

2021 CATALOG

ELECTRICAL CONNECTION AND ACCESSORIES

BRANCHEMENTS ÉLECTRIQUES
ET ACCESSOIRES

CONEXIONES ELÉCTRICAS
Y ACCESORIOS

Grote®



CONNECT & PROTECT

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 - Cordons ISO
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POWER CORDS

CORDONS D'ALIMENTATION

CABLES DE ENERGÍA

- 4 ABS Power Cords
- 5 Non-ABS Power Cords
- 5 ISO Cords
- 6 RV Power Cords
- 7 Lift Gate Cables



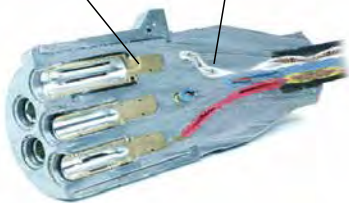
GROTE ULTRALINK™ POWER CORDS

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

ULTRALINK™



87105



87101



87171

- 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 NEW	7'	Premium ABS, 1/8, 2/10, 4/12 GA	Green	1
87191 NEW	8'	Premium ABS, 1/8, 2/10, 4/12 GA	Green	1
87192 NEW	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 NEW	20'	Premium ABS, 1/8, 2/10, 4/12 GA	Green	1

COILED ISO CABLES



81-2015

- For use in ISO and auxiliary applications
- 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)

PART #	LENGTH	LEADS	JACKET MATERIAL & GAUGE	JACKET	PACK
81-2015	15'	12"	ISO, 1/8, 2/10, 4/12 GA	Yellow	1
81-2015-40	15'	12" & 40"	ISO, 1/8, 2/10, 4/12 GA	Yellow	1

ULTRALINK™

NON-ABS POWER CORDS

- 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

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



87180

COILED NON-ABS

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



87111

STRAIGHT NON-ABS

ULTRALINK™

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



87182

UltraLink™

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

STRAIGHT ISO CABLES

- For use in ISO and auxiliary applications
- Heavy duty die-cast, ISO plugs
- Inverted male ground pin to prevent improper connection
- 1/8, 2/10, 4/12 Gauge 100% copper cable
- Plug and socket meet SAE J560
- Excellent recoil memory
- Replacement plug and socket also available (82-1044, 82-1043)

PART #	LENGTH	LEADS	JACKET MATERIAL & GAUGE	JACKET	PACK
81-2015-S	15'	12"	ISO, 1/8, 2/10, 4/12 GA	Yellow	1



81-2015-S

POWERCOILS

NEW



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

- 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



81-0142

LIFT GATE CABLES

- Ideal for lift gate and remote battery charging applications
- Zinc die-cast plugs with spring
- External ground – 4 gauge
- 4 gauge, fine stranded copper wire provides maximum flexibility
- Temperature rating -65°C to (-85°F); Single Pole
- 200 AMP carrying capacity



81-2215-V

DUAL POLE

PART #	LENGTH	LEADS	STYLE	GAUGE	JACKET	PACK
81-2212	12'	12"	Coiled	4 GA	Black/White	1
81-2212-V NEW	12'	12"	Coiled, Vertical Pin	4 GA	Black/White	1
81-2215	15'	12"	Coiled	4 GA	Black/White	1
81-2215-V NEW	15'	12"	Coiled, Vertical Pin	4 GA	Black/White	1

DUAL POLE – 1 SINGLE / 1 DUAL

PART #	LENGTH	LEADS	STYLE	GAUGE	JACKET	PACK
81-2215-DS	15'	12"	Coiled	4 GA	Black/White	1



81-2115

SINGLE POLE

PART #	LENGTH	LEADS	STYLE	GAUGE	JACKET	PACK
81-2112	12'	12"	Coiled	4 GA	Green	1
81-2115	15'	12"	Coiled	4 GA	Green	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

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



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+)

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 NEW	82-1055NB



82-1055NB



82-1055

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
82-0854	15 AMP	Split Pin, Metal Breakers
82-0855	20 AMP	Split Pin, Metal Breakers
82-0856	30 AMP	Split Pin, Metal Breakers
82-0853		Split Pin, Without Breakers
82-0857	20 AMP	Split Pin, Nylon Breakers
82-0858	30 AMP	Split Pin, Nylon Breakers



82-0855

NOSEBOXES

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

PART #	DESCRIPTION	DIMENSIONS	MATERIAL
82-0861 NEW	Deep Nose Box	3 1/2"	Nylon
82-0859	Deep Nose Box	3 1/8"	Die-Cast
82-0860 NEW	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



- 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 with guard	82-1019
7	Stainless Steel	Guard only	82-2141
7	Die-Cast	ISO Plug	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	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 spring	82-1022
4	Zinc Die-Cast	Plug	82-1021
4	Stainless Steel	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 & Spring – Dual Pole	Zinc Die-Cast
82-0852	1	Plug & 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

NEW



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

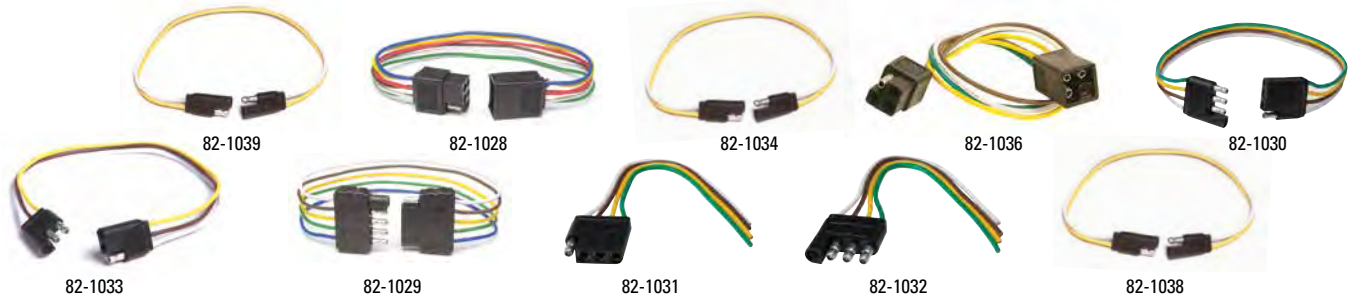
PART #	SOCKET #	DESCRIPTION	MATERIAL
82-1041V NEW	2	Socket – Dual Pole	Zinc Die-Cast
82-2144		Socket Boot	Rubber

PLUG

PART #	PLUG #	DESCRIPTION	MATERIAL
82-1042V NEW	2	Plug & 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

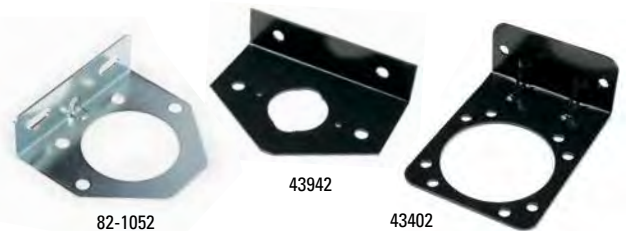


PLUG #	GAUGE	CONNECTOR HEAD	LENGTH	WIRE COLORS	CONNECTOR END	PART #
6	16	Square	12"	White, Yellow, Brown, Green, Blue, Red	Male & Female	82-1028
5	16	Flat	12"	White, Yellow, Brown, Green, Blue	Male & Female	82-1029
4	18	Square	12"	White, Yellow, Brown, Green	Male & Female	82-1036
4	16	Flat	12"	White, 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, Yellow	Male & Female	NEW 82-1038
2	12	Flat	12"	White, Black	Male & Female	NEW 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
7	Steel	7 pole sockets	NEW 82-1052



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



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



DEAL WITH **REAL**

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.

OPEN A RELATIONSHIP WITH GROTE

When it comes to service and support, you want to partner with a company that works like an extension of your organization. From OEMs to fleet managers to our distributors, Grote's partners all around the globe find that we help maximize profitability in a way that is convenient and supportive. You can concentrate on what you do best by letting us support you with our core expertise in Lighting and Electrical Connections & Accessory products. Great products with great support... Grote's Got It!

CONTACT US AT 1-800-268-5612 TO FIND OUT HOW WE CAN HELP YOUR BUSINESS

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03

AIR PRODUCTS

PRODUITS D'AIR

PRODUCTOS DE AIRE

- 20 Coiled Air
- 22 Rubber Air Lines
- 23 3 in 1 Air & Power Cord Assemblies
- 24 Gladhands
- 25 Seals and Airline Accessories
- 26 Suspension Products
- 29 Air Brake Tubing



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

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

- Hoses are designed to withstand harsh conditions including extreme temperatures and harmful chemicals
- Tightly coiled tubing provides excellent recoil memory while minimizing sagging or kinking
- Working pressure of 150 psi
- 1/2" Outside Diameter
- Red Hose = Emergency; Blue Hose = Service
- Heavy gauge steel spring provides superior cable support
- Thread sealant added to all brass connectors for a leak-free seal
- 1/2" NPT, DOT brass fittings, standard on all models



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



❄️ 81-0015-C



❄️ 81-0015-40C



❄️ 81-0015-CGH*

❄️ 81-0015-RC

- 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

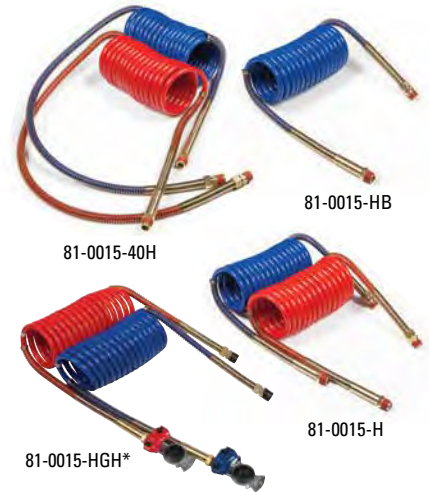
PART #	COLOR	WORKING LENGTH	LEADS	PACK
12'				
81-0012-C	Red & Blue	12'	6"	2
81-0012-CGH* NEW	Red & Blue	12'	6"	2
15'				
81-0015-C	Red & Blue	15'	12"	2
81-0015-RC	Red	15'	12"	1
81-0015-BC	Blue	15'	12"	1
81-0015-CGH* NEW	Red & Blue	15'	12"	2
81-0015-40C	Red & Blue	15'	12" & 40"	2
81-0015-40RC	Red	15'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

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* NEW	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* NEW	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

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* NEW	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* NEW	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

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



RUBBER AIR LINES



81-0112-RGR



81-0112-RGB



81-0115



81-0115-GRB

- 3/8" SAE J1402 Type A, EPDM rubber hose
- Meets or exceeds all DOT FMVSS No. 106 – Brake Hoses, 49 CFR 571.106
- Designed for operating pressure up to 225 psi
- Includes a swivel fitting for the tractor-end connection
- The rugged elastomeric hose is resistant to gasoline, diesel fuel, oil and other chemicals
- UV and ozone resistant
- Minimum burst pressure = 900 psi
- O.D. 3/4" (3/8" Hose); O.D. 7/8" (1/2" Hose)
- Available in Black, and now Red and 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 NEW	Red	–	12'	1
81-0112-B NEW	Blue	–	12'	1
81-0112-RGR NEW	Red	Red	12'	1
81-0112-BGB NEW	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
15'				
81-0115-R	Red	–	15'	1
81-0115-B	Blue	–	15'	1
81-0115-RGR NEW	Red	Red	15'	1
81-0115-BGB NEW	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
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



81-0038-250



81-0115-SPR

- -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 with Spring Guard	2

3 IN 1 AIR AND POWER CORD ASSEMBLIES



Plug Design
 Plug made from crush resistant weather-tight elastomeric material. Includes solid brass nickel-plated pins.



Cable-to-Plug Seal
 Wire jacket is molded into the plug, sealing it from the elements and eliminating the need for a spring



Gladhandles
 Provide strain relief and prevents kinking of the air coil. Allows user to couple and uncouple with ease

- UltraLink™ zinc die cast plugs are filled with elastomeric material that resists crushing and acts as a potting to seal solid brass terminals from moisture.
- A special adhesive bonds the cable to the plug, eliminating the need for a support spring and prevents moisture from entering the back of the plug.
- Premium ABS cords' advanced polymer jacketing material provides complete sealing & Abrasion protection. (-55°F to 190°F)
- Meets SAE J560, J2394 (ABS) certifications
- Air lines meet DOT FVSS No. 106 regulations and are resistant to gasoline, diesel fuel, oil and other chemicals
- Air lines meet DOT J1402, Type A regulations; 3/8" I.D. ; 225 psi working pressure
- High end spiral wrap protects the cable and air lines from chaffing and kinking
- Anodized gladhandles: superior corrosion resistance and easy coupling/uncoupling
- Includes a swivel fitting for the tractor-end connection



81-3215



81-3115



81-3215-GRP

PART #	HOSE COLOR	WORKING LENGTH	GRIPS	PACK
12'				
81-3212	Red & Blue	12'	Anodized	1
81-3212-GRP NEW	Red & Blue	12'	Rubber	1
81-3112	Black	12'	Anodized	1
81-3112-GRP NEW	Black	12'	Rubber	1
15'				
81-3215	Red & Blue	15'	Anodized	1
81-3215-GRP NEW	Red & Blue	15'	Rubber	1
81-3115	Black	15'	Anodized	1
81-3115-GRP NEW	Black	15'	Rubber	1
20'				
81-3120	Black	20'	Anodized	1

- 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 NEW	Rubber	Thermo-Elastomeric	Red & Blue	2

GLADHANDLES



81-0125



81-0124

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 unplugged – 38° gladhands

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

SHUTOFF GLADHANDS

HANDLE STYLE – SURFACE MOUNT



- 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

SHUTOFF GLADHANDS

KNOB STYLE – BULKHEAD



- 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

CAST IRON GLADHANDLES



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

PART #	MATERIAL	DESCRIPTION	SEAL COLOR	PACK
81-0001-C	Cast Iron	Universal, Polyurethane Seal	Black	1
81-0001-CR	Cast Iron	Emergency, Polyurethane Seal	Red	1
81-0001-CB	Cast Iron	Service, Polyurethane Seal	Blue	1

SEALS AND SCREENS

- 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 NEW	Polyurethane	Large Face	Black	100
81-0116-08BP NEW	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 NEW	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


GLADHAND ACCESSORIES

PART #	FEATURES	PACK
81-0126	Dummy Gladhand with 18" Stainless Steel Cable	1
81-0126T NEW	Dummy Gladhand with 18" Stainless Steel Cable and Heavy Duty Eyelet	1
81-0127	Gladhand Pacifier	1


GLADHAND LOCK

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

PART #	DESCRIPTION	PACK
81-0149 NEW	Gladhand Lock	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 NEW	Single Spring w 81-0129	20"	1
81-0145 NEW	Dual Spring	16"	1
81-0146 NEW	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 – 3/4" x 2, Eyelet Bolt	1
81-0138	3 Hose holder – 3/4" x 3, U-Bolt	1
81-0139	4 Hose holder – 3/4" 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 NEW	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



81-0136

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 1/2", Straight cable assemblies	1
81-0134	25", HD application incl. ABS power cords	1



81-0134

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



83-7016

DRAIN VALVE

- 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

EZ CLAW



EZ CLAW NEW

- Automatic extension and retraction system for airlines, hydraulic hoses and electrical cords
- Keeps airlines and electrical cords off the deck plate / catwalk
- Prevents chafing and costly downtime due to parts failure
- Allows for 90" of hose and cable travel (45 degree turns) keeping hoses and cables safe and secure
- Mounting bracket options available for most tractors
- Easy installation

EZ CLAW TRUCK & YARD DOG TENSIONER SYSTEM

PART NO.	DESCRIPTION	MAX TENISON	PACK
81-2300	Main unit	25 lbs.	1



81-2300

EZ CLAW HYDRAULIC TENSIONER SYSTEM

PART NO.	DESCRIPTION	MAX TENISON	PACK
81-2305	Main unit	40 lbs.	1

EZ CLAW TRUCK MOUNTING BRACKETS

- Designed for sleeper & day cab units; headache racks, tool boxes & side mounts

PART #	DESCRIPTION	APPLICATION	PACK SIZE
81-2301	Flange bracket	Most Sleeper	1
81-2302VM	Plate bracket – Versa-Mount	Day Cabs	1
81-2304	Flange bracket (Extended)	Headache & Tool Box	1



81-2301



81-2302VM



81-2303

EZ CLAW SLING

- Keeps your hydraulic or air hoses in place
- U.V. protected nylon webbing with a brass grommet and stainless steel mounting hardware

PART NO.	DESCRIPTION	PACK
81-2306	Self-adjusting Nylon Sling with Mounting Hardware	1



81-2306

EZ CLAW AIR HOSE & CABLE HOLDER

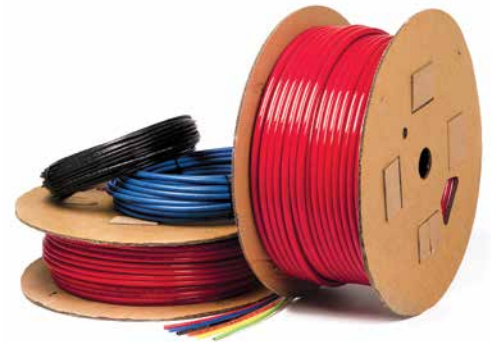
- Are rugged, lightweight and reduce hose and cable movement
- Constructed of high impact, glass reinforced, engineered plastic and stainless steel components
- Ensures a secure and safe connection to the main EZ CLAW unit

PART #	DESCRIPTION	PACK SIZE
81-2303	Air Hose & Cable Holder – 3/8" x 3/8"	1

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

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'
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'
81-1012-100G	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**

- 33** Technical information
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- 38** Crimp, Solder & Seal Lead Free Terminals
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- 58** 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.



