

84-1000

84-1000



SWITCHES AND ELECTRICAL ASSEMBLIES

COMMUTATEURS ET ASSEMBLAGES ÉLECTRIQUES • APAGADORES Y ENSAMBLES ELÉCTRICOS

PIGTAILS & SOCKETS • SPIRALES DE RACCORD ET DOUILLES • CABLES FLEXIBLES DE CONEXIÓN Y ENCHUFES

Socket Repair Assembly

- Stop, tail, turn & park lamps
- Offset, screw mount
- Fits 198, 1016, 1034, 1154, 1157 bulbs

84-1061



84-1061

Socket Repair Assembly

- Stop, tail, turn & park lamps
- 1 1/8" hole
- GM: 2974309
- Chrysler: 2926370
- Fits 198, 1016, 1034, 1154, 1157 bulbs

84-1051



84-1051

Dome and Map Light Socket Assembly

- Dome and map lights; universal
- Fits 64, 68, 82, 88, 90, 94, 210, 1004, 1076, 1130, 1142, 1158, 1176, 1178 bulbs

84-1068



84-1068

Socket Repair Assembly

- Back-up & rear lamps
- Ford: D3AZ-13410A, D80Z-15A434A
- Ford 1973 & up
- Fits 1156 bulbs

84-1048



84-1048

Headlamp Connector Harness – High Beam

- Weather-pack seal connector
- For halogen bulb headlamp assembly with 2 terminals
- High beam
- GM: 12101898, PT168
- Fits 9005 bulbs

84-1037



84-1037

Headlamp Connector Harness – High Beam

- Weather-pack seal connector
- For halogen bulb headlamp assembly with 2 terminals
- High beam
- GM: 12101897, PT167
- Fits 9006 bulbs

84-1038



84-1038

Seal Beam & Flasher Assembly

- ABS molded housing
- For 2 terminal sealed beam headlights or 2 terminal flashers

84-1007



84-1007

Side Marker Socket Assembly

- Side marker lamps
- GM: 12083007

84-1058



84-1058

Sensor Repair Harness Assembly

- GM: 12046623, 12101899
- Delco: PT169

84-1071



84-1071

Foglamp Harness Assembly

- Fits 880, 881, 884, 885, 886, 889, 890, 892, 893, 896, 899 bulbs

84-1072



84-1072

Sealed Horn Replacement Harness Assembly

- GM: 10456327, 10456328, 12116958, 1999160, 1999161
- Delco: PT419

84-1073



84-1073

Socket Repair Assembly

- Stop, tail, turn & signal lamps
- For 3/4" hole with adapter plate and boot
- Fits 198, 1016, 1034, 1154, 1157 bulbs

84-1064



84-1064

Alternator Terminal Repair Assembly

- Weather-pack seal connector
- Includes internal voltage regulator
- GM: 6294493

84-1034



84-1034

Socket Repair Assembly

- Stop, tail, turn & park lamps
- GM: 8903202, 8914822
- Fits 1034, 1154, 1157 bulbs

84-1050



84-1050

3 WIRE

Socket Repair Assembly

- Stop, tail, turn & park lamps
- 90 degree
- GM: 12003757, 12089345
- Jeep: J81289931
- Fits 1034, 1154, 1157 bulbs

84-1055



84-1055

Socket Repair Assembly

- Stop, tail, turn & park lamps
- Twist-lock
- GM: 8903203, 8914823, 8914823
- Fits 1034, 1154, 1157 bulbs

84-1009



84-1009

Socket Repair Assembly

- Stop, tail, turn, park & license lamps
- 90 degree; low profile
- GM: 12003759, 12089348
- Chrysler: 4450816, 4331051
- Fits 1016, 1034, 1154, 1157 bulbs

84-1056



84-1056

Socket Repair Assembly

- Park, stop, tail & turn lamps
- GM: 8919916, 12013813
- Fits 1034, 1154, 1157 bulbs

84-1030



84-1030

Socket Repair Assembly

- Front turn & signal lamps
- Ford: D4ZZ-13234A
- Fits 1157 bulbs

84-1057



84-1057

Socket Repair Assembly

- Stop, tail, turn & park lamps
- 1 1/8" mount ; includes ground terminal
- Ford: D1AZ-13410B, D20Z-13410B
- Fits 1034, 1154, 1157 bulbs

84-1067



84-1067

Socket Repair Assembly

- Stop, tail, turn & park lamps
- Chrysler: 3747831, 3764863, 3843431, 3513558, 3764561
- Fits 1157 bulbs

84-1065



84-1065

Socket Repair Assembly

- Stop, turn & park lamps
- GM: 12083006, 12092377
- GM 1988 & up
- Delco LS-12
- Fits 3057, 3157 bulbs

84-1049



84-1049

Socket Repair Assembly

- Stop, tail, turn & park lamps
- Chrysler: 3843432, 3843245, 4163003, 4362469
- Fits 198, 1016, 1034, 1154, 1157 bulbs

84-1066



84-1066

Headlamp Connector Harness –High/Low Beam

- Weather-pack seal connector
- For halogen bulb headlamp assembly with 3 terminals
- High-low beam
- Chrysler: 4400395, 4414332, 4430976, 4439076
- Fits 9004, 9007 bulbs

84-1039



84-1039

Socket Repair Assembly

- Stop, tail, turn & park lamps
- Ford: D3AZ-13410B, D5DZ-13410A, D5DY-13410A, DZfZ-13410A
- Ford 1973 & up
- Fits 1157 bulbs

84-1047

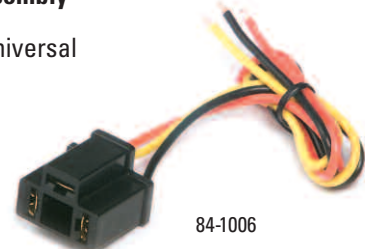


84-1047

Seal Beam & Flasher Assembly

- ABS molded housing; universal
- 16 gauge
- For 2-3 terminal sealed beam headlights or 2-3 terminal flashers

84-1006



84-1006

Socket Repair Assembly

- Stop, tail, turn & park lamps
- 4399576, 4124081

84-1074



84-1074

Sealed Beam Harness Assembly

- For 3 terminal sealed beam lamps with fiber optics
- Domestic and import vehicles

84-1042

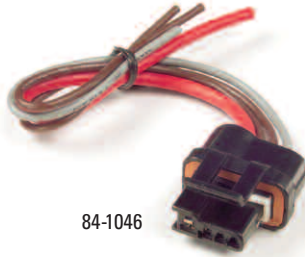


84-1042

Alternator Harness Assembly

- GM: 12101903, 12085525, 12085527, 12085528
- Delco PT135, PT137, PT138, PT165
- GM 1984 & up

84-1046



84-1046

Alternator Harness Assembly

- Ford vehicles 1986 & up

84-1043



84-1043

Alternator Harness Assembly

- Ford vehicles 1981-89

84-1044



84-1044

Dimmer Switch Assembly

- For floor mounted dimmer switch; locking ears
- GM: D-803, D-809
- See 82-2203 dimmer switch on page 64

84-1036



84-1036

Dimmer Switch Assembly

- For dimmer switches
- AMC: 3160926
- Mopar: 1881938, 2497158
- Mortorcraft: SW-263

84-1035



84-1035

4 WIRE

Metric-Pack Sealed Repair Assembly

- Sealed pigtail replacement
- OEM Metri-Pack 280 style connectors
- Fits either 4 or 5 wire applications
- Can plug into any 5370, 5371, 5372 and 5376 series lamps
- Additional parts available on pages 33-36

68680



68680

5 WIRE

Flasher & Relay Socket Assembly

- Connects 4 or 5 terminal relays or flashers
- 14 gauge wires
- Molded housing; universal
- 12 volt

84-1041

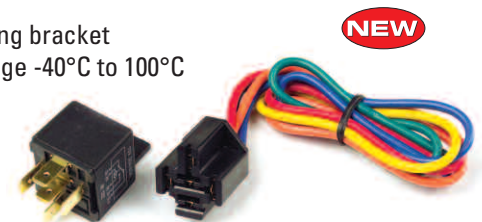


84-1041

5 Pin Relay & Pigtail Assembly

- Includes 5 terminal relay and pigtail assembly
- S.P.D.T. – Single Pole Double Throw, Form C
- Normally open or normally closed options
- Spike protection
- Includes mounting bracket
- Temperature range -40°C to 100°C (-40°F to 212°F)
- 14 gauge wire
- 12V DC, 30A/40A

84-1040

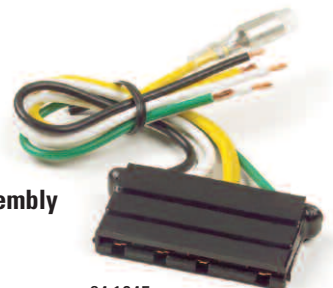


6 WIRE

Voltage Regulator Repair Assembly

- Ford vehicles 1965-81

84-1045

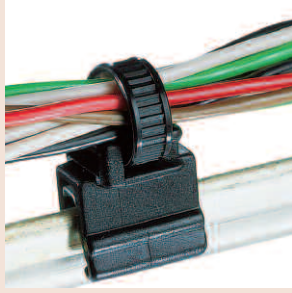


84-1045

SUPPORT AND PROTECTIVE PRODUCTS

PRODUITS DE FIXATION ET DE PROTECTION • PRODUCTOS DE SOPORTE Y PROTECCIÓN

NYLON CABLE TIES • SERRE-FILS EN NYLON • CINTILLO DE NYLON



Protect critical wire and cable systems in your vehicle. Reduce downtime and maintenance costs with Grote's Support and Protective products.

- Made of general purpose (PA66) Polyamide 6.6 nylon material
- UL flame rating 94V-2
- Provides flexible bundling and mounting options for wire, cable and multiple size hoses
- Absorbs vibration, insulates cables and provides abrasion protection
- Black ties are U.V. coated and provide superior protection from drying out and cracking
- Continuous operating temperature -40° C (-40° F) to 85° C (185° F)
- Federal ASTM and FDA Specifications (ASTM: D-4066PA0111); (FDA: CFR177.1500)
- Use Grote's ergonomic and mechanical cable tie tools for an easy effective application (83-6527, 83-6528) on page 74
- Made in North America



Light Duty Ties



83-6004

Pack of 25	Pack of 100	Pack of 1000	Length	Width	Bundle Diameter	Strength	Color
	83-6000	83-6000-3	4" (100mm)	.10" (2.5mm)	.87" (22mm)	18 lbs	White
	83-6001	83-6001-3	4" (100mm)	.10" (2.5mm)	.87" (22mm)	18 lbs	Black
	83-6004	83-6004-3	8" (205mm)	.10" (2.5mm)	2.17" (55mm)	18 lbs	White
	83-6005	83-6005-3	8" (205mm)	.10" (2.5mm)	2.17" (55mm)	18 lbs	Black

Standard Ties



83-6019

Pack of 25	Pack of 100	Pack of 1000	Length	Width	Bundle Diameter	Strength	Color
	83-6006	83-6006-3	5.9" (150mm)	.14" (3.5mm)	1.38" (35mm)	30 lbs	White
	83-6007	83-6007-3	5.9" (150mm)	.14" (3.5mm)	1.38" (35mm)	30 lbs	Black
85-6010	83-6010	83-6010-3	11.42" (290mm)	.16" (4.0mm)	3.15" (80mm)	40 lbs	White
85-6011	83-6011	83-6011-3	11.42" (290mm)	.16" (4.0mm)	3.15" (80mm)	40 lbs	Black
85-6018	83-6018	83-6018-3	7.9" (200mm)	.18" (4.6mm)	1.97" (50mm)	50 lbs	White
85-6019	83-6019	83-6019-3	7.9" (200mm)	.18" (4.6mm)	1.97" (50mm)	50 lbs	Black
85-6020	83-6020	83-6020-3	11.8" (300mm)	.18" (4.6mm)	3.35" (85mm)	50 lbs	White
85-6021	83-6021	83-6021-3	11.8" (300mm)	.18" (4.6mm)	3.35" (85mm)	50 lbs	Black
85-6026	83-6026	83-6026-3	15.35" (390mm)	.18" (4.6mm)	4.33" (110mm)	50 lbs	White
85-6025	83-6025	83-6025-3	15.35" (390mm)	.18" (4.6mm)	4.33" (110mm)	50 lbs	Black

Heavy Ties



83-6029

Pack of 25	Pack of 100	Pack of 1000	Length	Width	Bundle Diameter	Strength	Color
	83-6017	83-6017-3	8.85" (225mm)	.30" (7.6mm)	2.17" (55mm)	120 lbs	White
	83-6016	83-6016-3	8.85" (225mm)	.30" (7.6mm)	2.17" (55mm)	120 lbs	Black
85-6028	83-6028	83-6028-3	15.24" (387mm)	.30" (7.6mm)	4.13" (105mm)	120 lbs	White
85-6029	83-6029	83-6029-3	15.24" (387mm)	.30" (7.6mm)	4.13" (105mm)	120 lbs	Black

Extra Heavy Ties

Pack of 25	Pack of 100	Pack of 1000	Length	Width	Bundle Diameter	Strength	Color
85-6120	NEW		25.20" (640mm)	.35" (8.9mm)	7.00" (177mm)	175 lbs	Black
85-6118			52.17" (1325mm)	.35" (8.9mm)	15.95" (405mm)	175 lbs	White



85-6120

Nylon Cable Tie Assortment

- Made of general purpose (PA66) Polyamide 6.6 nylon material
- Contains an assortment of the most popular cable ties available
- Compact and attractive polybag packaging with a clear view of all the products inside
- Available in white, U.V. resistant black and assorted colors

Part No.	Pack of	Features	Strength	Color
83-6506	125	25 x 4"	18 lb	White
		25 x 8"	18 lb	White
		25 x 8"	50 lb	White
		25 x 11 1/2"	40 lb	White
		25 x 15 1/2"	50 lb	White



83-6506



83-6507

Part No.	Pack of	Features	Strength	Color
83-6507	125	25 x 4"	18 lb	Black
		25 x 8"	18 lb	Black
		25 x 8"	50 lb	Black
		25 x 11 1/2"	40 lb	Black
		25 x 15 1/2"	50 lb	Black

Part No	Pack of	Length	Width	Bundle Diameter	Strength	Color
83-6514	50	8" (205mm)	.18" (4.6mm)	1 3/4" (44mm)	50 lbs	10 x Blue, Yellow, Green, Orange, Red



83-6514

Color Ties

- Color Ties help to ease wire identification

Pack of 25	Pack of 1000	Length	Width	Bundle Diameter	Strength	Color
85-6030	83-6030-3	7.9" (200mm)	.18" (4.6mm)	1.97" (50mm)	50 lbs	Red
85-6031	83-6031-3	7.9" (200mm)	.18" (4.6mm)	1.97" (50mm)	50 lbs	Orange
85-6032	83-6032-3	7.9" (200mm)	.18" (4.6mm)	1.97" (50mm)	50 lbs	Blue
85-6033	83-6033-3	7.9" (200mm)	.18" (4.6mm)	1.97" (50mm)	50 lbs	Yellow
85-6034	83-6034-3	7.9" (200mm)	.18" (4.6mm)	1.97" (50mm)	50 lbs	Green
85-6035	83-6035-3	7.9" (200mm)	.18" (4.6mm)	1.97" (50mm)	50 lbs	Purple
85-6036	83-6036-3	7.9" (200mm)	.18" (4.6mm)	1.97" (50mm)	50 lbs	Gray



SUPPORT AND PROTECTIVE PRODUCTS

PRODUITS DE FIXATION ET DE PROTECTION • PRODUCTOS DE SOPORTE Y PROTECCIÓN

NYLON CABLE TIES • SERRE-FILS EN NYLON • CINTILLO DE NYLON

Screw Mount Ties



83-6104

Pack of 25	Pack of 50	Pack of 100	Length	Width	Bundle Diameter	Strength	Mounting Hole	Color
85-6104		83-6104	8.46" (215mm)	.18" (4.6mm)	1.77" (45mm)	50 lbs	#10	White
		83-6105	8.46" (215mm)	.18" (4.6mm)	1.77" (45mm)	50 lbs	#10	Black
		83-6107	12.40" (315mm)	.19" (4.7mm)	3.35" (85mm)	50 lbs	#10	Black
		83-6027	15.35" (390mm)	.18" (4.6mm)	4.00" (100mm)	50 lbs	#10	White
		83-6108	15.35" (390mm)	.18" (4.6mm)	4.00" (100mm)	50 lbs	#10	Black
	83-6037	83-6116	15.55" (395mm)	.30" (7.6mm)	4.02" (102mm)	120 lbs	.250"	White
	83-6117		15.55" (395mm)	.30" (7.6mm)	4.02" (102mm)	120 lbs	.250"	Black

