REFERENCE GUIDE

ELECTRICAL CONNECTION AND ACCESSORIES

BRANCHEMENTS ÉLECTRIQUES
ET ACCESSOIRES

CONNEXIONES ELÉCTRICAS
Y ACCESSORIOS

CONNECT & PROTECT

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01 POWER CORDS

CORDONS D'ALIMENTATION

CABLES DE ENERGÍA

4 ABS Power Cords
- Cordons d'alimentation ABS
- Cables de energía ABS

5 Non-ABS Power Cords
- Cordons d'alimentation non ABS
- Cables de energía no ABS

6 RV Power Cords
- Cordons d'alimentation RV
- Cables de energía RV

7 ISO Cords
- Cordons ISO
- Cables ISO

7 Lift Gate Cables
- Câbles hayon
- Cables para plataformas elevadoras

02 TRAILER CONNECTORS

CONNECTEURS POUR REMORQUES

CONECTORES PARA TRAILERS Y REMOLQUES

10 Trailer Sockets
- Prises pour remorque
- Conectores para remolque

11 Nose Boxes and Socket Breakers
- Boîtes de jonction et disjoncteurs de douille
- Nose Boxes y disyuntores de conectores

12 Trailer Plugs
- Fiches pour remorque
- Enchufes para remolque

16 Junction Boxes
- Boîtes de connexion
- Cajas de empalmes

16 Corrosion Preventive Sealant
- Scellant anti-corrosion
- Sellador anticorrosión

03 AIR PRODUCTS

PRODUITS D'AIR

PRODUCTOS DE AIRE

20 Coiled Air
- Air spiralé
- Aire en espiral

22 Gladhands
- Têtes d'accouplement
- Conectores de manguera de freno

24 Seals and Airline Accessories
- Accessoires pour joints et conduites d'air
- Accesorios para juntas y conductos de aire

25 Rubber Air Lines
- Conduites d'air en caoutchouc
- Conductos de aire en goma

26 Power Cord & Air Assemblies
- Ensembles cordon d'alimentation et pneumatique
- Ensambles de cables eléctricos y neumáticos

28 Suspension Products
- Produits de suspension
- Productos de suspensión

30 EZ Claw® Suspension System
- Système de Suspension EZ Claw[MD]
- Sistema de Suspensión EZ Claw®

31 Air Brake Tubing
- Tuyaux pour freins pneumatiques
- Tubos para frenos neumáticos

04 TERMINALS AND CONNECTORS

COSSES ET CONNECTEURS

TERMINALES Y CONECTORES

35 Technical information
- Information technique
- Información técnica

36 Heat Shrinkable Connectors
- Cosses thermorétrécissables
- Conectores Termocontráctiles

37 Sealed Multiple Wire Heat Shrink Connectors
- Connecteurs thermorétractables scellés pour plusieurs fils
- Conectores Termocontráctiles Sellados para varios calibres

40 Crystal Clear Heat Shrink Connectors
- Conn. Thermorétractables Crystal Clear
- Con. Termocontráctiles Crystal Clear

42 Crimp, Solder & Seal Lead Free Terminals
- Bornes thermorétractables à sertir, à souder et à sceller
- Terminales termocontráctiles, a presión y con soldadura

44 Solder & Seal Lead Free Terminals
- Bornes et connecteurs thermorétractables et à souder
- Terminales termocontráctiles con soldadura

46 Butt Connectors
- Manchons connecteurs
- Conectores de cable a tope

47 Ring Terminals
- Cosses à anneau
- Terminales de ojillo

51 Spade Terminals
- Cosses ouvertes
- Terminales de espada

52 Quick Disconnects
- Connecteurs à désaccouplement rapide
- Conectores rapidos

54 Bullet & Receptacle Connectors
- Connecteurs à fiche et à réceptacle
- Conectores de bala

55 Specialty Connectors & Adapters
- Connecteurs et adaptateurs spécialisés
- Conectores y adaptadores especiales

57 Assortment Kits
- Ensembles assortiment
- Juegos surtido

60 Deutsch Terminals & Tools
- Bornes Deutsch
- Terminales y Herramientas Deutsch

62 Weather Pack & Metri-Pack OEM Terminals & Connectors
- Cosses électroniques et boîtiers OEM
- Terminales y conexiones con especificaciones de OEM

05 WIRE AND CABLE

FILS ET CÂBLES

ALAMBRES Y CABLES

67 Technical information
- Information technique
- Información técnica

68 Primary Wire
- Fil primaire
- Alambre primario

70 Brake Cable & Portable Extension Cable
- Câbles de frein et câbles de rallonge
- Cables de Freno y Extensión

71 SXL & Bonded Wire
- Cable Duplex SXL
- Cable Duplex SXL

72 Trailer Cable
- Câble pour remorque
- Cables para remolque

74 Battery Cable
- Câbles de batterie
- Cables de baterías

75 Welding Cable
- Câble de soudage
- Cable para soldar

76 Booster Cable - Twin Conductor
- Câble d'appoint - conducteur double
- Cable de arranque - Conductor doble

77 Wire/Cable Displays
- Présentoirs pour fils/câbles
- Exhibidores de cables

06 SUPPORT AND PROTECTIVE PRODUCTS

PRODUITS DE FIXATION ET DE PROTECTION

PRODUCTOS DE SOPORTE Y PROTECCIÓN

80 Nylon Cable Ties
- Serre-fils en nylon
- Cintillo de nylon

84 Mounting Bases & Installation Tools
- Socles et brides
- Bases y abrazaderas de montaje

86 Heat Shrink Tubing
- Tube thermorétrécissable
- Tubos termocantráctiles

92 Heat Guns & Torches
- Pistolets thermiques et torches
- Pistola de aire caliente y antorchas

94 Tube and Loom
- Tubes et gaines
- Tubo Corrugado

96 Clamps, Clips & Grommets
- Pinces et œillets
- Mordazas, pinzas y aros protectores

07 SWITCHES AND ELECTRICAL ASSEMBLIES

COMMUTATEURS ET ASSEMBLAGES ÉLECTRIQUES

APAGADORES Y ENSAMBLES ELÉCTRICOS

100 Battery Disconnect Switches
- Interrupteurs de batterie
- Interruptores cortacorriente de batería

101 Ignition & Starter Switches
- Interrupteurs de démerrage et d'allumage
- Interruptores de encendido y arranque

102 Toggle Switches
- Commutateurs à bascule
- Interruptores de palanca

105 Rocker Switches
- Commutateurs à bascule
- Interruptores basculantes

106 Push/Pull Switches
- Commutateurs push/pull
- Interruptores pulsador/tirador

107 Solenoids
- Solénoïdes
- Solenoides

108 Miscellaneous Switches
- Commutateurs divers
- Interruptores diversos

110 Pigtails & Sockets
- Spirales de raccord et douilles
- Cables flexibles de conexión y enchufes

08 FUSE & CIRCUIT PROTECTION

FUSIBLE ET PROTECTION DE CIRCUIT

PROTECCIÓN DE FUSIBLE Y CIRCUITO

116 High Amperage Circuit Breakers
- Disjoncteurs à intensité de courant élevée
- Corta Circuito de Alto Amperaje

116 Standard & Miniature Blade Circuit Breakers
- Disjoncteurs à lame standards et miniatures
- Corta circuitos de espada y estándar

117 Universal Circuit Breakers
- Disjoncteurs universels
- Corta circuito Universal

118 Miniature Blade Fuses & Holders
- Mini fusibles à lame et porte-fusibles
- Fusibles de cuchilla miniatura y soportes

120 Standard Blade Fuses & Holders
- Fusibles à lames standard et porte-fusibles
- Fusibles de cuchilla estándar y soportes

122 Micro Blade Fuses & Holders
- Fusibles à lame et porte-fusibles
- Fusibles de cuchilla pequeña y soportes

123 Large Blade Fuses & Holders
- Grands fusibles à lame et porte-fusibles
- Fusibles de cuchilla grande y soportes

124 Automotive Link Fuses
- Fusibles à lamelles automobiles
- Fusibles con acoplador para automóviles

126 Glass Fuses & Holders
- Fusibles en verre et porte-fusibles
- Fusibles de vidrio y soportes

127 Assortment Kits
- Ensembles assortiment
- Juegos surtido

128 Bolt-On Fuses
- Fusibles à visser
- Fusibles atornillables

130 Fuse Panels & Terminal Strips
- Plaquettes à bornes et boîtes à fusibles
- Panel de fusibles & barra para conectar terminals

131 Relays
- Relais
- Relés

09 BATTERY CONNECTORS AND CABLE

CONNECTEURS ET CÂBLES DE BATTERIE

TERMINALES Y CABLES PARA BATERIA

134 Battery Connectors
- Connecteurs de batterie
- Terminales de bateria

142 Conversion Connectors and Adapters
- Connecteurs de conversion et adaptateurs
- Conectores para conversión y adaptadores

144 Booster Clamps and Cables
- Pinces et câbles de survoltage
- Cables pasa corriente

145 Charging Clips
- Pinces de recharge
- Pinzas de recarga

146 Booster Cable - Twin Conductor
- Câble d'appoint – conducteur double
- Cable de arranque – Conductor doble

148 Battery Cables
- Câbles de batterie
- Cables de baterías

152 Battery Disconnect Switches
- Interrupteurs de batterie
- Interruptorres corta correinte para bateria

153 Battery Protective Products
- Produits pour protection de batterie
- Productos para protección de bateria

154 Crimpers and Cutters
- Pinces à sertir et pinces coupantes
- Dobladora para terminales de bateria

156 Battery Boxes
- Compartiments de batterie
- Cajas de baterías

159 Hold-downs and Trays
- Plateaux et systèmes de retenue
- Sujetadores y bandejas

160 Battery Cable
- Câbles de batterie
- Cables de baterías

161 Welding Cable
- Câble de soudage
- Cable para soldar

10 TOOLS & KITS

OUTILS ET TROUSSES

HERRAMIENTAS Y JUEGOS

164 Heat Shrink Terminal Assortment Kits
- Trousses de bornes thermorétrécissables
- Juegos de terminales termocontraíbles

165 Nylon and PVC Terminal Assortment Kits
- Trousses de bornes en nylon et PVC
- Juego de terminales de nailon y PVC

166 Deutsch & Weather Pack Assortment Kits
- Trousses assorties Deutsch & Weather
- Juego de Deutsch y Weather Pack

167 Assorted Repair Kits
- Trousse de réparation
- Juego de reparación

168 Heat Shrink Tubing Assortment Kits
- Trousses de tuyaux thermorétrécissables
- Juegos de tubos termocontráctiles

170 Copper Lug Assortment Kits
- Trousses de cosses en cuivre assorties
- Terminales de ojillo de cobre

171 Storage Trays
- Plateaux de rangement
- Bandejas de almacenamiento

172 Crimping, Cutting and Installations Tools
- Outils de sertissage, coupe et installation
- Herramientas para engarzar, cortar y para hacer instalaciones

11 RETAIL & MERCHANDISING

VENTE AU DÉTAIL ET MARCHANDISAGE

VENTA AL POR MENOR Y COMERCIALIZACIÓN

180 Merchandising "Spinner Racks"
- Présentoirs de marchandisage rotatifs
- Exhibidores Giratorios

182 Accessory Plan-O-Grams
- Planogrammes accessoires
- Planogramas de accesorios

184 Wire/Cable Displays
- Présentoirs pour fils/câbles
- Exhibidores de Cables

PART #	PAGE
00870	77, 184
00872	77, 184
01061	180
01062	181
01063	181
01063-NA	181
351044	16
43402	15
43942	15
44170	106
68170	110
68380	110
68680	113
81-0001	22
81-0001-38B	22
81-0001-38BS	22
81-0001-38R	22
81-0001-38RS	22
81-0001-B	22
81-0001-BS	22
81-0001-C	23
81-0001-CB	23
81-0001-CR	23
81-0001-CS	23
81-0001-CRS	23
81-0001-CBS	23
81-0001-R	22
81-0001-RS	22
81-0001-S	22
81-0001-SB	23
81-0001-SBB	23
81-0001-SBR	23
81-0001-SBBS	23
81-0001-SBRS	23
81-0001-SR	23
81-0008	21
81-0008-B	21
81-0008-R	21
81-0011	22
81-0011-38B	22
81-0011-38R	22
81-0011-45B	22
81-0011-45R	22
81-0011-B	22
81-0011-R	22
81-0011-SB	22
81-0011-SR	22
81-0012	21
81-0012-GH	21
81-0012-CGH	20
81-0012-B	21
81-0012-C	20

PART #	PAGE
81-0012-H	21
81-0012-HB	21
81-0012-HR	21
81-0012-R	21
81-0015	21
81-0015-40	21
81-0015-40B	21
81-0015-40BC	20
81-0015-40C	20
81-0015-40H	21
81-0015-40HB	21
81-0015-40CGH	20
81-0015-40HGH	21
81-0015-HGH	21
81-0015-40HR	21
81-0015-40R	21
81-0015-40RC	20
81-0015-B	21
81-0015-BC	20
81-0015-C	20
81-0015-H	21
81-0015-HB	21
81-0015-HR	21
81-0015-R	21
81-0015-RC	20
81-0020	21
81-0020-B	21
81-0020-BC	20
81-0020-C	20
81-0020-R	21
81-0020-RC	20
81-0038-250	25
81-0054	21
81-0100-100	24
81-0101-08	24
81-0101-100	24
81-0102-08	24
81-0102-100	24
81-0103-25	24
81-0110-08B	24
81-0110-08R	24
81-0110-100B	24
81-0110-100R	24
81-0111	24
81-0112	25
81-0112-100B	24
81-0112-100R	24
81-0112-B	25
81-0112-BGB	25
81-0112-BSS	25
81-0112-GB	25
81-0112-GR	25
81-0112-GRB	25
81-0112-R	25

PART #	PAGE
81-0112-SS	25
81-0112-RGR	25
81-0112-RSS	25
81-0113-08B	24
81-0113-08R	24
81-0113-100B	24
81-0113-100R	24
81-0115	25
81-0115-25	24
81-0115-B	25
81-0115-BGB	25
81-0115-BSS	25
81-0115-GB	25
81-0115-GR	25
81-0115-GRB	25
81-0115-R	25
81-0115-RGR	25
81-0115-RSS	25
81-0115-SS	25
81-0115-SPR	25
81-0116-08BP	24
81-0116-100BP	24
81-0117-100BP	24
81-0120	25
81-0120-GB	25
81-0120-GR	25
81-0120-GRB	25
81-0124	23
81-0125	23
81-0126	24
81-0126T	24
81-0128	29
81-0128-14	29
81-0129	28
81-0130	28
81-0131	28
81-0132	29
81-0133	29
81-0134	29
81-0135	28
81-0136	29
81-0137	28
81-0138	28
81-0139	28
81-0140	28
81-0141	6
81-0142	6
81-0145	28
81-0146	28
81-0147	28
81-0149	24
81-0410	6
81-0412	6
81-0610	6

PART #	PAGE
81-0612	6
81-1012-100B	31
81-1012-100BL	31
81-1012-100G	31
81-1012-100R	31
81-1012-100Y	31
81-1012-500B	31
81-1012-500BL	31
81-1012-500G	31
81-1012-500R	31
81-1012-500Y	31
81-1014-1000B	31
81-1014-1000BL	31
81-1014-1000G	31
81-1014-1000R	31
81-1014-1000Y	31
81-1014-100B	31
81-1014-100BL	31
81-1014-100G	31
81-1014-100R	31
81-1014-100Y	31
81-1018-100B	31
81-1034-250B	31
81-1038-100B	31
81-1038-100BL	31
81-1038-100G	31
81-1038-100R	31
81-1038-100Y	31
81-1038-500B	31
81-1038-500BL	31
81-1038-500G	31
81-1038-500R	31
81-1038-500Y	31
81-1058-250B	31
81-1516-100B	31
81-1532-500B	31
81-1532-100B	31
81-2012-S	7
81-2015	7
81-2015-40	7
81-2015-S	7
81-2112	7
81-2115	7
81-2212	7
81-2212-V	7
81-2215	7
81-2215-DS	7
81-2215-V	7
81-2300	30
81-2301	30
81-2303VM	30
81-2303	30
81-2304	30
81-2305	30

PART #	PAGE
81-2306	30
81-2308	30
81-2309	30
81-2312	7
81-2315	7
81-2412	7
81-2415	7
81-3112	26
81-3112-GRP	26
81-3115	26
81-3115-GRP	26
81-3120	26
81-3212	26
81-3212-GRP	26
81-3215	26
81-3215-GRP	26
81-3215N	26
81-3312	27
81-3312-GRP	27
81-3315	27
81-3315-GRP	27
81-3412	27
81-3412-GRP	27
81-3415	27
81-3415-GRP	27
81-3512	27
81-3512-GRP	27
81-3515	27
81-3515-GRP	27
82-0115	109
82-0216	102
82-0302	104
82-0303	104
82-0304	104
82-0307	107
82-0308	107
82-0309	105
82-0310	105
82-0311	107
82-0312	107
82-0313	107
82-0315	102
82-0402	106
82-0456	108
82-0458	108
82-0465	108
82-0600	103
82-0850	11
82-0851	14, 147
82-0852	14, 147
82-0853	11
82-0855	11
82-0856	11
82-0859	11

PART #	PAGE
82-0860	11
82-0861	11
82-0950	14, 144
82-1000	16
82-1001	12
82-1002	10
82-1005	10
82-1010	13
82-1011	13
82-1012	13
82-1016	13
82-1018	13
82-1019	12
82-1020	13
82-1021	13
82-1022	13
82-1023	13
82-1025	13
82-1027	13
82-1028	15
82-1029	15
82-1030	15
82-1031	15
82-1032	15
82-1033	15
82-1034	15
82-1035	15
82-1036	15
82-1038	15
82-1039	15
82-1040	13
82-1041	14, 147
82-1041V	14, 147
82-1042	14, 147
82-1042V	14, 147
82-1043	10
82-1044	12
82-1050	10, 12
82-1051	15
82-1052	15
82-1055	11
82-1055NB	11
82-1056	12
82-1058	10
82-1059	10
82-1060	10
82-1061	12
82-1062	12
82-1063	12
82-1901	104
82-1902	104
82-1903	104
82-1904	104
82-1905	104

PART #	PAGE
82-1906	104
82-1907	104
82-1908	104
82-1909	104
82-1910	104
82-1911	104
82-1912	104
82-1913	105
82-1914	105
82-1915	105
82-1916	105
82-2100	106
82-2102	106
82-2103	100, 152
82-2104	100, 152
82-2105	106
82-2106	103
82-2107	106
82-2108	103
82-2110	103
82-2111	102
82-2112	103
82-2114	102
82-2115	104
82-2116	102
82-2117	102
82-2118	102
82-2119	102
82-2120	102
82-2121	102
82-2122	102
82-2123	102
82-2124	102
82-2125	103
82-2127	103
82-2128	103
82-2130	105
82-2131	105
82-2132	105
82-2133	105
82-2134	105
82-2135	105
82-2136	105
82-2137	105
82-2140	12
82-2141	12
82-2142	11
82-2144	11, 14, 147
82-2145	10
82-2146	12
82-2147	12
82-2148	12
82-2149	12
82-2150	101

PART #	PAGE
82-2151	103
82-2152	103
82-2154	12
82-2155	100, 152
82-2156	101
82-2157	100
82-2158	101
82-2159	108
82-2160	129
82-2161	129
82-2162	129
82-2163	129
82-2164	121
82-2165	121
82-2166	121
82-2167	129
82-2168	129
82-2169	129
82-2170	117
82-2171	117
82-2172	117
82-2173	117
82-2174	117
82-2176	116
82-2177	116
82-2178	116
82-2179	117
82-2180	117
82-2181	117
82-2182	117
82-2183	117
82-2184	117
82-2185	117
82-2186	117
82-2187	117
82-2188	117
82-2189	117
82-2190	117
82-2191	117
82-2192	117
82-2193	117
82-2194	117
82-2195	116
82-2196	116
82-2197	116
82-2198	116
82-2199	116
82-2200	116
82-2201	116
82-2203	109
82-2204	109
82-2207	121
82-2208	117
82-2209	121

PART #	PAGE
82-2210	117
82-2211	123
82-2212	121
82-2213	118
82-2215	129
82-2216	116
82-2217	116
82-2218	119
82-2219	122
82-2220	103
82-2221	102
82-2222	102
82-2224	102
82-2225	102
82-2226	102
82-2227	102
82-2230	109
82-2231	108
82-2232	108
82-2233	100, 152
82-2234	108
82-2235	101
82-2236	106
82-2238	109
82-2241	118
82-2246	121
82-2247	116
82-2248	116
82-2249	116
82-2250	116
82-2251	116
82-2301	129
82-2302	129
82-2303	130
82-2304	130
82-2305	130
82-2306	101
82-2311	131
82-2312	131
82-2313	131
82-2314	131
82-2332	131
82-2334	131
82-2338	131
82-2340	117
82-2341	117
82-2342	117
82-2343	117
82-2344	117
82-2350	117
82-2351	117
82-2352	117
82-2353	117
82-2354	117

PART #	PAGE
82-2355	116
82-2356	116
82-2357	116
82-2358	116
82-2359	116
82-5500	70
82-5501	70
82-5502	70
82-5503	70
82-5504	70
82-5507	70
82-5508	70
82-5509	70
82-5510	70
82-5511	70
82-5512	70
82-5514	70
82-5515	70
82-5519	70
82-5520	70
82-5521	70
82-5522	70
82-5524	70
82-5525	70
82-5526	70
82-5527	70
82-5590	70
82-5591	70
82-5600	73
82-5601	73
82-5602	73
82-5603	73
82-5604	73
82-5605	73
82-5606	73
82-5607	73
82-5609	73
82-5610	73
82-5611	73
82-5612	73
82-5614	73
82-5615	73
82-5619	73
82-5620	73
82-5621	73
82-5622	73
82-5623	73
82-5624	73
82-5700	74, 160
82-5701	74, 160
82-5702	74, 160
82-5703	74, 160
82-5704	74, 160
82-5705	74, 160

PART #	PAGE
82-5706	74, 160
82-5707	74, 160
82-5708	74, 160
82-5709	74, 160
82-5710	74, 160
82-5711	74, 160
82-5712	74, 160
82-5713	74, 160
82-5714	74, 160
82-5715	74, 160
82-5716	74, 160
82-5721	75, 161
82-5722	74, 160
82-5723	74, 160
82-5724	75, 161
82-5725	74, 160
82-5726	74, 160
82-5730	75, 161
82-5731	75, 161
82-5732	75, 161
82-5733	74, 160
82-5734	75, 161
82-5735	75, 161
82-5736	75, 161
82-5737	75, 161
82-5738	75, 161
82-5739	75, 161
82-5740	75, 161
82-5741	75, 161
82-5742	75, 161
82-5743	74, 160
82-5744	75, 161
82-5745	75, 161
82-5753	74, 160
82-5759-1500	76, 146
82-5760	76, 146
82-5760-1200	76, 146
82-5761	76, 146
82-5761-500	76, 146
82-5762	76, 146
82-5822	72
82-5822-250	72
82-5822-500	72
82-5823	72
82-5823-250	72
82-5823-500	72
82-5824	72
82-5824-250	72
82-5824-500	72
82-5825	72
82-5825-250	72
82-5825-500	72
82-5826	72
82-5826-250	72

PART #	PAGE
82-5826-500	72
82-5827	72
82-5827-250	72
82-5827-500	72
82-5828	72
82-5828-250	72
82-5828-500	72
82-5901	71
82-5901-500	71
82-5902	71
82-5904	71
82-5905	71
82-5907	71
82-5908	71
82-6010	134
82-6011	134
82-6700	74, 160
82-6701	74, 160
82-6703	74, 160
82-6704	74, 160
82-6706	74, 160
82-6707	74, 160
82-6709	74, 160
82-6710	74, 160
82-6712	74, 160
82-6713	74, 160
82-6715	74, 160
82-6716	74, 160
82-6717	74, 160
82-6718	74, 160
82-6719	74, 160
82-6720	74, 160
82-6721	74, 160
82-6722	74, 160
82-6723	74, 160
82-6725	74, 160
82-6726	74, 160
82-6727	75, 161
82-6728	75, 161
82-6730	75, 161
82-6731	75, 161
82-6732	75, 161
82-6733	74, 160
82-6734	75, 161
82-6735	75, 161
82-6736	75, 161
82-6737	75, 161
82-6738	75, 161
82-6739	75, 161
82-6740	75, 161
82-6741	75, 161
82-6742	75, 161
82-6743	74, 160
82-6744	75, 161

PART #	PAGE
82-6745	75, 161
82-6753	74, 160
82-7014	150
82-7025	150
82-7025-R	150
82-7053	150
82-7072	150
82-9047	134
82-9048	134
82-9050	134
82-9051	134
82-9053	134
82-9054	134
82-9056	134
82-9057	134
82-9058	134
82-9059	134
82-9060	134
82-9061	134
82-9062	134
82-9063	134
82-9095	134
82-9096	134
82-9097	134
82-9098	134
82-9099	134
82-9100	134
82-9124	141
82-9125	141
82-9126	140
82-9130	142
82-9131	142
82-9132	142
82-9133	140
82-9134	140
82-9135	140
82-9164	138
82-9165	138
82-9166	138
82-9167	138
82-9168	138
82-9169	138
82-9170	138
82-9171	138
82-9172	138
82-9173	138
82-9174	138
82-9175	138
82-9176	138
82-9177	138
82-9178	138
82-9179	138
82-9180	138
82-9181	138
82-9182	138

PART #	PAGE
82-9183	143
82-9184	143
82-9216	143
82-9217	143
82-9218	136
82-9219	136
82-9220	136
82-9221	136
82-9317	138
82-9318	138
82-9319	138
82-9428	139
82-9429	139
82-9430	139
82-9431	139
82-9432	139
82-9433	139
82-9434	139
82-9435	139
82-9436	139
82-9437	139
82-9438	139
82-9439	139
82-9440	139
82-9448	135
82-9463	135
82-9512	139
82-9513	139
82-9514	139
82-9515	139
82-9516	139
82-9517	139
82-9518	139
82-9519	139
82-9520	139
82-9521	139
82-9522	139
82-9523	138
82-9524	138
82-9525	138
82-9527	138
82-9528	138
82-9529	139
82-9530	139
82-9531	139
82-9532	139
82-9533	138
82-9534	138
82-9535	138
82-9536	138
82-9537	138
82-9538	139
82-9539	139
82-9540	145
82-9541	141

PART #	PAGE
82-9542	141
82-9543	144
82-9544	144
82-9545	139
82-9546	139
82-9547	139
82-9552	135
82-9553	135
82-9554	135
82-9555	135
82-9556	135
82-9557	135
82-9558	135
82-9595	141
82-9596	141
82-9597	140
82-9613	140
82-9614	145
82-9620	141
82-9623	142
82-9640	134
82-9641	130
82-9642	130
82-9647	130
82-9648	130
82-9649	130
82-9650	130
82-9651	130
82-9652	130
82-9653	130
82-9654	130
82-9655	130
82-AGA-6	126
82-AGC-60	126
82-AGW-5	126
82-AGX-5	126
82-ANK-10A	123
82-ANK-15A	123
82-ANK-5A	123
82-ANK-7.5A	123
82-ANM-10A	118
82-ANM-15A	118
82-ANM-20A	118
82-ANM-25A	118
82-ANM-2A	118
82-ANM-30A	118
82-ANM-35A	118
82-ANM-3A	118
82-ANM-4A	118
82-ANM-5A	118
82-ANM-7	118
82-ANM-7.5A	118
82-ANM-8P	118
82-ANM-8T	118
82-ANM-I-10A	119

PART #	PAGE
82-ANM-I-15A	119
82-ANM-I-20A	119
82-ANM-I-25A	119
82-ANM-I-30A	119
82-ANM-I-3A	119
82-ANM-I-5	119
82-ANM-I-5A	119
82-ANMI-7.5A	119
82-ANR-1A	120
82-ANR-10A	120
82-ANR-15A	120
82-ANR-20A	120
82-ANR-25A	120
82-ANR-2A	120
82-ANR-30A	120
82-ANR-35A	120
82-ANR-3A	120
82-ANR-40A	120
82-ANR-4A	120
82-ANR-5A	120
82-ANR-6T	120
82-ANR-7	120
82-ANR-7.5A	120
82-ANR-7P	120
82-ANR-I-10A	121
82-ANR-I-15A	121
82-ANR-I-20A	121
82-ANR-I-25A	121
82-ANR-I-30A	121
82-ANR-I-3A	121
82-ANR-I-40A	121
82-ANR-I-5	121
82-ANR-I-5A	121
82-ANRI-7.5A	121
82-ANS-10A	119
82-ANS-15A	119
82-ANS-20A	119
82-ANS-25A	119
82-ANS-30A	119
82-ANS-3A	119
82-ANS-5A	119
82-ANS-7	119
82-ANS-7.5A	119
82-ANS-7P	119
82-ANS-7T	119
82-ANS-I-5	119
82-ANT-10A	122
82-ANT-15A	122
82-ANT-20A	122
82-ANT-25A	122
82-ANT-30A	122
82-ANT-5A	122
82-ANT-7	122
82-ANT-7.5A	122
82-ANT-7P	122

PART #	PAGE
82-ANT-I-10A	122
82-ANT-I-15A	122
82-ANT-I-20A	122
82-ANT-I-25A	122
82-ANT-I-30A	122
82-ANT-I-5A	122
82-ANTI-7.5A	122
82-ANX-20A	123
82-ANX-30A	123
82-ANX-40A	123
82-ANX-50A	123
82-ANX-60A	123
82-ANX-70A	123
82-ANX-80A	123
82-ASST-180	118, 119, 120, 127
82-ASST-43	118, 126
82-ASST-44	120, 126
82-ASST-45	125
82-ASST-53	120, 123, 127
82-ASST-64	118, 123, 126
82-ASST-80M	118, 126
82-ASST-80R	120, 126
82-BLM-I-304	130
82-BLM-I-306	130
82-BLM-I-310	130
82-BLR-I-304	130
82-BLR-I-306	130
82-BLR-I-310	130
82-FLB-40A	125
82-FLB-60A	125
82-FLB-70A	125
82-FLD-80A	125
82-FLF-20A	125
82-FLF-30A	125
82-FLF-40A	125
82-FLF-50A	125
82-FLF-60A	125
82-FLM-100A	125
82-FLM-120A	125
82-FLM-60A	125
82-FLM-80A	125
82-FLS-30A	125
82-FLS-40A	125
82-FMX-20A	124
82-FMX-25A	124
82-FMX-30A	124
82-FMX-40A	124
82-FMX-50A	124
82-FMX-60A	124
82-FMX-M-15A	124

PART #	PAGE
82-FMX-M-20A	124
82-FMX-M-25A	124
82-FMX-M-30A	124
82-FMX-M-40A	124
82-FMXLP-20A	124
82-FMXLP-25A	124
82-FMXLP-30A	124
82-FMXLP-40A	124
82-FMXLP-50A	124
82-FMXLP-60A	124
82-FSA-10A-G	128
82-FSA-15A-G	128
82-FSA-1A-G	128
82-FSA-20A-G	128
82-FSA-25A-G	128
82-FSA-2A-G	128
82-FSA-30A-G	128
82-FSA-3A-G	128
82-FSA-5A-G	128
82-FSA-9-G	126
82-FSO-7-G	126
82-MGGA-80A	128
82-MGGA-100A	128
82-MGGA-125A	128
82-MGGA-150A	128
82-MGGA-175A	128
82-MGGA-200A	128
82-MGGA-225A	128
82-MGGA-250A	128
82-MGGA-300A	128
82-MGGA-FB	128
82-PUL-01	128
82-PUL-07	128
83-1932	42
83-1933	42
83-1934	42
83-1935	42
83-1937	42
83-1938	42
83-1939	42
83-1940	42
83-1941	42
83-1943	43
83-1944	43
83-1945	43
83-1946	43
83-1947	43
83-1951	43
83-1952	43
83-1953	43
83-1954	43
83-1955	43
83-1956	43
83-2102	47
83-2104	47

PART #	PAGE
83-2105	47
83-2132	50
83-2134	50
83-2150	38
83-2150-3	38
83-2180	46
83-2187	52
83-2190	46
83-2191	52
83-2204	47
83-2205	47
83-2206	47
83-2207	47
83-2208	47
83-2209	48
83-2210	48
83-2213	48
83-2216	48
83-2217	50
83-2218	50
83-2219	51
83-2220	51
83-2221	51
83-2222	51
83-2223	52
83-2224	52
83-2225	53
83-2226	53
83-2227	54
83-2250	54
83-2251	54
83-2302	48
83-2303	48
83-2304	48
83-2305	48
83-2308	48
83-2332	51
83-2334	51
83-2340	48
83-2380	46
83-2383	55
83-2387	52
83-2388	52
83-2390	46
83-2391	52
83-2394	54
83-2395	54
83-2396	54
83-2398	54
83-2399	52
83-2400	54
83-2401	54
83-2402	54
83-2408	40
83-2410	40

PART #	PAGE
83-2412	40
83-2413	40
83-2414	40
83-2415	40
83-2416	40
83-2417	40
83-2430	41
83-2432	41
83-2434	41
83-2435	41
83-2447	48
83-2448	48
83-2449	48
83-2455	48
83-2456	48
83-2457	48
83-2458	48
83-2501	40
83-2502	49
83-2504	49
83-2505	49
83-2507	49
83-2510	40
83-2511	40
83-2512	40
83-2513	40
83-2532	51
83-2534	51
83-2540	49
83-2560	54
83-2561	54
83-2580	46
83-2583	55
83-2587	53
83-2590	46
83-2591	53
83-2600	57
83-2602	46
83-2608	57
83-2609	58
83-2610	59
83-2612	44
83-2614	44
83-2618	44
83-2624	36
83-2625	36
83-2626	36
83-2896	53
83-2898	53
83-2904	55
83-2929	42
83-2930	42
83-2931	42
83-3100	47
83-3101	47

PART #	PAGE
83-3102	47
83-3103	47
83-3104	47
83-3110	47
83-3111	47
83-3112	47
83-3150	36
83-3150-3	36
83-3182	56
83-3187	56
83-3191	56
83-3350	36
83-3350-3	36
83-3382	56
83-3387	52
83-3391	52
83-3550	36
83-3550-3	36
83-3582	56
83-3587	53
83-3591	53
83-4150	40
83-4150-3	40
83-4350	40
83-4350-3	40
83-4550	40
83-4550-3	40
83-4999	91
83-5000	91
83-5001	91
83-5002	91
83-5003	91
83-5004	91
83-6000	80
83-6000-3	80
83-6001	80
83-6001C	81
83-6001-3	80
83-6004	80
83-6004-3	80
83-6005	80
83-6005-3	80
83-6006	80
83-6006-3	80
83-6007	80
83-6007C	81
83-6007-3	80
83-6012	81
83-6013	81
83-6016	80
83-6016C	81
83-6016-3	80
83-6017	80
83-6017-3	80
83-6018	80

PART #	PAGE
83-6018-3	80
83-6019	80
83-6019C	81
83-6019-3	80
83-6020	80
83-6020-3	80
83-6021	80
83-6021C	81
83-6021-3	80
83-6022	81
83-6023	81
83-6025	80
83-6025C	81
83-6025-3	80
83-6026	80
83-6026-3	80
83-6027	81
83-6028	80
83-6028-3	80
83-6029	80
83-6029C	81
83-6029-3	80
83-6030	84
83-6030-3	82
83-6031	84
83-6031-3	82
83-6032	84
83-6032-3	82
83-6033	84
83-6033-3	82
83-6034-3	82
83-6035-3	82
83-6036-3	82
83-6037	81
83-6040	81
83-6041	81
83-6042	82
83-6043	82
83-6045	83
83-6046	83
83-6048	83
83-6049	83
83-6052	83
83-6060	84
83-6061	84
83-6062	84
83-6063	84
83-6104	81
83-6105	81
83-6107	81
83-6108	81
83-6116	81
83-6117	81
83-6118	81
83-6119	81

PART #	PAGE
83-6120	81
83-6121	81
83-6122	81
83-6123	81
83-6163	81
83-6500	92, 175
83-6501	92, 175
83-6502	70, 169
83-6503	55, 164
83-6505	90, 170
83-6506	82
83-6507	82
83-6508	92, 175
83-6509	85, 176
83-6510	173
83-6511	172
83-6512	172
83-6513	176
83-6514	82
83-6515	76, 154, 176
83-6516	64, 173
83-6518	173
83-6519	59, 172
83-6520	165
83-6521	63
83-6522	63
83-6524	59, 172
83-6525	92, 175
83-6527	85, 176
83-6528	85, 176
83-6530	167
83-6532	169
83-6533	91
83-6535	83, 166
83-6536	65, 166
83-6537	88, 168
83-6538	58, 165
83-6539	45, 164
83-6540	57, 165
83-6542	43, 58, 164
83-6543	139, 170
83-6544	138, 170
83-6545	91, 169
83-6546	65, 166
83-6547	170
83-6548	170
83-6549	64, 166
83-6550	167
83-6552	170
83-6553	170
83-6554	57, 165
83-6555	58, 165
83-6556	59, 164
83-6559	82
83-6561	16, 177

PART #	PAGE
83-6562	64, 173
83-6563	64, 173
83-6564	64, 173
83-6565	64, 173
83-6566	64, 173
83-6567	64, 173
83-6568	64
83-6569	65, 173
83-6570	63
83-6600	82
83-6650	171
83-6651	171
83-6652	171
83-6653	171
83-6654	171
83-6655	171
83-6656	171
83-6657	171
83-6658	171
83-6659	171
83-6660	171
83-6661	171
83-6990	94, 176
83-6991	94, 176
83-6992	94, 176
83-6993	94, 176
83-6998	94
83-6999	94
83-7000	94
83-7001	94
83-7002	94
83-7003	96
83-7004	96
83-7005	96
83-7006	97
83-7007	96
83-7008	96
83-7009	96
83-7010	96
83-7011	96
83-7012	96
83-7014	96
83-7015	29
83-7016	29
83-7017	29
83-7018	96
83-7019	96
83-7020	97
83-7021	97
83-7022	97
83-7023	97
83-7024	97
83-7025	97
83-7026	97
83-7027	97

PART #	PAGE
83-7028	97
83-7029	95
83-7029-3	95
83-7034	96
83-7036	96
83-7037	96
83-7038	96
83-7039	96
83-8000	94
83-8000-3	94
83-8000-S	94
83-8001	94
83-8001-3	94
83-8001-S	94
83-8002	94
83-8002-3	94
83-8002-S	94
83-8003	94
83-8003-3	94
83-8003-S	94
83-8004	94
83-8004-3	94
83-8005-3	94
83-8007	94
83-8007-3	94
83-8007-S	94
83-8008	94
83-8008-250	94
83-8009-3	94
83-8010	94
83-8011	94
83-8013	94
83-8014	94
83-8014-3	94
83-8018	94
83-8030	94
83-8030-3	94
83-8030-3200	94
83-8031	94
83-8031-3	94
83-8031-1900	94
83-8032	94
83-8032-3	94
83-8032-1100	94
83-8033	94
83-8033-3	94
83-8033-800	94
83-8034	94
83-8034-3	94
83-8034-550	94
83-8035	94
83-8035-3	94
83-8036-3	94
83-8037-3	94
83-8051	97

PART #	PAGE
83-8052	97
83-8100	96
83-8101	96
83-8102	96
83-8103	96
83-8104	96
83-8105	96
83-8106	96
83-8107	96
83-8108	96
83-9000	95
83-9001	95
83-9002	95
83-9003	95
83-9004	95
83-9007	95
83-9008	95
83-9009	95
83-9010	95
83-9011	95
84-1000	111
84-1003	110
84-1004	111
84-1006	112
84-1007	111
84-1008	110
84-1009	112
84-1030	112
84-1031	110
84-1032	110
84-1034	111
84-1035	112
84-1036	112
84-1037	111
84-1038	111
84-1039	112
84-1040	113, 131
84-1041	113, 131
84-1042	112
84-1048	111
84-1049	112
84-1051	111
84-1052	110
84-1054	110
84-1056	112
84-1057	112
84-1060	110
84-1062	110
84-1064	112
84-1067	112
84-1068	111
84-1069	110
84-1071	111
84-1072	111
84-1073	111

PART #	PAGE
84-1075	110
84-1076	131
84-1077	131
84-1078	131
84-1079	131
84-1080	131
84-1081	111
84-1082	111
84-1083	111
84-1084	112
84-1085	112
84-1086	112
84-1090	113
84-1091	113
84-1092	113
84-1093	131
84-1094	131
84-1937	42
84-1938	42
84-1939	42
84-1940	42
84-1941	42
84-1943	43
84-1944	43
84-1945	43
84-1946	43
84-1947	43
84-1953	43
84-1954	43
84-2000	62
84-2001	62
84-2002	62
84-2003	62
84-2004	62
84-2005	62
84-2006	62
84-2007	62
84-2008	62
84-2009	62
84-2011	63
84-2013	63
84-2023	63
84-2024	63
84-2025	63
84-2026	63
84-2027	63
84-2028	63
84-2029	63
84-2033	62
84-2034	62
84-2035	63
84-2036	63
84-2037	63
84-2041	63
84-2047	62

PART #	PAGE
84-2048	62
84-2049	62
84-2050	62
84-2052	62
84-2053	62
84-2075	63
84-2076	63
84-2078	63
84-2079	63
84-2081	62
84-2082	62
84-2104	47
84-2105	47
84-2108	47
84-2114	46
84-2132	50
84-2134	50
84-2136	50
84-2138	50
84-2139	50
84-2140	47
84-2151	41
84-2170	46
84-2171	54
84-2172	54
84-2173	54
84-2180	46
84-2181	55
84-2183	55
84-2185	54
84-2186	52
84-2187	52
84-2188	52
84-2189	53
84-2190	46
84-2191	52
84-2192	53
84-2194	54
84-2196	52
84-2198	52
84-2204	47
84-2205	47
84-2206	47
84-2207	47
84-2208	47
84-2209	48
84-2210	48
84-2211	48
84-2212	48
84-2213	48
84-2215	48
84-2216	48
84-2217	50
84-2218	50
84-2219	51

PART #	PAGE
84-2220	51
84-2221	51
84-2222	51
84-2223	52
84-2224	52
84-2225	53
84-2226	53
84-2228	52
84-2250	54
84-2251	54
84-2301	52
84-2302	52
84-2303	48
84-2304	48
84-2305	48
84-2308	48
84-2310	48
84-2314	46
84-2321	52
84-2322	52
84-2332	51
84-2334	51
84-2336	51
84-2338	51
84-2340	48
84-2377	55
84-2378	55
84-2380	46
84-2381	55
84-2382	55
84-2383	55
84-2384	55
84-2387	52
84-2388	54
84-2389	53
84-2390	46
84-2391	52
84-2392	53
84-2394	54
84-2395	54
84-2396	54
84-2397	54
84-2398	54
84-2399	52
84-2400	54
84-2401	54
84-2402	54
84-2408	38
84-2410	38
84-2412	38
84-2413	38
84-2414	38
84-2415	38
84-2416	38
84-2417	38

PART #	PAGE
84-2418	39
84-2420	39
84-2421	39
84-2422	39
84-2423	38
84-2424	38
84-2425	38
84-2426	38
84-2427	38
84-2428	39
84-2429	39
84-2430	39
84-2431	39
84-2432	39
84-2433	39
84-2434	39
84-2435	39
84-2436	39
84-2437	39
84-2438	45
84-2439	39
84-2440	39
84-2441	38
84-2442	38
84-2443	38
84-2447	39
84-2448	39
84-2449	48
84-2455	44
84-2456	48
84-2457	48
84-2458	48
84-2459	61
84-2460	39
84-2462	61
84-2463	61
84-2464	61
84-2465	61
84-2466	61
84-2467	61
84-2468	61
84-2469	61
84-2470	61
84-2471	61
84-2472	61
84-2473	61
84-2474	61
84-2475	61
84-2476	61
84-2477	61
84-2478	61
84-2479	61
84-2480	60
84-2481	60
84-2482	60

PART #	PAGE
84-2483	60
84-2484	60
84-2485	60
84-2486	60
84-2487	60
84-2488	60
84-2489	60
84-2490	60
84-2491	60
84-2492	60
84-2493	60
84-2494	61
84-2495	61
84-2501	38
84-2502	49
84-2504	49
84-2505	49
84-2507	49
84-2509	49
84-2510	38
84-2511	38
84-2512	38
84-2513	38
84-2514	46
84-2518	39
84-2520	39
84-2521	39
84-2532	51
84-2534	51
84-2536	51
84-2537	51
84-2538	51
84-2540	49
84-2550	36
84-2580	46
84-2581	55
84-2582	55
84-2583	55
84-2587	53
84-2590	46
84-2591	53
84-2592	46
84-2612	44
84-2614	44
84-2618	44
84-2624	37
84-2625	37
84-2626	37
84-2627	37
84-2628	37
84-2629	37
84-2630	37
84-2631	37
84-2632	37
84-2701	56