FEATURES & BENEFITS

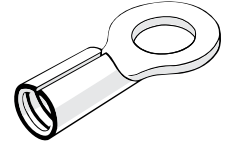
- Maximum electrical conductivity after crimping
 - Funnel edged barrel for fast, easy insertion of wire
 - Maximum holding power
 - Tin plating prevents corrosion
 - Wire range clearly stamped on neck of terminal
-
- *Retail and bulk packaging options*
 - *No master pack minimums*
 - *Trilingual and colorful labeling*
 - *Re-closable, 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

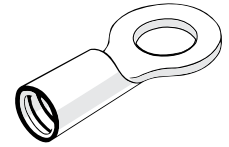
Uninsulated Butted Seam Terminal

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



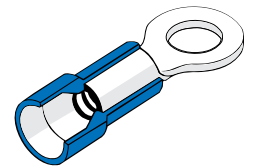
Uninsulated Brazed Seam Terminal

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



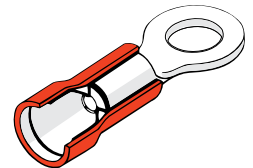
Pre-insulated Funnel Entry Vinyl Terminal

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



Pre-insulated Funnel Entry Nylon Terminal

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



TERMINAL & CONNECTOR IDENTIFICATION

Polyvinyl Chloride (PVC) and Nylon insulated connectors are colour coded for quick wire identification.

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:

Nylon: -55°C (-67°F) to 125°C (257°F)

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

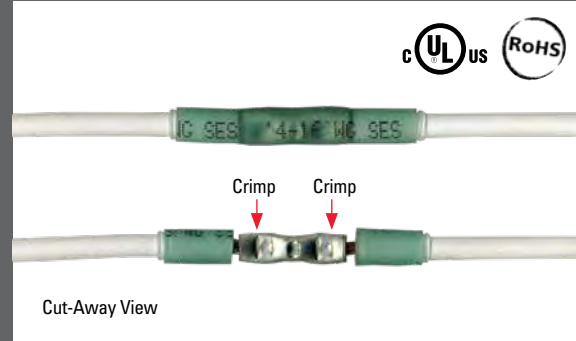
SHRINK RATIOS:

Nylon: 2:1

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



HEAT SHRINKABLE BUTT CONNECTORS – NYLON

22-10 GAUGE



PART #	GAUGE	COLOR	PACK
88-2150	22-18	Red	1000
83-2150-3 NEW	22-18	Red	300
83-2150	22-18	Red	100
84-2150	22-18	Red	15
88-2350	16-14	Blue	1000
83-2350-3 NEW	16-14	Blue	300
83-2350	16-14	Blue	100
84-2350	16-14	Blue	15
88-2550	12-10	Yellow	1000
83-2550-3 NEW	12-10	Yellow	200
83-2550	12-10	Yellow	50
84-2550	12-10	Yellow	15

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

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

HEAT SHRINK STEP-DOWN BUTT CONNECTORS



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



Tubing has an active adhesive that seals between multiple wires

Color dash on tubing indicates the wire gauge for the connector

Color stripes on the connector indicate which crimp die to use and to provide alignment for tool to crimp center of barrel

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

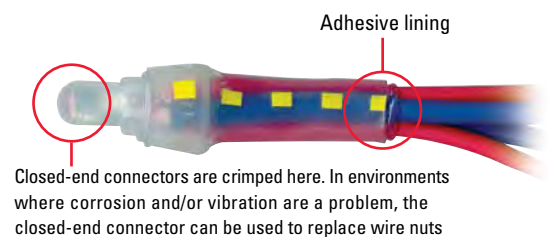
PART #	CONNECTOR GAUGE	MARKINGS	END COLOR	WIRE RANGE	PACK
84-2629	24-22	White	Red	24-22 x 2	15
84-2630	22-18	Red	Blue	22-18 x 2	15
84-2631	16-14	Blue	Yellow	16-14 x 2	15
84-2632	12-10	Red	Red	12-10 x 2	15



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



HEAT SHRINKABLE RING TERMINALS

22-18 GAUGE



84-2417

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



84-2412

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



84-2511

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



84-2426

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 162 FOR
OUR FULL LINE OF
ASSORTMENT KITS

CRIMP, SOLDER & SEAL LEAD FREE TERMINALS & CONNECTORS

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

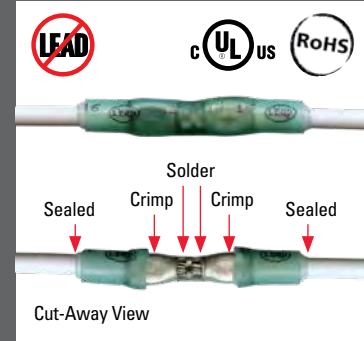
SOLDER MELTING TEMPERATURE:
138°C (280°F)
SHRINK RATIO: 3:1

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



84-2929



84-2930



84-2931

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



83-1932

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



83-1938

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

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 RING TERMINALS



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

CRIMP, SOLDER & SEAL QUICK DISCONNECTS



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 162 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

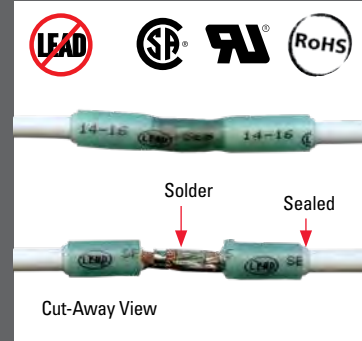
SOLDER MELTING TEMPERATURE:
138°C (280°F)
SHRINK RATIO: 3:1

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 re-closable 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 162 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

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

UNINSULATED BUTT CONNECTORS

22-16 GAUGE

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

NYLON RING TERMINALS

22-16 GAUGE

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

VINYL RING TERMINALS


NYLON RING TERMINALS



83-2448

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



84-2305

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



83-2456

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

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


84-2505

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


84-2740

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


84-2940

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

VINYL RING TERMINALS


84-2911

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

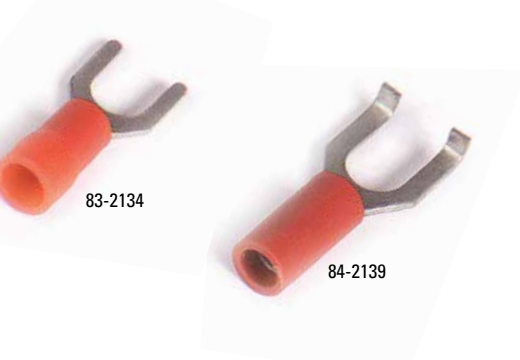
NYLON SPADE TERMINALS



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



84-2219

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



84-2334



84-2338

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



84-2222

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

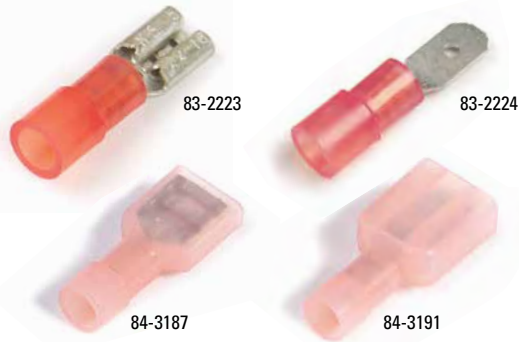


84-2534



84-2532

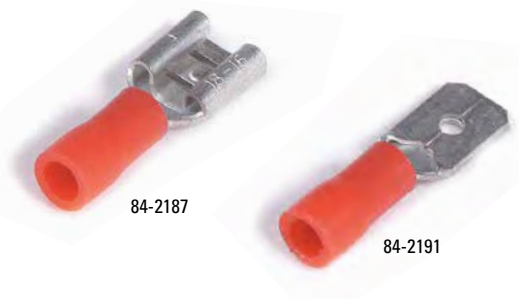
NYLON QUICK DISCONNECTS



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



NYLON MALE BULLET CONNECTORS



84-2397

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



84-2402

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



84-2194

83-2394

83-2560

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



84-2185

84-2400

83-2561

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



84-2388

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

VINYL PIN TERMINAL CONNECTORS



84-2171

84-2172

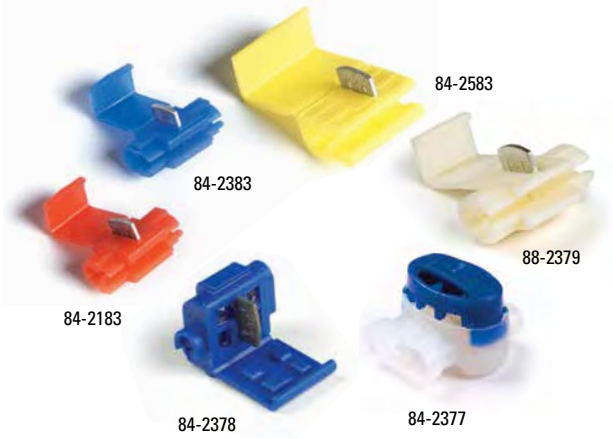
84-2173

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

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

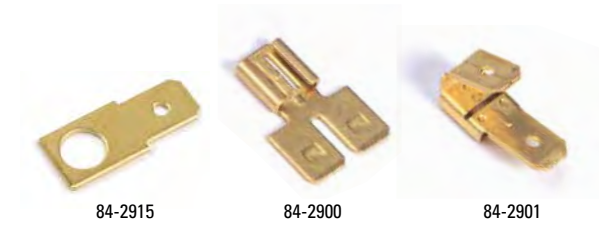
QUICK SPLICE CONNECTORS

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

QUICK SPLICE CONNECTORS

22-10 GAUGE

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

UNINSULATED SPECIAL ADAPTERS

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

VINYL 3 & 4 WAY CONNECTORS


CLOSED END CONNECTORS

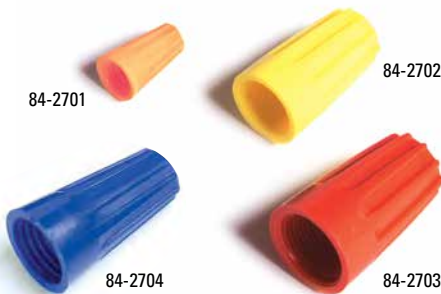


84-3382

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



84-2701

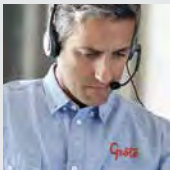
84-2702

84-2704

84-2703

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.

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 KIT



83-6540

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 <i>Includes Hang Tab</i>	Butt Connectors (34) Ring Terminals (51) Male Disconnects .250" (6) Female Disconnects .250" (8)	99

TERMINAL & CONNECTOR ASSORTMENT KITS



83-6554

83-2608

VINYL ASSORTMENTS

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



83-2600

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 re-closable 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 <i>Includes Hang Tab</i>	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



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 <i>Includes Hang Tab</i>	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 SHRINKABLE TERMINAL & CONNECTORS



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

HEAT SHRINK TERMINAL CRIMPING TOOL



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 60-61**



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 & Wedglock	DTM06-2S, WM-2S	2 pair
84-2485	2	Receptacle	Receptacle & Wedglock	DTM04-2P, WM-2P	2 pair
84-2486	3	Plug	Plug & Wedglock	DTM06-3S, WM-3S	2 pair
84-2487	3	Receptacle	Receptacle & Wedglock	DTM04-3P, WM-3P	2 pair
84-2488	4	Plug	Plug & Wedglock	DTM06-4S, WM-4S	2 pair
84-2489	4	Receptacle	Receptacle & Wedglock	DTM04-4P, WM-4P	2 pair
84-2490	6	Plug	Plug & Wedglock	DTM06-6S, WM-6S	2 pair
84-2491	6	Receptacle	Receptacle & Wedglock	DTM04-6P, WM-6P	2 pair
84-2492	8	Plug	Plug & Wedglock	DTM06-8S, WM-8S	2 pair
84-2493	8	Receptacle	Receptacle & Wedglock	DTM04-8P, WM-8P	2 pair

> Kits
 SEE PAGE 60-61
 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

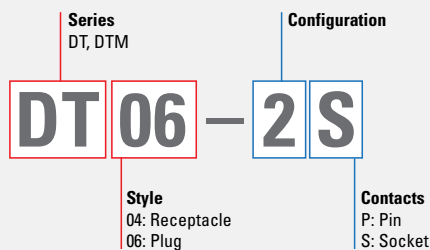
PART #	PINS	TYPE	CONTENTS	OEM #	PACK
84-2471	2	Plug	Plug & Wedgelo	DT06-2S, W2S	2 pair
84-2470	2	Receptacle	Receptacle & Wedgelo	DT04-2P, W2P	2 pair
84-2473	3	Plug	Plug & Wedgelo	DT06-3S, W3S	2 pair
84-2472	3	Receptacle	Receptacle & Wedgelo	DT04-3P, W3P	2 pair
84-2475	4	Plug	Plug & Wedgelo	DT06-4S, W4S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



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 recloseable 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 NEW
84-2002	15324982	20-18	Green	10
88-2082	15324980	16-14	Grey	1000 NEW
84-2082	15324980	16-14	Grey	10
88-2081	15324981	12-10	Blue	1000 NEW
84-2081	15324981	12-10	Blue	10
84-2003	12010300	Cable Plug	Green	10

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

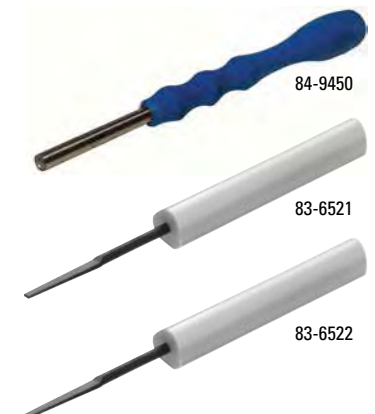
PART #	GAUGE	TERMINAL TYPE	CRIMP STYLE	OEM #	PACK
84-2011	16-14	Male	Open Barrel	2971962	10
84-2013	16-14	Female	Open Barrel	2962447	10



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 NEW	Combo Pack (84-9450, 83-6521 & 83-6522)



> Kits

SEE PAGE 60-61 FOR WEATHER PACK KITS AND TOOLS

DEUTSCH TERMINAL & CONNECTOR

NEW



83-6549

ASSORTMENT KIT

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

83-6549 NEW

DEUTSCH TERMINAL & CONNECTOR

NEW



83-6568

SERVICE KIT

- 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 NEW

CRIMPING TOOLS – DEUTSCH

NEW



83-6562

83-6564

83-6517

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

PART #	WIRE GAUGE	TERMINAL STYLE
83-6562 NEW	14, 16, 18	Solid Barrel
83-6563 NEW	20, 22	Solid Barrel
83-6564 NEW	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
83-6517	12, 14, 16, 18, 20	Solid Barrel – 2 Indent Crimp

REMOVAL TOOLS – DEUTSCH

NEW



83-6567

83-6565

83-6566

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

PART #	WIRE GAUGE	TERMINAL STYLE
83-6565 NEW	14, 16	Solid & Open Barrel; Gold Handle
83-6566 NEW	16, 18	Solid & Open Barrel; Blue Handle
83-6567* NEW	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 NEW	For open barrel Weather Pack, Metri Pack 150 & 280 series and Molex terminals
84-9449	For open barrel Weather Pack terminals – ratchet style



83-6569

84-9449

05

WIRE & CABLE

FILS ET CÂBLES

ALAMBRES Y CABLES

- 63 Technical information
- 64 Primary Wire
- 66 Brake Cable & Portable Extension Cable
- 67 SXL & Bonded Wire
- 68 Trailer Cable
- 70 Battery Cable
- 71 Welding Cable
- 72 Booster Cable – Twin Conductor
- 73 Wire/Cable Displays



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.

