

PERMATITE "DOUBLE CRIMP" NYLON TERMINALS

PREMIUM QUALITY, NYLON INSULATION WITH INSULATION GRIP

1st Crimp Grips Wire

1. One-piece, burr free construction for maximum electrical conductivity. Electro-tin plating for maximum corrosion resistance. Annealed to relieve stress points and assure maximum installed strength.
 2. Barrel-to-pad transition designed to minimize flexing and bending.
 3. Open-end design permits visual inspection of wire location before and after crimping.
 4. Multiple "V" grooves for maximum holding power and current flow.
 5. Injection molded insulation provide the highest quality terminals in the industry.
 - 1050C rated, tough, resistant electrical grade materials.
 - Molding insures consistent wall thickness for maximum reliability after crimping.
 - Molding affords Funnel Barrel construction for easier installation.
 - Molding offers the crimp ridge and non-slip ridge.

2nd Crimp Grips Insulation

- Positive and easy wire insertion.
 - Eliminates strand hangups.
 - No wire twisting necessary.
 - Insures good crimp contact and electrical conductivity.
 - Nylon-insulated terminals feature a brass sleeve for optimum grip on insulation, strain relief and vibration protection. Sleeve is recessed for excellent flash-over protection.

8. Non-slip ridge so tool slides to end of terminal for proper crimp and better workmanship.
9. Beveled leading edge for easy insulation entry.



U.L. Listing and CSA Certification.

U.L. file number 36507 and 76317
CSA file number 22190

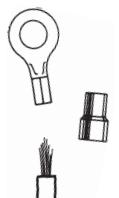
*U.L. test-U.L. 486 or U.L. 10

*CSA test-CSA C22.2 No. 65, No. 153 or No. 188

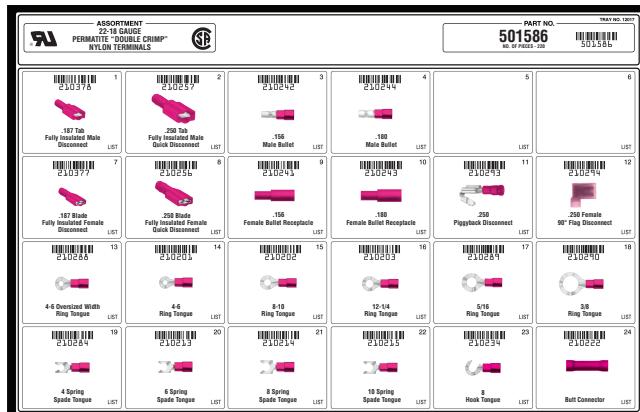
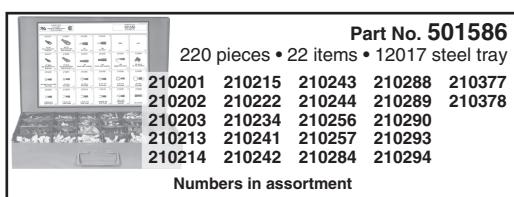
*Based upon stranded copper wire.

PERMATITE "DOUBLE-CRIMP" NYLON TERMINALS

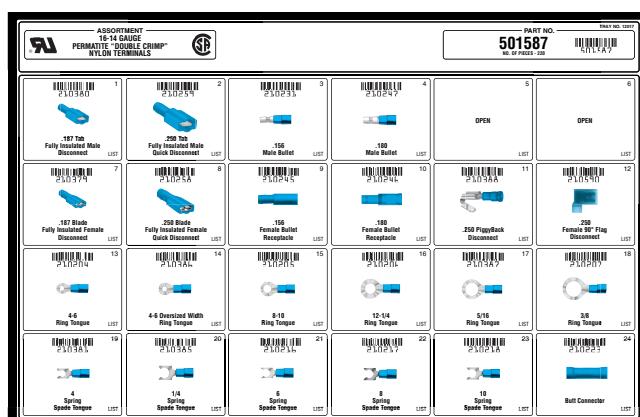
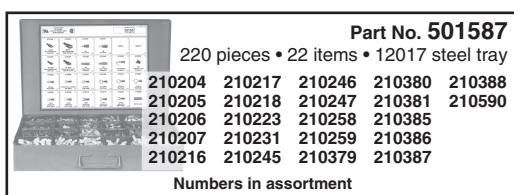
Engineered to prevent these common failures.



- Contains 22-18 ga. Permatite "Double Crimp" nylon terminals.

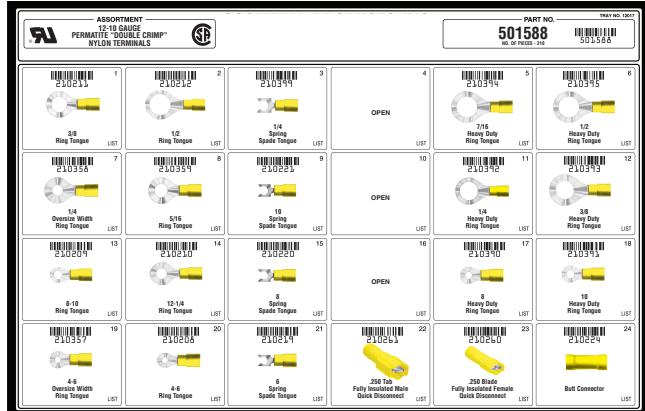


- Contains 16-14 ga. Permatite "Double Crimp" nylon terminals.

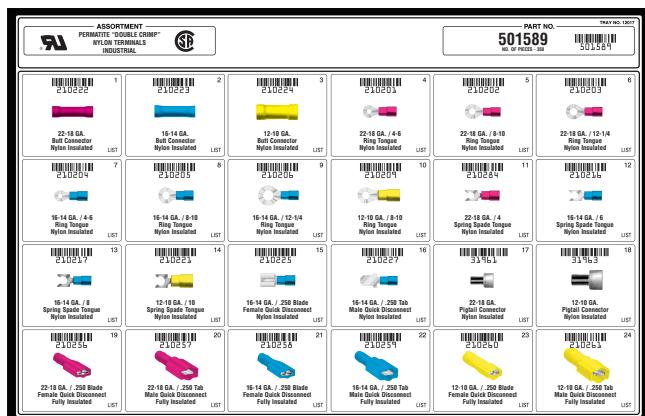
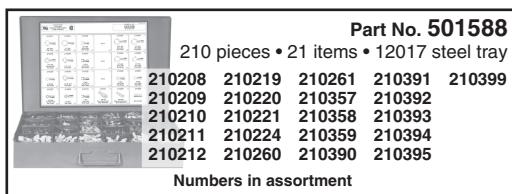


PERMATITE TERMINAL ASSORTMENTS

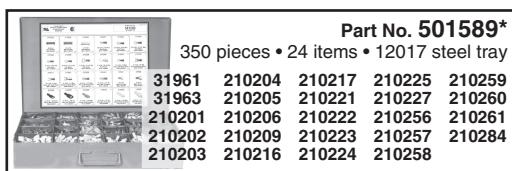
PERMATITE "DOUBLE-CRIMP" NYLON TERMINALS



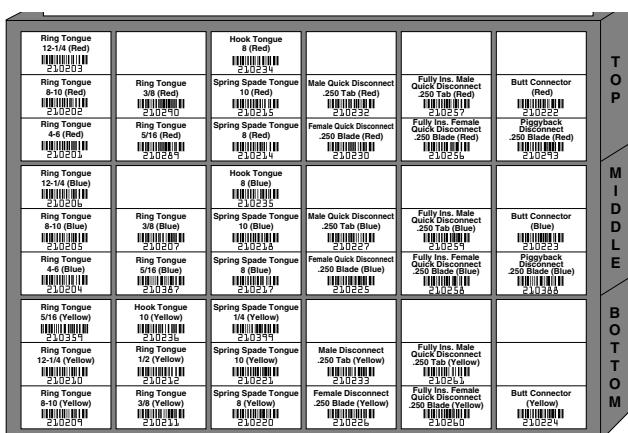
- Contains 12-10 ga. Permatite "Double Crimp" nylon terminals.



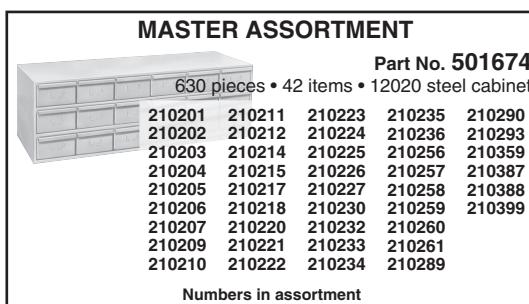
- Contains industrial Permatite "Double Crimp" nylon terminals.



*Complete Assortment Refills for Top "20" Assortments are available and are shipped in a Corrugated tray (just add RF to Part No.)



- Exceptionally broad coverage.
- 42 sizes and styles included.
- Convenient 18 drawer, 54 compartment cabinet.



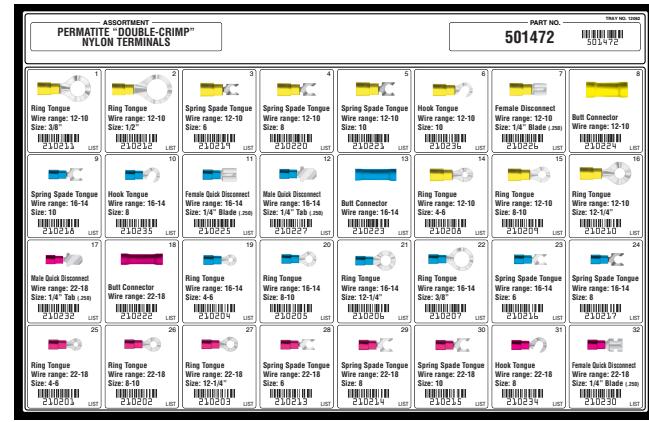
PERMATITE TERMINAL ASSORTMENTS

PERMATITE "DOUBLE-CRIMP" NYLON TERMINALS

- Expanded shop coverage.
- 32 different sizes and styles of butt connectors, rings, spades, hooks, and disconnects.

Part No. 501472*				
274 pieces • 32 items • 12062 steel tray				
210201	210208	210215	210222	210232
210202	210209	210216	210223	210234
210203	210210	210217	210224	210235
210204	210211	210218	210225	210236
210205	210212	210219	210226	
210206	210213	210220	210227	
210207	210214	210221	210230	

Numbers in assortment

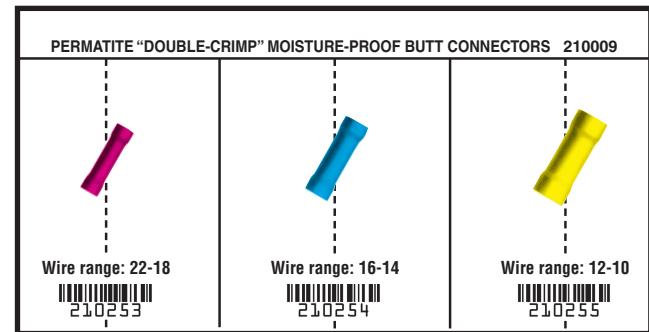


*Complete Assortment Refills for Top "20" Assortment's are available and are shipped in a Corrugated tray (just add RF to Part No.)

- Moisture resistant, butt connectors filled with silicone sealant.
- 22-18, 16-14 and 12-10 wire sizes.
- Packed in a sturdy plastic tray with size selector lid chart.

Part No. 210009		
40 pieces • 3 items • 12028 plastic tray		
210253	210254	210255

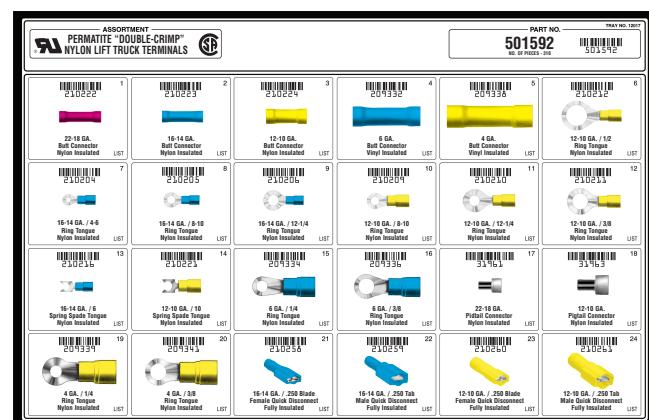
Numbers in assortment



- A selection of sizes and styles especially suited for forklift truck repair and maintenance including sizes in 6 and 4 gauge connectors.

Part No. 501592				
310 pieces • 24 items • 12017 steel tray				
31961	209338	210206	210216	210258
31963	209339	210209	210221	210259
209332	209341	210210	210222	210260
209334	210204	210211	210223	210261
209336	210205	210212	210224	

Numbers in assortment



PERMATITE "DOUBLE CRIMP" NYLON TERMINALS**PREMIUM QUALITY, NYLON INSULATION WITH INSULATION GRIP****22-18
WIRE
RANGE**Color Code:
REDPart No. **210201****210288****210202****210203****210289****210290****210266****210267**Size **4-6****4-6****8-10****12-1/4****5/16****3/8****2-4-6****6-8-10**Type **Ring Tongue****Oversized Width Ring Tongue****Ring Tongue****Ring Tongue****Ring Tongue****Ring Tongue****Multi-Stud Ring Tongue****Multi-Stud Ring Tongue****22-18
WIRE
RANGE**Color Code:
REDPart No. **210284****210213****210214****210215****210234****210376****210286****210287**Size **4****6****8****10****8****.110 Tab****.187 Blade****.187 Tab**Type **Spring Spade Tongue****Spring Spade Tongue****Spring Spade Tongue****Spring Spade Tongue****Hook Tongue****Male Disconnect****Female Disconnect****Male Disconnect****22-18
WIRE
RANGE**Color Code:
REDPart No. **210377****210378****210230****210232****210256****210257****210293****210294**Size **.187 Blade****.18 Tab****.250 Blade****.250 Tab****.250 Blade****.250 Tab****.250 Blade**Type **Fully Ins. Female Disconnect****Fully Ins. Male Disconnect****Female Quick Disconnect****Male Quick Disconnect****Fully Ins. Female Quick Disconnect****Fully Ins. Male Quick Disconnect****Piggyback Disconnect****Female 90° Flag Disconnect****22-18
WIRE
RANGE**Color Code:
REDPart No. **210368****210241****210242****210243****210244****210222****210253**Size **.156****.156****.156****.180****.180****Butt Connector**Type **Pin Connector****Female Bullet Receptacle****Male Bullet****Female Bullet Receptacle****Male Bullet****Silicone Filled Moisture Resistant Butt Connector**

PERMATITE "DOUBLE CRIMP" NYLON TERMINALS

PREMIUM QUALITY, NYLON INSULATION WITH INSULATION GRIP

16-14 WIRE RANGE

Color Code:
BLUE

Part No.	210204	210386	210205	210206	210387	210207	210268	210269
Size	4-6	4-6	8-10	12-1/4	5/16	3/8	2-4-6	6-8-10
Type	Ring Tongue	Oversized Width Ring Tongue	Multi-Stud Ring Tongue	Multi-Stud Ring Tongue				

16-14 WIRE RANGE

Color Code:
BLUE

Part No.	210381	210216	210217	210218	210385	210235	210367
Size	4	6	8	10	1/4	8	.110
Type	Spring Spade Tongue	Hook Tongue	Female Disconnect				

16-14 WIRE RANGE

Color Code:
BLUE

Part No.	210291	210292	210379	210380	210225	210227	210258	210259
Size	.187 Blade	.187 Tab	.187 Blade	.187 Tab	.250 Blade	.250 Tab	.250 Blade	.250 Tab
Type	Female Disconnect	Male Disconnect	Fully Ins. Female Disconnect	Fully Ins. Male Disconnect	Female Quick Disconnect	Male Quick Disconnect	Fully Ins. Female Quick Disconnect	Fully Ins. Male Quick Disconnect

16-14 WIRE RANGE

Color Code:
BLUE

Part No.	210388	210590	210369	210245	210231	210246	210247	210223	210254
Size	.250 Blade	.250		.156	.156	.180	.180		
Type	Piggyback Disconnect	Female 90° Flag Disconnect	Pin Connector	Female Bullet Receptacle	Male Bullet	Female Bullet Receptacle	Male Bullet	Butt Connector	Moisture Resist. Silicone Filled Butt Connector

PERMATITE "DOUBLE-CRIMP" NYLON TERMINALS**PREMIUM QUALITY, NYLON INSULATION WITH INSULATION GRIP****12-10 WIRE RANGE**Color Code:
YELLOW

Part No.	210208	210357	210209	210210	210358	210359	210211	210212
Size	4-6	4-6	8-10	12-1/4	1/4	5/16	3/8	1/2
Type	Ring Tongue	Oversized Width Ring Tongue	Ring Tongue	Ring Tongue	Oversized Width Ring Tongue	Ring Tongue	Ring Tongue	Ring Tongue

12-10 WIRE RANGEColor Code:
YELLOW

Part No.	210390	210391	210392	210393	210394	210395	210270	210219
Size	8	10	1/4	3/8	7/16	1/2	6-8-10	6
Type	Heavy Duty Ring Tongue	Multi-Stud Ring Tongue	Spring Spade Tongue					

12-10 WIRE RANGEColor Code:
YELLOW

Part No.	210220	210221	210399	210236	210226	210233	210260	210261
Size	8	10	1/4	10	.250 Blade	.250 Tab	.250 Blade	.250 Tab
Type	Spring Spade Tongue	Spring Spade Tongue	Spring Spade Tongue	Hook Tongue	Female Disconnect	Male Disconnect	Fully Ins. Female Quick Disconnect	Fully Ins. Male Quick Disconnect

210299 Set**12-10 WIRE RANGE**Color Code:
YELLOW

Part No.	210370	210248	210224	210255
Size	.156			
Type	Pin Connector	Male Bullet	Butt Connector	Silicone Filled Moisture Resistant Butt Connector

LARGE DIAMETER NYLON SOLDERLESS TERMINALS**SOLDERLESS TERMINALS - FLARED NYLON INSULATION *****8 GA.
WIRE
RANGE**

Color Code:
RED
.050 stock



Part No.	209326	209327	209328	209329	209330	209331	209325
Size	10	1/4	5/16	3/8	7/16	1/2	
Type	Ring Tongue	Butt Connector					

**6 GA.
WIRE
RANGE**

Color Code:
BLUE
.050 stock



Part No.	209333	209334	209335	209336	209337	209332
Size	10	1/4	5/16	3/8	7/16	1/2
Type	Ring Tongue					

**4 GA.
WIRE
RANGE**

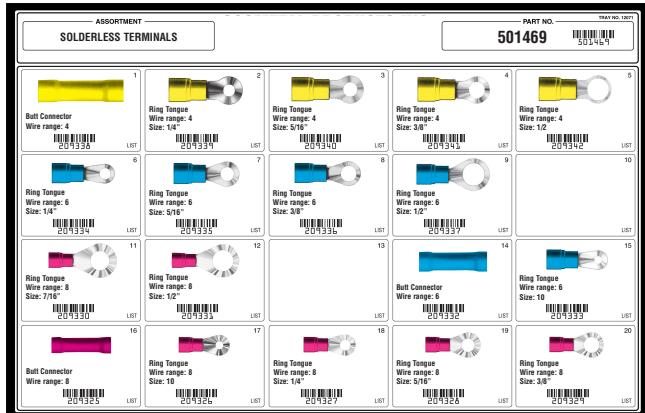
Color Code:
YELLOW
.075 stock



Part No.	209339	209340	209341	209342	209338
Size	1/4	5/16	3/8	1/2	
Type	Ring Tongue	Ring Tongue	Ring Tongue	Ring Tongue	Butt Connector

*Butt connectors flared vinyl insulation.

NOTE: THESE CONNECTORS ARE NOT PART OF THE PERMATITE DOUBLE CRIMP LINE.

LARGE DIAMETER NYLON SOLDERLESS TERMINALS**SOLDERLESS TERMINALS - FLARED NYLON INSULATION ***

- For 8, 6, and 4 ga. wire.
- Includes Butt Connectors and Ring Tongue Connectors.

Part No. 501469	
108 pieces • 18 items • 12071 steel tray	
209325	209330
209326	209331
209327	209332
209328	209333
209329	209334
209335	
209336	
209337	
209338	
209339	
Numbers in assortment	

*Butt connectors flared vinyl insulation.