PART #	PAGE
84-2702	56
84-2703	56
84-2704	56
84-2705	49
84-2707	49
84-2709	49
84-2740	49
84-2750	36
84-2803	44
84-2804	44
84-2805	44
84-2806	44
84-2807	44
84-2809	44
84-2810	44
84-2811	44
84-2813	44
84-2814	45
84-2815	45
84-2816	45
84-2818	45
84-2822	45
84-2823	45
84-2824	45
84-2825	45
84-2826	45
84-2827	45
84-2897	53
84-2899	55
84-2900	55
84-2901	55
84-2902	53
84-2903	121
84-2904	55
84-2905	55
84-2906	55
84-2907	55
84-2909	49
84-2910	49
84-2911	49
84-2912	49
84-2913	49
84-2915	55
84-2916	125
84-2917	125
84-2918	125
84-2919	125
84-2929	42
84-2930	42
84-2931	42
84-2940	49
84-2941	49
84-2942	49
84-2980	46
84-3000	50

PART #	PAGE
84-3001	50
84-3002	50
84-3003	50
84-3004	50
84-3005	50
84-3006	50
84-3007	50
84-3008	50
84-3009	50
84-3010	50
84-3011	50
84-3012	50
84-3013	50
84-3014	50
84-3015	50
84-3016	50
84-3017	50
84-3018	50
84-3019	50
84-3020	50
84-3021	50
84-3022	50
84-3100	47
84-3101	47
84-3102	47
84-3110	47
84-3111	47
84-3112	47
84-3150	36
84-3182	56
84-3187	53
84-3191	53
84-3350	36
84-3382	56
84-3387	52
84-3391	52
84-3550	36
84-3582	56
84-3587	53
84-3591	53
84-4000	89
84-4000-3	89
84-4000-48	89
84-4001	89
84-4001-3	89
84-4001-48	89
84-4002	89
84-4002-3	89
84-4002-48	89
84-4003	89
84-4003-3	89
84-4003-48	89
84-4004	89
84-4004-3	89
84-4004-48	89

PART #	PAGE
84-4005	89
84-4005-3	89
84-4005-48	89
84-4006	89
84-4006-3	89
84-4006-48	89
84-4007	91
84-4008	91
84-4009	91
84-4010	91
84-4011	91
84-4013	91
84-4015	88
84-4015-3	88
84-4015-48	88
84-4016	88
84-4016-3	88
84-4016-48	88
84-4017	88
84-4017-3	88
84-4017-48	88
84-4018	88
84-4018-3	88
84-4018-48	88
84-4019	88
84-4019-3	88
84-4019-48	88
84-4020	88
84-4020-3	88
84-4020-48	88
84-4021	88
84-4021-3	88
84-4021-48	88
84-4030	90
84-4031	90
84-4032	90
84-4150	40
84-4350	40
84-4388	53
84-4408	41
84-4410	41
84-4412	41
84-4413	41
84-4414	41
84-4415	41
84-4416	41
84-4430	41
84-4432	41
84-4436	41
84-4437	41
84-4439	41
84-4440	41
84-4447	41
84-4448	41
84-4510	41

PART #	PAGE
84-4511	41
84-4513	41
84-4550	41
84-4624	41
84-4625	41
84-4997	145
84-4998	145
84-4999	145
84-5000	145
84-5002	145
84-5003	145
84-5004	145
84-5005	145
84-5006	87
84-5006-3	87
84-5006-48	87
84-5007	87
84-5007-3	87
84-5007-48	87
84-5008	87
84-5008-3	87
84-5008-48	87
84-5009	87
84-5009-3	87
84-5009-48	87
84-5010	91
84-5011	91
84-5012	91
84-5013	91
84-5014	91
84-5015	91
84-5016	91
84-5019	91
84-5020	91
84-5021	91
84-5022	91
84-5023	91
84-5024	91
84-5025	91
84-5029	87
84-5030	87
84-5031	87
84-5032	87
84-5033	87
84-5034	87
84-5035	87
84-6010	134
84-6011	134
84-6100	89
84-6100-3	89
84-6100-48	89
84-6101	89
84-6101-3	89
84-6101-48	89
84-6103	89

PART #	PAGE
84-6103-3	89
84-6103-48	89
84-6104	89
84-6104-3	89
84-6104-48	89
84-6105	89
84-6105-3	89
84-6105-48	89
84-6106	89
84-6106-3	89
84-6106-48	89
84-6107	89
84-6107-3	89
84-6107-48	89
84-7003	96
84-7004	96
84-7005	96
84-7007	96
84-7008	96
84-7009	96
84-7010	96
84-7011	96
84-7012	96
84-7014	96
84-7018	96
84-7019	96
84-7020	96
84-7021	96
84-7022	96
84-7023	96
84-7033	97
84-7034	97
84-7035	97
84-8000	96
84-8001	96
84-8002	96
84-8003	96
84-8004	96
84-8005	96
84-8006	96
84-8007	96
84-8008	96
84-8050	97
84-8051	97
84-8052	97
84-9047	134
84-9048	134
84-9050	134
84-9051	134
84-9053	134
84-9054	134
84-9056	134
84-9057	134
84-9058	134
84-9059	134

PART #	PAGE
84-9060	134
84-9061	134
84-9062	134
84-9063	134
84-9080	154, 174
84-9082	154, 174
84-9084	154, 174
84-9085	154, 174
84-9087	154, 174
84-9088	76, 155, 174
84-9089	155, 174
84-9090	155, 174
84-9095	134
84-9096	134
84-9097	134
84-9098	134
84-9099	134
84-9100	134
84-9101	135
84-9103	135
84-9105	135
84-9106	135
84-9108	135
84-9109	135
84-9110	135
84-9111	135
84-9112	135
84-9113	135
84-9114	135
84-9115	135
84-9124	141
84-9125	141
84-9126	140
84-9130	142
84-9131	142
84-9133	140
84-9134	140
84-9135	140
84-9136	153
84-9137	153
84-9138	153
84-9139	153
84-9140	153
84-9141	153
84-9142	153
84-9143	153
84-9150	153
84-9151	153
84-9152	153
84-9153	153
84-9164	137
84-9165	137
84-9166	137
84-9167	137
84-9168	137
84-9169	137
84-9170	137
84-9171	137
84-9172	137
84-9173	137
84-9174	137
84-9175	137
84-9176	137
84-9177	137
84-9178	137
84-9179	137
84-9180	137
84-9181	137
84-9182	137
84-9183	143
84-9184	143
84-9185	143
84-9186	143, 177
84-9192	136
84-9193	136
84-9196	136
84-9197	136
84-9198	136
84-9199	136
84-9200	136
84-9201	136
84-9202	136
84-9203	136
84-9204	136
84-9205	136
84-9206	136
84-9207	136
84-9208	136
84-9209	136
84-9210	136
84-9211	136
84-9216	143
84-9217	143
84-9218	136
84-9219	136
84-9220	136
84-9221	136
84-9222	136
84-9223	136
84-9224	150
84-9225	150
84-9225-R	150
84-9226	150
84-9226-R	150
84-9227	150
84-9228	150
84-9228-R	150
84-9229	150
84-9229-R	150
84-9230	150
84-9230-R	150
84-9231	150
84-9232	150
84-9233	150
84-9233-R	150
84-9234	150
84-9234-R	150
84-9235	150
84-9236	150
84-9236-R	150
84-9237	150
84-9237-R	150
84-9238	150
84-9238-R	150
84-9239	151
84-9240	151
84-9241	150
84-9242	150
84-9242-R	150
84-9243	150
84-9244	150
84-9244-R	150
84-9245	150
84-9245-R	150
84-9246	150
84-9247	150
84-9248	150
84-9249	151
84-9249-R	151
84-9250	151
84-9250-R	151
84-9251	151
84-9251-R	151
84-9252	151
84-9252-R	151
84-9253	151
84-9253-R	151
84-9254	151
84-9254-R	151
84-9255	151
84-9255-R	151
84-9256	151
84-9256-R	151
84-9257	151
84-9257-R	151
84-9258	151
84-9258-R	151
84-9259	151
84-9260	151
84-9260-R	151
84-9261	151
84-9261-R	151
84-9262	151
84-9263	151
84-9264	151
84-9274	149
84-9275	149
84-9276	146
84-9277	146
84-9278	146
84-9279	146
84-9280	144
84-9281	144
84-9285	159
84-9286	159
84-9287	159
84-9288	159
84-9289	143
84-9290	155
84-9304	148
84-9305	148
84-9306	148
84-9307	148
84-9308	135
84-9309	135
84-9310	135
84-9311	135
84-9317	139
84-9318	139
84-9319	139
84-9320	159
84-9321	144
84-9322	144
84-9323	153
84-9324	153
84-9325	153
84-9326	153
84-9327	153
84-9328	153
84-9331	146
84-9361	150
84-9361-R	150
84-9365	150
84-9365-R	150
84-9367	150
84-9367-R	150
84-9371	150
84-9371-R	150
84-9372	150
84-9375	150
84-9375-R	150
84-9376	150
84-9377	151
84-9377-R	151
84-9382	151
84-9388	151
84-9401	149
84-9402	149
84-9403	149
84-9420	148
84-9421	148
84-9422	158
84-9423	158
84-9424	158
84-9425	156
84-9426	157
84-9427	158
84-9428	139
84-9429	139
84-9430	139
84-9431	139
84-9432	139
84-9433	139
84-9434	139
84-9435	139
84-9436	139
84-9437	139
84-9438	139
84-9439	139
84-9440	139
84-9442	135
84-9443	135
84-9445	143
84-9448	135
84-9449	65, 173
84-9450	63
84-9456	144
84-9459	62
84-9460	62
84-9461	136
84-9463	135
84-9464	151
84-9465	151
84-9467	149
84-9470	149
84-9472	146
84-9473	149
84-9476	146
84-9477	146
84-9480	159
84-9481	159
84-9482	144
84-9484	146
84-9485	144
84-9487	144
84-9496	146
84-9500-R	150
84-9503	150
84-9503-R	150
84-9504	151
84-9504-R	151
84-9505	151
84-9506	151
84-9510	150
84-9510-R	150
84-9512	139
84-9513	139
84-9514	139
84-9515	139
84-9516	139
84-9517	139
84-9518	139
84-9519	139
84-9520	139
84-9521	139
84-9522	139
84-9523	138
84-9524	138
84-9525	138
84-9527	138
84-9528	138
84-9529	139
84-9530	139
84-9531	139
84-9532	139
84-9533	138
84-9534	138
84-9535	138
84-9536	138
84-9537	138
84-9538	139
84-9539	139
84-9540	145
84-9541	141
84-9542	141
84-9543	144
84-9544	144
84-9545	139
84-9546	139
84-9547	138
84-9548	135
84-9550	146
84-9551	144
84-9552	135
84-9553	135
84-9554	135
84-9555	135
84-9556	135
84-9557	135
84-9558	135
84-9559	151
84-9561	90
84-9562	90
84-9563	90
84-9564	90
84-9565	90
84-9566	90
84-9567	146
84-9571	150
84-9572	150

PART #	PAGE
84-9576	151
84-9577	151
84-9579	149
84-9580	141
84-9581	141
84-9582	148
84-9583	148
84-9584	148
84-9585	148
84-9586	148
84-9587	148
84-9593	143
84-9599	143
84-9600	151
84-9601	151
84-9602	151
84-9603	151
84-9604	151
84-9605	151
84-9606	151
84-9607	151
84-9608	151
84-9610	142
84-9611	142
84-9612	143
84-9613	145
84-9614	145
84-9615	145
84-9616	145
84-9618	140
84-9621	144
84-9622	144
84-9624	142
84-9626	144
84-9627	144
84-9628	144
84-9629	159
84-9630	144
84-9631	144
84-9632	144
84-9633	144
84-9634	144
84-9635	136
84-9636	136
84-9637	136
84-9640	134
84-9641	134
84-9642	134
84-9647	134
84-9648	134
84-9649	134
84-9650	134
84-9651	134
84-9652	134
84-9653	134
84-9654	134
84-9655	134
84-9656	160
84-9657	160
84-9660	156
84-9661	156
84-9662	160
84-9664	157
84-9665	157
84-9671	140
84-9672	140
84-9674	160
84-9680	144
84-9681	144
84-9682	144
84-9683	144
84-9684	144
84-9685	159
84-9690	148
84-9691	148
84-9692	148
84-9693	148
84-9694	148
84-9695	148
85-6018	80
85-6019	80
85-6020	80
85-6021	80
85-6023	81
85-6025	80
85-6026	80
85-6028	80
85-6029	80
85-6030	82
85-6031	82
85-6032	82
85-6033	82
85-6034	82
85-6035	82
85-6036	82
85-6040	81
85-6041	81
85-6042	82
85-6043	82
85-6060	84
85-6061	84
85-6062	84
85-6063	84
85-6104	81
85-6120	81
85-6163	81
87020	5
87023	5
87052	5
87100	5
87101	4
87103	4
87104	4
87105	4
87110	5
87111	5
87112	5
87113	5
87170	4
87171	4
87172	4
87173	4
87180	4
87181	4
87182	5
87190	4
87191	4
87192	4
87193	4
87-0000	71
87-0002	71
87-1000	95
87-1001	95
87-1002	95
87-1007	95
87-1008	95
87-2000	71
87-2001	71
87-2002	71
87-2007	71
87-2010	69
87-2012	69
87-2015	69
87-2016	71
87-2017	69
87-2018	71
87-2020	71
87-3000	68
87-3002	68
87-4000	68
87-4002	68
87-4007	68
87-5000	68
87-5001	68
87-5002	68
87-5006	68
87-5007	68
87-5010	68
87-5011	68
87-6000	68
87-6001	68
87-6002	68
87-6006	68
87-6007	68
87-6010	68
87-6011	68
87-7000	69
87-7001	69
87-7002	69
87-7003	69
87-7006	69
87-7007	69
87-7010	69
87-7011	69
87-7012	69
87-7013	69
87-7014	69
87-8000	69
87-8001	69
87-8002	69
87-8003	69
87-8006	69
87-8007	69
87-8010	69
87-8011	69
87-8012	69
87-8013	69
87-8014	69
87-9000	69
87-9001	69
87-9002	69
87-9003	69
87-9006	69
87-9007	69
87-9010	69
87-9011	69
87-9012	69
88-2002	62
88-2081	62
88-2082	62
88-2180	46
88-2303	48
88-2304	48
88-2305	48
88-2379	55
88-2380	46
88-2383	55
88-2387	52
88-2390	46
88-2391	52
88-2580	46
88-2612	44
88-2614	44
88-2618	44
88-2929	42
88-2930	42
88-2931	42
88-3100	47
88-3101	47
88-3102	47
88-3110	47
88-3111	47
88-3150	36
88-3350	36
88-3387	52
88-3391	52
88-3550	36
88-3587	53
88-3591	53
88-4000	89
88-4001	89
88-4002	89
88-4003	89
88-4004	89
88-4005	89
88-4006	89
88-4150	40
88-4350	40
88-4550	40
88-5000	68
88-5002	68
88-5007	68
88-6000	68
88-6001	68
88-6002	68
88-6006	68
88-6007	68
88-6010	68
88-6011	68
88-7000	69
88-7001	69
88-7002	69
88-7006	69
88-7007	69
88-7010	69
88-7011	69
88-7012	69
88-7013	69
88-8000	69
88-8001	69
88-8002	69
88-8003	69
88-8006	69
88-8007	69
88-8010	69
88-8011	69
88-8012	69
88-8013	69
88-9000	69
88-9001	69
88-9002	69
88-9006	69
88-9007	69
88-9010	69
88-9011	69
88-9013	69
88-9014	69
89-3000	68
89-3002	68
89-4000	68
89-4002	68
89-4007	68
89-5000	68
89-5001	68
89-5002	68
89-5006	68
89-5007	68
89-5010	68
89-5011	68
89-6000	68
89-6001	68
89-6002	68
89-6006	68
89-6007	68
89-6010	68
89-6011	68
89-7000	69
89-7001	69
89-7002	69
89-7006	69
89-7007	69
89-7010	69
89-7011	69
89-7012	69
89-8000	69
89-8001	69
89-8002	69
89-8006	69
89-8007	69
89-8010	69
89-8011	69
89-8012	69
89-9000	69
89-9001	69
89-9002	69
89-9006	69
89-9007	69
89-9010	69
89-9011	69
920273	16
99170	16, 177
99170-1	16, 177
99180	16, 177

01

POWER CORDS

CORDONS D'ALIMENTATION

CABLES DE ENERGÍA

4 ABS Power Cords

5 Non-ABS Power Cords

6 RV Power Cords

7 ISO Cords

7 Lift Gate Cables

GROTE ULTRALINK™ POWER CORDS

SUPERIOR CORDS THAT PROVIDE MAXIMUM RELIABILITY IN THE HARSHEST ENVIRONMENTS

PLUG DESIGN

Solid brass nickel-plated pins

Crush resistant weather-tight elastomeric material

CABLE-TO-PLUG SEAL

Wire jacket is molded into the plug sealing it from the elements and eliminating the need for a spring

CRUSH RESISTANT

Grote's UltraLink's crush-resistant design can survive being run over by a heavy duty vehicle while conventional hollow core designs are permanently deformed and rendered useless.

- Grote UltraLink Power Cords exceed minimum legal lamp power delivery requirements for single or double trailer configurations.
- UltraLink zinc die-cast plugs are filled with elastomeric material that resists crushing and acts as potting to seal solid brass terminals from moisture.
- A special adhesive bonds the cable to the plug, eliminating the need for a supporting spring and preventing moisture from entering the back of the plug.
- Coiled versions have excellent recoil memory, plus chemical and abrasion resistance.
- Solid brass terminals are corrosion resistant, and provide superior current capacity with minimal voltage drop.
- Premium ABS cords' advanced polymer jacketing material provides complete sealing and abrasion protection between -55°F and 190°F.
- Grote UltraLink Power Cords meet SAEJ560, J2394 (ABS cords), and J2222 (coiled cord versions).

Grote's Got It!

ABS POWER CORDS

CRUSH RESISTANT | ALL WEATHER | SAE J560™ STANDARD | SAE J2394™ STANDARD

87105

87100

87101

87190

87171

ULTRALINK™

- UltraLink™ power cords exceed minimum legal lamp power delivery requirements for single or double trailer configurations
- Zinc die-cast plugs are filled with elastomeric material that resists crushing & acts as potting to seal solid brass terminals from moisture
- Provides excellent recoil memory, chemical, and abrasion resistance
- Adhesive bonds cable to plug, eliminating need for supporting spring and preventing moisture from entering the back of the plug
- Solid brass terminals are corrosion resistant, and provide superior current capacity with minimal voltage drop
- Advanced polymer jacketing material provides complete sealing and abrasion protection between -55°F and 190°F (Premium Versions)

COILED PREMIUM ABS — ULTRALINK™

PART #	LENGTH	LEADS	JACKET MATERIAL & GAUGE	JACKET	PACK
87104	15'	12"	Premium ABS, 1/8, 2/10, 4/12 GA	Green	1
87105	20'	12" & 36"	Premium ABS, 1/8, 2/10, 4/12 GA	Green	1

COILED ABS — ULTRALINK™

PART #	LENGTH	LEADS	JACKET MATERIAL & GAUGE	JACKET	PACK
87100	12'	12"	ABS, 1/8, 2/10, 4/12 GA	Green	1
87101	15'	12"	ABS, 1/8, 2/10, 4/12 GA	Green	1
87170	15'	12" & 48"	ABS, 1/8, 2/10, 4/12 GA	Green	1

STRAIGHT PREMIUM ABS — ULTRALINK™

PART #	LENGTH	JACKET MATERIAL & GAUGE	JACKET	PACK
87190	7'	Premium ABS, 1/8, 2/10, 4/12 GA	Green	1
87191	8'	Premium ABS, 1/8, 2/10, 4/12 GA	Green	1
87192	9'	Premium ABS, 1/8, 2/10, 4/12 GA	Green	1
87171	12'	Premium ABS, 1/8, 2/10, 4/12 GA	Green	1
87172	15'	Premium ABS, 1/8, 2/10, 4/12 GA	Green	1
87173	20'	Premium ABS, 1/8, 2/10, 4/12 GA	Green	1

UltraLink™

SEE PAGE 3 TO LEARN MORE ABOUT THE BENEFITS OF USING GROTE'S SUPERIOR ULTRALINK CABLES.

ULTRALINK™

- UltraLink™ power cords exceed minimum legal lamp power delivery requirements for single or double trailer configurations
- Zinc die-cast plugs are filled with elastomeric material that resists crushing & acts as potting to seal solid brass terminals from moisture
- Adhesive bonds cable to plug, eliminating need for supporting spring and preventing moisture from entering the back of the plug
- Solid brass terminals are corrosion resistant, and provide superior current capacity with minimal voltage drop

COILED NON-ABS, 1/10, 6/12 GA — ULTRALINK™

PART #	LENGTH	LEADS	JACKET MATERIAL & GAUGE	JACKET	PACK
87020	12'	12"	Non ABS, 1/10, 6/12 GA	Black	1
87023	15'	12"	Non ABS, 1/10, 6/12 GA	Black	1
87180	15'	12" & 72"	Non ABS, 1/10, 6/12 GA	Black	1
87181	15'	12" & 48"	Non-ABS, 1/10, 6/12 GA	Black	1

COILED NON-ABS, 1/12, 6/14 GA — ULTRALINK™

PART #	LENGTH	LEADS	JACKET MATERIAL & GAUGE	JACKET	PACK
87110	12'	12"	Non ABS, 1/12, 6/14 GA	Black	1
87111	15'	12"	Non ABS, 1/12, 6/14 GA	Black	1
87112	15'	12" & 72"	Non ABS, 1/12, 6/14 GA	Black	1
87113	15'	12" & 48"	Non ABS, 1/12, 6/14 GA	Black	1

STRAIGHT NON-ABS — ULTRALINK™

PART #	LENGTH	JACKET MATERIAL & GAUGE	JACKET	PACK
87052	12'	Non-ABS, 1/10, 6/12 GA	Black	1
87182	15'	Non-ABS, 1/10, 6/12 GA	Black	1

Did You Know?

ONE OF THE MOST COMMON CAUSES OF ELECTRICAL FAILURE IS CORROSION!

Grote's Ultra-Seal corrosion preventive sealant is a key part of protecting any plug and socket connection.

- Ultra-Seal provides an economical and reliable protection from dirt, salt, water and other harmful chemicals that can cause costly downtime.
- See page 16 for Ultra-Seal products

NON-ABS POWER CORDS

CRUSH RESISTANT | SAE J560™ STANDARD | SAE J2222™ STANDARD

87020

87180

87111

87052

87182

POWERCOILS

81-0612

- Commonly used in recreational vehicle (R.V.) applications (boat, snowmobile, utility trailers)
- Cords are manufactured with extremely flexible material and can withstand extreme temperatures. Rated at -65°C (-85°F)
- Ultra violet and harmful chemical resistant
- Extended springs for superior plug support

6-WAY

PART #	LENGTH	LEADS	STYLE	GAUGE	JACKET	PACK
81-0610	10'	12"	Coiled	6/14 GA	**Black**	1
81-0612	12'	12"	Coiled	6/14 GA	**Black**	1

81-0412

4-WAY

PART #	LENGTH	LEADS	STYLE	GAUGE	JACKET	PACK
81-0410	10'	12"	Coiled	4/14 GA	**Black**	1
81-0412	12'	12"	Coiled	4/14 GA	**Black**	1

POWER CORD/GLADHAND SUPPORT HOLDER

81-0141

81-0142

- Provides protection & easy storage of electrical cables and air lines when not in use
- High impact material designed to withstand all elements

PART #	DESCRIPTION	PACK SIZE
81-0141	3 Function – 1 power cord and 2 gladhands	1
81-0142	4 Function – 2 power cord and 2 gladhands	1

ISO AUXILIARY CABLES

SAE INTERNATIONAL SAE J560™ STANDARD
SAE INTERNATIONAL SAE J2222™ STANDARD

- Most commonly used for tanker, reefer, and live-bottom trailer applications, these cables are perfectly suited to deliver auxiliary power for any trailer or equipment need
- These cables can provide power for up to six additional circuits
- Heavy duty die-cast, ISO plugs
- Inverted male ground pin to prevent improper connection
- 1/8, 2/10, 4/12 Gauge 100% copper cable
- Yellow ABS cable meets SAE J2222 specifications; Plug and socket meet SAE J560
- Excellent recoil memory
- Replacement plug and socket also available (82-1044, 82-1043)

Specifications
Plug: SAE J560
Cable: SAE J222 (Coiled)
Cord: 1/8 GA, 2/10 GA, 4/12 GA

PART #	DESCRIPTION
81-2012-S	ISO Auxiliary, Straight Cord 12', **Yellow**
81-2015	ISO Auxiliary, Coiled Cord 15', w/12" Leads, **Yellow**
81-2015-40	ISO Auxiliary, Coiled Cord 15', w/40" Leads, **Yellow**
81-2015-S	ISO Auxiliary, Straight Cord 15', **Yellow**

81-2015

81-2015-S

LIFT GATE CABLES

- Ideal for lift gates, roll-tops, and remote battery-charging applications
- Available in single pole, single-to-dual pole, dual pole, and dual pole with vertical pins
- Die-cast zinc plugs
- External ground – 4 gauge
- Fine stranded copper wire provides maximum flexibility
- Temperature rating -65°C to (-85°F); Single Pole
- 200 AMP carrying capacity

Specifications
Cord: 4 GA, 200A (Carrying Capacity)
Copper Stranding: Fine
Operating Range: -40°F to 174°F / -40°C to 79°C

PART #	DESCRIPTION
81-2112	Lift Gate, Coiled Cord, Single Pole, 12', w/12" Leads, **Green**
81-2115	Lift Gate, Coiled Cord, Single Pole, 15', w/12" Leads, **Green**
81-2212	Lift Gate, Coiled Cord, Dual Pole, 12', w/12" Leads, **White/Black**
81-2212-V	Lift Gate, Coiled Cord, Dual Pole Vertical Pins, 12', w/12" , **White/Black**
81-2215	Lift Gate, Coiled Cord, Dual Pole, 15', w/12" Leads, **White/Black**
81-2215-DS	Lift Gate, Coiled Cord, Dual & Single Pole, 15', w/12" Leads, **White/Black**
81-2215-V	Lift Gate, Coiled Cord, Dual Pole Vertical Pins, 15', w/12" Leads, **White/Black**
81-2312	Lift Gate, Straight Cord, Single Pole, 12', **Green**
81-2315	Lift Gate, Straight Cord, Single Pole, 15', **Green**
81-2412	Lift Gate, Straight Cord, Dual Pole, 12', **White/Black**
81-2415	Lift Gate, Straight Cord, Dual Pole, 15', **White/Black**

81-2215
81-2215-V

81-2115

81-2312

81-2415

02

TRAILER CONNECTORS

CONNECTEURS POUR REMORQUES

CONECTORES PARA TRAILERS Y REMOLQUES

10 Trailer Sockets

11 Nose Boxes & Socket Breakers

12 Trailer Plugs

16 Junction Boxes

16 Corrosion Preventive Sealant

GROTE'S TRAILER CONNECTORS AND COMMUNICATION PRODUCTS ENSURE SUFFICIENT POWER IS DELIVERED TO THE ENTIRE VEHICLES LIGHTING AND SAFETY SYSTEM.

HEAVY DUTY 7 POLE SOCKETS

SAE INTERNATIONAL
SAE J560™ STANDARD

82-1002

- Die-cast housing for superior corrosion resistance
- Solid brass pin terminals for best conductivity
- Meets and exceeds SAE J560 specifications
- Terminals accept 16-10 gauge wires; 8 gauge ground wire
- Sloped socket barrel allows for moisture drainage
- 40 AMP @ 6-28V DC
- 2, 1/2" mounting holes
- Circuit identification on the back of the socket
- Female ground pin for (ISO) to prevent improper connections

82-2145

82-1043

#	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 & Hazard Signal	12 GA
4	Red	Stop Lamps & Anti-Lock Devices	10 GA
5	Green	Right Turn Signal & Hazard Signal	12 GA
6	Brown	Tail, Rear Clearance, Marker and License Plate Lamps	12 GA
7	Blue	Auxiliary Circuit/ABS	10 GA

SOCKET #	MATERIAL	TERMINALS	PART #
7	Zinc Die-Cast	Enclosed, split pin	**82-1002**
7	Zinc Die-Cast	Exposed, solid pin	**82-1005**
7	Nylon	Enclosed, solid pin	**82-2145**
7	Nylon	ISO Socket	**82-1043**

7 POLE R.V. SOCKETS

82-1058

- Made of lightweight, high impact nylon
- Socket lid has a slot for proper drainage, tin plated copper alloy terminals
- 82-1060 fits Ford style and universal mount brackets
- Easy twist-in and lock assembly for factory installed brackets & hitches
- Fits GM and Nissan trucks and SUV's

82-1060

82-1059

NO.	COLOR	CIRCUIT	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 & Left Hand Turn Signal	14 GA
6	Brown	Stop & Right Hand Turn Signal	14 GA
7	Yellow	Auxiliary Circuit	14 GA

SOCKET #	MATERIAL	DESCRIPTION	PART #
7	Nylon	R.V. Socket Only	**82-1058**
7	Nylon	R.V. Socket Only	**82-1060***
7	Nylon	R.V. Plug & Socket Kit (includes 82-1056 & 82-1058)	**82-1050**
7	Nylon	Twist-In & Lock Socket	**82-1059***

** See page 12 for Harness Adapters*

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)
- Easy snap-in assembly designed for truck and sport utility vehicles and when hauling multiple trailers
- Eliminates the need for an adapter; mounting bracket included
- Will plug into any Ford or GM vehicle built after 2001 (selected Nissan models 2004+)

82-1055NB

82-1055

PLUG #	MATERIAL	DESCRIPTION	PART #
7	Nylon	7 Way R.V. and 4 Pole Flat w bracket	**82-1055**
7	Nylon	7 Way R.V. and 4 Pole Flat	**82-1055NB**

PLUG AND SOCKET BOOT

PLUG / SOCKET #	DESCRIPTION	PART #
7	Plug Boot – complete protection	**82-2142**
7	Socket Boot – complete protection	**82-2144**

82-2142

82-2144

7- WAY SOCKET BREAKERS

- Heavy duty die-cast material; Meets SAE J560 specifications

PART #	RATED	DESCRIPTION
82-0855	20 AMP	Split Pin, Metal Breakers
82-0856	30 AMP	Split Pin, Metal Breakers
82-0853		Split Pin, Without Breakers

SAE INTERNATIONAL
SAE J560™ STANDARD

82-0855

NOSEBOXES

- Fits standard mounting hole patterns
- Includes mounting hardware, grommet and gasket

PART #	DESCRIPTION	DIMENSIONS	MATERIAL
82-0861	Deep Nose Box	3 1/2"	Nylon
82-0859	Deep Nose Box	3 1/8"	Die-Cast
82-0860	Low Profile Nose Box	1 7/8"	Die-Cast
82-0850*	Low Profile Nose Box	1 7/8"	Die-Cast

** Includes 20A Split-Pin Socket Breaker*

82-0860

82-0850

82-0861

82-0859

HEAVY DUTY 7 POLE PLUGS

SAE INTERNATIONAL
SAE J560™ STANDARD

- Die-cast housing for superior corrosion resistance
- Meets and exceeds SAE J560 specifications
- Plated steel cable guard prevents cable chafing
- Circuit identification on the back of the plug insert
- Male ground pin for (ISO) to prevent improper connection with standard 7 pole plugs

PLUG #	MATERIAL	DESCRIPTION	PART #
7	Zinc Die-Cast	Plug only	**82-1001**
7	Nylon	Plug only	**82-2140**
7	Zinc Die-Cast	Plug w/Guard Spring	**82-1019**
7	Stainless Steel	Guard Spring only	**82-2141**
7	Die-Cast	ISO plug w/Guard Spring	**82-1044**

7 POLE R.V. PLUGS

- Made of lightweight, high impact nylon

PLUG #	MATERIAL	DESCRIPTION	PART #
7	Nylon	R.V. Plug Only	**82-1056**
7	Nylon	R.V. Plug & Socket Kit (includes 82-1056 & 82-1058)	**82-1050**

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
- Ideal for boat trailers, campers and utility vehicles

PLUG#	MATERIAL	DESCRIPTION	PART #
7	Nylon	7 Way RV to 4 Pole Flat	**82-2146**
7	Nylon	7 Way RV to 5 Pole Flat	**82-2148**
7	Nylon	7 Way RV to 6 Pole Round, Ctr Pin, Brake	**82-2149**
7	Nylon	7 Way RV to 6 Pole Round, Ctr Pin, Auxiliary	**82-2154**
6	Nylon	6 Pole Round to 4 Pole Flat	**82-2147**

** See page 10 for Socket Connectors*

ADAPTERS

** See page 10 for Socket Connectors*

82-1063 | T CONNECTOR (FOR 5TH WHEEL & BUMPER MOUNT SOCKET)
- Plug & play without splicing into existing OEM harness
- Fits GM & Ford trucks/SUV's; Chrysler trucks/SUV's w/ 82-1062 adapter

82-1062 | RECTANGULAR-TO-ROUND HARNESS ADAPTER
- Adapter for OEM harnesses
- Mates w/ Grote socket # 82-1060, 82-1055, 82-1059, T-Connector #82-1063

82-1061 | HARNESS EXTENSION ADAPTER
- Adapter mates with socket # 82-1060, 82-1055
- 4' harness extension plugs into existing socket & splices into OEM harness

HEAVY DUTY 6 POLE SOCKETS

- Die-cast housing for superior corrosion resistance
- Solid brass pin terminals for best conductivity
- Terminals accepts up to 12 gauge wires
- 2, 1/2" mounting holes; Stainless steel spring
- Circuit identification on the back of the socket

SOCKET #	MATERIAL	TERMINALS	PART #
6	Zinc Die-Cast	Enclosed, split pin	**82-1016**

PLUG/SOCKET #	DESCRIPTION	PART #
6	Socket Boot – Complete protection	**82-1012**

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

HEAVY DUTY 6 POLE PLUGS

- Die-cast housing for superior corrosion resistance
- Plated steel cable guard prevents cable chafing
- Circuit identification on the back of the plug insert

PLUG #	MATERIAL	DESCRIPTION	PART #
6	Zinc Die-Cast	Plug only	**82-1011**
6	Zinc Die-Cast	Plug with Guard Spring	**82-1010**

HEAVY DUTY 4 POLE SOCKETS

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	**82-1040**

(includes 82-1020 & 82-1021)

NO.	COLOR	CIRCUITS
1	White	Ground Return
2	Green	Right Turns & Brake Lights
3	Yellow or Red	Left Turn & Brake Lights
4	Brown	Tail Lights

HEAVY DUTY 4 POLE PLUGS

PLUG #	MATERIAL	DESCRIPTION	PART #
4	Zinc Die-Cast	Plug with Guard Spring	**82-1022**
4	Zinc Die-Cast	Plug	**82-1021**
4	Stainless Steel	Guard Spring	**82-1023**

MOLDED CONNECTOR ASSEMBLIES

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

DESCRIPTION	PART #
2 Pole Molded Connector Assembly	**82-1027**
4 Pole Molded Connector Assembly	**82-1025**

LIFT GATE – CHARGING PLUGS & SOCKETS

82-1041

82-0851

82-2144

82-1042 82-0852

- Designed for lift gate applications and as an alternative power source
- Solid brass pin terminals for best conductivity
- 2, 1/2" mounting holes; stainless steel spring
- Terminals accepts 4 gauge cable
- 200 AMP heavy die-cast construction

SOCKET

PART #	SOCKET #	DESCRIPTION	MATERIAL
82-1041	2	Socket – Dual Pole	Zinc Die-Cast
82-0851	1	Socket – Single Pole	Zinc Die-Cast
82-2144		Socket Boot	Rubber

PLUG

PART #	PLUG #	DESCRIPTION	MATERIAL
82-1042	2	Plug & Guard Spring – Dual Pole	Zinc Die-Cast
82-0852	1	Plug & Guard Spring – Single Pole	Zinc Die-Cast

PLUG & SOCKET COMBO

PART #	PLUG/SOCKET#	DESCRIPTION	MATERIAL
82-0950	1	Plug & Socket – Single Pole	Zinc Die-Cast

DUMP TRUCK & TARP TRAILER PLUGS & SOCKETS

VERTICAL PIN

82-1041V

82-2144 82-1042V

- Designed for dump truck, tarp and grain trailer applications; also alternative power source
- Solid brass pin terminals for best conductivity
- 2, 1/2" mounting holes; stainless steel spring
- Terminals accepts 4 gauge cable(s)
- 200 AMP heavy die-cast construction
- Vertical pin plug/socket = set screw termination

SOCKET

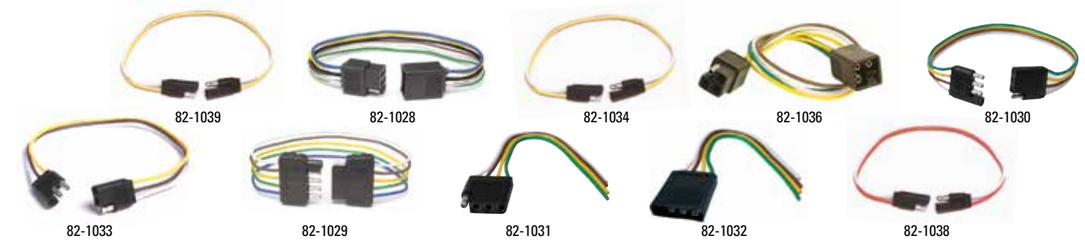
PART #	SOCKET #	DESCRIPTION	MATERIAL
82-1041V	2	Socket – Dual Pole	Zinc Die-Cast
82-2144		Socket Boot	Rubber

PLUG

PART #	PLUG #	DESCRIPTION	MATERIAL
82-1042V	2	Plug & Guard Spring – Dual Pole	Zinc Die-Cast

MOLDED TRAILER CONNECTORS

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


82-1039 82-1028 82-1034 82-1036 82-1030
82-1033 82-1029 82-1031 82-1032 82-1038

PLUG #	GAUGE	CONNECTOR HEAD	LENGTH	WIRE COLORS	CONNECTOR END	PART #
6	16	Square	12"	**White**, **Yellow**, **Brown**, **Green**, **Blue**, **Black**	Male & Female	**82-1028**
5	16	Flat	12"	**White**, **Yellow**, **Brown**, **Green**, **Blue**	Male & Female	**82-1029**
4	18	Square	12"	**White**, **Yellow**, **Brown**, **Green**	Male & Female	**82-1036**
4	16	Flat	12"	**White**, **Yellow**, **Brown**, **Green**	Male & Female	**82-1030**
4	16	Flat	6"	**White**, **Yellow**, **Brown**, **Green** (blunt cut)	Female	**82-1031**
4	16	Flat	6"	**White**, **Yellow**, **Brown**, **Green** (blunt cut)	Male	**82-1032**
3	16	Flat	12"	**White**, **Yellow**, **Brown**	Male & Female	**82-1033**
2	16	Flat	12"	**White**, **Yellow**	Male & Female	**82-1034**
2	16	Flat	24"	**White**, **Red**	Male & Female	**82-1038**
2	12	Flat	12"	**White**, **Black**	Male & Female	**82-1039**
2	10	Flat	12"	**White**, **Black**	Male & Female	**82-1035**

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**
4, 6, 7	Steel	4, 6 and 7 pole socket bracket	**82-1052**

82-1052 43942 43402

PROTECTIVE CAP – 7 POLE PLUGS

- Protective cap for 7 pole plugs
- Heavy duty glass-filled plastic housing
- Spring-loaded for secure locking
- Keeps plugs clean when not in use
- Protects the electrical contacts from dirt and moisture
- 2 mounting holes

PART #	MATERIAL	DESCRIPTION	PLUG #
82-1051	Plastic	Protective cap for 7 pole plugs	7

82-1051

SEVEN TERMINAL JUNCTION BOX

82-1000

- 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

351044

- 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 (retained in the cover)
- Ample area for wire and cable – 1 cable entrance fitting

351044

7-WAY SYSTEM CHECKER

920273

- Solid brass pin
- LED light source
- Lexan housing

920273

CLEANING BRUSH – 7 POLE PLUGS & SOCKETS

83-6561

- Engineered to properly fit 7 pole plugs and sockets
- Removes any unwanted corrosion build up
- Easily stored in a tool box or maintenance kit
- Stainless steel bristles and heavy duty plastic housing

PART #	MATERIAL	DESCRIPTION	PLUG / SOCKET #
83-6561	Plastic	Plastic housing w/ steel bristles	7

ULTRA-SEAL CORROSION PREVENTIVE SEALANT DISPLAY

99170-1

99170

99180

- 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

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

G24/7

ONLINE CUSTOMER SERVICE PLATFORM

For existing customers, this **COMPLIMENTARY SERVICE** is an innovative way to place orders, track order status and view all your Grote® product activity. From the convenience of your computer or mobile device, you can now access previously unavailable information that will help you more successfully manage your business and inventory.

NEW FEATURES

- Pay invoices online any time; easy credit card processing
- Reprint packing lists and invoices
- Order entry online by customer part number
- Upload from Microsoft® Excel
  Customers can also upload items from Microsoft Excel to create orders
- Refer and reorder using "My List"
  The user can create a list of products for future reference or to reorder
- E-mail notification
  When a new order is created and when an order is shipped, unlimited recipients can receive an instant e-mail notification.

USING G24/7, YOU CAN QUICKLY & EASILY

- Track the status of current orders
- Check the status of backorders
- Check for substitutions, replacements for obsolete parts
- Check Grote inventory availability
- Confirm ship dates
- Link to shipping carrier
- View invoice information
- Track credits
- View weight and packaging information
- View previously placed orders
- View product technical information
- Reprint packing lists and invoices

CONTACT US

CALL US AT 1-800-268-5612, OR CHECK OUT OUR G24/7 ONLINE CUSTOMER SERVICE PLATFORM AT SHOP.GROTE.COM

03

AIR PRODUCTS

PRODUITS D'AIR

PRODUCTOS DE AIRE

20 Coiled Air

22 Gladhands

24 Seals and Airline Accessories

25 Rubber Air Lines

26 Power Cord & Air Assemblies

28 Suspension Products

30 EZ Claw® Suspension System

31 Air Brake Tubing

GROTE CARRIES AN EXTENSIVE LINE OF AIR PRODUCTS REQUIRED FOR OPTIMUM SYSTEM PERFORMANCE.

FROM POWER CORD AND AIR ASSEMBLIES TO SEALS AND SCREENS, OUR AIR PRODUCTS ARE DESIGNED AND MANUFACTURED TO MEET OR EXCEED THE TOUGHEST INDUSTRY STANDARDS.

- Grote's 3-IN-1 Ultralink™ Power Cord and Air Assemblies are proudly made in North America
- Our hoses are designed to withstand harsh conditions including extreme temperatures and harmful chemicals, our "Low Temperature" products are even more rugged
- We offer tightly coiled air tubing assemblies that provide excellent recoil memory, while minimizing sagging or kinking to ensure a long service life
- Grote's exclusive EZ Claw System is the premier automatic suspension system for protecting power cords, airlines, and hydraulic hoses
- We go the extra mile, with heavy gauge steel springs to provide superior cable support, thread sealant added to all brass connectors for a leak-free seals, and high quality 1/2" NPT DOT brass fittings that come standard on all models
- Remember: when it comes to air products, Red = Emergency; Blue = Service

THE GROTE ADVANTAGE

Grote's coiled air hoses are designed to withstand harsh conditions including extreme temperatures and harmful chemicals. The tightly coiled tubing provides excellent recoil memory while minimizing sagging or kinking.

