

# FLEET MAINTENANCE



## CHROMATE FLEET MAINTENANCE

The repair and maintenance of trucks, buses, trailers, agricultural machinery, transport maintenance, forwarding maintenance, marine maintenance and repair, road construction equipment, railway maintenance, and public services and transportation maintenance.

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# CHROMATE INDUSTRIAL CORP.

EXCEPTIONAL PRODUCTS, SERVICE AND INNOVATIVE SOLUTIONS



# RED LION™ CHEMICALS

Part Numbers	Size	Product	Description
<b>Adhesives/ Sealants</b>			
74514	1.2 oz.	E-Z POXY Cups	Pre-measured, single use, fast setting epoxy
74547	4 fl. oz.	Liquid Electrical Tape	Forms a protective dielectric coating on connections Brush applicator
74516	1/3 fl. oz.	Instant Adhesive	Instant high-strength, cyanoacrylate adhesive for non-porous surfaces
74128, 74131, 74132, 74133	8 oz.	RTV Gasket Maker	Tough silicone adhesive sealer/gasket maker (white, black, blue clear)
74153	8 oz.	RTV Gasket Maker	High temperature resistant, tough silicone adhesive, meets GM specs (red)
74542, 74548, 74543, 74541	10.3 oz.	RTV Gasket Maker/Sealer	Tough silicone adhesive in a caulking gun cartridge (white, black, blue clear)
74515	1.2 fl. oz.	Stud Lock & Bearing Mount	High temperature resistant adhesive for locking studs and bearings
74513	1.2 fl. oz.	Threadlocker	Strong temporary lock for threaded fasteners
<b>Cleaners/Degreasers</b>			
74136	15.25 oz.	Air Tool Conditioner	Solvent-based, air tool cleaner and lubricant
74106	15 oz.	Battery Protector & Cleaner	Versatile 4-in-1 product (cleans, detects, neutralizes, protects)
74115	14.75 oz.	Choke and Carb Cleaner	Fast-drying carburetor cleaner
74147	12.25 oz.	Brake Cleaner	Non-chlorinated cleaner and degreaser
74120	17.75 oz.	Glass Cleaner	Strong, ammonia based glass and surface cleaner
74609	90 count	H.D. Multi-Purpose Citrus Towels	Strong, citrus based, pre-moistened hand/surface cleaner towels
<b>Soaps</b>			
74629	85 fl. oz.	Antimicrobial Hand Cleaner and Sanitizer	Conforms to the E-2 Designation requirements of the USDA.
74630	120 fl. oz.	Heavy Duty Scrub Hand Soap	Concentrated industrial hand cleaner fortified with leading edge skin conditioners and free floating polymer scrubbers.
74633	18 fl. oz.		
74631	120 fl. oz.	H.D. Citrus Hand Soap	A liquid heavy duty hand cleaner based on a synergistic blend of detergents, emulsifiers, solvents, and emollients.
74632	18 fl. oz.		
74471	120 fl. oz.	Cherry Impact Hand Soap	An industrial hand cleaner with cherry fragrance that contains superior emollients to reduce drying and cracking.
74472	18 fl. oz.		
74458	120 fl. oz.	Magic Hand Soap	All natural industrial hand cleaner that contains walnut shell scrubbers to clean the toughest soils.
74459	18 fl. oz.		
<b>Lubricants</b>			
74151	14 oz.	Cable & Chain Core Lube	Dry film lube for moisture and saltwater resistance
74108	17.75 oz.	Silicone	All Purpose Silicone Lube
<b>Pro-Coat™ Paints</b>			
74014, 74010, 74003, 74016, 74012	15.25 oz.	Acrylic Enamel Paints	Extremely tough, corrosion resistant, fast drying (Gloss black, gloss white, gray primer, hi-temp flat black, gray, red oxide primer)
74190, 74194, 74196	15.25 oz.	OSHA Color Industrial Enamels	Extremely tough, corrosion resistant, fast drying (Red, yellow, green)
74024	12 oz.	Clear Epoxy Grit Coating	Extremely tough, corrosion resistant, fast drying (clear)
<b>Specialty Products</b>			
74169	16 oz.	Insta-Shine Truck/Bus Protectant	Fast polish and shine for painted and chrome surfaces
74426	8 oz.	Anti-Seize II - Copper Compound	Blend of lubricating solids prevents seizing and galling of metal parts
<b>Bulk Chemicals</b>			
74235	55 gal.	Big Job™ Truck Wash	Concentrated, water-based, biodegradable, manual or auto wash
74236	30 gal.	Big Job™ Truck Wash	Concentrated, water-based, biodegradable, manual or auto wash
74237	20 gal.	Big Job™ Truck Wash	Concentrated, water-based, biodegradable, manual or auto wash
74238	5 gal.	Big Job™ Truck Wash	Concentrated, water-based, biodegradable, manual or auto wash
74239	1 gal.	Big Job™ Truck Wash	Concentrated, water-based, biodegradable, manual or auto wash
74245	55 gal.	Diesel Fuel Additive	Injector cleaner, rust inhibitor, smoke reducer
74246	30 gal.	Diesel Fuel Additive	Injector cleaner, rust inhibitor, smoke reducer
74247	20 gal.	Diesel Fuel Additive	Injector cleaner, rust inhibitor, smoke reducer
74248	5 gal.	Diesel Fuel Additive	Injector cleaner, rust inhibitor, smoke reducer
74249	1 gal.	Diesel Fuel Additive	Injector cleaner, rust inhibitor, smoke reducer
74305	55 gal.	Equipment Clean™	Emulsifiable, solvent based, engine/equipment cleaner/degreaser
74306	30 gal.	Equipment Clean™	Emulsifiable, solvent based, engine/equipment cleaner/degreaser
74307	20 gal.	Equipment Clean™	Emulsifiable, solvent based, engine/equipment cleaner/degreaser
74308	5 gal.	Equipment Clean™	Emulsifiable, solvent based, engine/equipment cleaner/degreaser
74309	1 gal.	Equipment Clean™	Emulsifiable, solvent based, engine/equipment cleaner/degreaser
74310	55 gal.	Steam Clean™	All purpose, deep cleaning, free-rinsing
74311	30 gal.	Steam Clean™	All purpose, deep cleaning, free-rinsing
74312	20 gal.	Steam Clean™	All purpose, deep cleaning, free-rinsing
74313	5 gal.	Steam Clean™	All purpose, deep cleaning, free-rinsing
74314	1 gal.	Steam Clean™	All purpose, deep cleaning, free-rinsing
74257	55 gal.	Brake Clean	Non-chlorinated cleaner and degreaser
74256	30 gal.	Brake Clean	Non-chlorinated cleaner and degreaser

Please refer to Section 30 for the full description and proper use of all Red Lion™ Chemicals.

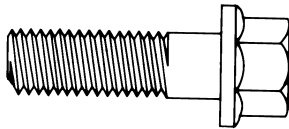
# HEX FLANGE BOLTS AND LOCK NUTS

## WHEN A STRONG BEARING SURFACE IS REQUIRED

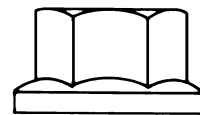
### TRIPLE HEAT TREATED ALLOY STEEL. U.S. MADE WITH U.S. STEEL AND U.S. LABOR.

- Minimum 150,000 psi tensile strength
- For use on Autocar, International Harvester, Mack, Peterbilt, Western, White and many other types of heavy equipment
- Grade "GT" Hex Flange Locknuts recommended for use with flange bolts
  - ALLOY 200 and Grade 8.2 applications
- Improves bearing load surface
- Eliminates the need for washers
- Meets IFI-107 specifications
- USS class 2 Threads
- 30% stronger than standard nuts

### HEX FLANGE BOLTS



### HEX FLANGE LOCK NUTS



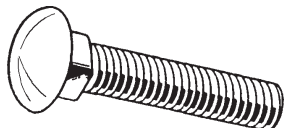
LENGTH	3/8-16	1/2-13	5/8-11	3/4-10
<b>1</b>	L 19503	-	-	-
<b>1-1/4</b>	L 19504	L 19517	-	-
<b>1-1/2</b>	L 19505	L 19518	I 19536	-
<b>1-3/4</b>	L 19508	-	-	-
<b>2</b>	L 19509	L 19522	I 19540	I 19550
<b>2-1/4</b>	L 19512	-	I 19541	E 19552
<b>2-1/2</b>	-	L 19526	I 19544	E 19554
<b>3</b>	-	I 19528	I 19546	-
<b>3-1/2</b>	-	-	I 19548	-
<b>4</b>	-	I 19532	I 19549	E 19560

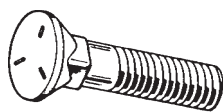
SIZE	WAF	USS	SAE
1/4	7/16	R 19589	-
3/8	9/16	R 19590	-
1/2	3/4	N 19592	R 19582
5/8	15/16	L 19594	L 19584
3/4	1 - 1/8	I 19596	E 19585

# SHAKER SCREEN AND PLOW BOLTS

## HEAT-TREATED GRADE 5 BOLTS FOR HIGH STRENGTH

High carbon content, 120,000 PSI bolts with U.S.S. threads and square neck. Nuts not included.

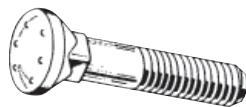
FULLY THREADED SHAKER SCREEN BOLTS			
		<ul style="list-style-type: none"> <li>• DURABLE CHROMATE PLATING</li> <li>• GRADE 5 CARRIAGE BOLT</li> </ul>	
LENGTH	1/2 DIA.	5/8 DIA.	3/4 DIA.
1-1/2	L 22899	-	-
2	L 22900	I 22911	-
2-1/2	L 22901	I 22912	-
3	L 22902	I 22913	-
3-1/2	L 22903	I 22914	E 22918
4	L 22904	I 22915	E 22920
4-1/2	L 22905	I 22916	E 22921
5	I 22906	E 22917	E 22922
5-1/2	I 22907	-	E 22923
6	I 22908	E 22919	E 22924
8	E 22910	-	-


#3 HEAD PLOW BOLTS			
			
LENGTH	7/16 DIA.	1/2 DIA.	
1	O 99412	O 99421	
1-1/4	O 99413	O 99422	
1-1/2	O 99414	O 99423	
1-3/4	O 99415	L 99424	
2	O 99416	L 99425	
2-1/2	O 99418	L 99427	
2-3/4	-	L 99428	
3	L 99420	L 99429	
3-1/2	-	L 99430	
4	-	L 99431	
	-	-	

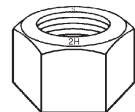
# #3 DOME HEAD PLOW BOLTS & FINISHED HEX NUTS

## HEAT-TREATED GRADE 8 BOLTS FOR ULTIMATE HIGH STRENGTH

High carbon content, 150,000 PSI bolts with U.S.S. threads and square neck. Nuts not included.

#3 DOME HEAD PLOW BOLTS					
					
LENGTH	5/8 DIA.	3/4 DIA.	7/8 DIA.	1 DIA.	1-1/4 DIA.
1-1/2	L 99432	-	-	-	-
1-3/4	L 99433	I 99443	-	-	-
2	L 99434	I 99444	E 99453	-	-
2-1/4	L 99407	I 99411	-	-	-
2-1/2	L 99435	I 99445	E 99454	E 99464	-
3	I 99436	I 99446	E 99455	E 99465	-
3-1/4	-	-	-	99410	-
3-1/2	I 99437	I 99447	E 99456	E 99466	-
4	I 99438	E 99448	E 99457	E 99467	-
4-1/2	I 99439	E 99449	E 99458	E 99468	A 99408
5	I 99440	E 99450	E 99459	E 99469	A 99409
5-1/2	-	E 99451	E 99460	E 99470	-
6	E 99442	E 99452	E 99461	E 99471	-
6-1/2	-	-	-	E 99472	-
7	-	-	E 99463	A 99473	-

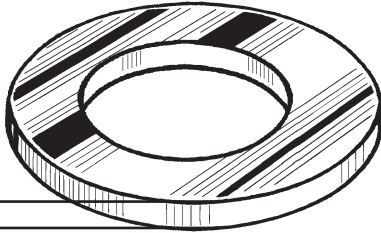
GRADE 8 HEX NUTS			
			
SIZE	PART	SIZE	PART
7/16-14	R 8929	3/4-10	N 8933
1/2-13	R 8930	7/8-9	I 8934
5/8-11	R 8932	1-8	I 8935

2H HEX NUTS			
			
SIZE	PART	SIZE	PART
1/2-13	R 4850	7/8-9	I 4865
5/8-11	N 4855	1-8	I 4870
3/4-10	L 4860		

# ALLOY 200 XT™ FLAT WASHERS

FOR ULTRA-HIGH STRENGTH APPLICATIONS

ALLOY 200 XT™ FLAT WASHERS PROVIDE THE ULTIMATE IN LOAD BEARING PERFORMANCE



75%  
THICKER

- **EXTRA THICK PATTERN**  
75% THICKER THAN STANDARD SAE WASHERS —  
ELIMINATING DISHING, BENDING AND GALLING.
- **MANUFACTURED FROM HIGH STRENGTH,  
HEAT-TREATED ALLOY STEEL**  
PROVIDES SUPERIOR STRENGTH TO ACHIEVE  
HIGHEST CLAMPING LOADS AVAILABLE.
- **YELLOW DICHROMATE PLATING**  
ASSURES SUPERIOR RESISTANCE TO RUST  
AND CORROSION FOR LONGER LIFE.



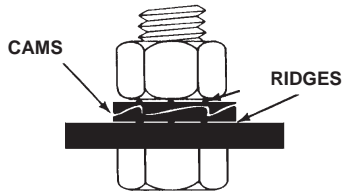
SIZE	THICKNESS	ID	OD		PART
1/4	3/32 - 7/64	9/32	5/8	T	5900
5/16	3/32 - 7/64	11/32	11/16	T	5901
3/8	3/32 - 7/64	13/32	13/16	T	5902
7/16	3/32 - 7/64	15/32	59/64	T	5903
1/2	5/32 - 3/16	17/32	1-1/16	R	5904
5/8	11/64 - 13/64	11/16	1-5/16	R	5906
3/4	11/64 - 13/64	13/16	1-15/32	N	5907
7/8	15/64 - 17/64	15/16	1-3/4	N	5908
1	15/64 - 17/64	1-1/8	2	L	5909

# ALLOY 200 VI-LOC WASHERS

THE MOST RELIABLE VIBRATION-RESISTANT LOCKING DEVICE AVAILABLE

THE MORE THEY VIBRATE — THE TIGHTER THEY LOCK

Meets military specification  
- MSN-5310-01-051-4149  
Special Chromate protective plating  
eliminates rust and corrosion.



The Vi-LOC principle calls for two washer shaped pieces that have inclined cams on one side and a series of ridges on the other. When the inclined cams are mated and set-up as shown in the diagram, one washer seizes to the joint material and the other washer to the nut or capscrew.

When the bolt contracts, the inclined planes of the cams cause the nut or capscrew to rotate back to its original position. This creates a fastening system that is vibration proof and meets military specifications. The Vi-LOC fastening system may be loosened by exerting approximately 50% more torque than required for tightening.

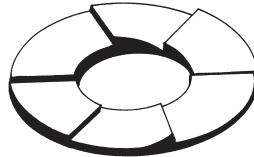


When a bolt elongates due to vibration or shock, the nut or capscrew starts to rotate loose. The Vi-LOC system prevents this since the cam rise angle is greater than the lead angle of the thread. As one piece of the Vi-LOC attempts to rotate with the nut or capscrew, the preload is actually increased, forcing the assembly back to a tight fitting unit.



## ALLOY 200 VI-LOC WASHERS

- USE ONLY IN PAIRS
- SELF-MATING
- RIDGES ON OUTSIDE



- RESISTS:**
- VIBRATION
  - LOST HOLDING POWER
  - SLIPPAGE
  - WEAR
  - EQUIPMENT BREAKDOWN



SIZE	INSIDE DIA.	OUTSIDE DIA.	PART	SIZE	INSIDE DIA.	OUTSIDE DIA.	PART
3/16 (5mm)	.203"	.401"	T 6100	9/16 (14mm)	.572"	1.128"	L 6106
1/4 (6mm)	.262"	.495"	T 6101	5/8 (16mm)	.651"	1.247"	L 6107
5/16 (8mm)	.326"	.628"	T 6102	3/4 (20mm)	.820"	1.381"	L 6110
3/8 (10mm)	.409"	.705"	R 6103	7/8 (22mm)	.883"	1.470"	I 6111
7/16 (11mm)	.450"	.880"	R 6104	1" (25mm)	1.015"	1.626"	I 6112
1/2 (12mm)	.510"	1.005"	Q 6105	-	-	-	-

# COTTER PINS

EASY TO INSERT, LOCK, REMOVE AND REUSE

• PRECISION MADE AND PROTECTED WITH SPECIAL CHROMATE PLATING

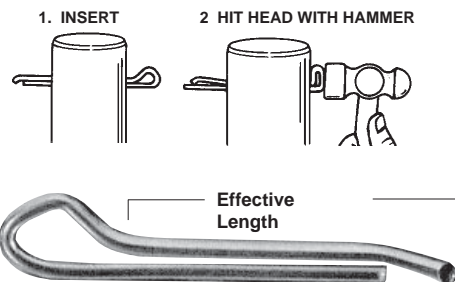


LENGTH	1/16	3/32	7/64	1/8	9/64	5/32	3/16	7/32	1/4	5/16	3/8	7/16	1/2
1/2	U 915	U 920	-	T 905	-	-	-	-	-	-	-	-	-
3/4	U 916	U 921	T 91925	U 927	-	T 907	T 910	-	-	-	-	-	-
1	U 917	U 922	T 91926	T 928	-	T 935	T 941	-	T 900	-	-	-	-
1-1/4	U 918	U 923	T 91928	T 929	-	T 971	T 913	-	T 901	-	-	-	-
1-1/2	U 919	T 924	T 91927	T 930	-	936	T 942	T 914	R 948	N 974	-	-	-
1-3/4	-	T 925	T 91929	T 931	-	R 937	-	-	-	-	-	-	-
2	T 902	T 926	T 91930	R 932	T 912	R 938	R 943	-	R 949	N 954	R 959	-	-
2-1/4	-	-	-	-	-	T 908	-	-	-	-	-	-	-
2-1/2	T 903	-	-	R 933	-	R 939	R 944	-	R 950	N 955	R 985	-	-
3	T 904	-	-	R 934	-	R 940	R 945	T 969	N 951	N 956	R 960	-	I 965
3-1/2	-	-	-	T 906	-	-	R 946	-	N 952	N 957	I 961	-	-
4	-	-	-	-	-	T 909	R 947	-	N 953	N 958	I 962	I 970	E 966
5	-	-	-	-	-	-	-	-	N 973	N 984	I 963	I 972	E 967
6	-	-	-	-	-	-	-	-	-	N 911	I 964	-	E 968



# HAMMERLOCK COTTER PINS

- MADE FROM LOW CARBON STEEL AND ZINC PLATED
- SPECIAL DESIGN LOCKS THE COTTER IN PLACE WITH ONE HAMMER BLOW
- MADE FOR SEMI-PERMANENT APPLICATIONS
- SIZE IS BASED UPON EFFECTIVE LENGTH AS MEASURED FROM UNDER HEAD TO END OF PRONG



17872

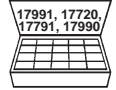
LENGTH		1/16		3/32		7/64		1/8		9/64		5/32	
1/2	U	90100	U	90108		-	T	90121		-		-	
3/4	U	90101	U	90109	T	90115	U	90122		-		T	90132
1	U	90102	U	90110	T	90116	T	90123		-		T	90133
1-1/4	U	90103	U	90111	T	90117	T	90124		-		T	90134
1-1/2	U	90104	T	90112	T	90118	T	90125		-		T	90135
1-3/4		-	T	90113	T	90119	T	90126		-		R	90136
2	T	90105	T	90114	T	90120	R	90127	T	90131		R	90137
2-1/4		-		-		-		-		-		T	90138
2-1/2	T	90106		-		-	R	90128		-		R	90139
3	T	90107		-		-	R	90129		-		R	90140
3-1/2		-		-		-	T	90130		-			-
4		-		-		-		-		-		T	90141

LENGTH		3/16		7/32		1/4		5/16		3/8		7/16		1/2
3/4	T	90142		-		-		-		-		-		-
1	T	90143		-	T	90153		-		-		-		-
1-1/4	T	90144		-	T	90154		-		-		-		-
1-1/2	T	90145	T	90151	R	90155	N	90162		-		-		-
1-3/4		-		-		-		-		-		-		-
2	R	90146		-	R	90156	N	90163	R	90170		-		-
2-1/2	R	90147		-	R	90157	N	90164	R	90171		-		-
3	R	90148	T	90152	N	90158	N	90165	R	90172		-	I	90179
3-1/2	R	90149		-	N	90159	N	90166	I	90173		-		-
4	R	90150		-	N	90160	N	90167	I	90174	I	90177	E	90180
5		-		-	N	90161	N	90168	I	90175	I	90178	E	90181
6		-		-	N	90169	N	90169	I	90176		-	E	90182

# HAIR PIN COTTERS

QUICK INSTALLATION, STRONG AND REUSABLE

- ACCURATELY FORMED FROM QUALITY SPRING STEEL
- PROTECTED WITH CHROMATE PLATING

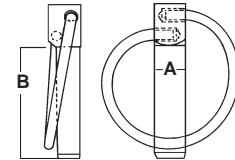


GAUGE	WIRE DIA.	LENGTH	I.D. OF EYE	SHAFT DIA.	DRILL HOLES	PART
22	.028	.600	.093	1/8 – 5/32	1/32	R 47365
20	.035	7/16	.078	7/64 – 9/64	.040	R 47366
19	.042	7/16	.080	1/16 – 1/8	.047	R 47367
19	.042	1	1/4	3/16 – 1/4	3/64	R 47368
18	.047	19/32	1/8	1/8 – 3/16	1/16	R 47369
18	.047	1-9/16	5/16	1/4 – 3/8	1/16	R 47370
17	.054	3/4	1/8	3/16 – 1/4	1/16	R 47371
17	.054	7/8	9/64	1/4 – 3/8	1/16	R 47372
16	.062	1-5/16	5/16	1/4 – 1/2	5/64	R 47373
16	.062	1-9/16	3/8	3/8 – 1/2	5/64	R 47374
15	.072	1-3/32	9/64	5/16 – 3/8	5/64	R 47375
15	.072	1-7/8	5/8	3/8 – 1/2	5/64	R 47376
14	.080	1-3/16	1/4	1/4 – 3/8	3/32	R 47377
13	.093	1-1/8	1/4	1/4 – 1/2	7/64	R 47379
12	.105	1-1/4	1/8	5/16 – 3/8	1/8	R 47380
14	.080	1-9/16	3/8	3/8 – 1/2	3/32 or 7/64	R 47098
13	.093	1-5/8	3/8	1/4 – 1/2	7/64	R 47090
13	.093	2-5/16	5/8	1/4 – 5/8	7/64	N 47092
13	.093	2	5/8	3/8 – 1/2	7/64	N 47378
13	.093	2-1/2	9/16	3/8 – 3/4	7/64	N 47096
11	.125	1-15/16	7/16	1/2 – 3/4	9/64	N 47097
11	.125	2-9/16	9/16	7/16 – 3/4	9/64	N 47095
9	.148	3-5/16	3/4	3/4 – 1-1/8	5/32 or 11/64	L 47094
9	.148	2-15/16	3/4	5/8 – 1	5/32	I 47383
7	.177	3-1/4	15/16	5/8 – 1	3/16 or 13/64	I 47091
7	.177	3-3/4	15/16	7/8 – 1-1/4	3/16 or 13/64	- 47093
3	.243	4	15/16	3/4 – 1	1/4 or 17/64	- 47099
3	.243	5-1/8	1-1/2	1-1/4 – 1-1/2	17/64	- 47387
0	.310	4-1/16	7/8	7/8 – 1	21/64	- 47389

# LYNCH PINS

1010 CARBON STEEL, ZINC PLATED

- 1010 STEEL, ZINC ELECTROPLATED AND DICHROMATE DIPPED FOR CORROSION RESISTANCE
- ROCKWELL HARDNESS OF Ra 50-60
- SELF-LOCKING RING ALLOWS THE PIN TO BE SECURELY HELD IN PLACE AND PROVIDES AN EASY GRIP FOR QUICK REMOVAL



SIZE (A x B)	PART	SIZE (A x B)	PART	SIZE (A x B)	PART
3/16 x 1-9/16	L 47390	7/16 x 1-9/16	L 47393	7/16 x 1-3/4 with Heavy Duty Ring	I 47395
1/4 x 1-9/16	L 47391	7/16 x 1-31/32	I 47394	7/16 x 1-31/32 with Heavy Duty Ring	I 47396
5/16 x 1-9/16	L 47392	-	-	-	-

# CIC 200™ PRIMARY WIRE

## CROSS-LINK WIRE



- TYPE SXL, SAE J1128
- CROSS-LINKED POLYETHYLENE INSULATION HAS SMOOTH SURFACE FINISH
- MOISTURE RESISTANT
- CHEMICAL RESISTANT — IMPERVIOUS TO GREASE, OIL, GASOLINE AND ACIDS
- HIGH TEMPERATURE RANGE: -50°F TO 350°F WITHOUT MELTING OR FUSING
- 100 FOOT ROLLS

SIZE	STRANDS	COLOR	PART	SIZE	STRANDS	COLOR	PART	SIZE	STRANDS	COLOR	PART
18	16	BLACK	A 8103	16	19	BROWN	A 8119	12	19	BLACK	A 8139
18	16	WHITE	A 8105	16	19	YELLOW	A 8120	12	19	WHITE	A 8140
18	16	RED	A 8106	14	19	BLACK	A 8123	12	19	RED	A 8143
18	16	BLUE	A 8164	14	19	WHITE	A 8129	12	19	BROWN	A 8098
16	19	BLACK	A 8107	14	19	RED	A 8130	12	19	YELLOW	A 8145
16	19	WHITE	A 8108	14	19	BLUE	A 8133	10	19	BLACK	A 8146
16	19	RED	A 8109	14	19	GREEN	A 8135	10	19	WHITE	A 8147
16	19	BLUE	A 8110	14	19	BROWN	A 8136	10	19	RED	A 8148
16	19	GREEN	A 8113	14	19	YELLOW	A 8137	—	—	—	—

## MULTI-CONDUCTOR PRIMARY WIRE

- MEETS SAE J1128 SPECIFICATIONS
- FOR USE AT 50 VOLTS OR LESS
- TEMPERATURE RATING: 221°F (105°C)
- HEAVY DUTY PVC GRAY JACKET WITH COLOR CODED CONDUCTORS



- RECOMMENDED FOR TRUCKS, BUSES, TRACTORS, LIGHT DUTY BOATS AND GENERAL SERVICE
- BLACK/WHITE/GREEN/RED  
100 FOOT ROLLS

GAUGE	PART	GAUGE	PART	GAUGE	PART
16/2	A 28100	14/3	A 28104	12/4	A 28108
16/3	A 28101	14/4	A 28105	10/2	A 28109
16/4	A 28102	12/2	A 28106	10/3	A 28110
14/2	A 28103	12/3	A 28107	10/4	A 28111

## TRAILER LIGHT CABLE

100 FOOT ROLLS



- MEETS SAE J1128 SPECS
- FOR USE AT 50 VOLTS OR LESS
- TEMPERATURE RATING: -7.6°F (-22°C) TO 176°F (80°C)
- FULL GAUGE COPPER CORE TO SAE AND ATA SPECIFICATIONS
- MULTIPLE CONDUCTOR CABLE, COLOR-CODED FOR CIRCUIT IDENTIFICATION

14/4 = RED / WHITE / BLACK / BROWN  
 14/6 = RED / WHITE / BLACK / BROWN / GREEN / YELLOW  
 14/7 = RED / WHITE / BLACK / BROWN / GREEN / YELLOW / BLUE  
 12/6-10/1 = RED / WHITE / BLACK / BROWN / GREEN / YELLOW / BLUE

GAUGE	PART	GAUGE	PART
14/4	A 28115	14/7	A 28117
14/6	A 28116	12/6-10/1	A 28120

# CIC 200™ WIRE TIES AND ACCESSORIES

## WIRE TIES

Superior design and construction that is QPL listed and UL recognized.

### STANDARD — WHITE



WIDTH	LENGTH	MAX. DIA.	PSI	PART	WIDTH	LENGTH	MAX. DIA.	PSI	PART
3/32	4	3/4	18	T 8401	3/16	11-1/8	3	50	R 8409
3/32	5-1/2	1-1/4	18	T 8402	3/16	14-1/8	4	50	R 8410
3/32	8	2	18	T 8403	5/16	8-7/8	2	120	N 8411
9/64	5-1/2	1-1/4	30	T 8404	5/16	14-1/4	4	120	N 8413
5/32	8-1/2	2	40	T 8405	11/32	15	4	175	N 8414
5/32	11-5/8	3	40	T 8406	11/32	24	6	175	I 8415
5/32	14-5/8	4	40	R 8407	11/32	36	9	175	I 8416
3/16	7-1/2	1-3/4	50	T 8408	11/32	42	12	175	I 8417

### STANDARD — COLORED TIES



COLOR	TIE WIDTH	LENGTH	MAX. DIA.	PSI	PART
BROWN	1/8	8	2	40	T 8578
BLUE	1/8	8	2	40	T 8579
PURPLE	1/8	8	2	40	T 8580
GRAY	1/8	8	2	40	T 8581
RED	1/8	8	2	40	T 8582

# CIC 200™ WIRE TIES AND ACCESSORIES (Cont'd.)

## WIRE TIES

Superior design and construction that is QPL listed and UL recognized.

### STANDARD — FLUORESCENT COLORS



COLOR	WIDTH	LGTH.	MAX. DIA.	PSI	PART	COLOR	WIDTH	LGTH.	MAX. DIA.	PSI	PART
PINK	1/8	8	2	40	T 8425	ORANGE	1/8	8	2	40	T 8427
PINK	3/16	11	3	40	T 8586	ORANGE	3/16	11	3	40	T 8588
GREEN	1/8	8	2	40	T 8426	YELLOW	1/8	8	2	40	T 8428
GREEN	3/16	11	3	40	T 8589	YELLOW	3/16	11	3	40	T 8587
-	-	-	-	-	-	BLUE	3/16	11	3	40	T 8412

### WEATHER RESISTANT — BLACK

- RESISTANT TO SOLVENTS, FUNGUS, OIL, GREASE, ALKALIES, MILD ACIDS, ULTRA-VIOLET RAYS, ETC.
- MEETS MIL SPECIFICATIONS (3367-2 TO 5-0), TEMPERATURE RANGE 40° TO 185°F.