DETERMINING WIRE AND CABLE GAUGE SIZE BY CIRCUIT AMPS AND LENGTH

TOTAL CIRCUIT AMPS	WIRE GAUGE FOR LENGTH IN FEET (TOTAL CIRCUIT LENGTH)												
	3'	5'	7'	10'	15'	20'	25'	30'	40'	50'	75'	100'	
12V													
1	18	18	18	18	18	18	18	18	18	18	18	18	18
3	18	18	18	18	18	18	18	18	18	18	18	14	14
5	18	18	18	18	18	18	18	18	18	16	14	12	12
7	18	18	18	18	18	18	18	16	16	14	14	10	10
10	18	18	18	18	18	16	16	16	14	12	12	10	10
15	18	18	18	18	18	14	14	12	12	12	10	8	8
20	16	16	16	16	16	14	12	10	10	10	10	8	6
24	14	14	14	14	14	12	12	10	10	10	8	6	6
30	12	12	12	12	12	10	10	10	10	10	6	4	4
40	10	10	10	10	10	10	10	8	8	6	6	4	2
50	8	8	8	8	8	8	8	8	8	6	6	2	2
100	4	4	4	4	4	4	4	4	4	4	2	1	1/0
150	2	2	2	2	2	2	2	2	2	2	1	2/0	2/0
200	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	4/0	4/0

HOW TO MATCH CABLE & EQUIPMENT

TYPE OF EQUIPMENT	TYPICAL WIRE 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

GPT – GENERAL PURPOSE THERMO PLASTIC WIRE



87-7001



87-7000



87-7002



87-7006



87-7007



87-5010



87-5011

GAUGE	OUTSIDE DIAMETER
6	0.286
8	0.222
10	0.177
12	0.142
14	0.117
16	0.103
18	0.092
20	0.084

- 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

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

GPT – GENERAL PURPOSE THERMO PLASTIC WIRE

14 GAUGE

COLOR	25'	100'	1000'
Red	89-7000	87-7000	88-7000
Brown	89-7001	87-7001	88-7001
Black	89-7002	87-7002	88-7002
Green	89-7006	87-7006	88-7006
White	89-7007	87-7007	88-7007
Blue	89-7010	87-7010	88-7010
Yellow	89-7011	87-7011	88-7011
Orange	89-7012	87-7012	88-7012
Purple	—	87-7013	—
Pink	—	87-7014	—
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	—
Pink	—	87-8014	—
Gray	—	87-8003	—

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	—
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 170

PVC JACKETED BRAKE CABLE



82-5502

- 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

2 CONDUCTOR

GAUGE	STRANDS	OUTSIDE DIAMETER	COLOR	LENGTH	PART #
10	19 X .023"	.246" x .432"	Yellow, Green	50'	82-5509
10	19 X .023"	.246" x .432"	Yellow, Green	100'	82-5508
10	19 X .023"	.246" x .432"	Yellow, Green	1000'	82-5507
10	19 X .023"	.246" x .432"	Blue, White	1000'	82-5590
12	19 X .017"	.202" x .347"	Black, White	50'	82-5512
12	19 X .017"	.202" x .347"	Black, White	100'	82-5511
12	19 X .017"	.202" x .347"	Black, White	500'	82-5550
12	19 X .017"	.202" x .347"	Black, White	1000'	82-5510
14	19 X .014"	.181" x .298"	Black, White	20'	82-5504
14	19 X .014"	.181" x .298"	Black, White	100'	82-5502
14	19 X .014"	.181" x .298"	Black, White	1000'	82-5503
16	19 X .011"	.168" x .272"	Black, White	100'	82-5500
16	19 X .011"	.168" x .272"	Black, White	1000'	82-5501



Split Flex Tubing: See page 90

3 CONDUCTOR

GAUGE	STRANDS	OUTSIDE DIAMETER	COLOR	LENGTH	PART #
12	19 X .017"	.202" x .486"	White, Green, Black	1000'	NEW 82-5591
14	19 X .014"	.200" x .430"	Red, Green, Black	100'	82-5520
16	19 X .011"	.170" x .380"	Red, Green, Black	100'	82-5522

4 CONDUCTOR

GAUGE	STRANDS	OUTSIDE DIAMETER	COLOR	LENGTH	PART #
14	19 X .014"	.204" x .535"	Red, Green, Black, White	100'	82-5521
16	19 X .011"	.185" x .525"	Red, Green, Black, White	100'	82-5519

PARALLEL BONDED WIRE



82-5514

- 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

4 CONDUCTOR

GAUGE	STRANDS	OUTSIDE DIAMETER	COLOR	LENGTH	PART #
14	19/27	.117" x .468"	White, Brown, Yellow, Green	25'	82-5515
14	19/27	.117" x .468"	White, Brown, Yellow, Green	100'	82-5514
16	19/29	.102" x .408"	White, Brown, Yellow, Green	25'	82-5524
16	19/29	.102" x .408"	White, Brown, Yellow, Green	100'	82-5525
18	16/30	.095" x .380"	White, Brown, Yellow, Green	25'	82-5527
18	16/30	.095" x .380"	White, Brown, Yellow, Green	100'	82-5526

TYPE SJOOW

PORTABLE EXTENSION CABLE

- Chlorinated Polyethylene (CPE) oil resistant neoprene jacket protects from outside conditions and abrasives
- Rated at 300 Volt; Meets UL and CSA specifications
- Maximum temperature rating -40°C (-40°F) to 90°C (194°F)
- Industrial equipment, heavy tools and power extension applications
- All extension cord cable is spooled



2 CONDUCTOR

GAUGE	STRANDS	OUTSIDE DIAMETER	COLOR	LENGTH	PART #
14	41/30	.340"	Black, White	50'	82-5902
14	41/30	.340"	Black, White	100'	82-5901



82-5907

3 CONDUCTOR

GAUGE	STRANDS	OUTSIDE DIAMETER	COLOR	LENGTH	PART #
14	41/30	.365"	Black, White, Green	50'	82-5905
14	41/30	.365"	Black, White, Green	100'	82-5904
16	26/30	.330"	Black, White, Green	50'	82-5908
16	26/30	.330"	Black, White, Green	100'	82-5907



Molded Connectors
82-1025

See page 13

TYPE SXL

HEAVY DUTY PRIMARY WIRE

- SXL wire is designed to withstand harsher environments than general purpose primary wire
- SXL has an annealed copper conductor that is insulated with cross linked polyethylene base
- XLPE insulation provides a thicker jacket that resists heat up to 125°C (257°F) and provides protection from weather conditions and abrasives
- Maximum 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

GAUGE	STRANDS	OUTSIDE DIAMETER	COLOR	LENGTH	PART #
14	19 x .014"	.151"	Red	100'	87-0000
14	19 x .014"	.151"	Black	100'	87-0002
16	19 x .011"	.129"	Red	100'	87-2000
16	19 x .011"	.129"	Brown	100'	NEW 87-2001
16	19 x .011"	.129"	Black	100'	87-2002
16	19 x .011"	.129"	White	100'	87-2007



87-2002

SPEAKER WIRE

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

2 CONDUCTOR

GAUGE	STRANDS	OUTSIDE DIAMETER	LENGTH	PART #
16	26 x .010"	.225"	100'	87-2016
18	16 x .010"	.195"	100'	87-2018
20	10 x .010"	.143"	100'	87-2020



87-2018

TRAILER CABLE

LOW TEMPERATURE

NEW



- 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

2 CONDUCTOR

GAUGE	OUTSIDE DIAMETER	STRANDS	COLOR	LENGTH	PART #
14	.293"	19	Black, White	100'	82-5822
14	.293"	19	Black, White	250'	82-5822-250
14	.293"	19	Black, White	500'	82-5822-500

3 CONDUCTOR

GAUGE	OUTSIDE DIAMETER	STRANDS	COLOR	LENGTH	PART #
14	.313"	19	Black, White, Red	100'	82-5823
14	.313"	19	Black, White, Red	250'	82-5823-250
14	.313"	19	Black, White, Red	500'	82-5823-500

4 CONDUCTOR

GAUGE	OUTSIDE DIAMETER	STRANDS	COLOR	LENGTH	PART #
14	.360"	19	Yellow, Green, Brown, Red	100'	82-5824
14	.360"	19	Yellow, Green, Brown, Red	250'	82-5824-250
14	.360"	19	Yellow, Green, Brown, Red	500'	82-5824-500

6 CONDUCTOR

GAUGE	OUTSIDE DIA.	STRANDS	COLOR	LENGTH	PART #
14	.474"	19	Yellow, Green, Brown, White, Red, Black	100'	82-5825
14	.474"	19	Yellow, Green, Brown, White, Red, Black	250'	82-5825-250
14	.474"	19	Yellow, Green, Brown, White, Red, Black	500'	82-5825-500

7 CONDUCTOR

GAUGE	OUTSIDE DIA.	STRANDS	COLOR	LENGTH	PART #
6/14, 1/12	.526"	19	Yellow, Green, Brown, White, Red, Black, Blue	100'	82-5827
6/14, 1/12	.526"	19	Yellow, Green, Brown, White, Red, Black, Blue	250'	82-5827-250
6/14, 1/12	.526"	19	Yellow, Green, Brown, White, Red, Black, Blue	500'	82-5827-500
6/12, 1/10	.645"	19	Yellow, Green, Brown, White, Red, Black, Blue	100'	82-5826
6/12, 1/10	.645"	19	Yellow, Green, Brown, White, Red, Black, Blue	250'	82-5826-250
6/12, 1/10	.645"	19	Yellow, Green, Brown, White, Red, Black, Blue	500'	82-5826-500
4/12, 2/10, 1/8	.700"	19	Yellow, Green, Brown, White, Red, Black, Blue	100'	82-5828
4/12, 2/10, 1/8	.700"	19	Yellow, Green, Brown, White, Red, Black, Blue	250'	82-5828-250



82-5822



82-5824



82-5827

TRAILER CABLE



- 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

4 CONDUCTOR

GAUGE	OUTSIDE DIAMETER	STRANDS	COLOR	LENGTH	PART #
14	.441"	19	Yellow, Green, Brown, White	100'	82-5602
14	.441"	19	Yellow, Green, Brown, White	500'	82-5603
14	.441"	19	Yellow, Green, Brown, Red	100'	82-5600
14	.441"	19	Yellow, Green, Brown, Red	500'	82-5601



82-5600

6 CONDUCTOR

GAUGE	OUTSIDE DIAMETER	STRANDS	COLOR	LENGTH	PART #
14	.519"	19	Yellow, Green, Brown, White, Red, Black	100'	82-5604
14	.519"	19	Yellow, Green, Brown, White, Red, Black	500'	82-5605
16	.425"	19	Yellow, Green, Brown, White, Red, Black	100'	82-5623
16	.425"	19	Yellow, Green, Brown, White, Red, Black	500'	82-5620



82-5606

7 CONDUCTOR

GAUGE	OUTSIDE DIA.	STRANDS	COLOR	LENGTH	PART #
14	.535"	19	Yellow, Green, Brown, White, Red, Black, Blue	50'	82-5610
14	.535"	19	Yellow, Green, Brown, White, Red, Black, Blue	100'	82-5609
14	.535"	19	Yellow, Green, Brown, White, Red, Black, Blue	250'	82-5619
14	.535"	19	Yellow, Green, Brown, White, Red, Black, Blue	500'	82-5614
6/14, 1/12	.543"	41/65	Yellow, Green, Brown, White, Red, Black, Blue	50'	82-5612
6/14, 1/12	.543"	41/65	Yellow, Green, Brown, White, Red, Black, Blue	100'	82-5611
6/14, 1/12	.543"	41/65	Yellow, Green, Brown, White, Red, Black, Blue	500'	82-5615
6/12, 1/10	.685"	19	Yellow, Green, Brown, White, Red, Black, Blue	100'	82-5606
6/12, 1/10	.685"	19	Yellow, Green, Brown, White, Red, Black, Blue	500'	82-5607

ABS

GAUGE	OUTSIDE DIA.	STRANDS	COLOR	LENGTH	PART #
4/12, 2/10, 1/8	.700"	19	Yellow, Green, Brown, White, Red, Black, Blue	50'	82-5622
4/12, 2/10, 1/8	.700"	19	Yellow, Green, Brown, White, Red, Black, Blue	100'	82-5621
4/12, 2/10, 1/8	.700"	19	Yellow, Green, Brown, White, Red, Black, Blue	250'	82-5624



82-5622

PLUG & SOCKET	JUNCTION BOX
<p>82-1019</p>	<p>82-1002</p> <p>82-1000</p>

See pages 9-16

BATTERY CABLE – TYPE SGR



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 Rubber (EPR) 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

6 GAUGE

COLOR	STRANDS	25'	50'	100'
Black	133	82-5722	82-5725	82-5726
Red	133	82-6722	82-6725	82-6726

4 GAUGE

COLOR	STRANDS	25'	50'	100'
Black	133	82-5714	82-5713	82-5712
Red	133	82-6717	82-6713	82-6712

2 GAUGE

COLOR	STRANDS	25'	50'	100'
Black	644	82-5711	82-5710	82-5709
Red	644	82-6718	82-6710	82-6709

1 GAUGE

COLOR	STRANDS	25'	50'	100'
Black	826	82-5708	82-5707	82-5706
Red	826	82-6719	82-6707	82-6706

1/0 GAUGE

COLOR	STRANDS	25'	50'	100'
Black	1,026	82-5705	82-5704	82-5703
Red	1,026	82-6720	82-6704	82-6703

2/0 GAUGE

COLOR	STRANDS	25'	50'	100'
Black	1,254	82-5702	82-5701	82-5700
Red	1,254	82-6721	82-6701	82-6700