Extremely flexible air tubing has **excellent recoil memory** even under extreme temperatures

Brass handle for **easy coupling and uncoupling**

Swivel fittings, extra-long spring and thread sealant provide **additional strain relief** and ensure an **air tight connection**

LOW TEMPERATURE COILED AIR

DOT COMPLIANT | SAE INTERNATIONAL SAE J844™ STANDARD

- Low temperature, double-jacketed coils remain flexible in extremely cold temperatures
- Operating temperature of -65°C (-85°F) to 104°C (220°F)
- Nylon Hose meets SAE J844, DOT FMVSS (49 CFR 571.106) & FMCSA (393.45) specifications
- Includes a swivel fitting for the tractor-end connection
- Brass handle enables a solid grip for coupling/uncoupling hoses

COLD RATED -65°C -85°F

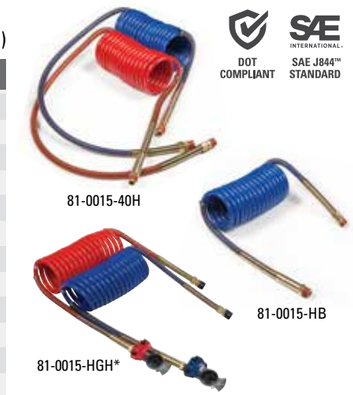
PART #	COLOR	WORKING LENGTH	LEADS	PACK
12'				
81-0012-C	Red & Blue	12'	6"	2
81-0012-CGH*	Red & Blue	12'	6"	2
15'				
81-0015-C	Red & Blue	15'	12"	2
81-0015-RC	Red	15'	12"	1
81-0015-BC	Blue	15'	12"	1
81-0015-CGH*	Red & Blue	15'	12"	2
81-0015-40C	Red & Blue	15'	12" & 40"	2
81-0015-40RC	Red	15'	12" & 40"	1
81-0015-40BC	Blue	15'	12" & 40"	1
20'				
81-0020-C	Red & Blue	20'	12"	2
81-0020-RC	Red	20'	12"	1
81-0020-BC	Blue	20'	12"	1

** Includes Red & Blue Gladhands*

COILED AIR WITH BRASS HANDLE

- Nylon Hose meets SAE J844, DOT FMVSS (49 CFR 571.106) & FMCSA (393.45) specifications
- Operating temp: -40°C (-40°F) to 104°C (220°F), Brass handle for solid grip (coupling/uncoupling)

DOT COMPLIANT | SAE INTERNATIONAL SAE J844™ STANDARD



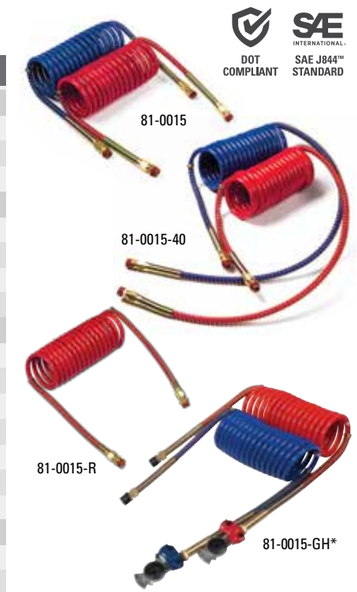
PART #	COLOR	WORKING LENGTH	LEADS	PACK
12'				
81-0012-H	Red & Blue	12'	6"	2
81-0012-HR	Red	12'	6"	1
81-0012-HB	Blue	12'	6"	1
15'				
81-0015-H	Red & Blue	15'	12"	2
81-0015-HR	Red	15'	12"	1
81-0015-HB	Blue	15'	12"	1
81-0015-HGH*	Red & Blue	15'	12"	2
81-0015-40H	Red & Blue	15'	12" & 40"	2
81-0015-40HR	Red	15'	12" & 40"	1
81-0015-40HB	Blue	15'	12" & 40"	1
81-0015-40HGH*	Red & Blue	15'	12" & 40"	2

** Includes Red & Blue Gladhands*

COILED AIR

- Nylon Hose meets SAE J844, DOT FMVSS (49 CFR 571.106) & FMCSA (393.45) specifications
- Operating temp: -40°C (-40°F) to 104°C (220°F), Swivel fittings on both ends for easy hook-up

DOT COMPLIANT | SAE INTERNATIONAL SAE J844™ STANDARD



PART #	COLOR	WORKING LENGTH	LEADS	PACK
8'				
81-0008	Red & Blue	8'	6"	2
81-0008-R	Red	8'	6"	1
81-0008-B	Blue	8'	6"	1
12'				
81-0012	Red & Blue	12'	6"	2
81-0012-R	Red	12'	6"	1
81-0012-B	Blue	12'	6"	1
81-0012-GH*	Red & Blue	12'	6"	2
15'				
81-0015	Red & Blue	15'	12"	2
81-0015-R	Red	15'	12"	1
81-0015-B	Blue	15'	12"	1
81-0015-GH*	Red & Blue	15'	12"	2
81-0015-40	Red & Blue	15'	12" & 40"	2
81-0015-40R	Red	15'	12" & 40"	1
81-0015-40B	Blue	15'	12" & 40"	1
20'				
81-0020	Red & Blue	20'	12"	2
81-0020-R	Red	20'	12"	1
81-0020-B	Blue	20'	12"	1

** Includes Red & Blue Gladhands*

5TH WHEEL SLIDER HOSE

- 54" air hose w/ 1/4" NPT male brass connectors, Nylon 1/4" tubing meets SAE J844 Type A spec
- Includes swivel fittings & heavy duty springs on both ends for easy installation, added strain relief

DOT COMPLIANT | SAE INTERNATIONAL SAE J844™ STANDARD

PART #	DESCRIPTION	PACK
81-0054	54", 5th wheel air hose with dual swivel and springs	1

GLADHANDS

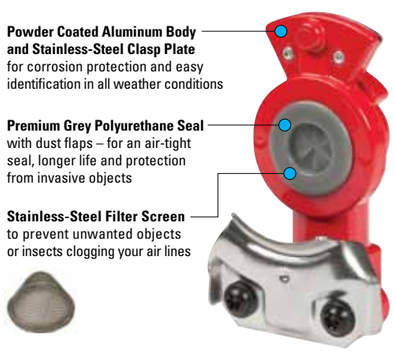
STANDARD & ANGLED

- Meets or exceed SAE J318 standards
- Aluminum castings with powder-coated steel clasp plates (service and emergency)
- Permanent clamp screws; Includes a large face rubber seal
- Polarized emergency and service gladhands
- Replacement seals available in rubber or polyethylene
- Port "A" comes standard as uplugged – 38° gladhands

PART #	MATERIAL	DESCRIPTION	COLOR	SCREEN	PACK
81-0001	Aluminum	Universal	–	No	1
81-0001-S	Aluminum	Universal	–	Yes	1
81-0001-R	Aluminum	Emergency	Red	No	1
81-0001-RS	Aluminum	Emergency	Red	Yes	1
81-0001-B	Aluminum	Service	Blue	No	1
81-0001-BS	Aluminum	Service	Blue	Yes	1
81-0001-38R	Aluminum	38° Emergency	Red	No	1
81-0001-38RS	Aluminum	38° Emergency	Red	Yes	1
81-0001-38B	Aluminum	38° Service	Blue	No	1
81-0001-38BS	Aluminum	38° Service	Blue	Yes	1

OEM-SPEC PREMIUM GLADHANDS

STANDARD & ANGLED



GROTE'S HIGHEST QUALITY, PROFESSIONAL-GRADE GLADHANDS

PROVIDES SUPERIOR PROTECTION FROM CORROSION, BLOCKED AIR LINES AND COSTLY DOWNTIME!

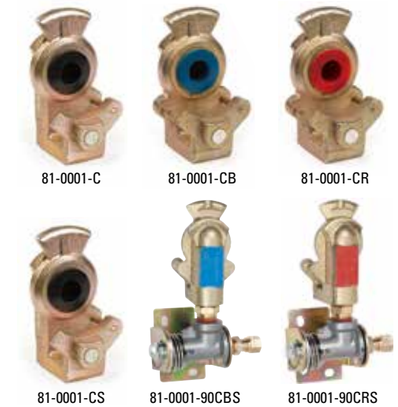
- Available in standard, shutoff, 38° and our new 45° swingers
- All Grote gladhands meet or exceed SAE J1318 standards and are polarized for easy identification (emergency and service)

PART #	MATERIAL	DESCRIPTION	COLOR	SCREEN	PK
81-0011	Aluminum/SS	Universal, Polyseal	Grey	Yes	10
81-0011-B	Aluminum/SS	Service, Polyseal	Blue	Yes	10
81-0011-R	Aluminum/SS	Emergency, Polyseal	Red	Yes	10
81-0011-38B	Aluminum/SS	38° Service, Polyseal	Blue	Yes	10
81-0011-38R	Aluminum/SS	38° Emergency, Polyseal	Red	Yes	10
81-0011-45B	Aluminum/SS	45° Service, Polyseal	Blue	Yes	1
81-0011-45R	Aluminum/SS	45° Emergency, Polyseal	Red	Yes	1
81-0011-SB	Aluminum/SS	Service Shutoff, Polyseal	Blue	Yes	1
81-0011-SR	Aluminum/SS	Emerg. Shutoff, Polyseal	Red	Yes	1

CAST IRON PREMIUM GLADHANDS

- Cast iron construction for extreme durability
- Polyurethane seals provides a reliable seal and longer service life
- Meets or exceeds J1318 standards

PART #	DESCRIPTION	COLOR	SCREEN	PK
81-0001-C	Universal, Polyseal	Black	No	1
81-0001-CR	Emergency, Polyseal	Red	No	1
81-0001-CB	Service, Polyseal	Blue	No	1
81-0001-CS	Universal, Painted, Polyseal	Black	Yes	1
81-0001-CRS	Emergency, Painted, Polyseal	Red	Yes	1
81-0001-CBS	Service, Painted, Polyseal	Blue	Yes	1
81-0001-90CRS	Emergency, 90° Swinger, S/S Plate, Polyseal	Grey	Yes	1
81-0001-90CBS	Service, 90° Swinger, S/S Plate, Polyseal	Grey	Yes	1



HANDLE STYLE – SURFACE MOUNT

SHUTOFF GLADHANDS

- Meets or exceed SAE J318 standards
- Shut-off arm, surface mount
- 3/8" port, full-face rubber seals

PART #	MATERIAL	DESCRIPTION	COLOR	SCREEN	PACK
81-0001-SR	Aluminum	Shut-Off, Emergency	Red	No	1
81-0001-SB	Aluminum	Shut-Off, Service	Blue	No	1

KNOB STYLE – BULKHEAD

SHUTOFF GLADHANDS

- Meets or exceed SAE J318 standards
- Low-profile knob, 3/8" port, full face rubber seal

PART #	MATERIAL	DESCRIPTION	COLOR	SCREEN	PACK
81-0001-SBR	Aluminum	Shut-Off, Emergency	Red	No	1
81-0001-SBB	Aluminum	Shut-Off, Service	Blue	No	1
81-0001-SBRS	Aluminum	Shut-Off, Emergency	Red	Yes	1
81-0001-SBBS	Aluminum	Shut-Off, Service	Blue	Yes	1

GLADHANDLES

- Provides strain relief and prevents kinking of the air coil
- Anodized coating provides superior corrosion resistance
- Allows user to couple/uncouple with ease
- Includes thread sealant on the male end

PART #	MATERIAL	FEATURES	COLOR	PACK
81-0125	Aluminum	Anodized	Red & Blue	2
81-0124	Rubber	Thermo-Elastomeric	Red & Blue	2

GLADHAND ACCESSORIES

PART #	DESCRIPTION	PACK
81-0126	Dummy Gladhand with 18" Stainless Steel Cable	1
81-0126T	Dummy Gladhand with 18" Stainless Steel Cable and Heavy Duty Eyelet	1

GLADHAND LOCK

- Prevents unwanted connection to tractors/trailers
- Made of glass filled nylon; Includes 2 keys – keyed alike

PART #	DESCRIPTION	PACK
81-0149	Gladhand Lock	1

SEALS AND SCREENS

** Recommend to use a filter screen at all times*

- Seals resist oil, chemicals, ozone
- Improved wear resistance lengthens service life
- Retail and bulk pack options

PART #	MATERIAL	FEATURES	COLOR	PACK
PROTECTIVE DUST FLAP				
81-0103-25	Polyurethane	Protective Dust Flap*	Grey	25
81-0102-100	Rubber	Protective Dust Flap*	**Black**	100
81-0102-08	Rubber	Protective Dust Flap*	**Black**	8
LARGE FACE WITH BUILT-IN FILTER SCREEN				
81-0113-100R	Polyurethane	w/ Built-In Filter Screen	Red	100
81-0113-08R	Polyurethane	w/ Built-In Filter Screen	Red	8
81-0113-100B	Polyurethane	w/ Built-In Filter Screen	Blue	100
81-0113-08B	Polyurethane	w/ Built-In Filter Screen	Blue	8
LARGE FACE				
81-0110-100R	Polyurethane	Large Face	Red	100
81-0110-08R	Polyurethane	Large Face	Red	8
81-0110-100B	Polyurethane	Large Face	Blue	100
81-0110-08B	Polyurethane	Large Face	Blue	8
81-0111	Polyurethane	Large Face	2 Red/2 Blue	4
81-0116-100BP	Polyurethane	Large Face	**Black**	100
81-0116-08BP	Polyurethane	Large Face	**Black**	8
SMALL FACE				
81-0112-100R	Polyurethane	Small Face	Red	100
81-0112-100B	Polyurethane	Small Face	Blue	100
81-0117-100BP	Polyurethane	Small Face	**Black**	100
DOUBLE LIP				
81-0101-100	Rubber	Double Lip	**Black**	100
81-0101-08	Rubber	Double Lip	**Black**	8
SINGLE LIP				
81-0100-100	Rubber	Single Lip	**Black**	100
FILTER SCREEN				
81-0115-25	Stainless Steel	Filter Screen	–	25

RUBBER AIR LINES

DURABLE CONSTRUCTION · DOT COMPLIANT · SAE J1402™ STANDARD

- 3/8" SAE J1402 Type A, EPDM rubber hose; UV and ozone resistant
- Meets or exceeds all DOT FMVSS No. 106 – Brake Hoses, 49 CFR 571.106
- Designed for operating pressure up to 225 psi; Minimum burst pressure = 900 psi
- Includes a swivel fitting for the tractor-end connection
- Rugged elastomeric hose is resistant to gasoline, diesel fuel, oil, and other chemicals
- O.D. 3/4" (3/8" Hose); O.D. 7/8" (1/2" Hose)
- Available in Black, Red, Blue for easy identification of emergency and service lines
- Aluminum grips provide easy coupling/uncoupling
- Bulk rubber hose and spring guard available to make custom hoses
- Red and Blue bulk hose available upon request

PART #	HOSE COLOR	GRIP COLOR	WORKING LENGTH	PACK
12'				
81-0112-R	Red	–	12'	1
81-0112-B	Blue	–	12'	1
81-0112-RGR	Red	Red	12'	1
81-0112-BGB	Blue	Blue	12'	1
81-0112	**Black**	–	12'	1
81-0112-GRB	**Black**	Red & Blue	12'	2
81-0112-GR	**Black**	Red	12'	1
81-0112-GB	**Black**	Blue	12'	1
81-0112-SS	**Black**	**Black** w/Single Spring	12'	1
81-0112-RSS	Red	Red w/Single Spring	12'	1
81-0112-BSS	Blue	Blue w/Single Spring	12'	1
15'				
81-0115-R	Red	–	15'	1
81-0115-B	Blue	–	15'	1
81-0115-RGR	Red	Red	15'	1
81-0115-BGB	Blue	Blue	15'	1
81-0115	**Black**	–	15'	1
81-0115-GRB	**Black**	Red & Blue	15'	2
81-0115-GR	**Black**	Red	15'	1
81-0115-GB	**Black**	Blue	15'	1
81-0115-SS	**Black**	**Black** w/Single Spring	15'	1
81-0115-RSS	Red	Red w/Single Spring	15'	1
81-0115-BSS	Blue	Blue w/Single Spring	15'	1
20'				
81-0120	**Black**	–	20'	1
81-0120-GRB	**Black**	Red & Blue	20'	2
81-0120-GR	**Black**	Red	20'	1
81-0120-GB	**Black**	Blue	20'	1

BULK RUBBER AIR HOSE, SPRING GUARD

- -40°C (-40°F) to 93°C (200°F)

PART #	NOMINAL INSIDE DIA	NOMINAL OUTSIDE DIA	WORKING PRESSURE	MIN BEND RADIUS	WEIGHT (LB/FT)	LENGTH
81-0038-250	.375"	.75"	Min. Burst 900	2.25"	0.17	250'
81-0012-250	.5"	.88"	Min. Burst 900	3.00"	0.20	250'

PART #	DESCRIPTION	PACK
81-0115-SPR	3/8" x 1/2" Reusable or Field Attachable Fitting w/Spring Guard	2

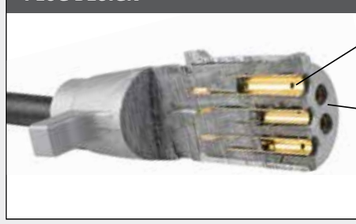
ULTRALINK™ POWER CORD & AIR ASSEMBLIES

Connect and Protect your trailer and equipment with Grote's **3-in-1 and 4-in-1 Ultralink™ Power Cord & Air Assemblies** featuring rugged straight rubber air line hoses and Grote's crush-resistant **UltraLink™ Power Cords**. The 4-in-1 Ultralink™ also features high-performance auxiliary power cables.

CRUSH RESISTANT

UltraLink's crush-resistant design can survive being run over by a heavy duty vehicle while conventional hollow core designs are permanently deformed and rendered useless.

PLUG DESIGN



The UltraLink™ Power Cord is the backbone of Grote's 3-in-1 and 4-in-1 systems! This premium power cord is constructed utilizing Grote's crush-resistant plug, so frequent replacement of the plug is no longer a consideration. Our plug stands up to the harshest environments and provides maximum reliability, while delivering improved performance, longer wear, and superior conductivity.

3-IN-1 — ULTRALINK™ POWER CORD & AIR ASSEMBLIES

CRUSH RESISTANT | ALL WEATHER | SAE J560™ STANDARD | SAE J2394™ STANDARD | DOT COMPLIANT

- Our rubber air lines are resistant to gasoline, diesel fuel, oil, and other chemicals
- The tractor ends of the hoses include swivel fittings, providing easy and quick installation
- Premium high-strength spiral wrap protects the cable and air lines from chaffing and kinking
- Assemblies with easy-coupling rubber gladhandles include a premium EZ Claw® "Self-Adjusting Sling"

POWER CORD SPECIFICATIONS
Plug: SAE J560
Cable: J2394 (ABS)
Cord: 1/8 GA, 2/10 GA, 4/12 GA
Operating Range: -55°F to 190°F /-48°C to 87°C

AIR LINE SPECIFICATIONS
DOT FMVSS-106
SAE J1402

81-3215

81-3115

81-3215-GRP

81-3212

PART #	HOSE COLOR	WORKING LENGTH	GRIPS	PACK
Black Air Lines				
81-3112	**Black**	12'	Anodized	1
81-3112-GRP	**Black**	12'	Rubber	1
81-3115	**Black**	15'	Anodized	1
81-3115-GRP	**Black**	15'	Rubber	1
81-3120	**Black**	20'	Anodized	1
Red & Blue Air Lines				
81-3212	**Red & Blue**	12'	Anodized	1
81-3212-GRP	**Red & Blue**	12'	Rubber	1
81-3215	**Red & Blue**	15'	Anodized	1
81-3215-GRP	**Red & Blue**	15'	Rubber	1
81-3215N	**Red & Blue**	15'	No Grips	1

ULTRALINK™ POWER CORD & AIR ASSEMBLIES — 4-IN-1

CRUSH RESISTANT | ALL WEATHER | SAE J560™ STANDARD | SAE J2394™ STANDARD | DOT COMPLIANT

- Our rubber air lines are resistant to gasoline, diesel fuel, oil, and other chemicals
- The tractor ends of the hoses, include swivel fittings, providing easy and quick installation
- Premium high-strength spiral wrap protects the cable and air lines from chaffing and kinking
- All assemblies come with easy-coupling gladhandles and a premium EZ Claw® "Self-Adjusting Sling"

POWER CORD SPECIFICATIONS
Plug: SAE J560
Cable: J2394 (ABS)
Cord: 1/8 GA, 2/10 GA, 4/12 GA
Operating Range: -55°F to 190°F /-48°C to 87°C

AIR LINE SPECIFICATIONS
DOT FMVSS-106
SAE J1402

81-3515

81-3315-GRP

81-3415-GRP

81-3412-GRP

PART #	STYLE/HOSE COLOR	WORKING LENGTH	GRIPS	PACK
Single Pole				
81-3312	**Single Pole, Black**	12'	Anodized	1
81-3312-GRP	**Single Pole, Black**	12'	Rubber	1
81-3315	**Single Pole, Black**	15'	Anodized	1
81-3315-GRP	**Single Pole, Black**	15'	Rubber	1
Dual Pole				
81-3412	**Dual Pole, Black**	12'	Anodized	1
81-3412-GRP	**Dual Pole, Black**	12'	Rubber	1
81-3415	**Dual Pole, Black**	15'	Anodized	1
81-3415-GRP	**Dual Pole, Black**	15'	Rubber	1
ISO Auxiliary				
81-3512	**ISO Auxiliary, Black**	12'	Anodized	1
81-3512-GRP	**ISO Auxiliary, Black**	12'	Rubber	1
81-3515	**ISO Auxiliary, Black**	15'	Anodized	1
81-3515-GRP	**ISO Auxiliary, Black**	15'	Rubber	1

TRACKER BAR SPRING REPLACEMENT KIT

- Complete replacement kit in one convenient part
- Includes a heavy duty spring and cover; 3 hose holder and large tracker bar snap clip

PART #	DESCRIPTION	LENGTH	PACK SIZE
81-0135	Single Spring	16"	1
81-0147	Single Spring w 81-0129	20"	1
81-0145	Dual Spring	16"	1
81-0146	Dual Spring	25"	1

HOSE HOLDERS

- Designed to route and suspend air coils, hoses and electrical cables
- Provides excellent kink protection

PART #	DESCRIPTION	PACK SIZE
81-0137	2 Hose holder – ¾" x 2, Eyelet Bolt	1
81-0138	3 Hose holder – ¾" x 3, U-Bolt	1
81-0139	4 Hose holder – ¾" x 4, Adjustable Bolt	1

CABLE CLAMP HOLDER

- Cable clamp & clip designed to support power cords and rubber air lines, including 3 in 1 assemblies
- Includes a heavy duty rubber insulated clamp and steel snap clip

PART #	DESCRIPTION	PACK SIZE
81-0129	Cable Clamp Holder	**1**

SNAP CLIP

- Stainless steel construction
- Ideal for use with a tracker bar

PART #	DESCRIPTION	PACK SIZE
81-0140	Snap Clip – Large	1

POGO STICKS

- Designed for nylon, rubber air hoses and heavy-duty ABS cables
- Internal heavy duty spring
- Includes a 7/16" mounting bolt, 3 hose holder, eyebolt & nut

PART #	MATERIAL	LENGTH	PACK SIZE
81-0130	Chrome	40"	1
81-0131	Zinc dichromate	40"	1

TENDER SPRINGS

- Heavy duty springs provide superior support
- Designed for under trailer applications
- Double loop ends

PART #	DESCRIPTION	PACK SIZE
81-0136	24", Includes 2 hose holder	1

SUSPENDER SPRINGS

- Heavy duty springs provide superior support
- Outside diameter exceeds 1"
- Double loop ends

PART #	DESCRIPTION	PACK SIZE
81-0132	12", Tandem and airline support	1
81-0133	14 ½", Straight cable assemblies	1
81-0134	25", HD application incl. ABS power cords	1

HOSE HANGER CLAMPS

- Quality material designed for low temperatures
- Ultra Violet (U.V.) and impact resistant

PART #	DESCRIPTION	PACK SIZE
83-7015	2 Hose holder – 3/8" x 2	25
83-7016	2 Hose holder – 1/2" x 2	25
83-7017	2 Hose holder – 3/8" and 1/2"	25

DRAIN VALVES

- 200 PSI maximum working pressure

PART #	FEATURES	PACK SIZE
81-0128	Drain Valve, 60" Stainless Steel Cable; 1/4" NPTF Male Thread	1
81-0128-14	Drain Valve with Uncrimped Loop (Ready-to-Install), 60" Stainless Steel Cable; 1/4" NPTF Male Thread	1

CONNECT & PROTECT

EZ CLAW®

EVERY EZ CLAW® PRODUCT IS RUGGED, LIGHTWEIGHT, AND BUILT TO LAST

The EZ Claw System is the premier automatic suspension system for protecting power cords, airlines, and hydraulic hoses.

Easy to install, the system is designed to prevent chaffing, crimping, and unplanned disconnects for the life of your truck.

Connect and protect your power cords and hoses with ease, while preventing the costly maintenance and downtime that can come with unreliable tracker bars and springs.

81-2300

EZ CLAW TENSIONER

Travel Length: Up to 84"
Travel Range: Full 90°
Support Strength: 25, 30 & 40 lbs
Corrosion Rating: ASTM F1941 & B117
Bracket Cut: Laser (Accurate to 0.001")
Bracket Welding: Robotic (Accurate to 0.041")
Bracket Plating: Zinc (ASTM B633)
Bracket Painting: Powder-coated
Sling Strength: 500 lb Rating
Sling Resistance: Moisture, Chemicals and UV
Sling Material: Polyester & Stainless Steel
Cable Block Material: Polymer & Stainless Steel

81-2301

81-2302VM

EZ CLAW MOUNTING BRACKETS

81-2306

EZ CLAW SLING

81-2303

EZ CLAW HOSE & CABLE BLOCK

BUILDING YOUR EZ CLAW SYSTEM IS AS EZ AS 1-2-3!

1. CHOOSE YOUR EZ CLAW TENSIONER

PART #	DESCRIPTION	SUPPORTS AND PROTECTS	WEIGHT
81-2300	EZ Claw Tensioner, 25 LB	12'-15' 3-in-1's & Straight Cords and Hoses	5 lbs
81-2309	EZ Claw Tensioner, 30 LB	12'-15' 4-in-1's & Straight Cords and Hoses, 20' 3-in-1's	5 lbs
81-2305	EZ Claw Tensioner, 40 LB	Hydraulic Lines	5.4 lbs

2. CHOOSE YOUR EZ CLAW MOUNTING BRACKET

PART #	DESCRIPTION	IDEAL APPLICATION	TRUCK TYPE	MOUNT SIZE
81-2301	EZ Claw Flange Mount Bracket	Back of Cab / Headache Rack	Sleeper	8" x 8.25"
81-2302VM	EZ Claw Versa Mount Bracket	Back of Cab / Headache Rack	Day Cab	5" x 8.25"
81-2304	EZ Claw Top Mount Bracket	Tool Box or Top of Headache Mount	any w/ Rack or Box	5" x 8.25"

HAVE A FREIGHTLINER M2?

PART #	DESCRIPTION	SPECIFIC APPLICATION
81-2308	EZ Claw Freightliner M2 Adapter Bracket	Rear Cab Installations on M2 Cabs w/o Air Fairing

WHICH BRACKET IS RIGHT FOR YOU?

PART #	MAKE	MODEL	SLEEPER	DAY CAB
81-2301	FREIGHTLINER	COLUMBIA	✔	✔
	FREIGHTLINER	CASCADIA	✔	
	INTERNATIONAL	ALL	✔	
	PETERBILT	ALL	✔	✔
	KENWORTH	ALL	✔	✔

PART #	MAKE	MODEL	SLEEPER	DAY CAB
81-2302VM	MACK	ALL	✔	✔
	VOLVO	ALL	✔	✔
	FREIGHTLINER	CASCADIA		✔
	INTERNATIONAL	ALL		✔

3. CHOOSE YOUR EZ CLAW HOLDER

PART #	DESCRIPTION	IDEAL APPLICATION	SUPPORT DIAMETER	MATERIAL
81-2306	EZ Claw Sling	3-in-1's, 4-in-1's, Hydraulic Lines	Up to 2" bundle or hose	UV-Protected Polyester
81-2303	EZ Claw Hose & Cable Block	Straight Cords and Hoses	3 x 3/8" (cord or hose)	Polymer + Stainless Steel

AIR BRAKE TUBING – BULK

- UV and ozone resistant nylon material; available in multiple lengths & colors
- Resistant to gasoline, diesel fuel and other road chemicals
- Meets or exceeds SAE J844 (Type A – non-reinforced & Type B – reinforced)
- Meets or exceeds SAE J844, DOT FMVSS (49 CFR 571.106) & FMCSA (393.45)
- Meets or exceeds DOT requirements for use with compression fittings
- Operates at up to 150 psi in air brake systems; Operating range: -40°F to 200°F

ALL WEATHER | DURABLE CONSTRUCTION | DOT COMPLIANT | SAE J844™ STANDARD

PART #	OUTSIDE DIAMETER	COLOR	TYPE	LENGTH
1/8"				
81-1018-100B	1/8"	Black	A	100'
5/32"				
81-1532-100B	5/32"	Black	A	100'
81-1532-500B	5/32"	Black	A	500'
1/4"				
81-1014-1000B	1/4"	Black	A	1000'
81-1014-100B	1/4"	Black	A	100'
81-1014-1000BL	1/4"	Blue	A	1000'
81-1014-100BL	1/4"	Blue	A	100'
81-1014-1000G	1/4"	Green	A	1000'
81-1014-100G	1/4"	Green	A	100'
81-1014-1000R	1/4"	Red	A	1000'
81-1014-100R	1/4"	Red	A	100'
81-1014-100Y	1/4"	Yellow	A	100'
5/16"				
81-1516-100B	5/16"	Black	A	100'
3/8"				
81-1038-500B	3/8"	Black	B	500'
81-1038-100B	3/8"	Black	B	100'
81-1038-500BL	3/8"	Blue	B	500'
81-1038-100BL	3/8"	Blue	B	100'
81-1038-500G	3/8"	Green	B	500'
81-1038-100G	3/8"	Green	B	100'
81-1038-500R	3/8"	Red	B	500'
81-1038-100R	3/8"	Red	B	100'
81-1038-500Y	3/8"	Yellow	B	500'
81-1038-100Y	3/8"	Yellow	B	100'
1/2"				
81-1012-500B	1/2"	Black	B	500'
81-1012-100B	1/2"	Black	B	100'
81-1012-500BL	1/2"	Blue	B	500'
81-1012-100BL	1/2"	Blue	B	100'
81-1012-500G	1/2"	Green	B	500'
81-1012-100G	1/2"	Green	B	100'
81-1012-500R	1/2"	Red	B	500'
81-1012-100R	1/2"	Red	B	100'
81-1012-500Y	1/2"	Yellow	B	500'
81-1012-100Y	1/2"	Yellow	B	100'
5/8"				
81-1058-250B	5/8"	Black	B	250'
3/4"				
81-1034-250B	3/4"	Black	B	250'

81-1014-100B

81-1038-100BL

81-1012-500R

04

TERMINALS & CONNECTORS

COSSES ET CONNECTEURS

TERMINALES Y CONECTORES

35 Technical information

36 Heat Shrinkable Connectors

37 Sealed Multiple Wire Heat Shrink Connectors

40 Crystal Clear Heat Shrink Connectors

42 Crimp, Solder & Seal Lead Free Terminals

44 Solder & Seal Lead Free Terminals

46 Butt Connectors

47 Ring Terminals

51 Spade Terminals

52 Quick Disconnects

54 Bullet & Receptacle Connectors

55 Specialty Connectors & Adapters

57 Assortment Kits

60 Deutsch Terminals & Tools

62 Weather Pack & Metri-Pack OEM Terminals & Connectors

POWER DELIVERY DEPENDS SO MUCH ON THE TYPE OF CONNECTIONS MADE. POOR CONNECTIONS LEAD TO DOWNTIME AND REDUCED PRODUCTIVITY, NOT TO MENTION FRUSTRATION AND DELAY.

GROTE'S EXTENSIVE LINE OF TERMINALS & CONNECTORS ENSURE THE BEST POSSIBLE CONNECTIONS FOR ANY REPAIR TYPE, INSTALLATION OF NEW EQUIPMENT AND GENERAL MAINTENANCE TO ENSURE THE EQUIPMENT PERFORMS AT OPTIMAL LEVELS AT ALL TIMES.

Connect & Protect with Grote's wide selection of terminals & connectors.

GROTE TERMINALS & 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.

22-18 GA **16-14 GA** **12-10 GA** **8 GA** **6 GA** **4 GA**

FEATURES & BENEFITS

- 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

- *Retail and bulk packaging options*
- *No master pack minimums*
- *Trilingual and colorful labeling*
- *Resealable, reusable and recyclable clamshells*
- *Installation instructions included*

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"	.173"	4.39mm
•	#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
- Color 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
- Color 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 color coded for quick wire identification.

WIRE SIZE (AWG)	STUD SIZE	TAB SIZE	BULLET/SNAP PLUG SIZE
24-22	#4	.110"	.157"
22-18	#6	.187"	.180"
22-16	#8	.250"	.195"
16-14	#10	.375"	
12-10	1/4"		
8	5/16"		
6	3/8"		
4	1/2"		
2	3/4"		
1			
1/0			
2/0			
3/0			
4/0			
250MCM			

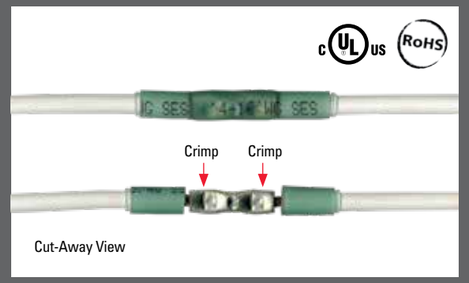
HEAT SHRINKABLE TERMINALS & CONNECTORS

OPERATING TEMPERATURES:
Polyolefin: -55°C (-67°F) to 110°C (230°F)

SHRINK RATIOS:
Polyolefin: 3:1

FEATURES & BENEFITS

- Protects splices from water, corrosion, salt and moisture, provides strain relief
- Protects against added vibration in rugged environments
- Seamless butt connectors and brazed seam rings & spades prevent opening of connector barrel
- Color-coded tubing with wire gauge imprint provides easy identification of the correct part for the job
- Completely insulates and protects electrical connections
- UL listed



Cut-Away View

HEAT SHRINKABLE BUTT CONNECTORS – POLYOLEFIN

22-8 GAUGE

PART #	GAUGE	COLOR	PACK
88-3150	22-18	Red	1000
83-3150-3	22-18	Red	300
83-3150	22-18	Red	100
84-3150	22-18	Red	15
88-3350	16-14	Blue	1000
83-3350-3	16-14	Blue	300
83-3350	16-14	Blue	100
84-3350	16-14	Blue	15
88-3550	12-10	Yellow	500
83-3550-3	12-10	Yellow	200
83-3550	12-10	Yellow	50
84-3550	12-10	Yellow	15
84-2750	8	Red	10

HEAT SHRINK STEP-DOWN BUTT CONNECTORS

22-8 GAUGE

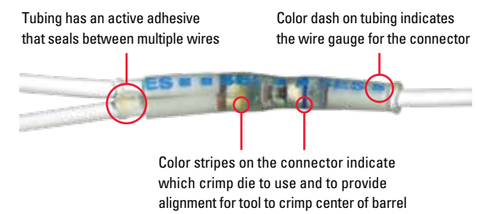
PART #	GAUGE	COLOR	PACK
83-2624	22-18 to 16-14	Blue	100
84-2624	22-18 to 16-14	Blue	15
83-2625	16-14 to 12-10	Yellow	100
84-2625	16-14 to 12-10	Yellow	15
83-2626	12-10 to 8	Red	100
84-2626	12-10 to 8	Red	15

SEALED MULTIPLE WIRE HEAT SHRINK CONNECTORS

Multiple wire connectors allow installer to terminate and seal 1 wire to 2 wires or to join multiple wires together. 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.

FEATURES & BENEFITS

- Seamless butt connectors provide superior crimp performance
- Window in butt connectors allows for visual inspection to ensure all wires are fully inserted
- Butt connectors have crimp indicators where the installation tool should be positioned to crimp connector
- High adhesive-flow 4:1 polyolefin tubing to seal multiple wires
- Color-coded dash on tubing to indicate the wire gauge for the connector
- Clear tubing to allow for visual inspection



IN-LINE HEAT SHRINK BUTT CONNECTORS, 24-10 GAUGE

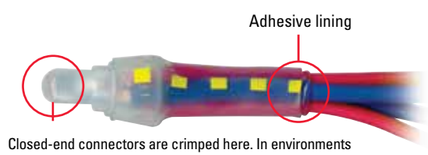
- Shrink Ratio 4:1; Color dash on tubing identifies the proper gauge sizes
- Color dash on the connector identifies the proper crimp gauge
- Heat shrink tubing has an active adhesive that seals multiple wires

PART #	CONNECTOR GAUGE	MARKINGS	END COLOR	WIRE RANGE	PACK
84-2629	24-22	White	Red	24-22 x 2	15
84-2630	22-18	Red	Blue	22-18 x 2	15
84-2631	16-14	Blue	Yellow	16-14 x 2	15
84-2632	12-10	Red	Red	12-10 x 2	15

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, where moisture/corrosion is a problem

PART #	CONNECTOR GAUGE	MARKINGS	WIRE RANGE	PACK
84-2627	22-14	Blue	Multiple	15
84-2628	18-10	Yellow	Multiple	15



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

HEAT SHRINKABLE RING TERMINALS

22-18 GAUGE

PART #	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 #	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

HEAT SHRINKABLE RING TERMINALS

12-10 GAUGE

PART #	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

HEAT SHRINKABLE RING TERMINALS

8 GAUGE

PART #	GAUGE	STUD SIZE	PACK
84-2443	8	10	10
84-2426	8	1/4"	10
84-2441	8	5/16"	10
84-2427	8	3/8"	10
84-2442	8	1/2"	10

22-10 GAUGE

PART #	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 QUICK DISCONNECTS

22-10 GAUGE

PART #	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

HEAT SHRINKABLE SPADE TERMINALS

22-14 GAUGE

PART #	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 BULLET & RECEPTACLE CONNECTORS

22-18 GAUGE

PART #	GAUGE	PIN SIZE	PACK
84-2151	22-18	.075" Diameter	15

HEAT SHRINKABLE PIN TERMINAL

> Kits

SEE PAGE 164 FOR OUR FULL LINE OF ASSORTMENT KITS

CRYSTAL CLEAR HEAT SHRINKABLE CONNECTORS

TAKE THE GUESSWORK OUT OF CRIMPING!

Crystal Clear Heat Shrinkable Connectors are designed to provide visual assurance that the terminal or connector is installed correctly, ensuring optimal conductivity. They offer the ability to visually inspect the condition of the wire and termination after the repair or installation.