WIDTH	LENGTH	MAX. DIA.	PSI	PART	WIDTH	LENGTH	MAX. DIA.	PSI	PART
3/32	4	5/8	18	T 8430	3/16	7-1/2	1-7/8	50	T 8438
3/32	4	7/8	18	T 8431	3/16	11-1/8	3-1/16	50	R 8439
3/32	6	1-1/2	18	T 8432	3/16	14-1/2	4-1/8	50	R 8437
3/32	8	2-3/16	18	T 8433	5/16	15-1/8	4-1/16	120	N 8443
9/64	5-3/4	1-7/16	40	T 8434	11/32	25	7-3/16	175	I 8445
9/64	8-3/4	2-3/8	40	T 8435	11/32	36	11	175	I 8436

### REUSABLE WEATHER RESISTANT — BLACK

- SELF-LOCKING, RELEASABLE, DURABLE, NON-BRITTLE AND NON-CRACKING
- RESISTS CORROSION, MOISTURE, ABRASION, ULTRA-VIOLET RAYS,
- SAVES MONEY, REUSABLE
- TEMPERATURE RANGE: 40°F TO 185°F



TIE WIDTH	LENGTH	MAX. DIA.	PSI	PART
5/16	6	1-3/8	50	R 8452
3/16	14-1/2	4	50	N 8595

# CIC 200™ WIRE TIES AND ACCESSORIES (Cont'd.)

## WIRE TIES

### REUSABLE (NOT WEATHER RESISTANT) — WHITE

- SELF-LOCKING, RELEASABLE, DURABLE, NON-BRITTLE AND NON-CRACKING
- TEMPERATURE RANGE: 40°F TO 185°F



TIE WIDTH	LENGTH	MAX. DIA.	PSI		PART
5/32	6	1-3/8	50	R	8451
3/16	14-1/2	4	50	R	8598

### STAINLESS STEEL SELF-LOCKING TIES

- MORE LOCKING FORCE THAN CONVENTIONAL BALL CLAMPS BECAUSE THE LOCKING BAR CONTACTS BOTH THE TOP AND BOTTOM OF THE BAND AT THE EDGES, THE STRONGEST PART OF THE BUCKLE
- EASY TO USE – SIMPLY INSERT THE TAIL AND TIGHTEN
- MINIMUM LOOP TENSILE STRENGTH: 150 LBS.
- WIDTH: 3/16" (5mm)  
THICKNESS: .010" (.245mm)
- CAN BE TIGHTENED BY HAND OR INSTALLED WITH THE HAND TOOL



• TYPE 304 STAINLESS STEEL

LENGTH (INCHES)	MAX. DIA. (INCHES)		PART
8.4	2	T	8084
14.9	4	T	8085
20.9	6	T	8086
27.4	8	T	8087
33.4	10	T	8088

### SELF-LOCKING HAND TOOL

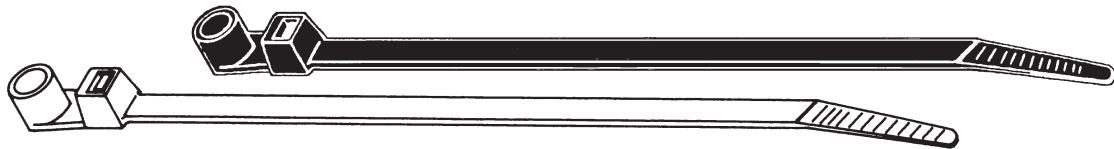
- HAND TOOL INSTALLS SELF-LOCKING STAINLESS STEEL TIES
- INCLUDES ADJUSTABLE TENSION AND AUTOMATIC CUT-OFF



DESCRIPTION	PART
Self-Locking Tool	A 28080

## SPECIAL PURPOSE WIRE TIES

### STANDARD MOUNTING TYPE — WHITE

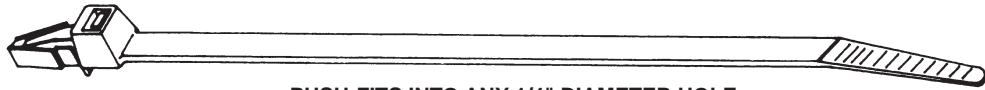


TIE WIDTH	LENGTH	MAX. DIA.	PSI		WHITE PART	BLACK UV PART
3/32	4-1/4	3/4	18	T	8418	
9/64	6-1/4	1-1/4	30	T	8419	R 8440
3/16	7-1/2	1-3/4	50	T	8420	R 8441
3/16	16	4	50	N	8421	
5/16	14	4	120	N	8422	N 8442

# CIC 200™ WIRE TIES AND ACCESSORIES (Cont'd.)

## SPECIAL PURPOSE WIRE TIES

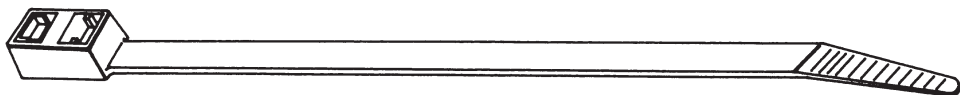
### PUSH MOUNT TYPE



PUSH-FITS INTO ANY 1/4" DIAMETER HOLE

TIE WIDTH	LENGTH	MAX. DIA.	PSI	PART
3/16	8-1/2	1-3/4	50	T 8423

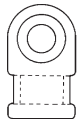
### DOUBLE LOOP TYPE



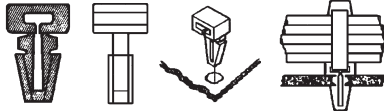
HARNESSES TWO CABLES SIMULTANEOUSLY

TIE WIDTH	LENGTH	MAX. DIA.	PSI	PART
3/16	8-1/2	1ST LOOP 3/4 2ND LOOP 3/4	1ST LOOP 50 2ND LOOP 40	R 8424

### MOUNTING HEADS



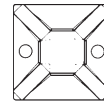
MOUNTING HEAD CONVERTS TIES TO MOUNTING TYPE



PUSH-IN CABLE TIE

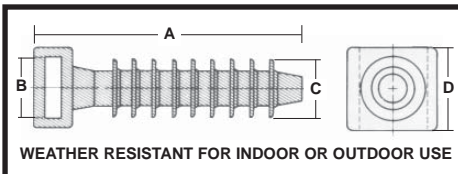
DESCRIPTION	FITS TIE WIDTHS	PART
Mounting Head Converts Ties to Mounting Type	3/32 – 3/16	T 8462
Push-In Cable Tie	3/32 – 3/16	N 8464

### MOUNTING BASES



\*with adhesive backing

DESCRIPTION	FITS TIE WIDTHS	SIZE	PART (BLACK)	PART (WHITE)
Cable Tie Mounting	3/32 – 9/64	3/4	R 8081*	N 8456*
Screw Type Base	3/32 – 3/16	1-1/8	–	N 8458
4-Way – From All 4 Sides	3/32 – 3/16	1-1/8	N 8083*	N 8459*
	3/32 – 3/16	1-1/2	L 8093*	N 8466*



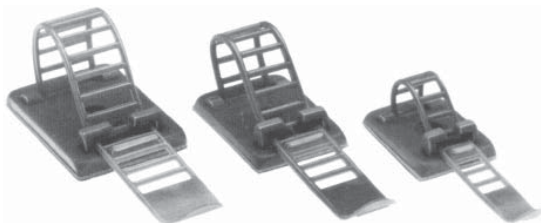
### MASONRY TIE MOUNTS

MOUNTING	MIN. DEPTH	A	B	C	D	PART
.188" Hole	.935"	1.185"	.218"	.236"	.390"	N 8080
.312" Hole	1-1/2"	1.715"	.313"	.362"	.500"	N 8082

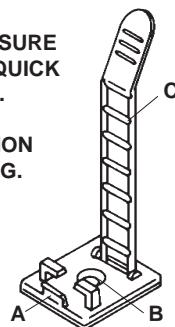
# CIC 200™ ADJUSTABLE CABLE CLAMPS

ADJUSTABLE HOLDING POWER FOR A WIDE RANGE OF CABLE DIAMETERS

- SECURES WIRES, CABLES, BUNDLES AND HARNESSSES TO VIRTUALLY ANY SURFACE
- PROVIDES HIGH RESISTANCE TO IMPACT, HEAT AND CHEMICALS



- A. EXTREMELY STRONG PRESSURE SENSITIVE ADHESIVE FOR QUICK AND SIMPLE INSTALLATION.
- B. SCREW HOLE OFFERS OPTION FOR PERMANENT MOUNTING.
- C. LADDER STYLE FASTENING SYSTEM ALLOWS FOR INSTANT RELEASING AND PRE-FASTENING.







SIZE	SMALL		MEDIUM		LARGE	
CLAMP RANGE	3/16 - 1/2		13/64 - 53/64		9/32 - 63/64	
BASE DIMEN.	45/64 x 63/64		53/64 x 1-11/64		63/64 x 1-3/8'	
PART	N	8476	N	8478	N	8480

# CIC 200™ MOUNTING CLAMPS & BLOCKS

NYLON CABLE CLAMPS

These nylon cable clamps are rustproof, rotproof, weatherproof and chemical proof. Temperature range is -40° to 185°F continuously, 250°F intermittently.

NON-ADJUSTABLE - BLACK					
					
WIDTH	DIA.	PART	WIDTH	DIA.	PART
5/32	1/8	T 2602	3/8	3/8	T 2614
5/32	3/16	T 2604	3/8	7/16	T 2616
1/4	1/4	T 2608	3/8	1/2	T 2618
3/8	1/4	T 2610	1/2	1/2	R 2640
3/8	5/16	T 2612	1/2	5/8	R 2642

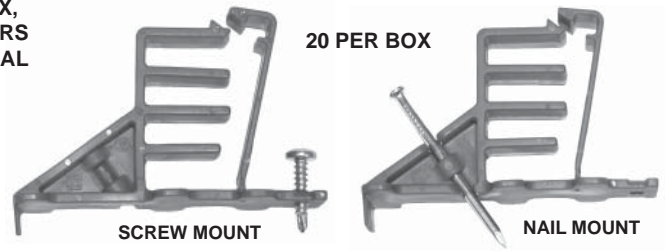
NON-ADJUSTABLE - WHITE					
					
WIDTH	DIA.	PART	WIDTH	DIA.	PART
1/2	1/8	T 2976	1/2	1/2	T 2985
1/2	3/16	T 2977	1/2	5/8	R 2993
1/2	1/4	T 2978	1/2	3/4	R 2994
1/2	5/16	T 2979	1/2	1	R 2996
1/2	3/8	T 2981	1/2	1-1/4	R 2998
1/2	7/16	T 2983	1/2	1-1/2	R 2999



# CIC 200™ MOUNTING CLAMPS & BLOCKS (Cont'd)

## MULTIPLE CABLE ORGANIZERS

- QUICKLY SECURES MULTIPLE CABLE RUNS SUCH AS NM/ROMEX, COAXIAL AND CAT 5 AS WELL AS OTHER CABLE WITH DIAMETERS LESS THAN 1/4" (6.3mm) ON A STUD FOR A CLEAN PROFESSIONAL INSTALLATION
- FAST, EASY INSTALLATION WITH ONE NAIL FOR WOOD OR ONE SCREW FOR METAL STUDS
- PATENT PENDING "SNAP LOCK GATE" QUICKLY SECURES ALL CABLES WITHOUT RESTRICTING THEM
- MADE OF FIRE-RETARDANT HIGH DENSITY POLYPROPYLENE
- NATIONAL ELECTRICAL CODE 300-4-(D) COMPLIANT



DESCRIPTION	PART	DESCRIPTION	PART
MULTIPLE CABLE ORGANIZER – SCREW	A 2966	MULTIPLE CABLE ORGANIZER – NAIL	A 2967

## VINYL COATED METAL TUBE AND HOSE CLAMPS



- PROVIDES PROTECTION AND ROUTING SUPPORT FOR TUBES, PIPES, WIRE BUNDLES AND CABLES WHERE ABRASION, MOVING PARTS OR HEAT MAY EXIST.
- HEAVY DUTY GALVANIZED STEEL CONSTRUCTION
- ONE OVAL HOLE FOR EASY ALIGNMENT
- 1/32" THICK BLACK VINYL CUSHION
- 3/4" WIDTH AND 13/32" HOLE DIAMETER



DIAMETER		PART	DIAMETER		PART	DIAMETER		PART
1/4	N	30153	5/8	N	30159	1-1/2	L	30173
5/16	N	30154	3/4	N	30161	1-3/4	L	30177
3/8	N	30155	1	L	30165	2	L	30181
1/2	N	30157	1-1/4	L	30169	–		–

# CIC 200™ WIRE AND CABLE PROTECTORS

## SPLIT LOOM WIRE WRAP

- ALLOWS QUICK AND EASY WIRE PROTECTION
- KEEPS WIRES NEAT AND FREE FROM ABRASION
- MADE FROM HIGH DENSITY POLYETHYLENE FOR DURABILITY
- TEMPERATURE RANGE -40°F TO 176°F



DESCRIPTION	I.D.	PART	DESCRIPTION	I.D.	PART
1/4" SPLIT LOOM WIRE WRAP (100' ROLL)	.272	A 8479	3/4" SPLIT LOOM WIRE WRAP (50' ROLL)	.760	A 8485
3/8" SPLIT LOOM WIRE WRAP (100' ROLL)	.405	A 8481	1" SPLIT LOOM WIRE WRAP (50' ROLL)	.915	A 8487
1/2" SPLIT LOOM WIRE WRAP (100' ROLL)	.505	A 8483			

## SPIRAL WIRE WRAP

- ALLOWS FOR FLEXIBLE ROUTING OF WIRE OR CABLE HARNESSSES
- PROVIDES A NEAT PROTECTIVE BUNDLE
- TWISTS ON QUICKLY AND EASILY AND ALLOWS LEAD-OUTS AT ANY POINT



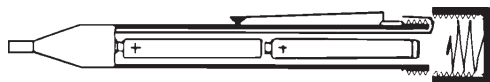
DESCRIPTION	O.D.	WALL THICKNESS	MIN./MAX. BUNDLE RANGE	PART
1/4" SPIRAL WIRE WRAP (100' ROLL)	1/4	.045	3/16 TO 2	A 8482
3/8" SPIRAL WIRE WRAP (100' ROLL)	3/8	.052	5/16 TO 3	A 8484
1/2" SPIRAL WIRE WRAP (100' ROLL)	1/2	.062	3/8 TO 4	A 8486

# SENSORS AND DETECTORS

## "STARLITE" AC SENSOR

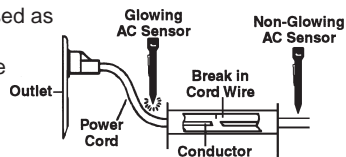
- A UL LISTING, PATENTED HAND HELD DEVICE USED FOR DETERMINING THE PRESENCE OR ABSENCE OF AC VOLTAGE IN INSULATED WIRES, WALL RECEPTACLES, FUSES, JUNCTION BOXES, SWITCHES OR ANY OTHER VOLTAGE CARRYING ELECTRICAL SYSTEM
- WILL LOCATE VOLTAGE OF 110-600 AC
- NO NEED TO DISCONNECT THE SYSTEM IN QUESTION BECAUSE NO CONTACT IS REQUIRED FOR OPERATION AND CURRENT FLOW IS NOT NECESSARY TO LOCATE VOLTAGE
- USE 2 AAA ALKALINE BATTERIES (INCLUDED)
- MADE IN U.S.A.

P/N 8207



### DIRECTIONS:

1. Simply touch the plastic probe tip to a connection point or move it along an insulated wire. If AC voltage is present, the LED light in the probe tip will glow bright red.
2. Illumination will stop at a break in the circuit or wire and this allows the AC sensor to be used as a troubleshooting instrument.
3. As you move the plastic probe tip away from the electrical source, in this case the wall receptacle, the probe tip will stop glowing at the exact break point in the wire.



## PRESSURE DETECTION VALVE CAP



- THIS PRESSURE DETECTION VALVE CAP FLASHES WHEN TIRE PRESSURE FALLS 4 PSI (TRUCK VERSION 8 PSI) BELOW THE CORRECT PRESSURE
- THIS SMALL, SIMPLE, LIGHTWEIGHT DEVICE HAS NO IMPACT ON THE WHEEL BALANCING OR THE APPEARANCE OF THE VEHICLE
- DURABLE DESIGN WITHSTANDS EVEN THE TOUGHEST CONDITIONS

- CHROME PLATED BRASS BODY AND A POLY CARBONATE LENS IS 100% SELF-CONTAINED WITH ONBOARD BATTERY
- HAS NO MOVING COMPONENTS EXCEPT FOR A FLEXING SENSOR WHICH WILL TRIGGER IF THE TIRE PRESSURE DROPS
- CAP AUTOMATICALLY AND PERMANENTLY CALIBRATES THE FIRST TIME IT IS PLACED ON VALVE STEM AND CANNOT BE RECALIBRATED
- ONE SIZE FITS ALL CARS, SUVs AND TRUCKS (10-130 PSI)
- MAXIMIZES GAS MILEAGE
- IMPROVES SAFETY
- REDUCES TIRE WEAR

### BATTERIES:

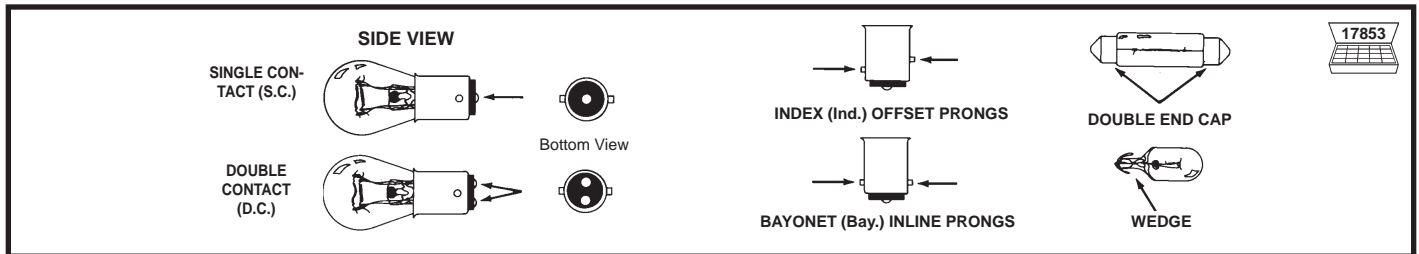
- BATTERIES ARE GOOD FOR ABOUT 3-4 YEARS OF STAND-BY AND UP TO 6 WEEKS OF BLINKING
- BATTERIES CANNOT BE CHANGED SINCE THE UNIT IS TOTALLY SEALED TO MAKE SURE IT IS AIRTIGHT



DESCRIPTION	PART
Pressure Detection Valve Cap – Car	A 78026
Pressure Detection Valve Cap – Truck	A 78027

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# BULBS – AUTOMOTIVE AND TRUCK



LAMP #	VOLTS	C.P.	LIFE HRS.	BASE	PART	LAMP #	VOLTS	C.P.	LIFE HRS.	BASE	PART
24	14.0	2	1500	Wedge	28901	1073	12.0	32	200	S.C. Bay	28924
37	14.0	0.5	2500	Wedge	28903	1141	12.0	21	500	S.C. Bay	28926
53	14.4	1	1000	Min. Bay	28900	1156	12.0	32	600	S.C. Bay, HD	28928
57	14.0	2	500	Min. Bay	28902	1156NA	12.8	24	1200	S.C. Bay	28921
67	13.5	4	**	S.C. Bay	28904	1157	12.0	32	600	D.C. Ind., HD	28930
74	14.0	0.7	500	Wedge	28905	1157 NA	12.8 <sup>A</sup>	32	**	D.C. Ind., HD	28932
89	13.0	6	750	S.C. Bay	28906	1176	12.0	21/6	200/1M	D.C. Bay	28934
90	13.0	6	750	D.C. Bay	28908	1445	12.0	1.5	**	Min. Bay	28936
97	13.5	4	**	S.C. Bay	28910*	1816	13.0	3	1000	Mini Bayonet	28923
168	14.0	2	500	Wedge	28912	1889	14.0	2	2000	Mini Bayonet	28925
193	14.0	2	5000	Wedge	28907	1891	14.0	2	500	Mini Bayonet	28927
194	14.0	2	1500	Wedge	28914	1893	12.0	2	5000	S.C. Bay	28938
194NA	14.0	1.5	2500	Wedge	28909	1895	14.0	2	1500	Min. Bay, HD	28940
198	12.8	32	1200	D.C. Index	28911	2057	12.8	32	1200	D.C. Index	28929
199	12.8	32	1200	S.C. Bay	28913	2057NA	12.8	24	1200	D.C. Ind., HD	28943
211-2	12.8	12	1000	Dbl. End Cap	28916	3057	12.8	32	1200	Wedge	28931
906	13.0	6	1000	Wedge	28915	3057NA	12.8	24	1200	Wedge	28933
912	12.8	12	1000	Wedge	28917	3156	12.8	32	1200	Wedge	28935
921	12.8	21	1000	Wedge	28919	3157	12.8	32	1200	Wedge	28941
1003	12.8	15	100	S.C. Bay	28918	3157NA	12.8	24	1200	Wedge	28942
1004	12.0	15	100	D.C. Bay	28920	3357	12.8	40	400	Wedge	28937
1034	12.0	32.3	200	D.C. Bay	28922	-	-	-	-	-	-

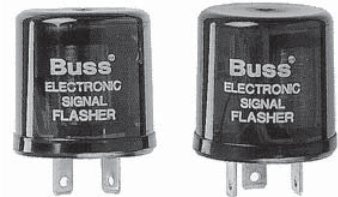
\* HEAVY DUTY FLEET SERVICE \*\* INDEFINITELY LONG A=AMBER

## AUTOMOTIVE SHOP SUPPLIES

### FLASHERS

#### ELECTRONIC SIGNAL FLASHERS

- MEETS THE DEMANDS OF HEAVY TRUCKS
- TEMPERATURE COMPENSATOR FOR AN EVEN FLASHING RATE IN ALL TEMPERATURE RANGES
- THICKER PALLADIUM CONTACT FOR LONGER LIFE UNDER HEAVY LOADS
- BRASS TERMINALS FOR CORROSION RESISTANCE AND GREATER STABILITY UNDER HIGH HEAT
- DESIGNED TO CONFORM TO ALL D.O.T. REQUIREMENTS AND SAE SPECIFICATIONS



INDUSTRY #	# OF PRONGS	VOLTAGE	LOAD LAMPS	TOTAL MAX WATTS	PART
EL 12	2	12	1 TO 10	250	A 29060
EL 13	3	12	1 TO 10	250	A 29061

# AUTOMOTIVE SHOP SUPPLIES (Cont'd)

## SOCKETS/PLUGS AND TOGGLE SWITCHES

### SOCKETS



- EXPOSED TERMINAL SCREWS
- SPLIT CONTACT PINS
- REPLACEABLE INTERIOR WITH SPECIAL HOUSING DESIGN TO PROTECT CONNECTIONS FROM ROAD SPLASH, DIRT, ETC.
- FLANGE HOLES 17/64" (6.74MM) DIAMETER, 2-15/16" (74.60MM) ON CENTERS
- MOUNTS THROUGH 1-3/8" (34.90MM) DIAMETER HOLE

SIZE	INDUSTRY #	PART
6-POLE	1235	A 29100

### 7-POLE SOCKETS



- SELF GROUNDING
- CORROSION RESISTANT DIE CAST METAL CONSTRUCTION
- SOLID BRASS SPLIT CONTACT PINS
- FLANGE HOLES 21/64" (8.33MM) DIA., 2-15/16" (74.60MM) ON CENTERS
- MOUNTS THROUGH 2" (50.80MM) DIAMETER HOLE

SIZE	INDUSTRY #	PART
7-POLE	12063-01	A 29105

### PLUGS

- INTEGRAL CLAMP PREVENTS CABLE FROM BEING PULLED LOOSE FROM CONNECTIONS
- REPLACEABLE INTERIOR
- PLATED STEEL SPRING CABLE PROTECTOR



SPRING SOLD SEPARATELY

SIZE	INDUSTRY #	PART
4-POLE	1253	A 29101
6-POLE	1254	A 29102
SPRING	-	A 29109

### 7-POLE PLUGS

- HEAVY DUTY CORROSION RESISTANT DIE CAST CONSTRUCTION
- INTEGRAL CABLE CLAMP (HOLDS ALL SIZE CABLES FIRMLY IN PLACE)
- REPLACEABLE INTERIOR
- PLATED STEEL SPRING CABLE PROTECTOR ELIMINATES DESTRUCTIVE SHARP BENDS
- CONTACTS "FLOAT" FOR PROPER ENGAGEMENT WITH ALL MATING SOCKETS
- GROUND TERMINAL ACCEPTS UP TO #8 GAUGE WIRE, OTHER TERMINALS UP TO #10 GAUGE WIRE
- SCREW TERMINALS WITH OPTIMUM THREAD DESIGN FOR SECURE WIRE CONNECTIONS



SPRING SOLD SEPARATELY

SIZE	INDUSTRY #	PART
7-POLE	12092	A 29106
SPRING	-	A 29109

## TOGGLE SWITCHES



- PLASTIC HOUSING WITH PLATED STEEL CAP
- STEM AND MOUNTING HARDWARE ARE NICKEL PLATED BRASS
- NICKEL PLATED BRASS HANDLES, STANDARD OR LONG VERSION
- MOUNTING STEM 15/32-32 THREAD, 15/32" LONG
- FITS PANELS UP TO 1/4" THICK
- SILVER CONTACTS FOR DEPENDABLE ELECTRICAL OPERATION
- KEYWAY IN STEM LOCATED IN DOWN POSITION

DESCRIPTION	UP POSITION	DOWN POSITION	TERMINAL #	TERMINAL TYPE	PART
Double Pole - Single Throw	ON	OFF	4	SCREW	A 29108
Double Pole - Single Throw	ON	OFF	4	BLADE	A 29110
Single Pole - Single Throw	ON	OFF	2	SCREW	A 29107

# CIC 200™ CABLE AND BATTERY SUPPLIES

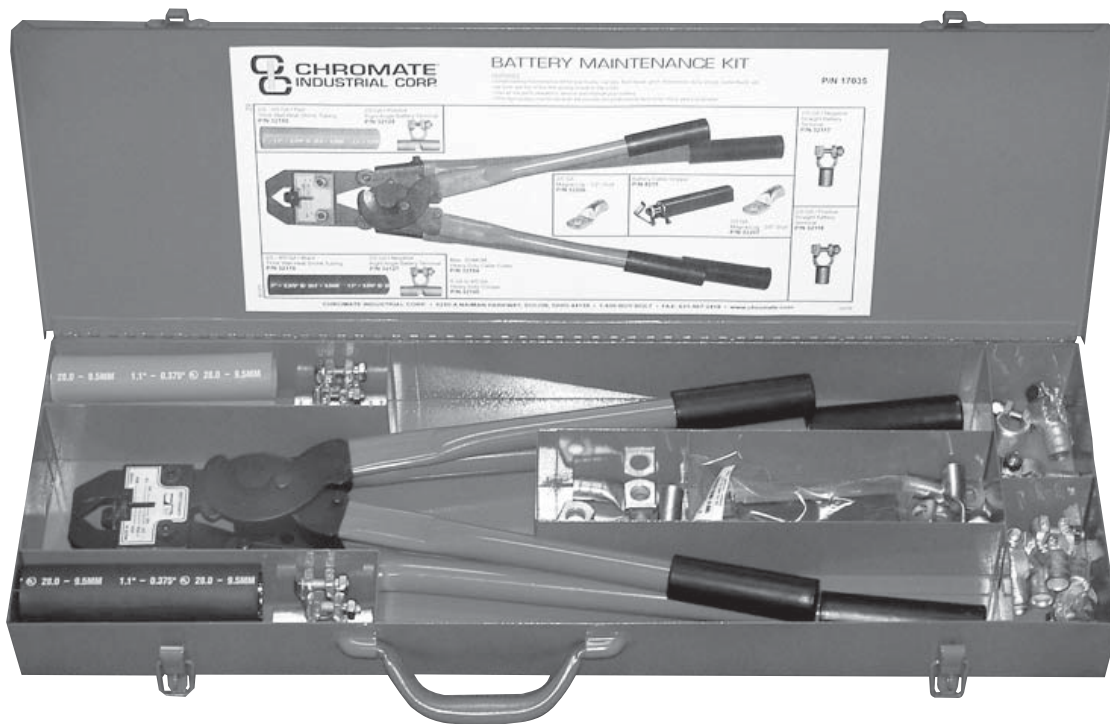
## BATTERY MAINTENANCE KIT

### FEATURES & BENEFITS

- Great battery maintenance kit for tow trucks, car lots, field repair, govt. motorpools, body shops, rental fleets, etc.
- 29 pieces total
- All tools are top of the line quality (made in the USA)
- Packaged in a portable, rugged all steel case with carrying handle, finished in red laquer paint
- Has all the parts needed to service and change your battery
- This high quality maintenance kit will provide the professional technician many years of service

### THE KIT CONTAINS:

- Heavy Duty Crimper – 6 GA to 4/0 GA
- Heavy Duty Cable Cutter – Max. 350 MCM
- Battery Cable Stripper
- Positive Straight Battery Terminals – 2/0 GA
- Negative Straight Battery Terminals – 2/0 GA
- Positive Right Angle Battery Terminals – 2/0 GA
- Negative Right Angle Battery Terminals – 2/0 GA
- Magna Lug / 3/8" Stud – 2/0 GA
- Magna Lug / 1/2" Stud – 2/0 GA
- Black 6" Heavy Wall Heat Shrink Tubing – 2 GA to 4/0 GA
- Red 6" Heavy Wall Heat Shrink Tubing – 2 GA to 4/0 GA



P/N 17035

## BOOSTER CABLES




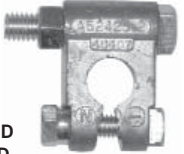
- HEAVY DUTY BOOSTER CABLES FOR ALL-SEASON RELIABILITY
- PROFESSIONAL QUALITY 400 AMP CLAMPS ENSURE QUICK AND EASY CONNECTIONS
- HEAVY 40 GA CABLE REMAINS FLEXIBLE TO -40°F
- FULLY INSULATED CLAMPS PROVIDE ADDED SAFETY
- LONG 16 FOOT LENGTH FOR EASY HOOKUP



SIZE	PART
4GA x 16 FT BLUE / BLACK BOOSTER CABLES	A 28090

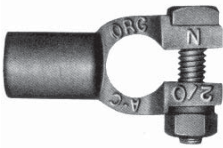



# CIC 200™ CABLE AND BATTERY SUPPLIES

## BATTERY TERMINALS





MARINE			UNIVERSAL		BOLT & NUT		MILITARY	
<p>BOTH POSITIVE AND NEGATIVE, EACH FEATURING DIFFERENT SIZE STUD AND WING NUT. DIMENSIONAL DIFFERENCE PREVENTS CROSS POLARITY WHEN ATTACHING CABLE TO BATTERY POST.</p> 					 <p>Bolt &amp; Nut #2855 Nuts only #2860</p>		<ul style="list-style-type: none"> <li>• LOW PROFILE DESIGN MEASURES ONLY 3/4" HIGH</li> <li>• LONG BOLT PERMITS ADDITIONAL POWER CONNECTIONS</li> <li>• POLARITY SPECIFIC LEAD CONSTRUCTION, ZINC PLATED STEEL FASTENERS INCLUDED</li> <li>• MIL SPEC A52425-1 / A52425-2</li> </ul> 	
SIZE	POS.	NEG.	SIZE	PART	SIZE	PART	POSITIVE	NEGATIVE
5/16	–	I 2870	#2 to 4/0	I 2811	5/16 x 1-3/8	T 2855		
3/8	I 2872	–	#4 to #2	I 2813	5/16	T 2860	D 2810	D 2812






## POST TYPE TERMINALS

Easily identified, electro-tin plated copper connector provides high conductivity and resists corrosion.


STRAIGHT			RIGHT ANGLE (FLAG)			RIGHT ELBOW		
 								
CABLE SIZE	POLARITY	PART	CABLE SIZE	POLARITY	PART	CABLE SIZE	POLARITY	PART
6 GA.	POS.	E 32219	1/0	NEG.	D 32125	1/0	NEG.	D 32135
6 GA.	NEG.	E 32221	1/0	POS.	D 32126	1/0	POS.	D 32136
6-4 GA.	UNIV.	E 32220	2/0	NEG.	D 32127	2/0	NEG.	D 32137
4 GA.	UNIV.	D 32110	2/0	POS.	D 32128	2/0	POS.	D 32138
1 + 2 GA.	NEG.	D 32113	3/0	NEG.	D 32129	3/0	NEG.	D 32139
1 + 2 GA.	POS.	D 32114	3/0	POS.	D 32130	3/0	POS.	D 32140
1/0	NEG.	D 32115	4/0	NEG.	D 32131	4/0	NEG.	D 32141
1/0	POS.	D 32116	4/0	POS.	D 32132	4/0	POS.	D 32142
2/0	NEG.	D 32117	–	–	–	–	–	–
2/0	POS.	D 32118	–	–	–	–	–	–
3/0	NEG.	D 32119	–	–	–	–	–	–
3/0	POS.	D 32120	–	–	–	–	–	–
4/0	NEG.	D 32121	–	–	–	–	–	–
4/0	POS.	D 32122	–	–	–	–	–	–

# CIC 200™ CABLE AND BATTERY SUPPLIES

POST TOP — LEFT ELBOW			STUD TOP/SIDE MOUNT — STRAIGHT			STUD TOP/SIDE MOUNT — DOUBLE (SPLICE)		
			 					
CABLE SIZE	POLARITY	PART	CABLE SIZE	POLARITY	PART	CABLE SIZE	POLARITY	PART
1/0	NEG.	D 32145	4 GA.	UNIV.	D 32155	2/0	UNIV.	D 32162
1/0	POS.	D 32146	1 + 2 GA.	UNIV.	D 32156	3/0	UNIV.	D 32163
2/0	NEG.	D 32147	1/0	UNIV.	D 32157	-	-	-
2/0	POS.	D 32148	2/0	UNIV.	D 32158	-	-	-
3/0	NEG.	D 32149	3/0	UNIV.	D 32159	-	-	-
3/0	POS.	D 32150	4/0	UNIV.	D 32160	-	-	-
4/0	NEG.	D 32151	-	-	-	-	-	-
4/0	POS.	D 32152	-	-	-	-	-	-

STUD NUT		SIDE MOUNT BOLT		SIDE MOUNT BOLT - X-LONG	
 		 			
SIZE	PART	SIZE	PART	SIZE	PART
3/8-16	I 32165	3/8-16 (OEM)	I 32166	3/8-16 (X-LONG)	F 32167


CRIMPING COLOR CODES				
AWG #	LEFT DIE	RIGHT DIE	TERMINAL COLOR CODE	# OF CRIMPS
4	J	H	GREEN	1
2	H	H	PINK	2
1	H	H	PINK	2
1/0	E	A	BLACK	2
2/0	A	C	ORANGE	2
3/0	A	B	PURPLE	2
4/0	A	A	YELLOW	2


SOLDER BUTT CONNECTORS					
<b>SOLDER OR CRIMP TYPE</b>  <b>NON-INSULATED</b>	CABLE SIZE	LENGTH	BARREL I.D.	PART	
	• HIGHEST GRADE PURE ELECTROLYTIC COPPER	8 GA.	1.000	.186	R 6261
	• TIN PLATED	6 GA.	1.075	.232	R 6262
	• FULLY ANNEALED FOR EASY, SECURE CRIMPING	4 GA.	1.215	.286	R 6263
	• FLARED BARREL ENDS	2 GA.	1.350	.336	N 6264
	• SEAMLESS CONSTRUCTION	1 GA.	1.350	.360	N 6265
	• EASY IDENTIFICATION	1/0	1.550	.407	N 6266
		2/0	1.800	.461	L 6267
		3/0	1.900	.511	L 6268
	4/0	2.000	.590	I 6269	


# CIC 200™ CABLE AND BATTERY SUPPLIES


## CIC 200™ SOLDER LINK SLUGS


CIC 200 Solder Link Slugs and Sur-Seal Shrink Tubing provide the fastest, easiest, hermetically sealed battery connections possible — far superior to crimping.