3/0 GAUGE

COLOR	STRANDS	25'	50'	100'
Black	1,615	82-5723	82-5715	82-5733
Red	1,615	82-6723	82-6715	82-6733

4/0 GAUGE

COLOR	STRANDS	25'	50'	100'
Black	2,109	82-5743	82-5716	82-5753
Red	2,109	82-6743	82-6716	82-6753

GAUGE	OUTSIDE DIAMETER
6	.310"
4	.365"
2	.430"
1	.461"
1/0	.525"
2/0	.587"
3/0	.645"
4/0	.709"

WELDING CABLE

- 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
- All welding cable is spooled
- Meets all SAE J1128 specifications

NEW



82-5730

6 GAUGE NEW

COLOR	STRANDS	25'	100'
Black	273	82-5732	82-5734
Red	273	82-6732	82-6734

4 GAUGE NEW

COLOR	STRANDS	25'	100'
Black	427	82-5724	82-5735
Red	427	82-6727	82-6735

2 GAUGE NEW

COLOR	STRANDS	25'	100'
Black	651	82-5721	82-5736
Red	651	82-6728	82-6736

1 GAUGE NEW

COLOR	STRANDS	25'	100'
Black	840	82-5737	82-5738
Red	840	82-6746	82-6738

1/0 GAUGE NEW

COLOR	STRANDS	25'	100'
Black	1,044	82-5739	82-5740
Red	1,044	82-6739	82-6740

2/0 GAUGE NEW

COLOR	STRANDS	25'	100'
Black	1,308	82-5730	82-5731
Red	1,308	82-6730	82-6731

3/0 GAUGE NEW

COLOR	STRANDS	25'	100'
Black	1,653	82-5741	82-5742
Red	1,653	82-6741	82-6742

4/0 GAUGE NEW

COLOR	STRANDS	25'	100'
Black	2,071	82-5744	82-5745
Red	2,071	82-6744	82-6745



82-6730

GAUGE	OUTSIDE DIA.	STRANDING (.010" DIA)
6	.305"	259
4	.340"	385
2	.420"	651
1	.498"	798
1/0	.525"	1026
2/0	.570"	1254
3/0	.635"	1615
4/0	.695"	2052

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 NEW	.320" x .700"	Black & Yellow	1,500'	82-5759-1500
6 GA	.360" x .780"	Black & Orange	100'	82-5760
6 GA NEW	.360" x .780"	Black & Orange	1,200'	82-5760-1200
4 GA	.410" x .880"	Black & White	100'	82-5761
4 GA NEW	.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



BEFORE

AFTER

- 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 NEW

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



00872



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

76 Nylon Cable Ties

80 Mounting Bases & Installation Tools

83 Heat Shrink Tubing

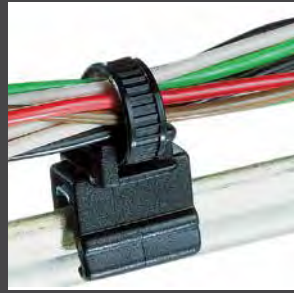
88 Heat Guns & Torches

90 Tube and Loom

92 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
- UL flame rating 94V-2
- Provides flexible bundling and mounting options for wire, cable and multiple size hoses
- Absorbs vibration, insulates cables and provides abrasion protection
- Black ties are U.V. coated and provide superior protection from drying out and cracking
- Continuous operating temperature -40°C (-40°F) to 85°C (185°F)
- 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

LIGHT DUTY TIES



83-6004

PACK OF 25	PACK OF 100	PACK OF 1000	LENGTH	WIDTH	BUNDLE DIAMETER	STRENGTH	COLOR
	83-6000	83-6000-3	4.10" (104mm)	.10" (2.5mm)	0.75" (19mm)	18 lbs	White
	83-6001	83-6001-3	4.10" (104mm)	.10" (2.5mm)	0.75" (19mm)	18 lbs	Black
	83-6004	83-6004-3	8.10" (205mm)	.10" (2.5mm)	2.00" (51mm)	18 lbs	White
	83-6005	83-6005-3	8.10" (205mm)	.10" (2.5mm)	2.00" (51mm)	18 lbs	Black

STANDARD TIES



83-6019

PACK OF 25	PACK OF 100	PACK OF 1000	LENGTH	WIDTH	BUNDLE DIAMETER	STRENGTH	COLOR
	83-6006	83-6006-3	5.80" (147mm)	.14" (3.5mm)	1.25" (32mm)	40 lbs	White
	83-6007	83-6007-3	5.80" (147mm)	.14" (3.5mm)	1.25" (32mm)	40 lbs	Black
85-6018	83-6018	83-6018-3	7.60" (193mm)	.18" (4.5mm)	2.00" (51mm)	50 lbs	White
85-6019	83-6019	83-6019-3	7.60" (193mm)	.18" (4.5mm)	2.00" (51mm)	50 lbs	Black
85-6020	83-6020	83-6020-3	11.10" (282mm)	.18" (4.5mm)	3.00" (76mm)	50 lbs	White
85-6021	83-6021	83-6021-3	11.10" (282mm)	.18" (4.5mm)	3.00" (76mm)	50 lbs	Black
85-6026	83-6026	83-6026-3	14.60" (371mm)	.18" (4.5mm)	4.00" (101mm)	50 lbs	White
85-6025	83-6025	83-6025-3	14.60" (371mm)	.18" (4.5mm)	4.00" (101mm)	50 lbs	Black

HEAVY TIES



83-6029

PACK OF 25	PACK OF 100	PACK OF 1000	LENGTH	WIDTH	BUNDLE DIAMETER	STRENGTH	COLOR
	83-6017	83-6017-3	9.00" (228mm)	.30" (7.6mm)	2.00" (50.8mm)	120 lbs	White
	83-6016	83-6016-3	9.00" (228mm)	.30" (7.6mm)	2.00" (50.8mm)	120 lbs	Black
85-6028	83-6028	83-6028-3	15.00" (381mm)	.30" (7.6mm)	4.00" (101mm)	120 lbs	White
85-6029	83-6029	83-6029-3	15.00" (381mm)	.30" (7.6mm)	4.00" (101mm)	120 lbs	Black

EXTRA HEAVY DUTY TIES

PACK OF 25	PACK OF 50	LENGTH	WIDTH	BUNDLE DIAMETER	STRENGTH	COLOR
	83-6121	24.00" (609mm)	.34" (8.6mm)	7.20" (183mm)	175 lbs	White
85-6120	83-6120 NEW	24.00" (609mm)	.34" (8.6mm)	7.20" (183mm)	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	48.50" (1,233mm)	.34" (8.6mm)	14.50" (368mm)	175 lbs	White
	83-6123 NEW	48.50" (1,233mm)	.34" (8.6mm)	14.50" (368mm)	175 lbs	Black



85-6120

RELEASABLE DUAL CLAMP TIES

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



FEDERAL ASTM SPECIFICATIONS: D-4066PA0151

PACK OF 10	PACK OF 50	LENGTH	WIDTH	BUNDLE DIA. (EACH 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



83-6040

RELEASABLE TIES

PACK OF 25	PACK OF 100	LENGTH	WIDTH	BUNDLE DIAMETER	STRENGTH	COLOR
	83-6012	7.60" (193mm)	.18" (4.5mm)	1.90" (48mm)	50 lbs	White
	83-6013	7.60" (193mm)	.18" (4.5mm)	1.90" (48mm)	50 lbs	Black
	83-6022	14.60" (371mm)	.18" (4.5mm)	4.00" (101mm)	50 lbs	White
85-6023	83-6023	14.60" (371mm)	.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

PACK OF 25	PACK OF 50	PACK OF 100	LENGTH	WIDTH	BUNDLE DIAMETER	STRENGTH	MOUNTING HOLE	COLOR
85-6104	83-6104		8.00" (203mm)	.18" (4.5mm)	1.90" (48mm)	50 lbs	#10	White
	83-6105		7.60" (193mm)	.18" (4.5mm)	1.90" (48mm)	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" & 8" (18lb); 25 x 8", 11" & 15" (50lb)

PART #	PACK OF	LENGTH	WIDTH	BUNDLE DIAMETER	STRENGTH
83-6514	50	7.6" (193mm)	.18" (4.6mm)	2.0" (51mm)	50 lbs
83-6559 NEW	50	11.1" (205mm)	.18" (4.6mm)	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



PART #	PACK OF 25	PACK OF 1000	LENGTH	WIDTH	BUNDLE DIAMETER	STRENGTH	COLOR
85-6030	83-6030-3	7.6" (193mm)	.18" (4.6mm)	2.0" (51mm)	50 lbs	Red	
85-6031	83-6031-3	7.6" (193mm)	.18" (4.6mm)	2.0" (51mm)	50 lbs	Orange	
85-6032	83-6032-3	7.6" (193mm)	.18" (4.6mm)	2.0" (51mm)	50 lbs	Blue	
85-6033	83-6033-3	7.6" (193mm)	.18" (4.6mm)	2.0" (51mm)	50 lbs	Yellow	
85-6034	83-6034-3	7.6" (193mm)	.18" (4.6mm)	2.0" (51mm)	50 lbs	Green	
85-6035	83-6035-3	7.6" (193mm)	.18" (4.6mm)	2.0" (51mm)	50 lbs	Purple	
85-6036	83-6036-3	7.6" (193mm)	.18" (4.6mm)	2.0" (51mm)	50 lbs	Gray	

WIDE STRAP 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 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

PART #	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



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



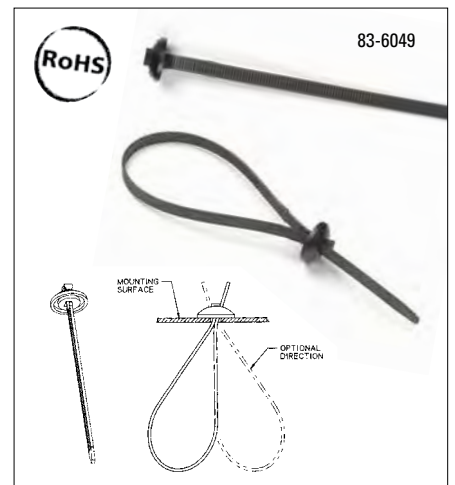
BUTTON HEAD CABLE TIE

- 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



- 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, #8	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

- 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



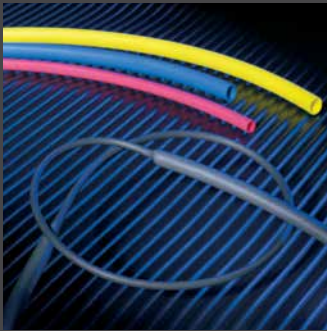
Did You Know?



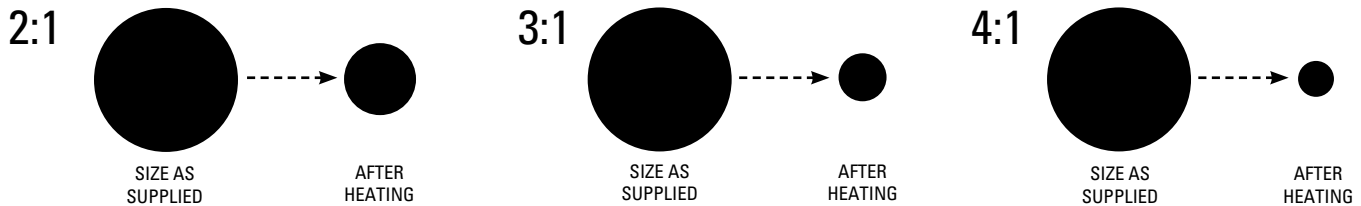
CABLE TIES WILL ABSORB AND RELEASE MOISTURE AS THE ATMOSPHERE CHANGES!

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

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.

SPECS / APPROVALS: UL E85381 RECOGNIZED, 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

"HOT MELT" HEAT SHRINK TUBING

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)



ADHESIVE LINED, DUAL WALL

4:1 SHRINK RATIO, DWA

- 40, 6", Black Dual Wall Heat Shrink pieces
- 6 compartment re-closable 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

"HOT MELT" HEAT SHRINK TUBING KIT



83-6535

HEAT SHRINK TUBING

Minimum shrink temperature:

80°C (176°F)

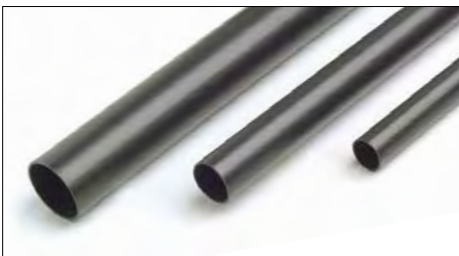
Minimum full recovery temperature:

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



SIZE	LENGTH PER PIECE	PACK	WIRE SIZE	BLACK PART #	CLEAR PART #
1/8"	6"	6	22-18 GA	84-4015	84-5029
1/8"	6"	20	22-18 GA	84-4015-3	
1/8"	48"	6	22-18 GA	84-4015-48	
3/16"	6"	6	20-12 GA	84-4016	84-5030
3/16"	6"	20	20-12 GA	84-4016-3	
3/16"	48"	6	20-12 GA	84-4016-48	
1/4"	6"	6	16-10 GA	84-4017	84-5031
1/4"	6"	20	16-10 GA	84-4017-3	
1/4"	48"	6	16-10 GA	84-4017-48	
3/8"	6"	6	12-8 GA	84-4018	84-5032
3/8"	6"	20	12-8 GA	84-4018-3	
3/8"	48"	6	12-8 GA	84-4018-48	
1/2'	6"	6	8-4 GA	84-4019	84-5033
1/2'	6"	20	8-4 GA	84-4019-3	
1/2'	48"	6	8-4 GA	84-4019-48	
3/4"	6"	6	4-2/0 GA	84-4020	84-5034
3/4"	6"	10	4-2/0 GA	84-4020-3	
3/4"	48"	6	4-2/0 GA	84-4020-48	
1"	6"	6	1-4/0 GA	84-4021	84-5035
1"	6"	10	1-4/0 GA	84-4021-3	
1"	48"	6	1-4/0 GA	84-4021-48	

HEAT SHRINK TUBING KIT

FLEXIBLE, ADHESIVE LINED, DUAL WALL

3:1 SHRINK RATIO, FDWA

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



83-6537

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

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.

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)

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



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 re-closable 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:

-55°C to 110°C (-67°F to 230°F)

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		LENGTH PER PIECE	PACK	PART #
	PRE HEAT	POST HEAT			
.750" (19mm)	.220" (5.6mm)	.220" (5.6mm)	48"	1	84-4030
1.100" (28mm)	.375" (9.5mm)	.375" (9.5mm)	48"	1	84-4031
1.500" (38mm)	.500" (12mm)	.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)

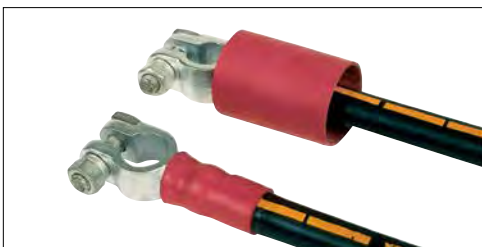
Operating temperature range:

-55°C to 110°C (-67°F to 230°F)

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



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



84-9564

SINGLE WALL

HEAT SHRINK TUBING

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.