Window Butt Connectors

- Window in connector assures that the wire is seated and is being crimped to the connector
- Color-coded stripes indicate/guide where to position crimp nest to install properly
- Seamless barrel butt connectors ensure superior crimp performance
- Wire-stop in butt connectors prevents over-insertion of wire

45° Ring Terminal

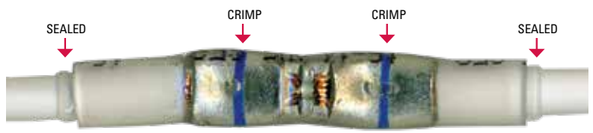
- 45° barrel angle allows tubing to adhere to it and provides stronger seal
- Color-coded stripes also indicate/guide where to position crimp nest to install properly
- Brazed seam barrel ensures superior crimp performance
- Serrations in crimp barrel provide strong mechanical termination

Adhesive-Lined Crystal Clear Heat Shrinkable Tubing

- Crystal Clear tubing provides optimal clarity for visual inspection
- Adhesive-Lined tubing ensures a waterproof seal
- Wire gauge imprint simplifies wire size identification

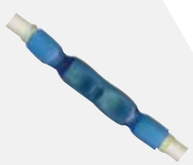
CRYSTAL CLEAR FEATURES & BENEFITS

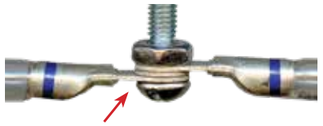
- Window butt connector and 45° barrel allows installer to see wire is fully inserted and wire is crimped to terminal
- Window butt connector and 45° barrel on terminals ensure wire is stripped the proper length
- Color stripes provide alignment for tool to crimp center of barrel and indicates industry standard for wire gauge size
- Longer ring terminals provide ideal seal and offers a flush surface without tubing impeding contact between screw and terminal... allows ring terminals to be stacked
- Crystal Clear waterproof insulation allows for indisputable inspection of the wire's condition



Standard connectors don't allow the installer to see the wire which can cause the following problems:

1. Wire stripped too short, which can result in crimping the end of the wire (poor termination)
2. Wire is not fully seated to connector, which can result in a poor termination





HS BUTT CONNECTORS — CRYSTAL CLEAR

83-4150

83-4350

83-4550

PART #	CONTENTS	GAUGE	PACK
83-4150	Crystal Clear Heat Shrinkable Butt Connector	22-18	100
83-4150-3	Crystal Clear Heat Shrinkable Butt Connector	22-18	300
84-4150	Crystal Clear Heat Shrinkable Butt Connector	22-18	15
88-4150	Crystal Clear Heat Shrinkable Butt Connector	22-18	1000
83-4350	Crystal Clear Heat Shrinkable Butt Connector	16-14	100
83-4350-3	Crystal Clear Heat Shrinkable Butt Connector	16-14	300
84-4350	Crystal Clear Heat Shrinkable Butt Connector	16-14	15
88-4350	Crystal Clear Heat Shrinkable Butt Connector	16-14	1000
83-4550	Crystal Clear Heat Shrinkable Butt Connector	12-10	50
83-4550-3	Crystal Clear Heat Shrinkable Butt Connector	12-10	200
84-4550	Crystal Clear Heat Shrinkable Butt Connector	12-10	15
88-4550	Crystal Clear Heat Shrinkable Butt Connector	12-10	500

HS RING TERMINALS — CRYSTAL CLEAR

PART #	CONTENTS	GAUGE	STUD SIZE	PACK
84-4408	Crystal Clear Heat Shrinkable Ring Terminal	16-14	#8	15
84-4410	Crystal Clear Heat Shrinkable Ring Terminal	16-14	#10	15
84-4412	Crystal Clear Heat Shrinkable Ring Terminal	16-14	1/4"	15
84-4413	Crystal Clear Heat Shrinkable Ring Terminal	16-14	5/16"	15
84-4414	Crystal Clear Heat Shrinkable Ring Terminal	16-14	3/8"	15
84-4415	Crystal Clear Heat Shrinkable Ring Terminal	22-18	#6	15
84-4416	Crystal Clear Heat Shrinkable Ring Terminal	22-18	#10	15
84-4510	Crystal Clear Heat Shrinkable Ring Terminal	12-10	#10	15
84-4511	Crystal Clear Heat Shrinkable Ring Terminal	12-10	1/4"	15
84-4513	Crystal Clear Heat Shrinkable Ring Terminal	12-10	3/8"	15

84-4412

84-4415

84-4510

HS QUICK DISCONNECTS — CRYSTAL CLEAR

PART #	CONTENTS	GAUGE	STUD SIZE	TYPE	PACK
84-4430	Crystal Clear HS Quick Disconnect	16-14	.250"	Male	15
84-4432	Crystal Clear HS Quick Disconnect	16-14	.250"	Female	15
84-4436	Crystal Clear HS Quick Disconnect	22-18	.250"	Male	15
84-4437	Crystal Clear HS Quick Disconnect	22-18	.250"	Female	15
84-4439	Crystal Clear HS Quick Disconnect	12-10	.250"	Male	15
84-4440	Crystal Clear HS Quick Disconnect	12-10	.250"	Female	15

84-4437

84-4440

HS BULLET CONNECTORS — CRYSTAL CLEAR

PART #	CONTENTS	GAUGE	STUD SIZE	TYPE	PACK
84-4447	Crystal Clear HS Bullet Connector	16-14	.180"	Male	15
84-4448	Crystal Clear HS Bullet Connector	16-14	.180"	Female	15

84-4447

84-4448

HS STEP DOWN BUTT CONNECTORS — CRYSTAL CLEAR

PART #	CONTENTS	GAUGE	PACK
84-4624	Crystal Clear Heat Shrink Step Down Butt Connector	20-18 to 16-14 Ga	15
84-4625	Crystal Clear Heat Shrink Step Down Butt Connector	16-14 to 12-10 Ga	15

84-4624

84-4625

CONNECT & PROTECT

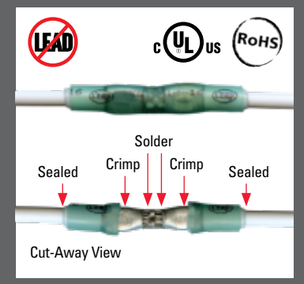
CRIMP, SOLDER & SEAL LEAD FREE TERMINALS & CONNECTORS

OPERATING TEMPERATURE: -55°C (-67°F) to 110°C (230°F)
TENSILE STRENGTH: 2200 PSI

SOLDER MELTING TEMPERATURE: 138°C (280°F)
SHRINK RATIO: 3:1

FEATURES & BENEFITS
- Protects splices from water, corrosion, salt and moisture, provides strain relief
- Protects against added vibration in rugged environments
- Completely insulates and protects electrical connections
- Seamless butt connectors & brazed seam rings & spades prevent unwanted opening of the connector barrel
- Color-coded tubing with wire gauge imprint provides easy identification of the correct part for the job
- UL listed

LEAD FREE (NEW)
- Lead free solder has greater surface tension
- Solder stays in place which provides greater tensile strength than other solder sleeves
- Solder sleeves pre-fluxed to clean metals & provide a quality solder termination
- New solder sleeves are Tin & Bismuth alloy
- 45° barrel allows installer to see wire is fully inserted and wire is crimped to terminal
- RoHS compliant; better for the environment



CRIMP, SOLDER & SEAL BUTT CONNECTORS

22-10 GAUGE

PART #	GAUGE	PACK
88-2929	22-18	1000
83-2929	22-18	100
84-2929	22-18	15
88-2930	16-14	1000
83-2930	16-14	100
84-2930	16-14	15
88-2931	12-10	1000
83-2931	12-10	100
84-2931	12-10	15

CRIMP, SOLDER & SEAL RING TERMINALS

22-18 GAUGE

PART #	GAUGE	STUD SIZE	PACK
83-1932	22-18	10	25
83-1933	22-18	1/4"	25
83-1934	22-18	5/16"	25
83-1935	22-18	3/8"	25

CRIMP, SOLDER & SEAL RING TERMINALS

16-14 GAUGE

PART #	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

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CRIMP, SOLDER & SEAL RING TERMINALS

12-10 GAUGE

PART #	GAUGE	STUD SIZE	PACK
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

22-10 GAUGE

PART #	GAUGE	STUD SIZE	PACK
83-1951	22-18	Female .250" FI	25
83-1952	22-18	Male .250"	25
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
83-1956	12-10	Male .250"	25

FI = Fully Insulated

22-10 GAUGE ASSORTMENT KIT

- Includes the most popular heat shrink crimp, solder and seal terminals and connectors
- 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 #	KIT CONTENTS	QUANTITY
83-6542	Butt Connectors (40) Ring Terminals (50) Spade Terminals (10) Male Disconnects (10) Female Disconnects (10)	120

CRIMP, SOLDER & SEAL TERMINAL & CONNECTOR

> Kits

SEE PAGE 164 FOR OUR FULL LINE OF ASSORTMENT KITS

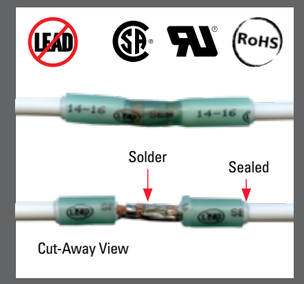
SOLDER & SEAL LEAD FREE TERMINALS & CONNECTORS

OPERATING TEMPERATURE: -55°C (-67°F) to 110°C (230°F)
TENSILE STRENGTH: 2200 PSI

SOLDER MELTING TEMPERATURE: 138°C (280°F)
SHRINK RATIO: 3:1

FEATURES & BENEFITS
- Protects splices from water, corrosion, salt and moisture, provides strain relief
- Protects against added vibration in rugged environments
- Completely insulates and protects electrical connections
- Color-coded tubing with wire gauge imprint provides easy identification of the correct part for the job
- UL listed

LEAD FREE (NEW)
- Lead free solder has greater surface tension
- Solder stays in place which provides greater tensile strength than other solder sleeves
- Solder sleeves pre-fluxed to clean metals & provide a quality solder termination
- New solder sleeves are Tin & Bismuth alloy
- RoHS compliant; better for the environment



HEAT SHRINK & SOLDER SPLICE CONNECTORS

22-10 GAUGE

PART #	GAUGE	COLOR STRIPE	PACK
88-2618	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
83-2612	12-10	Yellow	100
84-2612	12-10	Yellow	15

HEAT SHRINK & SOLDER RING TERMINALS

22-18 GAUGE

PART #	GAUGE	STUD SIZE	PACK
84-2803	22-18	8	25
84-2804	22-18	10	25
84-2805	22-18	1/4"	25
84-2806	22-18	5/16"	25
84-2807	22-18	3/8"	25

HEAT SHRINK & SOLDER RING TERMINALS

16-14 GAUGE

PART #	GAUGE	STUD SIZE	PACK
84-2809	16-14	8	25
84-2810	16-14	10	25
84-2811	16-14	1/4"	25
84-2455	16-14	5/16"	25
84-2813	16-14	3/8"	25

12-10 GAUGE

PART #	GAUGE	STUD SIZE	PACK
84-2814	12-10	10	25
84-2438	12-10	1/4"	25
84-2815	12-10	5/16"	25
84-2816	12-10	3/8"	25
84-2818	12-10	1/2"	25

HEAT SHRINK & SOLDER RING TERMINALS

22-10 GAUGE

PART #	GAUGE	STUD SIZE	PACK
84-2822	22-18	Female .250" FI	25
84-2823	22-18	Male .250"	25
84-2824	16-14	Female .250" FI	25
84-2825	16-14	Male .250"	25
84-2826	12-10	Female .250" FI	25
84-2827	12-10	Male .250"	25

FI = Fully Insulated

HEAT SHRINK & SOLDER QUICK DISCONNECTS

22-10 GAUGE ASSORTMENT KIT

- 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 resealable plastic box with re-order chart on the inside cover

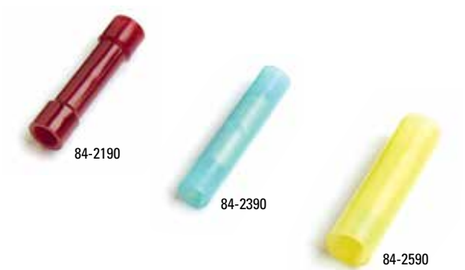
PART #	KIT CONTENTS	QUANTITY
83-6539	Butt Connectors (40), Ring Terminals (50) Spade Terminals (10), Male Disconnects .250" (10) Female Disconnects .250" (10)	120

HEAT SHRINK & SOLDER TERMINAL & CONNECTOR

> Kits

SEE PAGE 164 FOR OUR FULL LINE OF ASSORTMENT KITS

NYLON BUTT CONNECTORS



22-8 GAUGE

PART #	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
84-2592	8	10

VINYL BUTT CONNECTORS

22-6 GAUGE

PART #	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

VINYL STEP DOWN BUTT CONNECTORS

22-8 GAUGE

PART #	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

SEAMLESS + BUTTED SEAM – 22-6 GAUGE

UNINSULATED BUTT CONNECTORS

PART #	GAUGE	TYPE	PACK
83-3110	22-16	Seamless	100
84-3110	22-16	Seamless	15
88-3100	22-16	Butted Seam	1000
83-3100	22-16	Butted Seam	100
84-3100	22-16	Butted Seam	15
88-3111	16-14	Seamless	1000
83-3111	16-14	Seamless	100
84-3111	16-14	Seamless	15
88-3101	16-14	Butted Seam	1000
83-3101	16-14	Butted Seam	100
84-3101	16-14	Butted Seam	15
83-3112	12-10	Seamless	100
84-3112	12-10	Seamless	15
88-3102	12-10	Butted Seam	1000
83-3102	12-10	Butted Seam	100
84-3102	12-10	Butted Seam	15
83-3103	8	Seamless	100
83-3104	6	Seamless	100

22-16 GAUGE

NYLON RING TERMINALS

PART #	GAUGE	STUD SIZE	PACK
83-2204	22-16	4-6	50
84-2204	22-16	4-6	15
83-2205	22-16	8-10	50
84-2205	22-16	8-10	15
83-2206	22-16	1/4"	50
84-2206	22-16	1/4"	15
83-2207	22-16	5/16"	50
84-2207	22-16	5/16"	15
83-2208	22-16	3/8"	50
84-2208	22-16	3/8"	15

22-16 GAUGE

VINYL RING TERMINALS

PART #	GAUGE	STUD SIZE	PACK
83-2102	22-16	4-6	100
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

16-14 GAUGE

PART #	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

VINYL RING TERMINALS

16-14 GAUGE

PART #	GAUGE	STUD SIZE	PACK
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

NYLON RING TERMINALS

12-10 GAUGE

PART #	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

12-10 GAUGE

PART #	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

VINYL RING TERMINALS

8 GAUGE

PART #	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 #	GAUGE	STUD SIZE	PACK
84-2941	6	1/4"	25
84-2940	6	5/16"	25
84-2942	6	3/8"	25
84-2909	6	1/2"	25

VINYL RING TERMINALS

4 GAUGE

PART #	GAUGE	STUD SIZE	PACK
84-2910	4	1/4"	10
84-2911	4	5/16"	10
84-2912	4	3/8"	10
84-2913	4	1/2"	10

UNINSULATED RING TERMINALS

22-6 GAUGE

PART #	GAUGE	STUD SIZE	PACK
84-3000	22-16	6	50
84-3001	22-16	8	50
84-3002	22-16	10	50
84-3003	22-16	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

NYLON SPADE TERMINALS

22-16 GAUGE

PART #	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

VINYL SPADE TERMINALS

22-16 GAUGE

PART #	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

16-14 GAUGE

PART #	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

NYLON SPADE TERMINALS

16-14 GAUGE

PART #	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

VINYL SPADE TERMINALS

12-10 GAUGE

PART #	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

NYLON SPADE TERMINALS

12-10 GAUGE

PART #	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

VINYL SPADE TERMINALS

CONNECT & PROTECT

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TERMINALS AND CONNECTORS 04
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NYLON QUICK DISCONNECTS

22-16 GAUGE

PART #	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

22-16 GAUGE

PART #	GAUGE	TYPE/TAB	SIZE	PACK
84-2188	22-16	Female	.110"	15
84-2186	22-16	Female	.187"	15
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
83-2191	22-16	Male	.250"	100
84-2191	22-16	Male	.250"	15

NYLON QUICK DISCONNECTS

16-14 GAUGE

PART #	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

VINYL QUICK DISCONNECTS

16-14 GAUGE

PART #	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

12-10 GAUGE

PART #	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
83-3591	12-10	Male	.250"	50
84-3591	12-10	Male	.250"	15

NYLON QUICK DISCONNECTS

12-10 GAUGE

PART #	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

VINYL QUICK DISCONNECTS

22-14 GAUGE

PART #	GAUGE	TYPE/TAB SIZE	PACK
84-2192	22-16	Piggyback Disconnect .250"	15
84-2392	16-14	Piggyback Disconnect .250"	15

VINYL MULTI-STACK DISCONNECTS

FULLY INSULATED – 22-14 GAUGE

PART #	GAUGE	TYPE/TAB	SIZE	PACK
84-2189	22-16	Female	.250"	15
84-2389	16-14	Female	.250"	15

NYLON FEMALE QUICK DISCONNECT FLAG

20-14 GAUGE

PART #	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

UNINSULATED QUICK DISCONNECTS

CONNECT & PROTECT

Grote

TERMINALS AND CONNECTORS 04
COSSES ET CONNECTEURS • TERMINALES Y CONECTORES

NYLON MALE BULLET CONNECTORS

16-14 GAUGE

PART #	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	.180"	83-2402	50
84-2397	16-14	.180"	84-2402	15

NYLON FEMALE RECEPTACLE CONNECTORS

16-14 GAUGE – FULLY INSULATED

PART #	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	.180"	83-2227	50
84-2402	16-14	.180"	84-2397	15

VINYL MALE BULLET CONNECTORS

22-10 GAUGE

PART #	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	.180"	83-2251	100
84-2250	16-14	.180"	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

VINYL FEMALE RECEPTACLE CONNECTORS

22-10 GAUGE – FULLY INSULATED

PART #	GAUGE	RECEPTACLE SIZE	MATE	PACK
84-2185	22-16	.157"	84-2194	15
83-2400	16-14	.157"	83-2394	100
84-2400	16-14	.157"	84-2394	15
83-2251	16-14	.180"	83-2250	100
84-2251	16-14	.180"	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

DOUBLE FEMALE BULLET RECEPTACLES

PART #	FEATURES	QUANTITY
84-2388	Double Female Bullet Receptacle .157"	15

VINYL PIN TERMINAL CONNECTORS

22-10 GAUGE

PART #	GAUGE	PIN DIAMETER	PACK
84-2171	22-16	.075"	15
84-2172	16-14	.075"	15
84-2173	12-10	.110"	15

QUICK SPLICE CONNECTORS

22-10 GAUGE

SELF STRIPPING TAP CONNECTORS

PART #	GAUGE	COLOR	PACK
84-2183	22-16	Red	5
84-2377	22-14	Blue	5
88-2383	16-14	Blue	1000
83-2383	16-14	Blue	25
84-2383	16-14	Blue	5
84-2378	18-14	Blue (with Gel)	5
88-2379	18-14	White	1000
83-2583	12-10	Yellow	25
84-2583	12-10	Yellow	3

QUICK SPLICE CONNECTORS

22-10 GAUGE

SELF-STRIPPING SPECIAL ADAPTERS

PART #	GAUGE	COLOR	FEATURES	PACK
84-2906	22-16	Red	Female Tap	25
83-2904	16-14	Blue	Female Tap	100
84-2904	16-14	Blue	Female Tap	5
84-2384	18-14	Black	Bullet Tap .157"	3
84-2905	12-10	Yellow	Female Tap	25
84-2907	16-14	Blue	Disconnect (25)	25 pair

UNINSULATED SPECIAL ADAPTERS

PART #	STYLE	TAB SIZE	PACK
84-2900	Female – Double Male (Flat)	.250"	15
84-2901	Female – Double Male (Piggyback)	.250"	15
84-2915	Male	.250"	10

VINYL 3 & 4 WAY CONNECTORS

22-10 GAUGE

PART #	STYLE	GAUGE	PACK
84-2181	3 Way	22-16	5
84-2382	4 Way	16-14	5
84-2381	3 Way	16-14	5
84-2582	4 Way	12-10	5
84-2581	3 Way	12-10	5

CLOSED END CONNECTORS

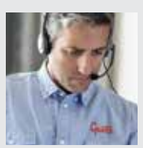
22-10 GAUGE

PART #	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

TWIST ON WIRE CONNECTORS – THERMOPLASTIC

22-10 GAUGE

PART #	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	22-14	3 #20; 1 #10 + 2 #14 + 1 #16	Yellow	600V	5
84-2703	18-10	3 #18; 3 #10	Red	600V	5



PREMIUM SERVICE

In a world of automated phone systems and outsourced customer service it's rare to contact **REAL PEOPLE** with **REAL EXPERIENCE** providing **REAL SOLUTIONS.** That is exactly what you get from Grote's team of expert Sales and Customer Solutions personnel.

01

KNOWLEDGEABLE CUSTOMER SOLUTIONS TEAM

Our dedicated personnel are there to handle all of your questions related to ordering and inventory availability. You have questions, we are here to help!

02

EXPERT TECHNICAL SUPPORT

Rely on our experienced professionals for technical support so that you make the right purchasing decisions and minimize customer downtime.

03

REAL-TIME INVENTORY WITH G24/7™

Grote's G24/7™ gives you the capability to check inventory, place orders and track order status. Available when you need, as you need, because making it easier for you to do business with us matters.

TIP

WIRE COLOR

To keep yourself from tearing your hair out, color-code your wire by accessory. It will help you keep track of which wire goes where during installation and troubleshooting.

TERMINAL & CONNECTOR ASSORTMENT KIT

VINYL

- Kit contains 650 of the most popular automotive electrical terminals and accessories
- Assorted gauges (22-16, 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 #	KIT CONTENTS	QUANTITY
83-6540	Butt Connectors (115) 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 – Black (50) Wire Terminal Crimper (1)	650

TERMINAL & CONNECTOR ASSORTMENT KITS

VINYL

PART #	KIT CONTENTS	QUANTITY
83-2608	Retail Clam Pack Butt Connectors (10) Ring Terminals (24) Female Disconnects .250" (3)	37

PART #	KIT CONTENTS	QUANTITY
83-6554 *Includes Hang Tab*	Butt Connectors (34) Ring Terminals (51) Male Disconnects .250" (6) Female Disconnects .250" (8)	99

VINYL ASSORTMENTS

PART #	KIT CONTENTS	QUANTITY
83-2600	Rings, Spades and Quick Disconnects	100

NYLON TERMINAL & CONNECTOR

22-10 GAUGE ASSORTMENT KITS

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

PART #	KIT CONTENTS	QUANTITY
83-6538	Butt Connectors (40) Ring Terminals (50) Spade Terminals (10) Male Disconnects .250" (10) Female Disconnects .250" (10)	120

PART #	KIT CONTENTS	QUANTITY
83-6555 *Includes Hang Tab*	Butt Connectors (24) Ring Terminals (26) Male Disconnects .250" (10) Female Disconnects .250" (10)	70

PART #	KIT CONTENTS	QUANTITY
83-2609	Retail Clam Pack Butt Connectors (13) Ring Terminals (15) Male Disconnects .250" (3) Female Disconnects .250" (6)	37

CRIMP, SOLDER & SEAL TERMINAL & CONNECTOR

22-10 GAUGE ASSORTMENT KIT

- Includes the most popular heat shrink crimp, solder and seal terminals and connectors
- 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 #	KIT CONTENTS	QUANTITY
83-6542	Butt Connectors (40) Ring Terminals (50) Spade Terminals (10) Male Disconnects (10) Female Disconnects (10)	120

HEAT SHRINKABLE TERMINAL & CONNECTORS

22-10 GAUGE ASSORTMENT KIT

- 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 #	KIT CONTENTS	QUANTITY
83-6503	Butt Connectors (40) Ring Terminals (50) Spade Terminals (10) Male Disconnects (10) Female Disconnects (10)	120

PART #	KIT CONTENTS	QUANTITY
83-6556 *Includes Hang Tab*	Butt Connectors (30) Ring Terminals (44) Male Disconnects (5) Female Disconnects (6)	85

PART #	KIT CONTENTS	QUANTITY
83-2610	Retail Clam Pack Butt Connectors (9) Ring Terminals (22) Female Disconnects (3)	34

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

HEAT SHRINK TERMINAL 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

DEUTSCH TERMINALS

Deutsch DT and DTM series environmentally sealed connectors are designed specifically for cable to cable applications. The connectors will provide reliability and performance in the engine or transmission, under the hood, on the chassis, or in the cab. Thermoplastic, flame-retardant housings offer a wide operating temperature range while silicone rear wire and interface seals allow the connectors to withstand extreme temperatures and moisture. Contact insertion and removal do not require any special tools. All connectors are designed to carry the rated current at the maximum rated temperature.

DEUTSCH CONNECTOR CRIMPING TOOLS
SEE PAGE 64

DTM SERIES

DEUTSCH TERMINAL AND CONNECTORS

- Ideal for use under the hood, transmission, lighting connections and other engine compartments
- Operating temp: -55°C (-67°F) to 125°C (257°F)
- Silicon seals; Nickel plated contacts
- Current rating 7.5 amps @ 125°C (257°F) continuous
- Designed for lower amperage connectors

DTM SERIES: TERMINALS

PART #	GAUGE	TYPE	CRIMP STYLE	OEM #	PACK
84-2481	24-20	Male	Solid Barrel	0460-202-20141	10
84-2480	24-20	Female	Solid Barrel	0462-201-20141	10
84-2483	20-16	Male	Open Barrel	1060-20-0122	10
84-2482	20-16	Female	Open Barrel	1062-20-0122	10

DTM SERIES: HOUSING & WEDGELOCK

- Includes 2 Plugs or Receptacles and 2 wedge locks

PART #	PINS	TYPE	CONTENTS	OEM #	PACK
84-2484	2	Plug	Plug & Wedgelock	DTM06-2S, WM-2S	2 pair
84-2485	2	Receptacle	Receptacle & Wedgelock	DTM04-2P, WM-2P	2 pair
84-2486	3	Plug	Plug & Wedgelock	DTM06-3S, WM-3S	2 pair
84-2487	3	Receptacle	Receptacle & Wedgelock	DTM04-3P, WM-3P	2 pair
84-2488	4	Plug	Plug & Wedgelock	DTM06-4S, WM-4S	2 pair
84-2489	4	Receptacle	Receptacle & Wedgelock	DTM04-4P, WM-4P	2 pair
84-2490	6	Plug	Plug & Wedgelock	DTM06-6S, WM-6S	2 pair
84-2491	6	Receptacle	Receptacle & Wedgelock	DTM04-6P, WM-6P	2 pair
84-2492	8	Plug	Plug & Wedgelock	DTM06-8S, WM-8S	2 pair
84-2493	8	Receptacle	Receptacle & Wedgelock	DTM04-8P, WM-8P	2 pair

> Kits

SEE PAGE 64-65 FOR DEUTSCH KITS AND TOOLS

DEUTSCH TERMINAL AND CONNECTORS

DT SERIES

- Ideal for use under the hood, transmission, lighting connections and other engine compartments
- Operating temp: -55°C (-67°F) to 125°C (257°F)
- Silicon seals; Nickel plated contacts
- Current rating 13 amps @ 125°C (257°F) continuous

DT SERIES: TERMINALS

PART #	GAUGE	TYPE	CRIMP STYLE	OEM #	PACK
84-2462	20-16	Male	Solid Barrel	0460-202-16141	10
84-2459	20-16	Female	Solid Barrel	0462-201-16141	10
84-2468	16-14	Male	Solid Barrel	0460-215-16141	10
84-2467	16-14	Female	Solid Barrel	0462-209-16141	10
84-2464	18-16	Male	Open Barrel	1060-16-0122	10
84-2463	18-16	Female	Open Barrel	1062-16-0122	10
84-2466	16-14	Male	Open Barrel	1060-14-0122	10
84-2465	16-14	Female	Open Barrel	1062-14-0122	10

DT SERIES: HOUSING & WEDGELOCK

- Includes 2 Plugs or Receptacles and 2 wedge locks

PART #	PINS	TYPE	CONTENTS	OEM #	PACK
84-2471	2	Plug	Plug & Wedgelock	DT06-2S, W2S	2 pair
84-2470	2	Receptacle	Receptacle & Wedgelock	DT04-2P, W2P	2 pair
84-2473	3	Plug	Plug & Wedgelock	DT06-3S, W3S	2 pair
84-2472	3	Receptacle	Receptacle & Wedgelock	DT04-3P, W3P	2 pair
84-2475	4	Plug	Plug & Wedgelock	DT06-4S, W4S	2 pair
84-2474	4	Receptacle	Receptacle & Wedgelock	DT04-4P, W4P	2 pair
84-2477	6	Plug	Plug & Wedgelock	DT06-6S, W6S	2 pair
84-2476	6	Receptacle	Receptacle & Wedgelock	DT04-6P, W6P	2 pair
84-2479	8	Plug	Plug & Wedgelock	DT06-8S, W8S	2 pair
84-2478	8	Receptacle	Receptacle & Wedgelock	DT04-8P, W8P	2 pair
84-2495	12	Plug	Plug & Wedgelock	DT06-12S, W12S	1 pair
84-2494	12	Receptacle	Receptacle & Wedgelock	DT04-12P, W12P	1 pair
84-2469			Cavity Plug	114017	2

Did You Know?

Deutsch Part Numbering System Explained:

Each segment of the OEM number for Deutsch Terminal and Connector products identify specifications of the product.

Series
DT, DTM

Configuration

DT 06 – 2 S

Style
04: Receptacle
06: Plug

Contacts
P: Pin
S: Socket

CONNECT & PROTECT

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 OEM styles
- Male connectors are packaged in clam shell resealable blisters
- Female receptacles are packaged in polybags
- OEM terminals and housings are packaged in economical 10-packs
- Also available in Bulk quantities
- Tin plated brass terminals

WEATHER PACK TERMINALS

TERMINALS

PART #	GAUGE	TERMINAL TYPE	CRIMP STYLE	OEM #	PACK
84-2000	20-18	Male	Open Barrel	12089040	10
84-2001	20-18	Female	Open Barrel	12089188	10
84-2048	16-14	Male	Open Barrel	12124582	10
84-2047	16-14	Female	Open Barrel	12124580	10
84-2049	12-10	Male	Open Barrel	12124587	10
84-2050	12-10	Female	Open Barrel	12124581	10
84-2002	20-18	Green	Cable Seal	15324982	10
84-2082	16-14	Grey	Cable Seal	15324980	10
84-2081	12-10	Blue	Cable Seal	15324981	10
84-2003		Green	Cable Plug	12010300	10

CONNECTOR ASSEMBLIES

PART #	TERMINAL TYPE	DESCRIPTION	OEM #	PACK
84-2004	Male	1 Cavity Housing	12010996	10
84-2005	Female	1 Cavity Housing	12015791	10
84-2006	Male	2 Cavity Housing	12010973	10
84-2007	Female	2 Cavity Housing	12015792	10
84-2008	Male	3 Cavity Housing	12010717	10
84-2009	Female	3 Cavity Housing	12015793	10
84-9459	Male	4 Cavity Housing - Flat	12010974	5
84-9460	Female	4 Cavity Housing - Flat	12015797	5
84-2033	Male	4 Cavity Housing - Square	12015024	10
84-2034	Female	4 Cavity Housing - Square	12015798	10
84-2053	Male	6 Cavity Housing	12010975	10
84-2052	Female	6 Cavity Housing	12015799	10

CABLE SEALS AND PLUGS

PART #	OEM#	GAUGE	COLOR	PACK
88-2002	15324982	20-18	Green	1000
84-2002	15324982	20-18	Green	10
88-2082	15324980	16-14	Grey	1000
84-2082	15324980	16-14	Grey	10
88-2081	15324981	12-10	Blue	1000
84-2081	15324981	12-10	Blue	10
84-2003	12010300	Cable Plug	Green	10

Grote

METRI PACK TERMINALS

METRI PACK 150 SERIES

PART #	GAUGE	TERMINAL TYPE	CRIMP STYLE	OEM #	PACK
84-2023	20-18	Male	Open Barrel	12047581	10
84-2036	24	Female	Open Barrel	12052466	10
84-2037	20-18	Female	Open Barrel	12103881	10
84-2024	20-18	Female	Open Barrel	12047767	10

METRI PACK 280 SERIES

PART #	GAUGE	TERMINAL TYPE	CRIMP STYLE	OEM #	PACK
84-2026	20-18	Male	Open Barrel	12034047	10
84-2025	18-14	Male	Open Barrel	12020116	10
84-2078	—	Male	5 Cavity Housing	12084891	1
84-2079	—	—	Tab for 84-2078	12015798	5
84-2027	20-18	Female	Open Barrel	12034046	10
84-2035	18-14	Female	Open Barrel	12066214	10
84-2075	—	Female	5 Cavity Housing	12084891	5
84-2076	—	—	Tab for 84-2075	15324857	5
68680	14	Female	Assembly with 20" leads	—	1

METRI PACK 480 SERIES

PART #	GAUGE	TERMINAL TYPE	CRIMP STYLE	OEM #	PACK
84-2028	16-14	Male	Open Barrel	12020120	10
84-2041	16-14	Female	Open Barrel	12124304	10

METRI PACK 630 SERIES

PART #	GAUGE	TERMINAL TYPE	CRIMP STYLE	OEM #	PACK
84-2029	16-14	Female	Open Barrel	12015870	10

56 SERIES

PART #	GAUGE	TERMINAL TYPE	CRIMP STYLE	OEM #	PACK
84-2011	16-14	Male	Open Barrel	2971962	10
84-2013	16-14	Female	Open Barrel	2962447	10

OEM TERMINAL REMOVAL TOOLS

- Economical tools designed to release both solid and open barrel terminals

PART #	TERMINAL STYLE
84-9450	Metri Pack & Weather Pack terminal release tool, for male & female terminals
83-6521	Metri Pack terminal release tool, narrow blade, for 150, 280 series terminals
83-6522	Metri Pack terminal release tool, wide blade, for 56, 480, 630, 800 series terminals
83-6570	Combo Pack (84-9450, 83-6521 & 83-6522)

> Kits

SEE PAGE 64-65 FOR WEATHER PACK KITS AND TOOLS

DEUTSCH TERMINAL & CONNECTOR — ASSORTMENT KIT

83-6549

- Perfect assortment kit for any repair or service technician or installer
- Includes 98 pieces of the most popular Deutsch, DT Series terminals and housings
- 20-16, 18-16 and 16-14 gauge terminals; 2, 3, 4, 6 and 8 way plugs/receptacles & wedge locks
- Crimping and removal tools also available
- 12 compartment resealable plastic box with re-order chart on the inside cover

83-6549

DEUTSCH TERMINAL & CONNECTOR — SERVICE KIT

83-6568

- Ideal for any repair shop or installer of Deutsch terminals & connectors
- A complete 6 piece tool kit to for crimping and releasing both solid and open barrel Deutsch terminals
- Includes 3 crimping tools for open and closed barrel terminals and 3 terminal release tools
- Supplied in a durable plastic molded storage case for easy storage and application
- Includes 83-6562, 83-6563 & 83-6564 crimping tools
- Includes 83-6567 assortment removal tool kit

83-6568

CRIMPING TOOLS – DEUTSCH

- Economical, ratcheting tools designed to crimp solid barrel or open barrel Deutsch terminals

PART #	WIRE GAUGE	TERMINAL STYLE
83-6562	14, 16, 18	Solid Barrel
83-6563	20, 22	Solid Barrel
83-6564	14, 16, 18, 20, 24	Open Barrel (Deutsch + Weather Pack)

- OEM tools designed to crimp solid barrel Deutsch terminals

PART #	WIRE GAUGE	TERMINAL STYLE
83-6516	12, 14, 16, 18, 20	Solid Barrel – 4 Indent Crimp

REMOVAL TOOLS – DEUTSCH

- Economical tools designed to release both solid and open barrel Deutsch terminals

PART #	WIRE GAUGE	TERMINAL STYLE
83-6565	14, 16	Solid & Open Barrel; Gold Handle
83-6566	16, 18	Solid & Open Barrel; Blue Handle
83-6567*	14, 16, 18, 20, 24	Solid & Open Barrel; Gold, Blue/Red Handles

*Kit contains 3 tools

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 cable 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

83-6536

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 connectors in one convenient location
- Easy to use reference re-order chart included

83-6546

83-6546

WEATHER PACK & METRI PACK — OEM OPEN BARREL CRIMPING TOOL

- Can crimp terminals 24-14 gauge
- Heavy duty steel construction
- Ergonomic design with cushioned grips

PART #	DESCRIPTION
83-6569	For open barrel Weather Pack, Metri Pack 150 & 280 series and Molex terminals
84-9449	For open barrel Weather Pack terminals – ratchet style

05

WIRE & CABLE

FILS ET CÂBLES

ALAMBRES Y CABLES

67 Technical information

68 Primary Wire

70 Brake Cable & Portable Extension Cable

71 SXL & Bonded Wire

72 Trailer Cable

74 Battery Cable

75 Welding Cable

76 Booster Cable – Twin Conductor

77 Wire/Cable Displays

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
3	18	18	18	18	18	18	18	18	18	18	14	14
5	18	18	18	18	18	18	18	18	16	14	12	12
7	18	18	18	18	18	18	16	16	14	14	10	10
10	18	18	18	18	16	16	16	14	12	12	10	10
15	18	18	18	18	14	14	12	12	12	10	8	8
20	16	16	16	16	14	12	10	10	10	10	8	6
24	14	14	14	14	12	12	10	10	10	8	6	6
30	12	12	12	12	10	10	10	10	10	6	4	4
40	10	10	10	10	10	10	8	8	6	6	4	2
50	8	8	8	8	8	8	8	8	6	6	2	2
100	4	4	4	4	4	4	4	4	4	2	1	1/0
150	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	4/0	4/0

HOW TO MATCH CABLE & EQUIPMENT

TYPE OF EQUIPMENT	TYPICAL WIRE GAUGE
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

AWG: American Wire Gauge

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.

GPT – GENERAL PURPOSE THERMOPLASTIC WIRE

MADE IN NORTH AMERICA
SAE INTERNATIONAL SAE J1128™ STANDARD
RoHS

87-7001

87-7000

87-7006

87-7002

87-5010

87-7007

87-5011

- Primary wire is single conductor based PVC jacketed wire
- PVC insulation resists heat up to 80°C (176°F) and provides protection from weather conditions and abrasives
- Maximum temperature rating -40°C (-40°F) to 80°C (176°F)
- Used for automotive, truck and marine applications
- Meets SAE J1128 specifications; rated to 60V
- Available in 25', 100' and 1000' spools
- Bulk sizes available
- Custom length wires available by special order only
- Made in North America

6 GAUGE (AUTOMOTIVE)

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

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GPT – GENERAL PURPOSE THERMOPLASTIC WIRE

RoHS

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	88-7013
Pink	—	87-7014	—
Gray	—	87-7003	—

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	88-8013
Pink	—	87-8014	—
Gray	—	87-8003	88-8003

18 GAUGE

COLOR	25'	100'	1000'
Red	89-9000	87-9000	88-9000
Brown	89-9001	87-9001	88-9001
Black	89-9002	87-9002	88-9002
Green	89-9006	87-9006	88-9006
White	89-9007	87-9007	88-9007
Blue	89-9010	87-9010	88-9010
Yellow	89-9011	87-9011	88-9011
Orange	—	87-9012	88-9012
Purple	—	—	88-9013
Pink	—	—	88-9014
Gray	—	87-9003	—

20 GAUGE

COLOR	25'	100'	1000'
Red	—	87-2010	—
Black	—	87-2012	—
White	—	87-2015	—
Blue	—	87-2017	—

87-7010

87-7011

87-7012

87-7013

87-7014

87-8000

87-9006

83-6512
Wire Stripper
See page 172

PVC JACKETED BRAKE CABLE

DURABLE CONSTRUCTION | MADE IN NORTH AMERICA | SAE J1128™ STANDARD

- PVC jacketed wire resists grease, oil, gasoline and acids
- Used for automotive, truck and marine applications
- Maximum temperature rating -40°C (-40°F) to 80°C (176°F)
- Meets SAE J1128 specifications; rated to 60V
- Custom lengths also available

82-5502

Split Flex Tubing: See page 94

2 CONDUCTOR

GAUGE	COLOR	LENGTH	PART #
10	Yellow, Green	50'	82-5509
10	Yellow, Green	100'	82-5508
10	Yellow, Green	1000'	82-5507
10	Blue, White	1000'	82-5590
12	Black, White	50'	82-5512
12	Black, White	100'	82-5511
12	Black, White	500'	82-5550
12	Black, White	1000'	82-5510
14	Black, White	20'	82-5504
14	Black, White	100'	82-5502
14	Black, White	1000'	82-5503
16	Black, White	100'	82-5500
16	Black, White	1000'	82-5501

3 CONDUCTOR

GAUGE	COLOR	LENGTH	PART #
12	White, Green, Black	1000'	82-5591
14	Red, Green, Black	100'	82-5520
16	Red, Green, Black	100'	82-5522

4 CONDUCTOR

GAUGE	COLOR	LENGTH	PART #
14	Red, Green, Black, White	100'	82-5521
16	Red, Green, Black, White	100'	82-5519

PARALLEL BONDED WIRE

- Ideal for RV, boat and utility trailers
- PVC insulation resists heat up to 80°C (176°F); provides protection from weather conditions and abrasives
- Maximum temp. rating -40°C (-40°F) to 80°C (176°F)
- Meets SAE J1128 specifications; rated to 60V

82-5514

4 CONDUCTOR

GAUGE	COLOR	LENGTH	PART #
14	White, Brown, Yellow, Green	25'	82-5515
14	White, Brown, Yellow, Green	100'	82-5514
16	White, Brown, Yellow, Green	25'	82-5524
16	White, Brown, Yellow, Green	100'	82-5525
18	White, Brown, Yellow, Green	25'	82-5527
18	White, Brown, Yellow, Green	100'	82-5526

TYPE SJEOOW — PORTABLE EXTENSION CABLE

- Black TPE jacketing provides premium oil resistance, sunlight, chemical and water resistance
- Rated at 300 Volt; Meets UL and CSA specifications
- Cable is suitable for use in temperatures between -40°C (-40°F) to maximum 105°C (221°F)
- Ideal for indoor and outdoor temporary power uses, portable industrial machinery, compressors, conveyor and automated production equipment
- All extension cord cable is spooled

82-5902

2 CONDUCTOR

GAUGE	COLOR	LENGTH	PART #
14	Black, White	50'	82-5902
14	Black, White	100'	82-5901
14	Black, White	500'	82-5901-500

3 CONDUCTOR

GAUGE	COLOR	LENGTH	PART #
14	Black, White, Green	50'	82-5905
14	Black, White, Green	100'	82-5904
16	Black, White, Green	50'	82-5908
16	Black, White, Green	100'	82-5907

Molded Connectors
82-1025

See page 13

82-5907

TYPE SXL — HEAVY DUTY PRIMARY WIRE

SAE J1128™ STANDARD

- 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 temp. rating: -40°C (-40°F) to 125°C (257°F)
- Resistant to grease, oil, gasoline and acids
- Meets SAE J1128 specifications; rated to 60V
- Additional sizes and gauges available upon request

87-2002

87-2000

87-2001

GAUGE	COLOR	LENGTH	PART #
14	Red	100'	87-0000
14	Black	100'	87-0002
16	Red	100'	87-2000
16	Brown	100'	87-2001
16	Black	100'	87-2002
16	White	100'	87-2007

CONNECT & PROTECT

Grote

TRAILER CABLE

LOW TEMPERATURE

DURABLE CONSTRUCTION | MADE IN NORTH AMERICA | SAE J1128™ STANDARD

- Used for wiring trucks and trailers where cable flexibility in extreme temperatures is a must
- Blue vinyl outer jacket provides protection from weather conditions and abrasive materials
- PVC insulation resists temperature ratings of -65°C (-85°F) to 105°C (221°F)
- Meets SAE J1128 specifications; rated to 60V
- Resistant to gasoline and oil; U.V. resistant
- Designed for 12V and 24V systems; made in North America

COLD RATED -65°C -85°F

82-5822

82-5824

82-5827

2 CONDUCTOR

GAUGE	COLOR	LENGTH	PART #
14	Black, White	100'	82-5822
14	Black, White	250'	82-5822-250
14	Black, White	500'	82-5822-500

3 CONDUCTOR

GAUGE	COLOR	LENGTH	PART #
14	Black, White, Red	100'	82-5823
14	Black, White, Red	250'	82-5823-250
14	Black, White, Red	500'	82-5823-500

4 CONDUCTOR

GAUGE	COLOR	LENGTH	PART #
14	Yellow, Green, Brown, Red	100'	82-5824
14	Yellow, Green, Brown, Red	250'	82-5824-250
14	Yellow, Green, Brown, Red	500'	82-5824-500

6 CONDUCTOR

GAUGE	COLOR	LENGTH	PART #
14	Yellow, Green, Brown, White, Red, Black	100'	82-5825
14	Yellow, Green, Brown, White, Red, Black	250'	82-5825-250
14	Yellow, Green, Brown, White, Red, Black	500'	82-5825-500

7 CONDUCTOR

GAUGE	COLOR	LENGTH	PART #
6/14, 1/12	Yellow, Green, Brown, White, Red, Black, Blue	100'	82-5827
6/14, 1/12	Yellow, Green, Brown, White, Red, Black, Blue	250'	82-5827-250
6/14, 1/12	Yellow, Green, Brown, White, Red, Black, Blue	500'	82-5827-500
6/12, 1/10	Yellow, Green, Brown, White, Red, Black, Blue	100'	82-5826
6/12, 1/10	Yellow, Green, Brown, White, Red, Black, Blue	250'	82-5826-250
6/12, 1/10	Yellow, Green, Brown, White, Red, Black, Blue	500'	82-5826-500
4/12, 2/10, 1/8	Yellow, Green, Brown, White, Red, Black, Blue	100'	82-5828
4/12, 2/10, 1/8	Yellow, Green, Brown, White, Red, Black, Blue	250'	82-5828-250

TRAILER CABLE

DURABLE CONSTRUCTION | MADE IN NORTH AMERICA | SAE J1128™ STANDARD

- Used for wiring trucks and trailers
- Black vinyl outer jacket provides protection from weather conditions and abrasive materials
- PVC insulation resists temperature ratings of -40°C (-40°F) to 80°C (176°F)
- Meets SAE J1128 specifications; rated to 60V
- ABS cable meets SAE J2394 specifications
- Designed for 12V and 24V systems; made in North America

RoHS

82-5600

82-5606

82-5622

4 CONDUCTOR

GAUGE	COLOR	LENGTH	PART #
14	Yellow, Green, Brown, White	100'	82-5602
14	Yellow, Green, Brown, White	500'	82-5603
14	Yellow, Green, Brown, Red	100'	82-5600
14	Yellow, Green, Brown, Red	500'	82-5601

6 CONDUCTOR

GAUGE	COLOR	LENGTH	PART #
14	Yellow, Green, Brown, White, Red, Black	100'	82-5604
14	Yellow, Green, Brown, White, Red, Black	500'	82-5605
16	Yellow, Green, Brown, White, Red, Black	100'	82-5623
16	Yellow, Green, Brown, White, Red, Black	500'	82-5620

7 CONDUCTOR

GAUGE	COLOR	LENGTH	PART #
14	Yellow, Green, Brown, White, Red, Black, Blue	50'	82-5610
14	Yellow, Green, Brown, White, Red, Black, Blue	100'	82-5609
14	Yellow, Green, Brown, White, Red, Black, Blue	250'	82-5619
14	Yellow, Green, Brown, White, Red, Black, Blue	500'	82-5614
6/14, 1/12	Yellow, Green, Brown, White, Red, Black, Blue	50'	82-5612
6/14, 1/12	Yellow, Green, Brown, White, Red, Black, Blue	100'	82-5611
6/14, 1/12	Yellow, Green, Brown, White, Red, Black, Blue	500'	82-5615
6/12, 1/10	Yellow, Green, Brown, White, Red, Black, Blue	100'	82-5606
6/12, 1/10	Yellow, Green, Brown, White, Red, Black, Blue	500'	82-5607

ABS

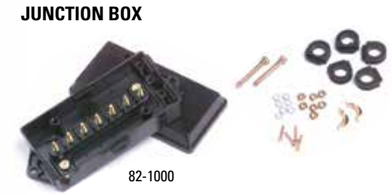
GAUGE	COLOR	LENGTH	PART #
4/12, 2/10, 1/8	Yellow, Green, Brown, White, Red, Black, Blue	50'	82-5622
4/12, 2/10, 1/8	Yellow, Green, Brown, White, Red, Black, Blue	100'	82-5621
4/12, 2/10, 1/8	Yellow, Green, Brown, White, Red, Black, Blue	250'	82-5624

PLUG & SOCKET

82-1019

82-1002

JUNCTION BOX


82-1000

See pages 10-16

CONNECT & PROTECT

Grote

BATTERY CABLE – TYPE SGR

DURABLE CONSTRUCTION | MADE IN NORTH AMERICA | SAE J1127™ STANDARD

82-5703

82-6703

- Ideal for use as an interconnection between batteries and a starter or as a ground in a vehicle
- 100% Copper Cable; made in North America
- Ethylene Propylene Diene Monomer Rubber (EPDM) Insulation
- Provides better flexibility than standard PVC starter cable
- Jacket rated at -40°C (-40°F) to 105°C (221°F)
- Meets all SAE code J1127 specifications; rated @ 60V
- All battery cable is spooled

RoHS

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

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FOR COMPLETE TECHNICAL SPECS VISIT OUR WEBSITE

WELDING CABLE

DURABLE CONSTRUCTION | MADE IN NORTH AMERICA | SAE J1127™ STANDARD

- Ideal for use as an interconnection between batteries and a starter or as a ground in a vehicle
- Abrasion, salt and chemical resistant; good flame resistance
- Fine stranded copper conductor; made in North America
- Provides better flexibility than standard PVC starter cable
- Jacket rated at -50°C (-58°F) to 105°C (221°F) – Rated @ 600V
- Meets all SAE J1127 specifications
- All welding cable is spooled

RoHS

82-5730

82-6730

6 GAUGE

COLOR	25'	100'
Black	82-5732	82-5734
Red	82-6732	82-6734

4 GAUGE

COLOR	25'	100'
Black	82-5724	82-5735
Red	82-6727	82-6735

2 GAUGE

COLOR	25'	100'
Black	82-5721	82-5736
Red	82-6728	82-6736

1 GAUGE

COLOR	25'	100'
Black	82-5737	82-5738
Red	82-6746	82-6738

1/0 GAUGE

COLOR	25'	100'
Black	82-5739	82-5740
Red	82-6739	82-6740

2/0 GAUGE

COLOR	25'	100'
Black	82-5730	82-5731
Red	82-6730	82-6731

3/0 GAUGE

COLOR	25'	100'
Black	82-5741	82-5742
Red	82-6741	82-6742

4/0 GAUGE

COLOR	25'	100'
Black	82-5744	82-5745
Red	82-6744	82-6745

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BOOSTER CABLE

TWIN CONDUCTOR

- Make up your own booster cables
- Combine with heavy duty clamps for superior charging power
- Can be used with SB type connectors for plug in convenience
- Ideal for tarps system (dump truck / dump trailer)
- Insulation stays flexible in cold weather; bonded cable resists tangling
- 100% fine-stranded copper meets SAE J1127 specifications
- Temperature rated to -40˚F (-40˚C); rated @ 60V or less

GAUGE	OUTSIDE DIAMETER	COLOR	LENGTH	PART #
8 GA	.320" x .700"	Black & Yellow	1,500'	82-5759-1500
6 GA	.360" x .780"	Black & Orange	100'	82-5760
6 GA	.360" x .780"	Black & Orange	1,200'	82-5760-1200
4 GA	.410" x .880"	Black & White	100'	82-5761
4 GA	.410" x .880"	Black & White	500'	82-5761-500
2 GA	.450" x .960"	Black & Red	100'	82-5762

CABLE SLITTER/STRIPPER TOOL

HEAVY DUTY: 8 - 4/0 GAUGE

83-6515

- 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

9" HAND HELD CABLE CUTTER

84-9088

- Cuts cables up to 2/0 Gauge
- Ergonomic design with insulated grips

84-9088

PRIMARY WIRE DISPENSER

The Grote Wire Dispenser provides a unique, compact and effective inventory management solution for spooled wire.