Cable Tie Tension and Cutter "Gun Style" Tool



83-6527

- Cable tie tension and cut-off tools reduce operator fatigue and speed assembly
- Ergonomic design ideally fits the operators hand
- Cushion grip for comfort
- Quick tension adjustability for a flush "cut-off"
- Equipped with a hook for easy hanging
- Meets Military Specification MS90387-1 (83-6527), MS90387-2 (83-6528)

83-6527 For 18-50 lb Ties

83-6528 For 18-250 lb Ties

Cable Tie Tension and Cutter "Twister" Tool



83-6509

- Compact tensioning tool enables cinching and cutting
- For cable ties ranging from 18lbs-50lbs tensile strength
- Twisting action leaves a clean edge to prevent chaffing of wires
- Lightweight ergonomic design
- 7" long

83-6509

Releasable Ties



83-6023

Pack of 25	Pack of 100	Pack of 1000	Length	Width	Bundle Diameter	Strength	Color
		83-6012	8.46" (215mm)	.16" (4.0mm)	2.00" (51mm)	40 lbs	White
		83-6013 NEW	8.46" (215mm)	.16" (4.0mm)	2.00" (51mm)	40 lbs	Black
		83-6022	15.0" (380mm)	.18" (4.6mm)	3.98" (101mm)	50 lbs	White
		83-6023	15.0" (380mm)	.18" (4.6mm)	3.98" (101mm)	50 lbs	Black
85-6163	83-6163		22.4" (1115mm)	.49" (12.5mm)	5.90" (150mm)	250 lbs	Black



Releasable Dual Clamp Ties

- Made of general purpose (PA66HIR) Polyamide 6.6 high impact nylon material
- UL flame rating 94-HB, good UV resistance
- Unique one piece design with the 1/4" mounting head centered on the strap
- Can reduce the need to carry numerous clamps and other mounting devises
- Is releasable and extremely flexible for tough to reach areas
- Federal ASTM (ASTM: D-4066PA0151)
- Continuous operating temperature -40°C (-40°F) to 110°C (230°F)

Pack of 50	Length	Width	Bundle Diameter (each side)	Strength	Mounting Hole	Color
83-6040	13.0" (331mm)	.50" (12.7mm)	1.3" (33.02mm)	150 lbs	.250" (6.35mm)	Black
83-6041	19.2" (489mm)	.50" (12.7mm)	2.3" (58.42mm)	150 lbs	.250" (6.35mm)	Black

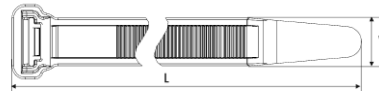


83-6040

Wide Strap Cable Tie

- Made of general purpose (PA66HIRHS) Polyamide 6.6 high impact, heat stabilized nylon material
- UL flame rating 94-HB, excellent UV resistance
- Continuous operating temperature -40°C (-40°F) to 110°C (230°F)
- Federal ASTM Specifications (ASTM: D-4066PA0161)

- The wide strap tie minimizes pinching on soft bundles
- Features a low profile head to provide compact bundling
- Flexible strap with a bent tip for quick insertion into mounts
- Accommodates a large bundle diameter range .375" (9.5mm) – 4.125" (104.7mm)



83-6042

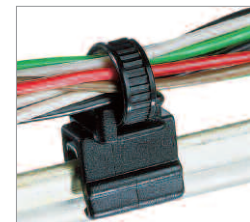
Pack of 25	Pack of 100	Length	Width	Bundle Diameter	Strength	Color
85-6042	83-6042	9.1" (231mm)	.5" (12.7mm)	2.25" (57mm)	120 lbs	Black
85-6043	83-6043	15.1" (244mm)	.5" (12.7mm)	4.12" (104mm)	120 lbs	Black

Edge Clip & Cable Tie Assemblies

- Made of general purpose (PA66HIRHS) Polyamide 6.6 high impact, heat stabilized nylon material
- UL flame rating 94V-2 cable tie; 94-HB mount – excellent UV resistance
- Continuous operating temperature -40°C (-40°F) to 110°C (230°F)
- Federal ASTM Specifications (ASTM: D-4066PA0161)

- The edge clip is designed to route bundles by securing to the edge of plastic or metal rails without the need for a mounting hole
- The clips are easy to secure and are extremely economical
- Comes complete with cable tie and edge clip
- Panel thickness range: .039"-.117" (1mm -3mm)

Pack of 25	Pack of 100	Length	Bundle Diameter	Strength	Mount Style	Color
85-6063	83-6063	7.9" (200mm)	1.80" (45mm)	50 lbs	Top	Black
85-6064	83-6064	7.9" (200mm)	1.80" (45mm)	50 lbs	Side	Black



85-6063

SUPPORT AND PROTECTIVE PRODUCTS

PRODUITS DE FIXATION ET DE PROTECTION • PRODUCTOS DE SOPORTE Y PROTECCIÓN

NYLON CABLE TIES • SERRE-FILS EN NYLON • CINTILLO DE NYLON



Fir Tree Mount & Cable Tie Assemblies

- Made of general purpose (PA66HS) Polyamide 6.6 nylon heat stabilized material
- UL flame rating 94V-2 cable tie; 94-HB mount – excellent UV resistance
- Provides low insertion force and high extraction force
- Continuous operating temperature -40° C (-40° F) to 105° C (221° F) cable tie; -40° C (-40° F) to 110° C (230° F) mount
- Federal ASTM Specifications (ASTM: D-4066PA0121)



Push Mount

- Fir tree design grips to inside of a hole for materials like sheet metal, wood and cast iron
- Panel thickness range: .052"-.280" (1.32mm-7.0mm)

Pack of 100	Length	Width	Bundle Diameter	Strength	Color
83-6045	8.27" (210mm)	.19" (4.7mm)	1.97" (50mm)	50 lbs	Black



Domed Fir Tree Mount and Cable Tie Assembly

- The domed head tie provides a tight rattle free installation and outside serrated strap has ribs designed for convoluted tubing. Dome also keeps out dust and liquids
- Panel thickness range: .250"-.280" (6.3mm-7.0mm)

Pack of 100	Length	Width	Bundle Diameter	Strength	Color
83-6048	6.69" (170mm)	.20" (5.1mm)	1.22" (31mm)	45 lbs	Black



Fir Tree Mount and Cable Tie Assembly

- Cable mount can slide along the cable tie for easy assembly. Fir tree design grips to inside of a hole for materials like sheet metal, wood, and cast iron.
- Popular on trailer manufacturing
- Panel thickness range: .028"-.193" (.75mm-3.0mm)

Pack of 100	Length	Width	Bundle Diameter	Strength	Color
83-6046	8.00" (203mm)	.18" (4.6mm)	1.75" (44.5mm)	50 lbs	Black

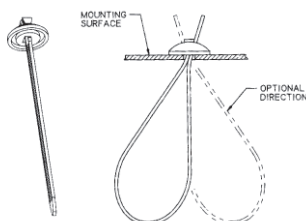


Button Head Cable Tie

- Made of general purpose (PA66HIRHS) Polyamide 6.6 high impact, heat stabilized nylon material
- UL flame rating 94-HB, excellent UV resistance
- Continuous operating temperature -40° C (-40° F) to 110° C (230° F)
- Federal ASTM Specifications (ASTM: D-4066PA0161)

- The buttons tie provides parallel entry and exit through the button head.
- With teeth on both sides of the strap it can be installed through bi-directional looping clockwise or counter-clockwise.
- Standoff tabs prevent tie head from seating into the button head
- Pilot bushings protect strap from abrasion
- Popular OEM product - reducing part numbers and labor time

Pack of 50	Length	Width	Bundle Diameter	Strength	Color
83-6049	9.63" (244mm)	.22" (5.6mm)	2.62" (66.7mm)	105 lbs	Black
83-6052	15.00" (578mm)	.30" (7.6mm)	4.33" (110mm)	130 lbs	Black



Heavy Duty Mounts

- Made of general purpose (PA66HIRHS) Polyamide 6.6 high impact, heat stabilized nylon material; UL flame rating 94-HB, excellent UV resistance
- Continuous operating temperature -40° C (-40° F) to 110° C (230° F)
- Federal ASTM Specifications (ASTM: D-4066PA0161)

- * When used with a cable tie, eliminates the need to carry multiple sizes of clamps
- * Provides quick and easy service in the field; replace the cable tie only
- * Has an excellent heat ratio and commonly used near an engine block
- * Can accommodate up to .5" wide cable ties
- * Contains a small tab inside the mounting hole that allows you to pre-install the mount on a stud before securing with a washer and a nut
- * Additional sizes available upon request

Pack of 25	Pack of 100	Mounting Hole	Length	Width	Max Torque	Color
85-6060	83-6060	.1875" (4.8mm)	.76" (19.3mm)	2.25" (57mm)	115 lb – in.	Black
85-6061	83-6061	.250" (6.4mm)	.76" (19.3mm)	2.25" (57mm)	115 lb – in.	Black
85-6062	83-6062	.3125" (8mm)	.76" (19.3mm)	2.25" (57mm)	115 lb – in.	Black



83-6062

Cable Tie Mounting Bases

- Made of general purpose (PA66) Polyamide 6.6 nylon material; Rubber-based adhesive
- UL flame rating 94V-2; Continuous operating temperature -40° C (-40° F) to 85° C (185° F)
- Accommodates 18-50 lb cable ties
- Federal ASTM and FDA Specifications (ASTM: D-4066PA0111); (FDA: CFR177.1500)

Part No.	Length	Width	Mounting Style/Hole	Pack of	Color
83-6030	1.11" (28.32mm)	1.11" (28.32mm)	2-Way with adhesive, #6	50	White
83-6032	1.11" (28.32mm)	1.11" (28.32mm)	2-Way with adhesive, #6	50	Black
83-6031	1.11" (28.32mm)	1.11" (28.32mm)	4-Way with adhesive, #8	50	White
83-6033	1.11" (28.32mm)	1.11" (28.32mm)	4-Way with adhesive, #8	50	Black



Adhesive Back Wiring Clamps

- Made of general purpose (PA66) Polyamide 6.6 nylon material
- Ideal for securing wire, cable and hydraulic hoses
- Continuous operating temperature -40° C (-40° F) to 65° C (150° F)
- Adhesive bonds to clean, smooth surfaces; Additional bulk sizes available

I.D. Size	Pack of 10	Pack of 50
1/4"	84-7030	83-7030
3/8"	84-7031	83-7031
1/2"	84-7032	83-7032



83-7030

Hose Hanger Clamps

- High quality material for low temperature and impact resistance
- Versatile design for diverse applications
- Ultra-Violet Resistant

I.D. Size	Pack	Color	Part No.
3/8" x 3/8"	25	Black	83-7015
1/2" x 1/2"	25	Black	83-7016
1/2" x 3/8"	25	Black	83-7017



83-7016

SUPPORT AND PROTECTIVE PRODUCTS

PRODUITS DE FIXATION ET DE PROTECTION • PRODUCTOS DE SOPORTE Y PROTECCIÓN

CLAMPS • BRIDES • ABRAZADERAS

Rubber Insulated Steel Clamps

- Black EPDM extruded material reduces vibration and has excellent heat resistance
- G-60 galvanized steel is resistant to acids, oxidizing, chemicals and weathering
- Ideal for securing wire loom, cables and hydraulic hoses
- Maximum temperature rating -40°C (-40°F) to 148°C (300°F)
- Federal ASTM (D2000 M3 BA710 A14 B13 C12 F17 Z1)
- Made in North America; additional bulk sizes available



I.D. Size	Width	Mounting Hole	Pack of 10	Pack of 100
1/4" (6.4mm)	5/8" (15.8mm)	3/8" (9.52mm)	84-8000	83-8100
3/8" (9.5mm)	5/8" (15.8mm)	3/8" (9.52mm)	84-8001	83-8101
1/2" (12.7mm)	5/8" (15.8mm)	3/8" (9.52mm)	84-8002	83-8102
5/8" (15.9mm)	5/8" (15.8mm)	3/8" (9.52mm)	84-8003	83-8103
3/4" (19.1mm)	5/8" (15.8mm)	3/8" (9.52mm)	84-8004	83-8104
7/8" (22.2mm)	5/8" (15.8mm)	3/8" (9.52mm)	84-8005	83-8105
1" (25.4mm)	5/8" (15.8mm)	3/8" (9.52mm)	84-8006	83-8106
1 1/4" (31.7mm)	5/8" (15.8mm)	3/8" (9.52mm)	84-8007	83-8107
2" (50.8mm)	5/8" (15.8mm)	3/8" (9.52mm)	84-8008	83-8108

Vinyl Insulated Clamps

- Black Plastisol (PVC) dip coating provides excellent resistance to acids, salts & moisture
- Self extinguishing & excellent resistance to impact, vibration and abrasion
- G-60 galvanized steel is resistant to acids, oxidizing, chemicals and weathering
- Ideal for securing wire loom, split flex tubing, cables and hydraulic hoses
- Maximum temperature rating -40°C (-40°F) to 93°C (200°F)
- Made in North America; additional bulk sizes available



I.D. Size	Width	Mounting Hole	Pack of 5	Pack of 10	Pack of 15	Pack of 100
1/4" (6.4mm)	1/2" (12.7mm)	1/4" (6.35mm)			84-7007	83-7007
3/8" (9.5mm)	1/2" (12.7mm)	1/4" (6.35mm)			84-7010	83-7010
1/2" (12.7mm)	1/2" (12.7mm)	1/4" (6.35mm)			84-7008	83-7008
5/8" (15.9mm)	1/2" (12.7mm)	1/4" (6.35mm)			84-7018	83-7018
3/4" (19.1mm)	1/2" (12.7mm)	1/4" (6.35mm)			84-7009	83-7009
7/8" (22.2mm)	1/2" (12.7mm)	1/4" (6.35mm)			84-7019	83-7019
1" (25.4mm)	1/2" (12.7mm)	1/4" (6.35mm)		84-7020		83-7036
1 1/4" (31.7mm)	1/2" (12.7mm)	1/4" (6.35mm)	84-7021			83-7037
1 1/2" (38.1mm)	1/2" (12.7mm)	1/4" (6.35mm)	84-7022			83-7038
2" (50.8mm)	1/2" (12.7mm)	1/4" (6.35mm)	84-7023			83-7039

Nylon Clamps

- Made of general purpose (PA66) Polyamide 6.6 nylon material
- Ideal for securing wire, cable and hydraulic hoses
- Continuous operating temperature -40°C (-40°F) to 85°C (185°F)



I.D. Size	Width	Mounting Hole	Pack of 10	Pack of 100
1/4" (6.4mm)	1/2" (12.7mm)	.203" (5.2mm)	84-7003	83-7003
5/16" (8.0mm)	1/2" (12.7mm)	.203" (5.2mm)	84-7014	83-7014
3/8" (9.5mm)	1/2" (12.7mm)	.203" (5.2mm)	84-7011	83-7011
1/2" (12.7mm)	1/2" (12.7mm)	.203" (5.2mm)	84-7004	83-7004
5/8" (15.9mm)	1/2" (12.7mm)	.203" (5.2mm)	84-7012	83-7012
3/4" (19.1mm)	1/2" (12.7mm)	.203" (5.2mm)	84-7005	83-7005

Split Flex Convuluted Tubing

- Provides excellent chemical protection and allows flexible routing of wire, cable and hoses
- Protects hoses, wire and cables from extreme heat and abrasion
- Helps reduce noise and protects wires from stones and other harmful debris
- Slit opening allows for easy installation of wires
- The slit snaps closed after installation to maintain its protective properties
- Applications include: Automotive, Truck, Bus, Trailer, Marine, R.V. and OE harness manufacturing



Nylon Split Loom

- Made of lightweight, black nylon material, with grey striping
- Continuous operating temperature -40° C (-40° F) to 149° C (300° F)
- FMVSS 302 Flame Rating
- Product Specifications Ford: WSS-M4D933-A1, ES-XU5T-14A099-AA
Chrysler: MS-DB41 CPN 4059
ASTM: D4066PA283