NOTE: THESE CONNECTORS ARE NOT PART OF THE PERMATITE DOUBLE CRIMP LINE.

MULTILINK TERMINALS

THE COMPONENTS

The Crimp Connector:

- Zippered brazed seam for superior crimp performance.
- Window for visual inspection.
- Wire stop to prevent over-insertion.
- Serrated inner barrel for extra crimp strength.



The Solder:

- Flux coating to clean metal surfaces.
- Pre-measured solder to deliver the right amount.
- Low-temp solder alloy for ease of installation.



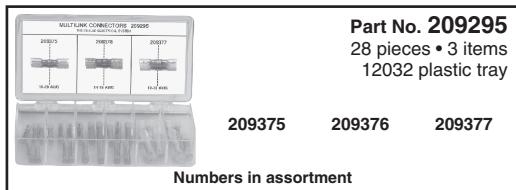
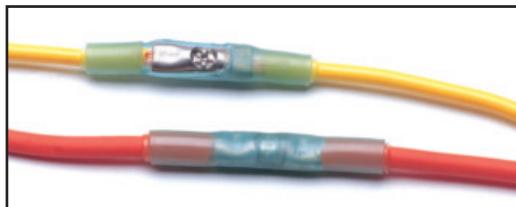
The Heat Shrink Tubing:

- Adhesive-lined polyolefin to seal the connection.
- Color-coded with wire gauge imprint for easy size identification.
- Translucent tubing to allow for visual inspection.



THE ULTIMATE CONNECTION

Since 1994, General Motors has mandated all electrical connection repairs be crimped, soldered and properly sealed against moisture and corrosion. In 1997, Freightliner Trucks issued a similar requirement. Only MultiLink satisfies this OE requirement in a convenient one-piece repair splice.

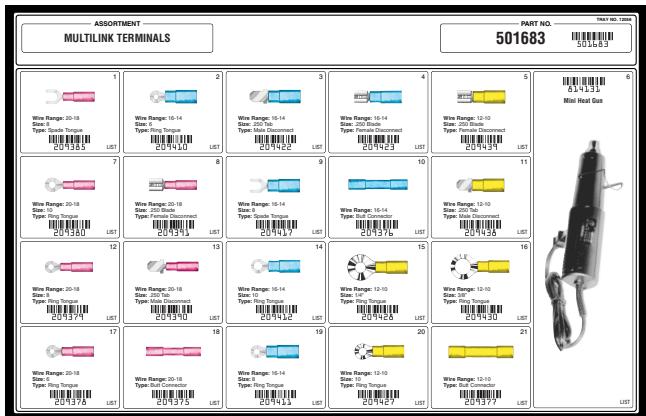


PART NUMBER	WIRE SIZE	COLOR	QTY
209375	20-18	Red	25
209376	16-14	Blue	25
209377	12-10	Yellow	25

Easy to install

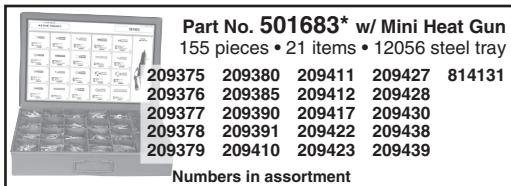


MULTILINK TERMINAL SHOP ASSORTMENTS

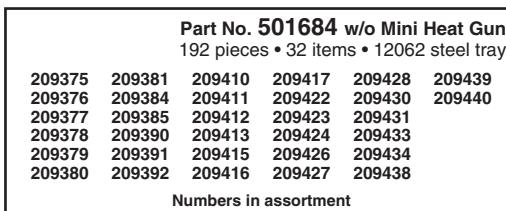


*Complete Assortment Refills for Top "20" Assortment's are available and are shipped in a Corrugated tray (just add RF to Part No.)

- Includes ring, spade, butt and quick disconnects in wire sizes 20 through 10 AWG.
- Available in both steel and plastic trays.
- Assortment #501683 includes #814131 heat gun.



Numbers in assortment

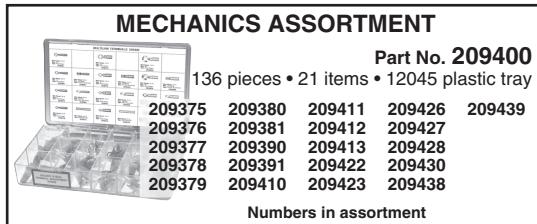


Numbers in assortment

MULTILINK TERMINALS

MULTILINK TERMINAL ASSORTMENT

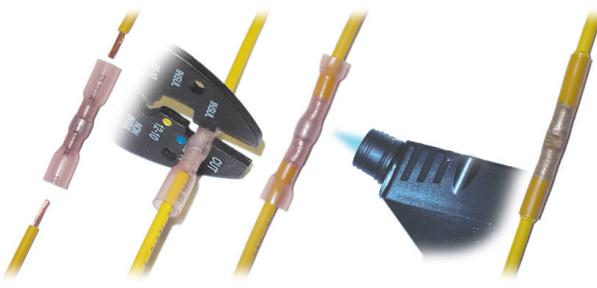
- Includes ring, spade, butt and quick disconnects in wire sizes 20 through 10 AWG.



MULTILINK TERMINAL ASSORTMENT 209400				
209381	209433	209430	209428	209431
Wire Range: 20-18 Size: 1/8 Type: Ring Tongue	Wire Range: 16-14 Size: 10 Type: Ring Tongue	Wire Range: 12-10 Size: 10 Type: Ring Tongue	Wire Range: 12-10 Size: 10 Type: Ring Tongue	Wire Range: 12-10 Size: 10 Type: Female Disconnect
209380	209431	209432	209429	209432
Wire Range: 20-18 Size: 10 Type: Ring Tongue	Wire Range: 20-18 Size: 250 Blade Type: Female Disconnect	Wire Range: 16-14 Size: 10 Type: Female Disconnect	Wire Range: 12-10 Size: 10 Type: Ring Tongue	Wire Range: 12-10 Size: 250 Blade Type: Female Disconnect
209379	209430	209421	209427	209438
Wire Range: 20-18 Size: 8 Type: Ring Tongue	Wire Range: 20-18 Size: 250 Tab Type: Male Disconnect	Wire Range: 16-14 Size: 8 Type: Ring Tongue	Wire Range: 12-10 Size: 10 Type: Male Disconnect	Wire Range: 12-10 Size: 10 Type: Male Disconnect
209378	209437	209430	209426	209437
Wire Range: 20-18 Size: 6 Type: Ring Tongue	Wire Range: 20-18 Size: 6 Type: Butt Connector	Wire Range: 16-14 Size: 6 Type: Ring Tongue	Wire Range: 12-10 Size: 10 Type: Ring Tongue	Wire Range: 12-10 Size: 10 Type: Butt Connector

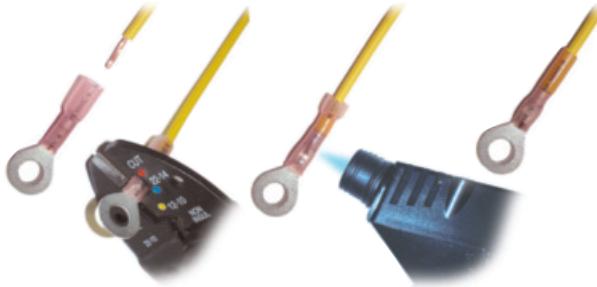
BUTT CONNECTOR INSTALLATION

- Strip the wire 3/8".
- Select a connector that matches the wire gauge and insert the wire into the connector barrel.
- Make sure the wire is properly seated and crimp the connector using an **insulated** connector crimping tool nest that matches the color gauge of the connector. **Do not crimp the solder sleeve.**
- Repeat steps 1 thru 3 for the other side.
- Apply heat evenly around the length of the tubing (including the crimp area) from the center out to the ends until the tubing fully recovers and the adhesive flows.
- Continue distributing the heat over the entire connector barrel until the solder flows into the opening.
- Remove from the heat and let cool for the ULTIMATE connection.



RING, SPADE, SLIP-ON TERMINAL INSTALLATION

- Strip the wire 1/2".
- Select a connector that matches the wire gauge and insert the wire into the connector barrel.
- Make sure the wire is properly seated and crimp the terminal barrel (the 1/4" of the barrel closest to the terminal end) using an **insulated** connector crimping tool nest that matches the color gauge of the connector.
- Apply heat evenly around the length of the tubing (including the crimp area) until the tubing fully recovers and the adhesive flows.
- Continue distributing the heat over the solder sleeve until the solder flows into the terminal barrel.
- Remove from the heat and let cool for the ULTIMATE connection.

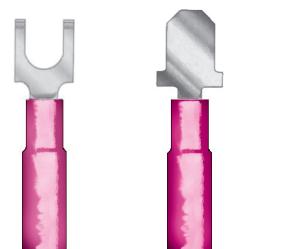
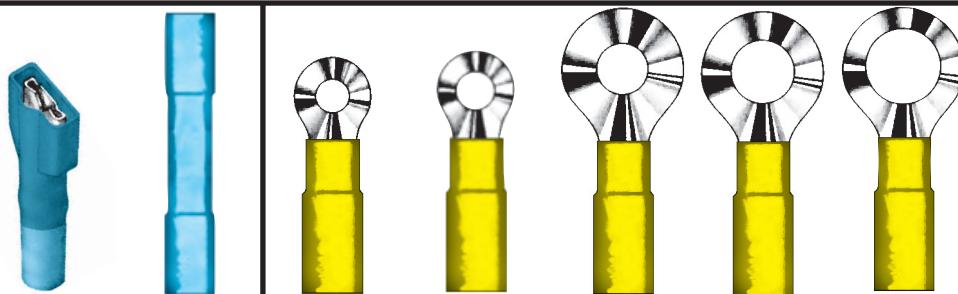


MULTILINK TERMINALS

20-18 WIRE RANGE
Color Code:
RED



Part No.	209378	209379	209380	209381	209382	209383	209384	209385
Size	6	8	10	1/4	5/16	3/8	6	8
Type	Ring Tongue	Spade Tongue	Spade Tongue					

MULTILINK TERMINALS**MULTILINK TERMINALS****20-18 WIRE RANGE**Color Code:
RED**16-14 WIRE RANGE**
Color Code: BLUE**16-14 WIRE RANGE**Color Code:
BLUE**16-14 WIRE RANGE**Color Code:
BLUE**12-10 WIRE RANGE**Color Code:
YELLOW

Part No.	209431	209433	209434	209438	209439	209440	209377
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Size	1/2	8	10	.250 Tab	.250 Blade	.250 Blade	
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Type	Ring Tongue	Spade Tongue	Spade Tongue	Male Disconnect	Female Disconnect	Fully Ins. Female Disconnect	Butt Connector
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MULTILINK TERMINALS

MULTILINK STEP-DOWN BUTT CONNECTORS

For connecting a larger wire to a smaller wire.

Has two stripes - one on each end - to indicate which wire size to insert, and which crimp die to use.

- Available in the following styles -



Uninsulated shown on page 37



Shrink 'N Seal shown on page 26
Sealed Crimp Connector



Multilink
Sealed Crimp & Solder Connector

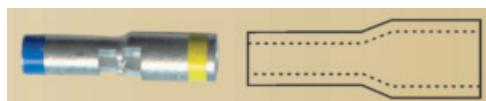
WHY IS OURS SO MUCH BETTER?

Theirs



The outside diameter of the butt connector is the same on both ends and only the inside diameter is adjusted for the different wire gauge. This means that the side for smaller wire has a much thicker wall than normal and is extremely difficult to crimp. **POTENTIAL FOR WIRE PULL-OUT!**

Ours



We vary the inside AND the outside diameter of the connector which means that both sides will make a positive crimp.
STRONG MECHANICAL TERMINATION!

Theirs



Has a color stripe to indicate where the smaller size of wire is inserted. However, it must be crimped in the larger crimp die. For example, on their connector for 14-16 to 10-12 AWG, the blue stripe indicates the side where a 14-16 AWG wire is to be inserted. However, it must be crimped in the Yellow crimp die. **CONFUSING!**

Ours



Has two stripes - one on each end - to indicate which wire size to insert. Plus, the stripe matches the crimp die that needs to be used. For example the blue stripe indicates the side where a 14 or 16 AWG wire is to be inserted, and it will be crimped in the blue crimp die. **MAKES SENSE!**

MULTILINK STEP-DOWN BUTT CONNECTORS

Sealed crimp & solder connectors.

209460



209461



209462



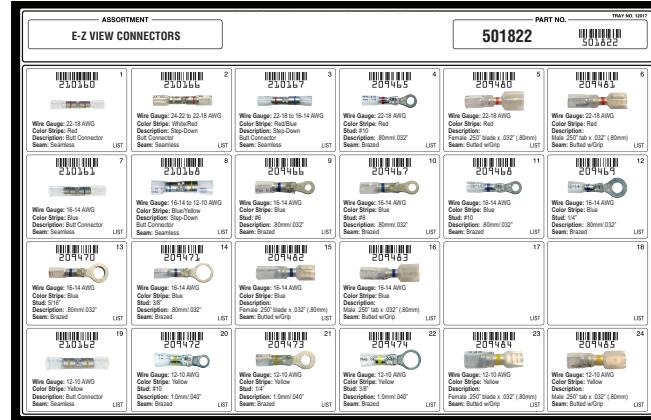
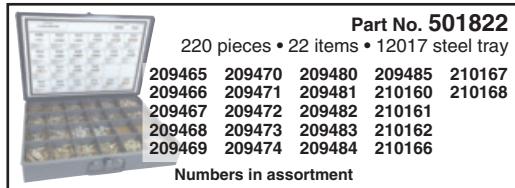
PART NUMBER	QTY	SIDE #1 COLOR STRIPE	WIRE	CRIMP DIE (INSULATED)	SIDE #2 COLOR STRIPE	WIRES	CRIMP DIE (INSULATED)
209460	25	White	24-22 AWG	White (24-22 AWG)	Red	20-18 AWG	Red (20-18 AWG)
209461	25	Red	20-18 AWG	Red (20-18 AWG)	Blue	16-14 AWG	Blue (16-14 AWG)
209462	25	Blue	16-14 AWG	Blue (16-14 AWG)	Yellow	12-10 AWG	Yellow (12-10 AWG)

HEAT SHRINK CONNECTORS

E-Z VIEW COLOR-CODED CONNECTORS

Provides optimal visual assurance that the terminal is installed properly.

- Offers visual inspection of the wire condition over the life of the terminal.
- Color-coded stripes identify the wire gauge size to be used and where to position crimp for proper installation.
- Includes Butt, Spade and Step-Down Butt Connectors, Ring Terminals & Quick Disconnects.



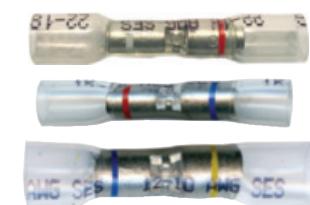
BUTT CONNECTORS

PART #	QTY.	WIRE GAUGE	COLOR STRIPE	DESCRIPTION	SEAM
210160	100	22-18 AWG	Red	Butt Connector	Seamless
210161	100	16-14 AWG	Blue	Butt Connector	Seamless
210162	100	12-10 AWG	Yellow	Butt Connector	Seamless



STEP-DOWN BUTT CONNECTORS

PART #	QTY.	WIRE GAUGE	COLOR STRIPE	DESCRIPTION	SEAM
210166	25	24-22 AWG to 22-18 AWG	White / Red	Step-Down Butt	Seamless
210167	25	22-18 AWG to 16-14 AWG	Red / Blue	Step-Down Butt	Seamless
210168	25	16-14 AWG to 12-10 AWG	Blue / Yellow	Step-Down Butt	Seamless
210169	25	12-10 AWG to 8 AWG	Yellow / Red	Step-Down Butt	Seamless



RING TERMINALS

PART #	QTY.	WIRE GAUGE	COLOR STRIPE	STUD	DESCRIPTION	SEAM
209463	25	22-18 AWG	Red	#6 Stud	.80mm/.032"	Brazed
209464	25	22-18 AWG	Red	#8 Stud	.80mm/.032"	Brazed
209465	25	22-18 AWG	Red	#10 Stud	.80mm/.032"	Brazed
209466	25	16-14 AWG	Blue	#6 Stud	.80mm/.032"	Brazed
209467	25	16-14 AWG	Blue	#8 Stud	.80mm/.032"	Brazed
209468	25	16-14 AWG	Blue	#10 Stud	.80mm/.032"	Brazed
209469	25	16-14 AWG	Blue	1/4" Stud	.80mm/.032"	Brazed
209470	25	16-14 AWG	Blue	5/16" Stud	.80mm/.032"	Brazed
209471	25	16-14 AWG	Blue	3/8" Stud	.80mm/.032"	Brazed
209472	25	12-10 AWG	Yellow	#10 Stud	1.0mm/.040"	Brazed
209473	25	12-10 AWG	Yellow	1/4" Stud	1.0mm/.040"	Brazed
209475	25	12-10 AWG	Yellow	5/16" Stud	1.0mm/.040"	Brazed
209474	25	12-10 AWG	Yellow	3/8" Stud	1.0mm/.040"	Brazed



QUICK DISCONNECTS

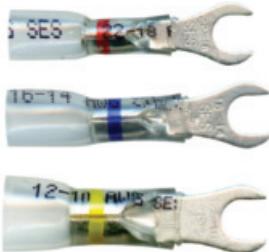
PART #	QTY.	WIRE GAUGE	COLOR STRIPE	DESCRIPTION	SEAM
209480	25	22-18 AWG	Red	Female .250" blade x .032" (.80mm)	Butted w/Grip
209481	25	22-18 AWG	Red	Male .250" tab x .032" (.80mm)	Butted w/Grip
209482	25	16-14 AWG	Blue	Female .250" blade x .032" (.80mm)	Butted w/Grip
209483	25	16-14 AWG	Blue	Male .250" tab x .032" (.80mm)	Butted w/Grip
209484	25	12-10 AWG	Yellow	Female .250" blade x .032" (.80mm)	Butted w/Grip
209485	25	12-10 AWG	Yellow	Male .250" tab x .032" (.80mm)	Butted w/Grip



US Patent Protected • Rated for 105° C (221° F)

HEAT SHRINK CONNECTORS

E-Z VIEW COLOR-CODED CONNECTORS



SPADE TERMINALS

PART #	QTY.	WIRE GAUGE	COLOR STRIPE	STUD	DESCRIPTION	SEAM
209493	25	22-18 AWG	Red	#6 Stud	.80mm/.032"	Brazed
209494	25	22-18 AWG	Red	#8 - #10 Stud	.80mm/.032"	Brazed
209495	25	16-14 AWG	Blue	#6 Stud	.80mm/.032"	Brazed
209496	25	16-14 AWG	Blue	#8 - #10 Stud	.80mm/.032"	Brazed
209497	25	12-10 AWG	Yellow	#8 - #10 Stud	1.0mm/.040"	Brazed
209498	25	12-10 AWG	Yellow	1/4" Stud	1.0mm/.040"	Brazed

US Patent Protected • Rated for 105° C (221° F)

SHRINK 'N SEAL™ TERMINALS**SHRINK 'N SEAL™ CONNECTORS**

With heat shrink tubing. Weatherproofs, seals and connects quickly & easily.

- Special dual walled, adhesive sealed splice is specially designed to seal out moisture and corrosion.
- The adhesive is a polyimide, uniquely formulated for high dielectric strength.
- Special encapsulation and flexible strain relief.
- The radiation cross-linked polyolefin sleeve meets the demanding requirements of mil-1-23053/4.
- Non melting. Thermally stabilized.
- Special hot tear strength that allows crimping of wire barrel without damage to the sealing sleeve.
- See-through, clear heat-shrinkable tubing eliminates errors in crimping and makes in-line splicing quick, simple and sure.