  
GRAY


  
GREEN

  
PINK

  
BLACK


  
ORANGE

  
PURPLE

  
YELLOW

**FEATURES:**

- COST EFFICIENT — NO EXPENSIVE TOOLS REQUIRED
- PRE-MEASURED — PROVIDES THE EXACT AMOUNT OF SOLDER FOR EACH SIZE CONNECTOR
- AVAILABLE IN SEVEN SIZES — 4 GAUGE TO 4/0
- COLOR CODED — COINCIDES WITH INDUSTRY STANDARDS
- PROVIDES THE PERFECT CONNECTION EVERY TIME — COMPLETE AND ENVIRONMENTALLY SEALED
- FLUX-CORED TO ELIMINATE CONTAMINATION
- EASY TO USE




**SIMPLY DROP A SOLDER LINK SLUG INTO A BATTERY TERMINAL, HEAT WITH TORCH WHILE PRESSING STRIPPED CABLE INTO TERMINAL AND ALLOW TO COOL. FIT SHRINK TUBING FOR EXTRA PROTECTION AGAINST THE ELEMENTS.**

SIZE	COLOR / DESCRIPTION		PART
4 GA	Gray	N	6270
2 GA	Green	N	6271
1 GA	Pink	R	6272
1/0	Black	R	6273
2/0	Orange	N	6274
3/0	Purple	N	6275
4/0	Yellow	L	6276
2 oz. Bottle	Solder-Link™ Flux	A	74518

## CABLE

### BATTERY CABLE


- BLACK
- SPECIAL ALL-WEATHER VINYL INSULATION
- FLEXIBLE AND CRACK PROOF
- OIL, ACID, GREASE AND WATER RESISTANT
- EASIER STRIPPING
- PLASTICITY REMAINS CONSTANT IN EXTREME TEMPERATURES
- MEETS ALL QUALITY AND PERFORMANCE REQUIREMENTS OF U.S. GOVERNMENT



SIZE	25 FEET	50 FEET
6	8168	8184
4	8170	8186
2	8172	8188
1	8174	8190
1/0	8176	8192
2/0	8178	8194
3/0	8180	8196
4/0	8182	8198

### FLEXIBLE WELDING/BATTERY CABLE

- MUCH MORE FLEXIBLE THAN STANDARD BATTERY CABLE
- TEMPERATURE RANGE -40°C to 90°C (-40°F to 194°F)
- 600 VOLT RATING
- RESISTS FLAME, OIL, GREASE, SOLVENTS, ACIDS, OZONE AND ABRASION



RED		BLACK	
SIZE	25 FEET	SIZE	25 FEET
6	8169	6	8185
4	8171	4	8187
2	8173	2	8189
1	8175	1	8191
1/0	8177	1/0	8193
2/0	8179	2/0	8195
3/0	8181	3/0	8197
4/0	8183	4/0	8199

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# CIC 200™ CABLE AND BATTERY SUPPLIES

## CRIMPING/STRIPPING TOOLS

### HAMMER TYPE BATTERY CRIMPER

#### 6 GA to 4/0 GA Professional Tool

Convenient and economical alternative for crimping lugs and terminals.

#### Features Include

- Spring Loaded; locks in up position for loading connector and cable and locks them in place when released
- Just hammer the top of the pin to crimp
- Simple and easy

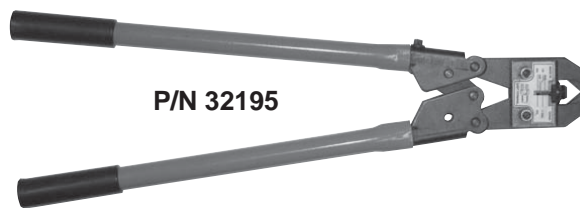


P/N 32191

### HEAVY DUTY CRIMPING TOOL

#### Features

- 6 GA to 4/0 GA
- A rugged tool that is easy to use
- Wire range from 4 GA to 4/0 GA
- Just rotate knob to desired crimping gauge
- Permanently installed jaws – no missing parts
- Long handle provides excellent leverage



P/N 32195

### HEAVY DUTY CABLE CUTTER

#### Features

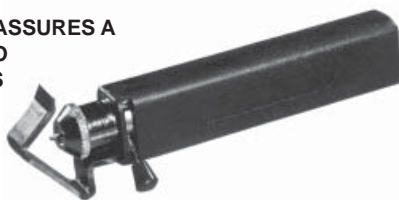
- Maximum 350 MCM
- A rugged tool that is easy to use

P/N 32194

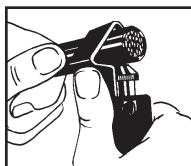


### BATTERY CABLE STRIPPER

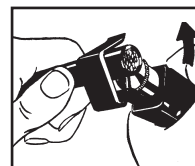
- PRECISE DEPTH CONTROL ASSURES A CLEAN EASY STRIP WITH NO KNICKING OF CONDUCTORS
- HEAVY DUTY DESIGN PROVIDES LASTING, DEPENDABLE SERVICE
- ADJUSTABLE FOR CABLE SIZES 8 GAUGE THROUGH 400 MCM
- REPLACEMENT BLADE INCLUDED (STORED IN HANDLE)
- CAN BE USED FOR BOTH END AND CENTER STRIPPING



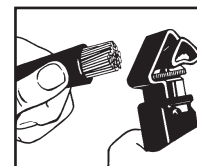
P/N 8215



1. Raise cable guide and place cable inside.



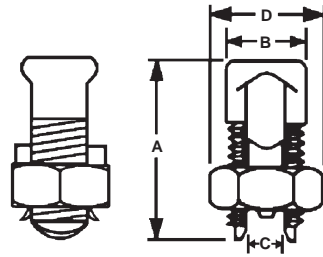
2. Rotate tool around cable.



3. Remove insulation.

# CIC 200™ CABLE AND BATTERY SUPPLIES

## COPPER SPLIT BOLTS



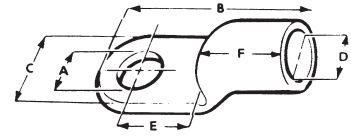
WIRE RANGE		DIMENSIONS				PART
EQUAL MAIN & TAP (MIN-MAX)	MIN. TAP WITH MAX. MAIN	A	B	C	D	
12 STR - 10 STR	16 STR	23/32	9/32	1/8	31/64	E 2740
10 STR - 8 STR	14 STR	23/32	3/8	9/64	37/64	E 2741
8 STR - 6 SOL	14 STR	63/64	7/16	11/64	45/64	E 2742
8 STR - 4 SOL	14 STR	1-3/64	1/2	7/32	25/32	E 2743
6 STR - 2 SOL	14 STR	1-5/64	37/64	17/64	27/32	B 2744
6 STR - 2 STR	14 STR	1-1/2	5/8	21/64	59/64	B 2745
4 STR - 1/0 STR	14 STR	1-25/32	13/16	7/16	1-3/16	B 2746
1 STR - 2/0 STR	14 STR	1-11/16	13/16	27/64	1-1/16	A 2747
2/0 STR - 3/0 STR	8 STR	2-3/32	63/64	17/32	1-1/4	A 2752
4/0 STR - 250 MCM	8 STR	2-3/32	1-1/16	37/64	1-1/4	A 2764

**NOTE:** Use Red Lion™ Red Insulating Varnish (P/N 4139) to assure a long-term, weather resistant connection.

# CIC 200™ CABLE AND BATTERY SUPPLIES

## HEAVY DUTY CRIMP OR SOLDER ELECTRICAL LUGS

- TIN PLATED, HIGH GRADE PURE ELECTROLYTIC COPPER LUGS THAT ARE FULLY ANNEALED FOR EASY, SECURE CRIMPING
- FLARED BARREL ENDS WITH SEAMLESS CONSTRUCTION ARE MARKED WITH WIRE SIZE

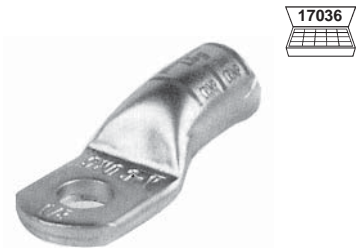


AWG WIRE SIZE	PAD THICKNESS	A STUD SIZE	B LTH	C PAD WTH	D BARREL I.D.	E CLEARANCE	F BARREL LTH	PART	AWG WIRE SIZE	PAD THICKNESS	A STUD SIZE	B LTH	C PAD WTH	D BARREL I.D.	E CLEARANCE	F BARREL LTH	PART
8	.075	10	1.23	.46	.186	.32	.450	R 6200	2	.100	3/8	1.65	.63	.336	.38	.575	N 6225
8	.075	1/4	1.23	.46	.186	.32	.450	R 6201	2	.115	1/2	1.78	.78	.336	.44	.575	N 6226
8	.075	3/8	1.37	.62	.186	.38	.450	R 6202	1	.100	1/4	1.75	.68	.360	.38	.625	N 6229
8	.075	1/2	1.51	.78	.186	.44	.450	R 6203	1	.100	5/16	1.75	.68	.360	.38	.625	N 6230
6	.080	10	1.30	.46	.232	.32	.475	R 6208	1	.100	3/8	1.75	.68	.360	.38	.625	N 6231
6	.080	1/4	1.30	.46	.232	.32	.475	R 6209	1	.115	1/2	1.86	.78	.360	.44	.625	N 6232
6	.080	5/16	1.44	.62	.232	.38	.475	R 6211	1/0	.100	1/4	1.89	.75	.407	.38	.675	N 6235
6	.080	3/8	1.44	.62	.232	.38	.475	R 6212	1/0	.100	5/16	1.89	.75	.407	.38	.675	N 6236
6	.080	1/2	1.58	.78	.232	.44	.475	R 6213	1/0	.100	3/8	1.89	.75	.407	.38	.675	N 6237
4	.085	10	1.53	.54	.286	.38	.550	N 6216	1/0	.115	1/2	1.98	.84	.407	.44	.675	N 6238
4	.085	1/4	1.53	.54	.286	.38	.550	N 6217	2/0	.105	3/8	2.11	.83	.461	.48	.700	N 6241
4	.085	5/16	1.58	.64	.286	.38	.550	N 6218	2/0	.105	1/2	2.11	.83	.461	.48	.700	N 6242
4	.085	3/8	1.58	.64	.286	.38	.550	N 6219	3/0	.115	3/8	2.22	.92	.511	.48	.725	L 6245
4	.115	1/2	1.71	.78	.286	.44	.550	N 6220	3/0	.115	1/2	2.22	.92	.511	.48	.725	L 6246
2	.100	1/4	1.65	.63	.336	.38	.575	N 6223	4/0	.125	3/8	2.38	1.00	.559	.52	.750	L 6248
2	.100	5/16	1.65	.63	.336	.38	.575	N 6224	4/0	.125	1/2	2.38	1.00	.559	.52	.750	L 6249

## MAGNA LUGS

### STARTER/GROUND UG BATTERY TERMINALS

- COLOR CODED FOR EASY IDENTIFICATION
- WIDER PADS FOR BETTER ELECTRICAL CONTACT
- THICKER PADS FOR GREATER STRENGTH
- 80% THICKER WALLS FOR GREATER CONDUCTIVITY AND STRENGTH
- SAME CRIMP SETTINGS AS BATTERY TERMINALS, SAVING YOU TIME, TROUBLE AND ERRORS
- EXCEED SAE CONDUCTIVITY STANDARDS
- MADE OF 100% COPPER, TIN PLATED TWICE AS THICK AS INDUSTRY STANDARDS
- CAN BE CRIMPED OR SOLDERED



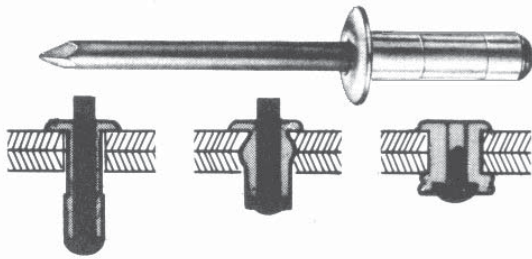
WIRE GAUGE	STUD SIZE	COLOR CODE	PART	WIRE GAUGE	STUD SIZE	COLOR CODE	PART
6	1/4"	Gray	I 32216	1/0	5/16"	Black	I 32202
6	5/16"	Gray	I 32217	1/0	3/8"	Black	I 32201
6	3/8"	Gray	I 32218	1/0	1/2"	Black	I 32200
4	1/4"	Gray	I 32213	2/0	5/16"	Orange	I 32208
4	5/16"	Gray	I 32215	2/0	3/8"	Orange	I 32207
4	3/8"	Gray	I 32214	2/0	1/2"	Orange	I 32206
1-2	5/16"	Pink	I 32205	3/0	3/8"	Purple	E 32210
1-2	3/8"	Pink	E 32204	3/0	1/2"	Purple	E 32209
1-2	1/2"	Pink	I 32203	4/0	3/8"	Yellow	E 32212
				4/0	1/2"	Yellow	E 32211

# CIC 200™ MULTI-GRIP PULL RIVETS

## DOME HEAD

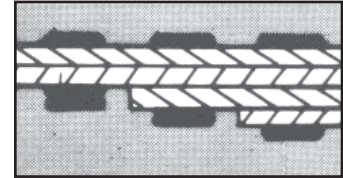
Only Chromate multi-grip pull rivets adapt to hole size variance and pull up snug regardless of material thickness. Only a few sizes cover the applications of up to 15 standard rivets.

### THE CHROMATE MULTI-GRIP DIFFERENCE

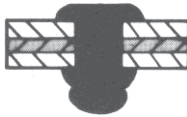


#### EXCLUSIVE FEATURES:

- EXPANDS UP TO ITS OWN HEAD DIAMETER FOR USE IN WIDE TOLERANCE HOLES
- ONE LENGTH FITS ALL THICKNESSES WITHIN GRIP RANGE
- SUPERIOR CLAMP-UP ACTION ELIMINATES LOOSE PART UNDER ADVERSE CONDITIONS
- LOW PROFILE GUARANTEED FOR FINISHED APPEARANCE ON BOTH SIDES
- SEALED STEM FOR WATERPROOF, DUSTPROOF APPLICATION



- DOME HEAD RIVETS ARE USED IN STANDARD APPLICATIONS REQUIRING MAXIMUM HOLE FILL AND CLAMP-UP



### DOME HEAD

DIAMETER	GRIP RANGE	HEAD DIA.	DRILL SIZE	PART
1/8	1/32 to 3/16	13/64	#29	U 6850
1/8	1/8 to 5/16	13/64	#29	U 6853
5/32	3/64 to 1/4	1/4	#19	U 6855
3/16	1/16 to 1/4	11/32	#8	U 6860
3/16	3/16 to 7/16	11/32	#8	T 6865

- LARGE FLANGE RIVETS INCREASE HEAD BEARING SURFACE, PREVENTING PULL-THROUGH IN SOFT MATERIALS



### LARGE FLANGE

DIAMETER	GRIP RANGE	HEAD DIA.	DRILL SIZE	PART
1/8	1/32 to 3/16	21/64	#29	U 6875
1/8	1/8 to 5/16	21/64	#29	U 6876
3/16	1/4 to 1/2	5/8	#8	T 6879
3/16	1/2 to 25/32	5/8	#8	T 6882

- 120° COUNTERSUNK RIVETS PROVIDE SMOOTH OFFSIDE SURFACES AND CLEARANCE FOR MOVING PARTS



### 120° COUNTERSUNK

DIAMETER	GRIP RANGE	HEAD DIA.	DRILL SIZE	PART
1/8	3/32 to 1/4	13/64	#29	U 6867

### DUAL-ACTION HAND RIVET TOOL



NOSE PIECES INCLUDED:	PART
3/32, 1/8, 5/32, 3/16	A 6885

### HAND RIVET TOOL

- SETS 1/8" - 1/4" DIAMETER RIVETS IN ALL MATERIALS. CAN ALSO SET T-RIVET/KLIK-SPLIT®, KLIK-LOCK™ AND ALL OTHER STRUCTURAL BLIND RIVETS
- HEAVY DUTY CONSTRUCTION WITH SHOCK RESISTANT HANDLES
- 1/4" NOSEPIECE INSTALLED IN THE TOOL AND 3/16" AND 5/32" NOSEPIECES IN THE HANDLE
- LONGER HANDLES PERMIT ACCESS TO HARD-TO-REACH AREAS
- OVERALL LENGTH 21", HANDLE LENGTH 16"

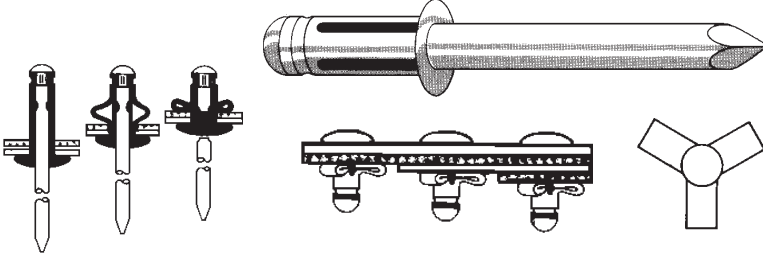


NOSE PIECES INCLUDED:	PART
1/4", 3/16" and 5/32"	A 6884


# CIC 200™ MULTI-GRIP PULL RIVETS (Cont'd.)

## TRI-CLAMP

All aluminum, multi-purpose, multi-grip rivet designed to fasten all materials including metal, plastic, fiberglass, ceramic, plexiglass and other composites where pull-through with standard rivets is a common cause of failure.




- EASY USE – INSERT AND SQUEEZE
- POSITIVE FASTENING
- ADAPTS TO ALL MATERIALS – THIN, BRITTLE, CLAD, SOFT
- MULTI-GRIP – WILL FASTEN MATERIALS FROM 3/64" TO 15/32" THICK
- SUPERIOR CLAMPING – SLOTTED SHELL UPSETS INTO 3 UNIFORM TINES ON BLIND SIDE CREATING A LARGE BEARING SURFACE EXTENDING PROPER CLAMPING FORCE FROM BOTH SIDES




DIAMETER	GRIP RANGE	HEAD DIA.	DRILL SIZE		PART
5/32	3/64 to 1/8	5/16	11/64 (.1719)	T	6887
5/32	3/64 to 9/32	5/16	11/64 (.1719)	T	6888
3/16	3/64 to 5/32	25/64	#8 (.1990)	T	6883
3/16	3/64 to 11/32	25/64	#8 (.1990)	T	6886
3/16	5/32 to 15/32	25/64	#8 (.1990)	T	6889

## FINISHING CAPS FOR TRI-CLAMP RIVETS

- THESE DECORATIVE "SNAP-ON" PLASTIC CAPS PROVIDE A FINISHED QUALITY IN APPLICATIONS WHERE RIVET HEADS SHOULD BE CONCEALED





DIAMETER	USE WITH PART NOS.	COLOR		PART
5/32	6887, 6888	WHITE	T	6896
5/32	6887, 6888	BLACK	T	6897
3/16	6883, 6886, 6889	WHITE	T	6898
3/16	6883, 6886, 6889	BLACK	T	6899


# RIVEDRILL™

## PATENTED DRILL ATTACHMENT WITH EFFORTLESS OPERATION

- EASILY CONVERTS CORDLESS, ELECTRIC AND PNEUMATIC DRILLS INTO BLIND RIVET GUNS
- INSTALLS AS EASILY AS A DRILL BIT
- COMPATIBLE WITH ANY REVERSIBLE DRILLING MACHINE WITH OR WITHOUT CORD
- ALLOWS OPERATORS TO SET UP TO 14 RIVETS PER MINUTE
- ERGONOMICALLY FRIENDLY – REQUIRING JUST 6.6 POUND OF PRESSURE TO OPERATE

**APPLICATIONS:**

- AUTOMOTIVE AFTERMARKET
- SMALL AIRCRAFT AND BOAT REPAIR
- RESIDENTIAL AND COMMERCIAL CONSTRUCTION
- GENERAL FACILITY MAINTENANCE AND REPAIR



Includes Nosepieces for 1/8", 5/32" and 3/16" sizes

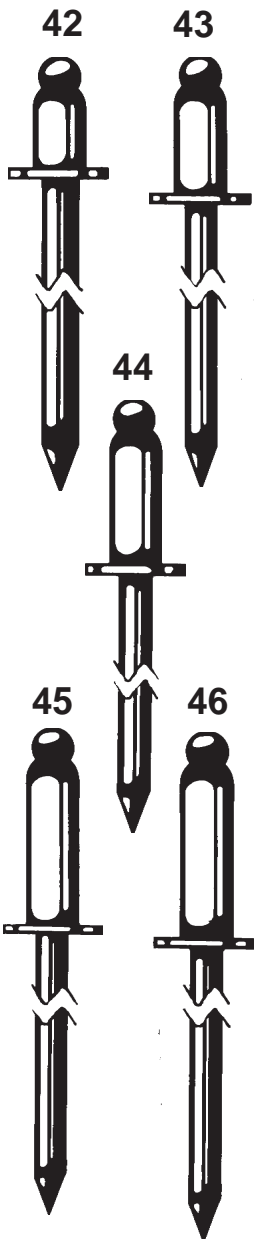
P/N 9612

DESCRIPTION	PART	REPLACEMENT NOSEPIECES		PART
Rivedrill	A 9612	1/8	A	9612NP18
Replacement Jaws for Rivedrill	A 9612JAWS	3/16	A	9612NP316
		5/32	A	9612NP532

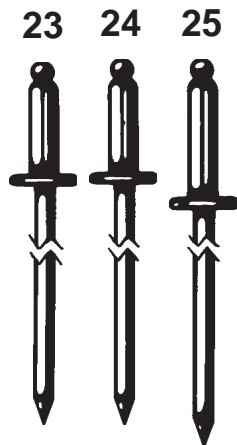
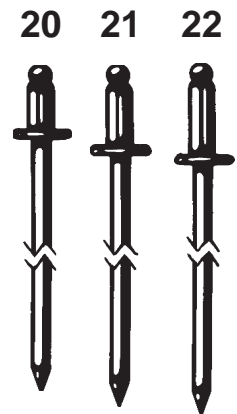
# CIC 200™ PULL RIVETS

## DOME HEAD

7737

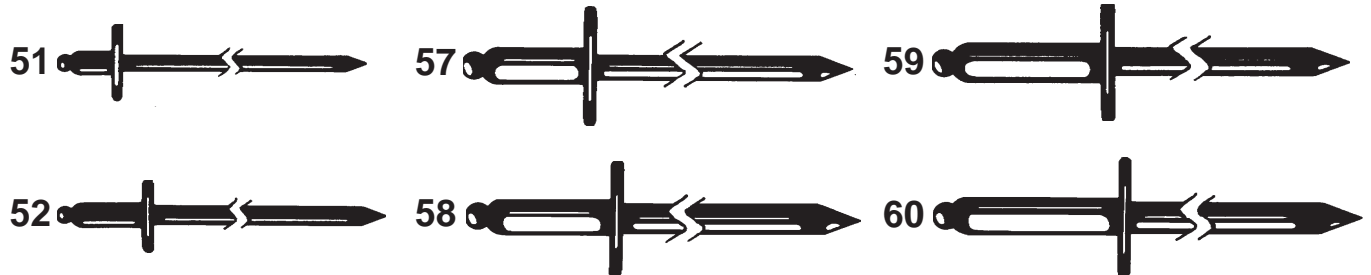


DIA.	DRILL SIZE	NO.	GRIP RANGE		ALUM. RIVET ALUM. MANDREL	ALUM. RIVET STEEL MANDREL	STEEL RIVET STEEL MANDREL	IN-DUS-TRY NO.	
3/32	#41 (.0960)	1	to 1/8	V	9800	V	9851	32	
		2	1/8 to 1/4	V	9801	V	9852	34	
1/8	#30 (.1285)	8	to 1/16	V	9806	V	9858	41	
		9	1/16 to 1/8	V	9807	V	9859	42	
		10	1/8 to 3/16	V	9808	V	9860	43	
		11	3/16 to 1/4	V	9809	V	9861	44	
		12	1/4 to 5/16	V	9810	V	9862	45	
		13	5/16 to 3/8	V	9811	V	9863	46	
		14	3/8 to 1/2	U	9812	U	9864	48	
5/32	#20 (.1610)	20	to 1/8	U	9818	U	9869	52	
		21	1/8 to 3/16		-	U	9870	53	
		22	3/16 to 1/4		-	U	9871	54	
		23	1/8 to 1/4	U	9820		-	U	9932
		24	1/4 to 3/8	U	9821	U	9872	U	9933
		25	3/8 to 1/2	U	9822		-	U	9934
3/16	#11 (.1910)	31	to 1/8	U	9827	U	9878	62	
		32	1/8 to 1/4	U	9828	U	9879	64	
		33	1/4 to 3/8	U	9829	U	9880	66	
		34	3/8 to 1/2	U	9830	U	9881	68	
		35	1/2 to 5/8	U	9831	U	9882	610	
		36	5/8 to 3/4	T	9832	T	9883	T	9944
1/4	F (.2370)	42	to 1/4		-	T	9889	84	
		43	1/4 to 3/8		-	T	9890	86	
		44	3/8 to 1/2		-	T	9891	88	
		45	1/2 to 5/8		-		-	T	9953
		46	5/8 to 3/4		-		-	T	9954



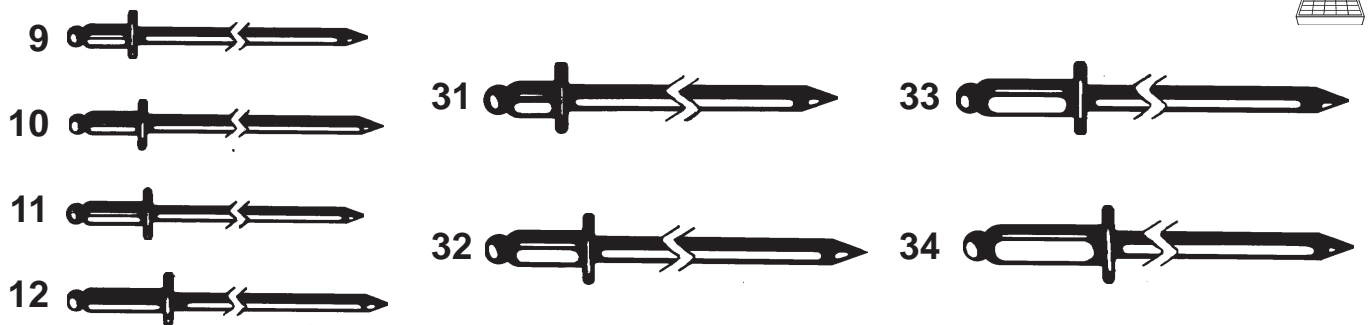
# CIC 200™ PULL RIVETS (Cont'd.)

## LARGE FLANGE



DIA.	FLANGE DIA.	DRILL SIZE	NO.	GRIP RANGE	ALUM. RIVET ALUM. MANDREL	ALUM. RIVET STEEL MANDREL	STEEL RIVET STEEL MANDREL
1/8	3/8	#30 (.1285)	51	1/16 to 1/8	U 9838	U 9897	U 9960
			52	1/8 to 1/4	U 9839	U 9898	U 9961
3/16	5/8	#11 (.1910)	57	1/4 to 3/8	U 9844	U 9903	U 9967
			58	3/8 to 1/2	-	U 9904	U 9968
			59	1/2 to 5/8	T 9846	T 9905	T 9969
			60	5/8 to 3/4	-	T 9906	T 9970

## STAINLESS STEEL

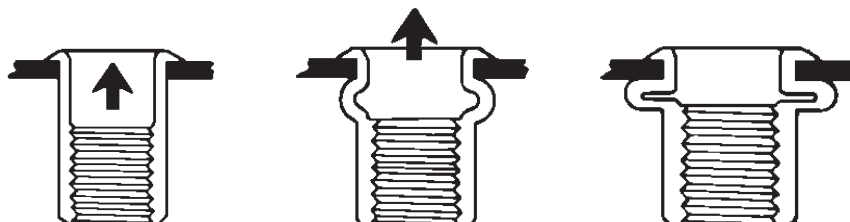


DIAMETER	DRILL SIZE	NO.	GRIP RANGE	PART
1/8	#30 (.1285)	9	to 1/8	T 9702
		10	1/8 to 3/16	T 9704
		11	3/16 to 1/4	T 9706
		13	1/4 to 3/8	T 9708
3/16	#11 (.1910)	31	to 1/8	R 9710
		32	1/8 to 1/4	R 9712
		33	1/4 to 3/8	R 9714
		34	3/8 to 1/2	R 9716

# CIC 200™ THREADED INSERT FASTENERS


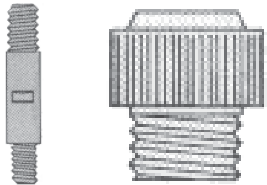
FAST, CONVENIENT INSTALLATION OF THREADS IN ANY BLIND AREA

CIC 200 Thinserts are an easily-installed alternative to many "blind" fasteners. They offer strength, permanence and load-bearing capabilities for a variety of materials.



**THINSERTS**  
DESIGNED TO PROVIDE A HIGHLY  
EFFICIENT METHOD OF SECURING  
THREADS FROM ONE SIDE OF WORK  
IN MATERIALS TOO THIN TO SUPPORT  
THREADS.

FOR MATERIALS .020" TO .200" THICK.

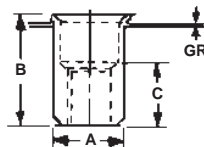
THINSERTS			ADAPTERS/MANDRELS		
					
SIZE	DRILL SIZE	PART	SIZE	PART	
6-32	1/4	T 581	4-40	A	460
8-32	1/4	T 582	6-32	A	483
10-24	9/32	T 583	8-32	A	484
10-32	9/32	T 584	10-24	A	485
1/4-20	3/8	R 585	10-32	A	486
5/16-18	1/2	R 587	12-24	A	487
-	-	-	1/4-20	A	488
-	-	-	1/4-28	A	492
-	-	-	5/16-18	A	490
-	-	-	5/16-24	A	493
-	-	-	3/8-16	A	489
-	-	-	3/8-24	A	494



# CIC 200™ THREADED INSERT FASTENERS (Cont'd.)

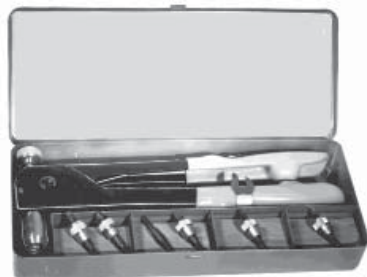
## SPECIFICATIONS

### THINSERTS



THREAD SIZE CLASS 2B AFTER INSTALLATION	RECOMMENDED GRIP RANGE		'A' MAX.	'B' MAX.	'C' MAX.	HOLE SIZE
	PILOT	FORMED				
6-32 and 8-32	.020 / .080	.020 / .060	.249	.410	.250	.250 / .254
10-24 and 10-32	.020 / .130	.020 / .100	.280	.465	.240	.281 / .285
1/4-20	.030 / .165	.030 / .130	.374	.610	.335	.375 / .379
5/16-18	.040 / .180	N/A	.499	.720	.395	.500 / .504

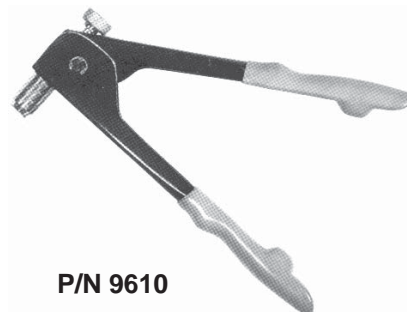
### QUIK TOOL KITS



- KIT INCLUDES:**
- QUIK TOOL
  - ADAPTERS/MANDRELS  
6-32, 8-32, 10-24, 10-32,  
1/4-20 AND 5/16-18

**P/N 9600**

### QUIK TOOL (WITHOUT ADAPTER)

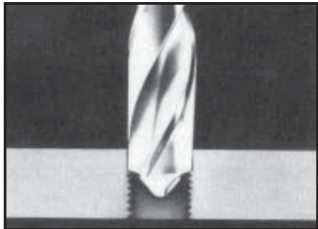


**P/N 9610**

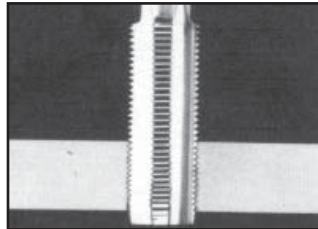
# CIC 200™ PERMASERTS™

## PERMANENT, LOCKING STEEL THREAD REPAIR INSERTS

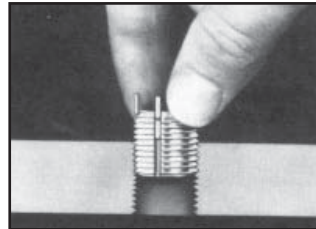
Quickly repairs stripped, damaged or worn threads. Also for use on original equipment applications where softer materials won't hold. Installed with standard drills and taps. No pre-winder tool required. Positive mechanical lock against rotation.