Size	Length	Part No.	Size	Length	Part No.
1/4"	50' (15.2m)	83-8030	5/8"	500' (152m)	83-8033-3
1/4"	500' (152m)	83-8030-3	3/4"	50' (15.2m)	83-8034
3/8"	50' (15.2m)	83-8031	3/4"	500' (152m)	83-8034-3
3/8"	500' (152m)	83-8031-3	1"	50' (15.2m)	83-8035
1/2"	50' (15.2m)	83-8032	1"	300' (91.4m)	83-8035-3
1/2"	500' (152m)	83-8032-3	1 1/2"	150' (45.7m)	83-8036-3
5/8"	50' (15.2m)	83-8033	2"	100' (30.4m)	83-8037-3

Polyethethylene Split Loom

- Made of lightweight, black polyethylene (PE) material
- Continuous operating temperature -40° C (-40° F) to 93° C (200° F)

Size	Length	Part No.	Size	Length	Part No.
1/4"	10' (3.0m)	83-6999	1/2"	50' (15.2m)	83-8001
1/4"	25' (7.6m)	83-8013	1/2"	500' (152m)	83-8001-3
1/4"	50' (15.2m)	83-8003	5/8"	50' (15.2m)	83-8007
1/4"	500' (152m)	83-8003-3	5/8"	500' (152m)	83-8007-3
3/8"	8' (2.43m)	83-7000	3/4"	5' (1.52m)	83-7002
3/8"	25' (7.6m)	83-8010	3/4"	50' (15.2m)	83-8002
3/8"	50' (15.2m)	83-8000	3/4"	500' (152m)	83-8002-3
3/8"	500' (152m)	83-8000-3	1"	5' (1.52m)	83-6998
7/16"	12' (3.6m)	83-8018	1"	50' (15.2m)	83-8004
7/16"	50' (15.2m)	83-8014	1"	300' (91.4m)	83-8004-3
7/16"	500' (152m)	83-8014-3	1 1/2"	150' (45.7m)	83-8005-3
1/2"	7' (2.13m)	83-7001	2"	100' (30.4m)	83-8009-3
1/2"	25' (7.6m)	83-8011			



Chassis Clips

- Made of heat treated spring steel with black corrosion resistant finish
- Clamps snap in place and securely hold wires, cables and hoses

I.D. Size	Dimensions	Pack of 15
3/16"	1/2" wide x 1 1/4" long x 3/16" deep	84-7033
1/4"	1/2" wide x 1 1/2" long x 1/4" deep	84-7034
3/8"	1/2" wide x 1 1/2" long x 1/2" deep	84-7035



SUPPORT AND PROTECTIVE PRODUCTS

PRODUITS DE FIXATION ET DE PROTECTION • PRODUCTOS DE SOPORTE Y PROTECCIÓN

TUBE AND LOOM • TUBES ET GAINES • TUBERIA DE AISLAMIENTO



Non Metallic Loom

- Used to protect wire harnesses, fuel lines, battery cables, control rods, vacuum lines and anywhere extreme heat or harsh chemicals are present
- Made of lightweight, non-metallic flexible conduit
- Constructed with the highest grade PET (Polyethylene Terephthalate) yarn and filled with PET monofilament
- Asphalt coating resists oil and fuel, water and other harsh chemicals
- Provides superior abrasion protection and crush resistance
- Extremely flexible and excellent for shock and noise reduction
- Continuous operating temperature -60° C (-76° F) to 163° C (325° F)
- Made in North America
- Custom lengths and split options available by request
- Industry Specifications:

Ford ESB-M3I38-A, ESF-M3L45-A, ESB-M99H96-A

General Motors: GM-675M, GM-676M, GM-677M, GM-678M

Chrysler: MS-542, MS-JZ9-31

MILITARY HH-T-791 A,B,C SAE J562A

Part No.	Size	Color	Length	
87-1000	1/4"	Black	100' (30.5m)	
83-8021	1/4"	Black	15' (4.57m)	NEW
87-1008	5/16"	Black	100' (30.5m)	
83-8022	5/16"	Black	15' (4.57m)	NEW
87-1001	3/8"	Black	100' (30.5m)	
83-8023	3/8"	Black	12' (3.65m)	NEW
88-1002	1/2"	Black	1000' (305m)	
87-1002	1/2"	Black	100' (30.5m)	
83-8024	1/2"	Black	8' (2.44m)	NEW
87-1003	5/8"	Black	100' (30.5m)	
83-8025	5/8"	Black	8' (2.44m)	NEW
87-1007	3/4"	Black	100' (30.5m)	
83-8026	3/4"	Black	6' (1.82m)	NEW



Clear Vinyl Tubing

NEW

- Excellent general purpose flexible tubing used for bundling and protecting wire harnesses
- Electrical insulation of wire splices, terminals and connectors
- Protects against salt, oil, acid and other harmful chemicals
- Abrasion and heat resistant
- Continuous operating temperature -20° C (-4° F) to 105° C (221° F)
- Industry Specifications:

UL subject 224 VW-1; 600V

CSA OFT flame retardancy

MILITARY AMS 3631

ASTM D 922; MIL-1-631D Grade C QPL Approved



Part No.	Size	Color	Length
83-8040	.250" (6.35mm)	Clear	50' (15.2m)
83-8041	.375" (9.53mm)	Clear	50' (15.2m)
83-8042	.500" (12.7mm)	Clear	50' (15.2m)

Spiral Wrap - Spooled

- Made of lightweight Polyethylene material
- Black spiral wrap is U.V. resistant
- Provides wire and cables from abrasion and allows flexible routing options
- Continuous operating temperature -60° C (-76° F) to 88° C (190° F)
- Military spec: MIL I-631D, MIL P-21922A (black only)
- Fed spec: LP390 (black and natural)

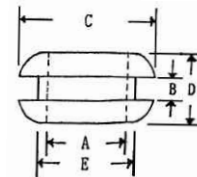


Size	Min/Max Bundle Diameter	Length (Ft)	Black	Natural
1/4"	.187" (4.75mm) – 2" (50.8mm)	100	83-9008	83-9003
3/8"	.312" (7.92mm) – 3" (76.2mm)	100	83-9009	83-9000
1/2"	.375" (9.52mm) – 4" (102mm)	100	83-9007	83-9001
3/4"	.750" (19.1mm) – 5" (127mm)	100	83-9010	83-9002
1"	1.00" (25.4mm) – 7" (178mm)	100	83-9011	83-9004



Rubber Grommets

- Protects wires from chafing against drilled holes
- Also available in bulk sizes



Inside Diam. Size (A)	Groove Width (B)	Overall Width (C)	Overall Thickness (D)	Groove Diameter (E)	Pack Size	Part No.
1/8" (3.1mm)	1/16" (1.5mm)	11/32" (8.7mm)	3/16" (4.7mm)	1/4" (6.4mm)	30	83-7020
3/16" (4.7mm)	1/16" (1.5mm)	7/16" (11.1mm)	7/32" (5.5mm)	5/16" (7.9mm)	30	83-7021
1/4" (6.4mm)	1/16" (1.5mm)	9/16" (14.2mm)	1/4" (6.4mm)	3/8" (9.5mm)	30	83-7022
5/16" (7.9mm)	1/16" (1.5mm)	5/8" (15.9mm)	1/4" (6.4mm)	7/16" (11.1mm)	30	83-7023
3/8" (9.5mm)	1/16" (1.5mm)	5/8" (15.9mm)	1/4" (6.4mm)	1/2" (12.7mm)	30	83-7024
25/64" (9.9mm)	1/8" (3.1mm)	27/32" (21.4mm)	3/8" (9.5mm)	21/32" (16.6mm)	30	83-7025
1/2" (12.7mm)	1/16" (1.5mm)	3/4" (19.2mm)	9/32" (5.2mm)	5/8" (15.9mm)	30	83-7026
5/8" (15.9mm)	1/16" (1.5mm)	1 1/8" (28.5mm)	9/32" (5.2mm)	7/8" (22.2mm)	30	83-7027
11/16" (17.4mm)	1/16" (1.5mm)	1 5/16" (33.3mm)	3/8" (9.5mm)	1" (25.4mm)	30	83-7028



83-7027



83-7024



83-7020

Rubber Grommet Assortment

- 30 assorted grommets
- 10 each (1/4", 1/8" & 3/8")

83-7006



83-7006

Electrical Tape

- General purpose vinyl insulating tape
- Excellent resistance to abrasion, moisture and other weather conditions
- 3/4" x 60' black
- Maximum temperature rating -10° C (14° F) to 80° C (176° F)
- CSA 22.2

83-7029 1 Pack

83-7029-3 10 Pack

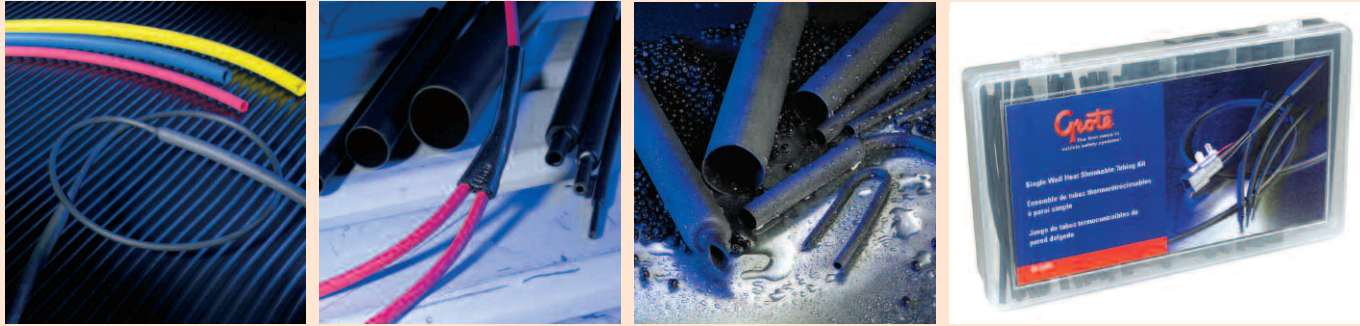


83-7029

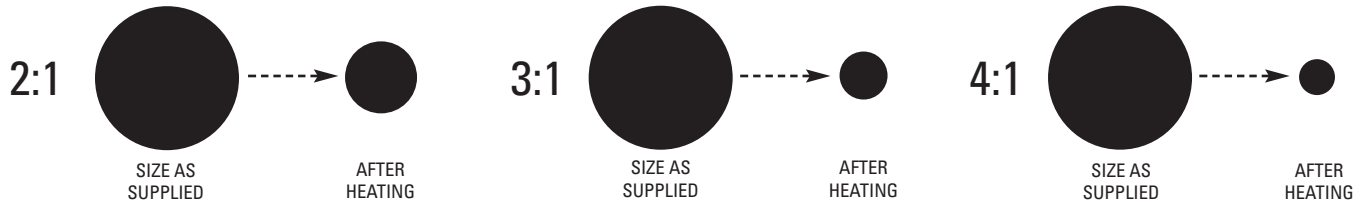
SUPPORT AND PROTECTIVE PRODUCTS

PRODUITS DE FIXATION ET DE PROTECTION • PRODUCTOS DE SOPORTE Y PROTECCIÓN

HEAT SHRINK TUBING • TUBE THERMORÉTRÉCISSABLE • TUBERIA DE AISLAMIENTO TERMOCONTRACTIL



Shrink Ratio:



POLYOLEFIN HEAT SHRINKABLE TUBING

Product Line	SWT	SWT-Clear	DWT	DWT-Clear	DWA	DWA-Clear	FDWA	HWA
Type	Single Wall	Single Wall	Dual Wall	Dual Wall	Dual Wall	Dual Wall	Dual Wall	Dual Wall
Outer Wall Construction	Thin/Flexible	Thin/Flexible	Semi-Rigid	Semi-Rigid	Semi-Rigid	Semi-Rigid	Flexible	Rigid
Inner Wall Construction	N/A	N/A	Encapsulant Lined	Adhesive Lining	Adhesive Lining	Adhesive Lining	Adhesive Lining	Adhesive Lining
Shrink Ratio	2 to 1	2 to 1	3 to 1	3 to 1	4 to 1	4 to 1	3 to 1	3 to 1
Minimum Shrink Temp.	70°C (158°F)	95°C (203°F)	125°C (257°F)	125°C (257°F)	110°C (230°F)	110°C (230°F)	80°C (176°F)	110°C (230°F)
Moisture Resistance	Low	Low	Medium	High	High	High	High	High
Flame Retardancy	Good	Poor	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Abrasion Protection	Good	Good	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Strain Relief & Insulation	Good	Good	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent

* Custom lengths and additional materials available upon request

Dual Wall – Adhesive Lined “Hot Melt” Heat Shrink Tubing

4:1 Shrink Ratio

Dual Wall is designed to meet automotive industry requirements for environmental sealing and electrical insulation. It has a dual wall construction. The outer jacket is semi-rigid, radiation cross-linked polyolefin that is flame retardant and provides strain relief and abrasion protection. The inner layer is a unique hot-melt adhesive designed to adhere to all major automotive wire and terminal insulations. The adhesive forms an effective barrier against fluids and moisture; protects harnesses from corrosion and water wicking and covers a wide temperature range. This product is an OEM approved product.

Specifications/Approvals: **Series** UL
 E85381
 600 V, 125°C

Size	Length	Pack	Wire Size	Part No.
1/16" - 3/16" (.225")	6"	6	22-12 ga	84-5006
1/16" - 3/16" (.225")	6"	20	22-12 ga	84-5006-3
1/16" - 3/16" (.225")	48"	6	22-12 ga	84-5006-48
3/16" - 1/4" (.293")	6"	6	20-10 ga	84-5007
3/16" - 1/4" (.293")	6"	20	20-10 ga	84-5007-3
3/16" - 1/4" (.293")	48"	6	20-10 ga	84-5007-48
1/4" - 3/8" (.427")	6"	6	16-8 ga	84-5008
1/4" - 3/8" (.427")	6"	20	16-8 ga	84-5008-3
1/4" - 3/8" (.427")	48"	6	16-8 ga	84-5008-48
1/2" - 5/8" (.700")	6"	6	8-1/0 ga	84-5009
1/2" - 5/8" (.700")	6"	10	8-1/0 ga	84-5009-3
1/2" - 5/8" (.700")	48"	6	8-1/0 ga	84-5009-48



Minimum shrink temperature:
110°C (230°F)
 Minimum full recovery temperature:
135°C (275°F)
 Operating temperature range:
-40°C to 130°C (-40°F to 266°F)



Dual Wall - Adhesive Lined “Hot Melt” Heat Shrink Tubing Kit

4:1 Shrink Ratio

- 40, 6", Black Dual Wall Heat Shrink pieces
- 6 compartment re-closable box
- Re-order chart on inside cover

Part No.	Features	Size	Quantity
83-6535	84-5006	1/16" - 3/16"	12
	84-5007	3/16" - 1/4"	12
	84-5008	1/4" - 3/8"	10
	84-5009	1/2" - 5/8"	6



83-6535

SUPPORT AND PROTECTIVE PRODUCTS

PRODUITS DE FIXATION ET DE PROTECTION • PRODUCTOS DE SOPORTE Y PROTECCIÓN

HEAT SHRINK TUBING • TUBE THERMORÉTRICISSABLE • TUBERIA DE AISLAMIENTO TERMOCONTRACTIL



Minimum shrink temperature:
80°C (176°F)
Minimum full recovery temperature:
125°C (257°F)
Operating temperature range:
-40°C to 110°C (-40°F to 230°F)

* Remains semi-flexible post-heat



Dual Wall – Flexible, Adhesive Lined Heat Shrink Tubing

3:1 Shrink Ratio

Flexible Dual Wall is an encapsulant-lined heat shrink tubing that provides moisture resistance, strain relief and electrical insulation for splices, terminations, breakouts and mechanical connections. The outer wall is semi-rigid, cross-linked polyolefin, while the inner wall is a meltable polyolefin that flows with the application of heat. This moisture resistant tubing provides flexibility to insulate and protect irregular shape products. It also provides rugged protection from chemicals, abrasion, vibration and flexing.