**ANOTHER
PROBLEM
SOLVER!!**

THE BEST CHOICE FOR:

- | | |
|-----------------------------|------------------------|
| • Automobile & truck wiring | • Industrial machinery |
| • Trailers & RV's | • Construction equip. |
| • Marine applications | • Outdoor lighting |
| • Mining operations | • Air conditioners |

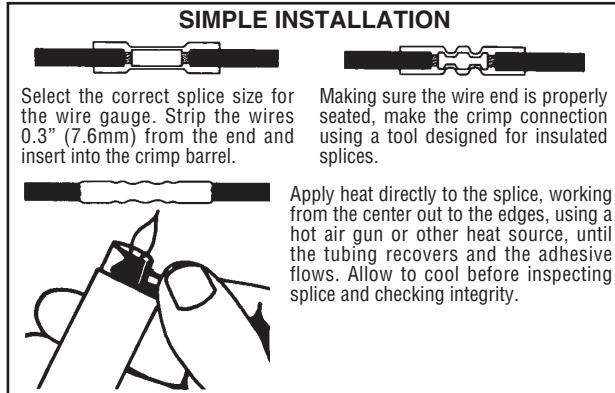
Encapsulates and provides adhesive environmental seal.

Funnel entry for easy insertion of pre-stripped wire.

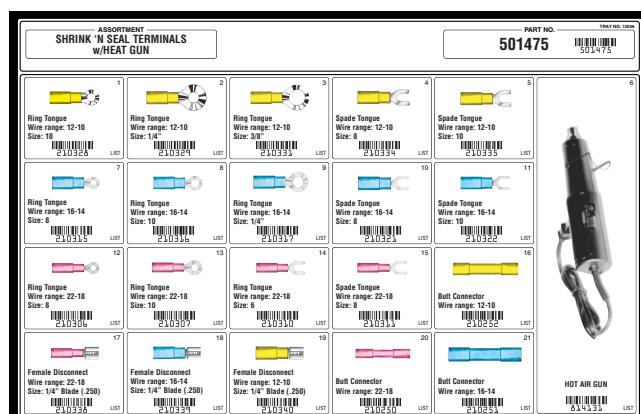
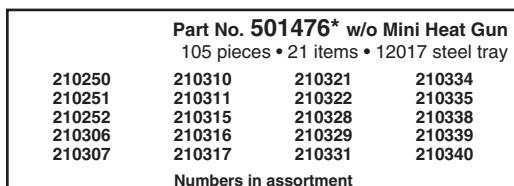
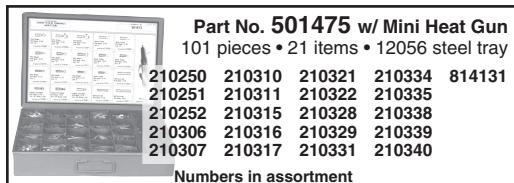
Polyolefin outer wall is non-melting and has special hot tear strength that allows crimping of nylon insulation & splice barrel without damage to the sealing sleeve.

Flexible strain relief which transmits strain gradually along wire jacket.

Meets Underwriter Laboratories, Canadian Standards Association, and U.S. Military Specification Approvals, complete UL, CSA and MIL spec approved product listings available upon request.

**SHRINK 'N SEAL TERMINAL ASSORTMENT****With Optional Heat Gun**

- Includes: Ring, Spade, Butt and Quick Disconnects
- Packed in a sturdy metal tray with size selector lid chart.



*Complete Assortment Refills for Top "20" Assortment's are available and are shipped in a Corrugated tray (just add RF to Part No.)

SHRINK 'N SEAL™ TERMINALS

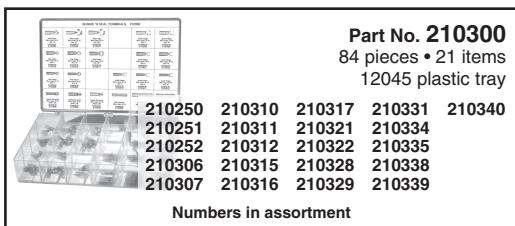
SHRINK 'N SEAL STEP-DOWN CONNECTORS

Sealed Crimp Connectors.



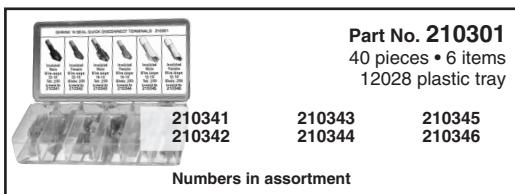
PART NUMBER	QTY	SIDE #1 COLOR STRIPE	WIRE	CRIMP DIE (INSULATED)	SIDE #2 COLOR STRIPE	WIRES	CRIMP DIE (INSULATED)
210538	25	White	24-22 AWG	White (24-22 AWG)	Red	20-18 AWG	Red (20-18 AWG)
210539	25	Red	20-18 AWG	Red (20-18 AWG)	Blue	16-14 AWG	Blue (16-14 AWG)
210540	25	Blue	16-14 AWG	Blue (16-14 AWG)	Yellow	12-10 AWG	Yellow (12-10 AWG)
210541	25	Yellow	12-10 AWG	Yellow (12-10 AWG)	Red	8 AWG	Red (8 AWG)

SHRINK 'N SEAL TERMINAL ASSORTMENT



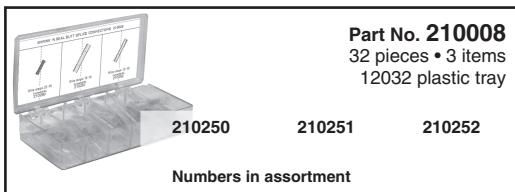
- Includes: Ring, Spade, Butt and Quick Disconnects
- 22-18, 16-14, and 12-18 wire sizes.

FULLY INSULATED SHRINK 'N SEAL QUICK DISCONNECT ASSORTMENT



- The most popular quick-disconnects you'll need.
- 22-18, 16-14, and 12-10 wire sizes.

SHRINK 'N SEAL BUTT CONNECTOR ASSORTMENT



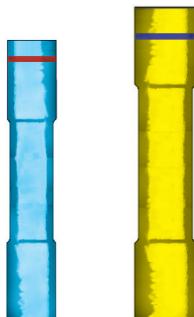
- Butt connectors with heat shrink tubing.
- 22-18, 16-14, and 12-10 wire sizes.

THE ALL-WEATHER, HEAT SEALABLE NYLON CONNECTOR

STEP DOWN BUTT CONNECTORS

For complete water tight seal.

The perfect solution when two wires need to be spliced to a single wire or from a larger to smaller gauge wire.



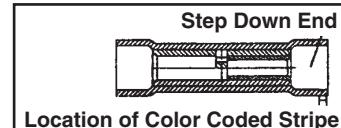
Part No. 210483

210484

Wire Size 22-18 to 16-14 16-14 to 12-10

Color Code Blue with Red Stripe Yellow with Blue Stripe

Cutaway View



SHRINK 'N SEAL™ TERMINALS**THE ALL-WEATHER, HEAT SEALABLE NYLON CONNECTOR****24-22
WIRE
RANGE**Color Code:
CLEAR

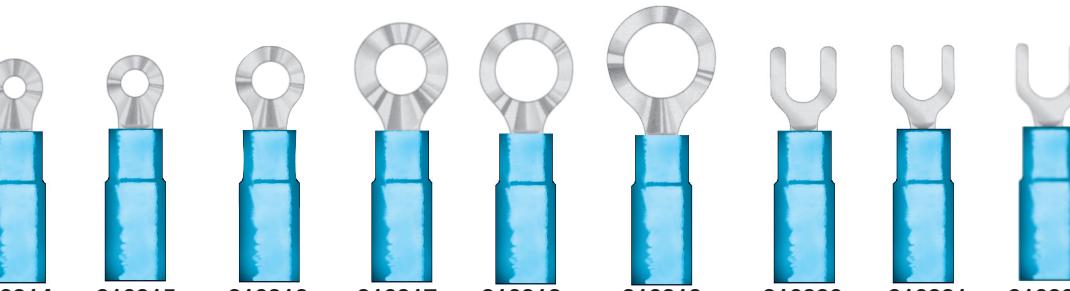
Part No.	210347	210348	210382	210383	210384
Size	4	6	4	6	
Type	Ring Tongue	Ring Tongue	Spade Tongue	Spade Tongue	Butt Connector

**22-18
WIRE
RANGE**Color Code:
RED

Part No.	210305	210306	210307	210308	210352	210309	210310	210311
Size	6	8	10	1/4	5/16	3/8	6	8
Type	Ring Tongue	Spade Tongue	Spade Tongue					

**22-18
WIRE
RANGE**Color Code:
RED

Part No.	210312	210250	210302	210303	210313	210341	210342	210338	210396
Size	10		.157	.157		.250 Tab	.250 Blade	.250 Blade	.250 Tab
Type	Spade Tongue	Butt Connector	Bullet Receptacle Female	Bullet Receptacle Male	Y Connector	Fully Ins. Male Disconnect	Fully Ins. Female Disconnect	Female Disconnect	Male Disconnect

**16-14
WIRE
RANGE**Color Code:
BLUE

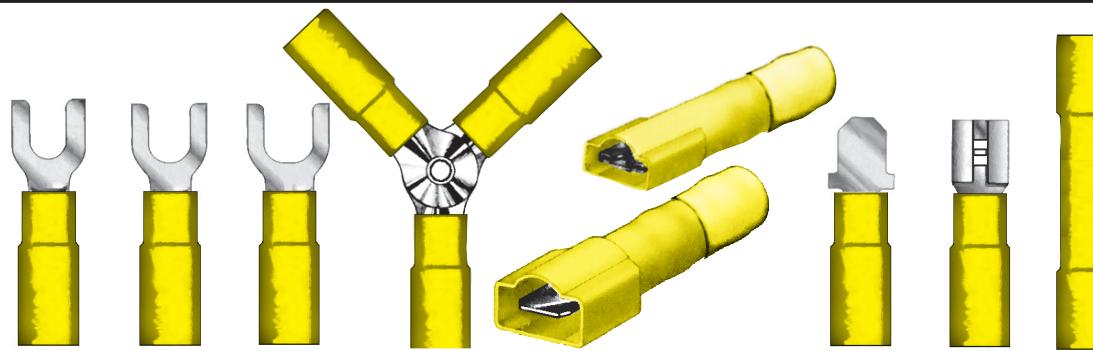
Part No.	210314	210315	210316	210317	210318	210319	210320	210321	210322
Size	6	8	10	1/4	5/16	3/8	6	8	10
Type	Ring Tongue	Spade Tongue	Spade Tongue	Spade Tongue					

SHRINK 'N SEAL™ TERMINALS**THE ALL-WEATHER, HEAT SEALABLE NYLON CONNECTOR****16-14 WIRE RANGE**Color Code:
BLUE

Part No.	210323	210397	210339	210304	210325	210324	210343	210344	210251
Size	10	.250 Tab	.250 Blade	.157	.157		.250 Tab	.250 Blade	
Type	Hook Tongue	Male Disconnect	Female Disconnect	Bullet Receptacle Female	Bullet Receptacle Male	Y Connector	Fully Ins. Male Disconnect	Fully Ins. Female Disconnect	Butt Connector

12-10 WIRE RANGEColor Code:
YELLOW

Part No.	210326	210327	210328	210329	210330	210331	210332	210333
Size	6	8	10	1/4	5/16	3/8	1/2	6
Type	Ring Tongue	Spade Tongue						

12-10 WIRE RANGEColor Code:
YELLOW

Part No.	210334	210335	210336	210337	210345	210346	210398	210340	210252
Size	8	10	1/4		.250 Tab	.250 Blade	.250 Tab	.250 Blade	
Type	Spade Tongue	Spade Tongue	Spade Tongue	Y Connector	Fully Ins. Male Disconnect	Fully Ins. Female Disconnect	Male Disconnect	Female Disconnect	Butt Connector

8 WIRE RANGEColor Code:
RED

Part No.	210505	210506	210507	210508	210509	210510
Size	10	1/4	5/16	3/8	1/2	
Type	Ring Tongue	Butt Connector				

SHRINK 'N SEAL™ TERMINALS**LONG NECK RING TERMINALS**

- Long neck designed to be insulated with heat shrink tubing.
- Long neck ensures proper seal.
- Assortment contains long neck terminals & butt connectors.

SUPERIOR CONTACT

- Long neck allows ring terminals to be stacked with maximum contact

VISUAL INSPECTION

- 45° barrel allows installer to see wire is fully inserted and wire is crimped to barrel
- 45° barrel ensures wire is stripped proper length



Part No. 501774									
170 pieces • 17 items • 12056 steel tray									
209501	209505	209509	209513	210252					
209502	209506	209510	209514						
209503	209507	209511	210250						
209504	209508	209512	210251						

Numbers in assortment

**22-18
WIRE
RANGE**

Color Code:
RED



Part No.	209501	209502	209503
Size	6	8	10
Type	Ring Tongue	Ring Tongue	Ring Tongue

**16-14
WIRE
RANGE**

Color Code:
BLUE



Part No.	209504	209505	209506	209507	209508	209509
Size	6	8	10	1/4	5/16	3/8
Type	Ring Tongue					

**12-10
WIRE
RANGE**

Color Code:
YELLOW



Part No.	209510	209511	209512	209513	209514
Size	8	10	1/4	5/16	3/8
Type	Ring Tongue				

NON-INSULATED TERMINALS

UNINSULATED STEP-DOWN CONNECTORS

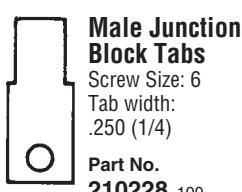


Unsealed - No Heat Shrink Tubing.

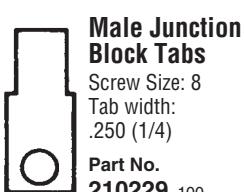
PART NUMBER	QTY	SIDE #1 COLOR STRIPE	WIRE	CRIMP DIE (INSULATED)	SIDE #2 COLOR STRIPE	WIRES	CRIMP DIE (INSULATED)
209450	50	White	24-22 AWG	White (24-22 AWG)	Red	20-18 AWG	Red (20-18 AWG)
209451	50	Red	20-18 AWG	Red (20-18 AWG)	Blue	16-14 AWG	Blue (16-14 AWG)
209452	50	Blue	16-14 AWG	Blue (16-14 AWG)	Yellow	12-10 AWG	Yellow (12-10 AWG)
209453	50	Yellow	12-10 AWG	Yellow (12-10 AWG)	Red	8 AWG	Red (8 AWG)

QUICK DISCONNECT TERMINALS

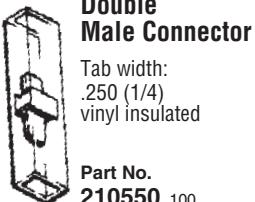
Convert stud terminals to quick disconnects.



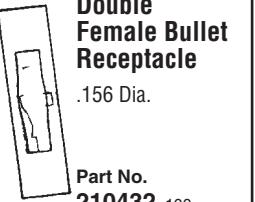
Male Junction Block Tabs
Screw Size: 6
Tab width: .250 (1/4)
Part No. 210228 100



Male Junction Block Tabs
Screw Size: 8
Tab width: .250 (1/4)
Part No. 210229 100



Double Male Connector
Tab width: .250 (1/4)
vinyl insulated
Part No. 210550 100



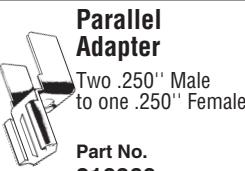
Double Female Bullet Receptacle
.156 Dia.
Part No. 210432 100



"Y" Adapter
Two .250" Male
to one .250" Female
Part No. 210462 100



Piggy-Back Adapter
Two .250" Male
to one .250" Female
Part No. 210463 100



Parallel Adapter
Two .250" Male
to one .250" Female
Part No. 210360 25



Female Tab
26-20 ga. wire
Tab width: .110
Non-Insulated
Part No. 210361 50



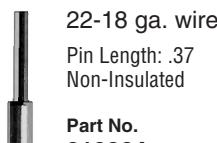
Female Tab
16-14 ga. wire
Tab width: .110
Non-Insulated
Part No. 210362 50



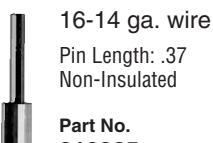
Female Bullet Receptacle
18-14 ga. wire
.156 Dia.
Non-Insulated
Part No. 210363 25

WIRE PIN TERMINALS

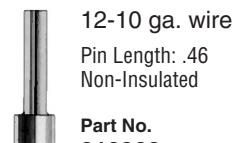
Used in truck/trailer junctions & plugs, and in European terminal blocks.



22-18 ga. wire
Pin Length: .37
Non-Insulated
Part No. 210364 50

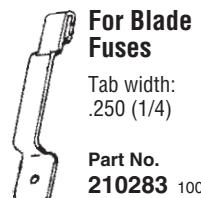


16-14 ga. wire
Pin Length: .37
Non-Insulated
Part No. 210365 50

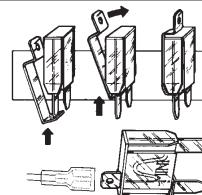


12-10 ga. wire
Pin Length: .46
Non-Insulated
Part No. 210366 50

FUSE TAP



For Blade Fuses
Tab width:
.250 (1/4)
Part No. 210283 100



MINIFUSE TAP ADAPTER



Part No. 615233 50

Directions for installation:

Tap the hot side of the MINIFUSE to power car stereos, alarms, CB's & add-on accessories.

Slip the leg of a MINIFUSE through the contact slot of the tap,
fold the tap over the top into the vehicle's MINIFUSE block.

To tap current slip a crimped .187 fully insulated female
quick connect over the tab of the MINIFUSE and plug.

MATE-N-LOK™ TERMINALS

Commonly used in cellular phone and communication equipment installations, office machines
and machine controls.



Male Terminal
20-14 ga. wire
.084 dia. pin
Single barb mates
with 210171
Part No.
210170 25



Female Terminal
20-14 ga. wire
.084 dia. pin
Single barb mates
with 210171
Part No.
210171 25



Male Terminal
20-14 ga. wire
.084 dia. pin
Dual barb mates
with 210173
Part No.
210172 25



Female Terminal
20-14 ga. wire
.084 dia. pin
Dual barb mates
with 210172
Part No.
210173 25

DEUTSCH CONNECTORS

DEUTSCH DT SERIES CONNECTORS

Environmentally sealed connectors for cable connections on engines, transmissions, chassis, brake systems, lights and cabs in the fleet, agricultural and equipment industries.

- Thermoplastic housings and silicone seals rated -55°C to 125°C.
- Withstands submersion in three feet of water.
- Current rating (maximum) 13 amps.
- **ALL TERMINALS REQUIRE A LOCKING WEDGE.**

- **Material specifications:**
Housings (plug and receptacle): Thermoplastic.
Seals: Silicone elastomer.
Locking wedge: Thermoplastic.
Contacts: Copper alloy, nickel plated.

PLUGS



PART PLUG NUMBER	CAVITIES	LOCKING WEDGE	QTY
206923	2	206929	5
206924	3	206930	5
206925	4	206931	5
206926	6	206932	5
206927	8	206933	2
206928	12	206934	2

RECEPTACLES



PART RECEPTACLE NUMBER	CAVITIES	LOCKING WEDGE	QTY
206910	2	206916	5
206911	3	206917	5
206912	4	206918	5
206913	6	206919	5
206914	8	206920	2
206915	12	206921	2

FEMALE SOCKET TERMINAL

- Use with DT series plugs.
- Wire range: 16-14 ga.

Part No. 206935 10

SEALING PLUG



Part No. 206936 10

MALE PIN TERMINAL



- Use with DT series receptacles.
- Wire range: 16-14 ga.

Part No. 206922 10

DEUTSCH REMOVAL TOOL



Part No. 206937

DEUTSCH CRIMPING TOOL

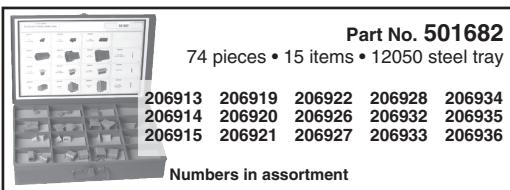
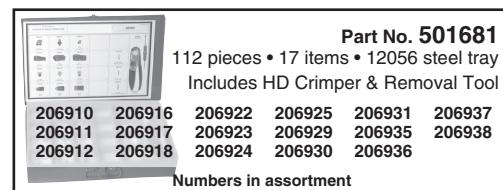
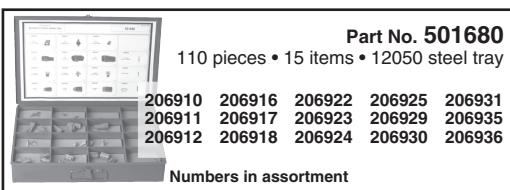


Part No. 206938

- Universal hand crimp tool,
eight indent, solid contacts.