- Unit holds up to 123 spools of wire – 63 x 100' spools of wire and 60 x 25' spools of primary wire
- Can accommodate 12GA-18 GA wire spools
- Ease of re-stocking through the top loading lid
- See through display provides inventory at-a-glance for immediate re-stocking
- Heavy gauge steel makes this unit rugged and very stable
- Effective use of shelf space improves revenue per square foot
- Mix-'n-match – Stock the primary wire and cable you need to support your unique customers
- Wire not included

00872

00872

ONLY 34" WIDE X 17" HIGH X 12" DEEP **Holds up to 7,800' of wire!**

Top loading lid eliminates re-stocking hassles

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

06

SUPPORT & PROTECTIVE PRODUCTS

PRODUITS DE FIXATION ET DE PROTECTION

PRODUCTOS DE SOPORTE Y PROTECCIÓN

80 Nylon Cable Ties

84 Mounting Bases & Installation Tools

86 Heat Shrink Tubing

92 Heat Guns & Torches

94 Tube and Loom

96 Clamps, Clips & Grommets

WIRE & CABLE MANAGEMENT IS VITAL IN TODAY'S VEHICLES AND EQUIPMENT. GROTE'S SELECTION OF SUPPORT & PROTECTIVE PRODUCTS PROVIDE OPTIONS FOR ALL TYPES OF APPLICATIONS. EVERYTHING TO PROPERLY AFFIX, HANG, WRAP, BUNDLE AND SECURE EQUIPMENT'S CRITICAL POWER DELIVERY WIRES AND CABLES IN EQUIPMENT AND VEHICLES IS ALL RIGHT HERE. YOU NEED IT, GROTE'S GOT IT!

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

NYLON CABLE TIES

- Made of general purpose (PA66) Polyamide 6.6 nylon material
- Flame rating: UL 94 V-2. All weather ties flame rating: UL 94 HB
- 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)
- Use Grote's ergonomic and mechanical cable tie tools for an easy effective application (83-6527, 83-6528) on page 81
- Made in North America

FEDERAL ASTM SPECIFICATIONS: D-4066PA0111 | FDA SPECIFICATIONS: CFR177.1500

83-6004

83-6019

83-6029

LIGHT DUTY TIES

PACK OF 25	PACK OF 100	PACK OF 1000	LENGTH	WIDTH	BUNDLE DIAMETER	STRENGTH	COLOR
	83-6000	83-6000-3	4.10" (104mm)	.11" (2.8mm)	0.75" (19mm)	18 lbs	White
	83-6001	83-6001-3	4.10" (104mm)	.11" (2.8mm)	0.75" (19mm)	18 lbs	Black
	83-6004	83-6004-3	8.00" (203mm)	.11" (2.8mm)	2.20" (56mm)	18 lbs	White
	83-6005	83-6005-3	8.00" (203mm)	.11" (2.8mm)	2.20" (56mm)	18 lbs	Black

STANDARD TIES

PACK OF 25	PACK OF 100	PACK OF 1000	LENGTH	WIDTH	BUNDLE DIAMETER	STRENGTH	COLOR
	83-6006	83-6006-3	5.60" (142mm)	.26" (6.6mm)	1.25" (32mm)	40 lbs	White
	83-6007	83-6007-3	5.60" (142mm)	.26" (6.6mm)	1.25" (32mm)	40 lbs	Black
85-6018	83-6018	83-6018-3	8.00" (203mm)	.19" (4.8mm)	1.87" (47mm)	50 lbs	White
85-6019	83-6019	83-6019-3	8.00" (203mm)	.19" (4.8mm)	1.87" (47mm)	50 lbs	Black
85-6020	83-6020	83-6020-3	11.10" (282mm)	.19" (4.8mm)	3.00" (76mm)	50 lbs	White
85-6021	83-6021	83-6021-3	11.10" (282mm)	.19" (4.8mm)	3.00" (76mm)	50 lbs	Black
85-6026	83-6026	83-6026-3	14.10" (358mm)	.19" (4.8mm)	4.00" (101mm)	50 lbs	White
85-6025	83-6025	83-6025-3	14.10" (358mm)	.19" (4.8mm)	4.00" (101mm)	50 lbs	Black

HEAVY TIES

PACK OF 25	PACK OF 100	PACK OF 1000	LENGTH	WIDTH	BUNDLE DIAMETER	STRENGTH	COLOR
	83-6017	83-6017-3	7.70" (196mm)	.30" (7.6mm)	2.37" (60mm)	120 lbs	White
	83-6016	83-6016-3	7.70" (196mm)	.30" (7.6mm)	2.37" (60mm)	120 lbs	Black
85-6028	83-6028	83-6028-3	14.10" (358mm)	.30" (7.6mm)	4.00" (101mm)	120 lbs	White
85-6029	83-6029	83-6029-3	14.10" (358mm)	.30" (7.6mm)	4.00" (101mm)	120 lbs	Black

HIGH PERFORMANCE ALL WEATHER TIES

PART #	DESCRIPTION	LENGTH	WIDTH	BUNDLE DIA.	STRENGTH	PK SIZE	COLOR
83-6001C	Light Duty	4.10" (104mm)	.11" (2.8mm)	0.75" (19mm)	18 lbs	100	Black
83-6007C	Standard	5.60" (142mm)	.26" (6.6mm)	1.25" (32mm)	40 lbs	100	Black
83-6019C	Standard	8.00" (203mm)	.19" (4.8mm)	1.87" (47mm)	50 lbs	100	Black
83-6021C	Standard	11.10" (282mm)	.19" (4.8mm)	3.00" (76mm)	50 lbs	50	Black
83-6025C	Standard	14.10" (358mm)	.19" (4.8mm)	4.00" (101mm)	50 lbs	50	Black
83-6016C	Heavy Duty	7.70" (196mm)	.30" (7.6mm)	2.37" (60mm)	120 lbs	30	Black
83-6029C	Heavy Duty	14.10" (358mm)	.30" (7.6mm)	4.00" (101mm)	120 lbs	20	Black

EXTRA HEAVY DUTY TIES

25 PACK	50 PACK	LENGTH	WIDTH	BUNDLE DIA.	STRENGTH	COLOR
	83-6121	24.00" (609mm)	.34" (8.6mm)	8.0" (203mm)	175 lbs	White
85-6120	83-6120	24.00" (609mm)	.34" (8.6mm)	8.0" (203mm)	175 lbs	Black
	83-6118	36.00" (914mm)	.34" (8.6mm)	11.00" (279mm)	175 lbs	White
	83-6119	36.00" (914mm)	.34" (8.6mm)	11.00" (279mm)	175 lbs	Black
	83-6122	48.00" (1,219mm)	.34" (8.6mm)	15.00" (381mm)	175 lbs	White
	83-6123	48.00" (1,219mm)	.34" (8.6mm)	15.00" (381mm)	175 lbs	Black

85-6120

RELEASABLE DUAL CLAMP TIES

- Unique one piece design with the 1/4" mounting head centered on the strap
- Constructed of high impact nylon material; with UL flame rating 94-HB excellent UV resistance
- Can reduce the need to carry numerous clamps and other mounting devises
- Is releasable and extremely flexible for tough to reach areas
- Continuous operating temperature -40°C (-40°F) to 110°C (230°F)

FEDERAL ASTM SPECIFICATIONS: D-4066PA0151

83-6040

10 PACK	50 PACK	LENGTH	WIDTH	BUNDLE DIA. *(EA. SIDE)*	STRENGTH	MOUNTING HOLE	COLOR
85-6040	83-6040	13.0" (331mm)	.50" (12.7mm)	1.3" (33.02mm)	150 lbs	.250" (6.35mm)	Black
85-6041	83-6041	19.2" (489mm)	.50" (12.7mm)	2.3" (58.42mm)	150 lbs	.250" (6.35mm)	Black

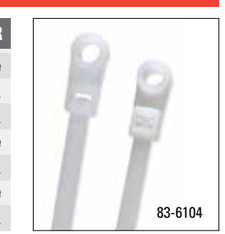
RELEASABLE TIES

25 PACK	100 PACK	LENGTH	WIDTH	BUNDLE DIA.	STRENGTH	COLOR
	83-6012	8.00" (203mm)	.18" (4.5mm)	2.00" (51mm)	50 lbs	White
	83-6013	8.00" (203mm)	.18" (4.5mm)	2.00" (51mm)	50 lbs	Black
	83-6022	15.00" (381mm)	.18" (4.5mm)	4.00" (101mm)	50 lbs	White
85-6023	83-6023	15.00" (381mm)	.18" (4.5mm)	4.00" (101mm)	50 lbs	Black
85-6163	83-6163	22.40" (569mm)	.49" (12.5mm)	5.90" (150mm)	250 lbs	Black

83-6023

SCREW MOUNT TIES

25 PACK	50 PACK	100 PACK	LENGTH	WIDTH	BUNDLE DIA.	STRENGTH	MOUNT HOLE	COLOR
85-6104		83-6104	8.00" (203mm)	.18" (4.5mm)	2.00" (51mm)	50 lbs	#10	White
		83-6105	8.00" (203mm)	.18" (4.5mm)	2.00" (51mm)	50 lbs	#10	Black
		83-6107	11.50" (292mm)	.18" (4.5mm)	3.00" (76mm)	50 lbs	#10	Black
		83-6027	14.50" (368mm)	.18" (4.5mm)	4.00" (101mm)	50 lbs	#10	White
		83-6108	14.50" (368mm)	.18" (4.5mm)	4.00" (101mm)	50 lbs	#10	Black
	83-6037	83-6116	15.75" (400mm)	.30" (7.6mm)	4.00" (101mm)	120 lbs	.250"	White
	83-6117		15.75" (400mm)	.30" (7.6mm)	4.00" (101mm)	120 lbs	.250"	Black


83-6104

NYLON CABLE TIE ASSORTMENT

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

PART #	PACK SIZE	COLOR
83-6506	125	**White**
83-6507	125	**Black**

Includes 25 x 4" (18lb.); 25 x 8" (40lb.); 25 x 7", 11" & 14" (50 lb.)

PART #	PACK OF	LENGTH	WIDTH	BUNDLE DIAMETER	STRENGTH
83-6514	50	7.6" (193mm)	.18" (4.6mm)	2.0" (51mm)	50 lbs
83-6559	50	11.1" (282mm)	.19" (4.8mm)	3.0" (76mm)	50 lbs

*Includes 10 x **Blue**, **Yellow**, **Green**, **Orange** and **Red***

CABLE TIE ASSORTMENT CANISTER

- Assortment of light to standard duty nylon cable ties
- 10 different cable ties ranging from 4" to 12" and in various colors
- 100 of each of the cable ties (total 1,000 pieces)
- Convenient storage canister
- Ideal use; at home, the garage or workshop

PART #	PACK OF	LENGTHS	STRENGTH	COLORS
83-6600	1,000	4", 6", 8", 12"	18lb–50lb	**Yellow, Blue, Red, Green, White**

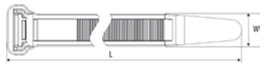
COLOR TIES

Color Ties help to ease wire identification

PACK OF 25	PACK OF 1000	LENGTH	WIDTH	BUNDLE DIAMETER	STRENGTH	COLOR
85-6030	**83-6030-3**	8.0" (203mm)	.19" (4.8mm)	1.87" (47mm)	50 lbs	**Red**
85-6031	**83-6031-3**	8.0" (203mm)	.19" (4.8mm)	1.87" (47mm)	50 lbs	**Orange**
85-6032	**83-6032-3**	8.0" (203mm)	.19" (4.8mm)	1.87" (47mm)	50 lbs	**Blue**
85-6033	**83-6033-3**	8.0" (203mm)	.19" (4.8mm)	1.87" (47mm)	50 lbs	**Yellow**
85-6034	**83-6034-3**	8.0" (203mm)	.19" (4.8mm)	1.87" (47mm)	50 lbs	**Green**
85-6035	**83-6035-3**	8.0" (203mm)	.19" (4.8mm)	1.87" (47mm)	50 lbs	**Purple**
85-6036	**83-6036-3**	8.0" (203mm)	.19" (4.8mm)	1.87" (47mm)	50 lbs	**Gray**

WIDE STRAP CABLE TIES

- Made of general purpose (PA66HIRHS) Polyamide 6.6 high impact, heat-stabilized nylon
- UL flame rating 94-HB, excellent UV resistance
- Continuous operating temp: -40°C (-40°F) to 110°C (230°F)



- The wide strap tie minimizes pinching on soft bundles
- Features a low profile head to provide compact bundling
- Accommodates a large bundle diameter range .375" (9.5mm) – 4.125" (104.7mm)

FEDERAL ASTM SPECIFICATIONS: D-4066PA0161

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**

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

RoHS

FEDERAL ASTM SPECIFICATIONS: 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)	.18" (4.57mm)	1.90" (48mm)	50 lbs	**Black**

DOMED FIR TREE — MOUNT & 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 & 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**

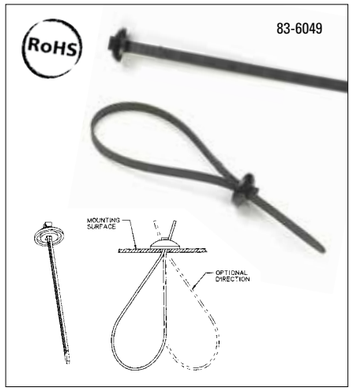
BUTTON HEAD CABLE TIE

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

- 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

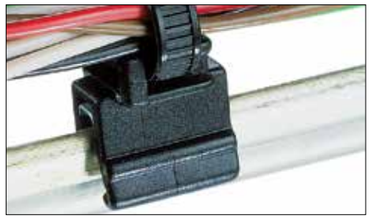
FEDERAL ASTM SPECIFICATIONS: D-4066PA0161

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**



EDGE CLIP & CABLE TIE ASSEMBLIES

85-6063



- Made of general purpose (PA66HIRHS) Polyamide 6.6 high impact, heat stabilized nylon
- 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)

- 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)

FEDERAL ASTM SPECIFICATIONS: D-4066PA0161

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**

HEAVY DUTY MOUNTS

83-6060
83-6061
83-6062

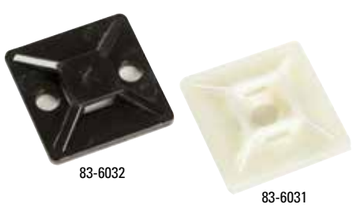
- Made of general purpose (PA66HIRHS) Polyamide 6.6 high impact, heat stabilized nylon material; UL flame rating 94-HB, excellent UV resistance
- Continuous operating temperature -40°C (-40°F) to 110°C (230°F)

- 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

FEDERAL ASTM SPECIFICATIONS: D-4066PA0161

PACK OF 25	PACK OF 100	MOUNTING HOLE	LENGTH	WIDTH	MAX TORQUE	COLOR
85-6060	**83-6060**	.187" (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**	.312" (8.0mm)	.76" (19.3mm)	2.25" (57mm)	115 lb - in.	**Black**

CABLE TIE MOUNTING BASES


83-6032
83-6031

- Made of general purpose (PA66) Polyamide 6.6 nylon material; rubber-based adhesive
- Accommodates 18-50 lb cable ties

PART #	LENGTH	WIDTH	MOUNTING STYLE/HOLE	PACK	COLOR
83-6030	0.75" (19.05mm)	0.75" (19.05mm)	4-Way with adhesive, #6	50	**White**
83-6032	0.75" (19.05mm)	0.75" (19.05mm)	4-Way with adhesive, #6	50	**Black**
83-6031	1.00" (25.4mm)	1.00" (25.4mm)	4-Way with adhesive, #10	50	**White**
83-6033	1.00" (25.4mm)	1.00" (25.4mm)	4-Way with adhesive, #10	50	**Black**

CABLE TIE TENSION AND CUTTER "GUN STYLE" TOOL

MILITARY

- 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

MILITARY SPECIFICATIONS: MS90387-1 (83-6527), MS90387-2 (83-6528)

83-6527 For 18-50 lb Ties
83-6528 For 18-250 lb Ties

83-6527

83-6528

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

83-6509

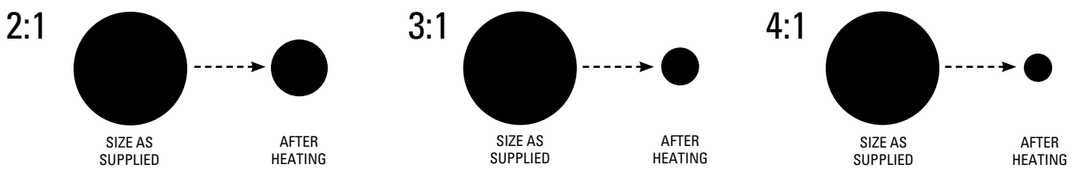
Did You Know?

CABLE TIES WILL ABSORB AND RELEASE MOISTURE AS THE ATMOSPHERE CHANGES!

Grote recommends the following information to ensure the most reliable and efficient cable tie application:

- Straps should be stored in an unopened bag in a storage environment at (70°F and 50% humidity)
- Installation temperature should be at or greater than (32°F and 40% humidity)
- Over tightening of the strap can cause stress on the pawl and greater potential of failure

SHRINK RATIO



POLYOLEFIN HEAT SHRINKABLE TUBING

Product Line	SWT	DWT	FDWA	FDWA-CLEAR	HWA	DWA
Type	Single Wall	Dual Wall	Dual Wall	Dual Wall	Dual Wall	Dual Wall
Shrink Ratio	2 to 1	3 to 1	3 to 1	3 to 1	3 to 1	4 to 1
Outer Wall Construction	Thin/Flexible	Semi-Rigid	Flexible	Flexible	Rigid	Semi-Rigid
Inner Wall Construction	N/A	Encapsulant Lined	Adhesive Lining	Adhesive Lining	Adhesive Lining	Adhesive Lining
Minimum Shrink Temp.	70°C (158°F)	125°C (257°F)	80°C (176°F)	80°C (176°F)	90°C (195°F)	110°C (230°F)
Operating Temperature	-55°C (135°C)	-55°C (110°C)	-40°C (110°C)	-40°C (110°C)	-55°C (110°C)	-40°C (130°C)
Moisture Resistance	Low	Medium	High	High	High	High
Flame Retardancy	Good		Excellent		Excellent	Excellent
Abrasion Protection	Good	Excellent	Excellent	Excellent	Excellent	Excellent
Strain Relief & Insulation	Good	Excellent	Excellent	Excellent	Excellent	Excellent
Mil Spec	23053/5 Class 1, 3	20353/4 Class 1	23053/4 Class 3		23053/15 Class 1	
ROHS	Yes	Yes	Yes	Yes	Yes	Yes
Other	Lead/Halogen Free	Lead/Halogen Free		Lead/Halogen Free		

** Custom lengths and additional materials available upon request*

ADHESIVE LINED, DUAL WALL | "HOT MELT" HEAT SHRINK TUBING

4:1 SHRINK RATIO, DWA

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.

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)

SPECS / APPROVALS: UL E85381RECOGNIZED, 600 V, 125° C

SIZE	LENGTH	PACK	WIRE SIZE	PART #
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**

ADHESIVE LINED, DUAL WALL | "HOT MELT" HEAT SHRINK TUBING KIT

4:1 SHRINK RATIO, DWA

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

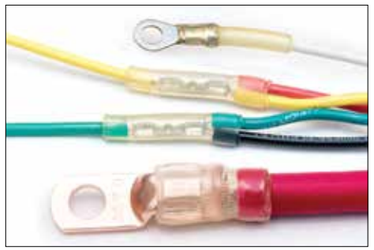
PART #	FEATURES	SIZE	QUANTITY
83-6535	**84-5006**	1/16"- 3/16"	12
	84-5007	3/16"- 1/4"	12
	84-5008	1/4"- 3/8"	10
	84-5009	1/2"- 5/8"	6

83-6535

HEAT SHRINK TUBING

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*



FLEXIBLE, ADHESIVE LINED, DUAL WALL

3:1 SHRINK RATIO, FDWA & FDWA-CLEAR

Flexible Dual Wall is an adhesive 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 an adhesive lining 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.

SPECS / APPROVALS: UL E35586, 600 V, 125°C | CSA LR31929, 600 V, 125° C

PART #	DESCRIPTION	GAUGE	SIZE	LENGTH	QUANTITY
84-5029	3:1, DUAL WALL, CLEAR	22-18 GA	1/8"	6"	6
84-5030	3:1, DUAL WALL, CLEAR	20-12 GA	3/16"	6"	6
84-5031	3:1, DUAL WALL, CLEAR	16-10 GA	1/4"	6"	6
84-5032	3:1, DUAL WALL, CLEAR	12-8 GA	3/8"	6"	6
84-5033	3:1, DUAL WALL, CLEAR	8-4 GA	1/2"	6"	6
84-5034	3:1, DUAL WALL, CLEAR	4-2/0 GA	3/4"	6"	6
84-5035	3:1, DUAL WALL, CLEAR	1-4/0 GA	1"	6"	6

PART #	DESCRIPTION	GAUGE	SIZE	LENGTH	QUANTITY
84-4015	3:1, DUAL WALL, **BLACK**	22-18 GA	1/8"	6"	6
84-4015-3	3:1, DUAL WALL, **BLACK**	22-18 GA	1/8"	6"	20
84-4015-48	3:1, DUAL WALL, **BLACK**	22-18 GA	1/8"	48"	6
84-4016	3:1, DUAL WALL, **BLACK**	20-12 GA	3/16"	6"	6
84-4016-3	3:1, DUAL WALL, **BLACK**	20-12 GA	3/16"	6"	20
84-4016-48	3:1, DUAL WALL, **BLACK**	20-12 GA	3/16"	48"	6
84-4017	3:1, DUAL WALL, **BLACK**	16-10 GA	1/4"	6"	6
84-4017-3	3:1, DUAL WALL, **BLACK**	16-10 GA	1/4"	6"	20
84-4017-48	3:1, DUAL WALL, **BLACK**	16-10 GA	1/4"	48"	6
84-4018	3:1, DUAL WALL, **BLACK**	12-8 GA	3/8"	6"	6
84-4018-3	3:1, DUAL WALL, **BLACK**	12-8 GA	3/8"	6"	20
84-4018-48	3:1, DUAL WALL, **BLACK**	12-8 GA	3/8"	48"	6
84-4019	3:1, DUAL WALL, **BLACK**	8-4 GA	1/2'	6"	6
84-4019-3	3:1, DUAL WALL, **BLACK**	8-4 GA	1/2'	6"	20
84-4019-48	3:1, DUAL WALL, **BLACK**	8-4 GA	1/2'	48"	6
84-4020	3:1, DUAL WALL, **BLACK**	4-2/0 GA	3/4"	6"	6
84-4020-3	3:1, DUAL WALL, **BLACK**	4-2/0 GA	3/4"	6"	10
84-4020-48	3:1, DUAL WALL, **BLACK**	4-2/0 GA	3/4"	48"	6
84-4021	3:1, DUAL WALL, **BLACK**	1-4/0 GA	1"	6"	6
84-4021-3	3:1, DUAL WALL, **BLACK**	1-4/0 GA	1"	6"	10
84-4021-48	3:1, DUAL WALL, **BLACK**	1-4/0 GA	1"	48"	6

HEAT SHRINK TUBING KIT

83-6537

FLEXIBLE, ADHESIVE LINED, DUAL WALL

3:1 SHRINK RATIO, FDWA, 50 QTY

PART #	FEATURES	SIZE	LENGTH	QUANTITY
83-6537	**84-4015**	1/8"	6"	12
	84-4016	3/16"	6"	12
	84-4017	1/4"	6"	12
	84-4018	3/8"	6"	6
	84-4019	1/2"	6"	6
	84-4020	3/4"	6"	2

DUAL WALL

HEAT SHRINK TUBING

3:1 SHRINK RATIO, DWT

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 encapsulant lined, while the inner wall is a meltable encapsulant lining that flows with the application of heat. This moisture resistant tubing provides rugged protection from chemicals, abrasion, vibration and flexing.

SPECS / APPROVALS: UL E85381, 600 V, 125°C | MILITARY AMS-DTL-23053/4 CLASS 1

MILITARY

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 #	RED PART #
1/8"	6"	6	22-18 GA	**84-4006**	**84-6106**
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**
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**
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**
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**
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**
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**
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**	

HEAT SHRINKABLE TUBING KITS

DUAL WALL

83-6502
83-6505

3:1 SHRINK RATIO, DWT

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

PART #	FEATURES	QUANTITY
83-6502	Black Tubing	50
83-6505	Red and Black Tubing	50

HEAT SHRINK TUBING

ADHESIVE LINED, HEAVY WALL

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

3:1 SHRINK RATIO, HWA

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.

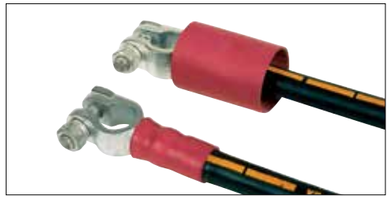
SPECS / APPROVALS: UL E1 15664

INSIDE DIAMETER PRE HEAT	POST HEAT	LENGTH PER PIECE	PACK	PART #
.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**

HEAT SHRINK TUBING

DUAL WALL

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)



84-9564

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.

SPECS / APPROVALS: CSA C22.2 | UL 486D | MILITARY DTL-23053/15, CLASS 2

MILITARY

RoHS

SIZE	LENGTH PER PIECE	PACK	WIRE SIZE	BLACK PART #	RED PART #
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**

HEAT SHRINK TUBING

SINGLE WALL

2:1 SHRINK RATIO, SWT

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.

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)

MILITARY

SPECS / APPROVALS: CSA LR31929 VW-1, 600 V, 125°C
UL E35586 VW-1, 600 V, 125°C | MILITARY AMS-DTL-23053/5, CLASSES 1 AND 3

SIZE	LENGTH PER PIECE	PACK	BLACK PART #	RED PART #	BLUE PART #	YELLOW PART #
1/8"	6"	6	**84-5010**	**84-4013**		
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*

HEAT SHRINKABLE TUBING KIT, BLACK

SINGLE WALL

2:1 SHRINK RATIO, SWT

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

PART #	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 SHRINK TUBING ASSORTMENT

SINGLE WALL

PART #	FEATURES	SIZE	QUANTITY
83-6533	Black	1/4" x 6"	3
		3/8" x 6"	2
		1/2" x 6"	2

83-6533

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

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

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

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

WE KNOW THE POWER OF A GOOD CONNECTION

At Grote Industries, **WE ARE COMMITTED TO TAKING CARE OF OUR CUSTOMERS** by ensuring that they receive the information and products they need, when they need them. That's why we are continually investing in industry-leading technology that allows us to connect to our valued customers.

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SPLIT FLEX CONVOLUTED TUBING

DURABLE CONSTRUCTION | MADE IN NORTH AMERICA | ALL WEATHER | RoHS

- Provides excellent chemical protection. Allows flexible routing of wire, cable, 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: Automotive, Truck, Bus, Trailer, Marine, R.V., OE harness manufacturing

83-8031

NYLON SPLIT LOOM

- Made of lightweight, black nylon material, with grey striping
- Continuous operating temp: -40°C (-40°F) to 125°C (257°F), FMVSS 302 Flame Rating

SPECS: FORD: WSS-M4D933-A1, ES-XU5T-14A099-AA CHRYSLER: MS-DB41 CPN 4059 | ASTM: D4066PA283

SIZE	LENGTH	PACK	PART #	SIZE	LENGTH	PACK	PART #
1/4"	50' (15.2m)	Bag	**83-8030**	5/8"	50' (15.2m)	Bag	**83-8033**
1/4"	500' (152m)	Box	**83-8030-3**	5/8"	500' (152m)	Box	**83-8033-3**
1/4"	3200' (975m)	Box	**83-8030-3200**	5/8"	800' (244m)	Box	**83-8033-800**
3/8"	50' (15.2m)	Bag	**83-8031**	3/4"	50' (15.2m)	Bag	**83-8034**
3/8"	500' (152m)	Box	**83-8031-3**	3/4"	500' (152m)	Box	**83-8034-3**
3/8"	1900' (579m)	Box	**83-8031-1900**	3/4"	550' (168m)	Box	**83-8034-550**
1/2"	50' (15.2m)	Bag	**83-8032**	1"	50' (15.2m)	Bag	**83-8035**
1/2"	500' (152m)	Box	**83-8032-3**	1"	300' (91.4m)	Box	**83-8035-3**
1/2"	1100' (335m)	Box	**83-8032-1100**	1.5"	150' (45.7m)	Box	**83-8036-3**
				2"	100' (30.4m)	Box	**83-8037-3**

83-8010

POLYETHYLENE SPLIT LOOM

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

SIZE	LENGTH	PACK	PART #	SIZE	LENGTH	PACK	PART #
1/4"	10' (3.0m)	Bag	**83-6999**	1/2"	100' (30.4m)	Spool	**83-8001-S**
1/4"	25' (7.6m)	Bag	**83-8013**	1/2"	500' (152m)	Box	**83-8001-3**
1/4"	50' (15.2m)	Bag	**83-8003**	5/8"	50' (15.2m)	Bag	**83-8007**
1/4"	100' (30.4m)	Spool	**83-8003-S**	5/8"	100' (30.4m)	Spool	**83-8007-S**
1/4"	500' (152m)	Box	**83-8003-3**	5/8"	500' (152m)	Box	**83-8007-3**
3/8"	8' (2.43m)	Bag	**83-7000**	3/4"	5' (1.52m)	Bag	**83-7002**
3/8"	25' (7.6m)	Bag	**83-8010**	3/4"	50' (15.2m)	Bag	**83-8002**
3/8"	50' (15.2m)	Bag	**83-8000**	3/4"	100' (30.4m)	Spool	**83-8002-S**
3/8"	100' (30.4m)	Spool	**83-8000-S**	3/4"	500' (152m)	Box	**83-8002-3**
3/8"	500' (152m)	Box	**83-8000-3**	1"	5' (1.52m)	Bag	**83-6998**
7/16"	12' (3.6m)	Bag	**83-8018**	1"	50' (15.2m)	Bag	**83-8004**
7/16"	50' (15.2m)	Bag	**83-8014**	1"	300' (91.4m)	Box	**83-8004-3**
7/16"	500' (152m)	Box	**83-8014-3**	1-1/4"	50' (15.2m)	Bag	**83-8008**
1/2"	7' (2.13m)	Bag	**83-7001**	1-1/4"	250' (76.2m)	Box	**83-8008-250**
1/2"	25' (7.6m)	Bag	**83-8011**	1 1/2"	150' (45.7m)	Box	**83-8005-3**
1/2"	50' (15.2m)	Bag	**83-8001**	2"	100' (30.4m)	Box	**83-8009-3**

83-8003-S

SPLIT LOOM INSTALLATION TOOL

83-6993

- Loom tool allows for easy insertion of singular or multiple wires to split loom
- Ergonomic design, saves valuable time *(and your thumbs)*

SIZE RANGE	PART #	SIZE RANGE	PART #
1/4" – 7/16" Size Range	**83-6990**	3/4" – 7/8" Size Range	**83-6992**
1/2" – 5/8" Size Range	**83-6991**	1" – 1 1/2" Size Range	**83-6993**

SPIRAL WRAP – SPOOLED

MILITARY

- 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 SPECS: MIL I-631D, MIL P-21922A (BLACK ONLY) | FED SPEC: LP390 (BLACK AND NATURAL)

SIZE	MIN/MAX BUNDLE DIAMETER	LENGTH	BLACK	NATURAL
1/4"	.187" (4.75mm) – 2" (50.8mm)	100' (30.5m)	**83-9008**	**83-9003**
3/8"	.312" (7.92mm) – 3" (76.2mm)	100' (30.5m)	**83-9009**	**83-9000**
1/2"	.375" (9.52mm) – 4" (102mm)	100' (30.5m)	**83-9007**	**83-9001**
3/4"	.750" (19.1mm) – 5" (127mm)	100' (30.5m)	**83-9010**	**83-9002**
1"	1.00" (25.4mm) – 7" (178mm)	100' (30.5m)	**83-9011**	**83-9004**

83-9001
83-9007

c UL us LISTED E147924 | RoHS

NON METALLIC LOOM

MILITARY

- 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 (Polyetheylene 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

INDUSTRY SPECS: FORD: ESB-M3L38-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

SIZE	LENGTH	COLOR	PART #
1/4"	100' (30.5m)	Black	**87-1000**
5/16"	100' (30.5m)	Black	**87-1008**
3/8"	100' (30.5m)	Black	**87-1001**
1/2"	100' (30.5m)	Black	**87-1002**
3/4"	100' (30.5m)	Black	**87-1007**

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

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)
- Made in North America; additional bulk sizes available

FEDERAL ASTM SPECIFICATIONS: D2000 M3 BA710 A14 B13 C12 F17 Z1

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**

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 SIZE	PART #
3/16"	1/2" wide x 1 1/4" long x 3/16" deep	15	**84-7033**
1/4"	1/2" wide x 1 1/2" long x 1/4" deep	100	**83-7034**
1/4"	1/2" wide x 1 1/2" long x 1/4" deep	15	**84-7034**
3/8"	1/2" wide x 1 1/2" long x 1/2" deep	15	**84-7035**

NYLON BUSHINGS

- Easy snap in style nylon bushings
- Protects wire and cables from chaffing and vibration
- Lightweight and easy to install; 1/8" thickness

I.D. SIZE	MOUNTING HOLE	PACK SIZE	PART #
3/8"	1/2"	10	**84-8050**
5/8"	3/4"	100	**83-8051**
5/8"	3/4"	10	**84-8051**
3/4"	1"	10	**84-8052**

PVC GROMMETS

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

INSIDE DIA. SIZE (A)	GROOVE WIDTH (B)	OVERALL WIDTH (C)	OVERALL THICKNESS (D)	GROOVE DIAMETER (E)	PACK SIZE	PART #
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**

PVC GROMMET ASSORTMENT

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

83-7006

07

SWITCHES & ELECTRICAL ASSEMBLIES

COMMUTATEURS ET ENSEMBLES ÉLECTRIQUES

APAGADORES Y ENSAMBLES ELÉCTRICOS

100 Battery Disconnect Switches
101 Ignition & Starter Switches
102 Toggle Switches
105 Rocker Switches
106 Push/Pull Switches
107 Solenoids
108 Miscellaneous Switches
110 Pigtails & Sockets

WHETHER YOU ARE INSTALLING NEW PRODUCTS OR REPLACING/UPDATING AN EXISTING SYSTEM, FOR REPAIRS AND MAINTENANCE ON LAWN AND GARDEN EQUIPMENT AROUND THE HOUSE, MARINE AND RV EQUIPMENT OR HEAVY VEHICLE AND EQUIPMENT NEEDS, GROTE OFFERS AN EXTENSIVE LINE OF SWITCHES & ELECTRICAL ASSEMBLIES YOU NEED TO GET THE JOB DONE RIGHT!

MASTER BATTERY DISCONNECT SWITCH

82-2103

82-2157

- Truck, Automotive, Marine, Off-Road and R.V. applications
- For battery circuit (82-2103, 82-2233); for alternator or generator field circuit (82-2155)
- 3/4" & #10-32 copper alloy stud terminals with hex nuts, lock washers included
- Large die cast lever for ease of operation; mounting stem ½" long x ¾" dia.
- Fits panel up to ¼" thick; 10,000 life cycle; 6-36V DC
- Includes faceplate
- Faceplate replacement for 82-2103 (82-2157)

DISCONNECTS ALL CIRCUITRY TO REDUCE THE POSSIBILITY OF THEFT / ACCIDENTAL ELECTRICAL FIRES

PRODUCT RATING

Continuous Rating (Make/Break), Large Studs – 180 AMP @ 6-36V DC; 1,000 AMP – in rush (82-2103)
Continuous Rating (Make/Break), Large Studs – 180 AMP @ 6-36V DC (82-2233)
Intermittent Rating (Carrying), Large Studs – 1800 AMP @12V DC; 1 cycle = 4 seconds on/20 minutes off)

PART #	POSITION	RATED	TYPE	TERMINATION	DIMENSIONS
82-2103	Off/On	12V	S.P.S.T.	2, 3/8" stud terminals ground w/ faceplate	4 3/8" L x 2 5/8" Dia.
82-2233	Off/On	12V	S.P.S.T.	2, ½" stud terminals ground w/ faceplate	4 3/8" L x 2 5/8" Dia.

82-2155

DESIGNED TO BREAK ALTERNATOR GENERATOR CIRCUIT PRIOR TO BATTERY CIRCUIT DISCONNECT

PRODUCT RATING

Continuous Rating (Make/Break), Large Studs: 180 AMP, Small Studs: 20 AMP @ 6-36V DC
Intermittent Rating (Carrying), Large Studs: 1,000 AMPs (20 sec. "On" – 5 Minutes "Off")

PART #	POSITION	RATED	TYPE	TERMINATION	DIMENSIONS
82-2155	Off/On	12V	D.P.S.T.	4 stud terminal ground	4 1/8" L x 2 5/8"Dia.

BATTERY ISOLATOR SWITCH

82-2104

- Prevents unauthorized use
- Eliminates battery discharge
- Waterproof body with removable key and protective cap
- Rated at 500 AMPs at 12V
- Stud Size: M10 (1.5mm)

82-2104

IGNITION STARTER SWITCHES

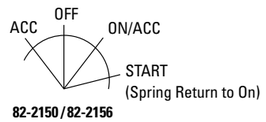
- Momentary start
- One piece die cast housing with brass terminals; includes 2 keys
- 4 position (ACC, OFF, ON/ACC, START – spring return to "ON")
- Key removable; key in "OFF" position only
- 50,000 life cycle
- Caution tag on ground terminal (82-2235)
- 82-2235 fits Packard #2984017

SPECIFICATIONS

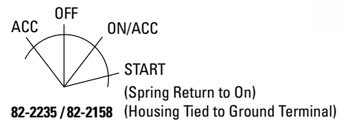
Rating @ 14V DC
Ignition Terminal, 8 AMP
Accessory Terminal, 30 AMP (inductive)
Start Terminal – 75 AMP make, 20 AMP break
Continuous current carrying capacity, 30 AMP @14V DC;
Accessory terminal with #10 gauge wire

PART #	CONNECTION TYPE	STARTER LOCKOUT	KEYCODE	MOUNTING HOLE PATTERN
82-2150	Screw	No	Various	2
82-2156	Screw	No	Universal	1
82-2235	Blade	No	Various	1
82-2158*	Screw	No	D250	1

* Includes specially designed glow plug warmer



82-2150 / 82-2156



82-2235 / 82-2158

82-2150
82-2156
82-2235
82-2158

IGNITION STARTER SWITCH

MARINE

- 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
- Switch mounts in panels up to 1/4" thick
- 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")

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 #	CONNECTION TYPE
82-2306	Screw

82-2306

TOGGLE SWITCHES

82-2226 82-2227 82-2120 82-2121 82-0216 82-2117 82-2114

82-2111 82-2221 82-2116 82-2123 82-2119 82-0315

82-2222 82-2118 82-2224 82-2225 82-2122 82-2128

- For Heavy-Duty Truck, Off-Road, Automotive, Marine, R.V.
- 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

* **82-2111** – Sealed with 8" leads.
** **82-0315** – Waterproof and dust-proof to IP68 standard – allows mounting anywhere on vehicle. Sealed with 12" leads.

EXTRA HEAVY DUTY

PART #	POSITION	RATED	TYPE	TERMINAL	HANDLE
82-2226	On/Off	50 AMP @ 12V DC	S.P.S.T.	2 screw	1" Long x 15/32" dia.
82-2227	On/Off	50 AMP @ 12V DC	S.P.S.T.	2 screw	1 1/2" Long x 15/32" dia.
82-2120	On/Off	35 AMP @ 12V DC	S.P.S.T.	2 screw	11/32" Long x 15/32" dia.
82-2121	On/Off	35 AMP @ 12V DC	S.P.S.T.	2 screw	1 1/2" Long x 15/32" dia.
82-0216	On/Off	30 AMP @ 12V DC	S.P.S.T.	2 blade	1" Long x 15/32" dia.

HEAVY DUTY

PART #	POSITION	RATED	TYPE	TERMINAL	HANDLE
82-2117	On/On	20 AMP @ 12V DC	S.P.D.T.	3 screw	11/16" Long x 15/32" dia.
82-2114	On/On	20 AMP @ 12V DC	D.P.D.T.	6 screw	11/16" Long x 15/32" dia.
82-2111*	On/Off	20 AMP @ 12V DC	S.P.S.T.	2 wire	11/16" Long x 15/32" dia.
82-2221	On/Off	20 AMP @ 12V DC	S.P.S.T.	2 screw	11/16" Long x 15/32" dia.
82-2116	On/Off	15 AMP @ 12V DC	S.P.S.T.	2 screw	3/8" Long x 15/32" dia.
82-2123	On/Off	10 AMP @ 12V DC	S.P.S.T.	2 screw	3/8" Long x 2 ¾" hole
82-2119	On/Off	15 AMP @ 12V DC	D.P.S.T.	4 screw	3/8" Long x 15/32" dia.
82-0315**	On/Off/On	25 AMP @ 12V DC	S.P.D.T.	3 wire	11/16" Long x 15/32" dia.
82-2222	On/Off/On	20 AMP @ 12V DC	S.P.D.T.	3 screw	11/16" Long x 15/32" dia.
82-2118	On/Off/On	15 AMP @ 12V DC	S.P.D.T.	3 screw	3/8" Long x 15/32" dia.
82-2224	On/Off/On	20 AMP @ 12V DC	D.P.D.T.	6 screw	11/16" Long x 15/32" dia.
82-2225	On/Off/On	20 AMP @ 12V DC	D.P.D.T.	6 blade	11/16" Long x 15/32" dia.
82-2122	On/Off/On	15 AMP @ 12V DC	D.P.D.T.	6 screw	3/8" Long x 15/32" dia.
82-2128	On/Off/On	15 AMP @ 12V DC	D.P.D.T.	6 blade	3/4" Long x 1/4" dia.
82-2124 (Toggle Plate for 82-2123)					

MOMENTARY TOGGLE SWITCHES

82-2112 82-2127 82-2125 82-2110 82-2220

PART #	POSITION	RATED	TYPE	TERMINAL	HANDLE
82-2112	Mom On/Off	25 AMP @ 12V DC	S.P.S.T.	2 screw	11/16" Long x 15/32" dia.
82-2127	Mom On/Off/Mom On	50 AMP @ 12V DC	S.P.D.T.	3 screw	1" Long x 15/32" dia.
82-2125	Mom On/Off/Mom On	35 AMP @ 12V DC	S.P.D.T.	3 screw	11/32" Long x 15/32" dia.
82-2220*	Mom On/Off/Mom On	20 AMP @ 12V DC	S.P.D.T.	3 wire	11/16" Long x 15/32" dia.
82-2110	Mom On/Off/Mom On	20 AMP @ 12V DC	D.P.D.T.	6 screw	11/32" Long x 15/32" dia.