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

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)



SINGLE WALL

HEAT SHRINKABLE TUBING KIT, BLACK

2:1 SHRINK RATIO, SWT

- 50, 6", Black Single Wall Heat Shrink Pieces
- 6-compartment re-closable 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

SINGLE WALL

HEAT SHRINK TUBING ASSORTMENT

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



83-6508

- 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



83-6501

- 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



83-6525

- 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



83-6500

- 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



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SPLIT FLEX CONVOLUTED TUBING



83-8031

- 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

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

PRODUCT 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"	500' (152m)	Box	83-8033-3
1/4"	500' (152m)	Box	83-8030-3	3/4"	50' (15.2m)	Bag	83-8034
3/8"	50' (15.2m)	Bag	83-8031	3/4"	500' (152m)	Box	83-8034-3
3/8"	500' (152m)	Box	83-8031-3	1"	50' (15.2m)	Bag	83-8035
1/2"	50' (15.2m)	Bag	83-8032	1"	300' (91.4m)	Box	83-8035-3
1/2"	500' (152m)	Box	83-8032-3	1.5"	150' (45.7m)	Box	83-8036-3
5/8"	50' (15.2m)	Bag	83-8033	2"	100' (30.4m)	Box	83-8037-3

POLYETHYLENE SPLIT LOOM

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

* **NEW**

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

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

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

SPIRAL WRAP – SPOOLED

- Made of lightweight Polyethylene material
- Black spiral wrap is U.V. resistant
- Provides wire and cables from abrasion and allows flexible routing options
- Continuous operating temperature: -60°C (-76°F) to 88°C (190°F)

MILITARY 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

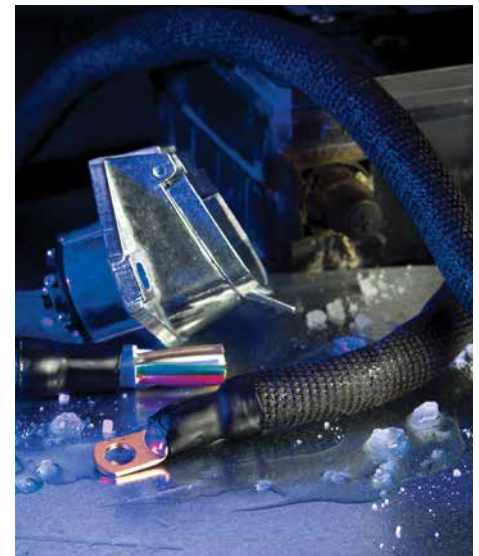


NON METALLIC LOOM

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

INDUSTRY 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
- Clips 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	NEW 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



RUBBER 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



RUBBER GROMMET ASSORTMENT

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

83-7006



07

SWITCHES & ELECTRICAL ASSEMBLIES

COMMUTATEURS ET
ASSEMBLAGES ÉLECTRIQUES

APAGADORES Y
ENSAMBLES ELÉCTRICOS

- 96 Battery Disconnect Switches
- 97 Ignition & Starter Switches
- 98 Toggle Switches
- 101 Rocker Switches
- 102 Push/Pull Switches
- 103 Solenoids
- 104 Miscellaneous Switches
- 106 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 1/2" long x 3/4" dia.
- Fits panel up to 1/4" 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	24V	S.P.S.T.	2, 1/2" 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

82-2104

IGNITION STARTER SWITCHES

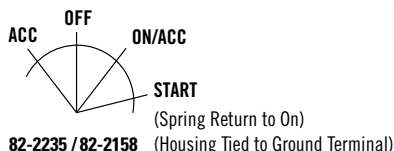
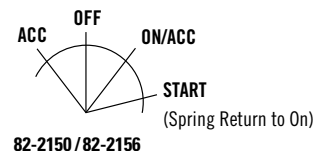
- Momentary start
- One piece die cast housing with brass terminals; includes 2 keys
- 4 position (ACC, OFF, ON/ACC, START – spring return to “ON”)
- Key removable; key in “OFF” position only
- 50,000 life cycle
- Caution tag on ground terminal (82-2235)
- 82-2235 fits Packard #2984017

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 NEW	Blade	No	Various	1
82-2158*	Screw	No	D250	1

* Includes specially designed glow plug warmer



IGNITION STARTER SWITCH



- Special “Push to Choke” feature eliminates need for separate electronic choke switch
- Magneto grounded in “off” position
- Glass filled delrin housing, stainless steel terminals and molded velox base
- 13/16" diameter mounting bushing special weather proofing seal and drain hole
- 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”)

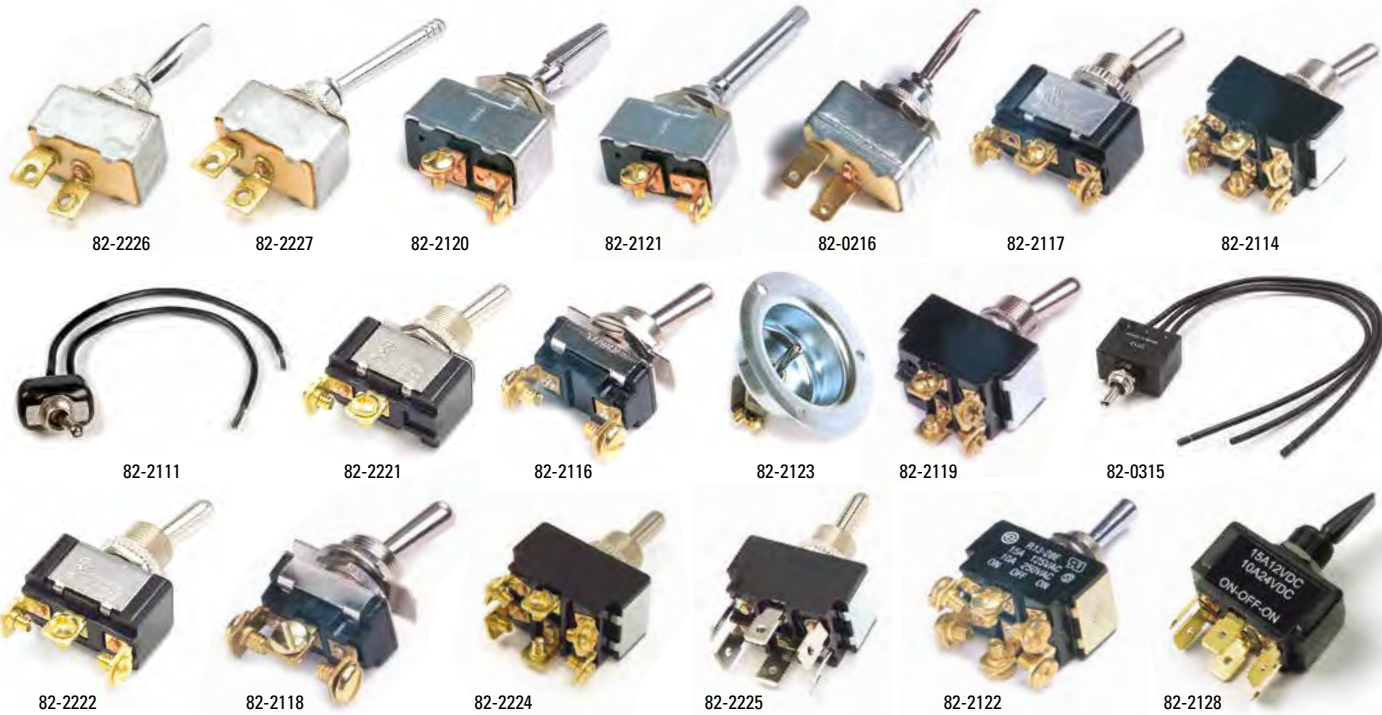
Product Specifications

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



TOGGLE SWITCHES



- 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 NEW	On/Off	50 AMP @ 12V DC	S.P.S.T.	2 screw	1" Long x 15/32" dia.
82-2227 NEW	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 NEW	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 3/4" hole
82-2119	On/Off	15 AMP @ 12V DC	D.P.S.T.	4 screw	3/8" Long x 15/32" dia.
82-0315** NEW	On/Off/On	25 AMP @ 12V DC	S.P.D.T.	3 wire	11/16" Long x 15/32" dia.
82-2222 NEW	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 NEW	On/Off/On	20 AMP @ 12V DC	D.P.D.T.	6 screw	11/16" Long x 15/32" dia.
82-2225 NEW	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



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* NEW	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



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



TOGGLE SWITCH BOOT

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

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



ILLUMINATED TOGGLE SWITCH



82-2113



82-1905



82-1906



82-1907



82-1908

PART #	POSITION	RATED	TYPE	TERMINAL	HANDLE	COLOR
82-2113	On/Off	30 AMP @ 12V DC	S.P.S.T.	4 blade	11/16" x 15/32" dia.	Red
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



82-1909



82-1910



82-1911



82-1912

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



82-0303



82-1901



82-1902



82-1903



82-1904

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



82-0309



82-0310

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



82-1913



82-1914



82-1915



82-1916

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



82-2130



82-2131



82-2132



82-2136

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



82-2133



82-2134



82-2135

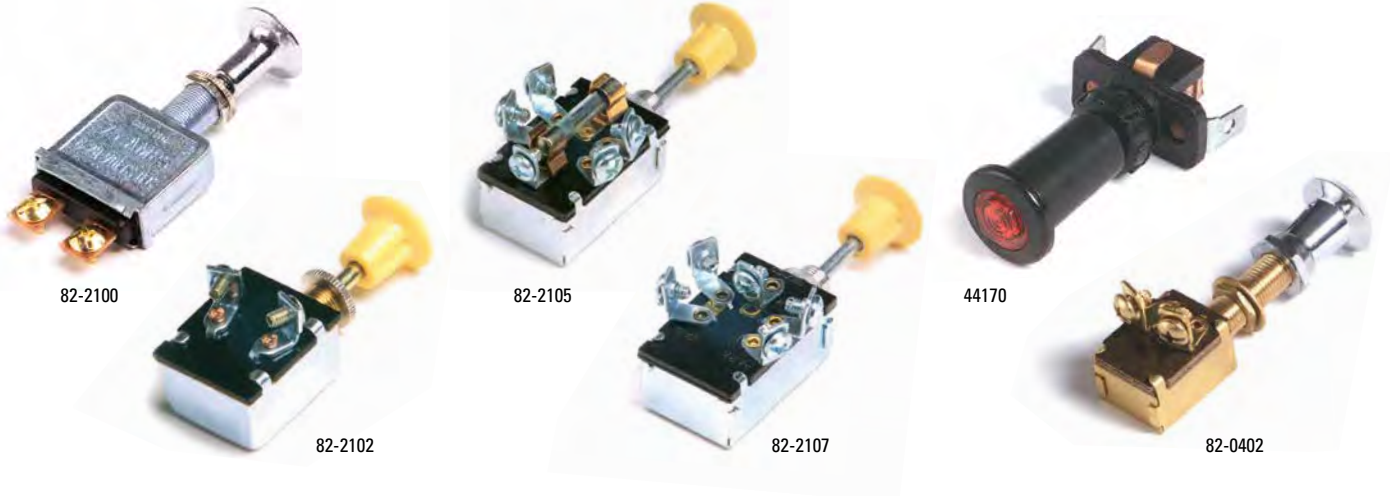


82-2137

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



- 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



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



- 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)

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



82-0307

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



82-0308

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

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 NEW	Ball switch	Normally Open	2 stud terminal	12V DC
82-0465 NEW	Ball switch	Normally Open	Metri-Pack (12052644)	12V DC
82-0364 NEW	Ball switch	Normally Open	Ford (C0AF-14A121-A)	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

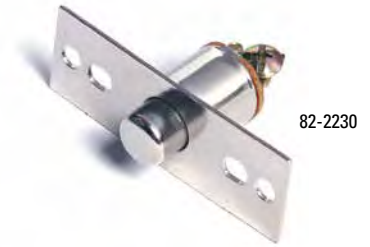
82-2231 Includes Mounting Bracket

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



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



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



82-0115

FLOOR DIMMER SWITCHES

- 3 terminals for plug connection



82-2203

82-2204

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 NEW	Floor mount	S.P.D.T.	2 Position On – Low Beam, On High beam	1 6/8" on center, 9/32" diameter

PIGTAILS & SOCKETS

1 WIRE

**SOCKET REPAIR ASSEMBLY**

- Fits 63, 67, 81, 87, 93, 97, 209, 1003, 1073, 1129, 1133, 1141, 1156 bulbs
- 18 GA, 12" wire

68080**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**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

2 WIRE

**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**SOCKET REPAIR ASSEMBLY**

- Ceramic washer and waterproof boot
- Fits 64, 68, 82, 88, 90, 94, 210, 1004, 1034, 1074, 1130, 1154, 1157, 1158, 1176, 1178 bulbs

68150**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**SOCKET REPAIR ASSEMBLY**

- Fits 1034, 1154, 1158, 1176, 1178 bulbs
- 18 GA, 12" wire, Ceramic washer

68110

2 WIRE (CONTINUED)

PIGTAILS & SOCKETS



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



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 NEW
 • Fits H8 & H11 bulbs
 • 18 GA, 12" wire
84-1081



SOCKET REPAIR ASSEMBLY NEW
 • Fits H7 bulbs
 • 14 GA, 6" wire
84-1082



SOCKET REPAIR ASSEMBLY NEW
 • 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 NEW**

- Fits 3057/3157 bulbs
 - GM: 12083689
 - 18 GA, 12" wire
- 84-1084**

**SOCKET REPAIR ASSEMBLY NEW**

- 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 NEW**

- 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**



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**



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**

NEW

POWER PLUGS & SOCKETS



CIGARETTE LIGHTER POWER PLUG

- Provides a power source through a cigarette lighter plug-in port
 - 2, 18 GA wires
- 84-1090**

NEW



POWER SOCKET

- 12V power socket with pre-wired fuse holder & cap
 - 2, 18 GA wires with .250" quick disconnects
- 84-1091**

NEW



POWER SOCKET, PANEL MOUNT

- 12V panel mount power socket
 - Includes socket, mounting bracket and locking ring
 - 2, .250" quick disconnect terminals
- 84-1092**

NEW

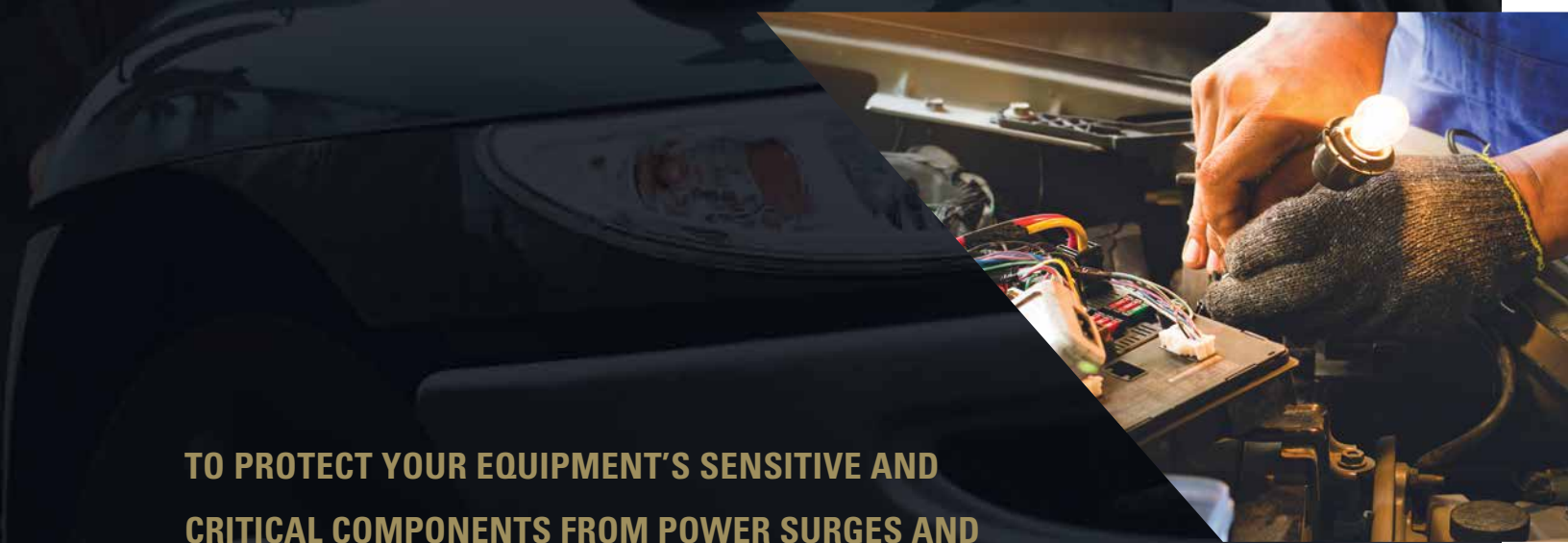
08

FUSE & CIRCUIT PROTECTION

FUSIBLE ET PROTECTION
DE CIRCUIT

PROTECCIÓN DE FUSIBLE
Y CIRCUITO

- 112 High Amperage Circuit Breakers
- 112 Standard & Miniature Blade Circuit Breakers
- 113 Universal Circuit Breakers
- 114 Miniature Blade Fuses & Holders
- 116 Standard Blade Fuses & Holders
- 118 Micro Blade Fuses & Holders
- 119 Large Blade Fuses & Holders
- 120 Automotive Link Fuses
- 121 Bolt-On Fuses
- 122 Assortment Kits
- 124 Glass Fuses & Holders
- 126 Fuse Panels & Terminal Strips
- 127 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