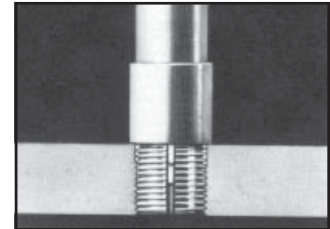
1. Drill out old threads, using standard drill.



2. Tap new threads, using standard tap.



3. Screw in insert until slightly below surface. "Kees" act as depth stop.



4. Drive "Kees" down with several light taps on installation tool.



5. Installed Insert



INSTALLATION TOOL

- **SOLID BUSHING WITH LOCKING KEES — PROVIDES POSITIVE MECHANICAL LOCKING AGAINST ROTATION**
- **USE IN ALUMINUM, MAGNESIUM, CAST IRON, COLD ROLLED STEEL AND PLASTIC — NO RESTRICTIONS ON PARENT MATERIAL**
- **HIGH STRENGTH AND RELIABILITY — PROVIDES MAXIMUM PULLOUT STRENGTH; BREAKS GRADE 8 BOLT**
- **EASY INSTALLATION — LEARN IN MINUTES**
- **HOLE PREPARED WITH STANDARD DRILL AND TAP — NO SPECIAL, COSTLY, SINGLE-PURPOSE DRILLS OR TAPS REQUIRED**
- **INSERT WITH FINGERS — NO SPECIAL PRE-WINDER TOOLS REQUIRED**
- **IMPOSSIBLE TO CROSS-THREAD DURING INSTALLATION — PERFECT EVERY TIME**
- **SIMPLE REMOVAL — PERMANENTLY INSTALLED UNLESS REMOVAL IS REQUIRED**

### USS THREAD SIZES

INTERNAL THREAD	EXTERNAL THREAD	LENGTH	TAP DRILL DIA.	TAP SIZE	DRILL REMOVAL		PART	INSTALLATION TOOL
					SIZE	DEPTH		
10-24	3/8-16	.31	"Q"	3/8-16	9/32	1/8	L 1913	A 1881
1/4-20	7/16-14	.37	"X"	7/16-14	11/32	3/16	L 1915	A 1882
5/16-18	1/2-13	.43	29/64	1/2-13	13/32	3/16	L 1917	A 1883
3/8-16	9/16-12	.50	33/64	9/16-12	15/32	3/16	I 1919	A 1884
7/16-14	5/8-11	.62	37/64	5/8-11	17/32	3/16	I 1921	A 1885
1/2-13	3/4-16	.62	45/64	3/4-16	21/32	3/16	I 1923	A 1886
5/8-11	7/8-14	.87	53/64	7/8-14	25/32	3/16	F 1927	A 1888
3/4-10	1-1/8-12	1.12	1-1/16	1-1/8-12	31/32	5/16	D 1929	A 1889
7/8-9	1-1/4-12	1.25	1-3/16	1-1/4-12	1-3/32	5/16	D 1931	A 1890
1-8	1-3/8-12	1.37	1-5/16	1-3/8-12	1-7/32	5/16	B 1933	A 1891

### SAE THREAD SIZES

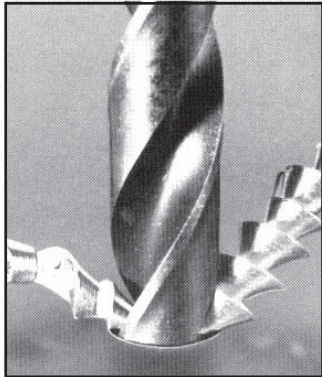
10-32	3/8-16	.31	"Q"	3/8-16	9/32	1/8	L 1914	A 1881
1/4-28	7/16-14	.37	"X"	7/16-14	11/32	3/16	L 1916	A 1882
5/16-24	1/2-13	.43	29/64	1/2-13	13/32	3/16	L 1918	A 1883
3/8-24	9/16-12	.50	33/64	9/16-12	15/32	3/16	I 1920	A 1884
7/16-20	5/8-11	.62	37/64	5/8-11	17/32	3/16	I 1922	A 1885
1/2-20	3/4-16	.62	45/64	3/4-16	21/32	3/16	I 1924	A 1886
5/8-18	7/8-14	.87	53/64	7/8-14	25/32	3/16	F 1928	A 1888
3/4-16	1-1/8-12	1.12	1-1/16	1-1/8-12	31/32	5/16	D 1930	A 1889
7/8-14	1-1/4-12	1.25	1-3/16	1-1/4-12	1-3/32	5/16	D 1932	A 1890
1-14	1-3/8-12	1.37	1-5/16	1-3/8-12	1-7/32	5/16	B 1935	A 1891

# CIC 200™ THREAD REPAIR INSERTS

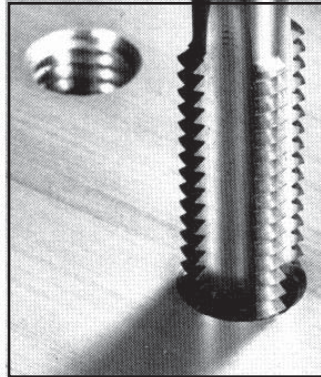
## METAL

Installs permanent threads that won't fail, strip, rotate or pull out even under excessive loading.

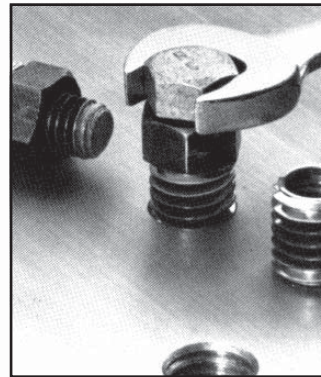
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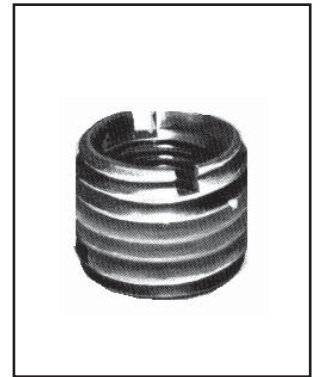
DRILL WITH STANDARD DRILL



TAP HOLE WITH  
STANDARD TAP



TURN E-Z LOK HOM  
FLUSH WITH BOLT



AUTOMATIC SELF-LOCKING  
EXTERNAL THREAD

### USS THREAD SIZES

INTERNAL THREAD	EXTERNAL THREAD	LENGTH	TAP DRILL SIZE	TAP SIZE	MIN. FULL THREAD DEPTH	PART
4-40	10-32	.250	5/32	10-32	9/32	L 1653
6-32	1/4-20	.280	7	1/4-20	11/32	L 1654
8-32	5/16-18	.290	F	5/16-18	7/16	L 1655
10-24	3/8-16	.406	5/16	3/8-16	15/32	L 1656
1/4-20	7/16-14	.437	23/64	7/16-14	1/2	L 1657
5/16-18	1/2-13	.484	27/64	1/2-13	9/16	I 1658
3/8-16	9/16-12	.515	31/64	9/16-12	19/32	I 1659
7/16-14	5/8-11	.656	17/32	5/8-11	23/32	I 1660
1/2-13	3/4-10	.656	21/32	3/4-10	3/4	I 1661
5/8-11	7/8-9	.687	49/64	7/8-9	13/16	E 1662
5/8-11-Long	7/8-9	1.125	49/64	7/8-9	1-1/4	E 1663
3/4-10	1-8	.781	7/8	1-8	7/8	E 1664
1-8	1-3/8-12	1.250	1-9/32	1-3/8-12	1-3/8	E 1665

### SAE THREAD SIZES

10-32	3/8-16	.406	5/16	3/8-16	15/32	L 1757
1/4-28	7/16-14	.437	23/64	7/16-14	1/2	L 1758
5/16-24	1/2-13	.484	27/64	1/2-13	9/16	I 1759
3/8-24	9/16-12	.515	31/64	9/16-12	19/32	I 1760
7/16-20	5/8-11	.656	17/32	5/8-11	23/32	I 1761
1/2-20	3/4-10	.656	21/32	3/4-10	3/4	I 1762
5/8-18	7/8-9	.687	49/64	7/8-9	13/16	E 1763
3/4-16	1/8	.781	7/8	1-8	7/8	E 1764

# CIC 200™ THREAD REPAIR INSERTS (Cont'd.)

## 303 STAINLESS STEEL, PASSIVATED

### USS THREAD


INTERNAL THREAD	EXTERNAL THREAD	OVERALL LENGTH	TAP DRILL SIZE	TAP SIZE	MIN. FULL THREAD DEPTH	PART
10-24	3/8-16	.406	5/16	3/8-16	15/32	E 1564
1/4-20	7/16-14	.437	23/64	7/16-14	1/2	E 1565
5/16-18	1/2-13	.484	27/64	1/2-13	9/16	E 1566
3/8-16	9/16-12	.515	31/64	9/16-12	19/32	E 1567
7/16-14	5/8-11	.656	17/32	5/8-11	23/32	E 1568
1/2-13	3/4-10	.656	21/32	3/4-10	3/4	E 1569

### SAE THREAD

10-32	3/8-16	.406	5/16	3/8-16	15/32	E 1575
1/4-28	7/16-14	.437	23/64	7/16-14	1/2	E 1576
5/16-24	1/2-13	.484	27/64	1/2-13	9/16	E 1577
3/8-24	9/16-12	.515	31/64	9/16-12	19/32	E 1578
7/16-20	5/8-11	.656	17/32	5/8-11	23/32	E 1579
1/2-20	3/4-10	.656	21/32	3/4-10	3/4	E 1580

## WOOD

The most effective way to make strong joints in hard wood, soft wood and particle board using machine screws and/or bolts.

	INTERNAL THREAD	MAX. DIA. EXT. THREAD	OVERALL LENGTH	DRILLED HOLE SIZE	PART
	6-32	.350	.375	1/4"	R 3786
	8-32	.350	.375	1/4"	R 3788
	10-24	.453	.500	3/8"	R 3790
	10-32	.453	.500	3/8"	R 3792
	1/4-20	.453	.500	3/8"	R 3794
	5/16-18	.594	.562	1/2"	O 3796
	3/8-16	.600	.625	1/2"	O 3798

### INSTALLATION TOOL

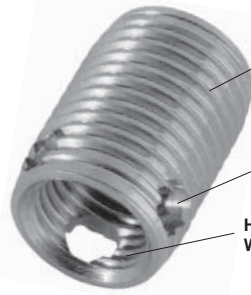


SIZE	USS	SAE	PART
8	32	-	A 1893
10	24	32	A 1894
1/4	20	28	A 1895
5/16	18	24	A 1896
3/8	16	24	A 1897
7/16	14	20	A 1898
1/2	13	20	A 1899

# SELF-TAPPING THREADED INSERTS

FOR USE IN ALUMINUM, ALUMINUM ALLOY, MAGNESIUM AND MILD STEEL

- TAPS AND INSTALLS IN ONE EASY STEP SAVING TIME, MONEY AND LABOR
- DESIGNED TO PROVIDE MAXIMUM PULL-OUT STRENGTH AND WEAR RESISTANT THREADS IN ALUMINUM, ALUMINUM ALLOY, MAGNESIUM AND MILD STEEL
- THREE LATERAL CUTTING HOLES PROVIDES AN EASY SELF-TAPPING INSTALLATION RESULTING IN A CONNECTION HIGHLY RESISTANT TO VIBRATION



SUPERIOR PULL-OUT RESISTANCE IN SOFTER METALS AND PLASTICS FROM THE EXTERNAL V-FORM THREAD.

CIRCULAR CUTTING ELEMENTS SELF-TAP AND LOCK INTO THE BASE MATERIAL. RESISTS EXTREME VIBRATION WITH NO LOSS IN PERFORMANCE.

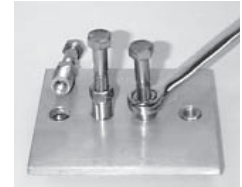
HIGH-QUALITY INTERNAL THREADS ARE WEAR RESISTANT STANDARD CLASS 2B.



### INSTALLATION INSTRUCTIONS:

(Using a hex head cap screw and nut)

1. Drill to recommended hole size.
2. Thread hex nut onto cap screw. Screw insert onto cap screw with holes away from nut. Tighten the nut snugly to the top of the insert.
3. Using appropriate wrench or socket, carefully align insert perpendicular to the hole and turn clockwise until flush with surface. To remove cap screw, hold the nut with a wrench and loosen cap screw.



SIZE	LENGTH	DRILL/ HOLE SIZE	HOLE DEPTH	PART	SIZE	LENGTH	DRILL/ HOLE SIZE	HOLE DEPTH	PART
4-40	.236	#15 (.181)	.315	N 1940	1/4-20	.472	U (.366)	.591	N 1945
6-32	.315	7/32 (.216)	.394	N 1941	5/16-18	.551	7/16 (.437)	.669	I 1946
8-32	.315	15/64 (.236)	.394	N 1942	3/8-16	.709	33/64 (.516)	.866	I 1947
10-24	.394	L (.291)	.512	N 1943	7/16-14	.866	19/32 (.590)	1.024	I 1948
10-32	.394	L (.291)	.512	N 1944	1/2-13	.945	43/64 (.669)	1.102	I 1949
-	-	-	-		5/8-11	.945	3/4 (.748)	1.102	E 1950

# HI-TORQUER TOOL AND CONVERSION KITS

- EASILY INSTALLS ALL SIZES OF THREADED INSERTS
- "QUICK-CHANGE" THREAD ADAPTATION KIT CHANGE OVER OF THE BASE TOOL (TOOL BODY WITH "T" HANDLE) TO PLACE DIFFERENT THREAD SIZES WITHOUT THE NEED OF ANY TOOLS

### INSTALLATION INSTRUCTIONS:

1. Lock the correct size conversion kit into the Hi-Torquer threaded insert tool.
2. Screw a nutsert or threadsert onto socket head cap screw.
3. Using the tool, place the insert into the hole until the tool comes to rest on the base material.
4. Hold in place with handle and turn the T-handle until insert is installed.
5. Remove the tool by unscrewing the T-handle out of the insert.



HEX DRIVER

SOCKET HEAD  
CAP SCREW

METAL  
WASHER

BRASS  
WASHER

NUT



HI-TORQUER THREADED  
INSERT TOOL



CONVERSION KIT

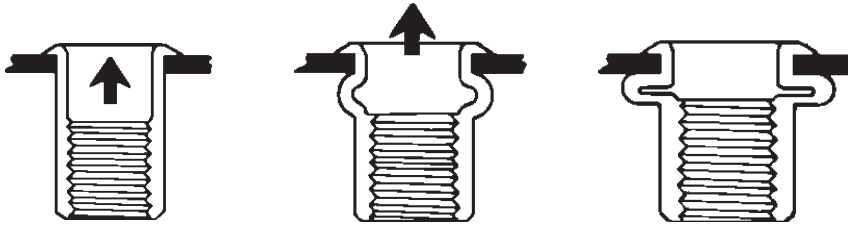


DESCRIPTION	PART	DESCRIPTION	PART
Hi-Torquer Threaded Insert Tool	A 9611	1/4-20 Hi-Torquer Conversion Kit	A 22105
4-40 Hi-Torquer Conversion Kit	A 22100	1/4-28 Hi-Torquer Conversion Kit	A 22106
6-32 Hi-Torquer Conversion Kit	A 22101	5/16-18 Hi-Torquer Conversion Kit	A 22107
8-32 Hi-Torquer Conversion Kit	A 22102	5/16-24 Hi-Torquer Conversion Kit	A 22108
10-24 Hi-Torquer Conversion Kit	A 22103	3/8-16 Hi-Torquer Conversion Kit	A 22109
10-32 Hi-Torquer Conversion Kit	A 22104	3/8-24 Hi-Torquer Conversion Kit	A 22110

# KNURLED FLANGED THREADED INSERT FASTENERS

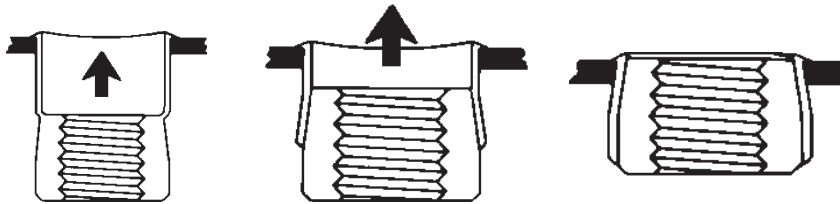
FAST, CONVENIENT INSTALLATION OF THREADS IN ANY BLIND AREA

Knurled Flanged Thinserts and Nutserts are an easily-installed alternative to many "blind" fasteners. They offer strength, permanence and load-bearing capabilities for a variety of materials.









## THINSERTS

DESIGNED TO PROVIDE A HIGHLY EFFICIENT METHOD OF SECURING THREADS FROM ONE SIDE OF WORK IN MATERIALS TOO THIN TO SUPPORT THREADS. FOR MATERIALS .020" TO .200" THICK.



## NUTSERTS

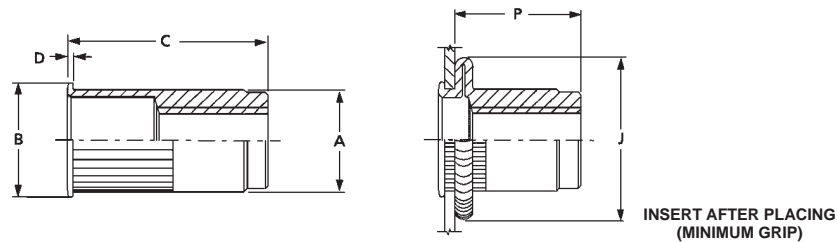
UNIQUE "BREAKAWAY" DESIGN PROVIDES SUPERIOR HOLDING POWER. A CONICALLY-SHAPED THREADED BASE IS DRAWN INTO THE UPPER SLEEVE, WEDGING THE SLEEVE FIRMLY IN THE HOLE. FOR MATERIALS .030" AND THICKER.

THINSERTS			NUTSERTS			ADAPTERS/MANDRELS	
<ul style="list-style-type: none"> <li>• SPLINED BODY PROVIDES INCREASED TORQUE-TO-TURN RESISTANCE OVER CONVENTIONAL NON-SPLINED INSERTS</li> <li>• LOW PROFILE HEAD PROVIDES NEAR-FLUSH SEATING WITHOUT SPECIAL HOLE PREPARATION</li> <li>• MATERIAL THICKNESS RANGING FROM .020" TO 0.312"</li> <li>• HARDENED SURFACE PROVIDING HIGH-STRENGTH, LOAD-BEARING THREADS</li> <li>• LEAD-IN CHAMFER ON THE BODY PROVIDES EASE OF INSERTION INTO THE WORK PIECE</li> </ul>  			<ul style="list-style-type: none"> <li>• REDUCED ASSEMBLY COSTS – INSTALLED FROM ONE SIDE OF THE WORKPIECE</li> <li>• NOT GRIP SENSITIVE – CAN BE USED IN ANY MATERIAL THICKNESS FROM .030" THROUGH SOLID MATERIALS</li> <li>• PERMANENT – RADIAL EXPANSION PROVIDES 360° CONTACT WITH PARENT MATERIAL</li> <li>• PORTABILITY – ALLOWS INSTALLATION ANYWHERE AND AT ANY TIME IN THE ASSEMBLY PROCESS</li> <li>• REDUCED REAR-SHEET PROTRUSION</li> </ul>  			 	
SIZE	DRILL SIZE	PART	SIZE	DRILL SIZE	PART	SIZE	PART
6-32	17/64	T 590	4-40	3/16	R 47900	4-40	A 460
8-32	17/64	T 591	6-32	7/32	R 47901	6-32	A 483
10-24	19/64	T 592	8-32	1/4	R 47902	8-32	A 484
10-32	19/64	T 593	10-24	9/32	R 47903	10-24	A 485
1/4-20	25/64	T 594	10-32	9/32	R 47904	10-32	A 486
5/16-18	17/32	R 595	1/4-20	3/8	R 47905	1/4-20	A 488
3/8-16	17/32	R 596	1/4-28	3/8	R 47906	1/4-28	A 492
-	-	-	5/16-18	1/2	N 47907	5/16-18	A 490
-	-	-	5/16-24	1/2	N 47908	5/16-24	A 493
						3/8-16	A 489

# KNURLED FLANGED INSERT FASTENERS (Cont'd.)

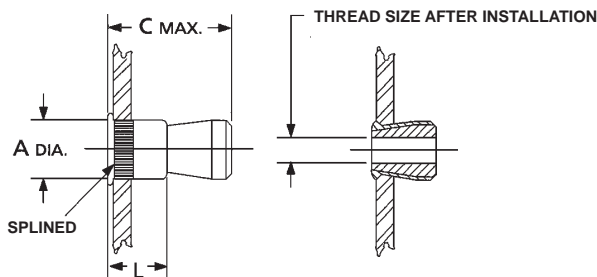
## SPECIFICATIONS

### THINSERTS



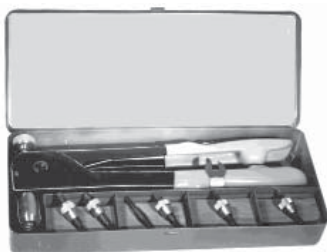
THREAD DESIGNATION	GRIP RANGE	HOLE DIA. +.006 -.000	A MAX.	B NOM.	C MAX.	P REF.	D MAX.	J MAX.
6-32 and 8-32	.020 - .080	17/64 (.2656)	.265	.310	.450	.305	.019	.390
10-24 and 10-32	.020 - .130	19/64 (.2969)	.296	.340	.505	.315	.020	.450
1/4-20	.027 - .165	25/64 (.3906)	.390	.455	.610	.380	.021	.550
5/16-18 and 3/8-16	.027 - .150	17/32 (.5312)	.530	.595	.720	.470	.023	.740

### NUTSERTS



THREAD SIZE	A	L	C	SUGGESTED HOLE SIZE FOR MATERIAL THICKNESS			
				.030-.090	.091-.124	.125-.186	.187-OVER
4-40	.1820 - .1870	.180 - .190	.385	.1875	.1935	.1935	.1935
6-32	.2136 - .2186	.180 - .190	.385	.2187	.2210	.2280	.2280
8-32	.2449 - .2499	.180 - .190	.385	.2500	.2570	.2656	.2656
10-24	.2760 - .2810	.180 - .190	.385	.2812	.2900	.2968	.2968
10-32	.2760 - .2810	.180 - .190	.385	.2812	.2900	.2968	.2968
1/4-20	.3699 - .3749	.252 - .262	.525	.375	.375	.386	.3906
1/4-28	.3699 - .3749	.252 - .262	.525	.375	.375	.386	.3906
5/16-18	.4949 - .4999	.302 - .312	.625	.500	.500	.5156	.5156
5/16-24	.4949 - .4999	.302 - .312	.625	.500	.500	.5156	.5156

### QUIK TOOL KITS



- KIT INCLUDES:**
- QUIK TOOL
  - ADAPTERS/MANDRELS  
6-32, 8-32, 10-24, 1/4-20  
AND 5/16-18

P/N 9600

### QUIK TOOL (WITHOUT ADAPTER)

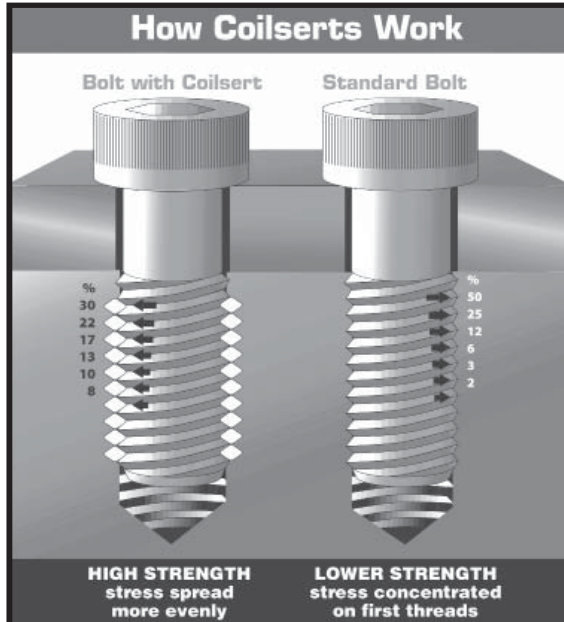


P/N 9610

# COILSERTS

## PERMANENT AND WEAR RESISTANT THREAD REPAIR INSERT

Coilserts are the quickest and simplest method of repair to stripped or damaged threads. A complete system of coilsert, STI tap and installation tools are offered.



In conventional threaded joints over 75% of the load is placed on the first three threads of the assembly. Coilsert on the left shows how the spring-like design of the insert allows the shear loading to be transformed into a preferable "hoop stress" or radial loading over the entire length of the insert.

### INSTALLATION TOOL

- THE MOST PRACTICAL AND SIMPLE TO USE FOR GENERAL APPLICATIONS
- CARE MUST BE TAKEN TO ENSURE THAT THE ADJUSTABLE COLLAR IS CORRECTLY SET TO SUIT THE PARTICULAR TYPE AND LENGTH OF THE COILSERT. IF THE COLLAR IS CORRECTLY SET, THE COILSERT WILL NOT DRIVE PROPERLY AND THE TOOL MAY SLIP OFF THE TANG AS THE COILSERT ENTERS THE HOLE.

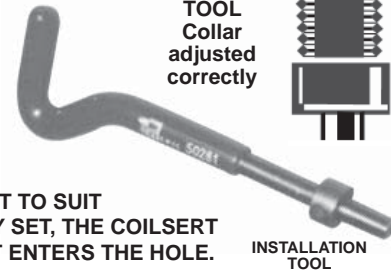
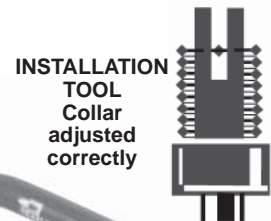
### COILSERTS

- ROLLED FROM HIGH QUALITY STAINLESS STEEL WIRE WOUND TO THE SHAPE OF A SPRING THREAD
- ONCE THE WIRE IS WOUND INTO A HELICAL COIL AND INSTALLED INTO A TAPPED HOLE, IT PROVIDES A PERMANENT AND WEAR RESISTANT THREAD IN THE PARENT MATERIAL THAT IS GENERALLY STRONGER THAN THE ORIGINAL THREAD
- COILSERT'S COMPENSATORY ACTION SHARES THE LOAD OVER THE ENTIRE BOLT AND HOLE, INCREASING HOLDING OR PULL OUT STRENGTH
- WITH A COILSERT IN PLACE, LOAD AND STRESS ARE MORE EVENLY DISTRIBUTED



### STI TAPS

- SCREW THREAD INSERT (STI) TAPS ARE ONLY SUITABLE FOR USE WITH COILSERTS
- THEY HAVE A LARGER DIAMETER BUT THE SAME PITCH AS A STANDARD TAP IN ORDER TO ACCOMMODATE THE WIRE INSERT



### USS THREAD SIZES

INTERNAL THREAD	LENGTH	TAP DRILL DIA.	PART		STI TAP PART	INSTALLATION TOOL
1/4-20	1-1/2	17/64	R	21823	A 21823T	A 21861
5/16-18	1-1/2	21/64	N	21825	A 21825T	A 21862
3/8-16	1-1/2	25/64	N	21827	A 21827T	A 21864
7/16-14	1-1/2	29/64	N	21829	A 21829T	A 21866
1/2-13	1-1/2	17/32	I	21831	A 21831T	A 21867
9/16-12	1-1/2	19/32	I	21833	A 21833T	A 21868
5/8-11	1-1/2	21/32	E	21835	A 21835T	A 21869
3/4-10	1"	25/32	E	21837	A 21837T	A 21870
7/8-9	1"	29/32	E	21839	A 21839T	A 21871
1-8	1-1/2	1-1/32	B	21841	A 21841T	A 21872

### SAE THREAD SIZES

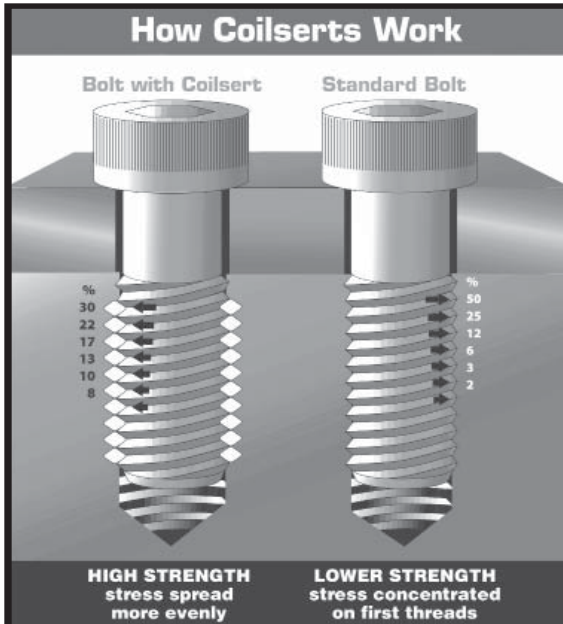
1/4-28	1-1/2	17/64	R	21824	A 21824T	A 21861
5/16-24	1-1/2	21/64	N	21826	A 21826T	A 21863
3/8-24	1-1/2	25/64	N	21828	A 21828T	A 21865
7/16-20	1-1/2	29/64	N	21830	A 21830T	A 21866
1/2-20	1-1/2	33/64	I	21832	A 21832T	A 21867
9/16-18	1-1/2	37/64	I	21834	A 21834T	A 21868
5/8-18	1-1/2	41/64	E	21836	A 21836T	A 21869
3/4-16	1"	49/64	E	21838	A 21838T	A 21870
7/8-14	1"	57/64	E	21840	A 21840T	A 21871
1-14	1-1/2	1-1/32	B	21842	A 21842T	A 21872



# METRIC COILSERTS

## PERMANENT AND WEAR RESISTANT THREAD REPAIR INSERT

Metric coilserts are the quickest and simplest method of repair to stripped or damaged threads. A complete system of coilsert, STI tap and installation tools are offered.



In conventional threaded joints over 75% of the load is placed on the first three threads of the assembly. Coilsert on the left shows how the spring-like design of the insert allows the shear loading to be transformed into a preferable "hoop stress" or radial loading over the entire length of the insert.

### INSTALLATION TOOL

- THE MOST PRACTICAL AND SIMPLE TO USE FOR GENERAL APPLICATIONS
- CARE MUST BE TAKEN TO ENSURE THAT THE ADJUSTABLE COLLAR IS CORRECTLY SET TO SUIT THE PARTICULAR TYPE AND LENGTH OF THE COILSERT. IF THE COLLAR IS CORRECTLY SET, THE COILSERT WILL NOT DRIVE PROPERLY AND THE TOOL MAY SLIP OFF THE TANG AS THE COILSERT ENTERS THE HOLE.