* Sealed with 8" leads

MOMENTARY STARTER SWITCH

- Miniaturized H.D. panel switch for Diesel Trucks, Tractor, Farm, 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

82-2151

MOMENTARY PUSH SWITCH

- 10 AMP @ 12V DC
- 2 screw terminals; 1 5/16" mounting hole
- Mounting stem 7/8"-20; .45" long
- Replaces 21A11500A

82-0600

82-0600

TOGGLE SWITCH BOOT

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

82-2106

82-2106

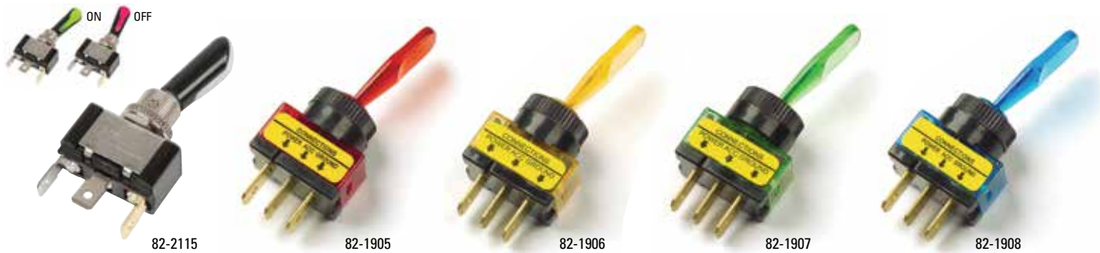
TOGGLE SWITCH GUARD

- 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
- Switch will not operate with the cover in the down position

82-2108

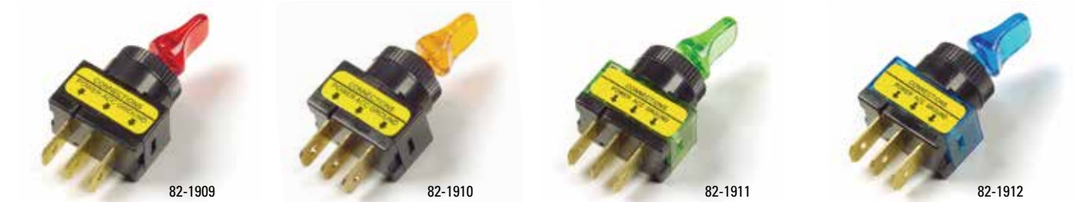
82-2108

ILLUMINATED TOGGLE SWITCH



PART #	POSITION	RATED	TYPE	TERMINAL	HANDLE	COLOR
82-2115	On/Off	30 AMP @ 12V DC	S.P.S.T.	3 blade	1" x 15/32" dia.	Red/Green
82-1905	On/Off	20 AMP @ 12V DC	S.P.S.T.	3 blade	1" x 15/32" dia.	Red
82-1906	On/Off	20 AMP @ 12V DC	S.P.S.T.	3 blade	1" x 15/32" dia.	Yellow
82-1907	On/Off	20 AMP @ 12V DC	S.P.S.T.	3 blade	1" x 15/32" dia.	Green
82-1908	On/Off	20 AMP @ 12V DC	S.P.S.T.	3 blade	1" x 15/32" dia.	Blue

ILLUMINATED TOGGLE SWITCH – DUCKBILL



PART #	POSITION	RATED	TYPE	TERMINAL	HANDLE	COLOR
82-1909	On/Off	20 AMP @ 12V DC	S.P.S.T.	3 blade	9/16" x 15/32" dia.	Red
82-1910	On/Off	20 AMP @ 12V DC	S.P.S.T.	3 blade	9/16" x 15/32" dia.	Yellow
82-1911	On/Off	20 AMP @ 12V DC	S.P.S.T.	3 blade	9/16" x 15/32" dia.	Green
82-1912	On/Off	20 AMP @ 12V DC	S.P.S.T.	3 blade	9/16" x 15/32" dia.	Blue

ILLUMINATED LED ROCKER SWITCHES

PART #	POSITION	RATED	TYPE	TERMINAL	DIMENSIONS	COLOR
82-0302	On/Off	20 AMP @ 12V DC	S.P.S.T.	3 screw	Fits .830" x 1.45" Hole	Red
82-0303	On/Off	20 AMP @ 12V DC	S.P.S.T.	3 screw	Fits .830" x 1.45" Hole	Yellow
82-0304	On/Off	20 AMP @ 12V DC	S.P.S.T.	3 screw	Fits .830" x 1.45" Hole	Green
82-1901	On/Off	20 AMP @ 12V DC	S.P.S.T.	3 blade (.250")	Fits .500" x 1.00" Hole	Red
82-1902	On/Off	20 AMP @ 12V DC	S.P.S.T.	3 blade (.250")	Fits .500" x 1.00" Hole	Yellow
82-1903	On/Off	20 AMP @ 12V DC	S.P.S.T.	3 blade (.250")	Fits .500" x 1.00" Hole	Green
82-1904	On/Off	20 AMP @ 12V DC	S.P.S.T.	3 blade (.250")	Fits .500" x 1.00" Hole	Blue

LED ROCKER SWITCHES

- Provides protection from dust and moisture
- Available in LED or standard bulb options
- Screw and .250" quick disconnect contact options
- Single and modular mounting brackets also available

SEALED LED

PART #	POSITION	RATED	TYPE	TERMINAL	DIMENSIONS	COLOR
82-0309	On/Off	20 AMP @ 12V DC	S.P.S.T.	4 blade (.250")	Fits .830" x 1.45" Hole	Amber
82-0310	Mom On/Off	20 AMP @ 12V DC	S.P.S.T.	4 blade (.250")	Fits .830" x 1.45" Hole	Amber

PANELS

PART #		DIMENSIONS	FITS ROCKER SWITCH
82-1914	Single Unit	Fits .980" x 1.88" Hole	82-0309, 82-0310
82-1915	End Unit	Fits .980" x 1.88" Hole	82-0309, 82-0310
82-1916	Middle Unit	Fits .980" x 1.88" Hole	82-0309, 82-0310
82-1913	Single Unit	Fits .500" x 1.00" Hole	82-1901, 82-1902, 82-1903, 82-1904

NOTE: Switches not included

SQUARE LED

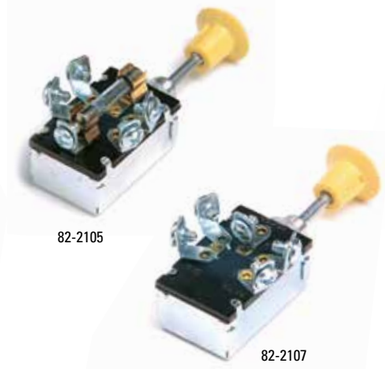
PART #	POSITION	RATED	TYPE	TERMINAL	DIMENSIONS	COLOR
82-2130	On/Off	25 AMP @ 12V DC	S.P.S.T.	3 blade (.250")	Fits 15/16" Hole	Red
82-2131	On/Off	25 AMP @ 12V DC	S.P.S.T.	3 blade (.250")	Fits 15/16" Hole	Yellow
82-2132	On/Off	25 AMP @ 12V DC	S.P.S.T.	3 blade (.250")	Fits 15/16" Hole	Green
82-2136	On/Off	25 AMP @ 12V DC	S.P.S.T.	3 blade (.250")	Fits 15/16" Hole	Blue

OVAL LED

PART #	POSITION	RATED	TYPE	TERMINAL	DIMENSIONS	COLOR
82-2133	On/Off	30 AMP @ 12V DC	S.P.S.T.	3 blade (.250")	Fits 1/2" Hole	Red
82-2134	On/Off	30 AMP @ 12V DC	S.P.S.T.	3 blade (.250")	Fits 1/2" Hole	Yellow
82-2135	On/Off	30 AMP @ 12V DC	S.P.S.T.	3 blade (.250")	Fits 1/2" Hole	Green
82-2137	On/Off	30 AMP @ 12V DC	S.P.S.T.	3 blade (.250")	Fits 1/2" Hole	Blue

PUSH/PULL SWITCHES

82-2100
82-2102


82-2105
82-2107

44170
82-0402

- 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 #	POSITION	RATED	TYPE	TERMINAL	HANDLE
82-2100	On/Off	75 AMP @ 6-28V DC	S.P.S.T.	2 Screw	5/8" Long x 15/32" diameter

HEAVY DUTY

PART #	POSITION	RATED	TYPE	TERMINAL	HANDLE
44170	On/Off	10 AMP @ 12V DC	S.P.S.T.	2 Blade	
82-2102	On/Off	15 AMP @ 12V DC	S.P.S.T.	2 Screw	5/8" Long x 7/16" diameter
82-2107	Off/On/On	15 AMP @ 12V DC	S.P.S.T.	5 Screw	5/8" Long x 7/16" diameter
82-2105*	Off/On/On	15 AMP @ 12V DC	S.P.S.T.	5 Screw	5/8" Long x 7/16" diameter

(Includes 15 AMP glass fuse)*

MARINE

MARINE

PART #	POSITION	RATED	TYPE	TERMINAL	HANDLE
82-0402	On/Off	15 AMP @ 12V DC	S.P.S.T.	2 Screw	1 1/4" Long x 7/16" diameter

AXLE SWITCH

82-2236

- 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

STARTER SOLENOID SWITCH

- Automotive, truck, tractor, construction, off-road and R.V. applications
- Continuous duty, 150 AMP in rush; 6-24V DC
- Ignition and ground terminals, #10-32 thread
- Contact terminals 5/16"-24 thread
- Bracket mounting holes, 5/16" x 19/32"; 2 1/8" on center
- 82-0307 (UL Listed)

82-0307

PRODUCT SPECIFICATIONS

82-0307 replaces Prestolite 15-132, 15-133, 15-236, 15-311, SAS-4201, 4202, 4213, 5203; Delco 1114218
82-0311 replaces Prestolite 15-141, 15-196, 15-310, SAS-4401, 4408, 5401
82-0308 replaces Prestolite 15-139, SAS-4208
82-0312 replaces Prestolite SAZ-4201N
82-0313 replaces Prestolite SAZ-4201E

CONTINUOUS DUTY

PRODUCT RATING
82-0307 Continuous duty 100 AMP, 150A in rush @ 12V DC
82-0311 Continuous duty 100 AMP, 150A in rush @ 24V DC
82-0308 Continuous duty 100 AMP, 150A in rush @ 12V DC

PART #	TYPE	TERMINATION	RATED
82-0307	S.P.S.T. Normally Open, Off-On	4 terminal ground	12V DC
82-0311	S.P.S.T. Normally Open, Off-On	4 terminal ground	24V DC
82-0308	S.P.S.T. Normally Open, Off-On	3 terminal ground	12V DC

82-0308

INTERMITTENT DUTY

PRODUCT RATING
82-0312 Intermittent duty 750 AMP make, 100A break @ 12V DC
82-0313 Intermittent duty 600 AMP make, 200A break @ 12V DC

PART #	TYPE	TERMINATION	RATED
82-0312	S.P.S.T. Normally Open, Off-On	4 terminal base ground	12V DC
82-0313	S.P.S.T. Normally Closed, Off-On	3 terminal base ground	12V DC

82-0312

82-0313

BRAKE & BACK-UP PRECISION BALL SWITCH

- 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)

PART #	STYLE	TYPE	TERMINATION	RATED
82-0456	Ball switch	Normally Open	2 screw terminal	12V DC
82-2234	Ball switch	Normally Open	2 stud terminal	12V DC
82-0465	Ball switch	Normally Open	Metri-Pack (12052644)	12V DC
82-0458	Ball switch	Normally Closed	2, .250" blade terminals	12V DC

STOP LIGHT SWITCH

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

82-2159

HORN BUTTONS

- Black plastic button
- Chrome plated housing
- 2 Position On-Off
- 2 1/8" on center mounting holes

82-2231 Includes Mounting Bracket
82-2232 Surface Mount

DOOR SWITCH – UNIVERSAL

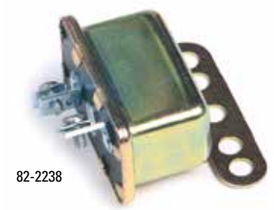
- 5 AMP @ 12V DC
- 2 screw terminals
- "ON" when plunger is out
- Dual mounting holes 1 3/8" x 2 1/16"
- Replaces Chrysler 882943, KF-204229

82-2230

UNIVERSAL BUZZER

- 842 Buzzer use as low air pressure or Bus rear door warning buzzer
- 76 db, 12V DC; 2 screw terminals
- Ford: FDM2938A
  GMC Truck & Coach: 76023
  Divco Wayne: E-11811A

82-2238



PILOT LIGHT

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

82-0115

FLOOR DIMMER SWITCHES

- 3 terminals for plug connection

PART #	STYLE	TYPE	FEATURES	MOUNTING
82-2203	Floor mount	S.P.D.T.	2 Position On – Low Beam, On High beam	1 5/8" on center, 7/32" diameter
82-2204	Floor mount	S.P.D.T.	2 Position On – Low Beam, On High beam	1 6/8" on center, 9/32" diameter

PIGTAILS & SOCKETS

SOCKET REPAIR ASSEMBLY
- For 5/8" socket
- Fits 63, 67, 81, 87, 93, 97, 209, 1003, 1073, 1129, 1133, 1141, 1156 bulbs
- 18 GA, 12" wire

68170

SOCKET REPAIR ASSEMBLY
- For base sockets; universal
- Fits 63, 67, 81, 89, 93, 209, 1003, 1073, 1129, 1133, 1141, 1156 bulbs
- 18 GA, 12" wire

84-1075

LICENSE & UTILITY SOCKET ASSEMBLY
- Fits 63, 67, 81, 89, 93, 97, 1003, 1141, 1156 bulbs
- 18 GA, 12" wire

84-1003

1 WIRE

INSTRUMENT PANEL & LICENSE ASSEMBLY
- Fits 51, 53, 55, 57, 57X bulbs
- 18 GA, 12" wire, 5/8" hole; snap-in mount

84-1060

INSTRUMENT PANEL & LICENSE ASSEMBLY
- 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
- 18 GA, 12" wire; 1 1/8" hole; universal

84-1062

MOLDED SENSOR RECEPTACLE
- Oil pressure switch; thermostat/brake sensors
- PT404, 12112171
- Mates with .157" to .159" male terminals or stud; #8 + M4 terminals
- 18 GA, 12" wire, 90 degree

84-1069

PIGTAILS & SOCKETS

SOCKET REPAIR ASSEMBLY
- Stop, tail, turn, license & side marker lamps
- Fits 194 bulbs; Includes 194 bulb
- 18 GA, 9.5" wire, twist-in mount

68380

SOCKET REPAIR ASSEMBLY
- License & side marker lamps; Twist-in mount
- Ford: E1FZ-13410A; D5VY-15442A
- GM:4489395, 6294015, 6298886, 6298892, 6298935, 8901283, 8910257, 8918527, 418977C91
- Fits 67, 131, 158, 161, 168, 194, 194A bulbs
- 18 GA, 10" wire

84-1008

SOCKET REPAIR ASSEMBLY
- Front & rear side marker lamps
- GM: 12037105, 12083460
- Fits 194 bulbs
- 18 GA, 12" wire

84-1032

2 WIRE

SOCKET REPAIR ASSEMBLY
- Front & rear side marker lamps
- Chrysler: 3588314, 4400147, 4400588, 4400899, 4450821
- Ford: E25Y-13410B
- Fits 67, 158, 168, 194, 194NA bulbs
- 18 GA, 12" wire

84-1031

SOCKET REPAIR ASSEMBLY
- Stop, tail, turn, park & license lamps
- GM: 12001470, 12078187, 12116169
- Ford: E0SZ-15A442B
- Fits 161, 168, 194, 194NA bulbs
- 18 GA, 12" wire, 90° mounting

84-1054

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

84-1052

2 WIRE (CONTINUED)

SOCKET REPAIR ASSEMBLY
- Stop, tail, turn & park lamps
- Fits 198, 1016, 1034, 1154, 1157 bulbs
- 18 GA, 12" wire

84-1004

SOCKET REPAIR ASSEMBLY
- Stop, tail, turn & park lamps
- Fits 198, 1016, 1034, 1154, 1157 bulbs
- 18 GA, 12" wire

84-1000

SOCKET REPAIR ASSEMBLY
- Stop, tail, turn & park lamps
- LS224, 5947900, 8861101
- GM: 2974309
- Chrysler: 2926370
- Fits 198, 1016, 1034, 1154, 1157 bulbs
- 18 GA, 12" wire; 1 1/8" hole

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
- 18 GA, 12" wire

84-1068

SOCKET REPAIR ASSEMBLY
- Back-up & rear lamps
- Ford: D3AZ-13410A, D80Z-15A434A
- Ford 1973 & up
- Fits 1156 bulbs
- 18 GA, 6" wire

84-1048

HEADLAMP CONNECTOR HARNESS: HIGH BEAM
- Weather-pack seal connector
- For halogen bulb headlamp assembly with 2 terminals
- GM: 12101898, PT168
- Fits 9005 bulbs
- 18 GA, 12" wire

84-1037

SEALED HORN REPLACEMENT HARNESS ASSEMBLY
- GM: 1999160, 1999161, 10456327, 10456328
- Delco: PT419, PT1357, 12116958, 15306302
- 18 GA, 12" wire

84-1073

PIGTAILS & SOCKETS

HEADLAMP CONNECTOR HARNESS: LOW BEAM
- Weather-pack seal connector
- For halogen bulb headlamp assembly with 2 terminals
- GM: 12101897, PT167
- Fits 9006 bulbs
- 16 GA, 6" wire

84-1038

SOCKET REPAIR ASSEMBLY
- Fits H8 & H11 bulbs
- 18 GA, 12" wire

84-1081

SOCKET REPAIR ASSEMBLY
- Fits H7 bulbs
- 14 GA, 6" wire

84-1082

SOCKET REPAIR ASSEMBLY
- Fits H880 bulbs
- 18 GA, 12" wire

84-1083

SEAL BEAM & FLASHER ASSEMBLY
- For 2 terminal sealed beam headlights or 2 terminal flashers
- LS145, PT270, 1210879, 88860447
- 18 GA, 12" wire; ABS molded housing

84-1007

SENSOR REPAIR HARNESS ASSEMBLY
- GM: 12046623, 12101899
- Delco: PT169
- 18 GA, 12" wire

84-1071

FOGLAMP AND SPEED SENSOR HARNESS ASSEMBLY
- Fits 880, 881, 884, 885, 886, 889, 890, 892, 893, 894, 896, 899 bulbs
- PT120, 12043215, 12085498
- 18 GA, 12" wire

84-1072

ALTERNATOR TERMINAL REPAIR ASSEMBLY
- Weather-pack seal connector
- Includes internal voltage regulator
- GM: 6294493, PT181, 624493, 12101909
- 12 GA 12" red & 16 GA 12" white wire

84-1034

PIGTAILS & SOCKETS

3 WIRE

SOCKET REPAIR ASSEMBLY
- Stop, tail, turn, park & license lamps
- GM: 12003759, 12089348
- Chrysler: 8218931, 4450816, 4331051
- Fits 1016, 1034, 1154, 1157 bulbs
- 18 GA, 8" wire, 90 degree; low profile

84-1056

SOCKET REPAIR ASSEMBLY
- Front turn & signal lamps
- Ford: D4ZZ-13234A
- Fits 1157 bulbs
- 18 GA, 8" wire

84-1057

SOCKET REPAIR ASSEMBLY
- Stop, tail, turn & signal lamps
- For 3/4" hole with adapter plate & boot
- Fits 198, 1016, 1034, 1154, 1157 bulbs
- 18 GA, 8" wire

84-1064

SOCKET REPAIR ASSEMBLY
- Park, stop, tail & turn lamps
- GM: 8919916, 12013813
- Fits 1034, 1154, 1157 bulbs
- 18 GA, 12" wire

84-1030

SOCKET REPAIR ASSEMBLY
- Fits 3057/3157 bulbs
- GM: 12083689
- 18 GA, 12" wire

84-1084

SOCKET REPAIR ASSEMBLY
- Fits H13 & 9008 bulbs
- 18 GA, 12" wire

84-1085

SOCKET REPAIR ASSEMBLY
- Stop, tail, turn & park lamps
- 1 1/8" mount ; includes ground terminal
- Ford: D0AZ-13410-B, D1AZ-A, D2AZ-B, D3AZ-A
- Fits 1034, 1154, 1157 bulbs
- 18 GA, 6" wire

84-1067

SOCKET REPAIR ASSEMBLY
- Stop, turn & park lamps
- GM: 12083006, 12092377
- GM 1988 & up
- Delco LS-12
- Fits 3057, 3157 bulbs
- 18 GA, 12" wire

84-1049

SOCKET REPAIR ASSEMBLY
- Fits 3057, 3157, 415 bulbs
- 18 GA, 12" wire

84-1086

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
- PT433, 12117260
- 18 GA, 12" wire

84-1039

SEAL BEAM & FLASHER ASSEMBLY
- ABS molded housing; universal
- For 2-3 terminal sealed beam headlights or 2-3 terminal flashers
- 16 GA, 12" wire

84-1006

SEALED BEAM HARNESS ASSEMBLY
- For 3 terminal sealed beam lamps with fiber optics
- Domestic and import vehicles
- LS144, 88860504
- 18 GA, 12" wire

84-1042

DIMMER SWITCH ASSEMBLY
- For floor mounted dimmer switch; locking ears
- GM: D-803, D-809
- 88865409
- 18 GA, 12" wire

84-1036

DIMMER SWITCH ASSEMBLY
- For dimmer switches
- AMC: 3160926
- Mopar: 1881938, 2497158
- Motorcraft: SW-263
- 18 GA, 12" wire

84-1035

4 WIRE — PIGTAILS & SOCKETS

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 page 59

68680

5 WIRE — PIGTAILS & SOCKETS

FLASHER & RELAY SOCKET ASSEMBLY
- Connects 4 or 5 terminal relays or flashers
- Molded housing; universal
- 12 volt
- 14 GA, 12" wire

84-1041

FLASHER & RELAY SOCKET ASSEMBLY
- Connects 4 or 5 terminal relays or flashers
- Weather resistant, molded housing;
- 12 volt; fits 84-1079 relay
- 12 GA, 12" wire

84-1078

5 PIN RELAY & PIGTAIL ASSEMBLY
- Includes 5 terminal relay & 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)
- 12V DC, 30A/40A
- 14 GA, 12" wire

84-1040

POWER PLUGS & SOCKETS

CIGARETTE LIGHTER POWER PLUG
- Provides a power source through a cigarette lighter plug-in port
- 2, 18 GA wires

84-1090

POWER SOCKET
- 12V power socket with pre-wired fuse holder & cap
- 2, 18 GA wires with .250" quick disconnects

84-1091

POWER SOCKET, PANEL MOUNT
- 12V panel mount power socket
- Includes socket, mounting bracket and locking ring
- 2, .250" quick disconnect terminals

84-1092

08

FUSE & CIRCUIT PROTECTION

FUSIBLE ET PROTECTION DE CIRCUIT

PROTECCIÓN DE FUSIBLE Y CIRCUITO

116 High Amperage Circuit Breakers

116 Standard & Miniature Blade Circuit Breakers

117 Universal Circuit Breakers

118 Miniature Blade Fuses & Holders

120 Standard Blade Fuses & Holders

122 Micro Blade Fuses & Holders

123 Large Blade Fuses & Holders

124 Automotive Link Fuses

126 Glass Fuses & Holders

127 Assortment Kits

128 Bolt-On Fuses

130 Fuse Panels & Terminal Strips

131 Relays

TO PROTECT YOUR EQUIPMENT'S SENSITIVE AND CRITICAL COMPONENTS FROM POWER SURGES AND OTHER POWER PROBLEMS, GROTE'S FUSE & CIRCUIT PROTECTION PRODUCTS OFFER YOU THE SELECTION, THE TYPE AND THE QUALITY YOU NEED TO MAKE SURE THAT YOUR INVESTMENT IS PROTECTED AND YOUR EQUIPMENT IS PERFORMING OPTIMALLY, EVERY TIME.

GROTE'S WIDE ARRAY OF FUSE & CIRCUIT PROTECTION PRODUCTS AND TOOLS, ENSURES THE JOB GETS DONE RIGHT THE FIRST TIME!

HIGH AMPERAGE THERMAL CIRCUIT BREAKERS

SAE J1625™ STANDARD
SAE J1171™ STANDARD

82-2176

- For use in auxiliary and accessory circuits – trucks, buses, RV and marine applications
- Also used as battery chargers and DC audio systems
- Thermoplastic; UL Rated 94V-0 housing
- Surface Mount, Type III; Single Pole; Manual Reset; Ignition protected
- Complies with SAE J1625 and J1171 standards
- Operating Temperature -40°C (-40°F) to 85°C (185°F)
- Stud insulators provided; 1/4"-28 thread studs

PART #	CURRENT RATING	DESCRIPTION
82-2251	40A	Type III, Manual Reset, Surface Mount
82-2247	50A	Type III, Manual Reset, Surface Mount
82-2216	60A	Type III, Manual Reset, Surface Mount
82-2248	70A	Type III, Manual Reset, Surface Mount
82-2177	80A	Type III, Manual Reset, Surface Mount
82-2178	100A	Type III, Manual Reset, Surface Mount
82-2249	120A	Type III, Manual Reset, Surface Mount
82-2250	135A	Type III, Manual Reset, Surface Mount
82-2176	150A	Type III, Manual Reset, Surface Mount
82-2217	200A	Type III, Manual Reset, Surface Mount

UNIVERSAL CIRCUIT BREAKER

SAE J553™ STANDARD

82-2197
82-2201

PLUG-IN STYLE

- 12V DC; Type 1, Auto-Reset
- SAE J553C
- Replacement for Standard Blade type fuses
- Dimensions: .840" x .4000" (10.2mm) x 1.500" (38.1mm)
- See Standard Blade fuse holders / fuse panels on page 117 & 126

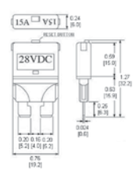
PART #	CURRENT RATING	DESCRIPTION
82-2195	10A	Type I, Auto-Reset
82-2196	15A	Type I, Auto-Reset
82-2197	20A	Type I, Auto-Reset
82-2199	25A	Type I, Auto-Reset
82-2198	30A	Type I, Auto-Reset
82-2200	35A	Type I, Auto-Reset
82-2201	40A	Type I, Auto-Reset

STANDARD BLADE CIRCUIT BREAKER

SAE J553™ STANDARD

82-2355
82-2357

- 12V DC; Type III, Manual-Reset
- Voltage: Up to 28VDC
- Interrupt Rating: 2,000A @ 28VDC
- Materials: Thermoplastic (UL Rated 94-V-0)
- Conforms to American National Standard SAE J553 Type III
- Operating Temperature: -40°C to 85°C

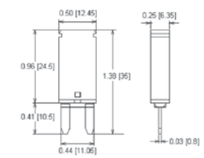


PART #	CURRENT RATING	COLOR	DESCRIPTION
82-2355	10A	Red	Type III, Manual Reset
82-2356	15A	Blue	Type III, Manual Reset
82-2357	20A	Yellow	Type III, Manual Reset
82-2358	25A	White	Type III, Manual Reset
82-2359	30A	Green	Type III, Manual Reset

MINIATURE BLADE CIRCUIT BREAKERS

SAE J553™ STANDARD

- Voltage: 14VDC
- Materials: Thermoplastic – (UL Rated 94-V-0)
- Testing Standard: SAE J553
- Operating Temperature: -40°C to 85°C



82-2340
82-2341
82-2352
82-2353
82-2354

TYPE I

PART #	CURRENT RATING	COLOR	DESCRIPTION
82-2340	10A	Red	Type I, Auto-Reset
82-2341	15A	Blue	Type I, Auto-Reset
82-2342	20A	Yellow	Type I, Auto-Reset
82-2343	25A	White	Type I, Auto-Reset
82-2344	30A	Green	Type I, Auto-Reset

TYPE II

PART #	CURRENT RATING	COLOR	DESCRIPTION
82-2350	10A	Red	Type II, Modified-Reset
82-2351	15A	Blue	Type II, Modified-Reset
82-2352	20A	Yellow	Type II, Modified-Reset
82-2353	25A	White	Type II, Modified-Reset
82-2354	30A	Green	Type II, Modified-Reset

UNIVERSAL CIRCUIT BREAKER

SAE J553™ STANDARD

- 12V DC; Type 1, Auto-Reset
- 2, #10-32 stud terminals (hex nuts and washers included)
- SAE J553C

82-2191
82-2183
82-2186

WITHOUT BRACKET

PART #	CURRENT RATING
82-2179	10A
82-2180	15A
82-2181	20A
82-2182	25A
82-2183	30A
82-2184	35A
82-2210	40A
82-2185	50A

**molded bracket*

WITH HORIZONTAL BRACKET

PART #	CURRENT RATING
82-2189	10A
82-2190	15A
82-2191	20A
82-2192	25A
82-2193	30A
82-2187	35A
82-2194	40A
82-2188	50A
82-2186	40A*

SNAP-IN STYLE

- 12V DC; Type II, Modified-Reset
- Opens automatically on overload
- Replaces round glass-style fuses
- Fits 1 1/4" Long x 1/4" fuse clips

PART #	CURRENT RATING	DESCRIPTION
82-2170	10A	Type II, Modified-Reset
82-2171	15A	Type II, Modified-Reset
82-2172	20A	Type II, Modified-Reset
82-2173	30A	Type II, Modified-Reset
82-2174	40A	Type II, Modified-Reset

UNIVERSAL CIRCUIT BREAKER

82-2171

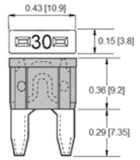
MINIATURE BLADE FUSES

Fast Acting/Blade Mounting
A cost-effective standard automotive fuse for use in automotive, battery and general DC applications.

2A-30A, 32VDC

82-ANM-5A

SPECIFICATIONS
Voltage: 32VDC
Amperage: 2A, 3A, 4A, 5A, 7.5A, 10A, 15A, 20A, 25A, 30A, 35A
Interrupt Rating: 1000A @ 32 VDC
Terminals: Zinc Alloy
Body Material: Nylon PA 66



Inches [mm]

APPROVALS: MEETS SAE STANDARDS & ISO 8820 STANDARD SPECIFICATIONS

82-ANM-2A

82-ANM-3A

82-ANM-7.5A

82-2241

82-ANM-5A

82-ANM-10A

82-ANM-15A

82-2208

82-ANM-20A

82-ANM-25A

82-ANM-30A

82-2213

PART #	CURRENT RATING	COLOR	PACK	DESCRIPTION
82-ANM-2A	2A	Gray	5	Miniature Blade Fuse
82-ANM-3A	3A	Violet	5	Miniature Blade Fuse
82-ANM-4A	4A	Pink	5	Miniature Blade Fuse
82-ANM-5A	5A	Tan	5	Miniature Blade Fuse
82-ANM-7.5A	7.5A	Brown	5	Miniature Blade Fuse
82-ANM-10A	10A	Red	5	Miniature Blade Fuse
82-ANM-15A	15A	Blue	5	Miniature Blade Fuse
82-ANM-20A	20A	Yellow	5	Miniature Blade Fuse
82-ANM-25A	25A	Clear	5	Miniature Blade Fuse
82-ANM-30A	30A	Green	5	Miniature Blade Fuse
82-ANM-35A	35A	Blue-Green	5	Miniature Blade Fuse
82-ANM-7	(5A, 7.5A, 10A, 15A, 20A, 25A, 30A)		7	Miniature Blade Fuse Assortment
82-ANM-8P	(2A, 5A, 7.5A, 10A, 15A, 20A, 25A, 30A)		9	Miniature Blade Fuse Assortment & Puller
82-ANM-8T	(2A, 5A, 7.5A, 10A, 15A, 20A, 25A, 30A)		9	Miniature Blade Fuse Assortment & Tester
82-ASST-43	(5A, 10A, 15A, 20A, 25A, 30A)		43	Miniature Blade Fuse Assortment & Tester
82-ASST-64	(2A, 3A, 4A, 5A, 7.5A, 10A, 15A, 20A, 25A, 30A) + (30A, 40A, 50A)		64	Miniature & Large Blade Fuse Assortment & Tester
82-ASST-80M	(3A, 5A, 7.5A, 10A, 15A, 20A, 25A, 30A)		80	Miniature Blade Fuse Assortment
82-ASST-180			180	Low Profile Miniature, Miniature, Standard Blade Fuses
FUSE HOLDER				
82-2241	30A (12GA)	Red	1	Miniature Blade Fuse Holder, 12" with Protective Cap
82-2208	20A (14GA)	Red	1	Miniature Blade Fuse Holder, 7" with Protective Cap
82-2213	Max 10A Primary Circuit, 10A Auxiliary Circuit *(Total not to exceed 20A combined)*	Red	1	"Add A Fuse" Miniature Blade Fuse Holder; 16GA

WITH LED INDICATOR — MINIATURE BLADE FUSES

82-ANMI-7.5A

82-ANM-I-10A

82-ANM-I-15A

82-ANM-I-20A

82-ANM-I-25A

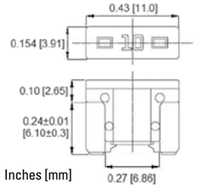
82-ANM-I-30A

LED

PART #	CURRENT RATING	COLOR	PACK	DESCRIPTION
82-ANM-I-3A	3A	Violet	2	Miniature Blade Fuse with LED Indicator
82-ANM-I-5A	5A	Tan	2	Miniature Blade Fuse with LED Indicator
82-ANMI-7.5A	7.5A	Brown	2	Miniature Blade Fuse with LED Indicator
82-ANM-I-10A	10A	Red	2	Miniature Blade Fuse with LED Indicator
82-ANM-I-15A	15A	Blue	2	Miniature Blade Fuse with LED Indicator
82-ANM-I-20A	20A	Yellow	2	Miniature Blade Fuse with LED Indicator
82-ANM-I-25A	25A	Clear	2	Miniature Blade Fuse with LED Indicator
82-ANM-I-30A	30A	Green	2	Miniature Blade Fuse with LED Indicator
82-ANM-I-5	(10A, 15A, 20A, 25A, 30A)		5	Miniature Blade Fuse with LED Indicator Assortment

LOW PROFILE — MINIATURE BLADE FUSES

SPECIFICATIONS
Voltage: 32VDC
Amperage: 3A, 5A, 7.5A, 10A, 15A, 20A, 25A, 30A
Interrupt Rating: 1000A @ 32 VDC
Terminals: Zinc Alloy
Body Material: Nylon PA 66



Inches [mm]

Fast Acting/Blade Mounting
Low Profile version of the Miniature Automotive Blade fuse.

3A-30A, 32VDC

82-2218

APPROVALS: MEETS SAE STANDARDS & ISO 8820 STANDARD SPECIFICATIONS

82-ANS-3A

82-ANS-7.5A

82-ANS-10A

82-ANS-15A

82-ANS-20A

82-ANS-25A

82-ASST-180

PART #	CURRENT RATING	COLOR	PACK	DESCRIPTION
82-ANS-3A	3A	Violet	5	Low Profile Miniature Blade Fuse
82-ANS-5A	5A	Tan	5	Low Profile Miniature Blade Fuse
82-ANS-7.5A	7.5A	Brown	5	Low Profile Miniature Blade Fuse
82-ANS-10A	10A	Red	5	Low Profile Miniature Blade Fuse
82-ANS-15A	15A	Blue	5	Low Profile Miniature Blade Fuse
82-ANS-20A	20A	Yellow	5	Low Profile Miniature Blade Fuse
82-ANS-25A	25A	Clear	5	Low Profile Miniature Blade Fuse
82-ANS-30A	30A	Green	5	Low Profile Miniature Blade Fuse
82-ANS-I-5 (LED)	(10A, 15A, 20A, 25A, 30A)		5	Low Profile Miniature Blade Fuse LED Assortment
82-ANS-7	(5A, 7.5A, 10A, 15A, 20A, 25A, 30A)		7	Low Profile Miniature Blade Fuse Assortment
82-ANS-7P	(5A, 7.5A, 10A, 15A, 20A, 25A, 30A)		8	Low Profile Miniature Blade Fuse Assortment & Puller
82-ANS-7T	(5A, 7.5A, 10A, 15A, 20A, 25A, 30A)		8	Low Profile Miniature Blade Fuse Assortment & Tester
82-ASST-180			180	Low Profile Miniature, Miniature, Standard Blade Fuses
FUSE HOLDER				
82-2218	Max 10A Primary Circuit, 10A Aux Circuit *(Total not to exceed 15A combined)*	Red	1	"Add A Fuse" Low Profile Miniature Blade: 16GA

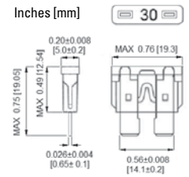
STANDARD BLADE FUSES

Fast Acting/Blade Mounting
A cost-effective standard automotive fuse for use in automotive, battery and general DC applications.

2A-40A, 32VDC

82-ANR-15A

SPECIFICATIONS
Voltage: 32VDC
Amperage: 1A, 2A, 3A, 4A, 5A, 7.5A, 10A, 15A, 20A, 25A, 30A, 35A, 40A
Interrupt Rating: 1000A @ 32 VDC
Terminals: Zinc Alloy
Body Material: Nylon PA 66



APPROVALS: MEETS SAE STANDARDS & ISO 8820 STANDARD SPECIFICATIONS

82-ANR-3A

82-ANR-5A

82-ANR-7.5A

82-ANR-10A

82-ANR-15A

82-ANR-20A

82-ANR-25A

82-ANR-30A

82-ANR-40A

82-ANR-6T

PART #	CURRENT RATING	COLOR	PACK	DESCRIPTION
82-ANR-1A	1A	**Black**	5	Standard Blade Fuse
82-ANR-2A	2A	**Gray**	5	Standard Blade Fuse
82-ANR-3A	3A	**Violet**	5	Standard Blade Fuse
82-ANR-4A	4A	**Pink**	5	Standard Blade Fuse
82-ANR-5A	5A	**Tan**	5	Standard Blade Fuse
82-ANR-7.5A	7.5A	**Brown**	5	Standard Blade Fuse
82-ANR-10A	10A	**Red**	5	Standard Blade Fuse
82-ANR-15A	15A	**Blue**	5	Standard Blade Fuse
82-ANR-20A	20A	**Yellow**	5	Standard Blade Fuse
82-ANR-25A	25A	**Clear**	5	Standard Blade Fuse
82-ANR-30A	30A	**Green**	5	Standard Blade Fuse
82-ANR-35A	35A	**Blue-Green**	5	Standard Blade Fuse
82-ANR-40A	40A	**Orange**	5	Standard Blade Fuse
82-ANR-7	(5A, 7.5A, 10A, 15A, 20A, 25A, 30A)		7	Standard Blade Fuse Assortment
82-ANR-7P	(5A, 7.5A, 10A, 15A, 20A, 25A, 30A)		8	Standard Blade Fuse Assortment & Puller
82-ANR-6T	(5A, 10A, 15A, 20A, 25A, 30A)		7	Standard Blade Fuse Assortment & Tester
82-ASST-44	(5A, 10A, 15A, 20A, 25A, 30A)		43	Standard Blade Fuse Assortment & Tester
82-ASST-53	(10A, 15A, 20A, 30A) + (30A, 40A, 50A)		45	Standard Blade & Large Blade Fuse Assortment & Tester
82-ASST-80R	(3A, 5A, 7.5A, 10A, 15A, 20A, 25A, 30A)		80	Standard Blade Fuse Assortment
82-ASST-180			180	Low Profile Miniature, Miniature and Standard Blade Fuses

WITH LED INDICATOR — STANDARD BLADE FUSES

82-ANR-I-5

82-ANR-I-3A

82-ANR-I-5A

82-ANRI-7.5A

82-ANR-I-10A

82-ANR-I-15A

82-ANR-I-20A

82-ANR-I-25A

82-ANR-I-30A

PART #	CURRENT RATING	COLOR	PACK	DESCRIPTION
82-ANR-I-3A	3A	**Violet**	2	Standard Blade Fuse with LED Indicator
82-ANR-I-5A	5A	**Tan**	2	Standard Blade Fuse with LED Indicator
82-ANRI-7.5A	7.5A	**Brown**	2	Standard Blade Fuse with LED Indicator
82-ANR-I-10A	10A	**Red**	2	Standard Blade Fuse with LED Indicator
82-ANR-I-15A	15A	**Blue**	2	Standard Blade Fuse with LED Indicator
82-ANR-I-20A	20A	**Yellow**	2	Standard Blade Fuse with LED Indicator
82-ANR-I-25A	25A	**Clear**	2	Standard Blade Fuse with LED Indicator
82-ANR-I-30A	30A	**Green**	2	Standard Blade Fuse with LED Indicator
82-ANR-I-40A	40A	**Orange**	2	Standard Blade Fuse with LED Indicator
82-ANR-I-5	(10A, 15A, 20A, 25A, 30A)		5	Standard Blade Fuse with LED Indicator Assortment

STANDARD BLADE FUSE HOLDERS

82-2165

82-2209

84-2903

82-2246

82-2207

82-2164

82-2166

82-2212

PART #	CURRENT RATING	COLOR	PACK	DESCRIPTION
82-2209	20A (14GA), 7"	**Red**	1	Standard Blade with Cap and 20A Fuse
82-2164	20A (14GA), 7"	**Black**	1	Standard Blade
82-2207	20A (16GA), 7"	**Red**	1	Standard Blade with Cap
82-2165	30A (12GA), 8"	**Orange**	1	Standard Blade
82-2246	40A (10GA), 12"	**Red**	1	Standard Blade with Cap
82-2166	30A (12GA), 10"	**Orange**	1	Standard Blade with Cap and Mounting Tab
84-2903	20A (18-14GA)	**Blue**	1	Self Stripping Standard Fuse Holder
82-2212	Max 10A Primary Circuit, 10A Aux Circuit (Total not to exceed 20A combined)	**Red**	1	Add A Fuse Holder with 16GA wire

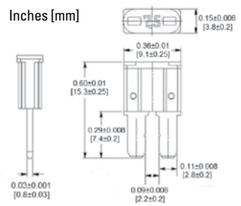
MICRO BLADE – 2 BLADE FUSES

Fast Acting/Blade Mounting
- New standard for vehicle circuit protection
- Sub-miniature design
- Space saving – smaller than the Miniature fuse

5A-30A, 32VDC

SPECIFICATIONS
Voltage: 32VDC
Amperage: 5A, 7.5A, 10A, 15A, 20A, 25A, 30A
Interrupt Rating: 1000A @ 32 VDC
Terminals: Zinc Alloy
Body Material: Nylon PA 66

Inches [mm]



APPROVALS: MEETS SAE STANDARDS & ISO 8820 STANDARD SPECIFICATIONS

82-2219

82-ANT-7P | 82-ANT-7.5A | 82-ANT-10A | 82-ANT-15A | 82-ANT-20A | 82-ANT-25A | 82-ANT-30A

PART #	CURRENT RATING	COLOR	PACK	DESCRIPTION
82-ANT-5A	5A	Tan	5	Micro Blade – 2 Blade Fuse
82-ANT-7.5A	7.5A	Brown	5	Micro Blade – 2 Blade Fuse
82-ANT-10A	10A	Red	5	Micro Blade – 2 Blade Fuse
82-ANT-15A	15A	Blue	5	Micro Blade – 2 Blade Fuse
82-ANT-20A	20A	Yellow	5	Micro Blade – 2 Blade Fuse
82-ANT-25A	25A	Clear	5	Micro Blade – 2 Blade Fuse
82-ANT-30A	30A	Green	5	Micro Blade – 2 Blade Fuse
82-ANT-7	(5A, 7.5A, 10A, 15A, 20A, 25A, 30A)		7	Micro Blade – 2 Blade Fuse Assortment
82-ANT-7P	(5A, 7.5A, 10A, 15A, 20A, 25A, 30A)		8	Micro Blade – 2 Blade Fuse Assortment & Puller
FUSE HOLDER				
82-2219	Max 10A Primary Circuit, 10A Aux Circuit *(Total not to exceed 15A combined)*	Red	1	"Add A Fuse" Micro Blade – 2 Blade: 16GA

MICRO BLADE – 2 BLADE FUSES WITH LED INDICATOR

82-ANT-I-5A | 82-ANTI-7.5A | 82-ANT-I-10A | 82-ANT-I-15A | 82-ANT-I-20A | 82-ANT-I-25A | 82-ANT-I-30A

PART #	CURRENT RATING	COLOR	PACK	DESCRIPTION
82-ANT-I-5A	5A	Tan	2	Micro Blade – 2 Blade Fuse with LED Indicator
82-ANTI-7.5A	7.5A	Brown	2	Micro Blade – 2 Blade Fuse with LED Indicator
82-ANT-I-10A	10A	Red	2	Micro Blade – 2 Blade Fuse with LED Indicator
82-ANT-I-15A	15A	Blue	2	Micro Blade – 2 Blade Fuse with LED Indicator
82-ANT-I-20A	20A	Yellow	2	Micro Blade – 2 Blade Fuse with LED Indicator
82-ANT-I-25A	25A	Clear	2	Micro Blade – 2 Blade Fuse with LED Indicator
82-ANT-I-30A	30A	Green	2	Micro Blade – 2 Blade Fuse with LED Indicator

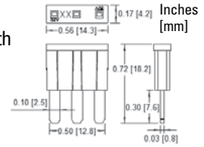
MICRO BLADE – 3 BLADE FUSES

82-ANK-5A | 82-ANK-7.5A | 82-ANK-10A | 82-ANK-15A

Fast Acting/Blade Mounting
- Provides 2 fuse elements with a common center terminal

5A-15A, 32VDC

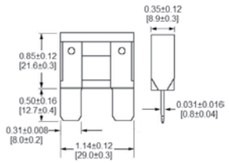
Inches [mm]



PART #	CURRENT RATING	COLOR	PACK	DESCRIPTION
82-ANK-5A	5A	Tan	5	Micro Blade – 3 Blade Fuse
82-ANK-7.5A	7.5A	Brown	5	Micro Blade – 3 Blade Fuse
82-ANK-10A	10A	Red	5	Micro Blade – 3 Blade Fuse
82-ANK-15A	15A	Blue	5	Micro Blade – 3 Blade Fuse

LARGE BLADE FUSES

SPECIFICATIONS
Voltage: 32VDC
Amperage: 20A, 30A, 40A, 50A, 60A, 70A, 80A
Interrupt Rating: 1000A @ 32 VDC
Terminals: Zinc Alloy
Body Material: Nylon PA 66



Inches [mm]

APPROVALS: MEETS SAE STANDARDS & ISO 8820 STANDARD SPECIFICATIONS

Fast Acting/Blade Mounting
A cost-effective automotive fuse for use in automotive, battery and general DC applications.