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 NEW	40A	Type III, Manual Reset, Surface Mount
82-2247 NEW	50A	Type III, Manual Reset, Surface Mount
82-2216	60A	Type III, Manual Reset, Surface Mount
82-2248 NEW	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 NEW	120A	Type III, Manual Reset, Surface Mount
82-2250 NEW	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

PLUG-IN STYLE



82-2197



82-2201

- 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

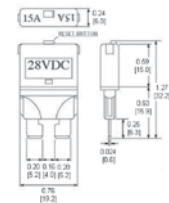
NEW

82-2355



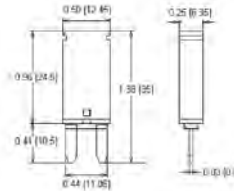
82-2357

- 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 NEW	10A	Red	Type III, Manual Reset
82-2356 NEW	15A	Blue	Type III, Manual Reset
82-2357 NEW	20A	Yellow	Type III, Manual Reset
82-2358 NEW	25A	White	Type III, Manual Reset
82-2359 NEW	30A	Green	Type III, Manual Reset

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



MINIATURE BLADE CIRCUIT BREAKERS

TYPE I

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

TYPE II

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



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

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

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*

*molded bracket

UNIVERSAL CIRCUIT BREAKER



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



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

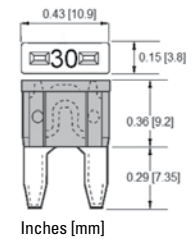
Voltage: 32VDC

Amperage: 2A, 3A, 5A, 7.5A, 10A, 15A, 20A, 25A, 30A

Interrupt Rating: 1000A @ 32 VDC

Terminals: Zinc Alloy

Body Material: Nylon PA 66



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-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-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 NEW	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 NEW	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



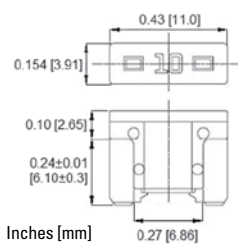
PART #	CURRENT RATING	COLOR	PACK	DESCRIPTION
82-ANMI-7.5A	7.5A	Brown	2	Miniature Blade Fuse with LED Indicator
82-ANM-I-10A	10A	Red	2	Miniature Blade Fuse with LED Indicator
82-ANM-I-15A	15A	Blue	2	Miniature Blade Fuse with LED Indicator
82-ANM-I-20A	20A	Yellow	2	Miniature Blade Fuse with LED Indicator
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



APPROVALS: MEETS SAE STANDARDS & ISO 8820 STANDARD SPECIFICATIONS

Fast Acting/Blade Mounting

Low Profile version of the Miniature Automotive Blade fuse.

3A-30A, 32VDC



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 NEW 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

SPECIFICATIONS

Voltage: 32VDC

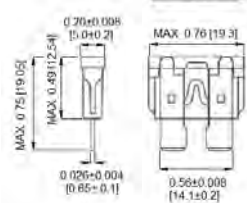
Amperage: 2A, 3A, 5A, 7.5A, 10A, 15A, 20A, 25A, 30A, 40A

Interrupt Rating: 1000A @ 32 VDC

Terminals: Zinc Alloy

Body Material: Nylon PA 66

Inches [mm]



APPROVALS: MEETS SAE STANDARDS & ISO 8820 STANDARD SPECIFICATIONS



82-ANR-15A



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-2A	2A	Gray	5	Standard Blade Fuse
82-ANR-3A	3A	Violet	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-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

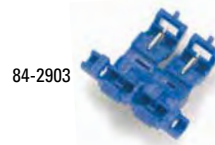
STANDARD BLADE FUSE HOLDERS



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 NEW	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 NEW	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

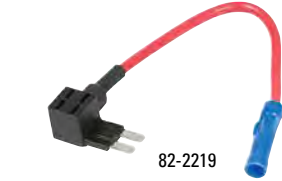
Fast Acting/Blade Mounting

- New standard for vehicle circuit protection
- Sub-miniature design
- Space saving – smaller than the Miniature fuse

5A-30A, 32VDC



82-ANT-7P



82-2219



82-ANT-7.5A



82-ANT-10A



82-ANT-15A



82-ANT-20A



82-ANT-25A



82-ANT-30A

SPECIFICATIONS

Voltage: 32VDC

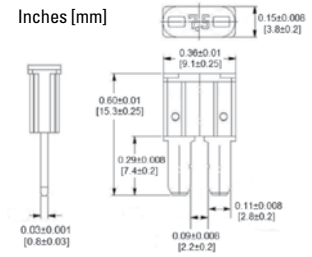
Amperage: 5A, 7.5A, 10A, 15A, 20A, 25A, 30A

Interrupt Rating: 1000A @ 32 VDC

Terminals: Zinc Alloy

Body Material: Nylon PA 66

Inches [mm]



APPROVALS: MEETS SAE STANDARDS & ISO 8820 STANDARD SPECIFICATIONS

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 NEW	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

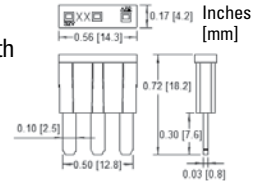
MICRO BLADE – 3 BLADE FUSES



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

5A-15A, 32VDC

NEW

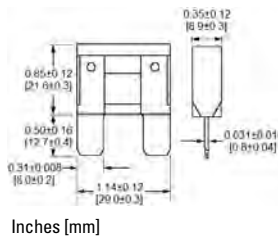


PART #	CURRENT RATING	COLOR	PACK	DESCRIPTION
82-ANK-5A NEW	5A	Tan	5	Micro Blade – 3 Blade Fuse
82-ANK-7.5A NEW	7.5A	Brown	5	Micro Blade – 3 Blade Fuse
82-ANK-10A NEW	10A	Red	5	Micro Blade – 3 Blade Fuse
82-ANK-15A NEW	15A	Blue	5	Micro Blade – 3 Blade Fuse

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



Fast Acting/Blade Mounting

A cost-effective automotive fuse for use in automotive, battery and general DC applications.

20A-80A, 32VDC

APPROVALS: MEETS SAE STANDARDS & ISO 8820 STANDARD SPECIFICATIONS



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.

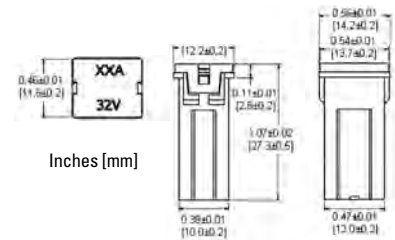
20A-60A, 32VDC

SPECIFICATIONS

Voltage: 32VDC

Amperage: 20A, 25A, 30A, 40A, 50A, 60A

Interrupt Rating: 1,500A @32VDC



Inches [mm]



82-FMX-20A



82-FMX-25A



82-FMX-30A



82-FMX-40A



82-FMX-50A



82-FMX-60A

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-FMXLIP-20A



82-FMXLIP-25A



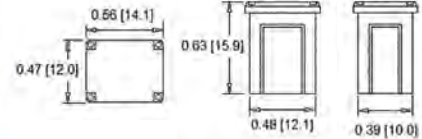
82-FMXLIP-40A



82-FMXLIP-50A



82-FMXLIP-60A



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

AUTOMOTIVE LINK FUSE ASSORTMENT

NEW



82-ASST-45

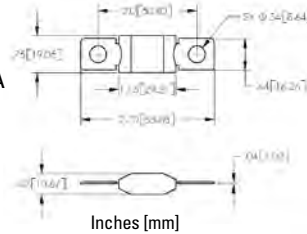
- Includes the top male and female automotive fusible links for late model import vehicles
- Includes 1 each of: FLB 40A/60A/70A, FLD 80A, FLF 20A/30A/40A/50A/60A, FLM 80A/100A, FLS 30A/40A, FMX 20A/30A/40A

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

BOLT ON FUSES

SPECIFICATIONS

Voltage: 32VDC
Amperage: 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



APPROVALS: MEETS SAE STANDARDS & ISO 8820 STANDARD SPECIFICATIONS

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



PART #	CURRENT RATING	COLOR	PACK	DESCRIPTION
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 NEW	300A	Black	1	Bolt On Fuse
82-MGGA-FB			1	Fuse Block – Bolt On Fuse

FUSE TESTER/PULLER

- 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



82-PUL-07

FUSE PULLER

- For automotive miniature blade fuses
- Material: ABS

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



82-PUL-01

FUSE TAPS – INSULATED

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



84-2916

84-2917

ASSORTMENT KITS



82-ASST-80M

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.



82-ASST-43



82-ANM-8P



82-ANS-7P

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



82-ANS-I-5



82-ASST-44



82-ASST-180



82-ANS-7



82-ANR-6T



82-ANT-7P



82-FSO-7-G



82-FSA-9-G

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

GLASS FUSES

FSA, AGC, AGX, AGW, AGA, FSO

**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**Agency Standards and Listings:**

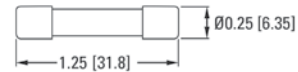
UL Listed 100mA~10A
UR Recognized 12A~30A
CSA Certified 100mA~30A

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 NEW	(5A, 10A, 15A, 20A, 25A, 30A)	60	AGC, Glass Fuse Assortment & Tester
82-AGX-5 NEW	(5A, 7.5A, 10A, 20A, 30A)	5	AGX, Glass Fuse Assortment
82-AGW-5 NEW	(5A, 7.5A, 10A, 20A, 30A)	5	AGW, Glass Fuse Assortment
82-AGA-6 NEW	(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

IN-LINE FUSE HOLDERS

- Nylon fuse holder for glass tube fuses
- Fits 1/4" x 1 1/4" 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)



BAYONET STYLE FUSE HOLDER

- Nylon fuse holder for glass tube fuses
- Fits 1/4" x 1 1/4" 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)



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"



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



LED STANDARD BLADE FUSE PANELS



NEW



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-V0)
- 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-V0)
- 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



NEW



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-V0)
- 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

- 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

TERMINAL STRIPS – STUD TYPE



82-2313

- 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

BARRIER STRIPS – SCREW TYPE



82-2338

- 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

RELAY ONLY

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

* Micro Blade

RELAY + PIGTAIL

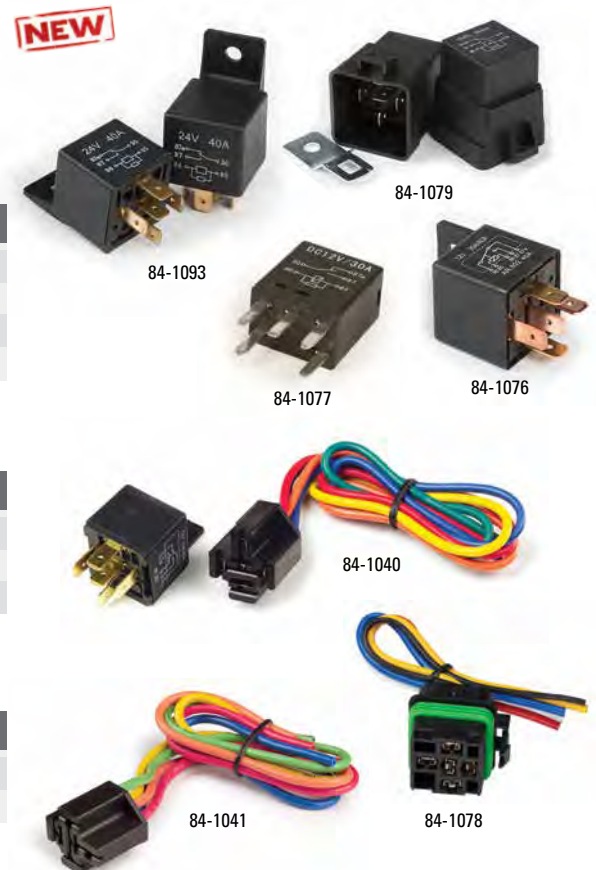
PART #	VOLTAGE	AMPS	FORM
84-1040	12V	30/40	S.P.D.T.
84-1094 NEW	24V	40/30	S.P.D.T.
84-1080* NEW	12V	40/30	S.P.D.T.

* Includes voltage spike resistor

PIGTAIL ONLY

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

RELAYS



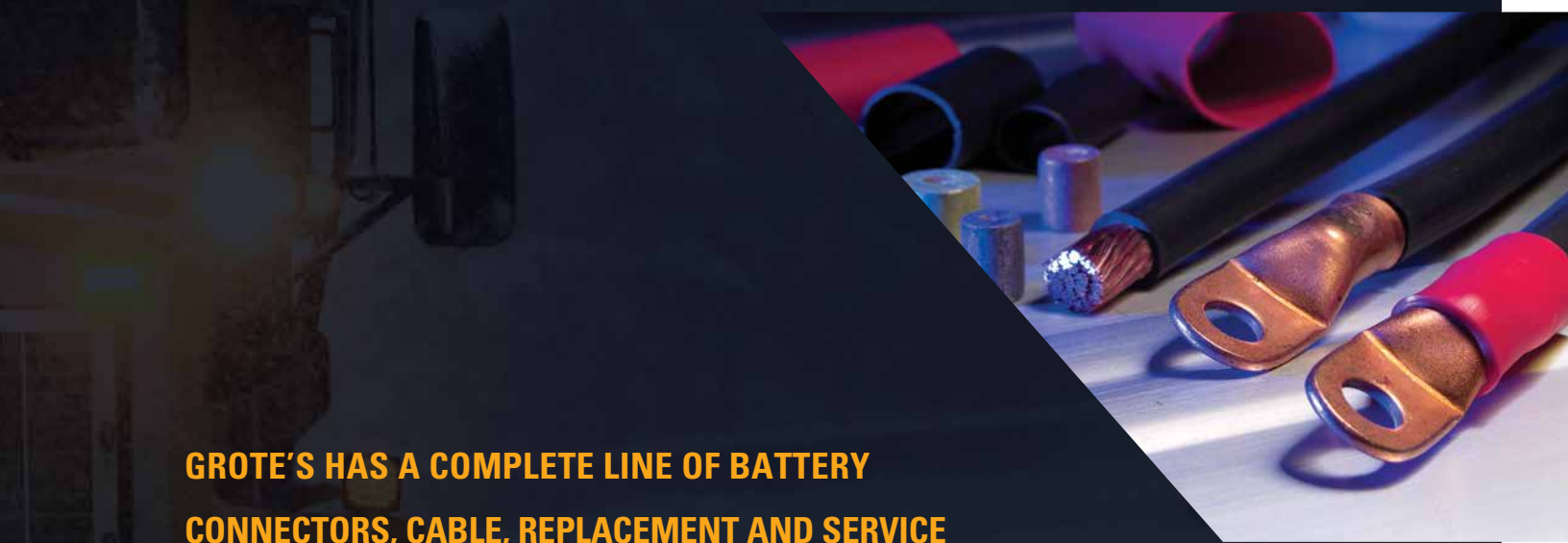
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BATTERY CONNECTORS & CABLE

CONNECTEURS ET
CÂBLES DE BATTERIE

TERMINALES Y CABLES
PARA BATERIA

- 130 Battery Connectors
- 138 Conversion Connectors and Adapters
- 140 Booster Clamps and Cables
- 141 Charging Clips
- 142 Booster Cable – Twin Conductor
- 144 Battery Cables
- 148 Battery Disconnect Switches
- 149 Battery Protective Products
- 150 Crimpers and Cutters
- 152 Battery Boxes
- 155 Hold-downs and Trays
- 156 Portable Power Packs & Chargers
- 158 Battery Cable
- 159 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

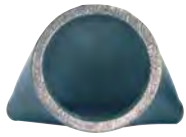
- 100% copper tin-plated
- Serrated barrel increases pull-out strength of hard-to-crimp wire
- Can be crimped or soldered
- Ideal for solder dipping applications
- Lead-free

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



DEAL WITH REAL

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.