DEUTSCH DT SERIES CONNECTOR ASSORTMENTS

- Contains 2, 3 and 4 socket plugs and locking wedges, 2, 3 and 4 pin receptacles and locking wedges, female socket terminals, male pin terminals and sealing plugs.



- Contains 6, 8 and 12 socket plugs and locking wedges, 6, 8 and 12 pin receptacles and locking wedges, female socket terminals, male pin terminals and sealing plugs.

WIRE and ELECTRICIAN SHEARS

PVC GENERAL PURPOSE PRIMARY WIRE

Multi-use wire for original equipment and replacement on automotive, truck, trailer and marine applications.



- Thermoplastic PVC insulation.
- Stranded copper conductor wire.
- Temperature rated from -30° to +165°F.
- Resistant to grease, oil and acids.

MEETS OR EXCEEDS:
S.A.E. Spec. J1128
Ford M1L56-A and M1L58-A
Chrysler MS 3450

(Add suffix for color)	PART NUMBER 100 ft. 250 ft. (Add suffix for color)	PART NUMBER 1000 ft. (Add suffix for color)	GAUGE
---	32111	---	22
---	32112	---	20
32103	---	---	18
32104	---	32104M	16
32105	---	32105M	14
32106	---	---	12
32107	---	---	10
32108	---	---	8

COLORS AVAILABLE: Add suffix to part number when ordering. All wire sizes except 22 ga., 20 ga. and 8 ga. available in Black (use no suffix), Blue (BL), Brown (BR), Green (G), Gray (GY), Orange (RNG), Purple (P), Red (R), White (W), Yellow (Y). 22 ga., 20 ga. and 8 ga. available in Black, Red (R), and White (W) only.

GENERAL PURPOSE PRIMARY WIRE STARTER ASSORTMENT

Part No. 32110

8 spools containing 100' each.
Steel rack
Part No. 12002 included.

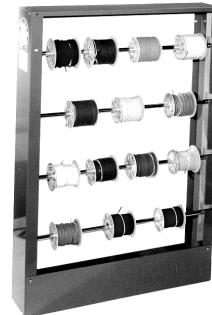
18 GAUGE	16 GAUGE	14 GAUGE	12 GAUGE
Black	Black	Black	Red
Blue	Blue		
Red	Red		



GENERAL PURPOSE PRIMARY WIRE MASTER ASSORTMENT

Part No. 32100

14 spools containing
100' each of the most
popular colors
and gauges.
Steel rack
Part No. 12057
included.



16 GAUGE	14 GAUGE
Black	Black*
Red*	Red*
Blue	Blue
Green	Green
Yellow	Yellow
White	

* Assortment contains 2 rolls

SXL CROSS-LINK PRIMARY WIRE

Special purpose automotive wire for use in extreme temperature areas, such as engine compartments.



- Cross-linked polyethylene insulation.
- Stranded copper conductor wire.
- Withstands temperature extremes of -50° to +350°F without melting or fusing.
- Resistant to moisture, most solvents and acids.

MEETS OR EXCEEDS:
S.A.E. Spec. J1128
Ford M1L 85-A, Chrysler MS-5919 and Packard M-3023

PART NUMBER (Add suffix for color)	100 ft.	GAUGE
310201	18	
310202	16	
310203	14	
310204	12	
310205	10	

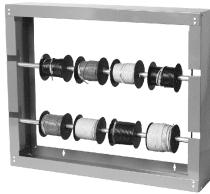
COLORS AVAILABLE: Add suffix to part number when ordering. All gauges except 10 ga. available in Black (use no suffix), Blue (BL), Brown (BR), Green (G), Red (R), White (W), Yellow (Y). 10 ga. available in Black (no suffix), Red (R) and White (W) only.

SXL CROSS-LINK PRIMARY WIRE STARTER ASSORTMENT

Part No. 310210

8 spools containing 100'
each.
Steel rack
Part No. 12002 included.

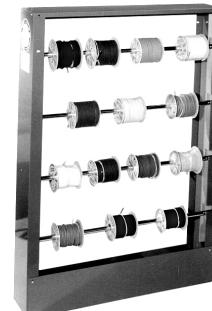
18 GAUGE	16 GAUGE	14 GAUGE	12 GAUGE
Black	Black	Black	Red
Blue	Blue		
Red	Red		



SXL CROSS-LINK PRIMARY WIRE MASTER ASSORTMENT

Part No. 310200

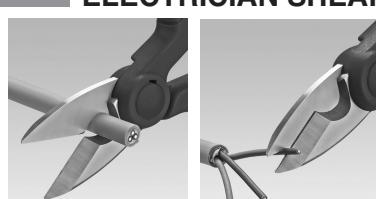
14 spools containing
100' each of the most popular colors and gauges.
Steel rack
Part No. 12057 included.
1 roll each of the following:



18 GAUGE	16 GAUGE	14 GAUGE
Black	Black	Black
Red	Red	Red
Blue	Blue	
Green	Green	
Yellow	Yellow	
White	White	



Part No. 113502



- Clean, non-slip cuts.
- Unlimited applications.
- Highest quality stainless steel, 56HRC.
- Professional quality.
- Cutting edge, with integrated cable cutter.
- Includes plastic belt case.

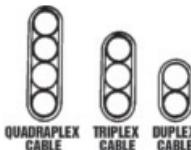
PSS091517

JACKETED PLASTIC PRIMARY WIRE

Recommended for automotive, truck, and trailer applications. Sizes 12 and 10 gauge recommended for electric brake wire.

- PVC insulated primary wires laid parallel and covered with gray vinyl jacket.
- Available in two, three and four conductor.
- Resistant to grease, oil, acids, and gasoline.
- For low voltage 12 and 24 volt systems only.
- 100 ft. spools.

PSS050419



PART NUMBER	GAUGE/CONDUCTORS	CONDUCTOR COLORS
310310	16/2	Black, White
310311	16/3	Black, White, Green
310312	16/4	Black, White, Green, Red
310313	14/2	Black, White
310314	14/3	Black, White, Green
310315	14/4	Black, White, Green, Red
310316	12/2	Black, White
310317	12/3	Black, White, Green
310319	10/2	Black, White
310320	10/3	Black, White, Green

BONDED PARALLEL PRIMARY WIRE

Used extensively for RV's, boat and utility trailers.

- Copper stranded wire with PVC insulation.
- Clear all-weather outer coating on top of insulation.
- Available in two, three, and four conductors.
- Withstands temperatures up to 160°F.
- 100 ft. spools.

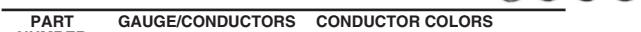
Two Conductor



Three Conductor



Four Conductor



* May be Black, Red - Depending on manufacturer.

LAMP WIRE

Used for alarms, lamps, and light duty wiring.

- Type SPT-1, 300 volt rated.
- Insulation coded for identification.
- Parallel style, also called "Ripcord".
- Available in 250 ft. spools.



PART NUMBER 250 ft.	GAUGE (Add suffix for color)
310221	18/2
310222	16/2

COLORS AVAILABLE:

Add suffix to part number when ordering
 Black No suffix
 Brown (Br)
 White (W)

SPEAKER WIRE

Used for general audio applications in homes, offices, boats, motor homes, and cars.

- Top grade insulated copper wire.
- Clear jacket (except 310355), coded for polarity identification.
- Available in 100 ft. spools (except 310355, 250 ft. spool).

PART NUMBER 250 ft.	GAUGE/ (Add suffix for color)	CONDUCTORS
310355	22/2*	
310357	18/2	
310358	16/2	
310359	14/2	
310360	12/2	

* Gray jacket, 250 ft. spool

Gray Jacket



Clear Jacket



UL LISTED PRIMARY WIRE

For use in DOT, Coast Guard and RVI electrical systems, and for internal wiring of appliances and electronic systems when exposed to temperatures not exceeding 221°F.

- Underwriters Lab. listed UL1015 rated at 600 volts.
- Meets Department of Transportation and Coast Guard specification for electrical systems.
- Rated for temperatures up to 221°F (105°C) dry and 167°F wet.
- 100 ft. per spool.



PART NUMBER 100 ft. (Add suffix for color)	GAUGE
310325	18
310326	16
310327	14
310328	12
310329	10

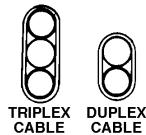
COLORS AVAILABLE:

Add suffix to part number when ordering
 Black No suffix
 Green (G)
 Red (R)
 White (W)

UL LISTED MULTI-CONDUCTOR MARINE CABLE

Used primarily as marine cable for boat and associated equipment wiring.

- Underwriters Lab. listed BG5W2 rated at 600 volts.
- Meets Coast Guard requirements for boat cable.
- Rated for temperatures up to 221°F (105°C) dry and 167°F (75°C) wet.
- Available in two or three conductor.
- White outer jacket.
- 100 ft. per spool.



BOAT CABLE 600 VOLTS (UL) 105°C DRY 75°C WET

BG5W2

PART NUMBER	GAUGE/CONDUCTORS	CONDUCTOR COLORS
310343	16/3	Black, Green, White
310344	14/2	Black, White
310345	14/3	Black, Green, White
310346	12/2	Black, White
310347	12/3	Black, Green, White

SERVICE CORD, 300 VOLT, TYPE SJ

Designed for stationary, light duty service.

- UL listed (E7362), OSHA acceptable.
- Black rubber jacket and rubber insulated conductors.
- Temperature rated -35°F (-37°C) to 140°F (60°C).
- Available in 250 ft. spool or 100 ft. cut length.



PART NUMBER	GAUGE/CONDUCTORS	CONDUCTOR COLORS
310365	18/3	Black, Green, White
310366	16/3	Black, Green, White
310367	14/3	Black, Green, White
310368	12/3	Black, Green, White

SERVICE CORD, 300 VOLT, TYPE SJO

Designed for heavy duty service, portable tools, small motor, and power extensions.

- UL listed (E7362), OSHA acceptable. Passes MSHA flame test (P136-MSHA).
- Oil resistant black neoprene jacket, rubber insulated conductors.
- Temperature rated -35°F (-37°C) to 194°F (90°C).
- Available in 250 ft. spool or 100 ft. cut length.



PART NUMBER	GAUGE/CONDUCTORS	CONDUCTOR COLORS
310376	16/3	Black, Green, White
310377	14/3	Black, Green, White

WIRE and CABLE

SERVICE CORD, 600 VOLT, TYPE SO

Designed for heavy duty service and heavy loads required by industrial equipment, heavy tools, battery chargers, portable lights and power extensions.

- UL listed (E7362), OSHA acceptable. Passes MSHA flame test (P136-MSHA).
- Temperature rated -35°F (-37°C) to 194°F (90°C).
- Resistant to oil, acid, impact, abrasion, sunlight and flame.
- Available in 250 ft. spool or 100 ft. cut length.



PART NUMBER	GAUGE/CONDUCTORS	CONDUCTOR COLORS
310385	16/3	Black, Green, White
310386	14/3	Black, Green, White
310387	12/3	Black, Green, White
310388	10/3	Black, Green, White

Four conductor available on special order

BATTERY CABLE

- Stranded copper conductor.
- Polyvinyl thermoplastic insulation.
- Use Black for ground (-), Red for positive (+).
- Outer coating resists moisture, weather, acids, and oil.
- Available in 25 ft. rolls.



Welding cable makes excellent
H.D. battery cables.
See Section D13 Welding

PART NUMBER	BLACK	RED	GAUGE	STRANDING	OD
33112	222161	2	6	44 x .023	.375
33113	222162	2	4	49 x .021	.375
33105	222163	2	2	84 x .021	.450
33107	222164	2	1	133 x .022	.500
33114	222165	2	1/0	133 x .021	.530
33106	222166	2	2/0	133 x .020	.590
33117	222167	2	3/0	259 x .022	.650
33118	222168	2	4/0	418 x .024	.740

WELD-FLEX SUPER FLEXIBLE WELDING CABLE

THE FINEST WELDING CABLE AVAILABLE
Excellent for Heavy Duty Battery and Jumper Cables

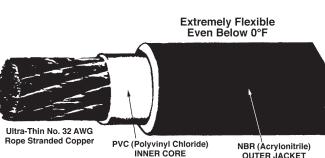
- Rope stranded ultra-thin No. 32 AWG annealed copper wire.
- Conforms to all international specifications.
- High flexibility of conductor and jacket makes handling extremely easy.
- Double cover jacket of PVC inner core, NBR (acrylonitrile rubber) outer jacket exceptionally tough and durable, very resistant to abrasion, oil, heat, ozone, and most solvents.

Actual Dia.

4

2

1/0



Sold by the foot.
Custom cut lengths to meet your requirements.
Minimum order: 10 feet

PART NUMBER	GAUGE	APPROX. # OF WIRES	CURRENT RATING (AMPS)
310226	4	660	162
310227	2	1050	279
310228	1/0	1670	390

TRAILER LIGHT CABLE

- All weather, heavy-duty cable for truck or trailer lighting.
- Heavy black vinyl insulation.



- Tinned copper color-coded conductors meet ATA spec E1-1950 & most SAE standards.
- Sold in either 50 or 100 foot lengths.

*SPECIFY LENGTH WHEN ORDERING.

PART NUMBER	GAUGE	CONDUCTORS	STRANDING	OD
32201	14	4	19 x 27	.410
32202	14	6	19 x 27	.500
32204	14	7	19 x 27	.496
32203	12	6	19 x 25	.600
	10	1	19 x 23	.600

COLOR CODE:

4 conductor, Black, White, Brown, Red

6 conductor, Black, White, Brown, Red, Green, Yellow

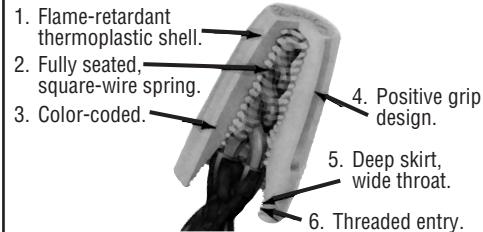
7 conductor, 10 ga. White; 12 ga., Black, Brown, Red, Green, Yellow, Blue #32203

7 conductor, 14 ga. Red, White, Black, Brown, Yellow, green, Blue #32204

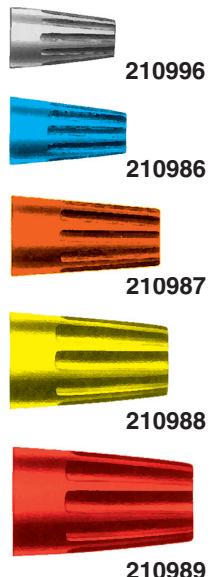
WIRE CONNECTORS

WIRE NUT CONNECTORS

- Flame retardant thermoplastic shell.
- Fully-seated, square wire spring draws the connector completely onto the wires.
- Color coding to industry standards.
- Positive grip design tightens all the way. They back-off easily for repeat usage.
- Wire nuts comply with federal inspection W-S610C, are UL listed (#E5238), and CSA certified (#LR 9706).



PART NUMBER	COMBINATION WIRE RANGE	COLOR	300 VOLT PRESSURE-TYPE WIRE CONNECTOR	600 VOLT PRESSURE-TYPE WIRE CONNECTOR	QTY
210996	No. 22 thru 16 AWG Min. 1 No. 20 & 1 No. 22/Max. 2 No. 16	Gray	✓		25
210986	No. 22 thru 14 AWG Min. 3 No. 20/Max. 3 No. 16	Blue	✓		25
210987	No. 22 thru 14 AWG Min. 3 No. 20/Max. 3 No. 16 & 1 No. 18	Orange	✓	✓	25
210988	No. 18 thru 12 AWG/Min. 1 No. 14 & 1 No. 18 Max. 4 No. 14 & 1 No. 18	Yellow	✓	✓	25
210989	No. 18 thru 10 AWG Min. 2 No. 14/Max. 2 No. 10 & 2 No. 12	Red	✓	✓	25



3M™ DIRECT BURIAL SPLICE KIT

PSS040119

UL listed for direct bury and rated for 600 V maximum.

Included in kit: (2) 3M Performance Plus Wire Connectors with quick bite and smooth twist plus (2) high-impact, UV-resistant tubes filled with moisture-resistant grease

- Moisture-proof, gel filled tube reliably secures connector.
- Premium connection - quick-bite and smooth twist.
- One connector fits a wide wire range.
- Excellent for golf courses, irrigation controls and outdoor lighting.

COMMON AWG COMBINATIONS

2 - 7 #18 1 - 3 #12 w/ 1 #18
2 - 6 #16 1 - 2 #10 sol w/ 1 #18 str
2 - 4 #14 1 - 3 #12 w/ 1 #16
2 - 4 #14 1 - 2 #10 w/ 1 #12
2 - 3 #10 1 - 2 #14 w/ 1 #18

No adverse health effects expected; for professional or industrial use only.

Contains white mineral oil grease, CAS# 8042-47-5

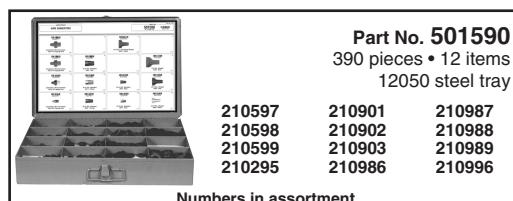


Part No. 210923

**Copper Wire Only,
Solid or Stranded**

WIRE NUT CONNECTOR ASSORTMENT

- A complete selection of wire nut connectors used by maintenance repair facilities.
- Includes standard square spring connectors, Scotchlok Y, R, G and B connectors, Tru-Lock winged connectors, and the special, winged, through-the-nut, ground connector.



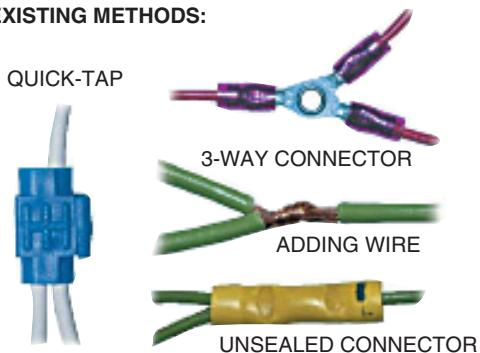
CONNECTORS

IN-LINE BUTT CONNECTORS

Joins two wires to one wire.

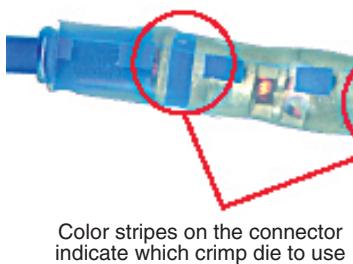
PROBLEMS:

EXISTING METHODS:



SOLUTION:

SEALED MULTIPLE WIRE CONNECTORS:



IN-LINE CONNECTOR

Color dash on tubing indicates the wire gauge for the connector

Tubing has an active adhesive that seals between multiple wires



Part No. 210600
White

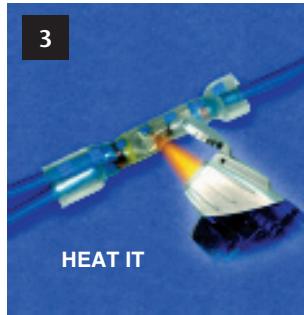
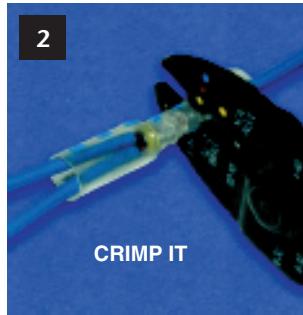
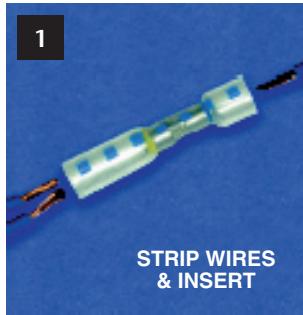
Part No. 210601
Red

Part No. 210602
Blue

Part No. 210603
Yellow

PART NUMBER	QTY	WIRE GAUGE	COLOR STRIPE TUBING COLOR	ON CONNECTOR	WIRE	CRIMP DIE (INSULATED)
210600	(25)	24-22 AWG	Clear / White Dashes	Side 1: White	One 24-22 AWG	White (24-22 AWG)
			Side 2: Red	Two 24-22 AWG	Red (20-18 AWG)	
210601	(25)	20-18 AWG	Clear / Red Dashes	Side 1: Red	One 20-18 AWG	Red (20-18 AWG)
			Side 2: Blue	Two 20-18 AWG	Blue (16-14 AWG)	
210602	(25)	16-14 AWG	Clear / Blue Dashes	Side 1: Blue	One 16-14 AWG	Blue (16-14 AWG)
			Side 2: Yellow	Two 16-14 AWG	Yellow (12-10 AWG)	
210603	(25)	12-10 AWG	Clear / Yellow Dashes	Side 1: Yellow	One 12-10 AWG	Yellow (12-10 AWG)
			Side 2: Red	Two 12-10 AWG	Red (8 AWG)	

EASY TO INSTALL



IN-LINE BUTT CONNECTOR INSTRUCTIONS

- For side of connector where two wires will be inserted, strip wires 5/8".
- Select a connector that matches the wire gauge (see chart above) and insert the two wires into the larger side of the connector.
- Make sure that both wires are properly seated and crimp the connector using an insulated connector crimping tool nest that matches the color stripe on the larger side of the connector barrel.
- For the side of the connector where one wire will be inserted, strip wire 5/16".
- Insert the wire into the smaller side of the connector, make sure the wire is properly seated and crimp the connector using an insulated connector crimping tool nest that matches the color stripe on the smaller side of the connector barrel.
- Apply heat evenly around the length of the tubing (including the crimp area) from the center out to the ends until the tubing fully recovers and the adhesive flows. During the heating process, separate the two wires in the larger end of the connector to allow the adhesive to flow in between the wires.
- Remove from the heat and let cool.