20A-80A, 32VDC

82-ANX-20A | 82-ANX-30A | 82-ANX-50A | 82-ANX-60A | 82-ANX-70A | 82-ANX- 80A | 82-2211

82-ANX-40A

PART #	CURRENT RATING	COLOR	PACK	DESCRIPTION
82-ANX-20A	20A	Yellow	1	Large Blade Fuse
82-ANX-30A	30A	Green	1	Large Blade Fuse
82-ANX-40A	40A	Orange	1	Large Blade Fuse
82-ANX-50A	50A	Red	1	Large Blade Fuse
82-ANX-60A	60A	Blue	1	Large Blade Fuse
82-ANX-70A	70A	Tan	1	Large Blade Fuse
82-ANX-80A	80A	Clear	1	Large Blade Fuse
82-ASST-53	(10A, 15A, 20A, 30A) + (30A, 40A, 50A)		45	Standard & Large Blade Fuse Assortment & Tester
82-ASST-64	(2A, 3A, 4A, 5A, 7.5A, 10A, 15A, 20A, 25A, 30A) + (30A, 40A, 50A)		64	Miniature & Large Blade Fuse Assortment & Tester
FUSE HOLDER				
82-2211	60A (8GA)		1	Fuse Holder for Large Blade Style Fuses, 12"

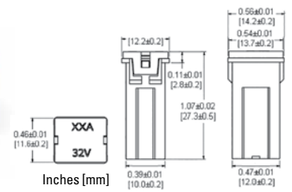
AUTOMOTIVE LINK FUSE

Fast Acting/Blade Mounting
A cost-effective high-current automotive fuses for use in automotive, battery and general DC application.

20A-60A, 32VDC

SPECIFICATIONS
Voltage: 32VDC
Amperage: 15A, 20A, 25A, 30A, 40A, 50A, 60A, 70A, 80A, 100A, 120A
Interrupt Rating: 1,500A @32VDC

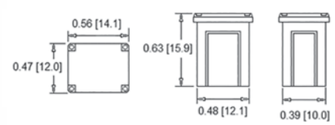
82-FMX-20A 82-FMX-25A 82-FMX-30A 82-FMX-40A 82-FMX-50A



PART #	CURRENT RATING	COLOR	PACK	DESCRIPTION
82-FMX-20A	20A	Blue	1	Automotive Link Fuse, Female
82-FMX-25A	25A	Clear	1	Automotive Link Fuse, Female
82-FMX-30A	30A	Pink	1	Automotive Link Fuse, Female
82-FMX-40A	40A	Green	1	Automotive Link Fuse, Female
82-FMX-50A	50A	Red	1	Automotive Link Fuse, Female
82-FMX-60A	60A	Yellow	1	Automotive Link Fuse, Female

AUTOMOTIVE LINK FUSE — LOW PROFILE

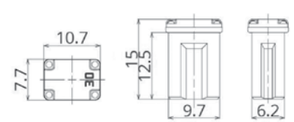
82-FMXLP-20A 82-FMXLP-25A 82-FMXLP-40A 82-FMXLP-50A 82-FMXLP-60A



PART #	CURRENT RATING	COLOR	PACK	DESCRIPTION
82-FMXLP-20A	20A	Blue	1	Automotive Link Fuse, Low Profile, Female
82-FMXLP-25A	25A	Clear	1	Automotive Link Fuse, Low Profile, Female
82-FMXLP-30A	30A	Pink	1	Automotive Link Fuse, Low Profile, Female
82-FMXLP-40A	40A	Green	1	Automotive Link Fuse, Low Profile, Female
82-FMXLP-50A	50A	Red	1	Automotive Link Fuse, Low Profile, Female
82-FMXLP-60A	60A	Yellow	1	Automotive Link Fuse, Low Profile, Female

AUTOMOTIVE LINK FUSE — MICRO

82-FMX-M-15A 82-FMX-M-20A 82-FMX-M-25A 82-FMX-M-30A 82-FMX-M-40A



PART #	CURRENT RATING	COLOR	PACK	DESCRIPTION
82-FMX-M-15A	15A	Gray	1	Automotive Link Fuse, Micro, Female
82-FMX-M-20A	20A	Blue	1	Automotive Link Fuse, Micro, Female
82-FMX-M-25A	25A	White	1	Automotive Link Fuse, Micro, Female
82-FMX-M-30A	30A	Pink	1	Automotive Link Fuse, Micro, Female
82-FMX-M-40A	40A	Green	1	Automotive Link Fuse, Micro, Female

AUTOMOTIVE LINK FUSE

82-FLB-40A 82-FLB-60A 82-FLF-20A 82-FLF-30A 82-FLM-60A 82-FLM-100A 82-FLS-30A
82-FLB-70A 82-FLD-80A 82-FLF-40A 82-FLF-50A 82-FLM-80A 82-FLM-120A 82-FLS-40A

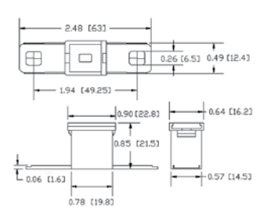
PART #	CURRENT RATING	COLOR	PACK	DESCRIPTION
82-FLB-40A	40A	Green	1	PAL Fuse Link, 13/16" Male Axial Terminal
82-FLB-60A	60A	Yellow	1	PAL Fuse Link, 13/16" Male Axial Terminal
82-FLB-70A	70A	Brown	1	PAL Fuse Link, 13/16" Male Axial Terminal
82-FLD-80A	80A	Black	1	PAL Fuse Link, 9/16" Male Axial Terminal
82-FLF-20A	20A	Light Blue	1	PAL Fuse Link, Female Terminal
82-FLF-30A	30A	Pink	1	PAL Fuse Link, Female Terminal
82-FLF-40A	40A	Green	1	PAL Fuse Link, Female Terminal
82-FLF-50A	50A	Red	1	PAL Fuse Link, Female Terminal
82-FLF-60A	60A	Yellow	1	PAL Fuse Link, Female Terminal
82-FLM-60A	60A	Yellow	1	PAL Fuse Link, Male Radial Terminal
82-FLM-80A	80A	Black	1	PAL Fuse Link, Male Radial Terminal
82-FLM-100A	100A	Blue	1	PAL Fuse Link, Male Radial Terminal
82-FLM-120A	120A	Gray	1	PAL Fuse Link, Male Radial Terminal
82-FLS-30A	30A	Pink	1	PAL Fuse Link, Female Terminal
82-FLS-40A	40A	Green	1	PAL Fuse Link, Female Terminal

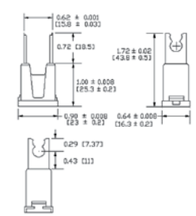
AUTOMOTIVE LINK FUSE ASSORTMENT

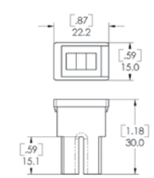
- Includes the top male and female automotive fusible links for late model import vehicles
- Includes 1 each of: FLB 40A/60A/70A, FLD 80A, FLF 20A/30A/40A/50A/60A, FLM 80A/100A, FLS 30A/40A, FMX 20A/30A/40A

PART #	CURRENT RATING	PACK	DESCRIPTION
82-ASST-45	(20A, 30A, 40A, 50A, 60A, 70 A, 80A, 100A)	16	Automotive Link Fuse Assortment

82-ASST-45


82-FLB FUSES


82-FLM FUSES


82-FLF FUSES

GLASS FUSES

Fast Acting / Glass Construction
- For Automotive Circuits
- Visual indication glass body
- SAE specifications
- Size varies with rating to prevent over-fusing
- For use with In-Line holders and ¼" clips.

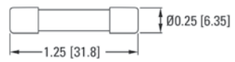
1A-30A, 32VAC

FSA, AGC, AGX, AGW, AGA, FSO

Agency Standards and Listings:
UL Listed 100mA~10A
UR Recognized 12A~30A
CSA Certified 100mA~30A

Interrupt Ratings:
10,000 amperes at 125V AC (100mA~10A)
35 amperes at 250V AC (100mA~1A)
100 amperes at 250V AC (1.2A~3.5A)
200 amperes at 250V AC (4A~10A)
300 amperes at 32V AC (12A~30A)

Operating Temperature:
-55°C to +125°C (-67°F to +257°F)



Inches [mm]

Physical Specifications:
Materials: Glass Body/Nickel Plated Brass Contacts

Electrical Characteristics
Rated Current: 100%
@ 100% – 4 hours min
@ 135% – 1 hour max
@ 200% – 5 sec max

82-AGC-60

82-FSA-9-G

82-FSO-7-G

PART #	CURRENT RATING	PACK	DESCRIPTION
82-FSA-1A-G	1A	5	AGC, Glass Fuse
82-FSA-2A-G	2A	5	AGC, Glass Fuse
82-FSA-3A-G	3A	5	AGC, Glass Fuse
82-FSA-5A-G	5A	5	AGC, Glass Fuse
82-FSA-10A-G	10A	5	AGC, Glass Fuse
82-FSA-15A-G	15A	5	AGC, Glass Fuse
82-FSA-20A-G	20A	5	AGC, Glass Fuse
82-FSA-25A-G	25A	5	AGC, Glass Fuse
82-FSA-30A-G	30A	5	AGC, Glass Fuse
82-FSA-9-G	(1A, 2A, 3A, 5A, 10A, 15A, 20A, 25A, 30A)	9	AGC, Glass Fuse Assortment
82-AGC-60	(5A, 10A, 15A, 20A, 25A, 30A)	60	AGC, Glass Fuse Assortment & Tester
82-AGX-5	(5A, 7.5A, 10A, 20A, 30A)	5	AGX, Glass Fuse Assortment
82-AGW-5	(5A, 7.5A, 10A, 20A, 30A)	5	AGW, Glass Fuse Assortment
82-AGA-6	(3A, 5A, 7.5A, 10A, 20A, 30A)	6	AGA, Glass Fuse Assortment
82-FSO-7-G	(4A, 6A, 7.5A, 9A, 14A, 20A, 30A)	7	SFE, Glass Fuse Assortment

ASSORTMENT KITS

Assortment Kits
Grote's assortment packs contain a variety of popular fuses that will provide you with replacement fuses for circuit protection as you need them!

The Grote assortment pack is perfect for the shop at home or at work! Choose from a variety of assortment packs that best suit your needs and applications.

PART #	CURRENT RATING	PACK	DESCRIPTION
MINIATURE BLADE FUSES WITH LED INDICATOR			
82-ANM-I-5	(10A, 15A, 20A, 25A, 30A)	5	Miniature Blade Fuses with LED Indicator
MINIATURE BLADE FUSES			
82-ANM-7	(5A, 7.5A, 10A, 15A, 20A, 25A, 30A)	7	Miniature Blade Fuses
82-ANM-8P	(2A, 5A, 7.5A, 10A, 15A, 20A, 25A, 30A)	9	Miniature Blade Fuses + Puller
82-ANM-8T	(2A, 5A, 7.5A, 10A, 15A, 20A, 25A, 30A)	9	Miniature Blade Fuses + Tester
82-ASST-43	(5A, 10A, 15A, 20A, 25A, 30A)	43	Miniature Blade Fuses + Tester
82-ASST-64	(2A, 3A, 4A, 5A, 7.5A, 10A, 15A, 20A, 25A, 30A) + (30A, 40A, 50A)	64	Miniature Blade and Large Blade Fuses + Tester
82-ASST-80M	(3A, 5A, 7.5A, 10A, 15A, 20A, 25A, 30A)	80	Miniature Blade Fuses
82-ASST-180	(5A, 7.5A, 10A, 15A, 20A, 25A, 30A)	180	Low Profile Miniature Blade and Standard Blade Fuses
LOW PROFILE MINIATURE BLADE FUSES			
82-ANS-I-5	(10A, 15A, 20A, 25A, 30A)	5	Low Profile Miniature LED Blade Fuses
82-ANS-7	(5A, 7.5A, 10A, 15A, 20A, 25A, 30A)	7	Low Profile Miniature Blade Fuses
82-ANS-7P	(5A, 7.5A, 10A, 15A, 20A, 25A, 30A)	8	Low Profile Miniature Blade Fuses + Puller
82-ANS-7T	(5A, 7.5A, 10A, 15A, 20A, 25A, 30A)	8	Low Profile Miniature Blade Fuses + Tester
STANDARD BLADE FUSES WITH LED INDICATOR			
82-ANR-I-5	(10A, 15A, 20A, 25A, 30A)	5	Standard Blade Fuses with LED Indicator
STANDARD BLADE FUSES			
82-ANR-7	(5A, 7.5A, 10A, 15A, 20A, 25A, 30A)	7	Standard Blade Fuses
82-ANR-7P	(5A, 7.5A, 10A, 15A, 20A, 25A, 30A)	8	Standard Blade Fuses + Puller
82-ANR-6T	(5A, 10A, 15A, 20A, 25A, 30A)	7	Standard Blade Fuses + Tester
82-ASST-44	(5A, 10A, 15A, 20A, 25A, 30A)	43	Standard Blade Fuses + Tester
82-ASST-53	(10A, 15A, 20A, 30A) + (30A, 40A, 50A)	45	Standard Blade & Large Blade Fuses + Tester
82-ASST-80R	(3A, 5A, 7.5A, 10A, 15A, 20A, 25A, 30A)	80	Standard Blade Fuses
82-ASST-180	(5A, 7.5A, 10A, 15A, 20A, 25A, 30A)	180	Low Profile Miniature, Miniature, Standard Blade Fuses
LARGE BLADE FUSES			
82-ASST-53	(10A, 15A, 20A, 30A) + (30A, 40A, 50A)	45	Standard Blade & Large Blade Fuses + Tester
82-ASST-64	(2A, 3A, 4A, 5A, 7.5A, 10A, 15A, 20A, 25A, 30A) + (30A, 40A, 50A)	64	Miniature Blade and Large Blade Fuses + Tester
MICRO BLADE – 2 BLADE FUSES			
82-ANT-7	(5A, 7.5A, 10A, 15A, 20A, 25A, 30A)	7	Micro Blade – 2 Blade Fuses
82-ANT-7P	(5A, 7.5A, 10A, 15A, 20A, 25A, 30A)	8	Micro Blade – 2 Blade Fuses + Puller
FUSIBLE LINK ASSORTMENT			
82-ASST-45	(20A, 30A, 40A, 50A, 60A, 70 A, 80A, 100A)	16	Automotive Link Fuse Assortment

BOLT ON FUSES

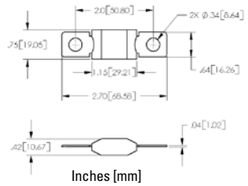
Fast Acting Automotive Bolt On Limiter Fuse
Bolt On type fuses are used in circuit where high current are present and are typically found in select late model cars and trucks. Bolt On type fuses are ideal for battery and/or alternator applications.

100A-300A, 32VDC

82-MGGA-100A

82-MGGA-FB

SPECIFICATIONS
Voltage: 32VDC
Amperage: 80A, 100A, 125A, 150A, 175A, 200A, 225A, 250A, 300A
Interrupt Rating: 2000A @ 32V
Operating Temperature: -40°C to +125°C (-40°F to +257°C)
Body Material: Polypropylene



Inches [mm]

APPROVALS: MEETS SAE STANDARDS & ISO 8820 STANDARD SPECIFICATIONS

PART #	CURRENT RATING	COLOR	PACK	DESCRIPTION
82-MGGA-80A	80A	**Black**	1	Bolt On Fuse
82-MGGA-100A	100A	**Black**	1	Bolt On Fuse
82-MGGA-125A	125A	**Black**	1	Bolt On Fuse
82-MGGA-150A	150A	**Black**	1	Bolt On Fuse
82-MGGA-175A	175A	**Black**	1	Bolt On Fuse
82-MGGA-200A	200A	**Black**	1	Bolt On Fuse
82-MGGA-225A	225A	**Black**	1	Bolt On Fuse
82-MGGA-250A	250A	**Black**	1	Bolt On Fuse
82-MGGA-300A	300A	**Black**	1	Bolt On Fuse
82-MGGA-FB			1	Fuse Block – Bolt On Fuse

FUSE TESTER/PULLER

82-PUL-07

- For standard blade automotive fuses
- Use to remove or insert or test fuses
- Can test fuses in or out of a fuse block
- Has a green indicator light on the end of the tester. Indicator light will remain on if fuse is good. If fuse is broken, the LED light will not light up

PART #	PACK	DESCRIPTION
82-PUL-07	1	Fuse Tester & Puller

FUSE PULLER

82-PUL-01

- For automotive miniature blade fuses
- Material: ABS

PART #	PACK	DESCRIPTION
82-PUL-01	1	Fuse Puller

FUSE TAPS – INSULATED

84-2916

84-2917

PART #	DESCRIPTION	SIZE	PACK
84-2917	Fuse Taps – Uninsulated	.187"	25
84-2919	Fuse Taps – Uninsulated	.187"	8
84-2916	Fuse Taps – Uninsulated	.250"	25
84-2918	Fuse Taps – Uninsulated	.250"	8

IN-LINE FUSE HOLDERS

- Nylon fuse holder for glass tube fuses
- Fits ¼" x 1 ¼" glass fuses
- Protects electrical equipment
- In-Line fuse holders include a fuse

PART #	CURRENT RATING	DESCRIPTION
82-2160	20A (18GA)	7" In-Line Fuse Holder (Black)
82-2162	10A (18GA)	7" In-Line Fuse Holder (White)
82-2161	15A (16GA)	7" In-Line Fuse Holder (Red)
82-2163	30A (14GA)	7" In-Line Fuse Holder (Black)

82-2160

82-2162

82-2161

82-2163

BAYONET STYLE FUSE HOLDER

- Nylon fuse holder for glass tube fuses
- Fits ¼" x 1 ¼" glass fuses
- Protects electrical equipment

PART #	CURRENT RATING	DESCRIPTION
82-2167	30A (12GA)	7" Bayonet Fuse Holder (Black)
82-2168	20A (14GA)	7" Bayonet Fuse Holder (Black)
82-2169	20A (14GA)	12" Bayonet Fuse Holder (Black)

82-2167

82-2169

FUSEBLOCK – GLASS FUSES

- For use with glass fuses
- Quick disconnect take off, .250"

PART #	DESCRIPTION	SIZE
82-2301	Glass Fuses Fuse Block – 4 Fuse	3" x 2.5"
82-2302	Glass Fuses Fuse Block – 6 Fuse	4.5" x 2.5"

82-2301

PANEL MOUNT FUSE

- Provides circuit protection for electrical systems
- 15A, .250" quick disconnect contacts, glass fuse
- Round fuseholder mounts easily into any dashboard

PART #	CURRENT RATING	DESCRIPTION
82-2215	15A	.250" Panel Mount Fuse

82-2215

LED STANDARD BLADE FUSE PANELS

82-BLR-I-310

- Fuse Type: Standard Automotive Blade
- Cover: Opaque Lexan (UL 94-V2)
- Indicating LED – Red
- Compact, lightweight and rugged construction
- Protects electrical equipment
- Base: Black thermoplastic (UL-Flame 94-VO)
- Terminals: Tin plated brass .250" quick disconnect
- Stud: #10-32 steel, nickel plated
- Max current rating: 25 A per circuit; 100 A max

PART #	DESCRIPTION
82-BLR-I-304	LED Standard Blade Fuse Panel w/cover – 4 Position
82-BLR-I-306	LED Standard Blade Fuse Panel w/cover – 6 Position
82-BLR-I-310	LED Standard Blade Fuse Panel w/cover – 10 Position

STANDARD BLADE FUSE PANELS

82-2304

- Fuse Type: Standard Automotive Blade
- Compact, lightweight and rugged construction
- Protects electrical equipment
- Base: Black thermoplastic (UL-Flame 94-VO)
- Terminals: Tin plated brass .250" quick disconnect
- Stud: #10-32 steel, nickel plated
- Max current rating: 25 A per circuit; 100 A max

PART #	DESCRIPTION
82-2303	Standard Blade Fuse Panel – 6 Position
82-2304	Standard Blade Fuse Panel – 8 Position
82-2305	Standard Blade Fuse Panel – 10 Position

LED MINIATURE BLADE FUSE PANELS

82-BLM-I-306

- Fuse Type: Miniature Automotive Blade
- Cover: Opaque Lexan (UL 94-V2)
- Indicating LED – Red
- Compact, lightweight and rugged construction
- Protects electrical equipment
- Base: Black thermoplastic (UL-Flame 94-VO)
- Terminals: Tin plated brass .250" quick disconnect
- Stud: #10-32 steel, nickel plated
- Max current rating: 25 A per circuit; 100 A max

PART #	DESCRIPTION
82-BLM-I-304	LED Miniature Blade Fuse Panel w/cover – 4 Position
82-BLM-I-306	LED Miniature Blade Fuse Panel w/cover – 6 Position
82-BLM-I-310	LED Miniature Blade Fuse Panel w/cover – 10 Position

TERMINAL STRIPS – STUD TYPE

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

PART #	DESCRIPTION
82-2311	Terminal Strips, Stud Type – 4 Stud
82-2312	Terminal Strips, Stud Type – 6 Stud
82-2313	Terminal Strips, Stud Type – 8 Stud
82-2314	Terminal Strips, Stud Type – 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)

PART #	DESCRIPTION
82-2332	Barrier Strips, Screw Type – 4 Position
82-2334	Barrier Strips, Screw Type – 6 Position
82-2338	Barrier Strips, Screw Type– 10 Position

82-2338

RELAYS

- General purpose relays designed to fit standard vehicles and equipment
- Available in standard and micro blade termination
- Available in 12V or 24V
- Can be purchased stand alone – or with a pigtail connection

84-1079
84-1093
84-1077
84-1076

RELAY ONLY

PART #	VOLTAGE	AMPS	FORM
84-1076	12V	30/40	S.P.D.T.
84-1093	24V	30/40	S.P.D.T.
84-1079	12V	40/30	S.P.D.T.
84-1077*	12V	30/20	S.P.D.T.

** Micro Blade*

RELAY + PIGTAIL

PART #	VOLTAGE	AMPS	FORM
84-1040	12V	30/40	S.P.D.T.
84-1094	24V	40/30	S.P.D.T.
84-1080*	12V	40/30	S.P.D.T.

** Includes voltage spike resistor*

84-1040

PIGTAIL ONLY

PART #	GAUGE	LENGTH	APPLICATION
84-1041	14	12"	Pigtail for 84-1076 & 84-1093
84-1078	12	12"	Pigtail for 84-1079 (Weather Resistant)

84-1041
84-1078

09

BATTERY CONNECTORS & CABLE

CONNECTEURS ET CÂBLES DE BATTERIE

TERMINALES Y CABLES PARA BATERIA

134 Battery Connectors

142 Conversion Connectors and Adapters

144 Booster Clamps and Cables

145 Charging Clips

146 Booster Cable – Twin Conductor

148 Battery Cables

152 Battery Disconnect Switches

153 Battery Protective Products

154 Crimpers and Cutters

156 Battery Boxes

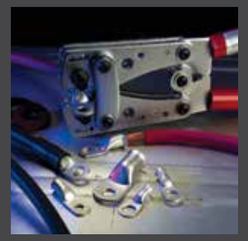
159 Hold-downs and Trays

160 Battery Cable

161 Welding Cable

GROTE'S HAS A COMPLETE LINE OF BATTERY CONNECTORS, CABLE, REPLACEMENT AND SERVICE PARTS, TEST CLIPS AND TERMINAL PROTECTIVE PRODUCTS AND OF COURSE CHARGING OPTIONS FOR ALL OF YOUR EQUIPMENT'S POWER DELIVERY NEEDS.

LIGHT DUTY, HOME AND GARDEN EQUIPMENT, HEAVY VEHICLE OR INDUSTRIAL APPLICATIONS – GROTE HAS THE BATTERY CONNECTION PRODUCT YOU NEED!



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 & J1811 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 & cUL® US when applied with Hex Crimp 84-9082
- Made in North America; Available in Retail and Bulk sizes
- Rated to 600V; lead-free

STRAIGHT BARREL CLAMP

84-9057

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

FLAG CONNECTOR

84-9097

CABLE GAUGE	COLOR CODE	RETAIL PACK SIZE	NEGATIVE	POSITIVE	BULK PACK SIZE	NEGATIVE	POSITIVE
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

RIGHT AND LEFT ELBOW

84-9648

CABLE GAUGE	COLOR CODE	ANGLE	RETAIL PACK SIZE	NEGATIVE	POSITIVE	BULK PACK SIZE	NEGATIVE	POSITIVE
1/0	Black	Right	1	82-9640	82-9641	5	84-9640	84-9641
1/0	Black	Left	1	82-9642	82-9647	5	84-9642	84-9647
2/0	Orange	Right	1	82-9648	82-9649	5	84-9648	84-9649
2/0	Orange	Left	1	82-9650	82-9651	5	84-9650	84-9651
3/0	Purple	Right	1	82-9652	82-9653	5	84-9652	84-9653
3/0	Purple	Left	1	82-9654	82-9655	5	84-9654	84-9655

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	–	5
2	Green	–	84-9103	–	5
1	Pink	–	84-9101	–	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

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

84-9309

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
82-9556

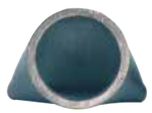
UNINSULATED BRAZED SEAM LUGS

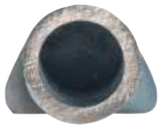
- 100% copper tin-plated
- Serrated barrel increases pull-out strength of hard-to-crimp wire
- Can be crimped or soldered
- Ideal for solder dipping applications
- Lead-free

CABLE GAUGE	STUD SIZE	BULK PACK	PACK SIZE
8	#10	84-9548	10
6	1/2"	84-9442	10
4	1/2"	84-9443	10

84-9443

MAGNALUG® CONNECTORS


STANDARD LUG


MAGNALUG®

- MagnaLugs® are superior to standard tube lugs
- Wider pad for better electrical contact; thicker pad for greater strength & conductivity
- Exceeds SAE conductivity standards J163 and J1811
- MagnaLugs® listed by UL STD. 486A & cUL® 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
- Lead-free

STARTER/GROUND COPPER LUGS

84-9208

CABLE GAUGE	COLOR CODE	1/4" (6 MM)	5/16" (8 MM)	3/8" (10 MM)	1/2" (12 MM)	PACK SIZE
8	Grey	84-9461	84-9635	–	–	5
6	Grey	–	–	84-9636	–	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	84-9637	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	–	2	84-9222	10
4/0	Yellow	–	2	84-9223	10

WE KNOW THE POWER OF A GOOD CONNECTION

At Grote Industries, **WE ARE COMMITTED TO TAKING CARE OF OUR CUSTOMERS** by ensuring that they receive the information and products they need, when they need them. That's why we are continually investing in industry-leading technology that allows us to connect to our valued customers.

CONNECT YOUR FLEET WITH GROTE
GROW YOUR FLEET WITH GROTE

Grote offers fleets full-service partnership support so you can stop worrying about inventories or suppliers. Grote can even provide comprehensive training to your maintenance partners, to ensure you get the most benefit from your Grote Electrical Connections and Accessory products. Connect with our experienced team of technical, sales & customer solution experts. Connect with our digital tools and **G24/7 ONLINE CUSTOMER SERVICE PLATFORM**. Limit unplanned maintenance downtime, and improve your fleet's safety and profitability, with our innovative and high quality electrical connection and accessory products.

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TIN PLATED COPPER TUBE LUGS

- Seamless 100% copper tube construction
- Can be crimped/soldered; ideal for general wiring, starter, ground applications
- Heavy tin-plated for superior conductivity and resistance to corrosion
- Flared barrel for easy installation of cables
- Available in clam shell packaging or bulk bag
- Lead-free

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**	2	**84-9537**	25
8	3/8"	**82-9523**	2	**84-9523**	25
8	1/2"	**82-9547**	2	**84-9547**	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**	2	**84-9535**	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**	2	**84-9536**	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

83-6544

TIN PLATED COPPER TUBE LUG ASSORTMENT KIT

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

83-6544 8 – 3/0 GA Copper Tube Lugs

STANDARD COPPER TUBE LUGS

- Seamless 100% copper tube construction
- Can be crimped or soldered – ideal for most general purpose applications
- Flared barrel for easy installation of cables
- Available in clam shell packaging or bulk bag
- Lead-free

CABLE GAUGE	STUD SIZE	RETAIL PACK	PACK SIZE	BULK PACK	PACK SIZE
8	#10	**82-9521**	2	**84-9521**	25
8	5/16"	**82-9538**	2	**84-9538**	25
8	3/8"	**82-9428**	2	**84-9428**	25
8	1/2"	**82-9539**	2	**84-9539**	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	1/4"	**82-9545**	2	**84-9545**	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	5/16"	**82-9546**	2	**84-9546**	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

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

83-6543 8 – 3/0 GA Copper Tube Lugs

BATTERY CONNECTORS – HEAVY DUTY

- Clamps designed for truck, bus, construction, agricultural, 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/O Gauge	Lead; zinc-plated, steel fasteners	**82-9133**	2	**84-9133**	25

BATTERY CONNECTORS – 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

AUTOMOTIVE TERMINAL CLAMPS

84-9671

TOP POST & SIDE MOUNT, CARDS OF 10

- Both products offered in convenient cards of 10 pieces per card
- Both accept 6 through 2/0 gauge cable

PART #	DESCRIPTION
84-9671	Automotive Top Post Terminal Clamps
84-9672	Automotive Side Mount Terminal Clamps

LEAD FREE CONNECTORS

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

DESCRIPTION	BULK PACK	PACK SIZE
Top Post, 8-6-4 GA	**84-9618**	5 Pair (Pos/Neg)
Top Post, 8-6-4 GA, with auxiliary take off	**82-9597**	1 Pair (Pos/Neg)

BATTERY CONNECTORS – MARINE

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"	Lead; zinc-plated steel fasteners	**82-9542**	1	**84-9542**	25

BATTERY CONNECTORS – MILITARY

MILITARY

- Exceeds 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
- Lead-free
- Copper; brass plated with zinc plated steel fasteners

DESCRIPTION	RETAIL PACK	PACK SIZE
Top Post, Negative	**82-9595**	1
Side Terminal, Universal	**82-9596**	1

CONVERSION CONNECTORS

STUD-TO-TOP POST

84-9130

- 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

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

CONVERSION CONNECTORS

SIDE TERMINAL-TO-TOP POST

84-9131

- 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

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	3/8"				**84-9610**	5
Positive	3/8"				**84-9611**	5

TERMINAL CONNECTORS

TOP POST-TO-SIDE

82-9132

- 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

DESCRIPTION	SIZE	MATERIAL	RETAIL PACK	PACK SIZE
Top Post to Side Terminal	3/8"	Lead; zinc-plated steel fasteners	**82-9132**	1 pair

PROTECTIVE WASHERS

84-9624

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

DESCRIPTION	PACK SIZE	PART #
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	—		**84-9445**	10
Bolt, side terminal; single power lead	3/8"- 16 x 13/32"	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

RoHS

84-9185
84-9599

DESCRIPTION	SIZE	MATERIAL	PACK SIZE	BULK PACK	PACK SIZE
Top terminal accessory post	5/16" - 18 x 9/16"	Brass; zinc-plated steel fasteners	1	**84-9185**	5
Side terminal extension bolt	3/8" - 16 x 13/32"	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 #	PACK SIZE
84-9186	1

84-9186

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	PART #
400 AMP	Standard Jaws	Commercial grade	Red & Black	Pair	84-9280
500 AMP	Parrot Jaws	Industrial grade	Red & Black	Pair	84-9281
900 AMP	Parrot Jaws	Industrial grade	Red	1	84-9321
900 AMP	Parrot Jaws	Industrial grade	Black	1	84-9322
900 AMP	Parrot Jaws	Industrial grade	Red & Black	Pair	84-9630

BATTERY CABLE CONNECTORS

PLUG-IN STYLE

- 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

RATING	TYPE	GAUGE	COLOR	PACK	PART #
50 AMP	Plug-In End	12-10	Red	1	84-9680
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	Red	1	84-9681
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	Red	1	84-9682
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	Blue	1	84-9683
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	Blue	1	84-9684
350 AMP	Plug-In End	2/0	Grey	1	84-9485

BATTERY CABLE CONNECTORS

PROTECTIVE CAPS – PLUG-IN STYLE

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

RATING	TYPE	DESCRIPTION	GRIP COLOR	PACK	PART #
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

HEAVY DUTY CHARGING CLIPS

- Jaws accommodate up to ¾"
- Excellent for test equipment
- Use for OEM repair and custom build
- Color-coded vinyl boots

RATING	JAW TYPE	DESCRIPTION	GRIP COLOR	RETAIL PACK	PACK
75 AMP	Clamp style	Industrial grade	Red	84-4997	1
75 AMP	Clamp style	Industrial grade	Black	84-4998	1
75 AMP	Clamp style	Industrial grade	Red & Black	84-4999	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

TEST CLIPS

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

RATING	JAW TYPE	JAW SPREAD	RETAIL PACK	PART #	BULK PACK	PACK
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	84-9544	25

ALLIGATOR CLIPS & TEST LEADS

- Jaws accommodate up to 5/16"

DESCRIPTION	INSULATED	COLOR	PART #	PACK
Test Lead, 10', 18 GA	Yes	Red	84-9615	1
Test Lead, 10', 18 GA	Yes	Black	84-9616	1
Test Lead, 2 ½', 16 GA	Yes	Red & Black	84-9613	1 Pair
Alligator Clip	No	Red	84-5005	1
Alligator Clip	No	Black	84-5004	1

ALLIGATOR CLIP BOOTS

DESCRIPTION	COLOR	RETAIL PACK	PACK SIZE	BULK PACK	PACK
Protective boots for Alligator Clips	Red & Black	82-9614	1 Pair	84-9614	5 Pair

BOOSTER CABLES

84-9550

84-9276

84-9279

84-9278

- Cable construction of 100% fine-stranded copper conductors
- Tangle-free design remains flexible even in cold weather
- 1 & 2 Gauge includes Thermoplastic Elastomer (TPE) jacketing
- 4, 6 & 8 Gauge includes Polyvinyl chloride (PVC) jacketing
- All booster cables are supplied in a retail storage box
- Additional gauges and lengths available as special order
- 175A plug in ends for 84-9279 and 84-9496

LIGHT DUTY

GAUGE	JAW TYPE	JAW RATING	LENGTH	CABLE COLOR	JACKET	PART #
8 GA	Standard Jaws	200 AMP	12'	Yellow & Black	PVC	84-9550

MEDIUM DUTY – COMMERCIAL GRADE

GAUGE	JAW TYPE	JAW RATING	LENGTH	CABLE COLOR	JACKET	PART #
6 GA	Standard Jaws	500 AMP	16'	Orange & Black	PVC	84-9472
4 GA	Standard Jaws	500 AMP	16'	White & Black	PVC	84-9331
4 GA	Standard Jaws	500 AMP	20'	White & Black	PVC	84-9276
4 GA	Parrot Jaws	600 AMP	20'	White & Black	PVC	84-9277

MEDIUM DUTY, PLUG IN CONNECTOR – COMMERCIAL GRADE

GAUGE	JAW TYPE	JAW RATING	LENGTH	CABLE COLOR	JACKET	PART #
4 GA	Std. Jaws & Plug-In	500 AMP	20'	White & Black	PVC	84-9279
4 GA	Plug-In w/ 3/8" lugs	175 AMP	5'	White & Black	PVC	84-9496

HEAVY DUTY – INDUSTRIAL GRADE

GAUGE	JAW TYPE	JAW RATING	LENGTH	CABLE COLOR	JACKET	PART #
2 GA	Parrot Jaws	600 AMP	20'	Red & Black	TPE	84-9278
1 GA	Standard Jaws	500 AMP	12'	Grey & Black	TPE	84-9484
1 GA	Standard Jaws	500 AMP	16'	Red & Black	TPE	84-9477
1 GA	Standard Jaws	500 AMP	20'	Grey & Black	TPE	84-9476
1 GA	Parrot Jaws	900 AMP	25'	Grey & Black	TPE	84-9567

BOOSTER CABLE

TWIN CONDUCTOR

- Make up your own booster cables
- Combine with heavy duty clamps for superior charging power
- Can be used with SB type connectors for plug in convenience
- Ideal for tarps system (dump truck / dump trailer)
- Insulation stays flexible in cold weather; bonded cable resists tangling
- 100% fine-stranded copper meets SAE J1127 specifications
- Temperature rated to -40˚F (-40˚C); rated @ 60V or less

GAUGE	OUTSIDE DIAMETER	COLOR	LENGTH	PART #
8 GA	.320" x .700"	Black & Yellow	1,500'	82-5759-1500
6 GA	.360" x .780"	Black & Orange	100'	82-5760
6 GA	.360" x .780"	Black & Orange	1,200'	82-5760-1200
4 GA	.410" x .880"	Black & White	100'	82-5761
4 GA	.410" x .880"	Black & White	500'	82-5761-500
2 GA	.450" x .960"	Black & Red	100'	82-5762

LIFT GATE – CHARGING PLUGS & SOCKETS

- Designed for lift gate applications and as an alternative power source
- Solid brass pin terminals for best conductivity
- 2, 1/2" mounting holes; stainless steel spring
- Terminals accepts 4 gauge cable
- 200 AMP heavy die-cast construction

SOCKET

PART #	SOCKET #	DESCRIPTION	MATERIAL
82-1041	2	Socket – Dual Pole	Zinc Die-Cast
82-0851	1	Socket – Single Pole	Zinc Die-Cast
82-2144		Socket Boot	Rubber

PLUG

PART #	PLUG #	DESCRIPTION	MATERIAL
82-1042	2	Plug & Guard Spring – Dual Pole	Zinc Die-Cast
82-0852	1	Plug & Guard Spring – Single Pole	Zinc Die-Cast

PLUG & SOCKET COMBO

PART #	PLUG/SOCKET#	DESCRIPTION	MATERIAL
82-0950	1	Plug & Socket – Single Pole	Zinc Die-Cast

82-1041

82-0851

82-2144

82-1042
82-0852

VERTICAL PIN

DUMP TRUCK & TARP TRAILER PLUGS & SOCKETS

- Designed for dump truck, tarp and grain trailer applications; also alternative power source
- Solid brass pin terminals for best conductivity
- 2, 1/2" mounting holes; stainless steel spring
- Terminals accepts 4 gauge cable(s)
- 200 AMP heavy die-cast construction
- Vertical pin plug/socket = set screw termination

SOCKET

PART #	SOCKET #	DESCRIPTION	MATERIAL
82-1041V	2	Socket – Dual Pole	Zinc Die-Cast
82-2144		Socket Boot	Rubber

PLUG

PART #	PLUG #	DESCRIPTION	MATERIAL
82-1042V	2	Plug & Guard Spring – Dual Pole	Zinc Die-Cast

82-1041V

82-2144
82-1042V

MOLDED BATTERY HARNESSES

"BEST"

- 100% fine stranded copper conductor
- 2/0 GA, PVC jacketed starter cable
- Meets SAE J1127 specifications
- Designed to connect 2, 3 or 4 batteries
- Red and Black (+/-) option for easy polarity identification
- Protective caps protect contacts and prevent corrosion
- Precision molded provide a maintenance free seal

CENTRE TO CENTRE DIMENSION	POLARITY	PACK SIZE	PART #
7"	Negative	1	**84-9582**
7"	Positive	1	**84-9583**
14"	Negative	1	**84-9584**
14"	Positive	1	**84-9585**
21"	Negative	1	**84-9586**
21"	Positive	1	**84-9587**

QUICKLINK® STUD BATTERY HARNESSES

"BETTER"

- 100% fine stranded copper conductor
- 2/0 GA, welding cable provides extreme flexibility in colder temperatures
- Includes high-end locking, anti-rotational lug ends to ensure a tight fit and a superior connection
- Ideal for truck, farm, construction and automotive applications

CENTRE TO CENTRE DIMENSION	POLARITY	TYPICAL BATTERY LAYOUT	PACK SIZE	PART #
8 1/2"	Negative	Side-By-Side	1	**84-9304**
8 1/2"	Positive	Side-By-Side	1	**84-9305**
12"	Negative	Side-By-Side	1	**84-9420**
12"	Positive	Side-By-Side	1	**84-9421**
17"	Negative	End-To-End	1	**84-9306**
17"	Positive	End-To-End	1	**84-9307**

TIN PLATED STUD BATTERY HARNESSES

"GOOD"

- 100% fine stranded copper conductor
- 2/0 GA, welding cable provides extreme flexibility in colder temperatures
- Tin plated copper tube lug connections

CENTRE TO CENTRE DIMENSION	POLARITY	TYPICAL BATTERY LAYOUT	PACK SIZE	PART #
8 1/2"	Negative	Side-by-Side	1	**84-9690**
8 1/2"	Positive	Side-by-Side	1	**84-9691**
12"	Negative	Side-by-Side	1	**84-9692**
12"	Positive	Side-by-Side	1	**84-9693**
17"	Negative	End-to-End	1	**84-9694**
17"	Positive	End-to-End	1	**84-9695**

STUD BATTERIES

STUD BATTERIES – LUG TO LUG – BATTERY TO GROUND OR STARTER

CENTRE TO CENTRE DIMENSION	DESCRIPTION	GAUGE	PACK SIZE	PART #
10"	Lug to Lug, 3/8"- 3/8"	2/0 GA	1	**84-9467**
15"	Lug to Lug, 3/8"- 3/8"	2/0 GA	1	**84-9470**
20"	Lug to Lug, 3/8"- 3/8"	2/0 GA	1	**84-9473**

TOP POST-TO-POWER TAKE OFF POST

CENTRE TO CENTRE DIMENSION	POLARITY	GAUGE	PACK SIZE	PART #
13 5/8"	Negative	2/0 GA	1	**84-9274**
13 5/8"	Positive	2/0 GA	1	**84-9275**

BATTERY JUMPERS

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

CENTRE TO CENTRE DIMENSION	DESCRIPTION	GAUGE	PACK SIZE	PART #
12"	Offset	1 GA	1	**84-9402**
8"	Offset	1 GA	1	**84-9401**
8"	Offset	2/0 GA	1	**84-9403**

SOLDER SLUGS AND FLUX

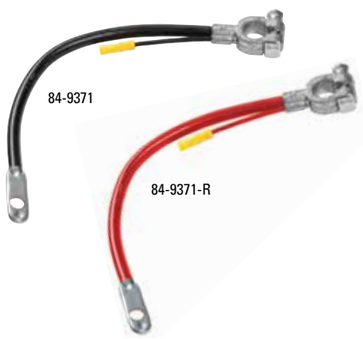
- Pre-measured solder slugs for quick and easy battery cable soldering
- Improves your electrical connection by filling in any contact irregularities
- Color coded to industry standards, gauges 6 through 4/0
- Melting temperature rating 182°C (361°F)

CABLE GAUGE	COLOR CODE	PACK SIZE	PART #
6	Grey	25	**84-9600**
4	Grey	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**

Visit page 169 for more information on our 48-piece Battery Terminal Solder Slug Kit

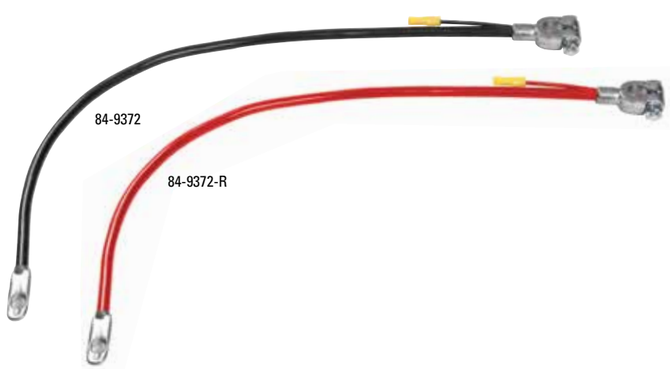
READY-TO-INSTALL BATTERY CABLES

TOP POST CABLES



- Meet or exceed SAE specifications; ideal for OEM replacement
- 100% fine stranded copper wire with black or red PVC insulation
- Tinning of copper wire before casting ensures perfect bond between the 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
- Excellent for light duty trucks, vans, and recreational vehicles (R.V.)
- Industry standard 3/8" stud hole
- Individually packed

CENTRE TO CENTRE	BLACK 4 GAUGE PART #	BLACK 4 GAUGE W/LEAD	BLACK 1 GAUGE PART #	RED 4 GAUGE PART #	RED 4 GAUGE W/LEAD	RED 1 GAUGE PART #
9"	84-9224					
12"	84-9225	84-9371	84-9241	84-9225-R	84-9371-R	
14"	82-7014					
15"	84-9226	84-9361		84-9226-R	84-9361-R	
16"	84-9227		84-9242			84-9242-R
19"	84-9230		84-9243	84-9230-R		
21"			84-9503			84-9503-R
22"	84-9228			84-9228-R		
24"	84-9231					
25"	82-7025	84-9372		82-7025-R	84-9372-R	
27"	84-9232		84-9244			84-9244-R
30"	84-9233		84-9245	84-9233-R		84-9245-R
32"	84-9234	84-9373		84-9234-R	84-9373-R	
36"	84-9229	84-9365	84-9246	84-9229-R	84-9365-R	84-9571
37"	84-9235					
41"			84-9247			
42"	84-9236			84-9236-R		
48"	84-9237	84-9367	84-9248	84-9237-R	84-9367-R	84-9572
53"	82-7053					
56"		84-9374			84-9374-R	
60"	84-9238			84-9238-R		
65"			84-9510			84-9510-R
72"	82-7072	84-9375			84-9375-R	84-9500-R



SIDE TERMINAL CABLES

READY-TO-INSTALL BATTERY CABLES

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

CENTRE TO CENTRE	PACK SIZE	BLACK 4 GAUGE PART #	RED 4 GAUGE W/LEAD PART #
15"	1	84-9249	84-9249-R
25"	1	84-9250	84-9250-R
35"	1	84-9251	84-9251-R
45"	1	84-9252	84-9252-R
55"	1	84-9253	84-9253-R
65"	1	84-9254	84-9254-R

SWITCH-TO-STARTER CABLES

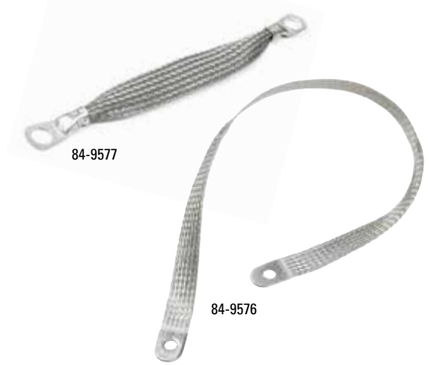
READY-TO-INSTALL BATTERY CABLES

CENTRE TO CENTRE	PACK SIZE	BLACK 4 GAUGE PART #	BLACK 1 GAUGE PART#	RED 4 GAUGE PART #
10"	1	84-9255	84-9505	84-9255-R
15"	1	84-9256	84-9262	84-9256-R
18"	1	84-9257	84-9382	84-9257-R
19"	1		84-9388	
24"	1	84-9258	84-9506	84-9258-R
25"	1		84-9263	
30"	1	84-9504		84-9504-R
33"	1	84-9259		
35"	1		84-9264	
36"	1	84-9260		84-9260-R
40"	1	84-9261		84-9261-R
46"	1		84-9376	
49"	1	84-9377		84-9377-R

READY-TO-INSTALL BRAIDED GROUND STRAP

- 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 #	2 GAUGE PART #
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	
24"	Clamp to Lug	1		84-9464
24"	Lug to Lug	1	84-9576	



MASTER BATTERY DISCONNECT SWITCH

82-2103

82-2157

- Truck, Automotive, Marine, Off-Road and R.V. applications
- For battery circuit (82-2103, 82-2233); for alternator or generator field circuit (82-2155)
- 3/4" & #10-32 copper alloy stud terminals with hex nuts, lock washers included
- Large die cast lever for ease of operation; mounting stem ½" long x ¾" dia.
- Fits panel up to ¼" thick; 10,000 life cycle; 6-36V DC
- Includes faceplate
- Faceplate replacement for 82-2103 (82-2157)

DISCONNECTS ALL CIRCUITRY TO REDUCE THE POSSIBILITY OF THEFT / ACCIDENTAL ELECTRICAL FIRES

PRODUCT RATING

Continuous Rating (Make/Break), Large Studs – 180 AMP @ 6-36V DC;
1,000 AMP – in rush (82-2103)
Continuous Rating (Make/Break), Large Studs – 180 AMP @ 6-36V DC (82-2233)
Intermittent Rating (Carrying), Large Studs – 1800 AMP @12V DC;
1 cycle = 4 seconds on/20 minutes off)

PART #	POSITION	RATED	TYPE	TERMINATION	DIMENSIONS
82-2103	Off/On	12V	S.P.S.T.	2, 3/8" stud terminals ground w/ faceplate	4 3/8" L x 2 5/8" Dia.
82-2233	Off/On	12V	S.P.S.T.	2, ½" stud terminals ground w/ faceplate	4 3/8" L x 2 5/8" Dia.