Specifications/Approvals:	Series	UL	CSA
		E35586	LR31929
		600 V, 125° C	600 V, 125° C
			

Size	Length	Pack	Wire Size	Part No.
1/8"	6"	6	22-18 ga	84-4015
1/8"	6"	20	22-18 ga	84-4015-3 *
1/8"	48"	6	22-18 ga	84-4015-48 *
3/16"	6"	6	20-12 ga	84-4016
3/16"	6"	20	20-12 ga	84-4016-3 *
3/16"	48"	6	20-12 ga	84-4016-48 *
1/4"	6"	6	16-10 ga	84-4017
1/4"	6"	20	16-10 ga	84-4017-3 *
1/4"	48"	6	16-10 ga	84-4017-48 *
3/8"	6"	6	12-8 ga	84-4018
3/8"	6"	20	12-8 ga	84-4018-3 *
3/8"	48"	6	12-8 ga	84-4018-48 *
1/2"	6"	6	8-4 ga	84-4019
1/2"	6"	20	8-4 ga	84-4019-3 *
1/2"	48"	6	8-4 ga	84-4019-48 *
3/4"	6"	6	4-2/0 ga	84-4020
3/4"	6"	10	4-2/0 ga	84-4020-3 *
3/4"	48"	6	4-2/0 ga	84-4020-48 *
1"	6"	6	1-4/0 ga	84-4021
1"	6"	10	1-4/0 ga	84-4021-3 *
1"	48"	6	1-4/0 ga	84-4021-48 *

*** NEW**

Dual Wall - Flexible, Adhesive Lined Heat Shrink Tubing Kit

3:1 Shrink Ratio

- 50, 6", Black Flexible Dual Wall Heat Shrink pieces
- 6 compartment re-closable box
- Re-order chart on inside cover

Part No.	Features	Size	Quantity
83-6537	84-4015	1/8"	12
	84-4016	3/16"	12
	84-4017	1/4"	12
	84-4018	3/8"	6
	84-4019	1/2"	6
	84-4020	3/4"	2



83-6537

Dual Wall – Heat Shrink Tubing

3:1 Shrink Ratio

Dual Wall is an encapsulant-lined heat shrink tubing that provides moisture resistance, strain relief and electrical insulation for splices, terminations, breakouts and mechanical connections. The outer wall is semi-rigid, cross-linked polyolefin, while the inner wall is a meltable polyolefin that flows with the application of heat. This moisture resistant tubing provides rugged protection from chemicals, abrasion, vibration and flexing.

Specifications/Approvals: **Series** **UL** **Military**
 E85381 AMS-DTL-23053/4
 600 V, 125°C Class 1



Minimum shrink temperature:
125°C (257°F)
 Minimum full recovery temperature:
135°C (275°F)
 Operating temperature range:
-55°C to 110°C (-67°F to 230°F)

Size	Length Per Piece	Pack	Wire Size	Black Part No.	Red Part No.	Clear Part No.
1/8"	6"	6	22-18 ga	84-4006	84-6106	84-5029
1/8"	6"	20	22-18 ga	84-4006-3	84-6106-3	
1/8"	48"	6	22-18 ga	84-4006-48	84-6106-48	
1/8"	48"	50	22-18 ga	88-4006		
3/16"	6"	6	20-12 ga	84-4005	84-6105	84-5030
3/16"	6"	20	20-12 ga	84-4005-3	84-6105-3	
3/16"	48"	6	20-12 ga	84-4005-48	84-6105-48	
3/16"	48"	50	20-12 ga	88-4005		
1/4"	6"	6	16-10 ga	84-4000	84-6100	84-5031
1/4"	6"	20	16-10 ga	84-4000-3	84-6100-3	
1/4"	48"	6	16-10 ga	84-4000-48	84-6100-48	
1/4"	48"	50	16-10 ga	88-4000		
3/8"	6"	6	12-8 ga	84-4001	84-6101	84-5032
3/8"	6"	20	12-8 ga	84-4001-3	84-6101-3	
3/8"	48"	6	12-8 ga	84-4001-48	84-6101-48	
3/8"	48"	50	12-8 ga	88-4001		
1/2"	6"	6	8-4 ga	84-4002	84-6107	84-5033
1/2"	6"	20	8-4 ga	84-4002-3	84-6107-3	
1/2"	48"	6	8-4 ga	84-4002-48	84-6107-48	
1/2"	48"	50	8-4 ga	88-4002		
3/4"	6"	6	4-2/0 ga	84-4003	84-6103	84-5034
3/4"	6"	10	4-2/0 ga	84-4003-3	84-6103-3	
3/4"	48"	6	4-2/0 ga	84-4003-48	84-6103-48	
3/4"	48"	30	4-2/0 ga	88-4003		
1"	6"	6	1-4/0 ga	84-4004	84-6104	84-5035
1"	6"	10	1-4/0 ga	84-4004-3	84-6104-3	
1"	48"	6	1-4/0 ga	84-4004-48	84-6104-48	
1"	48"	20	1-4/0 ga	88-4004		



Dual Wall, Black, Heat Shrinkable Tubing Kit

3:1 Shrink Ratio

- 50, 6", Black Dual Wall Heat Shrink Pieces
- 6 compartment re-closable plastic box
- Re-order chart on inside cover

Part No.	Features	Size	Quantity
83-6502	84-4006	1/8"	12
	84-4005	3/16"	12
	84-4000	1/4"	12
	84-4001	3/8"	6
	84-4002	1/2"	6
	84-4003	3/4"	2



83-6502

Dual Wall, Red/Black, Heat Shrinkable Tubing Kit

3:1 Shrink Ratio

- 50, 6", Black & Red Dual Wall Heat Shrink Pieces
- 6 compartment re-closable plastic box
- Re-order chart on inside cover

Part No.	Features	Size	Quantity	Color
83-6505	84-4006	1/8"	6	Black
	84-6106	1/8"	6	Red
	84-4005	3/16"	6	Black
	84-6105	3/16"	6	Red
	84-4000	1/4"	6	Black
	84-6100	1/4"	6	Red
	84-4001	3/8"	3	Black
	84-6101	3/8"	3	Red
	84-4002	1/2"	3	Black
	84-6107	1/2"	3	Red
	84-4003	3/4"	1	Black
	84-6103	3/4"	1	Red



83-6505

Heavy Wall – Adhesive Lined Heat Shrink Tubing **NEW**

3:1 Shrink Ratio

Dual Wall is designed for insulating, protecting and sealing electrical connections and low voltage cables. It provides insulation thickness equal to or greater than standard wire insulation. Heavy wall shrink tubing provides an environmental seal and is highly resistant to impact and abrasion. Longer lengths and sizes available upon request.

Specifications/Approvals: **Series** UL
E1 15664



Inside Diameter		Length Per Piece	Pack	Part No.
Pre Heat	Post Heat			
.750" (19mm)	.220" (5.6mm)	48"	1	84-4030
1.100" (28mm)	.375" (9.5mm)	48"	1	84-4031
1.500" (38mm)	.500" (12mm)	48"	1	84-4032



Minimum shrink temperature:
90°C (195°F)
Minimum full recovery temperature:
121°C (250°F)
Operating temperature range:
-55°C to 90°C (-67°F to 194°F)

Dual Wall – Heat Shrink Tubing



3:1 Shrink Ratio

Dual Wall is an encapsulant-lined heat shrink tubing that provides moisture resistance, strain relief and electrical insulation for splices, terminations, breakouts and mechanical connections. The outer wall is semi-rigid, cross-linked polyolefin, while the inner wall is a meltable polyolefin that flows with the application of heat. This moisture resistant tubing provides rugged protection from chemicals, abrasion, vibration and flexing. Meets UL #486D requirements.

Specifications/Approvals: **CSA** UL **Military**
C22.2 486D DTL-23053/15
Class 2



Size	Length Per Piece	Pack	Wire Size	Black Part No.	Red Part No.
1/2"	1.5"	10	6-2 ga	84-9561	84-9562
3/4"	1.5"	10	4-1/0 ga	84-9563	84-9564
1 1/8"	1.5"	10	2/0-250mcm	84-9565	84-9566



84-9564

Minimum shrink temperature:
90°C (195°F)
Minimum full recovery temperature:
121°C (250°F)
Operating temperature range:
-55°C to 110°C (-67°F to 230°F)

SUPPORT AND PROTECTIVE PRODUCTS

PRODUITS DE FIXATION ET DE PROTECTION • PRODUCTOS DE SOPORTE Y PROTECCIÓN

HEAT SHRINK TUBING • TUBE THERMORÉTRÉCISSABLE • TUBERIA DE AISLAMIENTO TERMOCONTRACTIL



Dual Wall - Heat Shrink Caps

Heat shrink, semi-rigid, encapsulant-lined caps provide an inexpensive solution to encapsulate a crimped electrical connection. The encapsulant lining flows to fill in surface irregularities while providing protection against abrasion. The vibration proof caps are used to insulate dead-end electrical cables and connectors with ease. The clear “adhesive-lined” caps allow for see through inspection. They also provide superior moisture protection and extreme temperature resistance.

Dual Wall

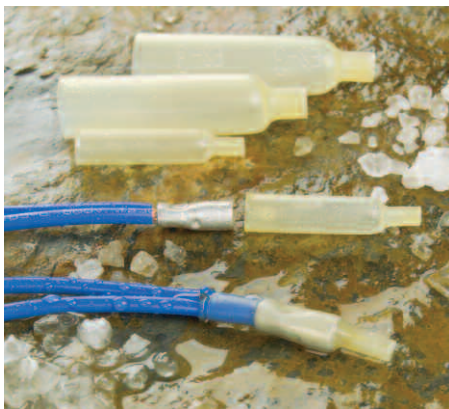
3:1 Shrink Ratio

Size	Color	Pack	Part No.
1/8"	Black	10	84-5040
3/16"	Black	10	84-5041
1/4"	Black	10	84-5042
3/8"	Black	5	84-5043
1/2"	Black	5	84-5044



84-5040

Minimum shrink temperature: 125°C (257°F)
Minimum full recovery temperature: 135°C (275°F)
Operating temperature range: -55°C to 110°C (-67°F to 230°F)



Dual Wall – Adhesive Lined

4:1 Shrink Ratio

Size	Color	Pack	Part No.
.225"	Clear	10	84-5045
.293"	Clear	10	84-5046
.427"	Clear	5	84-5047

Minimum shrink temperature: 100°C (212°F)
Minimum full recovery temperature: 135°C (275°F)
Operating temperature range: -40°C to 105°C (-40°F to 221°F)






84-5047

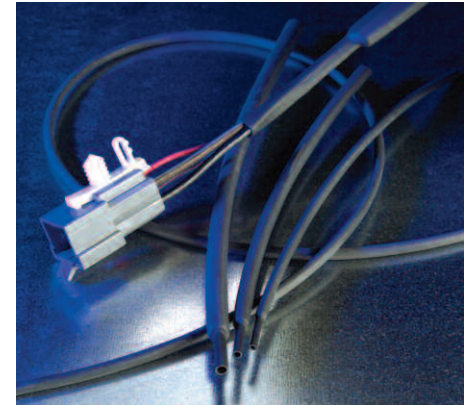
Single Wall – Heat Shrink Tubing

2:1 Shrink Ratio

Single Wall is cost effective tubing that insulates and protects electrical connections. It also provides a flexible option for wire bundling. It is made of cross-linked polyolefin and provides good protection from abrasion and moisture. Meets UL VW-1 and CSA OFT flame-retardancy.

Specifications/Approvals:

Series	CSA	UL	Military
	LR31929 VW-1 600 V, 125°C	E35586 VW-1 600 V, 125°C	AMS-DTL-23053/5 Classes 1 and 3
			



Minimum shrink temperature:
70°C (158°F)
Minimum full recovery temperature:
90°C (194°F)
Operating temperature range:
-55°C to 135°C (-67°F to 275°F)

Size	Length Per Piece	Pack	Black Part No.	Red Part No.	Blue Part No.	Yellow Part No.
1/8"	6"	6	84-5010			
1/8"	100'	Spool	83-4999			
3/16"	6"	6	84-5011	84-4007	84-5020	
3/16"	100'	Spool	83-5000			
1/4"	6"	6	84-5012	84-4008	84-5019	84-5025
1/4"	100'	Spool	83-5001			
3/8"	6"	6	84-5013	84-4009	84-5022	84-5024
3/8"	100'	Spool	83-5002			
1/2"	6"	6	84-5014	84-4011	84-5021	
1/2"	100'	Spool	83-5003			
3/4"	6"	6	84-5015	84-4010	84-5023	
3/4"	100'	Spool	83-5004			
1"	6"	6	84-5016			

* Custom lengths and colors available upon request



Single Wall, Black, Heat Shrinkable Tubing Kit

2:1 Shrink Ratio

- 50, 6", Black Single Wall Heat Shrink Pieces
- 6 compartment re-closable plastic box
- Re-order chart on inside cover

Part No.	Features	Size	Quantity
83-6545	84-5010	1/8"	12
	84-5011	3/16"	12
	84-5012	1/4"	8
	84-5013	3/8"	6
	84-5014	1/2"	6
	84-5015	3/4"	6



83-6545

Single Wall – Heat Shrink Tubing Assortment

Part No.	Features	Size	Quantity
83-6533	Black	1/4" x 6"	3
		3/8" x 6"	2
		1/2" x 6"	2



83-6533

SUPPORT AND PROTECTIVE PRODUCTS

PRODUITS DE FIXATION ET DE PROTECTION • PRODUCTOS DE SOPORTE Y PROTECCIÓN

HEAT GUNS AND TORCHES • PISTOLETS THERMIQUES ET TORCHES • PISTOLA DE AIRE CALIENTE Y ANTORCHAS



83-6508

Flameless Heat Gun

- Portable, self igniting, multi function heat tool; 7 1/2" long
- Cordless & flameless; OEM approved
- Comes with an attachable heat deflector, cooling tray and replacement orifice
- The wide nozzle has a high output long life catalyst
- Ready to use in 15 seconds; adjustable heat settings
- Gas container capacity: 20 ml
- Recommended butane: Triple Refined
- Continuous Operating Temperature: 250°C to 500°C (480°F to 930°F)
- Maximum Temperature Rating: 750°C (1400°F)

83-6508



83-6501

Heat Gun

- Two heat settings; 120 Volt, 10 Amp
- Lightweight (1 lb)
- 3-wire ground cord set
- UL and CUL listed
- Thermoplastic casing
- Minimum Temperature Rating: 260°C (500°F)
- Maximum Temperature Rating: 538°C (1000°F)

83-6501



83-6525



Hands-Free Heat Tool

- Hands-free slide lock for continuous use and instant operation
- Ergonomic handle design ensures a non-slip grip
- Removable base for table-top or hand-held use
- 60 minute continuous run time with full charge
- Gas adjustment wheel provides adjustable, long blue torch flame
- Unique shutter lever to easily extinguish ignition flame
- Instant off safety switch
- 1300°C (2500°F)

83-6525



83-6500

Butane Powered Micro Torch

- Compact palm size is perfect for tool kits and field service kits
- Produces an adjustable, wind resistant flame with temperatures up to 1300°C /2500°F, perfect for many microtorch applications
- Built in safety lock with improved easy to use self-ignition system
- Meets consumer products safety commission (CPSC) child safety requirements
- Powered by refillable "fuel cell" (included) with flame adjustment lever
- Built in fuel level viewing window
- Use with Master Ultratane butane for best performance
- Pinpoint flame is perfect for soldering, desoldering, heating shrinking and terminating heating lighting and many other applications
- Patent pending

83-6500

Proper connections to a vehicles power supply are vital to performance. Make the right choice – go with Grote Battery Connectors and Cables.