CONNECTORS**COOL SEAL BUTT CONNECTORS**

A heat-less, solderless connector, it utilizes revolutionary anaerobic sealant technology that installs in a fraction of the time of comparable connectors.

- **Strip & Crimp - It Seals Itself**

Just strip the wire, insert it into the connector & crimp. This activates the anaerobic sealant to create an environmentally sealed connection.

- **Unique Anaerobic Encapsulation**

Anaerobic sealant cures in the absence of oxygen. When the connection is crimped, oxygen is removed from the connector creating a moisture proof connection.

- **No Heat Required**

Eliminates the need for heat guns or torches.

- **Fast Installation**

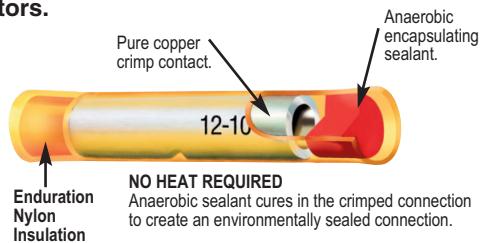
Installs in a fraction of the time of comparable heat shrink terminals.

- **Superior Sealed Connections**

Innovative new sealant prevents entry of air and contaminants, while the nylon insulations provide maximum abrasion and puncture resistance.

- **Superior Conductivity**

With corrosion effectively sealed out, the seamless 99.9% copper connector offers optimal electrical conductivity.



NO HEAT REQUIRED

Anaerobic sealant cures in the crimped connection to create an environmentally sealed connection.

PART NUMBER	WIRE SIZE	QTY
210111	22-18	50
210112	16-14	50
210113	12-10	50

RELATED PRODUCT

Installs with any of these crimpers

PART NUMBER
11363
11384
11386
18900



Part No. 210100

375 pieces • 6 items
12042 plastic tray

Contains all three sizes of our Cool Seal Butt Connectors along with three different sizes of popular cable ties.

Numbers in assortment

SPECIALTY BUTT CONNECTORS

All unique problem solvers together in one kit.

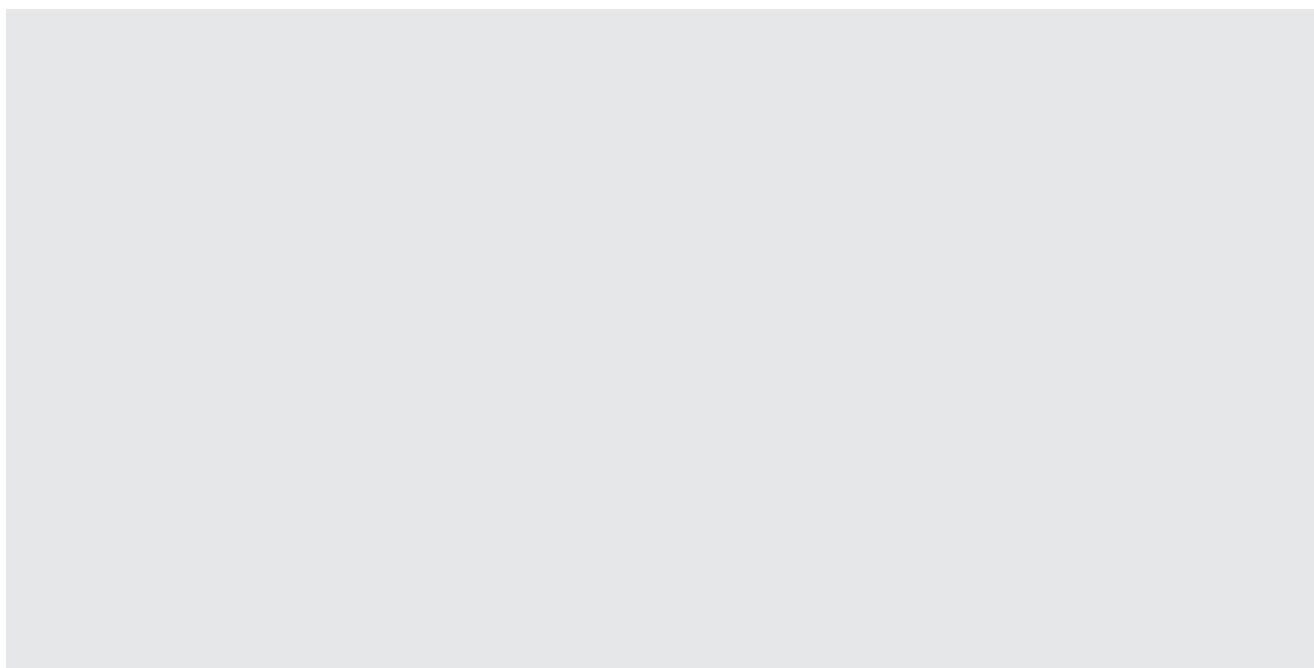
For Applications where you need to connect wires of different sizes or one wire to two wires.

- Contains Shrink 'N Seal, In-Line and Closed End connectors.
- Seals out moisture, dirt and corrosion.
- Prevents pull out of faulty electrical connections.
- Space for growth or storage.



Part No. 501794			
146 pieces • 10 items 12056 steel tray			
210538	210541	210602	210676
210539	210600	210603	
210540	210601	210675	

Numbers in assortment



CONNECTORS

INSTANT AUTO-ELECTRICAL CONNECTORS

No strip, no twist, just squeeze, makes tap, in-line and pigtail splices fast and easy.

- SELF-STRIPPING**
"U" element does the work of stripping and soldering – assures electrical conductivity.
- RESILIENT ACTION**
Provides firm holding power.
- UNIFORM CONDUCTOR**
Contact area provides dependable service.

PART NUMBER	WIRE SIZE	COLOR	QTY
210468	22-18	Red	100
210471	18-14	Blue	100
210481*	18-14	White	100
210474	12-10	Yellow	100
210480†	18-14	Brown	100

* 210481 Does not have internal stop allows for double taps (2 add-on circuits).

† 210480, 18-14 Tapline from 12-10 feed line.



INTEGRAL FLIP TOP
Snap-over cover for full insulation.



PRE-INSULATED
Won't chip, dry out or crack.



SCOTCHLOK WIRE CONNECTORS

Part No. 501591

236 pieces • 14 items
12050 steel tray



210461	210472	210481	210599
210467	210474	210482	615245
210468	210479	210597	
210471	210480	210598	

Numbers in assortment

Assortment photo for illustration purposes only. Actual contents may vary.

ELECTRICAL QUICK CONNECTS

Instant Connectors • T-Taps • Quick Disconnects

- A complete variety of Quick Connectors in one kit.
- Small enough to carry with you anywhere you need a quick connection.
- Complete coverage for wire sizes 10 thru 22.
- UL listed for 300 volts on tap splices.
- No special tools required, pliers do the job.
- Color coded for easy identification.



Part No. 210016

71 pieces • 11 items
12030 plastic tray

210275	210467	210474	210480
210276	210468	210476	210481
210461	210471	210479	

Numbers in assortment

SCOTCHLOK™ 804 MOISTURE-RESISTANT TAP CONNECTOR

Easier, Faster

The Scotchlok 804 connector from 3M makes connections easier and faster. No cutting or stripping is required. Just insert the run wire, insert the tap wire, crimp the element and close the cap. Taping is not necessary to protect the connection.

Longer Lasting

The patented application system forces protective gel around the wire and element, providing a moisture-resistant barrier to destructive substances such as salt water and other corrosive environments.

Stronger, More Reliable

The Scotchlok 804 withstands continuous operating temperatures of -40°C to 75°C (-40°F to 167°F). It can be installed in temperatures as low as -18°C (0°F). And the special locking feature of the cap insures a protected connection over time.

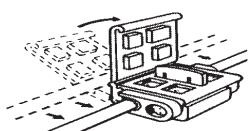
Wire Sizes

18-16 stranded, solid / 14 stranded

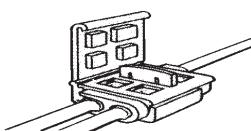


Part No. 210482 (50)

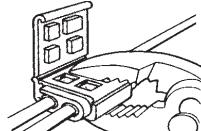
Applications: The 804 connector can be used in making tap connections for trucks, cars, recreational vehicles, snowmobiles, motorcycles, boats and off-road equipment. The same benefits can also be achieved for outdoor lighting and landscaping.



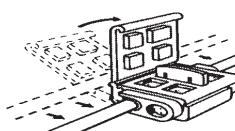
1. Open hinged side wall. Place unstripped run wire inside run channel and close hinged side wall.



2. Insert unstripped tap wire completely into tap port.



3. Hold tool perpendicular to the wire and make the connection by crimping the u-contact down flush with the top of the insulator.



4. Close cover until securely latched.

HEAT SHRINK TUBING**HEAT SHRINK SPECIFICATIONS**

A variety of types of heat shrink tubing and related accessories are available. Tubing types available include Heavy wall, Dual wall, Multiple wall and Thin wall. We have provided the following specifications to assist in determining which tubing is best for your application.

	HEAVY WALL	DUAL WALL	MULTIPLE WALL	THIN WALL
UL	UL 486 B&D	—	FILE E-157227	UL recognized
MIL Spec	MIL-1-23053/15	MIL-1-23053/4	MIL-I-23053/4, Class 1	MIL-1-23053/15
CSA	Meets C22.2 No. 198.1	—	N/A	Meets C22.2 No. 198.2
Continuous Operating Temp.	-55°C to 125°C	-55°C to 110°C	-55°C to 110°C	-55°C to 135°C
Minimum Shrink Temp.	120°C	120°C	135°C	100°C
Tensile Strength	1542 psi	2600 psi	2200 psi	1500 psi
Heat Shock	24 hrs. @ 225°C	168 hrs. @ 250°C	4 hrs. @ 250°C	4 hrs. @ 250°C
Elongation	425%	450%	400%	200%
Low Temperature Flexibility	4 hrs. @ -55°C	4 hrs. @ -55°C	4 hrs. @ -55°C	4 hrs. @ -55°C
Longitudinal Change	10% Max, <5% Typical	<10%	<5%	<5%
Secant Modulus	18,000 psi	16,000 psi	(2%) 27,000 psi	12,000 psi
Flame Retarded	Yes	Jacket Only	No	Yes
Dielectric Strength	700 Volts/MIL	1000 Volts/MIL	900 Volts/MIL	500 Volts/MIL
Volume Resistivity	6 x 10 ¹⁵ OHM/CM	10 ¹⁶ OHM/CM	10 ¹⁵ OHM/CM	10 ¹⁴ OHM/CM
Corrosion Resistance	Non-Corrosive	Non-Corrosive	Non-Corrosive	Non-Corrosive
Fungus Resistance	Non-Nutritive	Non-Nutritive	Non-Nutritive	Non-Nutritive
Fluid Resistance	Excellent	Excellent	<0.1%	Excellent

FR GRADE HEAVY WALL, HEAT SHRINK TUBING WITH SEALER

- Flame retardant (FR) grade meets requirements in many areas of transportation industry.
- 3 to 1 shrink ratio. One tube diameter can cover several wire diameters.
- White adhesive liner melts to form total contact with underlying surfaces and voids creating a watertight seal suitable for above and underground applications.



PART NO.	WIRE RANGE	EXPANDED I.D. (INCHES)	SHRUNK I.D. (INCHES)	COLOR	LENGTH (INCHES)	QTY
322142	18-14	.300	.100	Black	6	2
322143	18-14	.300	.100	Red	6	2
322144	14-6	.400	.150	Black	6	2
322145	14-6	.400	.150	Red	6	2
322146	8-1	.750	.220	Black	6	2
322147	8-1	.750	.220	Red	6	2
322150	8-1	.750	.220	Black	2	6
322151	8-1	.750	.220	Red	2	6
322148	2-4/0	1.100	.375	Black	6	2
322149	2-4/0	1.100	.375	Red	6	2
322152	2-4/0	1.100	.375	Black	2	6
322153	2-4/0	1.100	.375	Red	2	6



Part No. 501648
28 pieces • 8 items
12090 steel tray

322142 322145 322148
322143 322146 322149
322144 322147

Numbers in assortment

FOR HEAT GUNS SEE SECTION D11, HAND TOOLS

UNI-SEAL, DUAL WALL, HEAT SHRINK TUBING WITH SEALER

- 2 to 1 shrink ratio.
- Crosslinked polyolefin, dual wall.
- Inner wall melts when heated to create moisture-proof seal.
- Outer wall shrinks to form a tough, rigid covering.



6 INCH PIECES 2 PER PACK PART NO.	4 FOOT LENGTHS 2 PER PACK PART NO.	WIRE RANGE	EXPANDED I.D. (INCHES)	SHRUNK I.D. (INCHES)	COLOR
812140P	812140L	30-18	1/8 (.125)	.063	Black
812140RP	812140RL	30-18	1/8 (.125)	.063	Red
812141P	812141L	20-14	3/16 (.187)	.094	Black
812141RP	812141RL	20-14	3/16 (.187)	.094	Red
812142P	812142L	18-10	1/4 (.250)	.125	Black
812142RP	812142RL	18-10	1/4 (.250)	.125	Red
812144P	812144L	12-6	3/8 (.375)	.188	Black
812144RP	812144RL	12-6	3/8 (.375)	.188	Red
812143P	812143L	8-4	1/2 (.500)	.250	Black
812143RP	812143RL	8-4	1/2 (.500)	.250	Red
812145P	812145L	4-2/0	3/4 (.750)	.375	Black
812145RP	812145RL	4-2/0	3/4 (.750)	.375	Red
812146P	812146L	2/0-4/0	1 (1.00)	.500	Black
812146RP	812146RL	2/0-4/0	1 (1.00)	.500	Red

6 inch lengths of all sizes contained in both Assortment Part No. 501511 and Assortment Part No. 812010 (Black only).



Part No. 501511 (Black)
46 pieces • 7 items
12090 steel tray

812140P 812143P 812146P
812141P 812144P
812142P 812145P

Numbers in assortment



Part No. 812010 (Black)
26 pieces • 7 items • 12047 plastic tray

812140P 812143P 812146P
812141P 812144P
812142P 812145P

Numbers in assortment

HEAT SHRINK TUBING

MOISTURE PROOFING MULTI-WIRE CONNECTORS

Protect your multiple wire connections from corrosion, contaminants & current leakage with our new assortment.

	Part No. 501750 85 pieces • 11 items 12051 steel tray
210600	210675
210601	210676
210602	412227
210603	812988
Numbers in assortment	

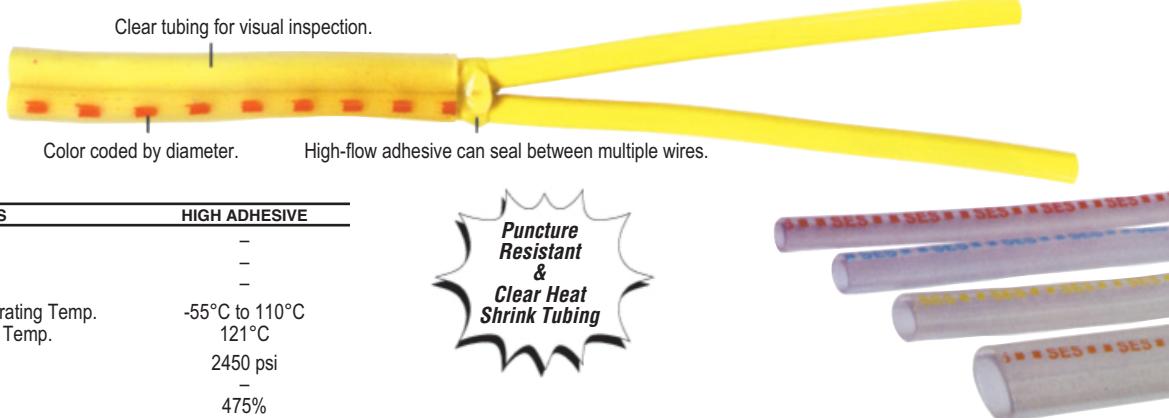
- This assortment contains In-Line Butt Connectors (cat. pg. E12-4A), Closed -End Connectors (cat. Pg. E12-4B) and Multiple Wire High Adhesive Heat Shrink Tubing (cat. Pg. E12-8A). All three products are for use in multiple wire situations.
- Multi-wire heat shrink tubing is different than the regular heat shrink tubing. This has a high-flow sealant that allows it to get in the spaces between the multiple wires and completely seal the connection. Regular tubing will only seal the outer perimeter of multiple wires, allowing moisture and other contaminants to work their way into the connection through the small spaces between the wires.
- Includes torch with butane for a handy heat source.

MULTIPLE WIRE HIGH ADHESIVE - HEAT SHRINK TUBING

Adhesive-lined heat shrink tubing provides the best protection for electrical terminations for primary wire and battery cables that are subjected to extreme conditions. Provides an adhesive barrier which protects electrical components from calcium chlorides, sodium chlorides, magnesium chlorides, abrasion, vibration, and other environmental contaminants.

- 4 to 1 heat shrink ratio.
- Polyolefin tubing.
- Specially designed for sealing multiple wires.
- Provides superior strain relief.
- Chrysler specs MS-DB56 CAN 3686.
- Ford specs ESB-M97D56A1.

NOTE: DURING THE HEAT SHRINK PROCESS SEPARATE THE WIRES TO ALLOW THE ADHESIVE TO FLOW IN BETWEEN.



SPECIFICATIONS	HIGH ADHESIVE
UL	-
MIL Spec	-
CSA	-
Continuous Operating Temp.	-55°C to 110°C
Minimum Shrink Temp.	121°C
Tensile Strength	2450 psi
Heat Shock	-
Elongation	475%
Low Temperature Flexibility	4 hrs. @ -30°C
Longitudinal Change	<10%
Secant Modulus	(2%) 16,500 psi
Flame Retarded	No
Dielectric Strength	500 Volts/MIL
Volume Resistivity	10 ¹⁴ OHM/CM
Corrosion Resistance	Non-Corrosive
Fungus Resistance	Non-Nutrient
Fluid Resistance	Good

PART NO.	PRE-SHRINK I.D. (INCHES)	REC I.D. (INCHES)	WIRE RANGE	COLOR/COLOR DASH	LENGTH	QTY
812987	0.220	0.045	24-12 AWG	①/W	6	2
812988	0.300	0.060	22-10 AWG	①/R	6	2
812989	0.350	0.080	16-8 AWG	①/B	6	2
812990	0.450	0.105	14-4 AWG	①/Y	6	2
812991	0.700	0.175	8-2/0 AWG	①/O	6	2

①/W Clear Tubing/White Dash ①/R Clear Tubing/Red Dash ①/B Clear Tubing/Blue Dash ①/Y Clear Tubing/Yellow Dash ①/O Clear Tubing/Orange Dash

HEAT SHRINK TUBING**CLEAR-VIEW ADHESIVE-LINED HEAT SHRINK TUBING**

The Competitor's Clear Heat Shrink Tubing



Vs.