### COILSERTS

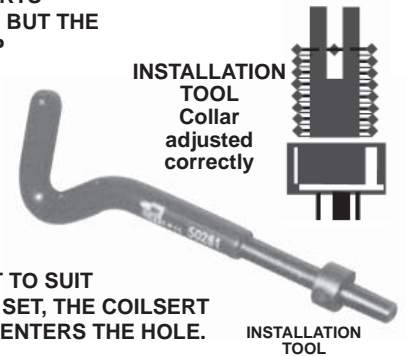
- ROLLED FROM HIGH QUALITY STAINLESS STEEL WIRE WOUND TO THE SHAPE OF A SPRING THREAD
- ONCE THE WIRE IS WOUND INTO A HELICAL COIL AND INSTALLED INTO A TAPPED HOLE, IT PROVIDES A PERMANENT AND WEAR RESISTANT THREAD IN THE PARENT MATERIAL THAT IS GENERALLY STRONGER THAN THE ORIGINAL THREAD
- COILSERT'S COMPENSATORY ACTION SHARES THE LOAD OVER THE ENTIRE BOLT AND HOLE, INCREASING HOLDING OR PULL OUT STRENGTH
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### STI TAPS

- SCREW THREAD INSERT (STI) TAPS ARE ONLY SUITABLE FOR USE WITH COILSERTS
- THEY HAVE A LARGER DIAMETER BUT THE SAME PITCH AS A STANDARD TAP IN ORDER TO ACCOMMODATE THE WIRE INSERT



COILSERT (partially installed)



INSTALLATION TOOL Collar adjusted correctly

INSTALLATION TOOL

## METRIC THREAD SIZES

INTERNAL THREAD	LENGTH	TAP DRILL DIA.	PART	STI TAP PART	INSTALLATION TOOL
M3 x .5	1-1/2	3.10	R 21843	A 21843T	A 21858
M4 x .7	1-1/2	4.10	R 21844	A 21844T	A 21859
M5 x .8	2	5.20	N 21845	A 21845T	A 21860
M6 x 1	1-1/2	6.20	N 21846	A 21846T	A 21861
M7 x 1	1-1/2	7.20	N 21847	A 21847T	A 21862
M8 x 1	1-1/2	8.20	N 21848	A 21848T	A 21863
M8 x 1.25	1-1/2	8.30	N 21849	A 21849T	A 21863
M9 x 1	1-1/2	9.30	N 21850	A 21850T	A 21864
M9 x 1.25	1-1/2	9.30	N 21851	A 21851T	A 21864
M10 x 1.25	1-1/2	10.30	N 21852	A 21852T	A 21865
M10 x 1.5	1-1/2	10.30	N 21853	A 21853T	A 21864
M11 x 1.25	1-1/2	11.30	N 21854	A 21854T	A 21866
M11 x 1.5	1-1/2	11.30	N 21855	A 21855T	A 21866
M12 x 1.5	1-1/2	12.50	I 21856	A 21856T	A 21867
M12 x 1.75	1-1/2	12.40	I 21857	A 21857T	A 21867

# CIC 200™ METRIC THREAD REPAIR INSERTS



## METRIC INTERNAL/METRIC EXTERNAL

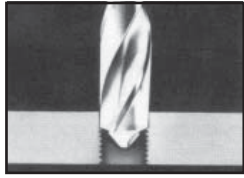
INTERNAL THREAD	EXTERNAL THREAD	LENGTH SIZE	TAP DRILL SIZE	TAP SIZE	THREAD DEPTH	PART
M3-0.5	M6-1.0	6.5mm	5.1mm (or #7)	M6-1.0	7.8mm	I 1860
M4-0.7	M8-1.25	7.5mm	6.9mm (or I)	M8-1.25	8.5mm	I 1861
M5-0.8	M8-1.25	7.5mm	6.9mm (or I)	M8-1.25	9.0mm	I 1862
M14-1.25*	M18-1.5	11.5mm	15.5mm (or 5/8)	M18-1.5	12.7mm	E 1876*

## METRIC INTERNAL — USS EXTERNAL

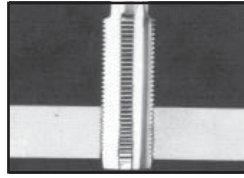
M6-1.0	3/8-16	.406	5/16	3/8-16	15/32	L 1867
M8-1.25	1/2-13	.484	27/64	1/2-13	9/16	I 1868
M10-1.50	9/16-12	.515	31/64	9/16-12	19/32	I 1869
M12-1.75	3/4-10	.656	21/32	3/4-10	3/4	E 1870
M14-2.0	7/8-9	.687	49/64	7/8-9	13/16	E 1871
M16-2.0	1-8	.781	7/8	1-8	7/8	E 1872

\* FOR 14mm SPARK PLUGS (12.7mm REACH)

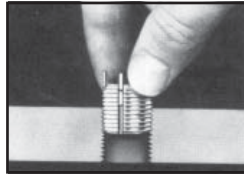
# METRIC THIN WALL PERMASERTS™



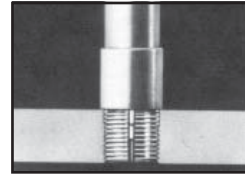
1. Drill out old threads, using standard drill.



2. Tap new threads, using standard tap.



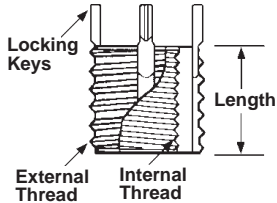
3. Screw in insert until slightly below surface. "Kees" act as depth stop.



4. Drive "Kees" down with several light taps on installation tool.



5. Installed insert



- SOLID BUSHING WITH LOCKING KEES – PROVIDES POSITIVE MECHANICAL LOCKING AGAINST ROTATION
- USE IN ALUMINUM, MAGNESIUM, CAST IRON, COLD ROLLED STEEL AND PLASTIC – NO RESTRICTIONS ON PARENT MATERIAL
- HIGH STRENGTH AND RELIABILITY – PROVIDES MAXIMUM PULLOUT STRENGTH; BREAKS GRADE 8 BOLT
- EASY INSTALLATION – LEARN IN MINUTES
- HOLE PREPARED WITH STANDARD DRILL AND TAP – NO SPECIAL, COSTLY, SINGLE-PURPOSE DRILLS OR TAPS REQUIRED
- INSERT WITH FINGERS – NO SPECIAL PRE-WINDER TOOLS REQUIRED
- IMPOSSIBLE TO CROSS-THREAD DURING INSTALLATION – PERFECT EVERY TIME
- SIMPLE REMOVAL – PERMANENTLY INSTALLED UNLESS REMOVAL IS REQUIRED



INSTALLATION TOOL

## METRIC THREAD SIZES

INTERNAL THREAD	EXTERNAL THREAD	LENGTH	DRILL DIA.	DRILL REMOVAL		PART	INSTALLATION TOOL
				SIZE	DEPTH		
M5 x .8	M8 x 1.25	8.0	6.9 or I	5.5	4	E 21800	A 21815
M6 x 1	M10 x 1.25	10.0	8.8 or 11/32	7.5	4.75	E 21801	A 21816
M8 x 1.25	M12 x 1.25	12.0	10.8 or 27/64	9.5	4.75	C 21802	A 21817
M8 x 1	M12 x 1.25	12.0	10.8 or 27/64	9.5	4.75	C 21803	A 21818
M10 x 1.5	M14 x 1.5	14.0	12.8 or 1/2	11.5	4.75	B 21804	A 21819
M10 x 1.25	M14 x 1.5	14.0	12.8 or 1/2	11.5	4.75	B 21805	A 21820
M12 x 1.75	M16 x 1.5	16.0	14.75 or 37/64	13.5	4.75	B 21806	A 21821
M12 x 1.25	M16 x 1.5	16.0	14.75 or 37/64	13.5	4.75	B 21807	A 21822

# CIC 200™ SUPER CUT™ SPOTWELD DRILLS

SUPER COBALT HIGH SPEED STEEL – GOLD FINISH

Rugged, high performance drill effectively cuts autobody panel spot welds, rivet heads and screw heads. Also ideal for drilling precision, burr-free holes in sheet metal.

- HIGH HARDNESS COBALT STEEL – PERMITS 30% GREATER DRILLING SPEEDS THAN HIGH SPEED STEEL DRILLS
- ABRASION RESISTANT ALLOY – RESULTS IN EXTREMELY LONG LASTING CUTTING EDGES
- UNIQUE SPUR POINT – REMOVES SPOTWELDS, SCREW HEADS AND RIVET HEADS WITHOUT DAMAGING PANELS BEHIND

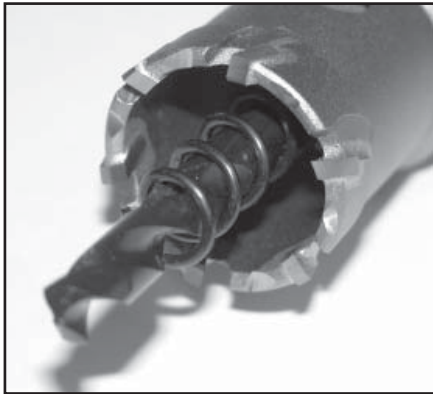


DIAMETER	SPOTWELD SIZE	OVERALL LENGTH	DOUBLE/SINGLE END	PART	
6.5 MM	1/4	1.75"	Single	C	61540
6.5 MM	1/4	3.62"	Double	A	61545
8.0 MM	5/16	1.75"	Single	B	61550
8.0 MM	5/16	3.62"	Double	A	61555
10.0 MM	3/8	1.75"	Single	A	61560
10.0 MM	3/8	3.62"	Double	A	61565

# RAZORQWIK™ CARBIDE TIPPED HOLE CUTTERS

THE ULTIMATE SOLUTION TO DRILLING THICK STEEL

The perfect, portable tool for the professional electrician, plumber, mechanic and general contractor. An extremely productive tool that is a cost effective alternative to bi-metal holesaws.



## INCREDIBLY FAST & EASY TO USE!

For cutting pipe, thick steel, steel plate, iron, aluminum, copper, cast iron and stainless steel up to 1" thick. An invaluable time, money and labor saver!

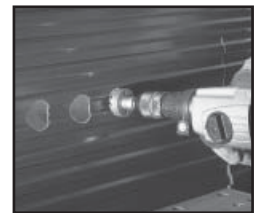


- **SPECIAL TUNGSTEN CARBIDE TEETH**  
SUPERIOR WEAR AND HEAT RESISTANCE.  
CUTS STAINLESS STEEL AND TOUGH ALLOYS



- **ONE-PIECE CONSTRUCTION**  
NO ASSEMBLY REQUIRED AND ASSURES  
STABLE, ACCURATE DRILLING

- **EJECTOR SPRING AND PILOT DRILL**  
(INCLUDED AND ASSEMBLED) –  
EJECTS THE SLUG SAVING TIME AND  
AGGRAVATION TRYING TO REMOVE SLUGS



### APPLICATIONS

- Junction/Switch Boxes
- Metal Studs
- Electrical Appliances
- Lighting Fixtures
- Auto Body Repair
- Truck/Trailer Frames
- Ductile Pipe
- *Anywhere a standard holesaw just won't cut it!*

- **SAFETY COLLAR STOP**  
PREVENTS OVER PENETRATION  
FOR SAFER, FASTER OPERATION

RAZORQWIK™ CARBIDE TIPPED HOLE CUTTERS									
DIAMETER	STEEL (RPM)	PART	DIAMETER	STEEL (RPM)	PART	DIAMETER	STEEL (RPM)	PART	
9/16"	700-1000	A 51109	1-7/16"	300-600	A 51123	2-1/2"	150-300	A 51136	
5/8"	700-1000	A 51110	1-1/2"	300-600	A 51124	2-5/8"	150-300	A 51137	
11/16"	700-1000	A 51111	1-9/16"	300-600	A 51125	2-3/4"	150-300	A 51138	
3/4"	700-1000	A 51112	1-5/8"	200-500	A 51126	3"	150-300	A 51139	
13/16"	700-1000	A 51113	1-11/16"	200-500	A 51127	3-1/4"	100-200	A 51140	
7/8"	500-800	A 51114	1-3/4"	200-500	A 51128	3-1/2"	100-200	A 51141	
15/16"	500-800	A 51115	1-13/16"	200-500	A 51129	3-5/8"	100-200	A 51107	
1"	500-800	A 51116	1-7/8"	200-500	A 51130	3-3/4"	100-200	A 51142	
1-1/16"	500-800	A 51117	1-15/16"	200-500	A 51131	4"	100-200	A 51143	
1-1/8"	500-800	A 51118	2"	200-500	A 51132	4-1/8"	100-200	A 51108	
1-3/16"	500-800	A 51119	2-1/8"	200-400	A 51133	4-1/4"	100-200	A 51144	
1-1/4"	300-600	A 51120	2-1/4"	200-400	A 51134	4-1/2"	100-200	A 51145	
1-5/16"	300-600	A 51121	2-3/8"	150-300	A 51135				
1-3/8"	300-600	A 51122	2-9/16"	150-300	A 51106				

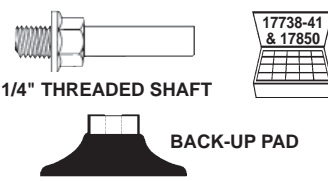
RAZORQWIK™ CARBIDE TIPPED HOLE CUTTER ACCESSORIES	
DESCRIPTION	PART
Pilot Drill for Hole Cutters	A 51146
Spring for Carbide Hole Saw	A 51148
Carbide Tipped Pilot Drill	A 51149
Extender – Precision machined tool steel, extends hole cutters by 4" (for 1/2" shank)	A 51104
Extender – Precision machined tool steel, extends hole cutters by 4" (for 3/8" shank)	A 51105

# ABRASIVES

## QUICK-LOK™ ABRASIVES

Fast, efficient deburring, blending, finishing and polishing on all types of metals and composites. Just a half twist and they're securely locked in place; a half twist again and it's off. Ideal for use with air tools & flex-shaft grinders.

### THREADED SHAFT AND BACK-UP PADS



17738-41 & 17850

1/4" THREADED SHAFT

BACK-UP PAD

SIZE	MAX RPM	PART
1" Dia.	30,000	A 45634
2" Dia.	25,000	A 45638
3" Dia.	18,000	A 45642
4" Dia.	12,000	A 45644
1/4" Threaded Shaft		A 45630

### STRIPPING DISCS

- EXTRA-COURSE DISCS ARE CONSTRUCTED FROM AN OPEN, NON-LOADING WEB
- MAKES TOUGH CLEANING AND STRIPPING JOBS QUICK AND EASY
- CLEANS FASTER AND SAFER THAN WIRE BRUSHES



2" DIA	3" DIA	4" DIA
E 45617	E 45618	E 45619


### BRISTLE BRUSHES/DISCS

- IDEAL FOR CLEANING, FINISHING, BLENDING AND DEBURRING
- USE ON CORNERS, WELDS AND OTHER AREAS WHERE EXTRA CONFORMABILITY IS REQUIRED
- USE FOR CLEANING RIVETS, WELDS AND CORNERS
- 50 GRIT - GREEN
- 80 GRIT - YELLOW
- 120 GRIT - WHITE



SIZE	MAX RPM	PART
1" x 50 Grit - Green	30,000	B 45689
1" x 80 Grit - Yellow	30,000	B 45694
1" x 120 Grit - White	25,000	B 45696
2" x 50 Grit - Green	25,000	B 45690
2" x 80 Grit - Yellow	25,000	B 45692
2" x 120 Grit - White	25,000	B 45697
3" x 50 Grit - Green	18,000	B 45691
3" x 80 Grit - Yellow	18,000	B 45693
3" x 120 Grit - White	25,000	B 45698
4.5" x 50 Grit - Green	12,000	A 45703
4.5" x 80 Grit - Yellow	12,000	A 45704
4.5" x 120 Grit - White	12,000	A 45705
<b>Radial Versions</b>		
3" x 3/8 x 50 Grit - Green	25,000	B 45720
3" x 3/8 x 80 Grit - Yellow	25,000	B 45721
3" x 3/8 x 120 Grit - White	25,000	B 45722

### ABRASIVE DISCS



17738-9


Color-coded disc buttons for easy grade identification:  
Brown = 36 Orange = 60 White = 120

PREMIUM ALUMINUM OXIDE MINERALS ON DURABLE RESIN BOND AND FIBRE BACKING

GRIT	2" DIA	3" DIA	4" DIA
36	L 45655	I 45661	I 45667
60	L 45657	I 45663	I 45669
120	L 45660	I 45666	I 45672

### SURFACE COND. PADS

NON-WOVEN NYLON, IMPREGNATED WITH ABRASIVE PARTICLES, PROVIDES A BUR-FREE SURFACE SUITABLE FOR PAINTING OR COATING. IDEAL FOR RUST, OXIDE AND COATING REMOVAL.  
Medium = Maroon Coarse = Brown



17740-1

DIA.	RPM	MEDIUM	COARSE
2"	18,000	L 45681	L 45682
3"	15,000	I 45685	I 45686
4"	11,000	I 45687	I 45688

### MINI FLAP DISCS

- HIGH QUALITY ZIRCONIUM EFFECTIVE ON MATERIALS FROM MILD STEEL TO EXOTIC TITANIUM ALLOYS, COMPOSITES AND PLASTICS
- COMBINES GRINDING AND FINISHING IN ONE STEP
- "MINI" SIZE ALLOWS ACCESS TO TIGHT AREAS

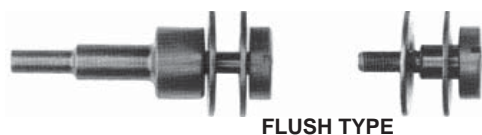


GRIT	2" DIA	3" DIA
40	C 33937	C 33943
80	C 33939	C 33945
120	C 33941	C 33946

# ABRASIVES (Cont'd.)

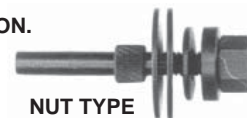
## CIC 200™ RAPID CUT MANDRELS

### HUMMER WHEEL MANDRELS



FLUSH TYPE

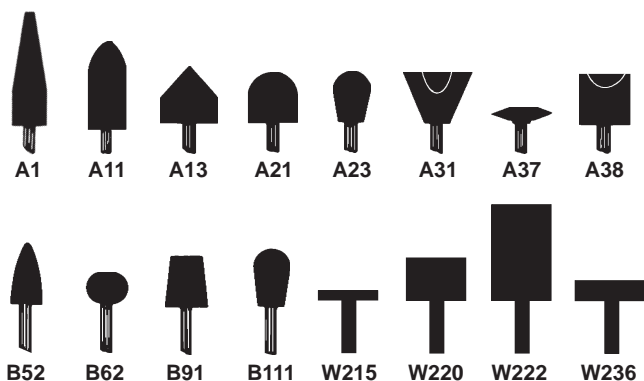
- FLUSH MANDRELS TIGHTEN BY SCREW, CAN HANDLE ANY NUT-TYPE MANDREL APPLICATION.
- ALLOW EASY ACCESS TO AREAS INACCESSIBLE WITH NUT-TYPE MANDRELS (EX: FLUSH CUTS AND CORNER CUTS).



NUT TYPE

TYPE	SHANK SIZE	ARBOR HOLE SIZE	WHEEL THICKNESS	PART
FLUSH SET	1/4" and 3/8"	1/4" and 3/8"	1/32" - 1/4"	C 33955
NUT	1/4"	1/4"	1/32" - 3/8"	B 33950
ADAPTER	1/4"	3/8"	1/32" - 1/4"	A 33801

### MOUNTED POINTS

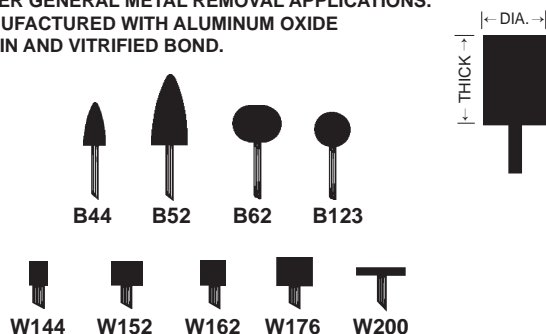


A1 A11 A13 A21 A23 A31 A37 A38

B52 B62 B91 B111 W215 W220 W222 W236

1/4" SHANKS

- FOR HIGH-SPEED AIR AND ELECTRIC GRINDERS.
- IDEAL FOR GRINDING DIES, CASTINGS, WELD SEAMS AND OTHER GENERAL METAL REMOVAL APPLICATIONS.
- MANUFACTURED WITH ALUMINUM OXIDE GRAIN AND VITRIFIED BOND.



B44 B52 B62 B123

W144 W152 W162 W176 W200

1/8" SHANKS

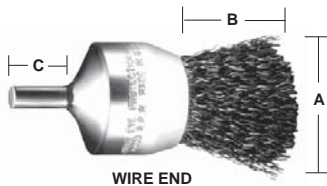


SHAPE NO.	DIA.	THICK	SHANK	MAX. R.P.M.	PART
A1	3/4	2-1/2	1/4"	19,800	B 33840
A11	7/8	2	1/4"	19,860	B 33841
A13	1-1/8	1-1/8	1/4"	33,950	B 33842
A21	1	1	1/4"	34,500	B 33843
A23	3/4	1	1/4"	39,370	B 33844
A31	1-3/8	1	1/4"	27,780	B 33845
A37	1-1/4	1/4	1/4"	30,560	B 33846
A38	1	1	1/4"	34,500	B 33847
B52	3/8	3/4	1/4"	81,000	B 33848
B62	1/2	3/8	1/4"	71,250	B 33849
B91	1/2	5/8	1/4"	61,500	B 33850
B111	7/16	11/16	1/4"	66,000	B 33851
W215	1	1/8	1/4"	38,200	B 33852
W220	1	1	1/4"	25,500	B 33853
W222	1	2	1/4"	15,900	B 33854
W236	1-1/2	1/2	1/4"	25,470	B 33855
B44	7/32	3/8	1/8"	68,400	E 33825
B52	3/8	3/4	1/8"	45,370	E 33826
B62	1/2	3/8	1/8"	41,020	E 33827
B123	3/16	3/16	1/8"	104,250	E 33828
W144	1/8	1/4	1/8"	105,000	E 33829
W152	3/16	1/4	1/8"	105,000	E 33835
W162	1/4	3/8	1/8"	68,400	E 33836
W176	3/8	1/2	1/8"	45,370	E 33837
W200	3/4	1/8	1/8"	50,930	E 33838

**IMPORTANT:** All CIC Wheels are manufactured under rigid quality conditions to insure product strength and safety. However, approved guards must be used for operator protection (ANSI Code B7.1).

# BRUSHES

## WIRE END BRUSHES



WIRE END



CIRCULAR FLARED END



HOLLOW END



STEM MOUNTED



KNOTTED CUP

HIGH QUALITY, OIL TEMPERED, CRIMPED WIRE PROVIDES SUPERIOR CUTTING CHARACTERISTICS AND FATIGUE RESISTANCE WHILE A STANDARD 1/4" STEM MAKES THEM PERFECT FOR USE IN PORTABLE AIR, ELECTRIC AND DRILL PRESS CHUCKS

**TYPICAL APPLICATIONS:**

- WELD CLEANING
- MOLD CLEANING
- DEBURRING
- POLISHING TOOLS, DIES AND MOLDS
- REMOVING RUST AND PAINT
- SPOT PAINTING

DESCRIPTION	(A) DIA.	(B) TRIM LENGTH	(C) STEM	WIRE SIZE	PART	MAX. SAFE FREE SPEED RPM
Wire End	1/2	7/8	1/4	.014	B 41320	20,000
Wire End	3/4	7/8	1/4	.014	B 41315	20,000
Circular Flared End	1-1/2	—	1/4 x 7/8	.006	A 41325	20,000
Circular Flared End	3	—	1/4 x 7/8	.008	A 41326	15,000
Hollow End	1-3/4	3/4	1/4	.0118	A 41330	13,000
Stem Mounted	2	—	1/4	.0118	A 41335	20,000
Stem Mounted	3	—	1/4	.014	A 41336	20,000
Knotted Cup	4	1-1/4	5/8-11	.014	A 41350	8,500
Knotted Cup	6	1-3/8	5/8-11	.014	A 41352	6,000

## HAND SCRATCH BRUSHES

**PIPE/TUBE BRUSH FEATURES:**

- CLEANS BOTH THE INSIDE AND OUTSIDE OF COPPER TUBING IN PREPARATION FOR SOLDER WHEN SWEATING PIPES
- CLEANS MOST POPULAR 1/2" AND 3/4" I.D. TUBE AND 5/8" & 7/8" O.D. TUBE
- HARDENED STEEL BRUSHES AND POLYPROPYLENE BODY FOR STRENGTH AND DURABILITY

**HAND SCRATCH BRUSHES FEATURES:**

- CONSTRUCTED OF HEAVY GAUGE WIRE EMBEDDED IN A HEAVY DUTY HARDWOOD HANDLE
- USE FOR REMOVING PAINT, RUST, SCALE, SOLDER CHIPS AND DIRT
- CLEANS METAL PARTS, THREADS, FILES, ETC.



4-IN-1 PIPE/TUBE BRUSH



GENERAL PURPOSE



3/8 OR 1/2 ACID SWAB BRUSH



1/2 OR 3/4 TUBE FITTING BRUSH



S/S SHOE HANDLE





NYLON, BRASS OR STAINLESS STEEL SMALL SCRATCH PLASTIC HANDLE


DESCRIPTION	ROWS	OVERALL LENGTH	TRIM	BRUSH LENGTH	PART
General Purpose	4 x 19	13-1/4	1-1/8	6	B 41310
S/S Shoe Handle	4 x 16	10	1-1/8	5-1/2	A 41312
S/S Small Scratch	3 x 7	7-7/8	1/2	1-3/8	C 41340
Brass Small Scratch	3 x 7	7-7/8	1/2	1-3/8	C 41342
Nylon Small Scratch	3 x 7	7-7/8	1/2	1-3/8	B 41347
3/8 Acid Swab	—	5-3/4	3/4	3/8 (width)	J 41345
1/2 Acid Swab	—	5-3/4	3/4	1/2 (width)	J 41346
1/2 S/S Tube Fitting	—	6-1/2	—	1/2 (width)	B 41348
3/4 S/S Tube Fitting	—	6-1/2	—	3/4 (width)	B 41349
4-in-1 Pipe/Tube Brush	—	7-1/2	—	3/4 (width) and 1" (width)	A 41344




# SCRAPERS

RAZOR BLADE SCRAPER	
<p><b>SCRAPER FEATURES:</b></p> <ul style="list-style-type: none"> <li>• RETRACTABLE BLADE</li> <li>• STRONG, GALVANIZED, NON-RUSTING STEEL</li> <li>• COMFORTABLE, FORM-FITTED GRIP</li> </ul> <p><b>BLADE FEATURES:</b></p> <ul style="list-style-type: none"> <li>• HIGH QUALITY, CARBON STEEL</li> <li>• DOUBLE-BEVELED GROUND RAZOR EDGE</li> <li>• FOLDED STEEL BACKING CRIMPED ON BOTH ENDS TO HOLD BLADE SECURELY</li> <li>• INDIVIDUALLY WRAPPED IN CARDBOARD SLEEVES</li> </ul>	
	
DESCRIPTION	PART
Industrial Scraper	E 66403
#9 Industrial Blades	T 66402

HAND SCRAPERS	
<ul style="list-style-type: none"> <li>• STAINLESS STEEL SCRAPERS HAVE A THREADED HANDLE TO FIT ANY WOOD OR ALUMINUM POLE – EASY ACCESS FOR HARD TO REACH AREAS</li> <li>• ROLLERGRIP HANDLE ENSURES YEARS OF DEPENDABLE SERVICE AND A FIRM AND COMFORTABLE GRIP</li> </ul>	
	
DESCRIPTION	PART
3-1/8" Flat Stainless Steel	A 66405
3" 20° Stainless Steel	A 66406

SUPER SCRAPERS	
<ul style="list-style-type: none"> <li>• UNIQUE HEAD DESIGN FOR EASY BLADE CHANGE AND PROPER ANGLE FOR SCRAPING</li> <li>• EXTREMELY DURABLE AND DEPENDABLE</li> <li>• 4" MODEL IS ERGONOMICALLY DESIGNED AND WILL GET INTO THE TIGHTEST PLACES. THE 8" AND 13" COMPLETE YOUR SCRAPER NEEDS FOR TOUGH TO REACH AREAS.</li> </ul>	
	
DESCRIPTION	PART
4" Mini Scraper	A 66407
8" Super Scraper	A 66408
13" Super Scraper	A 66409

# UTILITY KNIVES

AUTO-LOAD UTILITY KNIFE	
<ul style="list-style-type: none"> <li>• SLIDER KNOB AUTOMATICALLY LOADS NEW BLADE</li> <li>• SIDE LOADING 5 BLADE CHAMBER</li> <li>• NO PARTS TO LOSE</li> <li>• ERGONOMIC HANDLE WITH RUBBER GRIP</li> <li>• PUSH BUTTON BLADE REMOVAL</li> </ul>	
	
DESCRIPTION	PART
"AUTO-LOAD" UTILITY KNIFE WITH 5 BLADES	A 66412

SUPERKNIFE ULTRASHEAR	
<ul style="list-style-type: none"> <li>• ULTRASHEAR NEVER HAS TO BE SHARPENED</li> <li>• ACCEPTS STANDARD UTILITY KNIFE STYLE BLADES</li> <li>• CUTS ROPE, HOSE, PLASTIC, PLANTS, VINYL AND RUBBER</li> <li>• QUICK RELEASE THUMB OPERATED SAFETY LOCK</li> <li>• STAINLESS STEEL FRAME</li> <li>• RUBBERIZED GRIP</li> </ul>	
	
PART #66502	

BLADES	
<p><b>METAL BLADES</b></p> <p>ROUND BLADE</p> <p>BI-METAL UTILITY KNIFE BLADE</p> <p>HOOK BLADE</p>	<p><b>PLASTIC BLADES</b></p> <p>DOUBLE SIDED BLADE</p> <p>DESIGNED WITH 2 SHARP EDGES. FOR SCRAPING, CLEANING AND PEELING, NOT FOR CUTTING. WON'T DAMAGE SURFACE MATERIAL. BREAKS BOND BETWEEN SURFACE AND SUBSTANCE TO BE REMOVED.</p>
<ul style="list-style-type: none"> <li>• PATENT PROTECTED</li> <li>• BLUE FOR INSTANT RECOGNITION</li> <li>• UNBREAKABLE – SPRING BACKING STEEL FLEXES BUT WILL NOT BREAK</li> <li>• STAYS SHARPER 3X LONGER – HIGH SPEED STEEL EDGE HEAT TREATED TO HIGHER HARDNESS THAN STANDARD CARBON</li> </ul>	
DESCRIPTION	PART
Hook Blade	N 66418
Round Blade	N 66421
Economy Straight Blade*	T 66414
Bi-metal Utility Knife Blade*	A 66415
Bi-metal Utility Knife Blade Dispenser Pack*	T 66415-100
General Purpose Double-sided Plastic Blade	N 66423

\*0.025 thick

# U-BOLT WITH PLATE



- USED TO SECURE PIPE, HOSE AND TUBING IN VARIOUS STRUCTURAL MOUNTING APPLICATIONS
- STEEL ZINC PLATED
- MADE IN USA

DIAMETER	WIDTH	LENGTH	PART	DIAMETER	WIDTH	LENGTH	PART
1/4	9/16	1-1/4	I 60560	5/16	1-3/4	4-1/2	I 60577
1/4	3/4	1-1/4	I 60561	5/16	2	2-11/16	I 60578
1/4	3/4	2-1/4	I 60562	5/16	2	4-3/4	I 60579
1/4	1	1-3/4	I 60563	3/8	1-1/4	2-1/4	I 60583
1/4	1	2-3/4	I 60564	3/8	1-1/2	2-1/2	E 60585
1/4	1-1/8	2	I 60565	3/8	2	2-5/8	E 60587
1/4	1-1/8	3-1/8	I 60566	3/8	2-1/2	3-1/8	E 60588
1/4	1-1/4	2-1/4	I 60567	3/8	3	6-5/8	E 60590
1/4	1-1/2	2-3/4	I 60568	1/2	3	4-1/2	B 60592
1/4	1-3/4	3	I 60569	1/2	3-1/2	8-1/2	B 60594
1/4	2	3-1/4	I 60570	1/2	4-1/2	6	B 60596
5/16	1	2-3/16	I 60571				

# WIRE ROPE CLIPS

## MALLEABLE:

- PRECISION MANUFACTURED AND GALVANIZED
- MEETS FEDERAL SPECIFICATIONS FF-C-450, TYPE 1, CLASS 2
- SHOULD BE USED IN LIGHT DUTY, NON-CRITICAL APPLICATIONS ONLY



## DROP FORGED:

- PRECISION MANUFACTURED AND GALVANIZED
- MEETS FEDERAL SPECIFICATIONS FF-C-450, TYPE 1, CLASS 1
- FOR HEAVY DUTY APPLICATIONS

## MALLEABLE

ROPE SIZE	TYPE	PART	ROPE SIZE	TYPE	PART
1/8	Galvanized	E 12000	1/8	Plain	I 12003
3/16	Galvanized	E 12001	3/16	Plain	I 12004
1/4	Galvanized	E 12002	1/4	Plain	I 12005

## DROP FORGED

ROPE SIZE	TYPE	PART	ROPE SIZE	TYPE	PART
5/8	Galvanized	B 12006	1/4	Galvanized	E 12010
3/4	Galvanized	A 12007	5/16	Galvanized	E 12011
1/8	Galvanized	E 12008	3/8	Galvanized	B 12012
3/16	Galvanized	E 12009	1/2	Galvanized	B 12013

# TURNBUCKLES

## EYE & EYE AND HOOK AND EYE

### FEATURES:

- MAXIMUM STRENGTH AND EASY ADJUSTMENT OF WIRE ROPE ATTACHMENTS
- HOT DIP GALVANIZED
- FORGED BODY
- HEAT TREATED
- MEETS SPECIFICATIONS FF-T-791B, TYPE 1, FORM 1,  
EYE & EYE CLASS 4 AND HOOK & EYE CLASS 6



EYE & EYE



HOOK & EYE

### EYE AND EYE

THREAD DIA.	TYPE	PART	THREAD DIA.	TYPE	PART
3/8 x 6	Plain	A 11196 (Round)	5/8 x 9	Galvanized	A 11205 (Tear Drop)
1/2 x 6	Plain	A 11197 (Round)	1/4 x 4	Plain	A 11206 (Tear Drop)
5/8 x 9	Plain	A 11198 (Round)	5/16 x 4-1/2	Plain	A 11207 (Tear Drop)
5/8 x 12	Plain	A 11199 (Round)	3/8 x 6	Galvanized	A 11208 (Tear Drop)
-	-	-	1/2 x 6	Plain	A 11209 (Tear Drop)

### HOOK AND EYE

THREAD DIA.	TYPE	PART	THREAD DIA.	TYPE	PART
1/4 x 4	Plain	A 11200	1/2 x 6	Plain	A 11203
5/16 x 4-1/2	Plain	A 11201	1/2 x 9	Plain	A 11204
3/8 x 6	Plain	A 11202	-	-	-

# TIRE MAINTENANCE

## Universal Tire Repair Patches

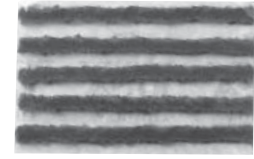
- For nail hole injuries in auto & light truck tires
- Black with black vulcanizing gum on a blue poly backing



**P/N 52168** 1-3/4" Round  
**P/N 52169** 2-1/4" Round  
**P/N 52170** 3-1/8" Round

## String Type Inserts

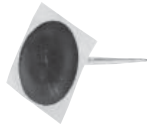
- 4" Long
- Butyl rubber
- Very strong
- For passenger or truck tires
- For radial or bias-ply tires
- Easy insertion through steel belted radials
- Temporary repairs, sealing by compression only



**P/N 52171**

## Universal Quilled Combination Unit

- Rubber reinforced patch heads
- Multidirectional
- Can be applied in any repairable area
- For radial or bias-ply tires
- Black with black vulcanizing gum
- Both the stem and the repair unit will vulcanize chemically effecting a perfect repair



**P/N 52172** 1-3/4" Round, 3/16" Stem Diameter  
**P/N 52173** 2-1/4" Round, 5/16" Stem Diameter

## Lead Wire Combination Units

- Requires no special wire pulling tools
- Insert the lead wire into the injury from the inside of the tire and pull the repair unit through from the outside
- Stem and the repair unit are gum coated to provide the most complete bond



**P/N 52174** 2" Round, 5/16" Stem Diameter  
**P/N 52175** 2" Round, 3/8" Stem Diameter

## Chemical Vulcanizing Cement

- 8 oz.
- For Chemical or Heat Vulcanization
- Use with any repair unit or insert
- Flammable



**P/N 52176**

## Buffing Solution

- 32 oz.
- For removing dirt, debris & mold lubricants from the repair area prior to buffing.