Die-Cast Battery Connectors

- Copper die-cast and bright tin plating exceeds SAE J163 conductivity standards by 25 times
- Ultra-smooth, pit-free cast surface resists against harmful materials and corrosion
- Can be crimped or soldered; can be installed with most major crimping tools
- Provides full height post connection
- Includes 5/16" battery bolts and shoulder nuts; fasteners included
- Clamps are marked for easy identification
- Listed by UL STD. 486A & C UL® US when applied with Hex Crimp 84-9082
- Made in North America; Available in Retail and Bulk sizes



GROTE

OTHER

Straight Barrel Clamp

Cable Gauge	Color Code	Retail Pack Size	Negative	Positive	Bulk Pack Size	Negative	Positive
4	Grey	1	82-9053	82-9054	5	84-9053	84-9054
2	Green	1	82-9050	82-9051	5	84-9050	84-9051
1	Pink	1	82-9047	82-9048	5	84-9047	84-9048
1/0	Black	1	82-9056	82-9057	5	84-9056	84-9057
2/0	Orange	1	82-9058	82-9059	5	84-9058	84-9059
3/0	Purple	1	82-9060	82-9061	5	84-9060	84-9061
4/0	Yellow	1	82-9062	82-9063	5	84-9062	84-9063



84-9057

Flag Connector

Cable Gauge	Color Code	Retail Pack Size	Negative	Positive	Bulk Pack Size	Negative	Positive
2	Green	1	82-9093	82-9094	5	84-9093	84-9094
1	Pink	1	82-9091	82-9092	5	84-9091	84-9092
1/0	Black	1	82-9095	82-9096	5	84-9095	84-9096
2/0	Orange	1	82-9097	82-9098	5	84-9097	84-9098
3/0	Purple	1	82-9099	82-9100	5	84-9099	84-9100
4/0	Yellow	1	82-6010	82-6011	5	84-6010	84-6011



84-9097

Heavy Wall Copper Lugs

- Use on stud style batteries

Cable Gauge	Color Code	5/16" (8 mm)	3/8" (10 mm)	1/2" (12 mm)	Pack Size
4	Grey	84-9105	84-9106	84-9107	5
2	Green		84-9103	84-9104	5
1	Pink		84-9101	84-9102	5
1/0	Black		84-9108	84-9109	5
2/0	Orange		84-9110	84-9111	5
3/0	Purple		84-9112	84-9113	5
4/0	Yellow		84-9114	84-9115	5



84-9110

BATTERY CONNECTORS AND CABLE

CONNECTEURS ET CÂBLES DE BATTERIE • TERMINALES Y CABLES PARA BATERIA

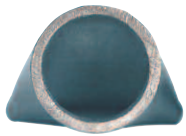
BATTERY CONNECTORS • CONNECTEURS DE BATTERIE • TERMINALES DE BATERIA



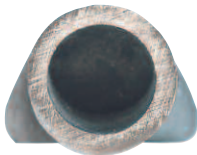
84-9309

Stud/Side Locking Lug

Cable Gauge	Color Code	3/8" (10 mm)	Pack Size
1/0	Black	84-9308	5
2/0	Orange	84-9309	5
3/0	Purple	84-9310	5
4/0	Yellow	84-9311	5



STANDARD LUG



MAGNALUG®

MagnaLug® Connectors



- MagnaLugs® are superior to standard tube lugs
- Wider pad for better electrical contact; thicker pad for greater strength and conductivity
- Exceeds SAE conductivity standards J163 and J1811
- MagnaLugs® are listed by UL STD. 486A & C UL® US when applied with Hex Crimp 84-9082
- Up to 80% heavier wall than standard lugs
- Made of 100% copper, tin-plated twice as thick as industry standards
- For truck, bus, farm or construction equipment
- Excellent for commercial or industrial applications
- Flameless installation, safe for repair shop or field repair

Starter/Ground Copper Lugs



84-9208

Cable Gauge	Color Code	1/4" (6 mm)	3/8" (10 mm)	1/2" (12 mm)	Pack Size
8	Grey	84-9461			5
4	Grey	84-9199	84-9200	84-9201	5
1 & 2	Pink	84-9196	84-9197	84-9198	5
1/0	Black	84-9202	84-9203	84-9204	5
2/0	Orange	84-9205	84-9206	84-9207	5
3/0	Purple		84-9208	84-9209	5
4/0	Yellow		84-9210	84-9211	5

Locking Anti Rotational Stackable Lug



84-9192

Cable Gauge	Color Code	3/8" (10 mm)	Pack Size
1/0	Black	84-9192	5
2/0	Orange	84-9193	5

Splices



84-9220



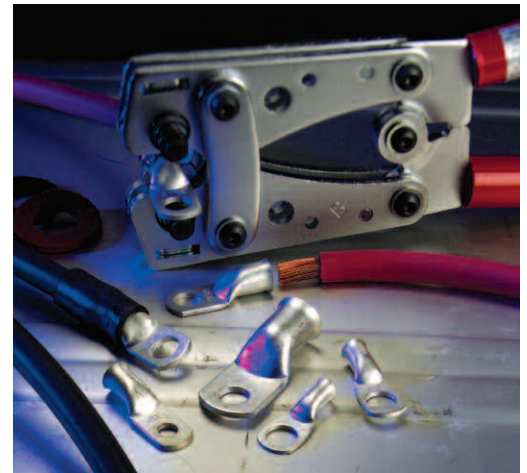
Cable Gauge	Color Code	Retail Pack	Pack Size	Bulk Pack	Pack Size
4	Grey	82-9219	2	84-9219	10
1 & 2	Pink	82-9218	2	84-9218	10
1/0	Black	82-9220	2	84-9220	10
2/0	Orange	82-9221	2	84-9221	10
3/0	Purple	82-9222	2	84-9222	10
4/0	Yellow	82-9223	2	84-9223	10

Tin Plated Copper Tube Lugs

- Seamless 100% copper tube construction
- Heavy tin-plated for superior conductivity and resistance to corrosion
- Can be crimped or soldered
- Ideal for general wiring, starter and ground applications
- Available in clam shell packaging or bulk bag



Cable Gauge	Stud Size	Retail Pack	Pack Size	Bulk Pack	Pack Size
8	#10	82-9164	2	84-9164	25
8	1/4"	82-9165	2	84-9165	25
8	5/16"	82-9537 NEW	2	84-9537 NEW	25
8	3/8"	82-9523	2	84-9523	25
6	#10	82-9524	2	84-9524	25
6	1/4"	82-9166	2	84-9166	25
6	5/16"	82-9167	2	84-9167	25
6	3/8"	82-9168	2	84-9168	25
6	1/2"	82-9525	2	84-9525	25
4	1/4"	82-9317	2	84-9317	25
4	5/16"	82-9169	2	84-9169	25
4	3/8"	82-9170	2	84-9170	25
4	1/2"	82-9527	2	84-9527	25
2	1/4"	82-9318	2	84-9318	25
2	5/16"	82-9319	2	84-9319	25
2	3/8"	82-9171	2	84-9171	25
2	1/2"	82-9172	2	84-9172	25
1	1/4"	82-9528	2	84-9528	25
1	5/16"	82-9533	2	84-9533	25
1	3/8"	82-9173	2	84-9173	25
1	1/2"	82-9174	2	84-9174	25
1/0	1/4"	82-9535 NEW	2	84-9535 NEW	25
1/0	5/16"	82-9534	2	84-9534	25
1/0	3/8"	82-9175	2	84-9175	25
1/0	1/2"	82-9176	2	84-9176	25
2/0	5/16"	82-9536 NEW	2	84-9536 NEW	25
2/0	3/8"	82-9177	2	84-9177	25
2/0	1/2"	82-9178	2	84-9178	25
3/0	3/8"	82-9179	2	84-9179	25
3/0	1/2"	82-9180	2	84-9180	25
4/0	3/8"	82-9181	2	84-9181	25
4/0	1/2"	82-9182	2	84-9182	25



84-9175

Tin Plated Copper Tube Lug Assortment Kit **NEW**

- Includes 76 of the most popular automotive and heavy duty copper tube lugs
- Heavy tin plated for superior conductivity and resistance to corrosion
- Can be crimped or soldered
- 12 compartment re-closable box with re-order chart on inside cover



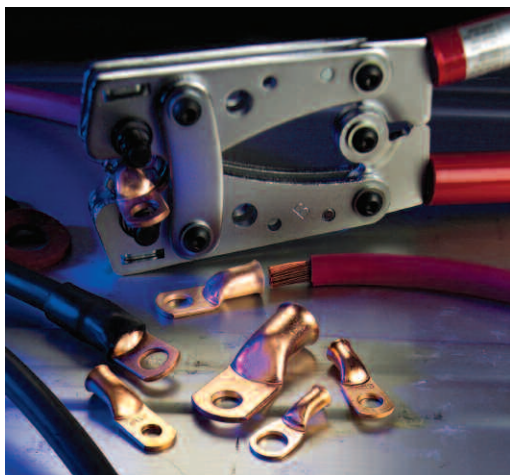
83-6544

83-6544 8 – 3/0 GA Copper Tube Lugs

BATTERY CONNECTORS AND CABLE

CONNECTEURS ET CÂBLES DE BATTERIE • TERMINALES Y CABLES PARA BATERIA

BATTERY CONNECTORS • CONNECTEURS DE BATTERIE • TERMINALES DE BATERIA



Standard Copper Tube Lugs

- Seamless 100% copper tube construction
- Can be crimped or soldered - ideal for most general purpose applications
- Available in clam shell packaging or bulk bag



Cable Gauge	Stud Size	Retail Pack	Pack Size	Bulk Pack	Pack Size
8	#10	82-9521	2	84-9521	25
8	3/8"	82-9428	2	84-9428	25
6	#10	82-9514	2	84-9514	25
6	1/4"	82-9522	2	84-9522	25
6	5/16"	82-9512	2	84-9512	25
6	3/8"	82-9429	2	84-9429	25
6	1/2"	82-9513	2	84-9513	25
4	1/4"	82-9515	2	84-9515	25
4	5/16"	82-9516	2	84-9516	25
4	3/8"	82-9430	2	84-9430	25
4	1/2"	82-9529	2	84-9529	25
2	1/4"	82-9517	2	84-9517	25
2	5/16"	82-9518	2	84-9518	25
2	3/8"	82-9431	2	84-9431	25
2	1/2"	82-9530	2	84-9530	25
1	1/4"	82-9519	2	84-9519	25
1	5/16"	82-9531	2	84-9531	25
1	3/8"	82-9432	2	84-9432	25
1	1/2"	82-9520	2	84-9520	25
1/0	5/16"	82-9532	2	84-9532	25
1/0	3/8"	82-9433	2	84-9433	25
1/0	1/2"	82-9434	2	84-9434	25
2/0	3/8"	82-9435	2	84-9435	25
2/0	1/2"	82-9436	2	84-9436	25
3/0	3/8"	82-9437	2	84-9437	25
3/0	1/2"	82-9438	2	84-9438	25
4/0	3/8"	82-9439	2	84-9439	25
4/0	1/2"	82-9440	2	84-9440	25



84-9436



83-6543

Copper Tube Lug Assortment Kit NEW

- Includes 76 of the most popular automotive and heavy duty copper tube lugs
- Provides superior conductivity
- Can be crimped or soldered
- 12 compartment re-closable box
- Re-order chart on inside cover

83-6543 8 – 3/0 GA Copper Tube Lugs

Uninsulated Brazed Seam Lugs

- 100% copper tin-plated
- Serrated barrel increases pull-out strength of hard-to-crimp wire
- Can be crimped or soldered
- Ideal for solder dipping applications



Cable Gauge	Stud Size	Bulk Pack	Pack Size
6	1/2"	84-9442	10
4	1/2"	84-9443	10



84-9443

Solder Slugs and Flux

- Pre-measured solder slugs for quick and easy battery cable soldering
- Improves your electrical connection by filling in any contact irregularities
- Color coded to industry standards
- Gauges 6 through 4/0
- Melting temperature rating 182°C (361°F)



Cable Gauge	Color Code	Pack Size	Part No.
6	Gray	25	84-9600
4	Gray	25	84-9601
2	Green	25	84-9602
1	Pink	25	84-9603
1/0	Black	25	84-9604
2/0	Orange	25	84-9605
3/0	Purple	25	84-9606
4/0	Yellow	25	84-9607
Solder Flux	Clear	2oz.	84-9608



84-9606

84-9608

Battery Terminal Solder Slug Kit

- Kit contains 48 pieces of heat shrink tubing, solder slugs and flux
- Ideal kit for any repair garage, mechanic or installer
- Provide superior protection from corrosion
- Improves your electrical connection by filling in any contact irregularities
- Color coded to industry standards
- Solder slugs melting temperature rating 182°C (361°F)

83-6532



83-6532

BATTERY CONNECTORS AND CABLE

CONNECTEURS ET CÂBLES DE BATTERIE • TERMINALES Y CABLES PARA BATERIA

BATTERY CONNECTORS • CONNECTEURS DE BATTERIE • TERMINALES DE BATERIA



84-9133

Heavy Duty

- Clamps designed for truck, bus, construction, agricultural and industrial applications
- Polarity-specific brass or universal polarity lead construction; hardware included
- Accept 1 through 4/0 gauge cable

Description	Material	Retail Pack	Pack Size	Bulk Pack	Pack Size
Universal Clamp 1 – 4/0 Gauge	Lead; zinc-plated, steel fasteners	82-9133	2	84-9133	25



84-9135



84-9126

Automotive

- Automotive and light truck applications
- Universal clamp and side terminal styles; constructed of lead or brass
- Accept 6 through 2/0 gauge cable sizes
- Zinc-plated steel hardware included

Description	Material	Retail Pack	Pack Size	Bulk Pack	Pack Size
Universal Clamp	Lead; zinc-plated, steel fasteners	82-9135	2	84-9135	25
Universal Clamp	Brass; zinc-plated, steel fasteners	82-9126	1	84-9126	25
Universal Clamp	Lead; epoxy coated 1 red, 1 black	82-9613	2		
Universal Side Terminal	Lead; zinc-plated, steel fasteners	82-9134	2	84-9134	25



82-9613



84-9134

Splices – Tin Plated

- Seamless 100% copper tube construction
- Heavy tin-plated for superior conductivity and resistance to corrosion
- Can be crimped or soldered - ideal for most applications

Cable Gauge	Retail Pack	Pack Size	Bulk Pack	Pack Size
8	82-9552	2	84-9552	10
6	82-9463	2	84-9463	10
4	82-9448	2	84-9448	10
2	82-9553	2	84-9553	10
1	82-9554	2	84-9554	10
1/0	82-9555	2	84-9555	10
2/0	82-9556	2	84-9556	10
3/0	82-9557	2	84-9557	10
4/0	82-9558	2	84-9558	10



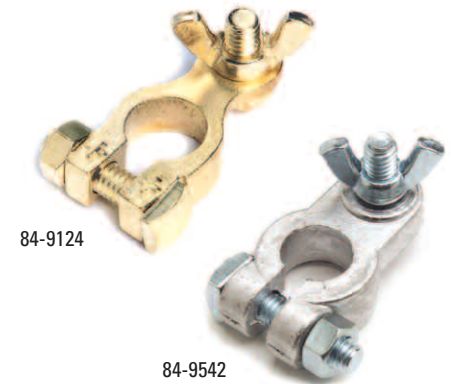
84-9448

MARINE

- Converts battery post to stud connector
- Permits quick disconnection from battery; eliminates current drain during storage
- Polarity-specific; meets U.S. Coast Guard regulations
- Brass or lead construction; hardware included



Description	Size	Material	Retail Pack	Pack Size	Bulk Pack	Pack Size
Top Post; Positive	5/16"	Brass; zinc-plated steel fasteners	82-9124	1	84-9124	25
Top Post; Positive	3/8"	Lead; zinc-plated steel fasteners	82-9541	1	84-9541	25
Top Post; Negative	5/16"	Brass; zinc-plated steel fasteners	82-9125	1	84-9125	25
Top Post; Negative	5/16"	Brass; zinc-plated steel fasteners	82-9542	1	84-9542	25



MILITARY

- Meets military specifications # A52425-1 & A52425-2
- Low profile design, only 3/4" high
- Long bolt permits additional power connections

Description	Material	Bulk Pack	Pack Size
Top Post; Positive	Lead; zinc plated steel fasteners	84-9581	5
Top Post; Negative	Lead; zinc plated steel fasteners	84-9580	5



Top Post – 3 Way Terminal

- Accept 2 through 1/0 gauge cable sizes
- Zinc plated, steel fasteners

Description	Material	Retail Pack	Pack Size
Top Post	Lead, 1 pos., 1 neg.	82-9620	1 pair



Battery Quick Disconnect

- 1/4" turn of the knob disconnects battery power
- Fits negative top post terminal

Description	Material	Retail Pack	Pack Size
Top Post Negative	Copper; brass plated zinc plated steel fasteners	82-9595	1



Lead Free Connectors

- Accept 8 through 4 gauge cable sizes
- Tin plated alloy resists corrosion
- For recreational and light duty applications



Description	Material	Bulk Pack	Pack Size
Top Post	Tin plated copper alloy	84-9618	5 pair (pos/neg)



BATTERY CONNECTORS AND CABLE

CONNECTEURS ET CÂBLES DE BATTERIE • TERMINALES Y CABLES PARA BATERIA

CONVERSION CONNECTORS AND ADAPTERS

CONNECTEURS DE CONVERSION ET ADAPTATEURS • CONECTORES PARA CONVERSIÓN Y ADAPTADORES

Stud-to-Top Post Conversion Connectors

- Converts stud terminal battery to top post
- Polarity specific for exact fit
- 3/8" - 16 threaded steel insert and nylon lock ring provide superior electrical and mechanical integrity
- 3/4" hex base permits precise torquing



84-9130

Description	Size	Material	Retail Pack	Pack Size	Bulk Pack	Pack Size
Stud to Top Post	3/8"-16	Lead; die-cast steel	82-9130	1 pair	84-9130	5 pair

Side Terminal-to-Top Post Conversion Connectors

- Permits top terminal cable connection to side terminal battery
- Stud head resists over-torque and improves conductivity; zinc-plated stud resists corrosion
- Polarity-specific for exact fit; oversize polarity signs molded in