Our **CLEAR-VIEW** Heat Shrink Tubing

What's special about this heat shrink tubing?

- Constructed of a cross-linked ionic polymer material for superior strength.
- Lightweight material is easy to work with and can be cut using simple shears or scissors.
- Exceeds 2.5 to 1 shrink ratio, to contain connectors up to 2 and a half times larger than your cable.

- Wire AWG is printed on the side for easy size ID.

Lined with a hot-melt adhesive to provide
a completely waterproof seal



Absolutely clear tubing provides ultimate clarity
for visual inspection at any time.

Specifications:**Material:** Cross-linked ionic polymer**Shrink Ratio:** Exceeds 2.5 to 1**Shrink/Recovery Temperature:** 90°C (194°F)**Continuous Operating Temp:** -55°C to 125°C (-67°F to 257°F)**Flammability:** Passed (FMVSS 302 test)**Tensile Strength:** 4,000 psi**Longitudinal Change:** + 1/-10% Max**Dielectric Strength:** 750 V/Mil (30KV/MM)

PART NUMBER	QTY	WIRE GAUGE	TUBING COLOR	LENGTH	MINIMUM EXPANDED I.D.	MAXIMUM RECOVERED I.D.
210163	10	22-18	Clear	6"	0.176"	0.045"
210164	10	16-14	Clear	6"	0.250"	0.080"
210165	10	12-10	Clear	6"	0.365"	0.100"

SEMI-RIGID, MULTIPLE WALL, HEAT SHRINK TUBING WITH SEALER

Excellent vibration resistance & strain relief. Identical to tubing used on Shrink 'N Seal & Solder 'N Seal terminals.

- 2.5 to 1 shrink ratio.
- Crosslinked polyolefin tubing withstands high operating temperatures.
- Adhesive liner melts to create environmental seal.
- Completely waterproof.
- Impervious to mechanical abuse, abrasion, salt and other corrosive materials.

PART NUMBER	WIRE RANGE	EXPANDED I.D. (INCHES)	SHRUNK I.D. (INCHES)	COLOR	LENGTH (INCHES)	QTY
322134	20-24	1/8 (.125)	.050	Clear	6	6
322135	22-18	3/16 (.187)	.075	Red	6	6
322136	16-14	1/4 (.250)	.100	Blue	6	6
322137	12-10	5/16 (.3125)	.125	Yellow	6	6
322138	8-6	3/8 (.375)	.150	Black	6	6
322139	4-2	1/2 (.500)	.200	Black	6	4
322140	2-1/0	3/4 (.750)	.300	Black	6	2
322141	2/0-4/0	1 (1.00)	.400	Black	6	2



Part No. 50163
48 pieces • 8 items
12090 steel tray

322134 322137 322140
322135 322138 322141
322136 322139

Numbers in assortment

Part No. 322100
28 pieces • 6 items • 12047 plastic tray

322134 322136 322138
322135 322137 322139

Numbers in assortment

BULK FLEXI-SEAL, THIN WALL, HEAT SHRINK TUBING DISPENSER

- 50' workbench/shelf dispenser.
- Eliminates waste from precut lengths.
- Dispenser size 7-1/2" x 7" x 2".

SHELF DISPENSERS (50' LENGTHS)

PART NUMBER	WIRE SIZE	I.D. BEFORE SHRINKAGE	COLOR	PART NUMBER	WIRE SIZE	I.D. BEFORE SHRINKAGE	COLOR
812960	24-18	1/8"	Black	812960-R	24-18	1/8"	Red
812961	20-16	3/16"	Black	812962-BL	16-14	1/4"	Blue
812962	16-14	1/4"	Black	812963-Y	12-10	5/16"	Yellow
812963	12-10	5/16"	Black	Red, blue and yellow colors and diameters fit over standard color coded terminals for 20-18, 16-14, and 12-10 wire sizes.			
812964	10-2	3/8"	Black				
812965	8-1	1/2"	Black				



Assortment Part No. 812013
Includes all six dispenser packs in black, part numbers 812960, 812961, 812962, 812963, 812964, 812965

Assortment Part No. 812014
Includes all three dispensers packs in colors, part numbers 812960-R, 812962-BL, 812963-Y

CABLE TIES

CABLE TIE RACK ASSORTMENT

An assortment of popular wire ties in a sturdy steel rack.
Wall mountable with pre-drilled holes on 3 sides for ease of hanging.



- A wide assortment of the fastest moving wire ties - no waste or inventory space.
- Inventory can be taken at a quick glance, with the 5 compartment rack.
- Includes standard duty sizes: 4", 8", 11", 14" and heavy duty in a 14" length, in black.
- Use for bundling, fastening and general purpose usage.



Part No. 501766				
400 pieces • 5 items • 12180 steel rack - wall mount				
210942	210951	210957	210958	210977
Numbers in assortment				



METAL DETECTABLE CABLE TIES

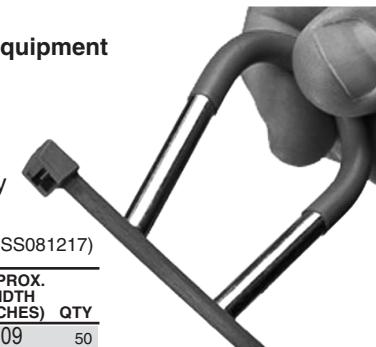
Don't let unwanted material end up where it shouldn't be.

Used in food, beverage, pharmaceutical, and cosmetic industries, automation equipment manufacturing & maintenance repair operations.

- Prevent possible contamination resulting in costly recalls & liabilities.
- Metal content blended throughout cable ties.
- 2-3 times stronger signal strength compared to competition.
- US FDA food contact material compliance.
- Half the price of stainless steel fasteners.

Detected by:

- Metal detectors
- X-Ray equipment
- Bright teal color for easy visual detection



(PSS081217)

PART NUMBER	COLOR	TENSILE STRENGTH	MAX. BUNDLE DIAMETER (INCHES)	APPROX. LENGTH (INCHES)	APPROX. WIDTH (INCHES)	QTY
210714	Teal	18lbs.	.87	4.12	.09	50
210715	Teal	40lbs.	2.37	8.87	.14	50
210716	Teal	50lbs.	1.87	7.56	.18	50
210717	Teal	50lbs.	3.06	11.25	.18	50
210718	Teal	50lbs.	4.00	14.25	.18	50
210719	Teal	120lbs.	4.06	15.09	.30	50

CABLE TIES**STANDARD CABLE TIES**

PART NUMBER	COLOR	GOVERNMENT DESIGNATION	MINIMUM TENSILE UNLOCKING STRENGTH MIL-S-2310D (Type 1 Class 1)	MAXIMUM BUNDLE DIAMETER	APPROX. LENGTH	APPROX. WIDTH	QTY
210925	Natural	MS3367-4	18lbs.	3/4	4	1/8	300
210951	Black	MS3367-4	18lbs.	3/4	4	1/8	300
210912	Natural	MS3367-5	30lbs.	1-1/4	6	9/64	300
210941	Black	MS3367-5	30lbs.	1-1/4	6	9/64	300
210952	Natural	MS3367-4	18lbs.	2	8	1/8	300
210953	Black	MS3367-4	18lbs.	2	8	1/8	300
210956	Natural	MS3367-1	50lbs.	1-3/4	8	3/16	300
210957	Black	MS3367-1	50lbs.	1-3/4	8	3/16	300
210954	Natural	MS3367-1	40lbs.	2	8-1/2	5/32	300
210955	Black	MS3367-1	40lbs.	2	8-1/2	5/32	300
210976	Natural	MS3367-1	40lbs.	3	11	5/32	300
210977	Black	MS3367-1	40lbs.	3	11	5/32	300
210978	Natural	MS3367-7	50lbs.	3	11	3/16	300
210945	Black	MS3367-7	50lbs.	3	11	3/16	300
210913	Natural	MS3367-2	50lbs.	4	14	3/16	300
210942	Black	MS3367-2	50lbs.	4	14	3/16	300

**COLORED CABLE TIES**

PART NUMBER	COLOR	MINIMUM TENSILE UNLOCKING STRENGTH MIL-S-2310D (Type 1 Class 1)	MAX. BUNDLE DIAMETER (INCHES)	APPROX. LENGTH (INCHES)	APPROX. WIDTH (INCHES)	QTY
210653	Brown	18lbs.	3/4	4	7/64	100
210654	Red	18lbs.	3/4	4	7/64	100
210655	Orange	18lbs.	3/4	4	7/64	100
210656	Yellow	18lbs.	3/4	4	7/64	100
210657	Green	18lbs.	3/4	4	7/64	100
210658	Blue	18lbs.	3/4	4	7/64	100
210659	Purple	18lbs.	3/4	4	7/64	100
210660	Gray	18lbs.	3/4	4	7/64	100
210661	Brown	40lbs.	1-3/4	7-1/2	3/16	100
210662	Red	40lbs.	1-3/4	7-1/2	3/16	100
210663	Orange	40lbs.	1-3/4	7-1/2	3/16	100
210664	Yellow	40lbs.	1-3/4	7-1/2	3/16	100
210665	Green	40lbs.	1-3/4	7-1/2	3/16	100
210666	Blue	40lbs.	1-3/4	7-1/2	3/16	100
210667	Purple	40lbs.	1-3/4	7-1/2	3/16	100
210668	Gray	40lbs.	1-3/4	7-1/2	3/16	100

**HEAVY DUTY CABLE TIES**

PART NUMBER	COLOR	GOVERNMENT DESIGNATION	MINIMUM TENSILE UNLOCKING STRENGTH MIL-S-2310D (Type 1 Class 1)	MAXIMUM BUNDLE DIAMETER	APPROX. LENGTH	APPROX. WIDTH	QTY
210671	Natural	N/A	120lbs.	2	9	5/16	100
210672	Black	N/A	120lbs.	2	9	5/16	100
210939	Natural	MS3367-3	120lbs.	4	14	5/16	100
210958	Black	MS3367-3	120lbs.	4	14	5/16	100
210801	Natural	MS3367-6	120lbs.	9	28	5/16	50
210802	Black	MS3367-6	120lbs.	9	28	5/16	50
210803	Natural	N/A	175lbs.	7	24	11/32	50
210804	Black	N/A	175lbs.	7	24	11/32	50
210805	Natural	N/A	175lbs.	10	34	11/32	50
210806	Black	N/A	175lbs.	10	34	11/32	50
210807	Gray	N/A	175lbs.	15	48	11/32	50
210808	Black	N/A	175lbs.	15	48	11/32	25

**FLUORESCENT CABLE TIES**

PART NUMBER	FLUORESCENT COLOR	GOVERNMENT DESIGNATION	MINIMUM TENSILE UNLOCKING STRENGTH MIL-S-2310D (Type 1 Class 1)	MAXIMUM BUNDLE DIAMETER	APPROX. LENGTH	APPROX. WIDTH	QTY
210969	Pink	MS3367-1	40lbs.	2	8-1/2	5/32	250
210970	Orange	MS3367-1	40lbs.	2	8-1/2	5/32	250
210971	Yellow	MS3367-1	40lbs.	2	8-1/2	5/32	250
210972	Green	MS3367-1	40lbs.	2	8-1/2	5/32	250
210973	Blue	MS3367-1	40lbs.	2	8-1/2	5/32	250



COMBO-PACK
100 pieces • 20 of each color
Part No. 210950

CABLE TIES

RELEASEABLE CABLE TIES

Perfect for construction and service requiring the release and reuse of cable ties on existing harnesses.

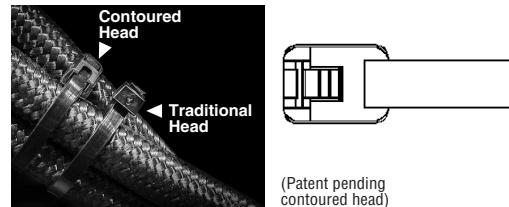


PART NUMBER	COLOR	MINIMUM TENSILE UNLOCKING STRENGTH MIL-S-2310D (Type 1 Class 1)	MAX. BUNDLE DIAMETER (INCHES)	APPROX. LENGTH (INCHES)	APPROX. WIDTH (INCHES)	QTY
210926	Natural	50lbs.	1-1/4	5-1/2	19/64	100
210964	Black	50lbs.	1-1/4	5-1/2	19/64	100
210924	Natural	50lbs.	2	7-3/4	19/64	100
210927	Black	50lbs.	2	7-3/4	19/64	100
210928	Natural	50lbs.	3	11-3/4	19/64	100
210965	Black	50lbs.	3	11-3/4	19/64	100

LOW PROFILE CABLE TIES

Low profile design is ideal for use where clearance is a necessity. Unique saddle back curves to fit snug around the wire bundle, and allows for easy pull-through in bulk heads and other tight places.

- Contoured head eliminates snagging and sharp edges.
- Durable high quality nylon 66.
- The saddle back fits snug against the contour of the wiring harness.



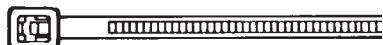
(Patent pending
contoured head)

PART NUMBER	COLOR	MINIMUM TENSILE UNLOCKING STRENGTH MIL-S-2310D (Type 1 Class 1)	MAX. BUNDLE DIAMETER (INCHES)	APPROX. LENGTH (INCHES)	APPROX. WIDTH (INCHES)	QTY
210831	Natural	18lbs.	1	4-1/2	.095	100
210832	Black	18lbs.	1	4-1/2	.095	100
210833	Natural	50lbs.	1-3/4	7-1/2	.187	100
210834	Black	50lbs.	1-3/4	7-1/2	.187	100
210835	Natural	50lbs.	3	11-1/4	.187	100
210836	Black	50lbs.	3	11-1/4	.187	100
210837	Natural	50lbs.	4	14-1/2	.187	100
210838	Black	50lbs.	4	14-1/2	.187	100
210686	Natural	120lbs.	4	14-1/2	.300	50
210687	Black	120lbs.	4	14-1/2	.300	50
210688	Natural	120lbs.	6	21-0	.300	50
210689	Black	120lbs.	6	21-0	.300	50

Part No. 501670 750 pieces • 8 items 12116 steel tray		
210831	210834	210837
210832	210835	210838
Numbers in assortment		

CABLE TIE ASSORTMENT

An assortment of fast moving wire ties conveniently stored in a portable tray. These UV resistant black, all nylon cable ties will satisfy all your bundling requirements. Includes standard duty in 4", 6" 8" & 11" lengths and heavy duty in 14" length.



Part No. 501743 500 pieces • 5 items 12116 steel tray		
210941	210957	210977
Numbers in assortment		

MOUNTING CABLE TIES

One piece, all plastic ties for quick, simple cable mounting.

Bundling and mounting are done with one unit.



PART NUMBER	COLOR	SCREW HOLE SIZE	MINIMUM TENSILE UNLOCKING STRENGTH MIL-S-2310D (Type 1 Class 1)	MAX. BUNDLE DIAMETER	APPROX. LENGTH	APPROX. WIDTH	QTY
210959	Natural	No. 8	30lbs.	1-1/4	6-1/4	9/64	100
210960	Black	No. 8	30lbs.	1-1/4	6-1/4	9/64	100
210910	Natural	No. 10	50lbs.	1-3/4	8	3/16	100
210961	Black	No. 10	50lbs.	1-3/4	8	3/16	100
210911	Natural	No. 10	50lbs.	4	15-1/2	3/16	100
210962	Black	No. 10	50lbs.	4	15-1/2	3/16	100
210940	Natural	1/4	120lbs.	4	15-1/2	5/16	50
210963	Black	1/4	120lbs.	4	15-1/2	5/16	50

IDENTIFICATION CABLE TIES



Identify bundles of cable in one operation. Large flat area for imprinting or writing the required information.

PART NUMBER	COLOR	GOVERNMENT DESIGNATION	MINIMUM TENSILE UNLOCKING STRENGTH MIL-S-2310D (Type 1 Class 1)	MAX. BUNDLE DIAMETER (INCHES)	APPROX. LENGTH (INCHES)	MARKING PAD SIZE (INCHES)	QTY
210967	Natural	MS3368-5-E	18lbs.	3/4	4	1 x 19/64	100
210968	Natural	MS3368-1-A	50lbs.	1-3/4	8	1 x 7/16	100

CABLE TIES**DUAL LOOP CABLE TIES**

Used by: Bus Companies, Farm & Equipment, Construction, Tractor Trailer Companies, Truck Dealers, Automotive, Electrical & Telecommunication Applications.

Designed to mount and wrap two separate bundles of hoses, wires, cables, or tubing, in parallel to protect them from abrasion or chafing.

- Use to separate hydraulic hoses on trucks & equipment.
- Increased flexibility and toughness.
- Impact resistant material prevents cracking and breaking due to repeated high impacts and vibration.
- 150 lb. tensile strength for heavy duty applications.
- Heat stabilized to provide high operating temperatures of 230°F.
- Mounting hole provides option of securing bundles in heavy duty equipment.
- Weather resistant UV black for outdoor use and sun protection.
- Separate wires or hoses in engine compartments.

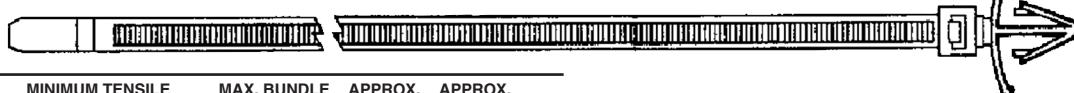


PART NUMBER	LENGTH (INCHES)	WIDTH (INCHES)	THICKNESS (INCHES)	TENSILE STRENGTH	BUNDLE DIA. (INCHES)	BOLT SIZE	QTY.
210720	13-35/64	1/2	3/64	150 lbs.	1-19/64	1/4	50
210721	19-13/16	1/2	1/16	150 lbs.	2-19/64	1/4	50

Now Sold in Packs of
25 - or - 50

PUSH-MOUNT CABLE TIES

Push-mount head snaps into 1/4" hole providing one piece mounting and bundling.



PART NUMBER	COLOR	MINIMUM TENSILE UNLOCKING STRENGTH MIL-S-2310D (Type 1 Class 1)	MAX. BUNDLE DIAMETER (INCHES)	APPROX. LENGTH (INCHES)	APPROX. WIDTH (INCHES)	QTY
210904	Natural	50 lbs.	1-3/4	8	13/64	50
210916	Black	50 lbs.	1-3/4	8	13/64	50

STAINLESS STEEL TIES

PART NUMBER	MATERIAL	MINIMUM TENSILE UNLOCKING STRENGTH (UNLOCKING)	MAX. BUNDLE DIAMETER (INCHES)	APPROX. LENGTH (INCHES)	APPROX. WIDTH (INCHES)	QTY
210708	316	100 lbs.	2	7.9	.18	10
210709	316	100 lbs.	4	14.2	.18	10
210710	316	100 lbs.	6	20.4	.18	10
210711	316	100 lbs.	8	26.8	.18	10
210712	316	250 lbs.	2	7.9	.31	10
210713	316	250 lbs.	4	14.2	.31	10

CABLE TIES INDUSTRIAL JAR

For wire bundling, fastening and general use.

- Available in natural nylon for indoor applications or UV-resistant black for outdoor applications.
- Made by Thomas and Betts.
- UL recognized and MIL-SPEC approved.
- Reusable jar.

CONTENTS OF JAR

LENGTH (INCHES)	WIDTH	MAX BUNDLE (INCHES)	TENSILE STRENGTH	JAR QTY
4	.100	5/8	18 lbs.	300
7.5	.187	1-3/4	50 lbs.	300
11.1	.187	3	50 lbs.	50

NATURAL NYLON
Part No. 210845

UV BLACK
Part No. 210846



CABLE TIES

FIR TREE CABLE TIES



PART NUMBER	COLOR	HOLE SIZE MIN/MAX (INCHES)	TENSILE RATING	MAX. BUNDLE DIAMETER (INCHES)	APPROX. LENGTH (INCHES)
210722	Black	.235/.276	50 lbs.	1/4	7.59

- Use indoor and outdoor.
 - Designed for easy insertion & mounting on all applications.
 - Extended fir tree mount for superior holding strength.
 - Heat stabilized to provide high operating temperatures of 230°F.
 - Available in packs of 50, 100 or 300.
- (PSS090919)



BUTTON HEAD CABLE TIES

Designed to securely attach bundle to chassis while allowing removal prior to tightening.