**P/N 52177**

## Bead Sealer

- 32 oz.
- For sealing small air leaks between the tire bead and the wheel.



**P/N 52178**

## Inner Liner Sealer

- 16 oz
- For sealing the over-buff area around a finished repair.



**P/N 52179**

## Cotton Tire Swab

- 11"
- Applies tire lube evenly for easy remounting.



**P/N 52180**

## Mounting Compound

- 25 lb
- Use to install tubes and prevent sticking.



**P/N 52181**

## Chrome T-Handle End Slot Needle Tool

- Used to remove objects and insert repair materials into the hole to be repaired.



**P/N 52182**

## Wood Handle Stitcher

- 3/16" x 1-1/2"
- Used to stitch down a repair unit to assure permanent adhesion.



**P/N 52183**

## Arbor Adapter

- 3/8" x 1-1/2" Long Threads



**P/N 52184**

## Carbide Buffing Wheel

- 2-1/2" Diameter
- 3/8" Arbor



**P/N 52185**



















## Counteract Balancing Beads

- 10 oz. – For Heavy Trucks
- Counteract is an internal balancing compound used to balance the entire wheel assembly.
- Balances for the complete life of the tire by readjusting the balanced position as required.
- Benefits of keeping the entire wheel assembly in balance include increased tread life, increased fuel economy, and elimination of wheel vibration.



**P/N 52186**

# TIRE MAINTENANCE

<b>Tubeless Snap-In Valves</b> <ul style="list-style-type: none"> <li>• 1.25" Long</li> <li>• 0.453" Valve Hole</li> </ul>  <p><b>P/N 52271</b></p>				<ul style="list-style-type: none"> <li>• 1.50" Long</li> <li>• 0.453" Valve Hole</li> </ul>  <p><b>P/N 52188</b></p>		<ul style="list-style-type: none"> <li>• 2" Long</li> <li>• 0.453" Valve Hole</li> </ul>  <p><b>P/N 52272</b></p>		<ul style="list-style-type: none"> <li>• 1.25" Long</li> <li>• 0.625" Valve Hole</li> </ul>  <p><b>P/N 52273</b></p>	
<p>Maximum cold inflation pressure 65 psi, maximum rim thickness of 0.156"</p>									
<b>Tubeless Snap-In Valves</b> <ul style="list-style-type: none"> <li>• Chrome sleeve/cap</li> <li>• 1.25" Long</li> <li>• 0.453" Valve Hole</li> </ul>  <p><b>P/N 52187</b></p>		<b>High Pressure Snap-In Valve</b> <ul style="list-style-type: none"> <li>• 1.25" Long</li> <li>• 0.453" Valve Hole</li> </ul>  <p><b>P/N 52189</b></p>		<b>Bolt-In Valve</b> <ul style="list-style-type: none"> <li>• Flush Mount</li> <li>• 1.50" Long</li> <li>• 0.453" / 0.625" Valve Hole</li> </ul>  <p><b>P/N 52274</b></p>					
<p>Maximum cold inflation pressure 65 psi, maximum rim thickness of 0.156"</p>		<p>Maximum cold inflation pressure 100 psi, maximum rim thickness of 0.205"</p>							
<b>Brass Valves (For Steel Wheels)</b> <ul style="list-style-type: none"> <li>• 1.50" Long</li> <li>• 0.625" Valve Hole</li> </ul>  <p><b>P/N 52190</b></p>						<ul style="list-style-type: none"> <li>• 3.75" Long</li> <li>• 0.625" Valve Hole</li> <li>• Unassembled</li> </ul>  <p><b>P/N 52192</b></p>		<ul style="list-style-type: none"> <li>• 4.38" Long</li> <li>• 0.625" Valve Hole</li> <li>• Unassembled</li> </ul>  <p><b>P/N 52193</b></p>	
<b>Nickel Plated Valve</b> <ul style="list-style-type: none"> <li>• 4.75" Long</li> <li>• 0.625" Valve Hole</li> <li>• 90° Angle</li> </ul>  <p><b>P/N 52191</b></p>		<b>Short Valve Core</b>  <p><b>P/N 52277</b></p>		<b>Short Valve Core, High Temperature</b>  <p><b>P/N 52194</b></p>		<b>Long Metal Dome Valve Cap</b>  <p><b>P/N 52195</b></p>			
<b>Plastic Valve Caps</b> <ul style="list-style-type: none"> <li>• Black</li> </ul>  <p><b>P/N 52276</b></p>		<ul style="list-style-type: none"> <li>• Green</li> </ul>  <p><b>P/N 52196</b></p>		<b>Plastic Valve Extension 3/4"</b>  <p><b>P/N 52275</b></p>		<b>Metal Braided Flexible Extension 8-1/4"</b>  <p><b>P/N 52197</b></p>			

# TIRE MAINTENANCE

## Tire Repair Kit

- SEALS THE INJURY COMPLETELY THROUGH THE TIRE, KEEPING OUT MOISTURE AND CONTAMINATES THAT CAN CAUSE THE CORDS TO RUST AND CAUSE TIRE SEPARATION
- CONFORMS TO THE SHAPE OF THE INJURY, UNLIKE HARD-CURED REPAIRS THAT FORCE THE INJURY TO CONFORM TO THE SHAPE OF THE PLUG
- CONFORMS TO THE SIZE AND SHAPE OF THE INJURY & ELIMINATES STRESS TO THE BELTS AND PRESERVE THE TIRE BODY WHILE COMPLETELY SEALING OUT MOISTURE AND DIRT

### KIT INCLUDES:

- PROFESSIONALLY ENGINEERED HEAVY DUTY HIGH IMPACT MOLDED CASE WITH INDUSTRIAL STRENGTH LATCH
- HEAVY DUTY 12 OZ CHROME T-HANDLE WITH REPLACEABLE NEEDLE
- SPIRAL DESIGNED PROBE CLEANS INJURY WITHOUT CAUSING ADDITIONAL STRESS OF THE TIRE
- HARDENED STEEL SET SCREW HOLDS NEEDLE OR PROBE IN PLACE WITHOUT STRIPING
- CHROME OPEN-EYE INSERTION NEEDLE
- HARDENED STEEL ALLEN WRENCH FOR EASY REPLACING PROBE NEEDLE OR OPEN-EYE NEEDLE
- RAZOR BLADE TO CUT OFF EXCESS REPAIR
- LARGE JAR OF INSERTION LUBE, MAKES INSERTING PROBE AND REPAIR EASY
- 40 PERMANENT REPAIRS, 4 INCHES LONG WITH CARBON BLACK ADDED TO STRENGTHEN REPAIRS AND MATCH THE COLOR OF THE TIRE
- INSTRUCTION GUIDE PERMANENTLY ADHERED TO INNER LID



DESCRIPTION	PART	
TIRE REPAIR KIT	A	78028
4" REPLACEMENT STRIPS	I	78023
TIRE REPAIR LUBE	A	78024

## Four-Way Valve Tool

P/N 52198



## Dual Foot Air Chuck, Angled

P/N 52232



## Straight-On Dual Foot Air Gauge

- 10-150 psi
- 2 sided nylon bar

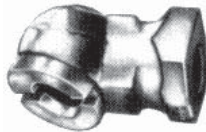
P/N 52199



## Female Air Chuck

- 1/4" NPT Female

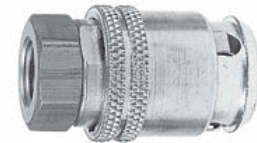
P/N 52234



## Clip-on Air Chuck

- 1/4" FPT
- For large bore valves

P/N 52167



# TIRE MAINTENANCE

## Pressure Detection Valve Caps

- Flashes when tire pressure falls 4 psi (8 psi for trucks) below the correct pressure
- Chrome plated brass body with polycarbonate lens
- Self-contained on-board battery
- Automatically and permanently calibrates the 1st time it is placed on the valve stem
- Maximizes gas mileage and improves safety

**P/N 78026** Pressure Detection Valve Cap – Car  
**P/N 78027** Pressure Detection Valve Cap – Truck



## Inflator Gauge with 12" Hose and Sight Glass

- Heavy Duty
- Inflates with single lever
- Magnifying lens allows full view of scale
- Calibrated in 2 lb. increments from 10 – 120 lbs.
- Dual head chuck with 15" rubber hose

**P/N 52270**



## Paint Sticks

- Real paint in stick form
- Lead free
- Weather resistant and UV resistant
- Use for identification, coding, fabrication and layout
- Marks through oil and water, and on smooth, rough or dirty surfaces
- For use on rubber, metal, plastic, wood, and concrete



**P/N 28400** Cold Surf – White  
**P/N 28401** Cold Surf – Yellow  
**P/N 28402** Cold Surf – Red  
**P/N 28403** Cold Surf – Black

# BRAKE HUB CLEANING DISCS

## Remove Rust and Corrosion Quickly

Brake hub cleaning disc and holder combine an aggressive 3-D disc construction with a unique, center hole attachment system for improved productivity. The system removes rust and corrosion quickly, even in hard to reach places. The attachment provides quick disc changes with the convenience of running on high-speed tools. All this adds up to saving time, increasing speed and effectiveness on the brake job.

### Features

- Extremely tough 3-D web
- Non-metallic attachment system and disc pad holder
- Unique attachment system, Type H
- Disc holder is designed to fit on a variety of tools with collets or chucks
- Discs contain no wire filaments
- Potential for injury from flying wires is eliminated

### Benefits

- Removes rust and corrosion without excessive metal removal or gouging of the metal
- Attachment button and holder are made of tough polymers that will not damage the wheel stud threads
- Disc locks securely; 1/2 turn on, 1/2 turn off (fits over wheel stud)
- Ideal for use on right angle air tools
- Helps to maintain AOEM surface milling marks
- Cleans the area fast while protecting the threads



- **P/N 45616** Brake Hub Cleaning Disc (Pkg. 2)
- **P/N 45615** Brake Hub Cleaning Disc Holder

# WHEEL WEIGHTS

COATED AND UNCOATED, FOR STEEL OR ALLOY WHEELS - DOMESTIC/IMPORTED

## UNCOATED FOR STANDARD PASSENGER CAR STEEL WHEELS

### P Type

- USE ON 13" TO 15" WHEELS
- CLIPS ARE PLATED
- TESTED TO COMPLY WITH DEMANDING OEM CORROSION RESISTANCE SPECIFICATIONS
- MEETS OR EXCEEDS ALL OEM SPECIFICATIONS



WEIGHT	PART	WEIGHT	PART
1/4 oz.	R 50150	2-1/4 oz.	R 50158
1/2 oz.	R 50151	2-1/2 oz.	R 50159
3/4 oz.	R 50152	2-3/4 oz.	R 50160
1 oz.	R 50153	3 oz.	R 50161
1-1/4 oz.	R 50154	3-1/4 oz.	N 50162
1-1/2 oz.	R 50155	3-1/2 oz.	N 50163
1-3/4 oz.	R 50156	3-3/4 oz.	N 50164
2 oz.	R 50157	4 oz.	N 50165

## UNCOATED FOR STANDARD PASSENGER CAR ALLOY WHEELS

### AW Type

- MEETS OR EXCEEDS ALL OEM SPECIFICATIONS
- UNIQUE CLIP DESIGN PREVENTS THE WEIGHT FROM COMING OFF THE FLANGE



WEIGHT	PART	WEIGHT	PART
1/4 oz.	R 50250	1-3/4 oz.	N 50256
1/2 oz.	R 50251	2 oz.	N 50257
3/4 oz.	R 50252	2-1/4 oz.	R 50258
1 oz.	R 50253	2-1/2 oz.	N 50259
1-1/4 oz.	R 50254	2-3/4 oz.	N 50260
1-1/2 oz.	R 50255	3 oz.	N 50261

## COATED FOR STANDARD PASSENGER CAR ALLOY WHEELS

### AW Type

- SPECIAL POLYMER SILVER/GRAY COATING PREVENTS CORROSION
- MEETS OR EXCEEDS ALL OEM SPECIFICATIONS



WEIGHT	PART	WEIGHT	PART
1/4 oz.	N 50262	1-3/4 oz.	N 50268
1/2 oz.	N 50263	2 oz.	N 50269
3/4 oz.	N 50264	2-1/4 oz.	N 50270
1 oz.	N 50265	2-1/2 oz.	N 50271
1-1/4 oz.	N 50266	2-3/4 oz.	N 50272
1-1/2 oz.	N 50267	3 oz.	N 50273

## COATED FOR IMPORTED CAR ALLOY WHEELS

### IAW Type

- SPECIAL POLYMER SILVER/GRAY COATING PREVENTS CORROSION
- MEETS OR EXCEEDS ALL OEM SPECIFICATIONS
- UNIQUE CLIP DESIGN PREVENTS THE WEIGHT FROM COMING OFF THE FLANGE



WEIGHT	PART	WEIGHT	PART
10 g	N 50275	40 g	N 50281
15 g	N 50276	45 g	N 50282
20 g	N 50277	50 g	N 50283
25 g	N 50278	55 g	N 50284
30 g	N 50279	60 g	N 50285
35 g	N 50280	-	-

## COATED FOR STANDARD PASSENGER CAR ALLOY WHEELS

### MC Type

- SPECIAL POLYMER SILVER/GRAY COATING PREVENTS CORROSION
- MEETS OR EXCEEDS ALL OEM SPECIFICATIONS



WEIGHT	PART	WEIGHT	PART
1/4 oz.	N 50300	1-3/4 oz.	N 50306
1/2 oz.	N 50301	2 oz.	N 50307
3/4 oz.	N 50302	2-1/4 oz.	N 50308
1 oz.	N 50303	2-1/2 oz.	N 50309
1-1/4 oz.	N 50304	2-3/4 oz.	N 50310
1-1/2 oz.	N 50305	3 oz.	N 50311



# WHEEL WEIGHTS

COATED, FOR ALLOY WHEELS - DOMESTIC OR IMPORTED

## COATED WHEEL WEIGHTS FOR ALLOY WHEELS

### LH Type

- USE ON LATE MODEL CHRYSLER CARS
- DESIGNED TO FIT UNIQUE WHEEL FLANGE PROFILE
- MEETS ALL OEM SPECIFICATIONS



WEIGHT	PART	WEIGHT	PART
1/4 oz.	N 50286	1-3/4 oz.	N 50292
1/2 oz.	N 50287	2 oz.	N 50293
3/4 oz.	N 50288	2-1/4 oz.	N 50294
1 oz.	N 50289	2-1/2 oz.	N 50295
1-1/4 oz.	N 50290	2-3/4 oz.	N 50296
1-1/2 oz.	N 50291	3 oz.	N 50297

## TWO PIECE COATED WHEEL WEIGHTS FOR ALLOY WHEELS

### MBN Type

- ORIGINAL EQUIPMENT WHEEL WEIGHTS FOR MERCEDES BENZ AUTOMOBILES
- MEETS OR EXCEEDS ALL OEM SPECIFICATIONS



WEIGHT	PART	WEIGHT	PART
5 g	N 50166	40 g	N 50173
10 g	N 50167	45 g	N 50174
15 g	N 50168	50 g	N 50175
20 g	N 50169	55 g	N 50176
25 g	N 50170	60 g	N 50177
30 g	N 50171	65 g	N 50178
35 g	N 50172	70 g	N 50179

## COATED WHEEL WEIGHTS FOR MANY JAPANESE ALLOY WHEELS

### FN Type

- DESIGNED FOR THICKER FLANGE ALLOY WHEELS BEING USED ON MANY JAPANESE VEHICLES
- MEETS ALL OEM SPECIFICATIONS

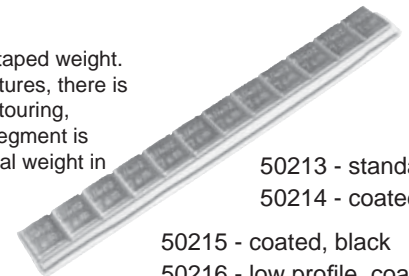


WEIGHT	PART	WEIGHT	PART
5 g	N 50192	32.5 g	N 50203
7.5 g	N 50193	35 g	N 50204
10 g	N 50194	37.5 g	N 50205
12.5 g	N 50195	40 g	N 50206
15 g	N 50196	45 g	N 50207
17.5 g	N 50197	50 g	N 50208
20 g	N 50198	55 g	N 50209
22.5 g	N 50199	60 g	N 50210
25 g	N 50200	65 g	N 50211
27.5 g	N 50201	70 g	N 50212
30 g	N 50202	-	-

## SEGMENTED ADHESIVE WEIGHTS FOR ALLOY WHEELS

### KwikStik Type

The only pre-cut, pre-taped weight. With these unique features, there is no cutting, no pre-contouring, and no waste. Each segment is stamped with the actual weight in ounces. It is the ideal weight for racing and off-road performance applications, and wheels without flanges.



50213 - standard  
50214 - coated

50215 - coated, black  
50216 - low profile, coated

WEIGHT	PART	WEIGHT	PART
3 oz.	O 50213	3 oz.	O 50215
3 oz.	O 50214	3 oz.	R 50216

## ADHESIVE COATED WHEEL WEIGHTS FOR ALLOY AND STEEL WHEELS

### CUC Type

High-quality, contoured, pre-taped adhesive style weight for alloy and steel wheels. Designed for high-performance sports cars. Applications include Porsche and other wheels that do not have the clip-on type flange. Available in sizes ranging from 10 grams to 60 grams.



WEIGHT	PART	WEIGHT	PART
10 g	N 50312	40 g	N 50318
15 g	N 50313	45 g	N 50319
20 g	N 50314	50 g	N 50320
25 g	N 50315	55 g	N 50321
30 g	N 50316	60 g	N 50322
35 g	N 50317	-	-

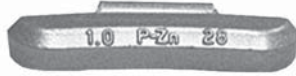
# WHEEL WEIGHTS

LEAD FREE ZINC - COATED, FOR STEEL OR ALLOY WHEELS

## COATED FOR STANDARD PASSENGER CAR STEEL WHEELS

### P Type

- Zinc
- Coated



Weights for standard steel rims.

WEIGHT	PART	WEIGHT	PART
1/4 oz.	N 50323	1-3/4 oz.	N 50329
1/2 oz.	N 50324	2 oz.	N 50330
3/4 oz.	N 50325	2-1/4 oz.	N 50331
1 oz.	N 50326	2-1/2 oz.	N 50332
1-1/4 oz.	N 50327	2-3/4 oz.	N 50333
1-1/2 oz.	N 50328	3 oz.	N 50334

## COATED FOR PASSENGER CAR & LIGHT TRUCK ALLOY WHEELS

### MC Type

- Zinc
- Coated



Weights for many domestic car and light truck alloy rims.

WEIGHT	PART	WEIGHT	PART
1/2 oz.	N 50335	2 oz.	N 50341
3/4 oz.	N 50336	2-1/4 oz.	N 50342
1 oz.	N 50337	2-1/2 oz.	N 50343
1-1/4 oz.	N 50338	2-3/4 oz.	N 50344
1-1/2 oz.	N 50339	3 oz.	N 50345
1-3/4 oz.	N 50340	-	-

## COATED FOR CHRYSLER PASSENGER CAR ALLOY WHEELS

### LH Type

- Zinc
- Coated



The "LH" is used primarily on late model Chrysler cars. Designed to fit unique wheel flange profile.

WEIGHT	PART	WEIGHT	PART
1/4 oz.	N 50346	1-3/4 oz.	N 50352
1/2 oz.	N 50347	2 oz.	N 50353
3/4 oz.	N 50348	2-1/4 oz.	N 50354
1 oz.	N 50349	2-1/2 oz.	N 50355
1-1/4 oz.	N 50350	2-3/4 oz.	N 50356
1-1/2 oz.	N 50351	3 oz.	N 50357

## COATED FOR EUROPEAN & JAPANESE PASSENGER CAR ALLOY WHEELS

### IAW Type

- Zinc
- Coated



Weights for European and Japanese alloy rims.

WEIGHT	PART	WEIGHT	PART
5 g	N 50358	35 g	N 50364
10 g	N 50359	40 g	N 50365
15 g	N 50360	45 g	N 50366
20 g	N 50361	50 g	N 50367
25 g	N 50362	55 g	N 50368
30 g	N 50363	60 g	N 50369

# WHEEL WEIGHTS

LEAD FREE ZINC OR STEEL - COATED, FOR ALLOY WHEELS

## UNCOATED FOR JAPANESE PASSENGER CAR ALLOY WHEELS

### FN Type

- Zinc
- Coated



This type is designed for the thicker flange alloy wheels being used on many Japanese vehicles.

WEIGHT	PART	WEIGHT	PART
5 g	N 50370	35 g	N 50376
10 g	N 50371	40 g	N 50377
15 g	N 50372	45 g	N 50378
20 g	N 50373	50 g	N 50379
25 g	N 50374	55 g	N 50380
30 g	N 50375	60 g	N 50381

## SEGMENTED STEEL ADHESIVE WEIGHTS FOR ALLOY WHEELS

### KwikStik

- Segmented Steel with Adhesive
- Coated

The only pre-cut, pre-taped weight. With these unique features, there is no cutting and no pre-contouring.



- 50382 (low profile)
- 50383 (standard profile)

WEIGHT	PART
3 oz.	N 50382
60 g	N 50383

# WHEEL WEIGHT ACCESSORIES

## WHEEL WEIGHT PLIERS AND STICK-ON WHEEL WEIGHT REMOVER

### • WHEEL WEIGHT PLIERS



PART

A 50298

### • STICK-ON WHEEL WEIGHT REMOVER



PART

A 50299

# INSTANT LENS REPAIR PRODUCTS

## LENS REPAIR KITS (CLEAR, RED, AMBER)

PROVIDES A SPECIAL PRE-FORMED LIGHT DIFFUSER REPAIR PANEL AND HEAVY DUTY WEATHER-PROOF GASKET THAT MAKES A HIGH QUALITY REPAIR. THE PRE-FORMED PANEL IS STRONG AS WELL AS FLEXIBLE AND CAN COVER COMMON TYPE LENS DAMAGE ON FLAT OR CURVED LENS SURFACES.

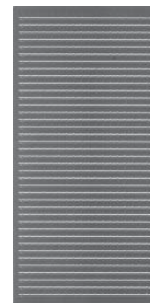


### HEADLIGHT LENS REPAIR KIT (CLEAR - P/N 78032)

- REPAIRS HEADLIGHTS AND BACKUP LIGHT LENSES
- FAST AND EASY TO APPLY – REPAIRS WITHOUT REMOVING HOUSING
- PREVENTS HEADLIGHTS FROM BURNING OUT
- SAVES HIGH COST OF REPLACEMENT
- PANEL SIZE 7-3/4" x 3-3/4"



78032 (CLEAR)



78031 (RED)



78030 (AMBER)

### TAIL LIGHT LENS REPAIR KIT (RED - P/N 78031)

- REPAIRS TAIL LIGHT LENSES
- FAST AND EASY TO APPLY – REPAIRS WITHOUT REMOVING LENS
- RESTORES LIGHT DIFFUSER GRID PATTERN
- FORMS A PERMANENT WEATHER-PROOF SEAL
- PANEL SIZE 7" x 10"

### TAIL LIGHT LENS REPAIR KIT (AMBER - P/N 78030)

- REPAIRS TAIL LIGHT LENSES
- FAST AND EASY TO APPLY – REPAIRS WITHOUT REMOVING LENS
- RESTORES LIGHT DIFFUSER GRID PATTERN
- FORMS A PERMANENT WEATHER-PROOF SEAL
- PANEL SIZE 7-3/4" x 3-3/4"

## DESCRIPTION

## PART

INSTANT LENS HEADLIGHT AND BACKUP LIGHT LENSES REPAIR KIT (CLEAR)

A 78032

INSTANT LENS TAIL LIGHT LENS REPAIR KIT (RED)

A 78031

INSTANT LENS TAIL LIGHT LENS REPAIR KIT (AMBER)

A 78030

# REARVIEW MIRROR REPAIR KIT

## REARVIEW MIRROR SAVER REPAIR KIT

- QUICK AND EASY MIRROR BUTTON REATTACHMENT KIT
- ALSO RESTORES MIRROR BUTTON MOUNTING SURFACE WHEN GLASS IS BROKEN AWAY
- DOUBLE STRENGTH ADHESIVE
- HOT AND COLD TEMPERATURE CHANGES ACTUALLY STRENGTHEN BOND



## DESCRIPTION

## PART

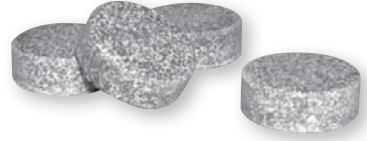
REARVIEW MIRROR SAVER REPAIR KIT

A 78025

# WINDSHIELD WASHER TABLETS



P/N 74529



- **One super-concentrated tablet makes 1 gallon windshield cleaner**
- **Just add 1 tablet to 1 gallon water; or drop in reservoir of clean water**
- **Virtually eliminates shipping costs\***
  
- 25 tablets per package
- Completely removes bugs, road film, dirt and grime.
- **Winter Conditions:** Anti-freeze type windshield solvents are poor cleaners. For triple cleaning power with any anti-freeze windshield solvent, add a Red Lion™ Windshield Washer Tablet.
- Red Lion™ Windshield Washer Tablets have kept millions of plastic containers out of landfills and from having to be recycled.
- Used by freight delivery services, car rental agencies, and state and local governments.
- This is a **GREEN** product. It is Non-Toxic and Biodegradable. Always keep out of reach of children. Mild eye irritant. If contact with eyes occurs, flush with plenty of water. If accidentally swallowed, drink a glass of water. Do not induce vomiting. If needed, seek medical attention.

**\* 2,500 gallon containers of pre-mix windshield cleaner weighs 20,750 lbs.**

**One UPS package of Red Lion™ Windshield Washer Tablets**

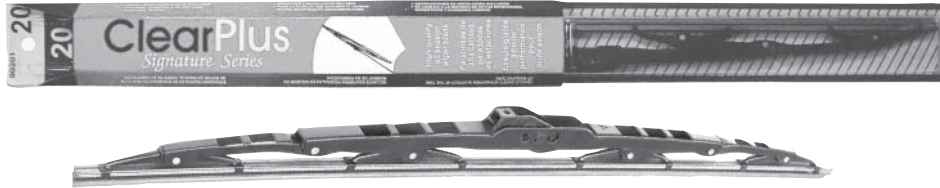
**(4 cases/100 ea. 25-tablet tubes) also makes 2,500 gallons, but**

**weighs only 33 lbs! An astounding 99.84% LESS shipping weight!**

**Virtually eliminates shipping costs!**

# CLEARPLUS® WINDSHIELD WIPERS

More pressure points in comparison to other premium brands (six for sizes 16/17 and eight starting in size 18) provide significantly better quality of wipe. Hugs the windshield like a beam blade! Wider spaced wind channels and better wrap around prevent losing contact at high speeds with highly curved windshields.



Features a unique graphite/MOS2 composition impregnated on compression molded rubber. This protects the rubber from road and environmental contamination and optimizes the quality of wipe and the durability. All products meet or exceed National Highway Traffic Standards.

DESCRIPTION	PART	
16" Signature Series Wiper Blades	A	50403
17" Signature Series Wiper Blades	A	50404
18" Signature Series Wiper Blades	A	50405
19" Signature Series Wiper Blades	A	50406
20" Signature Series Wiper Blades	A	50407
21" Signature Series Wiper Blades	A	50408
22" Signature Series Wiper Blades	A	50409
24" Signature Series Wiper Blades	A	50410
26" Signature Series Wiper Blades	A	50411
28" Signature Series Wiper Blades	A	50412

# CLEARPLUS® WINTER WINDSHIELD WIPERS

- Designed with a heavy duty galvanized steel structure and a large profile molded squeegee, winter wiper blades lift heavy and slushy snow and ice better than the competition.
- Synthetic boot (vs. natural rubber in competitor products) has stronger tear and ozone resistance than most winter blades on the market.
- Universal pre-installed adapter
- All products meet or exceed National Highway Traffic Standards.