84-9131

Description	Size	Material	Retail Pack	Pack Size	Bulk Pack	Pack Size
Top Post to Side Terminal	3/8"	Lead; die-cast steel	82-9131	1 pair	84-9131	5 pair
Negative					84-9610	5
Positive					84-9611	5

Top Post-to-Side Terminal Connectors

- Permits side terminal cable connection to top terminal battery
- Polarity-specific for exact fit on posts; polarity signs molded in
- Lead construction - zinc plated hardware resists corrosion



84-9132

Description	Size	Material	Retail Pack	Pack Size	Bulk Pack	Pack Size
Top Post to Side Terminal	3/8"	Lead; zinc-plated steel fasteners	82-9132	1 pair	84-9132	5 pair

Protective Washers

- Extends the life of the battery, connectors and hardware
- Easy to assemble



84-9624

Description	Pack Size	Part No.
Top Post Terminal	2	82-9623
Top Post Terminal	100	84-9624



Fastener Hardware

- Complete selection of standard and heavy-duty battery-related hardware
- Meets OEM and SAE specifications

Description	Size	Material	Retail Pack	Pack Size	Bulk Pack	Pack Size
Bolt, square head & nut	5/16" - 18 x 1 3/8"	Steel; zinc-plated	82-9183	2	84-9183	25
Bolt, square head & shoulder nut	5/16" - 18 x 1 3/8"	Steel; tin-plated			84-9289	25
Nut, closed cap for Group 31	3/8" - 16	Stainless Steel	82-9184	1	84-9184	25
Nut, flange	3/8" - 16	Steel; zinc-plated	82-9445	2	84-9445	10
Nut, shoulder	5/16" - 18	Steel, tin plated			84-9594	25
Bolt, side terminal; single power lead	3/8" - 16 x 1 1/2"	Steel; zinc-plated	82-9216	2	84-9216	25
Bolt, side terminal; dual power lead	3/8" - 16 x 1"	Steel; zinc-plated	82-9217	2	84-9217	25
Shim, battery post		Lead			84-9593	25
Spacer, for dual power lead, side terminal bolt		Lead			84-9612	10

Accessory Adapter Nuts

- Connects power accessories directly to battery
- Fits standard battery bolt
- For post-terminal applications



Description	Size	Material	Retail Pack	Pack Size	Bulk Pack	Pack Size
Top terminal accessory post	5/16" - 18 x 5/16"	Brass; zinc-plated steel fasteners	82-9185	1	84-9185	5
Side terminal extension bolt	3/8" - 16 x 1 1/2"	Brass; zinc plated fasteners			84-9599	5

Post-Terminal Brush

- Corrosion-resistant self-contained brush set
- Inner bristles clean post terminals
- Conical outer bristles clean cable connectors

Part No.	Pack Size
84-9186	1



BATTERY CONNECTORS AND CABLE

CONNECTEURS ET CÂBLES DE BATTERIE • TERMINALES Y CABLES PARA BATERIA

CHARGING CLIPS • PINCES DE RECHARGE • PINZAS DE RECARGA



84-4999

NEW

Heavy Duty Charging Clips

- Jaws accommodate up to 3/4"
- Excellent for test equipment
- Use for OEM repair and custom build
- Color-coded vinyl boots

Rating	Jaw Type	Description	Grip Color	Retail Pack	Pack Size
75 amp.	Clamp style	Industrial grade	Red	84-4997 NEW	1
75 amp.	Clamp style	Industrial grade	Black	84-4998 NEW	1
75 amp.	Clamp style	Industrial grade	Red & Black	84-4999 NEW	Pair
50 amp.	Clamp style	Industrial grade	Red	84-5002	1
50 amp.	Clamp style	Industrial grade	Black	84-5003	1
50 amp.	Clamp style	Industrial grade	Red & Black	84-5000	Pair



84-5000



84-9543

Test Clips

- For test/charge applications
- Jaws accommodate up to 3/4"

Rating	Jaw Type	Jaw Spread	Retail Pack	Part No.	Bulk Pack	Pack Size
10 amp.	Standard Jaw	7/16"	2	82-9540	84-9540	25
25 amp.	Standard Jaw	3/4"	2	82-9543	84-9543	25
50 amp.	Standard Jaw	1"	2	82-9544 NEW	84-9544	25



84-9615

NEW

Alligator Clips & Test Leads

- Jaws accommodate up to 5/16"

Description	Insulated	Color	Part No.	Pack Size
Test Lead, 10', 18 GA	Yes	Red	84-9615 NEW	1
Test Lead, 10', 18 GA	Yes	Black	84-9616 NEW	1
Test Lead, 2 1/2', 16 GA	Yes	Red & Black	84-9613	1 Pair
Alligator Clip	No	Red	84-5005	1
Alligator Clip	No	Black	84-5004	1



84-9613



84-5004

Alligator Clip Boots

Description	Color	Retail Pack	Pack Size	Bulk Pack	Pack Size
Protective boots for Alligator Clips	Red & Black	82-9614	1 Pair	84-9614	5 Pair

NEW



82-9614

Booster Cables

- Cable construction of 100% fine-stranded copper welding cable
- Tangle-free design remains flexible even in cold weather
- Choose from 1, 2, 4 or 8 gauges in popular lengths
- Heavy-duty, zippered vinyl storage bag included for most models
- Additional gauges and lengths available as special order



Light Duty

Rating	Gauge	Jaw Type	Length	Cable Color	Pack Size	Part No.
200 amp.	8 Ga.	Standard Jaws	12'	Blue & Black	1	84-9550

Medium Duty – Commercial Grade

Rating	Gauge	Jaw Type	Length	Cable Color	Pack Size	Part No.
400 amp.	4 Ga.	Standard Jaws	16'	Yellow & Black	1	84-9331
400 amp.	4 Ga.	Standard Jaws	20'	Yellow & Black	1	84-9276
400 amp.	4 Ga.	Standard Jaws with 175 AMP Plug-In End	20'	Yellow & Black (includes A & B)	1	84-9279
175 amp.	4 Ga.	175 AMP Plug-In Style with 3/8" lugs	5'	Yellow & Black B only	1	84-9496



Heavy Duty – Industrial Grade

Rating	Gauge	Jaw Type	Length	Cable Color	Pack Size	Part No.
500 amp.	4 Ga.	Parrot Jaws	20'	Yellow & Black	1	84-9277
500 amp.	2 Ga.	Parrot Jaws	20'	Red & Black	1	84-9278
500 amp.	1 Ga.	Standard Jaws	12'	Grey & Black	1	84-9484
500 amp.	1 Ga.	Standard Jaws	16'	Red & Black	1	84-9477
500 amp.	1 Ga.	Standard Jaws	20'	Grey & Black	1	84-9476
800 amp.	1 Ga.	Parrot Jaws	25'	Grey & Black	1	84-9567

BATTERY CONNECTORS AND CABLE

CONNECTEURS ET CÂBLES DE BATTERIE • TERMINALES Y CABLES PARA BATERIA

BOOSTER CLAMPS AND CABLES • PINCES ET CÂBLES DE SURVOLTAGE • CABLES PASA CORRIENTE



Booster Clamps - Replacement

- Jaws grip battery posts, studs & side terminals
- Insulated grips in both black & red
- For 1-3/0 gauges
- 3 coil spring, over 50 lbs. of clamping pressure
- Solid copper clamps weigh over 3/4 lb.
- 5/16" - 18 nut & bolt included

Rating	Jaw Type	Description	Grip Color	Pack Size	Part No.
400 amp.	Standard Jaws	Commercial grade	Red & Black	Pair	84-9280
500 amp.	Parrot Jaws	Industrial grade	Red & Black	Pair	84-9281
800 amp.	Parrot Jaws	Industrial grade	Red	1	84-9321
800 amp.	Parrot Jaws	Industrial grade	Black	1	84-9322
800 amp.	Parrot Jaws	Industrial grade	Red & Black	Pair	84-9630

Plug-In Style - Battery Cable Connectors

- Color coded ends help identify different voltages and will prevent mismatching power supply to the electrical output
- Comes complete with 1 housing and 2 contact terminals
- Housings mate together with the same color plug and receptacle – simply rotate connector 180° and plug similar part numbers together
- Available in 50, 175 and 350 amp ratings for use up to 600 volt AC or DC
- CSA and UL
- Welding and Battery Cables available on pages 42, 43



Rating	Type	Gauge	Color	Pack Size	Part No.
50 amp.	Plug-In End	12-10	Grey	1	84-9627
50 amp.	Plug-In End	6	Red	1	84-9626
50 amp.	Plug-In End	6	Grey	1	84-9631
175 amp.	Plug-In End	4	Blue	1	84-9551
175 amp.	Plug-In End	4	Grey	1	84-9632
175 amp.	Plug-In End	2	Blue	1	84-9487
175 amp.	Plug-In End	2	Grey	1	84-9633
175 amp.	Plug-In End	1/0	Red	1	84-9628
175 amp.	Plug-In End	1/0	Grey	1	84-9634
350 amp.	Plug-In End	2/0	Red	1	84-9482
350 amp.	Plug-In End	2/0	Grey	1	84-9485

Plug-In Style - Battery Cable Connectors Protective Caps

- Black protective caps cover the connector from weather and chemicals when not in use
- Available in three sizes



Rating	Type	Description	Grip Color	Pack Size	Part No.
50 amp.	Plug-In End	Fits 50 amp housings	Black	1	84-9621
175 amp.	Plug-In End	Fits 175 amp housing	Black	1	84-9456
350 amp.	Plug-In End	Fits 350 amp housings	Black	1	84-9622

Battery Cables - Pre-Made Lengths

- Meet or exceed SAE specifications; ideal for OEM replacement
- 100% fine stranded copper wire with black PVC insulation
- Tinning of copper wire before casting ensures perfect bond between wire and connector
- Antimonial lead connectors resist corrosion; die-cast process seals copper wires from acid fumes and corrosive salts
- Universal polarity top post connector
- Light duty trucks, vans and recreational vehicles (R.V.)
- Standard 3/8" stud hole

Top Post Cables

Centre to Centre Dimension	Pack Size	4 Gauge Part No.	1 Gauge Part No.
10"	1	84-9224	
12"	1	84-9225	84-9241
14"	1	82-7014	
15"	1	84-9226	
16"	1	84-9227	84-9242
19"	1	84-9230	84-9243
21"	1		84-9503
22"	1	84-9228	
24"	1	84-9231	
25"	1	82-7025	
27"	1	84-9232	84-9244
30"	1	84-9233	84-9245
32"	1	84-9234	
36"	1	84-9229	84-9246
36"	1 RED		84-9571
37"	1	84-9235	
41"	1		84-9247
42"	1	84-9236	
48"	1	84-9237	84-9248
48"	1 RED		84-9572
53"	1	82-7053	
60"	1	84-9238	
65"	1		84-9510
72"	1	82-7072	



Side Terminal Cables

- 3/8" - 16 x 13/32" bolts
- 1/2" hex head bolt

Centre to Centre Dimension	Description	Pack Size	4 Gauge Part No.
15"	Side Terminal	1	84-9249
25"	Side Terminal	1	84-9250
35"	Side Terminal	1	84-9251
45"	Side Terminal	1	84-9252
55"	Side Terminal	1	84-9253
65"	Side Terminal	1	84-9254



BATTERY CONNECTORS AND CABLE

CONNECTEURS ET CÂBLES DE BATTERIE • TERMINALES Y CABLES PARA BATERIA

BATTERY CABLES • CÂBLES DE BATTERIE • CABLES DE BATERÍAS



84-9256

Switch-to-Starter Cables

Centre to Centre Dimension	Pack Size	4 Gauge Part No.	1 Gauge Part No.
10"	1	84-9255	84-9505
15"	1	84-9256	84-9262
18"	1	84-9257	84-9382
19"	1		84-9388
24"	1	84-9258	84-9506
25"	1		84-9263
30"	1	84-9504	
33"	1	84-9259	
35"	1		84-9264
36"	1	84-9260	
40"	1	84-9261	



84-9304

84-9305

QuickLink® Stud Battery Harnesses

- Heavy 2/0 gauge copper welding cable is color-coded and rubber insulated; provides easier tight space routing and best cold weather flexibility
- Stackable die-cast copper lugs have 36 anti-rotational teeth for solid bite
- Made for truck, farm, construction and similar equipment applications
- Meets or exceeds SAE and OEM specifications
- Connected and protected with Magna Tube heat shrink tubing

Heavy Duty, 2/0 GA Battery Cables - Stud Battery Harnesses

Centre to Centre Dimension	Polarity	Typical Battery Layout	Pack Size	Part No.
8-1/2"	Negative	Side-By-Side	1	84-9304
8-1/2"	Positive	Side-By-Side	1	84-9305
17"	Negative	End-To-End	1	84-9306
17"	Positive	End-To-End	1	84-9307



84-9467

Stud Batteries - Lug to Lug - Battery to Ground or Starter

Centre to Centre Dimension	Description	Pack Size	Part No.	
10"	Lug to Lug	3/8" - 3/8"	1	84-9467
15"	Lug to Lug	3/8" - 3/8"	1	84-9470
20"	Lug to Lug	3/8" - 3/8"	1	84-9473



84-9401

Battery Jumpers

- Designed for connection of 2 batteries to achieve additive voltage
- Premium quality synthetic rubber insulated copper welding cable enables easy routing & cold weather flexibility

Centre to Centre Dimension	Description	Pack Size	1 Gauge Part No.
8"	Top Post	1	84-9401
12"	Top Post	1	84-9402

Braided Ground Strap – Pre-Made Lengths

- 3/8" Clamp-to-Lug or Lug-to-Lug styles
- Light to medium duty, marine and automotive applications
- Corrosion resistant tin plating

Centre to Centre Dimension	Description	Pack Size	4 Gauge Part No.	2 Gauge Part No.
9"	Clamp to Lug	1		84-9239
9"	Lug to Lug	1	84-9577	
13"	Clamp to Lug	1		84-9240
13"	Lug to Lug	1	84-9559	
18"	Lug to Lug	1	84-9465	
19"	Clamp to Lug	1		84-9579
24"	Clamp to Lug	1		84-9464



Braided Ground Strap - Bulk

- Fine stranded copper conductor for maximum conductivity and flexibility

Description	Pack	Gauge Size	Part No.
Ground Strap	25'	2	84-9575

Battery Boxes

- Impervious to acid, gasoline, oil and solvents
- Heat stable -34°C (-30°F) to 93°C (200°F)
- Built in vent holes allow gasses to escape

Automotive, Marine and Light Duty Truck

- Polypropylene co polymer construction that's
- Meets U.S. Coast Guard Regulations 183.420 and ABYCE-10.7
- Locking tabs on the cover ensure a secure seal
- Heavy duty tie down straps included

Part No.	Battery Group	Color	Dimensions	Pack
84-9424	Group 24	Black	10 ¼" L x 6 ¾" W x 9 ½" H (inside) 13 ½" L x 9 ¼" W x 10 ¼" H (outside)	1
84-9427	Group 27	Black	12 ¾" L x 7 ¼" W x 9 ¼" H (inside) 15 ½" L x 9" W x 10 ½" H (outside)	1



Heavy Duty Truck and Commercial Vehicle

NEW

- Durable heavy wall construction
- Flame retardant
- U.V stabilized (Rating 6)
- 3-way cable channels molded into the cover
- Cover held securely down by thumb screws

Part No.	Battery Group	Color	Dimensions	Pack
84-9425	4D, 6 Volt (End-to-End)	Black	21 5/8" L x 9 ½" W x 11 ½" H (inside) 26 ¾" L x 14" W x 12 ¾" H (outside)	1
84-9426	8D High	Black	21 5/8" L x 11 ¾" W x 13" H (inside) 26 ¾" L x 16 ½" W x 14" H (outside)	1



BATTERY CONNECTORS AND CABLE

CONNECTEURS ET CÂBLES DE BATTERIE • TERMINALES Y CABLES PARA BATERIA

BATTERY HOLD-DOWNS AND TRAYS

• PLATEAUX ET SYSTÈMES DE RETENUE POUR BATTERIE • SUJETADORES Y BANDEJAS DE BATERÍAS

Battery Hold-Downs

- New telescoping design
- Fiberglass-reinforced polypropylene is rust and corrosion-proof
- Non-conductive – eliminates hold-down as source of shorts
- Car, truck, bus off-road, marine and recreational vehicle applications