82-2155

DESIGNED TO BREAK ALTERNATOR GENERATOR CIRCUIT PRIOR TO BATTERY CIRCUIT DISCONNECT

PRODUCT RATING

Continuous Rating (Make/Break), Large Studs: 180 AMP, Small Studs: 20 AMP @ 6-36V DC
Intermittent Rating (Carrying), Large Studs: 1,000 AMPs (20 sec. "On" – 5 Minutes "Off")

PART #	POSITION	RATED	TYPE	TERMINATION	DIMENSIONS
82-2155	Off/On	12V	D.P.S.T.	4 stud terminal ground	4 1/8" L x 2 5/8"Dia.

BATTERY ISOLATOR SWITCH

82-2104

- Prevents unauthorized use
- Eliminates battery discharge
- Waterproof body with removable key and protective cap
- Rated at 500 AMPs at 12V
- Stud Size: M10 (1.5mm)

82-2104

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, meets USCG requirements

84-9140
84-9141

STRAIGHT CLAMP

FITS GAUGES	COLOR	PACK	PART #
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

84-9138
84-9139

STRAIGHT CLAMP SNAP ON FEATURE

FITS GAUGES	COLOR	PACK	PART #
6 & 4	Black	5	84-9138
6 & 4	Red	5	84-9139
1 & 2	Black	5	84-9136
1 & 2	Red	5	84-9137

84-9150
84-9151

AUTOMOTIVE LUG

FITS GAUGES	COLOR	PACK	PART #
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

84-9324
84-9323

TAB INSULATOR

FITS GAUGES	TERMINAL O.D.	COLOR	PACK	PART #
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

BRUTE™ HAMMER CRIMPER

84-9087

- 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 #
8-4/0 GA	**84-9087**

CUB™ CRIMPER

84-9080

- 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 #
15"	8-1 GA	**84-9080**

HEXCRIMP™

c UL us

84-9082
84-9085

- Medium to heavy duty applications
- Properly crimps copper, tin-plated, die cast and Magna lug splices and connectors
- Adjustable dies can crimp 8 to 250 MCM cable range
- 26" long with insulated handles for comfort
- 2 year limited warranty
- Made in North America

PART #	DESCRIPTION
84-9082	Hand Held
84-9085	Bench Mount
84-9084	Replacement Dies & Hardware (for 84-9082)

ROTARY CABLE SLITTER/STRIPPER TOOL

HEAVY DUTY

83-6515

- 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

PART #	DESCRIPTION
83-6515	Heavy Duty Rotary Cable Slitter / Stripper Tool

9" CABLE CUTTER

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

84-9088

OVERALL LENGTH	CONNECTOR CABLE RANGE	PART #
9"	up to 2/0 GA	**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

PART #	DESCRIPTION
84-9089	Hand Held
84-9090	Bench Mount

84-9089

84-9090

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

PART #	DESCRIPTION	RE-ORDER PART #
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**

84-9290

BATTERY BOXES FOR 6-VOLT, GC2 AND 4D BATTERIES

Growing demand for more power and deeper cycles has led to wider use of GC2 and 4D batteries in recreational vehicles, boats, and small alternative energy applications. Our Battery Box line allows you to set up the configuration that works best for your installation, whether it is single batteries, or dual batteries side by side or end-to-end.

Larger boxes use thumb screws to retain the covers and have foot pads to allow mounting options in low clearance environments like sailboats and campers.

Construction

Marine

RV

SINGLE & DUAL

- Rugged heavy wall polyethylene construction
- Impervious to acid, gasoline, oil and solvents
- Flame retardant
- Cold temperature impact resistant to -30°F (-34°C)
- Heat stable -30°F to +200°F (-34°C to +93°C)
- Single box holds ONE 6-Volt battery
- Dual box holds TWO 6-Volt batteries
- Depending on your space requirements, use two boxes side-by-side, end-to-end or use a dual box
- Dual box is molded in black

PART #	GROUP SIZE	TYPICAL BATTERIES IN ARRAY	BOX COLOR	INSIDE DIMENSIONS LENGTH	INSIDE DIMENSIONS WIDTH	INSIDE DIMENSIONS HEIGHT	OUTSIDE DIMENSIONS LENGTH	OUTSIDE DIMENSIONS WIDTH	OUTSIDE DIMENSIONS HEIGHT	MOUNTING BRACKET
84-9660	6-Volt/ GC2	1	Black	10-3/4" (27.3 cm)	7-1/4" (18.4 cm)	12-1/4" (31.1 cm)	13-1/2" (34.3 cm)	9-1/4" (23.5 cm)	13" (33 cm)	–
SIDE BY SIDE										
84-9661	Dual 6-Volt/GC2	2	Black	15" (38.1 cm)	11" (27.9 cm)	13" (33 cm)	20" (50.8 cm)	14-1/2" (36.8 cm)	14-1/2" (36.8 cm)	(2 Included)
END TO END										
84-9425	Dual 6-Volt Single 4D GC2	2	Black	21-5/8" (55 cm)	9-1/2" (24.1 cm)	11-1/2" (29.2 cm)	26-3/4" (68 cm)	14" (35.6 cm)	12-3/4" (32.4 cm)	(2 Included)

Single 6-Volt
84-9660

Dual 6-Volt side-by-side, black
84-9661

Dual 6-Volt end-to-end
84-9425

COMMERCIAL MARINE, RECREATIONAL VEHICLES, CONSTRUCTION MACHINERY, LARGER OFF-GRID, BACKUP POWER SYSTEMS

Big power requirements mean big batteries and big battery boxes. Our commercial boxes are used for 4D, 8D and other large arrays. These boxes traditionally have secured batteries on working boats and heavy construction equipment and now are found in larger residential and small commercial off-grid power systems.

With mounting options to accommodate a variety of installations, venting options and cable routing options including conduit mounting, these battery boxes have been carefully engineered to solve your battery security issues.

Construction

Heavy Duty

Marine

COMMERCIAL BOXES

- Rugged, durable, heavy wall construction
- Impervious to acid, gasoline, oil and solvents
- Heat stable to +200°F (+93°C)
- Cold temperature impact resistant to -30°F (-34°C)
- Flame retardant
- UV stabilized (Rating 6)
- 3-4 way cable channels molded into design
- Large entry ports for heavy duty cable
- Cover held firmly with convenient thumb screws, no special tools required
- Cover can be locked for protection and tamper resistance
- Vent holes in cover allow gases to escape, preventing dangerous hydrogen build up
- Accommodates variety of mounting options

PART #	TYPICAL GROUP SIZE	TYPICAL BATTERIES IN ARRAY	COLOR	INSIDE DIMENSIONS LENGTH	INSIDE DIMENSIONS WIDTH	INSIDE DIMENSIONS HEIGHT	OUTSIDE DIMENSIONS LENGTH	OUTSIDE DIMENSIONS WIDTH	OUTSIDE DIMENSIONS HEIGHT	MOUNTING BRACKET
84-9425	4D	1	Black	21-5/8" (55 cm)	9-1/2" (24.1 cm)	11-1/2" (29.2 cm)	26-3/4" (68 cm)	14" (35.6 cm)	12-3/4" (32.4 cm)	(2 Included)
84-9426	8D High	1	Black	21-5/8" (55 cm)	11-3/4" (29.8 cm)	13" (33 cm)	26-3/4" (68 cm)	16-1/2" (41.9 cm)	14" (35.6 cm)	(2 Included)
84-9664	Dual 8D End-to-End	2	Black	42-1/2" (108 cm)	12" (30.5 cm)	10-3/4" (27.3 cm)	49-1/2" (125.7 cm)	18-1/4" (46.4 cm)	12-1/4" (31.1 cm)	(Optional)
84-9665	Dual 8D Side-by-Side	2	Black	21-1/2" (54.6 cm)	23-1/2" (59.7 cm)	10-3/4" (27.3 cm)	27" (68.6 cm)	29" (73.7 cm)	12-1/4" (31.1 cm)	(2 Included)

4D
84-9425

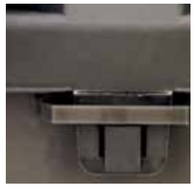
8D high
84-9426

Dual 8D end-to-end
84-9664

Dual 8D side-by-side
84-9665

BATTERY BOXES

Mounting holes



Strap in use

U1

24

27

24, 27, 31

Dual 27, 31

AUTO, LIGHT TRUCK, MARINE & RV

Heavy duty tie down strap kit is included with each box.

FITS ALL BATTERIES
- Fits all traditional battery group sizes
- Fits all new orbital or spiral celled, deep cycle, high performance batteries

NEW COVER
- Easy-on and easy-off
- Safe and secure
- Convenient, fast, durable

NEW MOUNTING HOLES IN HANDLE
- Use hold-down holes molded in to reinforced handles
- Use J-hooks, L-hooks, threaded rod or lag bolts
- Remove the lid while keeping the box secure

NEW TOUGHER MATERIAL
- Impact resistant to -30°F (-34°C)
- Heat stable to +200°F (+93°C)
- Meets U.S. Coast Guard Regulations 183.420 & ABYCE-10.7
- Impervious to acid, gasoline, oil and solvents
- Will not rust, UV protected

PART #	GROUP SIZE	INSIDE DIMENSIONS			OUTSIDE DIMENSIONS		
		LENGTH	WIDTH	HEIGHT	LENGTH	WIDTH	HEIGHT
84-9662	U1 Black	8" (20.3 cm)	5-1/4" (13.3 cm)	7-15/16" (20.1 cm)	10-3/4" (27.9 cm)	7-1/2" (19.1 cm)	8-1/2" (21.6 cm)
84-9424	24 Black	10-1/2" (26.7 cm)	7" (17.8 cm)	9-3/4" (24.8 cm)	13-1/2" (34.3 cm)	9-1/4" (23.5 cm)	10-1/4" (26 cm)
84-9427	27 Black	12-3/4" (32.4 cm)	7-1/4" (18.4 cm)	10" (25.4 cm)	16-1/8" (40.9 cm)	9-5/8" (24.4 cm)	10-7/8" (27.6 cm)
84-9423	Adjustable 24, 27, 31 Black	14-1/2" (36.8 cm)	7-1/4" (18.4 cm)	10-3/8" (26.3 cm)	17-3/4" (45.1 cm)	10-1/4" (26 cm)	10-7/8" (27.6 cm)
84-9422	Dual 27, 31	14-1/2" (36.8 cm)	15-1/2" (39.3 cm)	10-1/4" (26.0 cm)	19-1/4" (48.8 cm)	20" (50.8 cm)	11-7/8" (30.1 cm)

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 #	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
- 4", ¼"-20 thread

PART #	DESCRIPTION	LENGTH	PACK
84-9287	J bolt	8"	Pair
84-9286	J bolt	10"	Pair
84-9685	J bolt	12"	Pair
84-9285	L bolt	10"	Pair

BATTERY TRAYS

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 (84-9481)

PART #	DESCRIPTION	PACK
84-9481	11" for Group 24 size batteries	1
84-9629	GM base mount hold down	1

BATTERY CABLE – TYPE SGR

DURABLE CONSTRUCTION | MADE IN NORTH AMERICA | SAE J1127™ STANDARD

82-5703

82-6703

- Ideal for use as an interconnection between batteries and a starter or as a ground in a vehicle
- 100% Copper Cable; made in North America
- Ethylene Propylene Diene Monomer Rubber (EPDM) Insulation
- Provides better flexibility than standard PVC starter cable
- Jacket rated at -40°C (-40°F) to 105°C (221°F)
- Meets all SAE code J1127 specifications; rated @ 60V
- All battery cable is spooled

RoHS

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

EZ-FIND
FOR COMPLETE TECHNICAL SPECS VISIT OUR WEBSITE

WELDING CABLE

DURABLE CONSTRUCTION | MADE IN NORTH AMERICA | SAE J1127™ STANDARD

- Ideal for use as an interconnection between batteries and a starter or as a ground in a vehicle
- Abrasion, salt and chemical resistant; good flame resistance
- Fine stranded copper conductor; made in North America
- Provides better flexibility than standard PVC starter cable
- Jacket rated at -50°C (-58°F) to 105°C (221°F) – Rated @ 600V
- Meets all SAE J1127 specifications
- All welding cable is spooled

RoHS

82-5730

82-6730

6 GAUGE

COLOR	25'	100'
Black	82-5732	82-5734
Red	82-6732	82-6734

4 GAUGE

COLOR	25'	100'
Black	82-5724	82-5735
Red	82-6727	82-6735

2 GAUGE

COLOR	25'	100'
Black	82-5721	82-5736
Red	82-6728	82-6736

1 GAUGE

COLOR	25'	100'
Black	82-5737	82-5738
Red	82-6746	82-6738

1/0 GAUGE

COLOR	25'	100'
Black	82-5739	82-5740
Red	82-6739	82-6740

2/0 GAUGE

COLOR	25'	100'
Black	82-5730	82-5731
Red	82-6730	82-6731

3/0 GAUGE

COLOR	25'	100'
Black	82-5741	82-5742
Red	82-6741	82-6742

4/0 GAUGE

COLOR	25'	100'
Black	82-5744	82-5745
Red	82-6744	82-6745

EZ-FIND
FOR COMPLETE TECHNICAL SPECS VISIT OUR WEBSITE

10

TOOLS & KITS

OUTILS ET TROUSSES

HERRAMIENTAS Y JUEGOS

164 Heat Shrink Terminal Assortment Kits

165 Nylon & PVC Terminal Assortment Kits

166 Deutsch & Weather Pack Assortment Kits

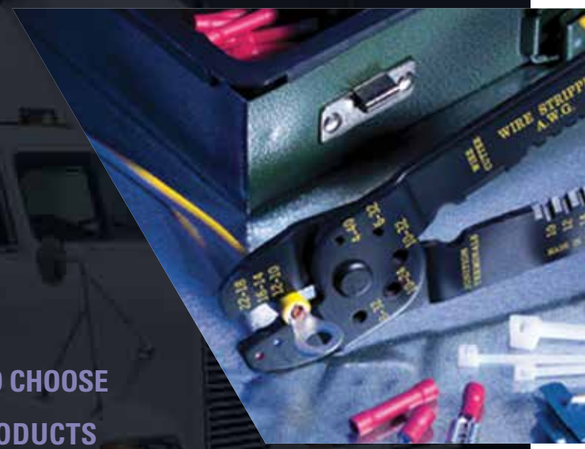
167 Assorted Repair Kits

168 Heat Shrink Tubing Assortment Kits

170 Copper Lug Assortment Kits

171 Storage Trays

172 Crimping, Cutting and Installations Tools



GROTE'S LINE OF TOOLS & KITS ALLOW YOU TO CHOOSE EXACTLY THE TOOLS AND THE TYPES OF PRODUCTS YOU NEED TO GET THE JOB DONE RIGHT FOR YOUR SPECIFIC NEED & APPLICATION. GROTE'S KITS OFFER A SELECTION OF THE MOST POPULAR, IN-DEMAND PRODUCTS IN COMPACT, RUGGED CASES TO KEEP ALL THE PARTS TOGETHER AND EASY TO ACCESS.

CHOOSE THE RIGHT PRODUCT AND THE RIGHT TOOLS TO GET THE BEST RESULTS!

CRIMP, SOLDER & SEAL TERMINAL & CONNECTOR

22-10 GAUGE ASSORTMENT KIT

83-6542

- Includes the most popular heat shrink crimp, solder and seal terminals and connectors
- 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 #	KIT CONTENTS	QUANTITY
83-6542	Butt Connectors (40) Ring Terminals (50) Spade Terminals (10) Male Disconnects (10) Female Disconnects (10)	120

HEAT SHRINK & SOLDER TERMINAL & CONNECTOR

22-10 GAUGE ASSORTMENT KIT

83-6539

- 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 resealable plastic box with re-order chart on the inside cover

PART #	KIT CONTENTS	QUANTITY
83-6539	Butt Connectors (40) Ring Terminals (50) Spade Terminals (10) Male Disconnects .250" (10) Female Disconnects .250" (10)	120

HEAT SHRINKABLE TERMINAL & CONNECTORS

22-10 GAUGE ASSORTMENT KIT

83-6503
83-6556

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

PART #	KIT CONTENTS	QUANTITY
83-6503	Butt Connectors (40) Ring Terminals (50) Spade Terminals (10) Male Disconnects (10) Female Disconnects (10)	120

PART #	KIT CONTENTS	QUANTITY
83-6556	Butt Connectors (30) Ring Terminals (44) Male Disconnects (5) Female Disconnects (6) ** Includes Hang Tab*	85

22-10 GAUGE ASSORTMENT KITS

NYLON TERMINAL & CONNECTOR

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

PART #	KIT CONTENTS	QUANTITY
83-6538	Butt Connectors (40) Ring Terminals (50) Spade Terminals (10) Male Disconnects .250" (10) Female Disconnects .250" (10)	120

PART #	KIT CONTENTS	QUANTITY
83-6555	Butt Connectors (24) Ring Terminals (26) Male Disconnects .250" (10) Female Disconnects .250" (10) ** Includes Hang Tab*	70

83-6538
83-6555

22-10 GAUGE ASSORTMENT KITS

VINYL & NYLON TERMINAL & CONNECTOR

- Kit contains 650 of the most popular automotive electrical terminals and accessories
- Assorted gauges (22-16, 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 #	KIT CONTENTS	QUANTITY
83-6540	Butt Connectors (115) 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 – Black (50) Wire Terminal Crimper (1)	650

PVC

PART #	KIT CONTENTS	QUANTITY
83-6554	Butt Connectors (34) Ring Terminals (51) Male Disconnects .250" (6) Female Disconnects .250" (8) ** Includes Hang Tab*	99

83-6540
83-6554

DEUTSCH TERMINAL & CONNECTOR

ASSORTMENT KIT

83-6549

- Perfect assortment kit for any repair or service technician or installer
- Includes 98 pieces of the most popular Deutsch, DT Series terminals and housings
- 20-16, 18-16 and 16-14 gauge terminals; 2, 3, 4, 6 and 8 way plugs/receptacles & wedge locks
- Crimping and removal tools also available
- 12 compartment resealable plastic box with re-order chart on the inside cover

83-6549

TERMINAL & CONNECTOR REPAIR KIT

WEATHER PACK

83-6536

- Kit Includes 250 assorted pieces; assorted 22-14 GA terminals; 1, 2 and 4 cavity nylon housings and 22-18 & 16-14 GA cable 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

TERMINAL & CONNECTOR INSTALLATION & REPAIR KIT

WEATHER PACK

83-6546

- 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 connectors in one convenient location
- Easy to use reference re-order chart included

83-6546

AUTO ELECTRIC REPAIR KIT

22-10 GAUGE

- Kit includes 208 electrical tools & components, voltage tester and 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)

22-10 GAUGE

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

PART #	KIT CONTENTS	QUANTITY
83-2102	22-16 Ring #6 (6)	37
83-2104	22-16 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	22-16 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)

22-10 GAUGE

PART #	KIT CONTENTS	QUANTITY
84-2180	22-16 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	22-16 Ring Terminals (5)	
84-2304	16-14 Ring Terminals (5)	
84-2191	22-16 Male Quick Disconnect (5)	
84-2391	16-14 Male Quick Disconnect (5)	
84-2187	22-16 Female Quick Disconnect (5)	
84-2387	16-14 Female Quick Disconnect (5)	
83-6510	Wire Terminal Crimper (1)	

83-6520

HEAT SHRINK TUBING KIT

DUAL WALL – ADHESIVE LINED "HOT MELT"

83-6535

4:1 SHRINK RATIO

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

PART #	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

HEAT SHRINK TUBING KIT

DUAL WALL – FLEXIBLE, ADHESIVE LINED

83-6537

3:1 SHRINK RATIO

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

PART #	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

HEAT SHRINKABLE TUBING KIT

DUAL WALL, RED/BLACK

83-6505

3:1 SHRINK RATIO

- Combination of 50, 6" Red & Black Dual Wall heat shrink pieces
- 6-compartment resealable plastic box
- Re-order chart on inside cover

PART #	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

DUAL WALL, BLACK

HEAT SHRINKABLE TUBING KIT

3:1 SHRINK RATIO

- 50, 6" Black Dual Wall heat shrink pieces
- 6-compartment resealable plastic box
- Re-order chart on inside cover

PART #	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

SINGLE WALL, BLACK

HEAT SHRINKABLE TUBING KIT

2:1 SHRINK RATIO

- 50, 6", Black Single Wall heat shrink pieces
- 6-compartment resealable plastic box
- Re-order chart on inside cover

PART #	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

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 #	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)	

83-6532

TIN PLATED COPPER TUBE LUG ASSORTMENT KIT

8-3/0 GAUGE

83-6544

- 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
- Flared barrel for easy installation of cables
- 12 compartment resealable box
- Re-order chart on inside cover

83-6544 8 – 3/0 GA Copper Tube Lugs

COPPER TUBE LUG ASSORTMENT KIT

8-3/0 GAUGE

83-6543

- Includes 76 of the most popular automotive and heavy-duty copper tube lugs
- Provides superior conductivity
- Can be crimped or soldered
- Flared barrel for easy installation of cables
- 12 compartment resealable box
- Re-order chart on inside cover

83-6543 8 – 3/0 GA Copper Tube Lugs

REPAIR AND INSTALLATION KITS

ELECTRICAL CONNECTION, WIRE AND CABLE

83-6552

83-6553

- 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

FLEET TRAYS

- Streamline your shop inventory with fully customizable fleet/installer trays and insert labels
- Wide range of fast moving electrical connection and accessory products
- Clear and concise product labeling for easy restocking
- Fully customizable insert tray labels to accommodate existing hardware
- 12" (304mm) deep x 3" (76mm) high x 18" (457mm) wide

PART #	DESCRIPTION	PIECES
83-6650	Heat-Shrink Term Fleet Tray Assortment	245
83-6651	Crimp, Solder & Seal Fleet Tray Assortment	130
83-6652	Solder & Seal Fleet Tray Assortment	130
83-6653	Copper Lug Fleet Tray Assortment	145
83-6654	Tin-Plated Copper Lug Fleet Tray Assortment	145
83-6655	Cable Tie Fleet Tray Assortment	525
83-6656	Heat Shrink Tubing Fleet Tray Assortment	88
83-6657	Deutsch Terminal Fleet Tray Assortment	189
83-6658	Insulated Rubber Clamp Fleet Tray Assortment	64
83-6659	Fuse & Circuit Breaker Fleet Tray Assortment	553

83-6650

83-6653

83-6657

EZ-FIND
SCAN TO VIEW THE FULL LIBRARY OF FLEET TRAY OFFERINGS FROM GROTE

LARGE STORAGE TRAY

- 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

83-6547

HEAVY DUTY STORAGE RACKS

- Heavy duty storage racks are perfect for any garage or service vehicle
- Accommodates up to 4 large storage trays (83-6660)
- Prime cold rolled steel with a durable gray powder coat finish
- Does not include storage trays (above)
- 83-6548: 15 3/4" deep x 8 1/8" high x 20" wide; 20 lbs
- 83-6660: 15 3/4" deep x 15" high x 20" wide; 30 lbs

PART #	DESCRIPTION
83-6548	Easy Glide Slide Rack, 2 Trays
83-6660	Easy Glide Slide Rack, 4 Trays
83-6661	Base for Large Slide Rack

83-6548

83-6660

83-6661

HEAT SHRINK TERMINAL CRIMPING TOOL

RATCHET STYLE, 22-8 GAUGE

83-6519

- 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

83-6524

- 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 NYLON & PVC CRIMPING TOOL

22-10 GAUGE

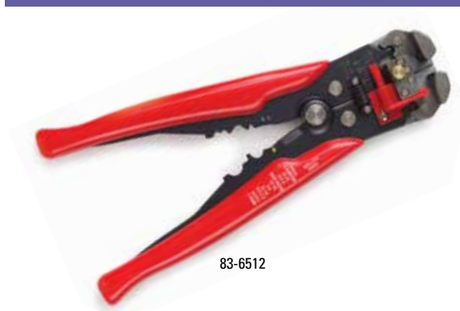
83-6511

- 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 & CRIMPING TOOL

26-10 GAUGE


83-6512

- 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 TOOLS – DEUTSCH

- Economical, ratcheting tools designed to crimp solid barrel or open barrel Deutsch terminals

PART #	WIRE GAUGE	TERMINAL STYLE
83-6562	14, 16, 18	Solid Barrel
83-6563	20, 22	Solid Barrel
83-6564	14, 16, 18, 20, 24	Open Barrel (Deutsch + Weather Pack)

- OEM tools designed to crimp solid barrel Deutsch terminals

PART #	WIRE GAUGE	TERMINAL STYLE
83-6516	12, 14, 16, 18, 20	Solid Barrel – 4 Indent Crimp

REMOVAL TOOLS – DEUTSCH

- Economical tools designed to release both solid and open barrel Deutsch terminals

PART #	WIRE GAUGE	TERMINAL STYLE
83-6565	14, 16	Solid & Open Barrel; Gold Handle
83-6566	16, 18	Solid & Open Barrel; Blue Handle
83-6567*	14, 16, 18, 20, 24	Solid & Open Barrel; Gold, Blue/Red Handles

WEATHER PACK & METRI PACK

- Can crimp terminals 24-14 gauge
- Heavy duty steel construction
- Ergonomic design with cushioned grips

PART #	DESCRIPTION
83-6569	For open barrel Weather Pack, Metri Pack 150 & 280 series and Molex terminals
84-9449	For open barrel Weather Pack terminals – ratchet style

OEM OPEN BARREL CRIMPING TOOL

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
- 10" long; Cuts and strips 22-10 gauge wires

83-6518

83-6518

ECONOMY 4-WAY CRIMPING TOOL

22-10 GAUGE

- 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

9" HAND HELD CABLE CUTTER

84-9088

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

84-9088

22" CABLE CUTTER

84-9090
84-9089

- 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

84-9080

- 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 #
15"	8-1 GA	**84-9080**

HEXCRIMP™

84-9082
84-9085

- 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 (for 84-9082)

BRUTE™ HAMMER CRIMPER

84-9087

- 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 #
8-4/0 GA	**84-9087**

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

HEAVY DUTY OEM WIRE STRIPPING TOOL

26-8 GAUGE

- 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

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

CABLE TIE TENSION AND CUTTER "GUN STYLE" TOOL

- Cable tie tension & cut-off tools reduce operator fatigue/speed assembly
- Ergonomic design ideally fits the operator's hand
- Quick tension adjustability for a flush "cut-off"
- Equipped with a hook for easy hanging; Cushion grip for comfort
- 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

- 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

SPLIT LOOM INSTALLATION TOOLS

- Loom tool allows for easy insertion of singular or multiple wires to split loom
- Ergonomic design
- Saves valuable time, and your thumbs!

83-6990 1/4" – 7/16" Size Range
83-6991 1/2" – 5/8" Size Range
83-6992 3/4" – 7/8" Size Range
83-6993 1" – 1 1/2" Size Range

CLEANING BRUSH – 7 POLE PLUGS & SOCKETS

- Engineered to properly fit 7 pole plugs and sockets
- Removes any unwanted corrosion build up
- Easily stored in a tool box or maintenance kit
- Stainless steel bristles and heavy duty plastic housing

PART #	MATERIAL	DESCRIPTION	PLUG / SOCKET #
83-6561	Plastic	Plastic housing w/ steel bristles	7

POST-TERMINAL BRUSH

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

PART #	PACK SIZE
84-9186	1

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

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

11

RETAIL & MERCHANDISING

VENTE AU DÉTAIL ET MARCHANDISAGE

VENTA AL POR MENOR Y COMERCIALIZACIÓN

180 Merchandising "Spinner Racks"

182 Accessory Plan-O-Grams

184 Wire/Cable Displays

UTILIZE YOUR SHOWROOM'S MERCHANDISING SPACE EFFICIENTLY TO HELP MAXIMIZE YOUR SALES POTENTIAL. OUR WELL DESIGNED GROTE DISPLAYS ALLOW YOUR CUSTOMERS TO FIND WHAT THEY ARE LOOKING FOR QUICKLY AND EASILY, IMPROVING YOUR OVERALL CUSTOMER EXPERIENCE.

OUR SPINNER RACKS, PLAN-O-GRAMS AND RETAIL SUPPORT ITEMS HELP ORGANIZE YOUR STORE, SUGGEST HIGHER QUALITY PRODUCTS, AND REMIND YOUR CUSTOMERS OF ITEMS THEY MAY HAVE FORGOTTEN. GROTE'S MERCHANDISING PLANS ARE DESIGNED TO HELP YOU INCREASE THE PRODUCTIVITY OF YOUR STORE, ALLOWING YOU THE TIME TO PROVIDE IMPROVED CUSTOMER SERVICE AND SATISFACTION.

SPINNER RACK DISPLAYS

Your customer base is varied and you need selling solutions to meet that need. Look to Grote's 8-sided Spinner Rack displays.

Choose from the popular 01061 automotive display that features products for lighter duty as well as some heavy duty products or select either the 01062 or 01063 display for those specialty heavy duty needs.

FAST MOVERS | MAXIMIZE SALES | RETAIL READY

AUTOMOTIVE DISPLAY

01061

The popular 01061 automotive display features products for lighter duty as well as some heavy duty products.

01061 – Automotive Display

Includes:
- Heat Shrink, Nylon and PVC Insulated Terminals & Connectors
- Primary Wire
- Automotive, Marine, Heavy Duty Battery Clamps & Conversion Connectors
- Cable Ties
- Split Flex & Heat Shrink Tubing
- Automotive, Marine, Heavy Duty Sockets, Plugs and Adapters
- LED Toggle, Push/Pull Rocker and Disconnect Switches
- And much more…

6' TALL X 4' WIDE

HEAVY DUTY DISPLAY

Our 01062 display offers more heavy duty products should your customer base demand that. More connection and protection products to choose from as needed.

01062 – Heavy Duty Display

Includes:
- Cable Ties
- Primary Wire
- Battery Lugs and Hardware
- Assorted Sockets and Switches
- Heat Shrink Tubing, Crimp & Solder and Heat Shrink Terminals
- PVC and Vinyl Electrical Terminals
- Trailer Sockets
- Circuit Protection Products

6' TALL X 4' WIDE

01062

HEAVY DUTY DISPLAY

Grote's 01063 display features popular OEM, Deutsch and Weather pack terminals and a variety of Fuse and Circuit protection products. These products are the choice of professionals everywhere! Stock them, display them and solve your customers' needs for these necessary products!

01063 – Heavy Duty Display

Provides similar coverage to 01062 but with hard to find products including:
- OEM, Deutsch and Weather Pack Terminals and Connectors
- Circuit Protection products including Fuses, Fuse Holders & Circuit Breakers
- OEM molded battery cables & split loom insertion tools

6' TALL X 4' WIDE

01063-NA – Heavy Duty Display

Provides similar coverage to 01063 but with the following differences
- Addition of the most popular Nylon & PVC electrical terminals and connectors
- Removal of circuit protection products including fuses, fuse holders and circuit breakers

6' TALL X 4' WIDE

01063/01063-NA

Grote
RETAIL & MERCHANDISING 11
VENTE AU DÉTAIL ET MARCHANDISAGE • VENTA AL POR MENOR Y COMERCIALIZACIÓN

PLAN-O-GRAMS FOR RETAIL

Grote's Electrical Connection, Air Product and Accessories Plan-O-Grams help you utilize your showroom's merchandising space efficiently, and help your customers find what they need. Managing a retail space is difficult, but our plans let you easily see what is selling, and re-stock as needed. Best of all, all Grote products feature efficiently sized, tri-lingual, and retail-friendly packaging.

DISPLAY GROTE'S MOST POPULAR ELECTRICAL CONNECTION, AIR AND ACCESSORY PRODUCTS IN AN EFFICIENT PLAN-O-GRAM. TOP-SELLING GROTE PRODUCTS EFFECTIVELY DISPLAYED IN RETAIL-FOCUSED PACKAGING IS A FORMULA FOR SUCCESS.

FAST MOVERS | IMPROVE PROFITABILITY | RETAIL READY

Grote's electrical connection, accessory, and air products are the choice of automotive and heavy-duty professionals everywhere. Stock them, display them, and sell your customers the fast-moving repair and installation products that they demand.

Grote's updated plan-o-grams help you utilize your showroom's merchandising space efficiently, to help maximize your sales potential! Don't worry if you have a small space, we can help you customize our plans to suit your specific needs.

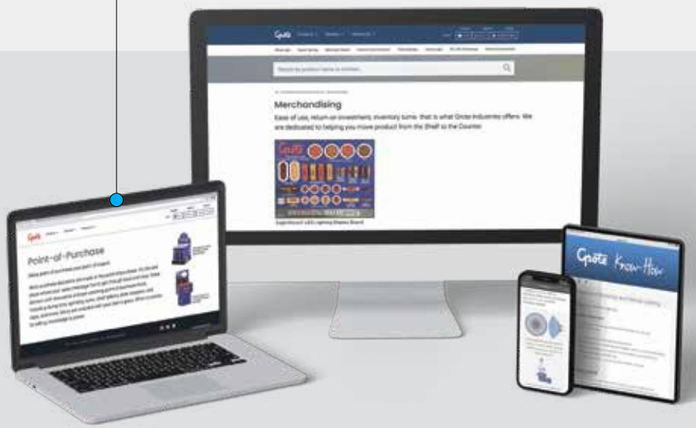
Better inventory management will deliver improved profits for your business!

RETAIL SOLUTIONS

Our proven quality, our excellent retail packaging, and a great merchandising plan will all help you compete and win in your market with our extensive electrical connection, air product and accessory products!

EZ-FIND

Effective displays drive sales. Grote's Plan-O-Grams make that happen! Visit our Plan-O-Gram page on Grote.com today, to review and select one of our newest and updated merchandising displays.



WIRE & CABLE DISPLAY

00872

Top loading lid eliminates re-stocking hassles

The Grote Wire Dispenser provides a unique, compact and effective inventory management solution for spooled wire.

00872 – Wire & Cable Display **Holds up to 7,800' of wire!**

Features & Benefits
- Unit holds up to 123 spools of wire – 63 x 100' spools of wire and 60 x 25' spools of primary wire
- Can accommodate 12GA-18 GA wire spools
- Ease of re-stocking through the top loading lid
- See through display provides inventory at-a-glance for immediate re-stocking
- Heavy gauge steel makes this unit rugged and very stable
- Effective use of shelf space improves revenue per square foot
- Mix-'n-match – Stock the primary wire and cable you need to support your unique customers
- Wire not included

ONLY 34" WIDE X 17" HIGH X 12" DEEP

WIRE & CABLE DISPLAY

00870

00870 – Wire & Cable Display

Features & Benefits
- 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
- Wire not included

ONLY 27" WIDE X 18 1/4" TALL X 6 1/4" DEEP; 11 LBS

LIMITED WARRANTY
Grote® Industries, Inc. ("Grote®") warrants its products to be free from defects in material and workmanship under normal use and service as set forth in this Limited Warranty. THIS LIMITED WARRANTY is the final, complete and exclusive expression of warranty to the purchaser and cannot be modified except in writing signed by an authorized officer of Grote®.

GENERAL ONE-YEAR LIMITED WARRANTY
Subject to the following conditions, Grote® warrants to the original purchaser only (and not to anyone else) of each new product made by Grote® that any part thereof which proves to be defective in material or workmanship within one year from the date of manufacture by Grote® will, at Grote's option, be repaired or replaced without charge upon return to Grote® of the defective product, provided any defect in the product is brought to the attention of Grote® within the warranty period, who alone will be authorized to furnish or arrange for repairs or replacements within the terms of this limited warranty.

The above limited warranty does not apply, and no warranty, either expressed or implied, shall be applicable (a) to damage resulting from accident, alteration, misuse or abuse; (b) if the product is not installed, operated and maintained according to procedures recommended by Grote®; (c) if the serial number, date code, or other identifying marks affixed to the product by Grote® are removed, obliterated or defaced. In no case shall the warranty be extended to defects in materials, components (which includes but not limited to bulbs), or services furnished by third parties, nor to the installation of the product performed by third parties, except those performed by or on behalf of Grote® authorized distributors. If any repairs are made, or any other parts are replaced during the warranty period, by any distributor other than a Grote® distributor, in accordance with service manuals, parts, accessories, or attachments other than authorized by Grote® for use in Grote's products, the purchaser shall pay for such repairs or parts without recourse against Grote®, and Grote® shall be relieved of responsibility for fulfillment of the warranty with respect to parts or components of all repairs, alterations, or replacements so made.

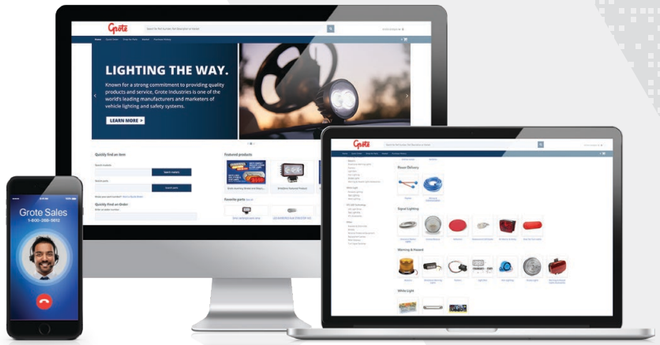
WE KNOW THE POWER OF A GOOD CONNECTION

Grote®

At Grote Industries, **WE ARE COMMITTED TO TAKING CARE OF OUR CUSTOMERS** by ensuring that they receive the information and products they need, when they need them. That's why we are continually investing in industry-leading technology that allows us to connect to our valued customers.

MANY WAYS TO CONNECT, MANY WAYS TO GROW TOGETHER

From our updated website with instant-search and live technical help, to our completely refreshed **G24/7 ONLINE CUSTOMER SERVICE PLATFORM**, Grote's experienced team of sales and customer solutions experts are never more than a click or a phone call away. Let us help you connect with your customers, with our digital tools, best-in-class customer service and innovative safety solutions.



CONTACT US

CALL US AT 1-800-268-5612, OR CHECK OUT OUR G24/7 ONLINE CUSTOMER SERVICE PLATFORM AT SHOP.GROTE.COM

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