FLEET SUPPORT

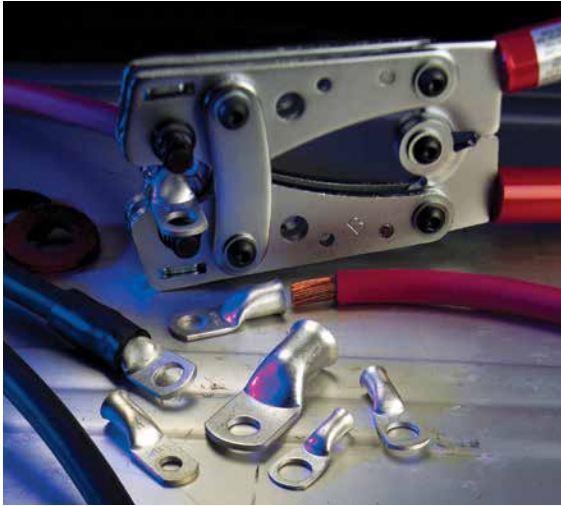
As a fleet manager, you don't have time to waste worrying about inventory and products. That's why we offer a full service partnership. You won't have to worry about inventories or suppliers. Grote can provide comprehensive training to your maintenance partners, to ensure you get the most benefit from your Grote Electrical Connections and Accessory products.

Limit unplanned maintenance downtime, increase the profitability of your fleet and improve your fleet's safety through proven electrical connection and accessory products that withstand everything your vehicles face in day-to-day work. Find out more about how these products affect your fleet's profitability, and how Grote can maximize your return with our innovative, industry-leading Electrical Connection and Accessory solutions.

CONTACT US AT 1-800-268-5612 TO FIND OUT HOW WE CAN HELP YOUR BUSINESS

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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 re-closable 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



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 re-closable box
- Re-order chart on inside cover

83-6543 8 – 3/0 GA Copper Tube Lugs



83-6543

BATTERY CONNECTORS – HEAVY DUTY



84-9133

- 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 1-4/0 Gauge	Lead; zinc-plated, steel fasteners	82-9133	2	84-9133	25

BATTERY CONNECTORS – AUTOMOTIVE



82-9613

84-9134

84-9126

- 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

TOP POST & SIDE MOUNT, CARDS OF 10



84-9671

- 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



84-9618

82-9597

- 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)

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 – MARINE



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

BATTERY CONNECTORS – MILITARY



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

TOP POST – 3 WAY TERMINAL



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

BATTERY QUICK DISCONNECT



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



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



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

RATING	JAW TYPE	DESCRIPTION	GRIP COLOR	RETAIL PACK	PACK
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



84-4999

84-5000

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



84-9543

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 1/2', 16 GA	Yes	Red & Black	84-9613	1 Pair
Alligator Clip	No	Red	84-5005	1
Alligator Clip	No	Black	84-5004	1



84-9615

84-9613

84-5004

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



82-9614

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 NEW	.320" x .700"	Black & Yellow	1,500'	82-5759-1500
6 GA	.360" x .780"	Black & Orange	100'	82-5760
6 GA NEW	.360" x .780"	Black & Orange	1,200'	82-5760-1200
4 GA	.410" x .880"	Black & White	100'	82-5761
4 GA NEW	.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 & Spring – Dual Pole	Zinc Die-Cast
82-0852	1	Plug & Spring – Single Pole	Zinc Die-Cast

PLUG & SOCKET COMBO

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



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 NEW	2	Socket – Dual Pole	Zinc Die-Cast
82-2144		Socket Boot	Rubber

PLUG

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



MOLDED BATTERY HARNESSSES

"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	NEW 84-9586
21"	Positive	1	NEW 84-9587

QUICKLINK® STUD BATTERY HARNESSSES

"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 HARNESSSES

"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 additive 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



PRE-MADE LENGTHS

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

CENTRE TO CENTRE DIMENSION	DESCRIPTION	PACK SIZE	4 GAUGE PART #	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



BATTERY CABLES

PRE-MADE LENGTHS



84-9225



84-9571



84-9249

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

TOP POST CABLES

CENTRE TO CENTRE DIMENSION	PACK SIZE	4 GAUGE PART #	1 GAUGE PART #
10"	1	84-9224	
12"	1	84-9225	84-9241
14"	1	82-7014	
15"	1	84-9226	
16"	1	84-9227	84-9242
19"	1	84-9230	84-9243
21"	1		84-9503
22"	1	84-9228	
24"	1	84-9231	
25"	1	82-7025	
27"	1	84-9232	84-9244
30"	1	84-9233	84-9245
32"	1	84-9234	
36"	1	84-9229	84-9246
36"	1 RED		84-9571
37"	1	84-9235	
41"	1		84-9247
42"	1	84-9236	
48"	1	84-9237	84-9248
48"	1 RED		84-9572
53"	1	82-7053	
60"	1	84-9238	
65"	1		84-9510
72"	1	82-7072	

SIDE TERMINAL CABLES

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

CENTRE TO CENTRE DIMENSION	DESCRIPTION	PACK SIZE	4 GAUGE PART #
15"	Side Terminal	1	84-9249
25"	Side Terminal	1	84-9250
35"	Side Terminal	1	84-9251
45"	Side Terminal	1	84-9252
55"	Side Terminal	1	84-9253
65"	Side Terminal	1	84-9254

SWITCH-TO-STARTER CABLES

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



84-9256

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



84-9606

84-9608

BATTERY TERMINAL SOLDER SLUG KIT

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

83-6532



83-6532

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 1/2" long x 3/4" dia.
- Fits panel up to 1/4" 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	24V	S.P.S.T.	2, 1/2" 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

82-2104

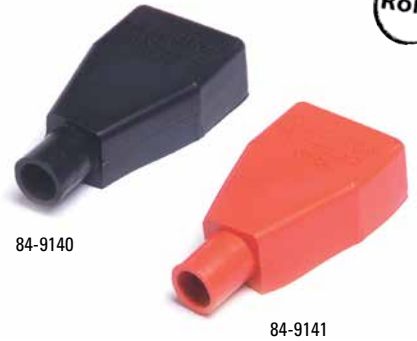
BATTERY TERMINAL PROTECTORS

- 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



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



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



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



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™



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

83-6515



HEAVY DUTY

- 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



OVERALL LENGTH	CONNECTOR CABLE RANGE	PART #
9"	up to 2/0 GA	84-9088



84-9088

22" CABLE CUTTER

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

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

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			OUTSIDE DIMENSIONS			MOUNTING BRACKET
				LENGTH	WIDTH	HEIGHT	LENGTH	WIDTH	HEIGHT	
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

BATTERY BOXES

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			OUTSIDE DIMENSIONS			MOUNTING BRACKET
				LENGTH	WIDTH	HEIGHT	LENGTH	WIDTH	HEIGHT	
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

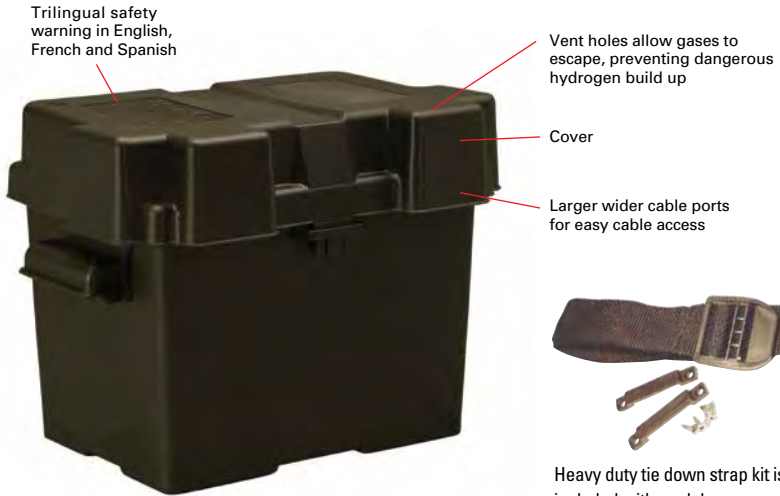


Mounting holes



Strap in use

AUTO, LIGHT TRUCK, MARINE & RV



Vent holes allow gases to escape, preventing dangerous hydrogen build up

Cover

Larger wider cable ports for easy cable access



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



- 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", 1/4"-20 thread

PART #	DESCRIPTION	LENGTH	PACK
84-9287	J bolt	8"	Pair
84-9286	J bolt	10"	Pair
84-9685 NEW	J bolt	12"	Pair
84-9285	L bolt	10"	Pair

HOLD DOWN SETS – L & J STYLE



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 TRAYS



RESCUE® 2100

OBSOLETE



84-9657

PORTABLE POWER PACK

- 12/24V power, USB power outlet
- Dual 12-Volt 22AH high output AGM batteries
- Built-in, 1 AMP internal charger – CEC compliant
- Digital battery voltage gauge reads internal and external
- 12V power outlet; 500 AMP coated parrot clamps
- 2 gauge 62" 100% copper cables
- Work light and flasher, battery charging status
- Unit will not operate if polarity or voltage is set incorrectly
- Professional quality
- Crank/Peak: 12V 900/1600 Amps; 24V 500/1100 Amps
- 1 Year Warranty

PART #	GAUGE	LENGTH	BATTERY CAPACITY
84-9657 OBSOLETE	2	62"	Dual 22 AMP Hr.

RESCUE® 1800

OBSOLETE

DUAL BATTERIES FOR ALL DAY POWER AND RELIABILITY



84-9656

A WORKHORSE FOUND IN MORE ROADSIDE SERVICE VEHICLES

- Professional quality
- Dual 12-Volt 20AH AGM batteries
- 2 gauge 62" 100% copper cables
- LED battery charging status
- Polarity alarm; 500 AMP coated parrot clamps
- 12-Volt power outlet
- Internal battery gauge
- Work light and flasher
- Built in charger
- Crank/Peak: 12V 700/1500 Amps
- 1 Year Warranty

PART #	GAUGE	LENGTH	BATTERY CAPACITY
84-9656 OBSOLETE	2	62"	Dual 20 AMP Hr.

RESCUE® 900

OBSOLETE



84-9674

AUTOMOTIVE / POWERSPORTS: RELIABLE POWER DELIVERED WHEREVER AND WHENEVER YOU NEED IT

- 12-Volt 18AH AGM battery
- 6 gauge 27" 100% copper cables
- 12-Volt power outlet
- Built-in charger
- LED battery charging status
- Crank/Peak: 12V 400/900 Amps
- 1 Year Warranty

PART #	GAUGE	LENGTH	BATTERY CAPACITY
84-9674 OBSOLETE	6	27"	18 AMP Hr.

POWER PACK COMPARISON CHART

MODEL	PART #	VOLTAGE	STYLE	CABLE LENGTH	CABLE GAUGE	BATTERY (AH)	BATTERY STATUS	COMPRESSOR	INVERTER	USB PORT	SHIPPING WEIGHT
2100	84-9657	12/24V	Hand Carried	62" 157.5 cm	2	Dual 22 AMP Hour	Digital	No	No	Yes	40.0 lb 18.3 kg
1800	84-9656	12V	Hand Carried	62" 157.5 cm	2	Dual 20 AMP Hour	Analog	No	No	No	40.5 lb 18.5 kg
900	84-9674	12V	Hand Carried	27" 68.5 cm	6	18 AMP Hour	LED	No	No	No	25.0 lb 11.4 kg



- Perfect for lead-acid, flooded or sealed maintenance-free batteries (AGM, gel cell)
- Complete 4-step charging program (Initialization, Bulk Charge, Absorption Mode, Float Mode)
- Automatically switches to float/maintenance voltage after fully charging the battery
- Solid state two color LED indicates stage of charger
- Reverse polarity protected
- Dimensions: 3.3"L x 2.3"W x 1.9"H, 2 lbs
- Meets cUL, UL and CSA standards
- **5 Year Warranty**

PART #	DESCRIPTION
021-0123-CA <i>OBSELETE</i>	Battery Tender – Junior, 0.75 AMPs @ 12v



- Spark Proof, Waterproof, Short Circuit Protected
- Reverse Polarity Protected
- Dimensions: 4.2"L x 2.8"W x 1.4"H, 2 lbs
- Meets UL and CE standards
- **3 Year Warranty**

PART #	DESCRIPTION
022-0150-DL-WH <i>OBSELETE</i>	Battery Tender: Waterproof 800, 0.80 AMPs @ 12v



- Temperature compensated to ensure optimum charge voltage according to ambient temperature
- Automatically switches from full charge to float charging mode
- Battery Tender at 1.25 AMPs will charge as fast or faster than any 3 AMP charger
- Reverse Polarity Protection to ensure user safety – Red & Green Lights
- Complete 4-step charging program (Initialization, Bulk Charge, and Absorption Mode, Float Mode)
- Dimensions: 4.9"L x 3.3"W x 2.9"H, 3 lbs
- Meets cUL, CSA and UL Standards
- **10 Year Warranty**

PART #	DESCRIPTION
021-0128-CA <i>OBSELETE</i>	Battery Tender: Plus, 1.25 AMPs @ 12v



- Ideal for AGM style batteries, Group 31 batteries, heavy duty applications
- These units are waterproof, vibration proof, mountable and include a safety timer
- Dimensions: 5.25"L x 5.0"W x 2.0"H, 4 lbs
- Meets UL Standards
- **2 Year Warranty**

PART #	DESCRIPTION
022-0157-CA <i>OBSELETE</i>	Battery Tender: Power Tender Plus, 5.0 AMPs @ 12v
022-0158-CA <i>OBSELETE</i>	Battery Tender: Power Tender Plus, 2.5 AMPs @ 24v

BATTERY TENDER® JUNIOR

OBSELETE



021-0123-CA

BATTERY TENDER® WATERPROOF 800

OBSELETE



022-0150-DL-WH

BATTERY TENDER® PLUS

OBSELETE



021-0128-CA

POWERTENDER PLUS

OBSELETE



022-0157-CA

BATTERY CABLE – TYPE SGR



82-5703



82-6703

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

6 GAUGE

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

4 GAUGE

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

2 GAUGE

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

1 GAUGE

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

1/0 GAUGE

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

2/0 GAUGE

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

3/0 GAUGE

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

4/0 GAUGE

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

GAUGE	OUTSIDE DIAMETER
6	.310"
4	.365"
2	.430"
1	.461"
1/0	.525"
2/0	.587"
3/0	.645"
4/0	.709"

WELDING CABLE

- 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
- All welding cable is spooled
- Meets all SAE J1128 specifications