Part No.	Description	Min/Max Extension	Pack Size
84-9288	Offset hold-down	5 1/2" - 9"	1
84-9320	Flush hold-down	8 5/8" - 14 3/4"	1
84-9480	Adjustable mount crossbar	6 7/8"	1



Hold Down Sets - L & J Style

- Long thread accommodates all crossbar/frame designs including QuickHold® products
- "L" and "J" style bend eliminates any need to shift or remove battery
- Sold as pair; hardware included
- Use with battery tray below



Part No.	Description	Length	Pack
84-9287	J bolt	8"	Pair
84-9286	J bolt	10"	Pair
84-9285	L bolt	10"	Pair



Battery Trays

- Drain slots prevent fluid accumulation
- Ideal replacement for OEM-style trays
- Vinyl coated steel resists corrosion & cold climate cracking
- Also fits group 1, 2, 17, 22, 23, 42, 54, 55, 56, 72 & 74 batteries

Part No.	Description	Pack
84-9481	11" for Group 24 size batteries	1
84-9629	GM base mount hold down	1



Battery Terminal Protectors



- Protects alternator and electrical system from shorts
- Reduces the risks of battery explosion caused by sparks
- High temperature PVC construction rated at 90°C (190°F)
- Color-coded for easy polarity identification
- Conforms to SAE J1128 dielectric specifications

Straight Clamp

Fits Gauges	Color	Pack	Part No.
1 & 2	Black	5	84-9140
1 & 2	Red	5	84-9141
1/0 & 2/0	Black	5	84-9142
1/0 & 2/0	Red	5	84-9143



Straight Clamp Snap on Feature

Fits Gauges	Color	Pack	Part No.
6 & 4	Black	5	84-9138
6 & 4	Red	5	84-9139
1 & 2	Black	5	84-9136
1 & 2	Red	5	84-9137



Automotive Lug

Fits Gauges	Color	Pack	Part No.
1 & 2	Black	5	84-9150
1 & 2	Red	5	84-9151
1/0 - 2/0	Black	5	84-9152
1/0 - 2/0	Red	5	84-9153



Tab Insulator

Fits Gauges	Terminal O.D.	Color	Pack	Part No.
8-2	0.73"	Red	5	84-9323
8-2	0.73"	Black	5	84-9324
2-2/0	1.03"	Red	5	84-9327
2-2/0	1.03"	Black	5	84-9328
3/0-4/0	1.37"	Red	5	84-9325
3/0-4/0	1.37"	Black	5	84-9326



BATTERY CONNECTORS AND CABLE

CONNECTEURS ET CÂBLES DE BATTERIE • TERMINALES Y CABLES PARA BATERIA

CRIMPERS AND CUTTERS • PINCES À SERTIR ET PINCES COUPANTES • DOBLADORA PARA TERMINALES DE BATERIA



84-9087

Brute™ Hammer Crimper

- Inexpensive, simple crimping tool
- Use with hammer or vise
- Crimps 8- 4/0 gauge connectors
- Spring loaded pin locks in "up" position for loading connector and cable
- Pin is then released to hold connector securely during crimping
- 6 month limited warranty

Connector Cable Range	Part No.
8-4/0	84-9087

Cub™ Crimper

- Light-medium duty applications
- Adjustable crimp dies crimp all major lugs, connectors and splices
- Insulated grips
- One year limited warranty

Overall Length	Connector Cable Range	Part No.
15"	8-1/0	84-9080



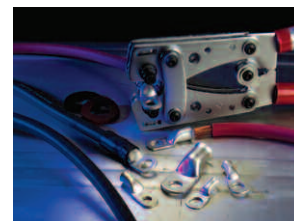
84-9082

84-9080

Hexcrimp™

- Medium to heavy duty applications
- Properly crimps copper, tin-plated, die cast and Magna lug splices and connectors
- Adjustable dies can crimp 8 to 4/0 GA cable range
- 26" long with insulated handles for comfort
- 2 year limited warranty
- Made in North America

- 84-9082 Hand Held
- 84-9085 Bench Mount
- 84-9084 Replacement Dies & Hardware



Heavy Duty Rotary Cable Slitter/Stripper Tool

- Slits & strips round battery & trailer cables
- Can strip 8 to 4/0 GA wire, battery and trailer cables
- Self-adjusting cutting depth
- Makes a clean strip without damaging wire strands
- Blade swivels for longitudinal/spiral cuts
- Ergonomic design

83-6515



83-6515



9" Cable Cutter

- Cuts cable up to 2/0 gauge
- Fits any toolbox
- Forged steel with insulated grips
- 6 month limited warranty

Overall Length	Connector Cable Range	Part No.
9"	up to 2/0	84-9088



84-9088



22" Cable Cutter

- Cuts cables 22 GA to 250 mcm (6/0 GA)
- 22" handle for easy cutting
- 1075 Carbon steel blade, hardened for long life; can be sharpened
- 6 month limited warranty
- Made in North America

84-9089

Hand Held

84-9090

Bench Mount



84-9089

Field Repair Kit with HexCrimp™

- Contains components (except cable) needed to build or repair 2/0 battery cables
- The carrying case is made of steel, finished in corrosion resistant baked grey enamel



84-9290

Part No.	Description	Re-Order Part No.
84-9290	Field Repair Kit- Includes:	
	1 HexCrimp™ Tool – 8 gauge - 250 mcm	84-9082
	1 9" Cutter – up to 2/0 cables	84-9088
	5 2/0 straight clamp - positive	84-9059
	5 2/0 straight clamp - negative	84-9058
	2 2/0 flag clamp - positive	84-9098
	2 2/0 flag clamp - negative	84-9097
	5 2/0 starter/ground lug - 3/8" hole	84-9110
	5 2/0 starter/ground lug - 1/2" hole	84-9111
	5 Terminal Protector straight - black	84-9142
	5 Terminal Protector straight - red	84-9143
	2 Terminal Protector flag - black	84-9144
	2 Terminal Protector flag - red	84-9145
	2 3/4" Heat shrink tubing 6" – Black 3:1	84-4003
	2 3/4" Heat shrink tubing 6" – Red 3:1	84-6103

KITS

ENSEMBLES • JUEGOS

STORAGE TRAYS AND REPAIR KITS • PLATEAUX DE RANGEMENT ET TROUSSES DE RÉPARATION
• BANDEJAS DE ALMACENAMIENTO Y JUEGOS DE REPARACIÓN



83-6552



83-6553



83-6547



83-6548

Electrical Connection, Wire and Cable, Repair and Installation Kits

- Comes with quality cutting, stripping and crimping tools needed to properly repair or install electrical connections
- Electrical repair kit comes in a sturdy metal steel case with a comfort fit foam insert to protect your tools
- Economical and easy access tool kit is perfect for emergency repair and can be stored in a tool chest or under the driver seat
- Is a 'must have' for any mechanic, installer or service professional
- Use the right tool for the right job!

Electrical Termination and Repair Kit 83-6552

Kit includes:

- 83-6508 Flameless Heat Gun (OEM approved)
- 83-6509 Cable Tie Tension and Cutter Tool, 18-50 lbs
- 83-6515 Heavy Duty Rotary Cable Stripper/Slitter
- 83-6512 Heavy Duty Wire Stripper, Cutter, 22-10 gauge
- 83-6511 22-10 Gauge "Ratchet Style" Terminal Crimping Tool

Wire and Cable Installation and Repair Kit 83-6553

Kit includes:

- 84-9088 9" Heavy Duty Cable Cutter (up to 2/0 ga)
- 83-6509 Cable Tie Tension and Cutter Tool, 18-50 lbs
- 83-6515 Heavy Duty Rotary Cable Stripper/Slitter
- 83-6512 Heavy Duty Wire Stripper, Cutter, 22-10 gauge
- 83-6511 22-10 Gauge "Ratchet Style" Terminal Crimping Tool

Large Storage Tray **NEW**

- Heavy duty storage tray designed to hold an array of small parts and tools
- 21 compartment large scoop box
- Prime cold rolled steel with a durable gray powder coat finish
- Boxes can be removed and transported to any job site
- Rugged plastic inserts and scoop bottoms fit neatly into steel outer shell boxes
- 12" (304mm) deep x 3" (76mm) high x 18" (457mm) wide; 8 lbs

83-6547

Heavy Duty Storage Rack **NEW**

- Heavy duty storage rack is perfect for any garage or service vehicle
- Accommodates up to 2 large storage trays (83-6547)
- Prime cold rolled steel with a durable gray powder coat finish
- 15 3/4" deep x 8 1/8" high x 20" wide; 20 lbs
- Does not include storage trays (above)

83-6548

STORAGE TRAYS AND REPAIR KITS • PLATEAUX DE RANGEMENT ET TROUSSES DE RÉPARATION
• BANDEJAS DE ALMACENAMIENTO Y JUEGOS DE REPARACIÓN

Portable Storage Rack **NEW**

- Heavy duty storage rack is perfect for any remote repair vehicle, mechanic or garage
- Accommodate up to 5 plastic storage kits measuring (6 3/4" deep x 10 3/4" high x 11" wide)
- Prime cold rolled steel with a durable gray powder coat finish; 7 lbs
- Includes a locking hinge for added security and to prevent kits from falling out during transport
- Includes pre-drilled holes for permanent mounting

83-6551



83-6551

Mobile Electrical Repair Kit **NEW**

- Enables on the spot electrical repairs and troubleshooting
- Reduces downtime due to electrical failure
- OEM approved heat shrink crimp tool; cable cutting and heat tool
- Includes a circuit tester, lamp and wire tester, heat shrink tubing, heat shrink connectors, cable ties, clamps and Ultra Seal grease

01-9911-73



01-9911-73

Dual Wall - Adhesive Lined "Hot Melt" Heat Shrink Tubing Kit **4:1 Shrink Ratio**

- 40, 6" black Dual Wall heat shrink pieces
- 6 compartment re-closable box
- Re-order chart on inside cover

Part No.	Features	Size	Quantity
83-6535	84-5006	1/16" - 3/16"	12
	84-5007	3/16" - 1/4"	12
	84-5008	1/4" - 3/8"	10
	84-5009	1/2" - 5/8"	6



83-6535

Dual Wall - Flexible, Adhesive Lined Heat Shrink Tubing Kit **3:1 Shrink Ratio**

- 50, 6" black flexible Dual Wall heat shrink pieces
- 6 compartment re-closable box
- Re-order chart on inside cover

Part No.	Features	Size	Quantity
83-6537	84-4015	1/8"	12
	84-4016	3/16"	12
	84-4017	1/4"	12
	84-4018	3/8"	6
	84-4019	1/2"	6
	84-4020	3/4"	2



83-6537

KITS

ENSEMBLES • JUEGOS

HEAT SHRINKABLE ASSORTMENT KITS • ENSEMBLES D'ACCESSOIRES ASSORTIS
THERMORÉTRÉCISSABLES • JUEGOS SURTIDOS TERMOCONTRAÍBLES



83-6505

Dual Wall, Red/Black, Heat Shrinkable Tubing Kit

3:1 Shrink Ratio

- Combination of 50, 6" Red & Black Dual Wall Heat Shrink Pieces
- 6 compartment re-closable plastic box
- Re-order chart on inside cover

Part No.	Features	Size	Quantity	Color
83-6505	84-4006	1/8"	6	Black
	84-6106	1/8"	6	Red
	84-4005	3/16"	6	Black
	84-6105	3/16"	6	Red
	84-4000	1/4"	6	Black
	84-6100	1/4"	6	Red
	84-4001	3/8"	3	Black
	84-6101	3/8"	3	Red
	84-4002	1/2"	3	Black
	84-6107	1/2"	3	Red
	84-4003	3/4"	1	Black
	84-6103	3/4"	1	Red



83-6502

Dual Wall, Black, Heat Shrinkable Tubing Kit

3:1 Shrink Ratio

- 50, 6" Black Dual Wall Heat Shrink Pieces
- 6 compartment re-closable plastic box
- Re-order chart on inside cover

Part No.	Features	Size	Quantity
83-6502	84-4006	1/8"	12
	84-4005	3/16"	12
	84-4000	1/4"	12
	84-4001	3/8"	6
	84-4002	1/2"	6
	84-4003	3/4"	2

Single Wall, Black, Heat Shrinkable Tubing Kit

2:1 Shrink Ratio

- 50, 6", Black Single Wall Heat Shrink Pieces
- 6 compartment re-closable plastic box
- Re-order chart on inside cover

Part No.	Features	Size	Quantity
83-6545	84-5010	1/8"	12
	84-5011	3/16"	12
	84-5012	1/4"	8
	84-5013	3/8"	6
	84-5014	1/2"	6
	84-5015	3/4"	6



83-6545

HEAT SHRINKABLE ASSORTMENT KITS • ENSEMBLES D'ACCESSOIRES ASSORTIS
THERMORÉTRÉCISSABLES • JUEGOS SURTIDOS TERMOCONTRAÍBLES

Crimp Solder and Seal Terminal & Connector Assortment Kit 20-10 gauge

- Includes the most popular heat shrink crimp, solder and seal terminals and connectors
- Includes rings, butts, spades and quick disconnects
- 20-18, 16-14 and 12-10 gauges
- 12 compartment plastic box with re-order chart on the inside cover

Part No.	Kit Contents	Quantity
83-6542	Butt Connectors (40)	120
	Ring Terminals (50)	
	Spade Terminals (10)	
	Male Disconnects (10)	
	Female Disconnects (10)	

Part No.	Kit Contents	Quantity
83-6558	Butt Connectors (24)	70
	Ring Terminals (36)	
	Male Disconnects (4)	
	Female Disconnects (6)	
	* Includes Hang Tab	



83-6542

83-6558



Heat Shrink & Solder Terminal & Connector Assortment Kit 22-10 gauge

- Includes the most popular heat shrink solder and seal terminals and connectors
- Includes rings, butts, spades and quick disconnects
- 22-18, 16-14 and 12-10 gauges
- 12 compartment re-closable plastic box with re-order chart on the inside cover

Part No.	Kit Contents	Quantity
83-6539	Butt Connectors (40)	120
	Ring Terminals (50)	
	Spade Terminals (10)	
	Male Disconnects .250" (10)	
	Female Disconnects .250" (10)	

Part No.	Kit Contents	Quantity
83-6557	Butt Connectors (24)	70
	Ring Terminals (36)	
	Male Disconnects .250" (4)	
	Female Disconnects .250" (6)	
	* Includes Hang Tab	



83-6539

83-6557



HEAT SHRINKABLE ASSORTMENT KITS • ENSEMBLES D'ACCESSOIRES ASSORTIS
THERMORÉTRÉCISSABLES • JUEGOS SURTIDOS TERMOCONTRAÍBLES

Heat Shrinkable Terminal & Connector Assortment Kit

22-10 gauge

- Includes the most popular heat shrinkable crimp splices and terminals
- Includes rings, butts, spades and quick disconnects
- 22-18, 16-14 and 12-10 gauges
- 12 compartment plastic box with re-order chart on the inside cover

Part No.	Kit Contents	Quantity
83-6503	Butt Connectors (40)	120
	Ring Terminals (50)	
	Spade Terminals (10)	
	Male Disconnects (10)	
	Female Disconnects (10)	

Part No.	Kit Contents	Quantity
83-6556	Butt Connectors (30)	85
	Ring Terminals (44)	
	Male Disconnects (5)	
	Female Disconnects (6)	
	* Includes Hang Tab	

Nylon Terminal & Connector Assortment Kit

22-10 gauge

- Includes the most popular Nylon terminals and connectors
- Includes rings, butts, spades and quick disconnects
- 22-18, 16-14 and 12-10 gauges
- 12 compartment re-closable plastic box with re-order chart on the inside cover

Part No.	Kit Contents	Quantity
83-6538	Butt Connectors (40)	120
	Ring Terminals (50)	
	Spade Terminals (10)	
	Male Disconnects .250" (10)	
	Female Disconnects .250" (10)	

Part No.	Kit Contents	Quantity
83-6555	Butt Connectors (24)	70
	Ring Terminals (26)	
	Male Disconnects .250" (10)	
	Female Disconnects .250" (10)	
	* Includes Hang Tab	



83-6503

83-6556



83-6538

83-6555



OEM, PVC AND NYLON ASSORTMENT KITS • ENSEMBLES D'ACCESSOIRES ASSORTIS D'ORIGINE, EN PVC ET EN NYLON • JUEGOS SURTIDOS DE FABRICANTES ORIGINALES, DE PVC Y NYLON

Vinyl and Nylon Terminal & Connector Assortment Kit

- Kit contains 650 of the most popular automotive electrical terminals and accessories
- Assorted gauges (22-18, 16-14, 12-10) & stud sizes (#6 - 1/4")
- Matrix chart on inside lid describes piece parts, provides illustrations and details individual re-order part numbers