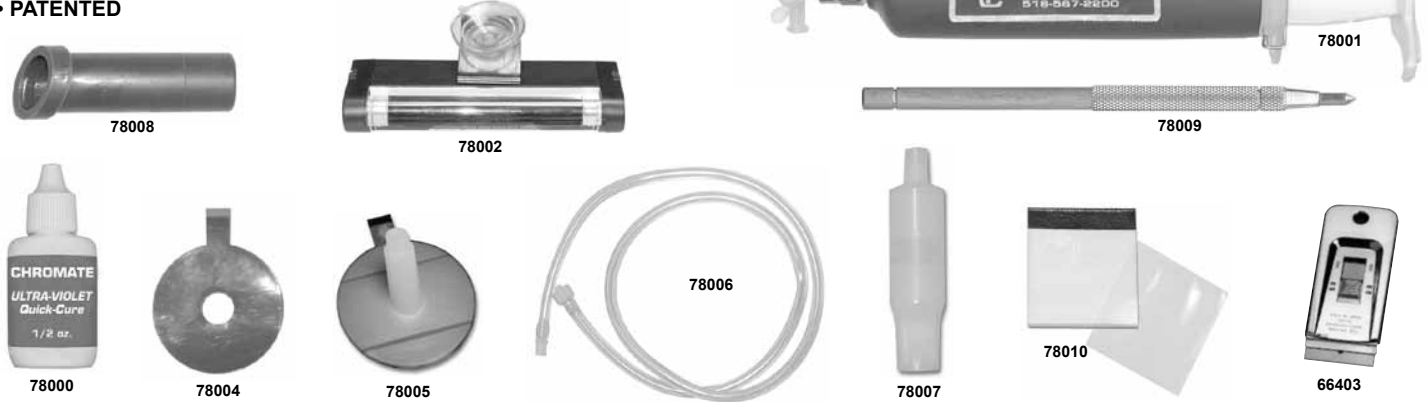


DESCRIPTION	PART	
16" Winter Wiper Blades	A	50413
18" Winter Wiper Blades	A	50414
20" Winter Wiper Blades	A	50415
22" Winter Wiper Blades	A	50416
24" Winter Wiper Blades	A	50417
26" Winter Wiper Blades	A	50418

# WINDSHIELD REPAIR SYSTEM

## REPAIRS COMMON WINDSHIELD DAMAGE

- PENETRATES THE GLASS SURFACE THROUGH THE PIT OF THE BREAK WITH A TRANSPARENT LIQUID RESIN
- THE RESIN REPLACES THE ENTRAPPED AIR, THEN CURES AND RESTORES VISIBILITY
- AVOID VISIBILITY HAZARDS AND REPLACEMENT COSTS
- FORMS A CLEAR PERMANENT REPAIR
- STOPS DAMAGE FROM SPREADING OR CRACKS FROM DEVELOPING
- NO MIXING – FAST AND EASY TO USE
- PATENTED



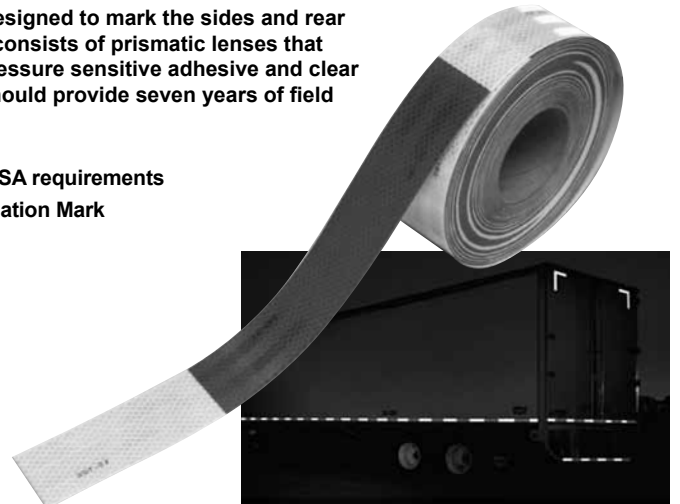
DESCRIPTION	PART	DESCRIPTION	PART
UV QUICK CURE RESIN – 1/2 OZ.	A 78000	FLOW REGULATOR	A 78007
INJECTOR ASSEMBLY	A 78001	CURE GUARD	A 78008
UV CURING LAMP	A 78002	CARBIDE PROBE	A 78009
UV LAMP 12V ADAPTER (not shown)	A 78003	MYLAR SQUARE CURING FILM – 25 PACK	A 78010
ADHESIVE ALIGNMENT SEALS	A 78004	SCRAPER	A 66403
PEDESTAL RESIN CHAMBERS	A 78005	INSTRUCTION VIDEO (not shown)	A 78012
HOSE – 30"	A 78006	WINDSHIELD REPAIR SYS. MANUAL (not shown)	A 78013

## REFLECTIVE DOT TAPE

### DOT APPROVED – ROLLS AND STRIPS

Reflective DOT Tape is a highly retroreflective microprismatic marking designed to mark the sides and rear of vehicles for enhanced visibility and detection. The reflective marking consists of prismatic lenses that are formed in a transparent, synthetic resin, sealed and backed with a pressure sensitive adhesive and clear poly liner. Applied to properly prepared surfaces, Reflective DOT Tape should provide seven years of field performance.

- Reflective DOT Tape is certified and guaranteed to meet and exceed NHTSA requirements
- Meets or exceeds all FMVSS 108 requirements, including DOT-C2 Certification Mark
- Strong and durable for easy application to smooth surfaces
- Non-corroding / high brightness
- Resists weather, dirt and aging
- Aggressive pressure sensitive adhesive with an easy to remove liner
- Wide angularity to almost 90° from perpendicular
- Pre-sealed edges
- Non-metallic construction to prevent corrosion
- 7 year warranty (non-prorated)
- Other mandatory markings available



DESCRIPTION	PART
Reflective DOT Tape / Rolls (2" x 50 yards / Red 11" and White 7")	A 32878
Reflective DOT Tape / Strips (18" / Red 11" and White 7")	A 32879

# SAFETY FLARES

## FOR LONG DISTANCE ILLUMINATION

- PROVIDES LONG DISTANCE ILLUMINATION FOR SAFETY DURING EMERGENCY ROAD-SIDE SITUATIONS
- VISIBLE IN FOG, RAIN OR SNOW
- EASY TO IGNITE WITH SELF-CONTAINED STRIKER
- 20 MINUTE DURATION
- 36 FLARES IN A CASE



DESCRIPTION	PART
20 MINUTE NON-SPIKE SAFETY FLARES (Package Quantity: 36 Flares)	59080

# EARLY WARNING TRIANGLE KIT

## REFLECTIVE SAFETY WARNING SYSTEM

- Instant Alert for Oncoming Motorists
- Meets US Federal Motor Vehicle Safety Standard No. 125 for Warning Devices
- Weighted Base for Stability
- Kit Includes 3 Reflective Triangles

- APPLICATIONS**
- Emergency Assistance
  - Truck / Auto Accidents
  - Hazardous Conditions
  - Visually Alerts Authorities Quickly



DESCRIPTION	PART
EARLY WARNING TRIANGLE KIT	A 59082

# GLOW STICKS

## A DEPENDABLE LIGHT SOURCE THAT LASTS FOR 12 HOURS

- A DEPENDABLE LIGHT SOURCE WHENEVER AND WHEREVER YOU NEED IT, LIGHT LASTS FOR 12 HOURS
- NON-TOXIC / NON-FLAMMABLE / WEATHERPROOF
- MADE WITH CYALUME® TECHNOLOGY (10 mL FLUID)
- TO ACTIVATE REMOVE FROM FOIL WRAPPER, BEND, SNAP AND SHAKE



DESCRIPTION	PART
6" GLOW STICKS – 12 HOUR	J 59081



# NTA AIR BRAKE FITTINGS – BRASS

MEETS ALL AIR BRAKE SPECIFICATIONS — FULLY D.O.T. APPROVED

Utilizes ribbed sleeve for compression and positive grip. Five remakes possible when disassembled. Body (less insert) interchangeable with standard air brake compression bodies.



## SPECIFICATIONS

**USE WITH:** Nylon tubing (SAE J844, type 3).

### ASSEMBLY INSTRUCTIONS:

1. Cut tubing to length required.
2. Insert tubing into fitting.
3. Tighten nut.

### DISSASSEMBLY INSTRUCTIONS:

1. Remove nut and pull tubing out of fitting body.
2. Insert will remain in tubing.

### RE-ASSEMBLY INSTRUCTIONS:

1. Push tubing and insert into fitting body until it bottoms.
2. Thread nut onto fitting body and tighten.

### SLEEVE



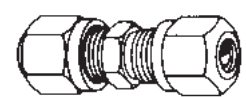
TUBE SIZE	INDUSTRY TYPE	PART
1/4	1460-4	R 55402
3/8	1460-6	R 55403
1/2	1460-8	O 55404
5/8	1460-10	L 55405
3/4	1460-12	I 55406

### NUT



TUBE SIZE	INDUSTRY TYPE	PART
1/4	1461-4	O 55410
3/8	1461-6	O 55411
1/2	1461-8	L 55412
5/8	1461-10	I 55413
3/4	1461-12	I 55414

### UNION



TUBE SIZE	INDUSTRY TYPE	PART
1/4	1462-4	I 55418
3/8	1462-6	I 55419
1/2	1462-8	F 55420
5/8	1462-10	D 55421
3/4	1462-12	B 55422

### TUBE INSERT



BRASS

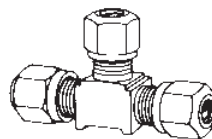


STAINLESS STEEL



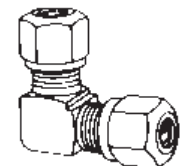
BRASS			STAINLESS STEEL	
TUBE SIZE	IND. TYPE	PART	TUBE SIZE	PART
1/4	1484-4	R 55425	1/4	N 55447
3/8	1484-6	R 55426	3/8	N 55448
1/2	1484-8	O 55427	1/2	N 55449
5/8	1484-10	L 55428	5/8	I 55450
3/4	1484-12	I 55429	-	-

### UNION TEE



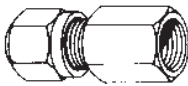
TUBE SIZE	INDUSTRY TYPE	PART
1/4	1464-4	D 55433
3/8	1464-6	D 55434
3/8 x 3/8 x 1/4	1464-664	D 55435
1/2	1464-8	B 55437
1/2 x 1/2 x 3/8	1464-886	B 55438

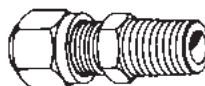

### UNION ELBOW

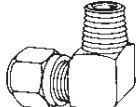



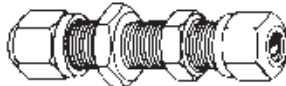
TUBE SIZE	INDUSTRY TYPE	PART
1/4	1465-4	D 55443
3/8	1465-6	G 55444
1/2	1465-8	D 55445
5/8	1465-10	B 55446

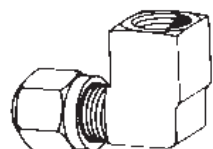
# NTA AIR BRAKE FITTINGS – BRASS (Cont'd.)

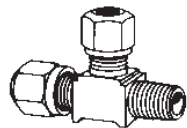
FEMALE CONNECTOR			
			
TUBE SIZE	PIPE THREAD	INDUSTRY TYPE	PART
1/4	1/8	1466-42	I 55451
1/4	1/4	1466-44	I 55452
3/8	1/8	1466-62	I 55453
3/8	1/4	1466-64	I 55454
3/8	3/8	1466-66	G 55455
1/2	3/8	1466-86	D 55456
5/8	1/2	1466-108	B 55457
3/4	1/2	1466-128	B 55458

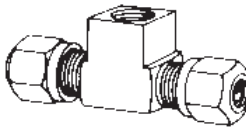
MALE CONNECTOR			
 			
TUBE SIZE	PIPE THREAD	INDUSTRY TYPE	PART
1/4	1/8	1468-42	I 55463
1/4	1/4	1468-44	I 55464
1/4	3/8	1468-46	I 55465
3/8	1/8	1468-62	I 55466
3/8	1/4	1468-64	I 55467
3/8	3/8	1468-66	I 55468
3/8	1/2	1468-68	G 55469
1/2	1/4	1468-84	I 55470
1/2	3/8	1468-86	I 55471
1/2	1/2	1468-88	F 55472
5/8	3/8	1468-106	F 55473
5/8	1/2	1468-108	F 55474
3/4	1/2	1468-128	D 55475
3/4	3/4	1468-1212	D 55476

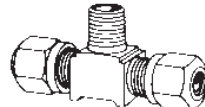
90° MALE ELBOW			
 			
TUBE SIZE	PIPE THREAD	INDUSTRY TYPE	PART
1/4	1/8	1469-42	I 55482
1/4	1/4	1469-44	I 55483
1/4	3/8	1469-46	F 55484
3/8	1/8	1469-62	I 55485
3/8	1/8 long	1469-62 L	I 55486
3/8	1/4	1469-64	I 55487
3/8	3/8	1469-66	I 55488
3/8	1/2	1469-68	F 55489
1/2	1/4	1469-84	F 55490
1/2	3/8	1469-86	G 55491
1/2	1/2	1469-88	F 55492
5/8	3/8	1469-106	D 55493
5/8	1/2	1469-108	D 55494
3/4	1/2	1469-128	B 55495

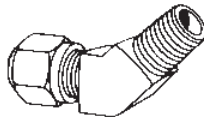
BULKHEAD UNION		
		
TUBE SIZE	INDUSTRY TYPE	PART
1/4	1474-4	F 55532
3/8	1474-6	F 55533
1/2	1474-8	D 55534
5/8	1474-10	B 55535

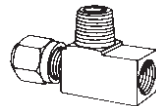
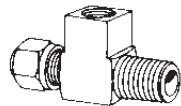
FEMALE ELBOW			
			
TUBE SIZE	PIPE THREAD	INDUSTRY TYPE	PART
1/4	1/8	1470-42	I 55501
3/8	1/8	1470-62	F 55502
3/8	1/4	1470-64	G 55503
3/8	3/8	1470-66	G 55504
1/2	3/8	1470-86	F 55505

MALE RUN TEE			
			
TUBE SIZE	PIPE THREAD	INDUSTRY TYPE	PART
1/4	1/8	1471-42	F 55510
1/4	1/4	1471-44	D 55511
3/8	1/4	1471-64	F 55513
3/8	3/8	1471-66	D 55514
1/2	3/8	1471-86	D 55515
5/8	1/2	1471-108	D 55516

FEMALE BRANCH TEE			
			
TUBE SIZE	PIPE THREAD	INDUSTRY TYPE	PART
3/8	1/4	1477-64	B 55538
1/2	1/4	1477-84	B 55539

MALE BRANCH TEE			
			
TUBE SIZE	PIPE THREAD	INDUSTRY TYPE	PART
1/4	1/8	1472-42	F 55522
1/4	1/4	1472-44	F 55523
3/8	1/8	1472-62	F 55524
3/8	1/4	1472-64	F 55525
3/8	3/8	1472-66	F 55526
1/2	3/8	1472-86	D 55527
5/8	1/2	1472-108	D 55528

45° MALE ELBOW			
			
TUBE SIZE	PIPE THREAD	INDUSTRY TYPE	PART
1/4	1/8	1480-42	G 55546
3/8	1/4	1480-64	G 55547
3/8	3/8	1480-66	F 55548
1/2	3/8	1480-86	D 55549
1/2	1/2	1480-88	D 55550
5/8	1/2	1480-108	B 55551

ADAPTER TEE			
 			
55556		55557	
TUBE SIZE	PIPE THREAD	INDUSTRY TYPE	PART
3/8	1/4 x 3/8	1482-646	D 55556
3/8	3/8 x 1/4	1483-664	D 55557

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# NTA AIR BRAKE FITTINGS – BRASS (Cont'd.)

## EATON – FULLER AIR TRANSMISSION FITTINGS

### COLLET – SPLIT SLEEVE



TUBE SIZE	INDUSTRY TYPE	PART
1/8	560-2	R 55576
5/32	560-2.5	R 55575
1/4	560-4	R 55577

### NUT



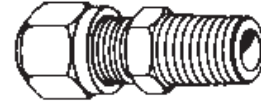
TUBE SIZE	INDUSTRY TYPE	PART
1/8	561-2	O 55580
5/32	561-2.5	O 55579
1/4	561-4	O 55581

### UNION – SPLIT SLEEVE



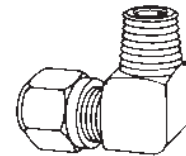
TUBE SIZE	INDUSTRY TYPE	PART
1/8	562-2	I 55584
5/32	562-2.5	I 55583
1/4	562-4	I 55585

### MALE CONNECTOR – SPLIT SLEEVE



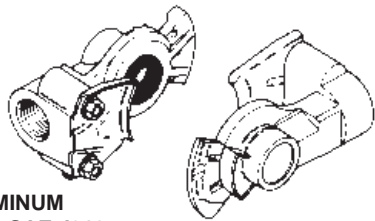
TUBE SIZE	PIPE THREAD	INDUSTRY TYPE	PART
1/8	1/16	568-21	I 55587
1/8	1/8	568-22	I 55588
5/32	1/16	568-2.51	I 55595
5/32	1/8	568-2.52	I 55596
1/4	1/8	568-42	I 55589

### 90° MALE ELBOW – SPLIT SLEEVE



TUBE SIZE	PIPE THREAD	INDUSTRY TYPE	PART
1/8	1/16	569-21	I 55592
1/8	1/8	569-22	I 55593
5/32	1/8	569-2.52	I 55591
1/4	1/8	569-42	I 55594

## MISCELLANEOUS AIR BRAKE FITTINGS



- DIE CAST ALUMINUM
- CONFORMS TO SAE J318
- CONNECTS TO 1/2" PIPE

### GLADHAND COUPLINGS AND SEALS

DESCRIPTION	INDUSTRY TYPE	PART
Service type coupling — connect only to service	78850	A 55597
Emergency type coupling — connect only to emergency	78851	A 55598
Universal type coupling — connects to all three styles	75150	A 55599

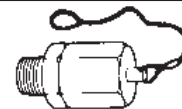
### GLADHAND SEAL



EASY INSTALLATION LUBRICATE WITH HYDRAULIC FLUID

INDUSTRY TYPE	PART
13630	I 54763

### AIR TANK DRAIN VALVE

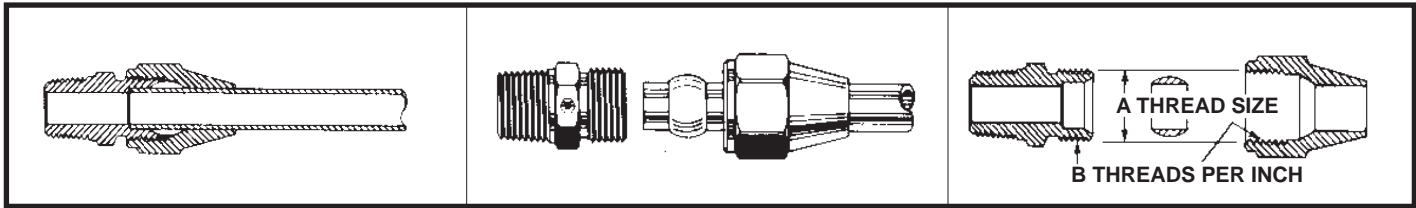


PIPE THREAD	INDUSTRY TYPE	PART
1/4	1421	A 55542

# AIR BRAKE FITTINGS FOR COPPER TUBING – BRASS

EXCEEDS PRESSURE REQUIREMENTS FOR ALL AIR BRAKE SYSTEMS

Manufactured from virgin high density brass alloy. Low cost. No flare required. Easy to assemble.



## SPECIFICATIONS

**PRESSURE:** Exceeds pressure requirements of all automotive air brake systems.

**TEMPERATURE:** -65°F to +250°F.

**USE WITH:** Copper tubing in air brake systems.

**CONFORMANCE:** Meets specifications and standards of SAE and MS (Military Standards).

### ASSEMBLY INSTRUCTIONS:

1. Slide nut and then sleeve on tubing. Threaded end of nut must face out.
2. Insert tubing into fitting body. Be sure tubing is bottomed on fitting shoulder.
3. Tighten assembly hand tight. From that point, tighten with a wrench the number of turns indicated below:

TUBE SIZE	ADD'L. # TURNS FROM HAND TIGHT
1/4, 3/8	1-3/4
1/2, 5/8, 3/4	3-1/4

TUBE SIZE	1/4	3/8	1/2	5/8	3/4
<b>A - THREAD SIZE</b>	7/16	17/32	11/16	13/16	1
<b>B - THREADS/INCH</b>	24	24	20	18	18

## SLEEVE



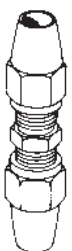
TUBE SIZE	INDUSTRY TYPE	PART
1/4	00457	T 53425
3/8	00361	T 53426
1/2	03754	T 53427
5/8	10612	R 53428
3/4	03897	R 53429

## NUT



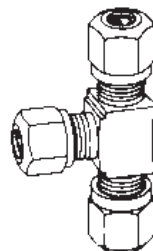
TUBE SIZE	INDUSTRY TYPE	PART
1/4	00455	R 53435
3/8	00360	O 53436
1/2	03755	L 53437
5/8	10613	I 53438
3/4	03896	E 53439

## UNION



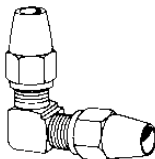
TUBE SIZE	INDUSTRY TYPE	PART
1/4	05514	I 53445
3/8	05134	I 53446
1/2	15710	E 53447
5/8	21826	A 53448
3/4	16523	A 53449
-	-	-

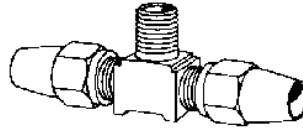
## UNION TEE

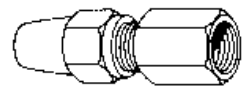


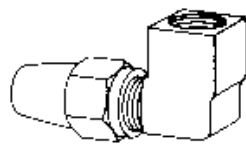
TUBE SIZE	INDUSTRY TYPE	PART
1/4	B-164-4	E 53455
3/8 x 3/8 x 1/2	17663	E 53456
3/8	05106	A 53457
1/2	15712	A 53458
5/8	21984	A 53459
3/4	B-164-12	A 53460

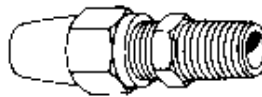
# AIR BRAKE FITTINGS FOR COPPER TUBING – BRASS (Cont'd.)

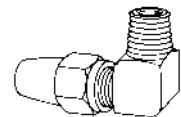
UNION ELBOW			
			
TUBE SIZE	INDUSTRY TYPE	PART	
1/4	B-165-4	E	53466
3/8	05113	E	53467
1/2	22359	A	53468
5/8	22360	A	53469
3/4	B-165-12	A	53470

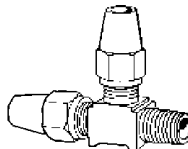
MALE BRANCH TEE			
			
TUBE SIZE	PIPE THREAD	INDUSTRY TYPE	PART
1/4	1/8	B-172-42	E 53489
3/8	1/8	17051	E 53490
3/8	1/4	05103	E 53491
3/8	3/8	05177	A 53492
1/2	3/8	15700	A 53493
5/8	1/2	21982	A 53494
3/4	1/2	B-172-128	A 53495

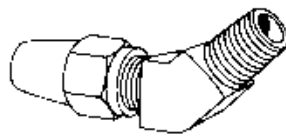
FEMALE CONNECTOR			
			
TUBE SIZE	PIPE THREAD	INDUSTRY TYPE	PART
1/4	1/8	B-166-42	L 53476
3/8	1/8	05418	I 53477
3/8	1/4	05826	I 53478
3/8	3/8	05827	E 53479
1/2	3/8	15711	L 53480
1/2	1/2	B-166-88	E 53481
5/8	1/2	B-166-108	E 53482
3/4	1/2	B-166-128	A 53483

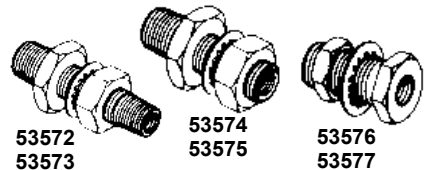
FEMALE ELBOW			
			
TUBE SIZE	PIPE THREAD	INDUSTRY TYPE	PART
1/4	1/8	B-170-42	I 53537
3/8	1/8	B-170-62	I 53538
3/8	1/4	05135	E 53539
3/8	3/8	05830	E 53540
1/2	3/8	15702	E 53541
1/2	1/2	B-170-88	A 53542
5/8	1/2	B-170-108	A 53543

MALE CONNECTOR			
			
TUBE SIZE	PIPE THREAD	INDUSTRY TYPE	PART
1/4	1/8	05127	L 53501
1/4	1/4	05183	L 53502
3/8	1/8	05509	I 53503
3/8	1/4	05053	I 53504
3/8	3/8	05824	I 53505
3/8	1/2	22063	I 53506
1/2	1/4	17690	I 53507
1/2	3/8	17525	I 53508
1/2	1/2	17691	I 53509
5/8	3/8	16685	E 53510
5/8	1/2	16684	A 53511
5/8	3/4	B-168-1012	E 53512
3/4	1/2	17621	A 53513
3/4	3/4	15762	A 53514

90° MALE ELBOW			
			
TUBE SIZE	PIPE THREAD	INDUSTRY TYPE	PART
1/4	1/8	B-169-42	L 53520
1/4	1/4	24318	I 53521
3/8	1/8	05522	I 53522
3/8	1/4	05102	I 53523
3/8	3/8	05829	E 53524
3/8	1/2	22062	E 53525
1/2	1/4	20475	E 53526
1/2	3/8	15709	E 53527
1/2	1/2	16310	E 53528
5/8	3/8	21993	A 53529
5/8	1/2	21825	A 53530
3/4	1/2	B-169-128	A 53531

MALE RUN TEE			
			
TUBE SIZE	PIPE THREAD	INDUSTRY TYPE	PART
1/4	1/8	B-171-42	E 53549
1/4	1/4	B-171-44	E 53550
3/8	1/8	17051	E 53551
3/8	1/4	05103	E 53552
3/8	3/8	05177	A 53553
1/2	3/8	15700	A 53554
1/2	1/2	B-171-88	A 53555
5/8	1/2	21982	A 53556
3/4	1/2	B-171-128	A 53557

45° MALE ELBOW TUBE			
			
TUBE SIZE	PIPE THREAD	INDUSTRY TYPE	PART
1/4	1/8	B-177-42	I 53563
3/8	1/4	20722	E 53564
1/2	3/8	20292	E 53565
5/8	1/2	22065	A 53566

BULKHEAD COUPLING				
				
THREAD		LENGTH	INDUSTRY TYPE	PART
A	B			
1/2	1/4	2-15/16	05730	A 53572
1/2	1/4	3-15/16	23464	A 53573
1/2	1/4	2-5/32	05498	A 53574
1/2	1/4	2-17/32	05499	A 53575
1/4	1/4	1-1/2	05465	E 53576
1/4	1/4	5/16	21204	E 53577

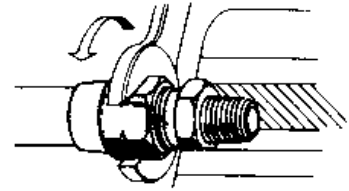
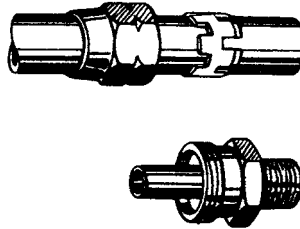
# REUSABLE AIR BRAKE FITTINGS – BRASS

## HOSE ENDS AND ASSEMBLIES

### ASSEMBLY INSTRUCTIONS:

1. Slide nut and sleeve onto hose. Make sure bevel edge of sleeve faces out toward fitting.
2. Push hose into fitting until it bottoms.
3. Tighten nut down all the way.

HOSE: P/N 53419



### HOSE CONNECTOR ASSEMBLY



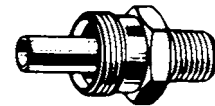
HOSE ID	PIPE THREAD	INDUSTRY TYPE	PART
3/8	1/4	15540	A 53583
3/8	3/8	24887	A 53584
3/8	1/2	15539	A 53585
1/2	3/8	368-86	A 55442

### HOSE COUPLING NUT



HOSE ID	PIPE THREAD	INDUSTRY TYPE	PART
3/8	–	03624	I 53591

### HOSE COUPLING BODY



HOSE ID	PIPE THREAD	INDUSTRY TYPE	PART
3/8	1/4	15993	I 53597
3/8	3/8	33470	E 53598
3/8	1/2	15992	E 53599

### SLEEVE



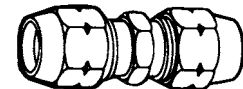
HOSE ID	PIPE THREAD	INDUSTRY TYPE	PART
3/8	–	03610	L 53626

### HOSE CONNECTOR WITH SPRING GUARD



HOSE ID	PIPE THREAD	INDUSTRY TYPE	PART
3/8	1/4	15536	A 53605
3/8	3/8	23907	A 53606
3/8	1/2	15535	A 53607

### HOSE SPLICER



HOSE ID	PIPE THREAD	INDUSTRY TYPE	PART
3/8	–	362-6	A 55416
1/2	–	362-8	A 55417

### HOSE COUPLING NUT WITH SPRING GUARD



TUBE SIZE	PIPE THREAD	INDUSTRY TYPE	PART
3/8	–	379-6	E 53614

### HOSE COUPLING NUT FOR SPRING GUARD



TUBE SIZE	PIPE THREAD	INDUSTRY TYPE	PART
3/8	–	03613	I 53613

### SPRING GUARD



HOSE ID	PIPE THREAD	INDUSTRY TYPE	PART
3/8	–	01045	O 53620

35

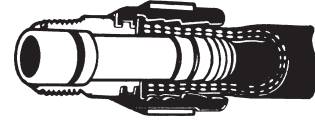
# AIR BRAKE HOSE REPAIR KIT

FIELD INSTALLATION KIT MEETS DOT AND SAE SPECIFICATIONS

CIC 200™ Heavy Duty Air Brake Hose Repair Kit is ideal for shop and field installations and repairs of 3/8" air brake hose. Repairs are fast, simple and conform to both DOT 106 and SAE J1402 requirements. These fittings are standard original equipment with manufacturers such as Strick, Monon, Loadcraft, Dorsey, Great Dane, GMC, Pike, Trail King, etc.

## FEATURES:

- REINFORCED NYLON AND BRASS COMPONENTS
- DOT 106 AND SAE J1402 CERTIFIED
- FOR USE ON AIR CHAMBERS, RELAY VALVES, GLAD HANDS, ETC.



DESCRIPTION	PART
TWO 3/8" AIR BRAKE END FITTINGS	A 53420
3/8" FEMALE X 1/4" MALE ADAPTOR	R 54415

## INSTALLATION PROCEDURE

1. Disassemble Kit

2. Position hose end on SHELL (A) flush with groove (see arrows).

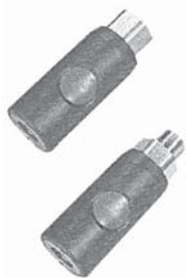
3. Insert FITTING (B) into groove and position SHELL (C) opposite SHELL (A).

4. With assembly in hand, squeeze forward ends of shell and push and twist RETAINING RING (D) over shells to its final position as shown by arrows.

5. Insert BARB (E) into fitting. (Threaded end of barb should be greased). Push and turn to start threads. Using a 5/16" hexagon key continue to push and turn until the barb is flush inside the fitting. *NOTE: Check final assembly visually to insure that hose has not shifted position during assembly.*

# QUICK DISCONNECTS – PUSH BUTTON

## PUSH BUTTON SAFETY RELEASE COUPLINGS



- STATE OF THE ART PUSH-BUTTON COUPLING TECHNOLOGY
- DOUBLE RELEASE AIR SAFETY COUPLING PREVENTS HOSE WHIP
- LEAKAGE FREE – "THRU O-RING" DESIGN GREATLY REDUCES EXPENSIVE AIR LEAKS
- FULLY INTERCHANGEABLE WITH SERIES LISTED BELOW
- MEETING MIL-C-4109 AND ISO 6150-B SPECIFICATIONS CONFORMS TO ISO 4144 SAFETY SPECIFICATIONS

### APPLICATIONS:

- SAFETY REQUIRED AIR TOOLS, BLOWGUNS, AIR AUTOMATIC EQUIPMENT
- PAINT AND BODY SHOPS
- AUTOMOTIVE AND AIRCRAFT ASSEMBLY LINES

### INSTRUCTIONS:

1. The first press on the push-button decompresses the lower part of the circuit without disconnecting the plug and with reduced risk to the user.
2. The second press on the push button safely releases the plug.



ARO STYLE INTERCHANGE SERIES			INDUSTRIAL INTERCHANGE SERIES						TRU-FLATE/PARKER STYLE INTERCHANGE SERIES					
			"H" STYLE - 3/8"			"M" STYLE - 1/4"			"P" STYLE - 3/8"			"T" STYLE - 1/4"		
"A" STYLE - 1/4"			NPT PIPE THREAD	FLOW I.D.	PART	NPT PIPE THREAD	FLOW I.D.	PART	NPT PIPE THREAD	FLOW I.D.	PART	NPT PIPE THREAD	FLOW I.D.	PART
3/8 Female	3/8	A 52293	1/4 Female	1/4	A 52289	3/8 Female	3/8	A 52299	1/4 Female	1/4	A 52295			
3/8 Male	3/8	A 52294	1/4 Male	1/4	A 52290	3/8 Male	3/8	A 52301	1/4 Female	3/8	A 52297			
1/4 Female	1/4	A 52296	-	-	-	3/8 Female	1/4	A 52291	OSHA Safety Vented Blowgun with 1/4" NPT Female Thread					A 52233
-	-	-	-	-	-	3/8 Male	1/4	A 52292						

# TUBING, HOSE AND ACCESSORIES

## TUBING

### COPPER

- SEAMLESS, SOFT, BRIGHT ANNEALED TUBING.
- USE FOR FUEL, OIL, WATER, GAS, ETC.
- EASY TO WORK WITH.