NEW



82-5730

6 GAUGE NEW

COLOR	STRANDS	25'	100'
Black	273	82-5732	82-5734
Red	273	82-6732	82-6734

4 GAUGE NEW

COLOR	STRANDS	25'	100'
Black	427	82-5724	82-5735
Red	427	82-6727	82-6735

2 GAUGE NEW

COLOR	STRANDS	25'	100'
Black	651	82-5721	82-5736
Red	651	82-6728	82-6736

1 GAUGE NEW

COLOR	STRANDS	25'	100'
Black	840	82-5737	82-5738
Red	840	82-6746	82-6738

1/0 GAUGE NEW

COLOR	STRANDS	25'	100'
Black	1,044	82-5739	82-5740
Red	1,044	82-6739	82-6740

2/0 GAUGE NEW

COLOR	STRANDS	25'	100'
Black	1,308	82-5730	82-5731
Red	1,308	82-6730	82-6731

3/0 GAUGE NEW

COLOR	STRANDS	25'	100'
Black	1,653	82-5741	82-5742
Red	1,653	82-6741	82-6742

4/0 GAUGE NEW

COLOR	STRANDS	25'	100'
Black	2,071	82-5744	82-5745
Red	2,071	82-6744	82-6745



82-6730

GAUGE	OUTSIDE DIA.	STRANDING (.010" DIA)
6	.305"	259
4	.340"	385
2	.420"	651
1	.498"	798
1/0	.525"	1026
2/0	.570"	1254
3/0	.635"	1615
4/0	.695"	2052

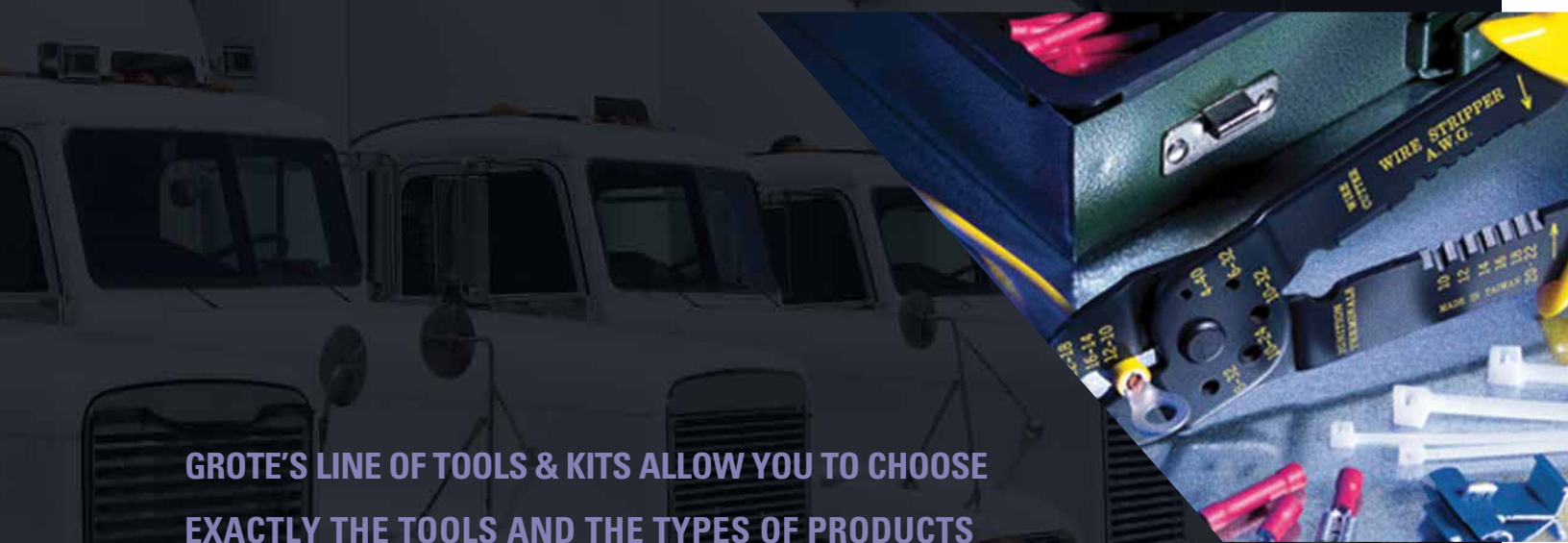
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TOOLS & KITS

OUTILS ET TROUSSES

HERRAMIENTAS Y JUEGOS

- 162 Heat Shrink Terminal Assortment Kits
- 163 Nylon & PVC Terminal Assortment Kits
- 164 Deutsch & Weather Pack Assortment Kits
- 165 Assorted Repair Kits
- 166 Heat Shrink Tubing Assortment Kits
- 168 Copper Lug Assortment Kits
- 169 Storage Trays
- 170 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



83-6542

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 SHRINK & SOLDER TERMINAL & CONNECTOR



83-6539

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 re-closable 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



83-6503

22-10 GAUGE ASSORTMENT KIT

- 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

83-6556

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 re-closable 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) <i>* Includes Hang Tab</i>	70

NYLON TERMINAL & CONNECTOR



83-6538

83-6555

22-10 GAUGE ASSORTMENT KITS

- 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) <i>* Includes Hang Tab</i>	99

VINYL & NYLON TERMINAL & CONNECTOR



83-6540

83-6554

DEUTSCH TERMINAL & CONNECTOR

ASSORTMENT KIT

NEW

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

83-6549 NEW

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

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

AUTO ELECTRIC REPAIR KIT



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)	

ALL PURPOSE TERMINAL KIT (83-6530)



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

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)	

ECONOMY TERMINAL KIT (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 re-closable 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 re-closable 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 re-closable 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

3:1 SHRINK RATIO

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

PART #	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

2:1 SHRINK RATIO

- 50, 6", Black Single Wall heat shrink pieces
- 6-compartment re-closable plastic box
- Re-order chart on inside cover

PART #	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 re-closable 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 re-closable 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

- 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



83-6553

WIRE AND CABLE INSTALLATION AND REPAIR KIT**83-6553**

KIT INCLUDES

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

LARGE STORAGE TRAY

- 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

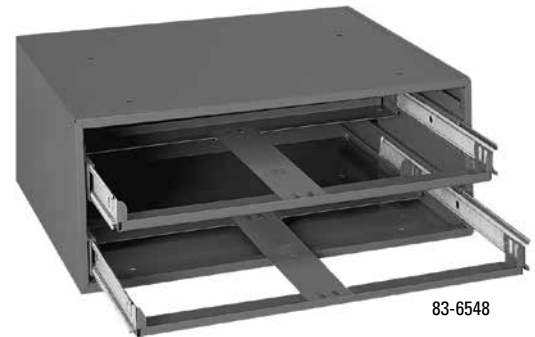


83-6547

HEAVY DUTY STORAGE RACK

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

83-6548



83-6548

MOBILE ELECTRICAL REPAIR KIT

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

01-9911-73



01-9911-73

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 NEW	14, 16, 18	Solid Barrel
83-6563 NEW	20, 22	Solid Barrel
83-6564 NEW	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
83-6517	12, 14, 16, 18, 20	Solid Barrel – 2 Indent Crimp



REMOVAL TOOLS – DEUTSCH

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

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



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

HEAVY DUTY CRIMPING AND CUTTING 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

ECONOMY 4-WAY CRIMPING TOOL



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



83-6513

- 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



83-6515



BEFORE AFTER

- 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



83-6527



83-6528

- 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



83-6509

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

83-6509 For 18-50 lb Ties

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

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



83-6561

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

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



99170

99180

99170-1

11

RETAIL & MERCHANDISING

VENTE AU DÉTAIL
ET MARCHANDISAGE

VENTA AL POR MENOR
Y COMERCIALIZACIÓN

178 Merchandising “Spinner Racks”

180 Accessory Plan-O-Grams

184 Wire/Cable Displays





EFFECTIVELY DISPLAYED PRODUCT GENERATES INCREASED SALES AND ALLOWS A CUSTOMER TO SELECT WHAT THEY NEED QUICKLY AND EFFICIENTLY, IMPROVING CUSTOMER EXPERIENCE.

STRATEGICALLY PLACED PRODUCT DISPLAYS PROVIDE CUSTOMERS THE OPPORTUNITY TO REVIEW PRODUCTS TO MAKE THE BEST SELECTION FOR THEIR SPECIFIC NEEDS. NOT ONLY DOES THIS HELP YOUR CUSTOMERS BUT IT ALLOWS YOU TO SEE QUICKLY WHAT STOCK NEEDS TO BE REPLENISHED TO AVOID A LOST SALE. INCREASE REVENUES AND PROFITS, INCREASE INVENTORY TURNS WITH GROTE'S SUGGESTED PLAN-O-GRAMS IN YOUR LOCATION.





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.

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 NEW

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

AIR & POWER DELIVERY ESSENTIALS



01065-5

Air & Power delivery connections are critical and Grote's Air & Power delivery essential plan-o-grams are a perfect solution.

Both offer Coiled air products, assorted gladhands, seals and hardware, tender springs, OEM battery cables and nose and junction boxes.

The 01065-5 features Grote's 3 in 1 air and electrical cables as well as lift gate cables.

Choose the plan-o-gram that is right for your market needs.

01065-5 – Air & Power Delivery Essentials

Includes:

- Coiled Air Products
- 3-in-1 Air and Electrical Cables
- Lift Gate Cables
- Tender Springs
- Assorted Glad Hands
- Glad Hand Grips
- Seals & Hardware
- OEM Battery Cables & Connectors
- Trailer & RV Sockets and Plugs
- Socket Breakers and High Amperage Circuit Breakers
- Nose and Junction Boxes

▶ **6' WIDE X 8' HIGH**

01065-6 – Air & Power Delivery Connections

Includes:

- Power Cords
- Coiled Air Products
- Assorted Glad Hands
- Glad Hand Grips
- Seals & Hardware
- Tender Springs
- OEM Battery Cables & Connectors
- Trailer Sockets & Plugs
- Socket Breakers and High Amperage Circuit Breakers
- Nose and Junction Boxes

▶ **4' WIDE X 4' HIGH**



01065-6

Small space? No worries!
 Wide Selection of products
 for many applications in
 one specific area. Grote's
 got it covered!

POWER DELIVERY PRODUCT REPAIR & MAINTENANCE

Essentials for Repair and maintenance of power delivery systems and equipment.

Looking for terminals and connectors along with protective and support products as well as tools? Choose the 01065-7 from Grote.

If you prefer more electrical switches, disconnects, sockets and junction boxes, as well as terminals and connectors, the 01065-8 is ideal.

You know what you need and Grote's Got It!

01065-7 – Power Delivery Repair & Maintenance

Includes:

- Heat Shrink Butt Connector Jars
- PVC and Nylon Terminals & Connectors
- Battery Connectors
- Heat Shrink Tubing
- Cable Ties and Split Loom
- Trailer Connectors
- Heat Guns
- Crimp Tools
- Primary Automotive Wire

▶ **4' WIDE X 4' HIGH**

01065-8 – Power Delivery Repair & Maintenance

Includes:

- Heat Shrink Butt Connector Jars
- PVC and Nylon Terminals & Connectors
- Battery Connectors & Disconnects
- Trailer Connectors
- Switches
- Trailer & RV Sockets and Plugs
- Junction Box

▶ **4' WIDE X 4' HIGH**



01065-7

See what is selling
 and re-stock as needed.
 Better inventory
 management means
 improved profits!



01065-8

POWER PRODUCTS



01065-9

Products that cover what you need to repair or replace parts between the power supply and the component, Grote's Wire & cable or Battery Connection Repair products are a perfect solution.

Better still, put them side by side so your customers have everything they will need at a glance!

Effective displays drive sales – Grote's Plan-o-Grams make that happen!

01065-9 – Wire & Cable Products

Includes:

- Primary Wire
- Battery Cable
- Heat Shrink Tubing & Guns
- Cable Ties
- Split Loom

▶ **4' WIDE X 4' HIGH**

01065-14 – Battery Connection: Repair & Maintenance

Includes:

- Battery Connectors
- Clamps
- Charging Clips
- Boxes
- Cutting Tools
- Assortment Terminal Kits
- Disconnect Switches
- Booster Cables

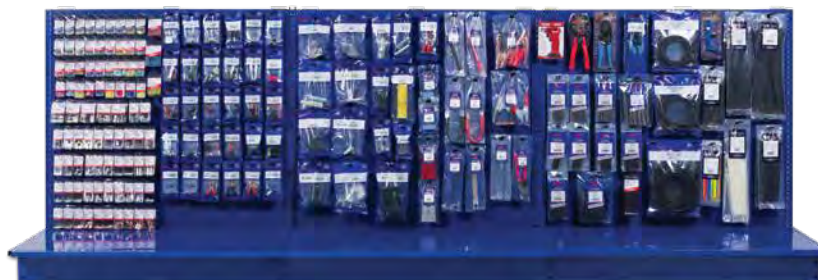
▶ **4' WIDE X 4' HIGH**



01065-14

CONNECTION REPAIR & WIRE MANAGEMENT

A total Connection Repair and Wire & Cable management solution!



01065-10

12 feet of in-demand and necessary products for connecting, supporting and protecting equipment's wiring and cable systems. The right products, the right tools, the best results! **'Connect & protect' with Grote!**

01065-10 – Connection Repair & Wire Management

Includes:

- Heat Shrink
- Nylon + PVC Terminals & Connectors
- Battery Connectors
- Clamps and Cables
- Heat Shrink & Split Flex Tubing
- Cable Ties
- Hand Tools
- Maintenance Tools
- Heat Guns
- Trailer Connectors
- Electrical Switches
- Socket Assemblies

▶ **12' WIDE X 4' HIGH**

SPECIALTY PLAN-O-GRAMS

Specialty Plan-o-Grams make selection of the needed products easier for your customers.

Set up in your location these specialty plan-o-grams from Grote for Cable tie products or Fuse and Circuit protection or a display of kits designed for the DIY'er or the pro.

A wide variety of products for any application and requirement. Your customers will find what they need, when they need it and they will thank you for that!

01065-15 – Cable Tie Products

Includes:

Cable Ties in various colors, lengths and tensile strength

▶ 4' WIDE X 4' HIGH



01065-15

01065-12 – Fuse & Circuit Protection

Includes:

The most popular Replacement Fuses, Fuse Kits, Fuse Holders, Circuit Breakers, Installation and Removal Tools

▶ 2' WIDE X 4' HIGH



01065-12

01065-11 – Fuse & Circuit Protection

Includes:

The most popular Replacement Fuses, Fuse Kits, Fuse Holders, Installation and Removal Tools

▶ 4' WIDE X 4' HIGH



01065-11

01065-13 – Power Delivery Connection Essentials

Includes:

- Heat Shrink Nylon and PVC Terminal Assortment Kits
- Heat Shrink Tubing Kits
- Copper and Tin Plated Replacement Battery Lug Kits
- OEM Weather Pack Assortment Kits
- Deutsch Assortment Kits
- Assorted Electrical Repair Kits

▶ 2' WIDE X 4' HIGH



01065-13

WIRE & CABLE DISPLAY

NEW



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**

For Primary Wire see Page 64-65





DEAL WITH REAL

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.

OPEN A RELATIONSHIP WITH GROTE

When it comes to service and support, you want to partner with a company that works like an extension of your organization. From OEMs to fleet managers to our distributors, Grote's partners all around the globe find that we help maximize profitability in a way that is convenient and supportive. You can concentrate on what you do best by letting us support you with our core expertise in Lighting and Electrical Connections & Accessory products. Great products with great support... Grote's Got It!

CONTACT US AT 1-800-268-5612 TO FIND OUT HOW WE CAN HELP YOUR BUSINESS

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