PART NUMBER	COLOR	LENGTH (INCHES)	WIDTH (INCHES)	TENSILE STRENGTH (LBS.)	MAX. BUNDLE DIA. (INCHES)
210723	Black	8	.30	120	2.00
210724	Black	11	.30	120	3.25
210725	Black	14	.30	120	4.07

- Provides parallel entry and exit through the button head.
- Serrations on both sides of cable tie and two opposed pawls allow for clockwise or counter-clockwise installation.
- Heat stabilized to provide high operating temps. of 230°F.
- Impact resistant material resists high impact fatigue and endures vibrations.
- Weather resistant UV black for outdoor use and sun protection breaking from high impacts or extreme temperatures.

PUSH-MOUNT CABLE TIE BASE

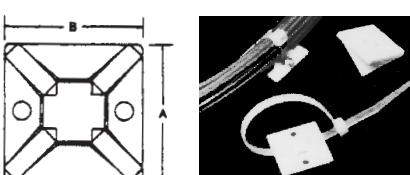


PART NUMBER	COLOR	QTY
210847	Natural	25
210848	Black	25

To attach wire ties securely. Installs in any 1/4" hole.

- Centering ears & locking barb design holds base securely in place.
- Type 6/6 nylon.
- Can be used on all standard ties up to 14-1/2" & 50 lb. tensile strength.
- Base dimension 5/16" x 9/16".

ADHESIVE BACK CABLE TIE BASE



To attach wire tie to specific place, such as securing to a fire wall.

- Adhesive back with screw holes for fast installation.
- Apply to smooth clean, dry and oil free surface.
- Holds from -50°F to +180°F.
- Counter-sunk hole for the screw or rivet will not interfere with the cable ties.
- Can be used on self-locking ties up to 14" and 75lb. tensile strength.

CABLE TIE BASE ASSORTMENT			
66 pieces • 10 items • 12038 plastic tray			
210701	210704	210707	210915
210702	210705	210847	
210703	210706	210848	
Numbers in assortment			

PART NUMBER	ENTRY TYPE	COLOR	DIMENSION (INCHES) A & B	QTY
210701	2-way	Natural	1 x 1	50
210702	2-way	Black	1 x 1	50
210915	4-way	Natural	1-1/8 x 1-1/8	50
210703	4-way	Black	1-1/8 x 1-1/8	50
210704	Mini 4-way	Natural	3/4 x 3/4	50
210705	Mini 4-way	Black	3/4 x 3/4	50

SCREW MOUNT BASES



PART NUMBER	COLOR	QTY
210706	Natural	50
210707	Black	50

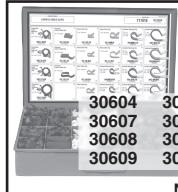
- Narrow and higher design for crowded surface areas.
- Deep cradle design provides extra support for large bundles and many components.
- For use at temperatures not exceeding 85°C (185°F).
- Can be used on all standard and heavy-duty ties up to 48" and 175lbs. tensile strength.
- Screw hole size: 1/4". Base dimensions: 5/8" x 7/8".
- Made in USA.

WIRE TIE ASSORTMENT with INSTALLATION TOOL

WIRE TIE ASSORTMENT			
Part No. 210909			
149 pieces • 11 items • 12090 steel tray			
210905	210912	210939	210942
210910	210913	210940	210955
210911	210925	210941	
Numbers in assortment			



- A wide assortment of the fastest moving wire ties - no waste of money or inventory space.
- Packed in a sturdy metal tray with 3 horizontal and 3 vertical dividers for fully adjustable compartments.

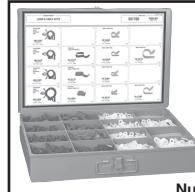
LOOM / LOOM & CABLE CLIPS**LOOM & CABLE CLIPS - SHOP ASSORTMENTS**

Part No. 717016
199 pieces • 23 items
12017 steel tray

30604	30610	30617	210937	717358	717185
30607	30611	30625	210938	717359	717186
30608	30612	210935	717356	717360	717187
30609	30615	210936	717357	717361	

Numbers in assortment

INSULATED MOUNTING CLIP	CONVOLUTED LOOM CLIP	NYLON CABLE CLIP	UNIVERSAL LOOM & CABLE CLIPS
30604	30611	210935	717356
30607	30612	210936	717357
30608	30615	210937	717358
30609	30617	210938	717359
30610	30625		717360
			717361



Part No. 501706
241 pieces • 13 items
12050 steel tray

210935	717356	717360	717187
210936	717357	717361	
210937	717358	717185	
210938	717359	717359	717186

Numbers in assortment

CONVOLUTED LOOM CLIP	NYLON CABLE CLIP	UNIVERSAL LOOM & CABLE CLIPS
210935	717356	717185
210936	717357	717186
210937	717358	717187
210938	717359	
	717360	
		717361

SPLIT CONVOLUTED LOOM

Protects wire, cable, tubing and hoses from pinching and abrasion.

- Slit entire length for easy installation.
- Slit remains closed, even when twisted or bent.
- Polyethylene-temperature rated to 200°F.
- Nylon-temperature rated to 300°F.
- (Recommended for all engine compartment applications.)



BLACK POLYETHYLENE PART NUMBER	I.D. SIZE (INCHES)	LENGTH (FEET)	HI-TEMP BLACK/ GRAY STRIPE NYLON(PART NUMBER)	I.D. SIZE (INCHES)	LENGTH (FEET)
210930	1/4	25/100	210870	1/4	25/100
210931	3/8	25/100	210871	3/8	25/100
210932	1/2	25/100	210872	1/2	25/100
210933	5/8	25/100	210873	5/8	25/50
210974	3/4	25/50	210874	3/4	25/50
210975	1	25/50	210889	1	25/50
210994	1-1/4	25			
210995	1-1/2	25			
210999	2	25			

CONVOLUTED LOOM CLIPS

For routing & fastening wires, tubes, hoses, etc.

- Exact replacement for GM late model cars and trucks.
 - Strong heat resistant black plastic holds loom harness neatly and securely.
 - Universal applications for all car makes
- SAVES YOU MONEY!**

PART NUMBER	FITS LOOM SIZE I.D.	REPLACES O.E.M. #	QTY
210935	1/4	8911473	12
210936	3/8	8911497	12
210937	1/2	8911472	12
210938	5/8	8917320	12
210929	3/4 - 1	12015983	12



Part No. 210934
41 pieces • 5 items
12047 plastic tray

210929	210936	210938
210935		

Numbers in assortment

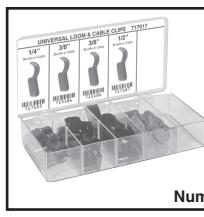
LOOM & CABLE CLIPS

For cars, trucks, trailers & RV's.

- Made from spring steel.
- Holds wire or cable securely.



PART NUMBER	FITS O.D. BUNDLE/CABLE	QTY
717185	1/4	50
717186	3/8	50
717187	1/2	25



Part No. 717017
38 pieces • 3 items
12034 plastic tray

717185	717186	717187
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Numbers in assortment

LOOM & CABLE CLIPS

STEEL INSULATED MOUNTING CLIPS

Used for holding tubing, hoses, cable and other typical assemblies.

- Black vinyl plastisol coated - chemical resistant.
- Zinc plated to resist corrosion.

- Available in 1/2" width with 1/4" mounting hole, or heavy duty 3/4" width with 3/8" mounting hole.

TUBING SIZE	1/2" WIDTH 1/4" MOUNTING HOLE	3/4" WIDTH 3/8" MOUNTING HOLE	QTY
3/16	30603	---	25
1/4	30606	30618	24
5/16	30604	30619	24
3/8	30607	30620	24
1/2	30608	30621	24
5/8	30609	30622	24
3/4	30610	30623	24
7/8	30611	30624	24
1	30612	30625	24
1-1/4	---	30615	12
1-1/2	---	30617	12
1-3/4	---	30627	10
2	---	30628	10

INDUSTRIAL MAINTENANCE/FLEET SHOP

Part No. 501606

140 pieces • 13 items
12058 steel bin

30603	30606	30608	30610	30612	30617	30628
30604	30607	30609	30611	30615	30627	

Numbers in assortment

**Part No. 30601 (3/4" Width)**37 pieces • 9 items
12043 plastic tray

30615	30620	30623
30618	30621	30624
30619	30622	30625

Numbers in assortment

Part No. 30602 (1/2" Width)

45 pieces • 9 items • 12039 plastic tray

30603	30606	30608	30610	30612
30604	30607	30609	30611	

Numbers in assortment

Part No. 501707 (Shop)111 pieces • 14 items
12050 steel tray

30603	30608	30612	30623
30604	30609	30615	30625
30606	30610	30617	
30607	30611	30621	

Numbers in assortment

ALUMINUM TUBING & CABLE MOUNTING CLIPS

Indoor or outdoor use

- Mounts with 1/4" screw or bolt.
- Recommended for use where aging and weathering is a problem.
- 1/2" wide.
- Removable neoprene cover protects tubing or cable from abrasion.

NEOPRENE CUSHION COVER

PART NUMBER	QTY	DIA.	PART NUMBER	QTY	DIA.
720101	10	1/4	720108	10	1
720102	10	5/16	720109	5	1-1/8
720103	10	3/8	720110	5	1-1/4
720104	10	1/2	720111	5	1-3/8
720105	10	5/8	720112	5	1-1/2
720106	10	3/4	720114	5	1-3/4
720107	10	7/8	720113	5	2

**Part No. 720100**38 pieces • 12 items
12043 plastic tray

720101	720105	720109
720102	720106	720110
720103	720107	720101
720104	720108	720112

Numbers in assortment

Part No. 50170887 pieces • 14 items
12050 steel tray

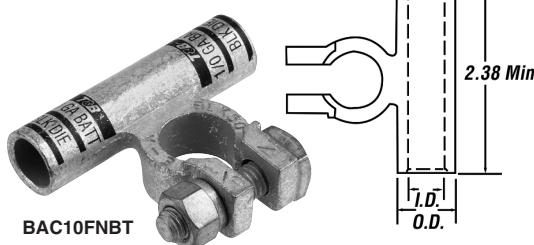
720101	720105	720109	720113
720102	720106	720110	720114
720103	720107	720111	
720104	720108	720112	

Numbers in assortment

Color Keyed® – Battery Cable/Connector System

COLOR-KEYED® SAND CAST TIN PLATED FLAG BATTERY CONNECTORS

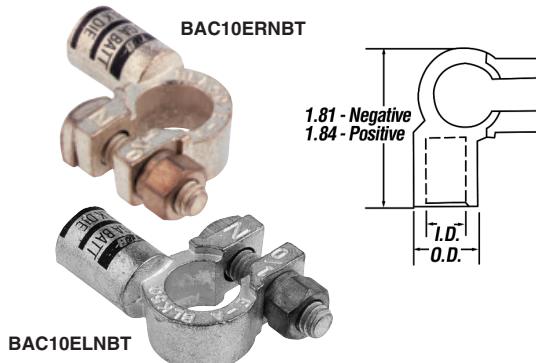
- Material:** High-conductivity copper
- Finish:** Electro-tin plated
- Installing Tools:** TBM5SV, TBM5V, BCT840, BCT840S



CAT. NO.	SAE CABLE SIZE AND COLOR	DESCRIPTION	I.D.	O.D.	PKG. QTY.
BAC10FPBT	1/0 Gauge	Flag Positive	.455	.625	5
BAC10FNBT	1/0 Gauge	Flag Negative	.455	.625	5
BAC20FPBT	2/0 Gauge	Flag Positive	.502	.676	5
BAC20FNBT	2/0 Gauge	Flag Negative	.502	.676	5
BAC30FPBT	3/0 Gauge	Flag Positive	.530	.730	5
BAC30FNBT	3/0 Gauge	Flag Negative	.530	.730	5
BAC40FPBT	4/0 Gauge	Flag Positive	.600	.844	5
BAC40FNBT	4/0 Gauge	Flag Negative	.600	.844	5

COLOR-KEYED® SAND CAST TIN PLATED ELBOW BATTERY CONNECTORS

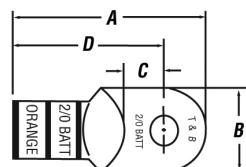
- Material:** High-conductivity copper
- Finish:** Electro-tin plated
- Installing Tools:** TBM5SV, TBM5V, BCT840, BCT840S



CAT. NO.	SAE CABLE SIZE AND COLOR	DESCRIPTION	I.D.	O.D.	PKG. QTY.
BAC10ERNBT	1/0 Gauge	Right Elbow – Negative	.455	.625	5
BAC10ERPBT	1/0 Gauge	Right Elbow – Positive	.455	.625	5
BAC20ERNBT	2/0 Gauge	Right Elbow – Negative	.502	.676	5
BAC20ERPBT	2/0 Gauge	Right Elbow – Positive	.502	.676	5
BAC30ERNBT	3/0 Gauge	Right Elbow – Negative	.530	.730	5
BAC30ERPBT	3/0 Gauge	Right Elbow – Positive	.530	.730	5
BAC40ERNBT	4/0 Gauge	Right Elbow – Negative	.600	.844	5
BAC40ERPBT	4/0 Gauge	Right Elbow – Positive	.600	.844	5
BAC10ELNBT	1/0 Gauge	Left Elbow – Negative	.455	.625	5
BAC10ELPBT	1/0 Gauge	Left Elbow – Positive	.455	.625	5
BAC20ELNBT	2/0 Gauge	Left Elbow – Negative	.502	.676	5
BAC20ELPBT	2/0 Gauge	Left Elbow – Positive	.502	.676	5
BAC30ELNBT	3/0 Gauge	Left Elbow – Negative	.530	.730	5
BAC30ELPBT	3/0 Gauge	Left Elbow – Positive	.530	.730	5
BAC40ELNBT	4/0 Gauge	Left Elbow – Negative	.600	.844	5

COLOR-KEYED® STARTER LUGS – TIN PLATED

- Material:** High-conductivity copper
- Finish:** Electro-tin plated
- Installing Tools:** TBM5SV, TBM5V, BCT840, BCT840S



CAT. NO.	SAE CABLE SIZE AND COLOR	STUD SIZE	A ±.040	B ±.020	C ±.020	D ±.020	PKG. QTY.
BAL414	4 Gauge	1/4	1.40	.52	.40	1.15	5
BAL4516	4 Gauge	5/16	1.45	.61	.36	1.14	5
BAL438	4 Gauge	3/8	1.45	.61	.36	1.14	5
BAL2516	2 Gauge	5/16	1.59	.69	.40	1.25	5
BAL238	2 Gauge	3/8	1.78	.67	.55	1.40	5
BAL212	2 Gauge	1/2	1.77	.76	.54	1.40	5
BAL1516	1 Gauge	5/16	1.83	.76	.49	1.50	5
BAL138	1 Gauge	3/8	1.85	.75	.55	1.50	5
BAL112	1 Gauge	1/2	2.20	.75	.75	1.70	5
BAL10516	1/0 Gauge	5/16	1.92	.83	.50	1.50	5
BAL1038	1/0 Gauge	3/8	1.93	.83	.55	1.55	5
BAL1012	1/0 Gauge	1/2	1.97	.88	.53	1.53	5
BAL20516	2/0 Gauge	5/16	2.06	.93	.50	1.60	5
BAL2038	2/0 Gauge	3/8	2.11	.93	.55	1.65	5
BAL2012	2/0 Gauge	1/2	2.11	.93	.55	1.65	5
BAL30516	3/0 Gauge	5/16	2.16	1.03	.55	1.65	5
BAL3038	3/0 Gauge	3/8	2.03	1.03	.55	1.65	5
BAL3012	3/0 Gauge	1/2	2.35	1.03	.75	1.85	5
BAL40516	4/0 Gauge	5/16	2.40	1.13	.59	1.84	5
BAL4038	4/0 Gauge	3/8	2.28	1.12	.55	1.90	5
BAL4012	4/0 Gauge	1/2	2.60	1.12	.75	2.10	5

Color Keyed® – Battery Cable/Connector System

COLOR-KEYED® STACKABLE BATTERY CONNECTORS – LEAD PLATED

- **Material:** High-conductivity copper
- **Finish:** Lead plated
- **Installing Tools:** TBM5SV, TBM5V, BCT840, BCT840S

CAT. NO.	SAE CABLE SIZE AND COLOR	A ±.040	M ±.020	W ±.020	C ±.020	E ±.010	STUD SIZE	PKG. QTY.
BAC438	4 Gauge	1.455	1.143	.615	.750	.365	3/8	5
BAC238	2 Gauge	1.775	1.400	.675	.850	.467	3/8	5
BAC138	1 Gauge	1.875	1.500	.750	.950	.521	3/8	5
BAC1038	1/0 Gauge	1.925	1.550	.825	1.000	.571	3/8	5
BAC2038	2/0 Gauge	2.110	1.645	.930	1.100	.632	3/8	5
BAC3038	3/0 Gauge	2.025	1.650	1.025	1.100	.701	3/8	5
BAC4038	4/0 Gauge	2.275	1.900	1.125	1.350	.766	3/8	5



COLOR-KEYED® SPLICES (2 WAY CONNECTORS) – TIN PLATED

CAT. NO.	SAE CABLE SIZE AND COLOR	PKG. QTY.
BAS4	4 Gauge	5
BAS2	2 Gauge	5
BAS1	1 Gauge	5
BAS10	1/0 Gauge	5
BAS20	2/0 Gauge	5
BAS30	3/0 Gauge	5
BAS40	4/0 Gauge	5

- **Material:** High-conductivity copper
- **Finish:** Electro-tin plated
- **Installing Tools:** TBM5SV, TBM5V, BCT840, BCT840S



COLOR-KEYED® BATTERY/STARTER CABLES

Abrasion-resistant and engineered for optimum performance at both high and low temperatures.

- Made of fine flexible copper rope stranding.
- PVC jacket that conforms to SAE J1127 specifications.
- Layer of paper separates insulation from copper providing easy stripping with no stranding damage.

- Temperature rated for 80°C.
- Flexibility ideal for tight spaces and cold environments.
- **Color-Keyed™** for fast and accurate identification.
- Marked in 1ft. increments for easy measurements.

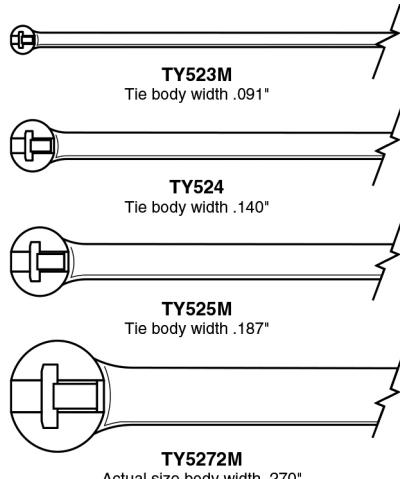
CAT. NO.	SAE CABLE SIZE AND COLOR	CABLE LENGTH	CABLE COLOR
BC425	4 Gauge	25 Ft. Coil	Black
BC225	2 Gauge	25 Ft. Coil	Black
BC125	1 Gauge	25 Ft. Coil	Black
BC1025	1/0 Gauge	25 Ft. Coil	Black
BC2025	2/0 Gauge	25 Ft. Coil	Black
BC3025	3/0 Gauge	25 Ft. Coil	Black
BC4025	4/0 Gauge	25 Ft. Coil	Black
BC425R	4 Gauge	25 Ft. Coil	Red
BC225R	2 Gauge	25 Ft. Coil	Red
BC125R	1 Gauge	25 Ft. Coil	Red
BC1025R	1/0 Gauge	25 Ft. Coil	Red
BC2025R	2/0 Gauge	25 Ft. Coil	Red
BC3025R	3/0 Gauge	25 Ft. Coil	Red
BC4025R	4/0 Gauge	25 Ft. Coil	Red
BC4100	4 Gauge	100 Ft. Coil	Black
BC2100	2 Gauge	100 Ft. Coil	Black
BC1100	1 Gauge	100 Ft. Coil	Black
BC10-00	1/0 Gauge	100 Ft. Coil	Black
BC20100	2/0 Gauge	100 Ft. Coil	Black
BC30100	3/0 Gauge	100 Ft. Coil	Black
BC40100	4/0 Gauge	100 Ft. Coil	Black

- **Material:** High-conductivity copper
- **Finish:** Electro-tin plated
- **Installing Tools:** TBM5SV or TBM5V



Ty-Rap® – Cable Tying System

TY-RAP® STANDARD NYLON 6/6 CABLE TIES

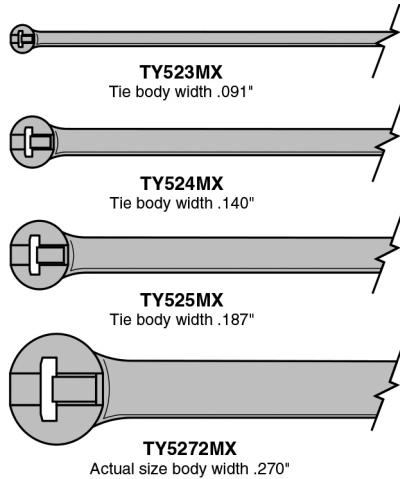


- Suitable for air handling (plenum) applications.
- For use in temperatures ranging from -40°F to 185°F (-40°C to 85°C).
- Color - natural nylon.