Part No.	Kit Contents	Quantity
83-6540	Butt Connectors (115)	650
	Ring Terminals (200)	
	Spade Terminals (40)	
	Male Disconnects .250" (80)	
	Female Disconnects .250" (90)	
	Bullet Connectors .157" (30)	
	Bullet Receptacles .157" (30)	
	Tap Connectors (15)	
	Cable Ties - Natural (50)	
	Wire Terminal Crimper (1)	

PVC

Part No.	Kit Contents	Quantity
83-6554	Butt Connectors (34)	99
	Ring Terminals (51)	
	Male Disconnects .250" (6)	
	Female Disconnects .250" (8)	

* Includes Hang Tab

OEM "Weather Pack" Terminal & Connector Repair Kit

- Kit Includes 250 assorted pieces; assorted 22-14 GA terminals; 1, 2 and 4 cavity nylon housings and 22-18 & 16-14 GA cables seals
- Sturdy plastic container keeps all the connectors in one convenient location
- Easy to use reference re-order chart included
- Use Grote OEM crimping tool 84-9449 and extractor tool 84-9450 for superior connection and repair. Tools sold separately

83-6536

OEM "Weather Pack" Terminal & Connector Installation & Repair Kit

- 185 male and female weather pack OEM terminals, cable seals and plugs
- Includes an OEM ratchet style crimping tool and extractor tool for a complete repair and installation kit (see page 34)
- Sturdy plastic container keeps all the connectors in one convenient location
- Easy to use reference re-order chart included

83-6546



83-6540



83-6554

NEW



83-6536



83-6546

NEW

BATTERY CONNECTORS ASSORTMENT KITS • ENSEMBLES D'ACCESSOIRES ASSORTIS DE CONNECTEURS DE BATTERIE • JUEGOS SURTIDOS DE CONECTORES DE BATERÍAS



83-6532

Solder Slugs and Connector Kit

- Kit contains 48 pieces of heat shrink tubing, solder slugs and flux
- Ideal kit for any repair garage, mechanic or installer
- Provide superior protection from corrosion
- Improves electrical connection by filling in any contact irregularities
- Color coded to industry standards
- Solder slugs melting temperature rating 182°C (361°F)

Part No.	Kit Contents	Quantity
83-6532	Solder Slug 4 GA - Gray (5)	48
	Solder Slug 2 GA - Green (5)	
	Solder Slug 1 GA - Pink (5)	
	Solder Slug 1/0 GA - Black (5)	
	Solder Slug 2/0 GA - Orange (5)	
	Solder Slug 3/0 GA - Purple (5)	
	Solder Slug 4/0 GA - Yellow (5)	
	ELA-Flux, 2 oz. Bottle (1)	
	3/4" Dual Wall Shrink Tubing 1.5", Black (2)	
	3/4" Dual Wall Shrink Tubing 1.5", Red (2)	
	1" Dual Wall Shrink Tubing 1.5", Black (2)	
	1" Dual Wall Shrink Tubing 1.5", Red (2)	
	1 1/2" Dual Wall Shrink Tubing 1.5", Black (2)	
	1 1/2" Dual Wall Shrink Tubing 1.5", Red (2)	



NEW

83-6544

Tin Plated Copper Tube Lug Assortment Kit

- Includes 76 of the most popular automotive and heavy duty copper tube lugs
- Heavy tin plated for superior conductivity and resistance to corrosion
- Can be crimped or soldered
- 12 compartment re-closable box
- Re-order chart on inside cover

83-6544 8 – 3/0 GA Copper Tube Lugs



NEW

83-6543

Copper Tube Lug Assortment Kit

- Includes 76 of the most popular automotive and heavy duty copper tube lugs
- Provides superior conductivity
- Can be crimped or soldered
- 12 compartment re-closable box
- Re-order chart on inside cover

83-6543 8 – 3/0 GA Copper Tube Lugs

Field Repair Kit with HexCrimp™

- Contains components (except cable) needed to build or repair 2/0 battery cables
- The carrying case is made of steel, finished in corrosion resistant baked grey enamel
(See page 109 for kit contents listing)

84-9290



84-9290

Auto Electric Repair Kit

- Kit includes 208 electrical tools & components, voltage tester & test leads, assorted ring, butt, spade and quick disconnect wire terminals, terminal crimping tool, primary wire, cable ties, shrink tubing and nylon wire clamps, glass & ATO emergency fuses and a fuse puller, battery brush and miniature screwdrivers

83-6550



83-6550

All Purpose Terminal Kit 83-6530

- 37 pieces; 2 miniature screwdrivers, electrical pliers & circuit tester, Assorted wire terminals and a heavy duty terminal crimping tool

Part No.	Kit Contents	Quantity
83-2102	22-18 Ring #6 (6)	37
83-2104	22-18 Ring #10 (4)	
83-2303	16-14 Ring #6 (6)	
83-2304	16-14 Ring #10 (2)	
83-2504	12-10 Ring #10 (1)	
83-2180	22-18 Butt Splice (2)	
83-2380	16-14 Butt Splice (1)	
83-2391	16-14 Male disconnect .250 (2)	
83-2387	16-14 Female disconnect .250 (2)	
83-2334	16-14 Spade #8 (4)	
83-6510	4-way crimp tool: 8 - 1/2" (1)	

Kit also includes 6" long nose pliers, Voltage tester, Slotted screw driver (-), Phillips screw driver (+), Electrical tape UL 30'



83-6530

Economy Terminal Kit 83-6520

Part No.	Kit Contents	Quantity
84-2180	22-18 Butt Connectors (5)	51
84-2380	16-14 Butt Connectors (5)	
84-2580	12-10 Butt Connectors (5)	
84-2303	16-14 Ring Terminals (5)	
84-2104	22-18 Ring Terminals (5)	
84-2304	16-14 Ring Terminals (5)	
84-2191	22-18 Male Quick Disconnect (5)	
84-2391	16-14 Male Quick Disconnect (5)	
84-2187	22-18 Female Quick Disconnect (5)	
84-2387	16-14 Female Quick Disconnect (5)	
83-6510	Wire Terminal Crimper (1)	



83-6520

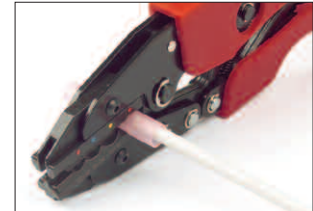


Heat Shrink Terminal Crimping Tool - Ratchet Style

22-8 Gauge

- Ratchet style tool properly crimps Heat Shrink and Crimp Solder & Seal Terminals
- Specially designed die ensures a clean crimp that protects the Heat Shrink jacket from over crimping
- 22-8 gauge is the largest crimp range industry wide
- Ergonomic design for easy use; a must have for any mechanic, installer or repair professional

83-6519



Heavy Duty Heat Shrink Crimping Tool

22-10 Gauge

- Crimps heat shrink and crimp solder and seal terminals and connectors 22-10 Gauge
- Ratchet style is easy to use and provides a superior crimp
- Makes a clean crimp without damaging the conductor
- Ergonomic design for comfort
- 10" long

83-6524



Heavy Duty Crimping Tool

22-10 Gauge

- Crimps 22-10 gauge PVC, Nylon and uninsulated terminals
- Sure grip vinyl handles for safety
- Ratchet style with safety release
- Ergonomic handle for ease of use

83-6511



Heavy Duty Wire Stripper, Cutter and Crimping Tool

- Crimps insulated & non-insulated terminals 22-10 Gauge
- Self-adjusting wire stripper for 26-10 Gauge wire
- Built in cutter
- Makes a clean cut and crimp without damaging the conductor
- Cushion grip for comfort
- Adjustable stopper for a clean strip every time
- 8" long

83-6512

CRIMPING AND STRIPPING TOOLS • OUTILS À SERTIR ET À DÉNUDER • ALICATES DE ENGARZAR Y PELAR

Heavy Duty Crimping and Cutting Tool 22-10 Gauge

- Designed to crimp most terminals used in an automotive, marine or electrical application
- Applies a "W" crimp to 7mm and 8mm straight or 90 degree distributor terminals
- Cuts and strips 22-10 gauge wires
- 10" long

83-6518



83-6518

Economy 4-Way Crimping Tool

- 8" long
- Cuts and strips primary wire 22-10 gauge sizes
- Crimps insulated and non-insulated terminals
- Sure grip vinyl handles for safety

83-6510



83-6510

Heavy Duty O.E.M. Wire Stripping Tool

- Stripping tool with precision blades
- Self-adjusting wire stripper for 26-8 Gauge wire
- Makes a clean strip without damaging the wire strands
- Cushion grip for comfort
- 8" long

83-6513



83-6513

Heavy Duty Cable Slitter/Stripper Tool 8 - 4/0 Gauge

- Slits & strips round battery & trailer cables
- Can strip 8 GA to 4/0 GA wire, battery and trailer cables
- Self-adjusting cutting depth
- Makes a clean strip without damaging wire strands
- Blade swivels for longitudinal/spiral cuts
- Ergonomic design

83-6515



83-6515



9" Hand Held Cable Cutter

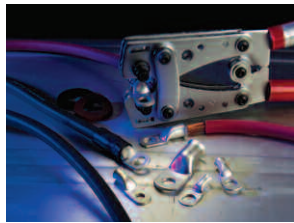
- Cuts cables up to 2/0 Gauge
- Ergonomic design with insulated grips
- 6 month limited warranty

84-9088

22" Cable Cutter

- Cuts cables 22 GA to 250 mcm (6/0 GA)
- 1075 Carbon steel blade, hardened for long life; can be sharpened
- 6 month limited warranty
- Made in North America

84-9089 **Hand Held**
84-9090 **Bench Mount**



Cub™ Crimper

- Light-medium duty applications
- Adjustable crimp dies crimp all major lugs, connectors and splices
- Insulated grips
- One year limited warranty

Overall Length	Connector Cable Range	Part No.
15"	8-1/0	84-9080



Hexcrimp™

- Medium to heavy duty applications
- Properly crimps copper, tin-plated, die cast and Magna lug splices and connectors
- Adjustable dies can crimp 8 to 4/0 GA cable range
- 26" long with insulated handles for comfort
- 2 year limited warranty
- Made in North America

84-9082 **Hand Held**
84-9085 **Bench Mount**
84-9084 **Replacement Dies & Hardware**

Brute™ Hammer Crimper

- Inexpensive, simple crimping tool
- Use with hammer or vise
- Crimps 8- 4/0 gauge connectors
- Spring loaded pin locks in "up" position for loading connector and cable
- Pin is then released to hold connector securely during crimping
- 6 month limited warranty

Connector Cable Range	Part No.
8-4/0	84-9087



HEAT GUNS AND TORCHES • PISTOLETS THERMIQUES ET TORCHES • PISTOLA DE AIRE CALIENTE Y ANTORCHAS

Flameless Heat Gun

- Portable, self igniting, multi function heat tool; 7 1/2" long
- Cordless & flameless; OEM approved
- Comes with an attachable heat deflector, cooling tray and replacement orifice
- The wide nozzle has a high output long life catalyst
- Ready to use in 15 seconds; adjustable heat settings
- Gas container capacity: 20 ml
- Recommended butane: Triple Refined
- Continuous Operating Temperature: 250°C to 500°C (480°F to 930°F)
- Maximum Temperature Rating: 750°C (1400°F)

83-6508



83-6508

Heat Gun

- Two heat settings; 120 Volt, 10 Amp
- Lightweight (1 lb)
- 3-wire ground cord set
- UL and CUL listed
- Thermoplastic casing
- Minimum Temperature Rating: 260°C (500°F)
- Maximum Temperature Rating: 538°C (1000°F)

83-6501



83-6501

Hands-Free Heat Tool

- Hands-free slide lock for continuous use and instant operation
- Ergonomic handle design ensures a non-slip grip
- Removable base for table-top or hand-held use
- 60 minute continuous run time with full charge
- Gas adjustment wheel provides adjustable, long blue torch flame
- Unique shutter lever to easily extinguish ignition flame
- Instant off safety switch
- 1300°C (2500°F)

83-6525



83-6525

Butane Powered Micro Torch

- Compact palm size is perfect for tool kits and field service kits
- Produces an adjustable, wind resistant flame with temperatures up to 1300°C /2500°F, perfect for many microtorch applications
- Built in safety lock with improved easy to use self-ignition system
- Meets consumer products safety commission (CPSC) child safety requirements
- Powered by refillable "fuel cell" (included) with flame adjustment lever
- Built in fuel level viewing window
- Use with Master Ultratane butane for best performance
- Pinpoint flame is perfect for soldering, desoldering, heating shrinking and terminating heating lighting and many other applications
- Patent pending

83-6500



83-6500



83-6527

Cable Tie Tension and Cutter "Gun Style" Tool

- Cable tie tension and cut-off tools reduce operator fatigue and speed assembly
- Ergonomic design ideally fits the operators hand
- Cushion grip for comfort
- Quick tension adjustability for a flush "cut-off"
- Equipped with a hook for easy hanging
- Meets Military Specification MS90387-1 (83-6527), MS90387-2 (83-6528)

83-6527 For 18-50 lb Ties

83-6528 For 18-250 lb Ties



83-6509

Cable Tie Tension and Cutter "Twister" Tool

- Compact tensioning tool enables cinching and cutting
- For cable ties ranging from 18lbs-50lbs tensile strength
- Twisting action leaves a clean edge to prevent chaffing of wires
- Lightweight ergonomic design
- 7" long

83-6509 For 18-50 lb Ties



83-6516

Deutsch Connectors Crimping Tools

83-6516 Production Style 20-12 Gauge Solid Contacts



83-6517

83-6517 Field Repair Style 20-12 Gauge Solid Contacts

Primary Wire Dispenser

- A rugged, well constructed wire dispenser made of high grade steel
- Easy top-loading display eliminates re-stocking hassles
- Only 23" wide x 18" high x 12" deep
- Perfect for storing wire or used as a retail display – all in one convenient unit
- Can accommodate up to 78 spools of wire 36 (25') and 42 (100') covering 20-12 gauges
- Wire not included

00871



00871

Wire & Cable Display

- Constructed of heavy-duty steel, painted powder blue
- Can accommodate a variety of primary wire, battery cable or welding cable assortments in one display
- Steel bars can be removed to accommodate larger spools
- Mounting brackets included for mounting, safety and functionality
- Can be mounted or used as a stand alone display
- No assembly required
- Made in North America
- 27" wide x 18 1/4" tall x 6 1/4" deep; 11 lbs
- Wire not included

00870



00870

Ultra-Seal Corrosion Preventive Sealant Display

- Prevents rust and corrosion
- Added tackifiers improve adhesion and resistance to washout
- Operating range -40°C (-40°F) to 150°C (302°F)
- Ideal for heavy-duty, automotive, agricultural, marine, industrial and recreational applications

99170-1	Display (includes 12 - 4 oz. tubes # 99170)
99170	4 oz. Tube
99180	8 oz. Tub with applicator



99170-1



99170



99180

RETAIL DISPLAY

ÉTALAGES POUR LA VENTE AU DÉTAIL • DISPENSADOR DE PRODUCTO

ELECTRICAL CONNECTION AND SUPPLY DISPLAY • PRÉSENTOIRS DE CONNECTEURS ET DE FOURNITURES ÉLECTRIQUES • EXPOSITOR DE CONEXIÓN Y ALIMENTACIÓN ELÉCTRICA



01061

'Connect and Protect'

Electrical Connection and Supply Display

NEW

- 8 sided carousel display comes with heavy duty casters for easy transportation and movement
- High end, informative graphics and illustrations help promote the product and educate your customers
- Offers both economical and high-end choices in one display
- Includes the most popular installation, protection, application and repair accessories available
- Also includes OEM approved installation and repair tools
- Attractive retail packaging that includes product features and technical information
- Re-order cards, hooks and price tags included

Includes: Heat Shrink Crimp Solder & Seal, Solder and Seal, Crimp and Shrink Terminals; PVC, Nylon and Uninsulated Terminals; Heat Shrink and Split Flex Tubing; Cable Ties; Heavy Duty and Automotive Battery Terminals and Booster Clamps; Toggle and Push/Pull Electrical Switches, Battery Disconnect Switches, Seal Beam and Electrical Sockets, Fuseholders, Circuit Breakers and Panels; Trailer Sockets, Plugs and Adapters; Ultra Seal Grease; Crimping, Cutting and Installation Tools and Primary Wire

01061 Automotive and Light Duty

01062 Heavy Duty and Commercial