CAT. NO.	BODY WIDTH (IN.)	LENGTH (IN.)	MAX. WIRE BUNDLE DIAMETER (IN.)	MILITARY STANDARD PART NO.	TENSILE STRENGTH (LBS.)	PKG. QTY.
TY523M	.091	3.62	.625	MS3367-4	18	100
TY52315M	.091	7.00	1.500	--	18	50
TY5232M	.091	8.00	2.000	--	18	50
TY5234M	.091	14.00	4.000	--	18	50
TY524M	.140	5.50	1.125	MS3367-5	40	50
TY5242M	.140	8.19	2.000	--	40	50
TY526M	.140	11.10	3.000	--	40	50
TY5244M	.140	14.50	4.000	--	40	50
TY525M	.184	7.31	1.750	MS3367-1	50	50
TY5253M	.184	11.40	3.000	MS3367-7	50	50
TY528M	.184	14.20	4.000	MS3367-2	50	50
TY5272M	.270	8.00	2.000	--	120	25
TY527M	.270	13.40	3.500	MS3367-3	120	25
TY5275M	.270	18.00	5.000	--	120	25
TY5277M	.270	24.30	7.000	--	120	25
TY529M	.301	30.00	9.000	MS3367-6	120	25
TY53510MX†	.320	35.00	10.000	--	175	25
TY54513MX†	.320	45.00	13.000	--	175	25

UL® Listed natural nylon 6/6 cable ties are suitable for use in air handling spaces (plenums) in accordance with Section 300.22 (C) & (D) of the National Electrical Code®. UL® File No. E49405.

TY-RAP® NYLON 6/6 CABLE TIES - WEATHER RESISTANT

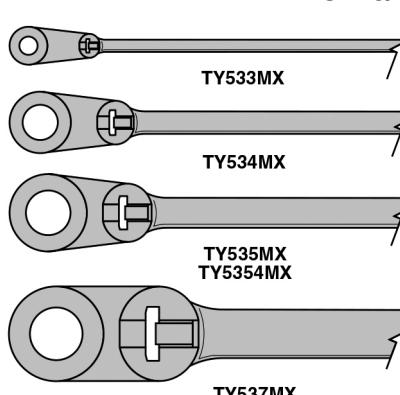


- For use in temperatures ranging from -40°F to 185°F (-40°C to 85°C).
- Color - black.

CAT. NO.	BODY WIDTH (IN.)	LENGTH (IN.)	MAX. WIRE BUNDLE DIAMETER (IN.)	MILITARY STANDARD PART NO.	TENSILE STRENGTH (LBS.)	PKG. QTY.
TY523MX	.091	3.62	.625	MS3367-4	18	50
TY52315MX	.091	7.00	1.500	--	18	50
TY5232MX	.091	8.00	2.000	--	18	50
TY5234MX	.091	14.00	4.000	--	18	50
TY5242MX	.140	5.50	1.125	MS3367-5	40	50
TY526MX	.140	8.19	2.000	--	40	50
TY5244MX	.140	11.10	3.000	--	40	50
TY525MX	.184	7.31	1.750	MS3367-1	50	50
TY5253MX	.184	11.40	3.000	MS3367-7	50	50
TY528MX	.184	14.20	4.000	MS3367-2	50	50
TY5272MX	.270	8.00	2.000	--	120	25
TY527MX	.270	13.40	3.500	MS3367-3	120	25
TY5275MX	.270	18.00	5.000	--	120	25
TY5277MX	.270	24.30	7.000	--	120	25
TY529MX*	.301	30.00	9.000	MS3367-6	120	25
TY53510MX†	.320	35.00	10.000	--	175	25
TY54513MX†	.320	45.00	13.000	--	175	25

* For military compliance of weather-resistant black 120 lbs. ties, replace suffix X with 0 (ie. TY27M-0).
† Not listed or recognized models. UL® File No. E49405.

TY-RAP® NYLON 6/6 MOUNTING HEAD CABLE TIES - WEATHER RESISTANT



- Recommended for outdoor use. The addition of carbon black provides good ultraviolet resistance and prolongs the useful life of a cable tie.
- For use in temperatures ranging from -40°F to 185°F (-40°C to 85°C).
- Color - black.

CAT. NO.	BODY WIDTH (IN.)	LENGTH (IN.)	MAX. WIRE BUNDLE DIAMETER (IN.)	MOUNTING HOLE	TENSILE STRENGTH (LBS.)	PKG. QTY.
TY533MX	.091	4.00	.625	#4	18	50
TY534MX	.140	6.00	1.125	#8	40	50
TY535MX	.184	7.80	1.750	#10	50	50
TY5354MX	.184	14.60	4.000	#10	50	50
TY537MX	.301	13.90	3.500	1/4	120	50



BATTERY / BATTERY TERMINALS

STUD TOP BATTERY CABLE

- 2/0 gauge wire.
- Molded tin-plated copper lugs and black PVC outer jacket.



LENGTH INCHES	PART NUMBER
8	322174
12	322179

FLAG to POST TERMINAL ADAPTERS

Converts Group U-1 flag terminal batteries to post terminals.



Part No. 222191 10

- Permits use of standard post style battery cables on utility, garden, lawn & landscape tractors & equipment.
- Eliminates corrosion problem that is common on flag connections.
- Post connection permits much higher conductivity to post terminal.

BATTERY MASTER SWITCH

Anti-Theft Battery Saver

- Available for top post and side post terminals.
- A quarter turn of the knob disconnects battery while cable stays connected.
- Removal of knob prevents theft.
- For 6, 12 or 24 volt batteries.
- Rated 100 amps continuous, 600 amps cranking.
- Not for use on marine and RV applications.



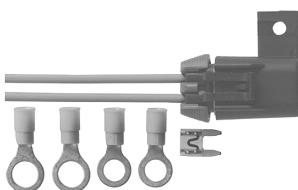
Part No. 222192
Top Post Terminals



Part No. 222193
Side Post Terminals

OPTIONAL FUSE BYPASS KIT

Includes: Fuse holder, 20 amp MINI fuse, ring terminals



Part No. 222194
Use with Part No.'s 222192 &
222193, Battery Master Switches

- Optional fuse bypass mounts between post bolt and cable bolt to allow current flow when switch is disconnected. This provides power to computers, radios, locks, clocks, etc. If an attempt is made to start the vehicle the fuse will blow.

UNIVERSAL LEAD-FREE BATTERY TERMINAL

- Universal style fits positive or negative posts.
- 5/16" stud mount for lug type cables, popular on many imports.
- Includes two 4-6 ga. plated copper cable lugs.



Part No. 222195 4

UNIVERSAL POST TERMINALS

- 2-bolt clamp for tight, strong connection.
- Solid lead terminals.
- Corrosion-resistant, highest conductivity.
- Fits 6 gauge to 00 gauge cable.
- Available bulk boxed or mounted on display card.



Part No. 33001
25 bulk boxed

Part No. 33002
10 terminals/card

UNIVERSAL SIDE TERMINALS

- 2-bolt clamp for tight, strong connection.
- Repairs damaged side-terminal cables.
- Fits 6 gauge to 00 gauge cable.
- Made of antimony-lead.
- Available bulk boxed or mounted on display card.



Part No. 33008
25 bulk boxed

Part No. 33007
8 terminals/card

E-Z GRIP TERMINALS

- Single set screw for OEM appearance.
- Fits 6 ga. to 00 ga. cable.



Part No. 222155 25
for Post terminal batteries



Part No. 222156 25
for Side terminal batteries

TOP POST IMPORT CAR TERMINALS

- Sizes cover Asian & European imports.
- Crimp style closed barrel end.
- 300% more conductive than lead.



SAE CABLE	PART NUMBER	QTY
6	222149	6
4	222150	6
1	222148	6

Part No. 222151 3
Black insulator cover

Part No. 222152 3
Red insulator cover



BATTERY TERMINALS**HEAVY DUTY COPPER BATTERY TERMINALS**

RIGHT



FLAG



LEFT



STRAIGHT

- Raised characters to ensure legibility.
- Bright tin plated finish provides protection against corrosion.

- Constructed of 131 contact copper to provide high conductivity.

LEFT ELBOWS

PART NUMBER	CABLE SIZE	POLARITY	T & B COLOR DIE CODE	DIE CODE	QTY
322122	1/0	Negative	Black	EA	5
322123	1/0	Positive	Black	EA	5
322124	2/0	Negative	Orange	AC	5
322125	2/0	Positive	Orange	AC	5
322126	3/0	Negative	Purple	AB	5
322127	3/0	Positive	Purple	AB	5
322094	4/0	Negative	Yellow	AA	5
322095	4/0	Positive	Yellow	AA	5

STRAIGHTS

PART NUMBER	CABLE SIZE	POLARITY	T & B COLOR DIE CODE	DIE CODE	QTY
322105	4	Universal	Gray	JH	5
322106	1-2	Negative	Pink	HH	5
322107	1-2	Positive	Pink	HH	5
322108	1/0	Negative	Black	EA	5
322109	1/0	Positive	Black	EA	5
322110	2/0	Negative	Orange	AC	5
322111	2/0	Positive	Orange	AC	5
322112	3/0	Negative	Purple	AB	5
322113	3/0	Positive	Purple	AB	5
322114	4/0	Negative	Yellow	AA	5
322115	4/0	Positive	Yellow	AA	5

RIGHT ELBOWS

PART NUMBER	CABLE SIZE	POLARITY	T & B COLOR DIE CODE	DIE CODE	QTY
322116	1/0	Negative	Black	EA	5
322117	1/0	Positive	Black	EA	5
322118	2/0	Negative	Orange	AC	5
322119	2/0	Positive	Orange	AC	5
322120	3/0	Negative	Purple	AB	5
322121	3/0	Positive	Purple	AB	5
322096	4/0	Negative	Yellow	AA	5
322097	4/0	Positive	Yellow	AA	5

FLAGS

PART NUMBER	CABLE SIZE	POLARITY	T & B COLOR DIE CODE	DIE CODE	QTY
322132	1/0	Negative	Black	EA	5
322133	1/0	Positive	Black	EA	5
322128	2/0	Negative	Orange	AC	5
322129	2/0	Positive	Orange	AC	5
322130	3/0	Negative	Purple	AB	5
322131	3/0	Positive	Purple	AB	5
322098	4/0	Negative	Yellow	AA	5
322099	4/0	Positive	Yellow	AA	5

TERMINAL LUGS & BUTT CONNECTORS

- Heavy duty.

- Marked with T&B color tool die codes.

- Solid copper.



8 Gauge		6 Gauge		4 Gauge		1-2 Gauge		
STUD SIZE	PART NUMBER	QTY	PART NUMBER	QTY	PART NUMBER	QTY	PART NUMBER	QTY
1/4	210117	25	210131	30	210120	25	210122	15
5/16	210118	25	210132	30	210133	25	210134	15
3/8	210119	25	210145	30	210121	25	210123	15
1/2	---	-	---	-	---	-	210146	15
1/0 Gauge		2/0 Gauge		3/0 Gauge		4/0 Gauge		
STUD SIZE	PART NUMBER	QTY	PART NUMBER	QTY	PART NUMBER	QTY	PART NUMBER	QTY
3/8	210125	15	210127	10	210147	5	210148	5
1/2	210126	15	210128	10	210129	5	210130	5

BUTT CONNECTORS

WIRE GAUGE	PART NUMBER	QTY
6	210137	25
4	210138	20
1-2	210139	15
1/0	210141	10
2/0	210142	10
3/0	210143	5
4/0	210144	5

INDUSTRIAL MAINTENANCE TERMINALS

Part No. 501314

50 pieces • 18 items

Heavy duty Ring tongues - 4 to 4/0,
Butt connectors - 6 to 4/0.
Heat shrink tubing.

210121	210127	210137	210142	812145P
210123	210128	210138	210143	812146P
210125	210129	210139	210144	
210126	210130	210141	210146	

Numbers in assortment

GENERAL PURPOSE BATTERY TERMINALS

Part No. 501011

42 pieces • 20 items

E-Z grip, crimpable battery terminals
and Ring tongues. Wire gauges 1 to 4/0.
Heat shrink tubing.

210120	210125	210130	322106	322110
210121	210126	210134	322107	322111
210122	210127	210146	322108	812145P
210123	210128	322105	322109	812146P

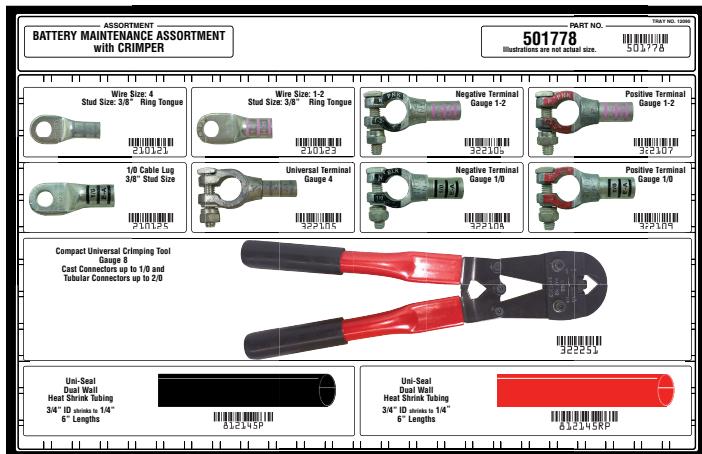
Numbers in assortment

BATTERY TERMINALS

BATTERY MAINTENANCE ASSORTMENT with CRIMPER

- Includes popular automotive replacement battery terminals for domestics and imports.
- Wide array of accessory replacements including starter lugs, heat shrink tubing, terminals & crimper.

PSS100217



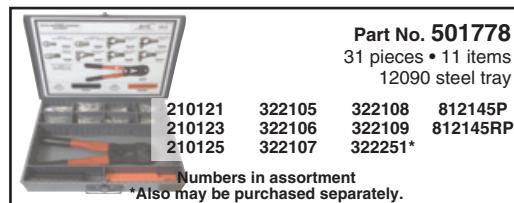
COMPACT CRIMP-MASTER UNIVERSAL CRIMPING TOOL

Tool features a unique, 21st century designed triangular crimp. Innovative design exerts equal pressure at all contact points, centers the cable and produces a homogeneous mass of copper on any battery terminal or lug.

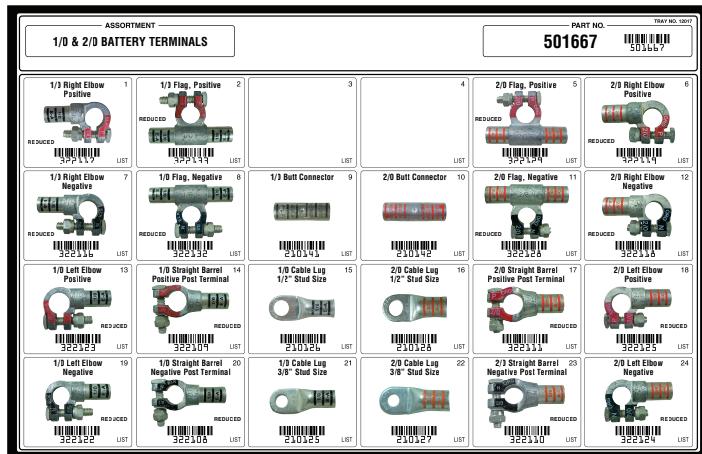
- 50 different crimp settings.
- Setting changes are a simple two finger adjustment.
- No flashing.
- No dies to replace or misalign.
- Compression crimp (not indent).
- Made in U.S.A.
- Unique patented design head.



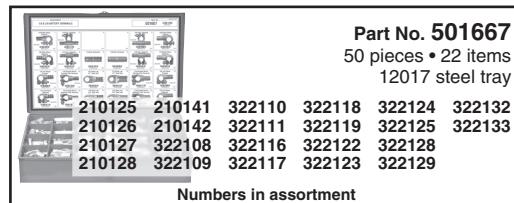
Part No. 322251
15-1/4" overall length



1/0 & 2/0 FLEET BATTERY TERMINAL ASSORTMENT



- Specially designed for fleet maintenance shops.
- Also includes butt splice connectors and lugs.
- Complete selection of 1/0 and 2/0 post terminals, polarity coded, including straights, flags and elbows.



INDUSTRIAL BATTERY CONNECTORS

Heavy duty power connectors for battery powered vehicles and equipment.

- Known as "S Connectors", "Anderson Connectors", and "SB Connectors".
- Self-mating connectors.
- 600 VDC rated.
- Lexan housing.
- Silver plated copper contacts.
- Complete unit with two contacts.

AWG. GAUGE	AMP	PART NUMBER	QTY
6	50	210155	1
1/0	175	210156	1
2/0	350	210157	1



BATTERY TERMINALS**CORRECTCONNECT™ UN-PLATED SEAMLESS COPPER STARTER LUGS**

Part No. 210748
102 pieces • 23 items
12017 steel tray

210750	210754	210758	210762	210766	210770
210751	210755	210759	210763	210767	210771
210752	210756	210760	210764	210768	210772
210753	210757	210761	210765	210769	

Numbers in assortment

Part No. 210749
56 pieces • 16 items
12050 steel tray

210773	210777	210781	210785
210774	210778	210782	210786
210775	210779	210783	210787
210776	210780	210784	210788

Numbers in assortment

- Pure un-plated copper 99.9% conductive.
- Seamless pad for added strength and improved conductivity.
- Wire size stamped into the copper not painted on.
- Flared barrel for easy wire insertion.

PART NUMBER	WIRE SIZE	STUD HOLE	QTY
210750	8	#10	20
210751	8	1/4"	20
210752	8	5/16"	20
210753	8	3/8"	20
210754	8	1/2"	20
210755	6	#10	20
210756	6	1/4"	20
210757	6	5/16"	20
210758	6	3/8"	20
210759	6	1/2"	20
210760	4	#10	10
210761	4	1/4"	10
210762	4	5/16"	10
210763	4	3/8"	10
210764	4	1/2"	10
210765	2	1/4"	10
210766	2	5/16"	10
210767	2	3/8"	10
210768	2	1/2"	10

PART NUMBER	WIRE SIZE	STUD HOLE	QTY
210769	1	1/4"	10
210770	1	5/16"	10
210771	1	3/8"	10
210772	1	1/2"	10
210773	1/0	1/4"	10
210774	1/0	5/16"	10
210775	1/0	3/8"	10
210776	1/0	1/2"	10
210777	2/0	1/4"	10
210778	2/0	5/16"	10
210779	2/0	3/8"	10
210780	2/0	1/2"	10
210781	3/0	1/4"	5
210782	3/0	5/16"	5
210783	3/0	3/8"	5
210784	3/0	1/2"	5
210785	4/0	1/4"	5
210786	4/0	5/16"	5
210787	4/0	3/8"	5
210788	4/0	1/2"	5