25 FOOT ROLL

TUBE SIZE	WALL THICKNESS	PART	TUBE SIZE	WALL THICKNESS	PART
1/8	.030	A 54509	3/8	.032	A 54513
3/16	.030	A 54510	1/2	.032	A 54515
1/4	.030	A 54511	5/8	.035	A 54516
5/16	.032	A 54512	3/4	.035	A 54517

### NYLON

- MILKY COLORED SEMI-RIGID TUBING USED IN AGRICULTURE, FOOD PROCESSING AND LABORATORIES.
- PROVIDES GOOD CHEMICAL RESISTANCE TO ALIPHATICS, AMMONIA, AMMONIUM HYDROXIDE, BENZENE AND OTHER SUBSTANCES.
- TEMPERATURE RANGE: -60°F TO 180°F
- MAXIMUM WORKING PRESSURE @ 70°F: 333 PSI
- MINIMUM BURST PRESSURE @ 70°F: 1,000 PSI



50 FOOT ROLL

TUBE SIZE	TUBE I.D.	WALL THK.	PART	TUBE SIZE	TUBE I.D.	WALL THK.	PART
1/8	.096	.015	A 54536	5/16	.242	.036	A 54539
3/16	.142	.023	A 54537	3/8	.295	.040	A 54540
1/4	.190	.030	A 54538	-	-	-	A -

### METRIC NYLON



25 METERS

SIZE	PART	SIZE	PART
4mm	A 55686	8mm	A 55689
5mm	A 55687	10mm	A 55690
6mm	A 55688	12mm	A 55691

### NYLON AIR BRAKE — SINGLE WALL

- FOR USE ON TRUCKS, TRACTORS, OFF-THE-ROAD EQUIPMENT
- TEMP. RANGE: -40°F to +200°F
- MEETS DOT FMVSS 571-106
- DESIGNED FOR AIR BRAKE SYSTEMS, AIR CONTROL LINES, AIR GAUGE LINES, FUEL LINES (GAS, DIESEL) ANTI-FREEZE LINES, AIR SUPPLY LINES, SHIFT CONTROL LINES

SAE SPEC. J844 TYPE 3A – INDUSTRY TYPE NT-100



100 FOOT ROLL

TUBE SIZE	WALL THICKNESS	BURST RATING (PSI)	MIN. BEND RADIUS	PART
1/8	.023	1000	3/8"	A 55565
1/4	.040	1200	1"	A 55566

### NYLON AIR BRAKE — REINFORCED

- FOR USE ON TRUCKS, TRACTORS, OFF-THE-ROAD EQUIPMENT
- TEMP. RANGE: -40°F to +200°F
- MEETS DOT FMVSS 571-106
- DESIGNED FOR AIR BRAKE SYSTEMS, AIR CONTROL LINES, AIR GAUGE LINES, FUEL LINES (GAS, DIESEL) ANTI-FREEZE LINES, AIR SUPPLY LINES, SHIFT CONTROL LINES

SAE SPEC. J844 TYPE 3B – INDUSTRY TYPE NT-100



100 FOOT ROLL

TUBE SIZE	WALL THICKNESS	BURST RATING (PSI)	MIN. BEND RADIUS	PART
3/8	.062	1400	1-1/2"	A 55570
1/2	.062	950	2"	A 55571
5/8	.092	900	2-1/2"	A 55572
3/4	.092	800	3"	A 55573

### VACUUM AND WINDSHIELD WASHER

- SPECIAL EPSYN® COMPOUND WITHSTANDS THE EFFECTS OF HEAT, OZONE AND WASHER SOLUTIONS.
- MEETS SAE J1037 SPECIFICATIONS.
- IDEAL FOR WINDSHIELD WASHER, VACUUM OPERATED ACCESSORIES AND EMISSION CONTROL APPLICATIONS.



50 FOOT ROLL


HOSE I.D.	NIPPLE SIZE	PART	HOSE I.D.	NIPPLE SIZE	PART
7/64	1/8	A 52540	7/32	1/4	A 52544
5/32	3/16	A 52542	9/32	5/16	A 52546



# TUBING, HOSE AND ACCESSORIES (Cont'd.)

### POLYETHYLENE — LOW DENSITY

- NATURAL COLOR
- FLEXIBLE
- GOOD CHEMICAL RESISTANCE
- TEMP. RANGE: -40°F TO +135°F




100 FOOT ROLL

O.D. TUBE	I.D. TUBE	WALL THICKNESS	MAX PSI @ 70°F	PART
1/4	11/64	.406	150	A 55661
5/16	15/64	.062	130	A 55662
3/8	1/4	.062	125	A 55663
1/2	3/8	.062	100	A 55664

### VINYL

- CLEAR, SOFT, PLIABLE
- EXCELLENT RESISTANCE TO ALCOHOLS, ANTI-FREEZE, MINERAL ACIDS AND ALKALIES
- TEMP. RANGE: -5°F TO +105°F



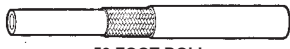
100 FOOT ROLL

O.D. TUBE	I.D. TUBE	WALL THICKNESS	MAX PSI @ 70°F	PART
1/4	11/64	.040	55	A 55675
1/4	1/8	.062	65	A 55676
5/16	3/16	.062	55	A 55677
3/8	1/4	.062	55	A 55678
1/2	3/8	.062	40	A 55679

## HOSES

### NEOPRENE AIR BRAKE — REINFORCED

- MAXIMUM WORKING PRESSURE: 125 PSI
- MINIMUM BURST PRESSURE: 900 PSI
- SPECIFICATIONS: Penn State approved. SAE 40R2 type B (DOT FMVSS 571.106A1).
- CONSTRUCTION: Neoprene inner tube and cover. One ply braided fiber reinforcing material over inner wall.
- TEMPERATURE RANGE: -40°F TO +250°F.
- MAXIMUM AIR TEMPERATURE: APPROXIMATELY 160°F.




50 FOOT ROLL

INSIDE DIA.	OUTSIDE DIA.	PKG.	PART	USE WITH HOSE ENDS: REUSABLE AIR BRAKE See Section 29
3/8	3/4	50 FEET	A 53419	

### RUBBER COVERED AIR HOSE

- MAXIMUM WORKING PRESSURE: 300 PSI
- RESISTS OIL, GREASE AND DETERIORATION FROM OZONE
- 2-PLY REINFORCED
- EACH LENGTH OF HOSE HAS A 1/4" NPT MALE FITTING ON EACH END
- REMAINS FLEXIBLE IN USE




50 FOOT ROLL


INSIDE DIA.	OUTSIDE DIA.	PKG.	PART
3/8	5/8	50 FEET	A 54560

### LOW PRESSURE — GENERAL PURPOSE

- DESIGNED FOR LOW PRESSURE AUTOMOTIVE AND INDUSTRIAL APPLICATIONS. (HOSE CLAMPS NOT REQUIRED).
- USE FOR ASSEMBLY OF LOW PRESSURE FUEL AND OIL LINES, VACUUM GAUGE LINES, AIR LINES AND OTHER USES WHERE APPLICATION WILL NOT EXCEED WORKING PRESSURES OVER 250 PSI.
- INNER TUBE: SYNTHETIC RUBBER COMPOUNDED RESISTS DETERIORATING EFFECTS OF GASOLINE, OIL, DIESEL, FUEL, AIR, WATER, GREASE, KEROSENE AND COMMON HYDRAULIC FLUIDS.
- RUBBER OUTER COVER: TOUGH, ABRASION-RESISTANT RUBBER.
- COTTON OUTER COVER: TOUGH COTTON JACKET TREATED WITH GRAPHITE. RESISTS OIL, GASOLINE, VIBRATION, HEAT AND COLD.
- TEMPERATURE RANGE: -40°F TO +250°F. MAXIMUM AIR TEMPERATURE: 160°F.
- REINFORCEMENT: ONE PLY BRAIDED FIBER.



RUBBER COVER — 25 FOOT ROLL

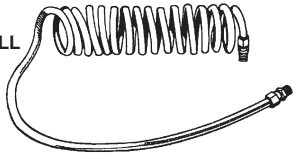


COTTON COVER — 25 FOOT ROLL

RUBBER I.D.	RUBBER O.D.	PART	USE WITH HOSE ENDS: REUSABLE "PUSH ON" See Section 29	COTTON I.D.	COTTON O.D.	PART
1/4	1/2	A 54546		1/4	1/2	A 54547
3/8	5/8	A 54548		3/8	5/8	A 54549
1/2	3/4	A 54553		-	-	-

### POLYURETHANE SELF-COILING AIR HOSE


- KINK RESISTANT, LIGHT WEIGHT AND MOBILE
- SUPERIOR MEMORY, IT SNAPS BACK TO ORIGINAL SIZE
- EXCELLENT CHEMICAL, OXIDATION, HYDROLYSIS AND OZONE RESISTANCE
- 100 PSI WORKING PRESSURE AT 70°F
- 18" NON-COILED TOOL END. HOSE WILL NOT INTERFERE WITH TOOL USE.
- 360° WORKING 1/4" MALE PIPE SWIVEL FITTING ON BOTH ENDS
- TEMPERATURE -40°F TO +170°F



INSIDE DIA.	OUTSIDE DIA.	PKG.	PART
1/4	3/8	15 FEET	A 54561
1/4	3/8	25 FEET	A 54562

### FUEL LINE HOSE

- MANUFACTURED TO MEET OR EXCEED SAE J30R6, SAE J30R7 AND GM 6165M SPECIFICATIONS
- SUITABLE FOR USE WITH LEADED AND UNLEADED GASOLINE, ETHANOL AND METHANOL BASED GASOHOL AND DIESEL FUEL. DO NOT USE FOR FUEL INJECTION APPLICATION.
- CONSTRUCTED OF A NITRILE TUBE, 2-BRAID RAYON CORD REINFORCEMENT AND A HYPALON COVER
- RESISTS HEAT UP TO 257°F
- 175 PSI BURST STRENGTH



25 FOOT ROLL

INSIDE DIA.	OUTSIDE DIA.	PKG.	PART
1/4	1/2	25 FEET	A 54550
5/16	9/16	25 FEET	A 54551
3/8	5/8	25 FEET	A 54552

# DOT FITTINGS – COMPOSITE

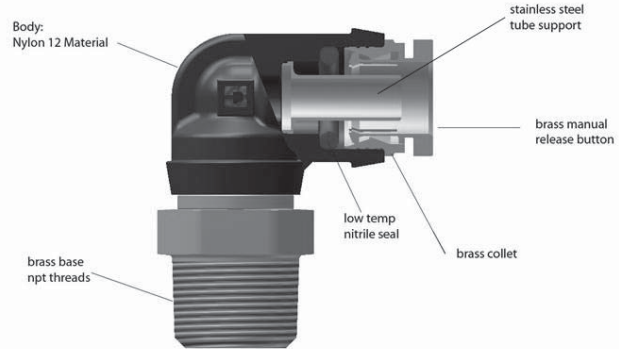
## THE FASTEST CONNECTIONS FOR COMPRESSED AIR

Instant pneumatic/compressed air connections. Automatic locking and sealing to maximum working pressure. Release collar for instant removal of tubing.

### Features

- **Optimum Flow**  
Full Flow: The gripping and sealing of the fitting is achieved using the outside diameter of the tube without deformation, compact yet no restriction in flow.
- **Immediate Seal**  
Seals in both static and dynamic applications.
- **Threads**  
Threaded bases - available in 1/8" to 1/2" NPT.
- **Buttons/Caps**  
Optional colored release buttons or caps.
- **Time Savings**  
Tube fitting assembly time is substantially reduced. Savings are on average, 80% of conventional compression fittings. The Instant Fitting System provides a 100% tubing lock. This feature eliminates the need for tightening. No special tools required for assembly.

### DOT FMVSS 571.106 SAEJ1131 SAEJ2494-3



### Technical Specifications

- **Materials**
  - Fitting Body: Brass
  - Collet: Brass
  - Tube Support: Stainless Steel
  - O-ring: BUNA N
  - Threads: Brass
- **Working Pressure:** Up to 250 psi
- **Working Temperature:** -40°F to +200°F
- **Suitable Fluids:**  
Compressed air only. Lubricated or non-lubricated.
- **Tubing:**  
Tubing used should be that specified in SAE J844 (Oct '80) which also meets NHTSA FMVSS 106.

### MALE CONNECTOR



TUBE SIZE	NPT PIPE THREAD	PART
5/32	1/8	I 44526
5/32	1/4	I 44527
3/16	1/8	I 44528
3/16	1/4	I 44529
1/4	1/8	I 44530
1/4	1/4	I 44531
1/4	3/8	I 44532
3/8	1/8	I 44533
3/8	1/4	I 44534
3/8	3/8	I 44535
3/8	1/2	I 44536
1/2	1/4	E 44537
1/2	3/8	E 44538
1/2	1/2	E 44539

### MALE RUN TEE



TUBE SIZE	NPT PIPE THREAD	PART
5/32	1/8	I 44574
5/32	1/4	I 44575
3/16	1/8	I 44576
1/4	1/8	I 44577
1/4	1/4	I 44578
1/4	3/8	I 44579
3/8	1/4	I 44580
3/8	3/8	I 44581
3/8	1/2	I 44582
1/2	1/4	E 44583
1/2	3/8	E 44584
1/2	1/2	E 44585

### MALE ELBOW



TUBE SIZE	NPT PIPE THREAD	PART
5/32	1/8	I 44540
3/16	1/8	I 44541
1/4	1/8	I 44542
1/4	1/4	I 44543
1/4	3/8	I 44544
3/8	1/4	I 44545
3/8	3/8	I 44546
3/8	1/2	I 44547
1/2	1/4	E 44548
1/2	3/8	E 44549
1/2	1/2	E 44550

# DOT FITTINGS – COMPOSITE

## MALE BRANCH TEE



TUBE SIZE	NPT PIPE THREAD	PART
5/32	1/8	I 44562
5/32	1/4	I 44563
3/16	1/8	I 44564
1/4	1/8	I 44565
1/4	1/4	I 44566
1/4	3/8	I 44567
3/8	1/4	I 44568
3/8	3/8	I 44569
3/8	1/2	I 44570
1/2	1/4	E 44571
1/2	3/8	E 44572
1/2	1/2	E 44573

## MALE "Y" CONNECTOR



TUBE SIZE	NPT PIPE THREAD	PART
5/32	1/8	I 44586
1/4	1/8	I 44587
1/4	1/4	I 44588

## FEMALE CONNECTOR



TUBE SIZE	NPT PIPE THREAD	PART
5/32	1/8	I 44551
5/32	1/4	I 44552
3/16	1/8	I 44553
1/4	1/8	I 44554
1/4	1/4	I 44555
3/8	1/4	I 44556
3/8	3/8	I 44557

## UNION



TUBE SIZE	PART
5/32	I 44589
3/16	I 44590
1/4	I 44591
3/8	I 44592
1/2	E 44593

## UNION ELBOW



TUBE SIZE	PART
5/32	I 44594
3/16	I 44595
1/4	I 44596
3/8	I 44597
1/2	E 44598

## UNION TEE



TUBE SIZE	PART
5/32	I 44393
3/16	I 44394
1/4	I 44395
3/8	I 44396
1/2	E 44397

## BULKHEAD UNION



TUBE SIZE	PART
5/32	I 44558
1/4	I 44559
3/8	I 44560
1/2	E 44561

## "Y" UNION



TUBE SIZE	PART
5/32	I 44733
1/4	I 44734
3/8	I 44735

## PLUG-IN ELBOW



TUBE SIZE	PART
1/4	I 44736

## PLUG-IN RUN TEE



TUBE SIZE	PART
1/4	I 44737

## PLUG-IN UNION TEE



TUBE SIZE	PART
1/4	I 44738

## REDUCER



TUBE SIZE	NPT PIPE THREAD	PART
5/32	1/4	I 44398
1/4	3/8	I 44399

# DOT AIR BRAKE BRASS PUSH-IN FITTINGS

GET YOUR VEHICLE CONNECTED



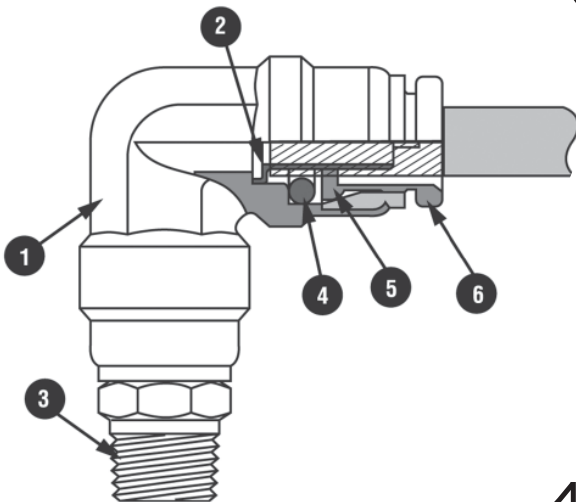
## Advantages

- Patented design of sizes 5/32" and above meet SAE J2494 and DOT FMVSS 571.106 air brake performance specifications.
- No special tools are needed to assemble. Just bottom the tubing in the fitting body for a positive seal.
- Stainless steel tube support in sizes 1/4" and above assures maximum flow and performance requirements of SAE J1131.

## Application

- Use with SAE J844 type A & B nylon tubing. Designed for all DOT truck and trailer applications.

## Inch Fittings DOT FMVSS 571.106



## Technical Data



- Working pressure from vacuum to 250 psi.
- Working temperature:
  - 40° F to +200° F for 5/32", 1/4", 3/8", 1/2 fittings
  - 40° F to +225° F for 5/8" fittings
- Buna N (Nitrile) O-Rings.



## Features



1. All brass body.
2. Stainless steel tube support assures maximum flow and performance characteristics.
3. Elbows and tees are available in swivel or rigid dryseal pipe threads. Swivels are designed for alignment purposes only.
4. Lubricated O-Ring Seal (Buna N) insures a quick, easy and positive seal.
5. Innovative Collet design insures positive grip on tubing.
6. Release button offers quick and easy disconnections.


Chromate air brake push-in fittings can be used in the same applications where you currently use NTA style compression air brake fittings. All sizes of these fittings 1/4" and above meet the requirements of DOT FMVSS 571.106 as well as SAE J1131, J2494-1, and J2494-3. Sizes less than 1/4" are designed for use in pressure protected air accessory lines that are isolated from the air brake system.


# DOT AIR BRAKE BRASS PUSH-IN FITTINGS



STRAIGHT MALE CONNECTOR			
			
TUBE SIZE	NPT PIPE THREAD	PART	
5/32	1/16	E	44742
5/32	1/8	E	44743
1/4	1/8	I	44739
1/4	1/4	I	44740
1/4	3/8	E	44741
3/8	1/8	E	44744
3/8	1/4	E	44745
3/8	3/8	E	44746
3/8	1/2	E	44747
1/2	1/4	E	44748
1/2	3/8	E	44749
1/2	1/2	E	44750
5/8	1/8	B	44906
5/8	1/4	B	44907



STRAIGHT UNION		
		
TUBE SIZE	TUBE SIZE	PART
5/32	5/32	B 44778
1/4	1/4	E 44779
3/8	3/8	B 44780
1/2	1/2	B 44781
5/8	5/8	B 44908


MALE SWIVEL BRANCH TEE		
		
TUBE SIZE	NPT PIPE THREAD	PART
1/4	1/4	B 44771
3/8	1/4	B 44772
3/8	3/8	B 44773
1/2	3/8	A 44774



FEMALE ELBOW		
		
TUBE SIZE	NPT PIPE THREAD	PART
1/4	1/4	E 44798



MALE SWIVEL RUN TEE		
		
TUBE SIZE	NPT PIPE THREAD	PART
1/4	1/8	B 44782
1/4	1/4	B 44783
3/8	1/4	B 44784
3/8	3/8	B 44785
1/2	3/8	A 44786
1/2	1/2	A 44787



UNION TEE			
			
TUBE SIZE	TUBE SIZE	TUBE SIZE	PART
1/4	1/4	1/4	B 44775
3/8	3/8	3/8	B 44776
1/2	1/2	1/2	B 44777
5/8	5/8	5/8	B 44909


MALE ELBOW		
		
TUBE SIZE	NPT PIPE THREAD	PART
5/32	1/8	E 44751
1/4	1/8	E 44752
1/4	1/4	E 44753
1/4	3/8	E 44754
3/8	1/4	E 44755
3/8	3/8	E 44756
3/8	1/2	E 44757
1/2	3/8	B 44758
1/2	1/2	B 44759
5/8	3/8	B 44910
5/8	1/2	B 44911

MALE BULKHEAD CONNECTOR		
		
TUBE SIZE	NPT PIPE THREAD	PART
3/8	1/2	B 44788
1/2	1/2	B 44789

MALE SWIVEL ELBOW		
		
TUBE SIZE	NPT PIPE THREAD	PART
1/4	1/8	E 44763
1/4	1/4	E 44764
1/4	3/8	E 44765
3/8	1/8	B 44766
3/8	1/4	B 44767
3/8	3/8	B 44768
1/2	3/8	B 44769
1/2	1/2	B 44770
5/8	3/8	B 44913
5/8	1/2	B 44914

45° MALE SWIVEL ELBOW		
		
TUBE SIZE	NPT PIPE THREAD	PART
5/8	1/2	B 44912

45° MALE ELBOW		
		
TUBE SIZE	NPT PIPE THREAD	PART
1/4	1/8	B 44790
1/4	1/4	B 44791
3/8	1/8	B 44792
3/8	1/4	B 44793
3/8	3/8	B 44794
1/2	1/4	B 44795
1/2	3/8	B 44796
1/2	1/2	B 44797
5/8	3/8	B 44915
5/8	1/2	B 44916

UNION ELBOW		
		
TUBE SIZE	TUBE SIZE	PART
1/4	1/4	B 44760
3/8	3/8	B 44761
1/2	1/2	B 44762



## HIGH STRENGTH FLUX-CORED ALUMINUM BRAZING ALLOY

### GENERAL PURPOSE TORCH BRAZING OF ALL WELDABLE ALUMINUM

**FEATURES:**

A specially engineered alloy with flux core center for faster, easier joining of all aluminum and aluminum alloys. Provides deep penetration in tight joints. Excellent for out of position brazing and build-up deposits.

**TYPICAL APPLICATIONS:**

- Motor Housings
- Tools
- Tanks
- Vats
- Ladders
- Utensiles
- Rails
- Beverage Cases
- Pulleys
- Sheaves

**TECHNICAL DATA:**

Tensile Strength: 30,000 PSI

**WELDING TECHNIQUES:**

Clean weld area, removing plating or anodized finish. Leave gap approximately 1/6". For thicker parts, cracks or butt joints, bevel a 60° to 70° vee. Use a carburizing flame (excess acetylene with oxygen) and heat work with flame 1" to 3" from surface. Touch rod to weld area depositing small amounts of alloy and allow to flow out and bond to base metal.

SIZE	1/8"		
PART	E	8745	



## EASY-FLOW ALUMINUM ALLOY WIRE

### FOR JOINING, FABRICATING AND REPAIRING OF MOST ALUMINUM GRADES

**FEATURES:**

Provides exceptional strength and ductility for general purpose joining, fabricating and repairing of most aluminum grades. Minimum preparation and low melt (950° - 1010° F) for ease of application. Thin flowing for tight fits. Perfect color match.

**TECHNICAL DATA:**

Tensile Strength: 35,000 PSI  
For torch or tig welding.

**TYPICAL APPLICATIONS:**

- Poles
- Frames
- Bus Bars
- Sign Posts
- Guard Rails
- Furniture
- Structural Parts
- Housings

**WELDING TECHNIQUES:**

Clean joint with wire brush removing grease and oxides. Apply Auralloy 620 Flux. Using excess acetylene (carburizing) flame, keep torch in constant motion to uniformly heat area. When flux turns to clear liquid, start adding alloy to the joint.

SIZE	1/16"	3/32"	1/8"
PART	i   8750	i   8751	i   8752



## EZ-WELD ALUMINUM ALLOY

### BRAZING ROD FORMULATED FOR HIGH STRENGTH FABRICATION AND ALUMINUM REPAIR

**FEATURES:** Joints stronger than parent metal. Easy machining of welded areas. Non-corrosive joints. Low heat requirement (propane torch application). Superior strength and adhesion provides permanent seal and strength when subjected to extreme pressure. Contains no lead or cadmium.

**TYPICAL APPLICATIONS:** AUTOMOTIVE: Radiators, manifolds, transmission housings, pump housings, carburetors, motorcycles, running boards, mobile homes, recreational vehicles. TRADES: Plumbing, heating and A/C, power tools, farm equipment, storm shutters, screen enclosures, satellite dishes, sign companies, aluminum awnings, gutters and down spouts. MARINE: Hulls, leaking rivets, props, brass & bronze fittings, engine parts. HOUSEHOLD: Lawn furniture, doors/windows, bicycles, fishing rods, antiques.

**WELDING TECHNIQUES:** Clean the surface with a stainless steel brush. Heat the parent metal surface, NOT the E-Z Weld Aluminum Alloy. Apply the E-Z Weld to the heated surface. Keep flame in motion. Allow weld to air-cool naturally. Never plunge into water.

**TECHNICAL DATA:**

Tensile Strength (lbs./sq. inch): 47,000 PSI  
Melting Range: 715°F - 730°F  
Density: 25  
Elongation: 3%  
Compression Strength (lbs./sq. inch): 60-75,000  
Shear Strength (lbs./sq. inch): 34,000  
Electrical Conductivity: 24.9% of cu  
Impact Strength: (Charpy) 4 ft. lbs. to break 1/4" bar  
Thermal Conductivity: .24 cal/cu.cm  
Hardness: (Brinell 100)  
Corrosion Penetration: 300 x 10 in 11-R  
Ductility: Good

SIZE	1/8"		
PART	E	8733 (includes stainless steel wire brush P/N 41340)	

# AURALLOY 900

RESEARCH "GRANITE"

## HARD SURFACING ELECTRODE



### SUPERIOR IMPACT AND ABRASION RESISTANCE

**FEATURES:** A truly unique electrode combining unsurpassed weldability plus super impact and abrasion resistance and high hardness. It is the ideal alloy combination where hardness and toughness are required on carbon and alloy steels, manganese steels and cast iron.

**TECHNICAL DATA:**

Hardness: RC 56-60  
Use any AC or DC coated electrode power sources.  
On DC use reverse polarity.

**TYPICAL APPLICATIONS:**

Crusher jaws, hammers, bucket lips and teeth. Wear plates, pins, axles, shafts, cams, eccentrics.

**WELDING TECHNIQUES:** Prepare weld surface by chamfering to remove old overlays and loosely adhering metal. Use a cushion, if required. Deposit the electrode using any technique applicable such as stringer beading or weaving up to 4X. Allow each layer to cool somewhat before continuing. Remove slag between passes.

SIZE	1/8"	5/32"
AMPERAGE	80-135	120-160
PART	8735	8736

# AURALLOY 910

RESEARCH

## HARD FACING CHROMIUM CARBIDE TUBULAR ELECTRODE



### FOR APPLICATIONS SUBJECT TO HIGH ABRASION, COMPRESSIVE IMPACT LOADS AND EROSION

**FEATURES:** For manual application to large parts where deposition rate and job completion times are paramount. Easy to use and offers the greatest range of carbide bearing alloys to overcome a great variety of wear caused by abrasion, erosion, impact and heat. Designed for all position welding and can be used at low amperature to hardface thin edges on tillage tools and similar parts. A proprietary coating formulation is completely moisture-resistant and will survive storage in damp conditions for years. Can be applied to cast iron, manganese steel and mild steel without preheat; high carbon and alloy steels may require preheat.

**TECHNICAL DATA:**

Hardness: RC 55-60  
Use with either AC or DC welding power sources.  
Amperage: 70-125

**TYPICAL APPLICATIONS:** Ideal for hardfacing parts made from austenitic manganese steel. Dredge bucket lips, crusher jaws, crusher mantles and liners, manganese steel swing hammers, quarry screen plates, grizzly bars and feeder spots, and shovel buckets.

SIZE	1/4" x 18"	
PART	J	8739

# AURALLOY

RESEARCH

## HOLD-IT™ JIGGING / HEAT DAM PUTTY

- HOLDS PARTS FIRMLY IN PLACE FOR "HANDS FREE" WELDING, BRAZING AND SOLDERING
- PROTECTS MATERIAL SURFACES FROM HEAT
- ELIMINATES HEAT DAMAGE SUCH AS BUCKLING, WARPING, DISTORTION AND DISCOLORATION
- WITHSTANDS TEMPERATURES OF 3,000°F
- MAINTAINS SHAPE WHEN HEATED
- USE ON ANY HORIZONTAL, VERTICAL OR OVERHEAD SURFACE



**DIRECTIONS:** Apply a thin layer of Hold-It™ putty, covering the entire area to be protected. In extreme heat, use a thicker covering. If surface is affected by moisture, use a sheet of impervious plastic as a barrier and then apply Hold-It™ putty. When using as a jiggling putty, treat each part to be held separately by placing in individual mounds of putty. Wipe off and clean with water.

SIZE	2 LB. CONTAINER	
PART	A	8800

# AURALLOY

RESEARCH

## BRAZING/ SOLDERING FLUXES

**500 FLUX: LIQUID SOLDERING** – For difficult soldering applications. Especially active for use on stainless related alloys. Non-fuming. Completely water soluble. Use with Auralloy 500 Silver Solder when additional flux is required.

**620 FLUX: ALUMINUM BRAZING (POWDER)** – Becomes active well below the melting temperature of the aluminum and produces maximum flow of the brazing alloy. Easy to use as a powder or paste with Auralloy 620 aluminum brazing rods.

**700 FLUX: SILVER BRAZING (LIQUID)** – Dissolves surface oxides and protects joint area to improve bonding and wetting action of all silver brazing wires. Particularly useful when joining stainless steel and high alloy steels. When additional power is required use with Auralloy 700 silver brazing rods.

**825 FLUX: GENERAL PURPOSE (LIQUID PASTE)** – "Wide Range" brazing flux designed to improve results when joining cast iron, malleable iron, copper, brass, bronze and steel. For use in applications not requiring specialized fluxes.

	500 FLUX	620 FLUX	700 FLUX	825 FLUX
SIZES	1 Pint Bottle	6 oz. Jar	1 lb. Jar	8 oz. Jar
PART	A 8787	A 8790	A 8796	A 8798

# AURALLOY ACCESSORIES

## WELDER'S CHIPPING HAMMER

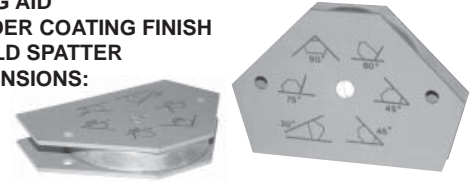
- SOLID STEEL
- SHARP 1" BLADE ON ONE END, TAPERS TO A POINT ON THE OTHER END
- COIL SPRING HANDLE FOR SHOCK AND HEAT DISSIPATION
- RUST RESISTANT, BLACK OXIDE FINISH



BLADE	LENGTH	HEAD WEIGHT	PART	
Horizontal	10*	16 oz.	A	8867
Vertical	10*	16 oz.	A	8868

## WELDING MAGNET

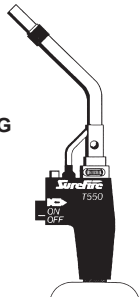
- MULTIPLE ANGLES: 30°, 45°, 60°, 75° and 90°
- IDEAL WELDING AID
- SPECIAL POWDER COATING FINISH TO RESIST WELD SPATTER
- OVERALL DIMENSIONS: 3-3/4 X 2-1/2



DESCRIPTION	PART
Multi-Angle Clamping Welding Magnet	A 8869

## SUREFIRE® PROPANE TORCH

- DESIGNED FOR PROFESSIONAL USE\*
- IGNITES AUTOMATICALLY
- INSTANT ON – INSTANT OFF!
- NO MATCHES!
- VARIABLE FLAME ADJUSTMENT
- TRIGGER LOCK PROVIDES CONTINUOUS BURNING
- IGNITES AND BURNS UPSIDE DOWN
- 3400°F AT TIP – BRAZE AND SOLDER COPPER PIPE, LIGHT STEEL AND SHEET METAL
- PRESSURE REGULATOR PROVIDES EVEN FLOW OF GAS IN ALL POSITIONS
- SAFE AND EASY TO USE



\*Not available in mass-market retail stores

DESCRIPTION	PART
Surefire® Self-Igniting Propane or Mapp Torch	A 8866

## MAPP® GAS CYLINDER

- FOR BRAZING, WELDING OR SOLDERING – BURNS HOTTER THAN PROPANE
- CYLINDER HAS 1" - 20 THREADED FUEL OUTLET VALVE THAT FITS ALL STANDARD PROPANE TORCHES
- NON-REFILLABLE CYLINDER MEETS DOT 39 SPECIFICATIONS
- 16 OZ.



DESCRIPTION	PART
16 oz. Mapp® Gas Cylinder	A 8875

## SOLDER PRO 180™

- EQUIVALENT TO A 185-WATT SOLDERING IRON AND 2500°F TORCH
- POWERED BY PATENTED RECHARGEABLE LIQUID ENERGY CELL (LEC)
- COMES WITH 3.4MM CHISEL SOLDERING TIP AND BLOW TORCH HEAD, 2 LECs
- SAFELY TRAVELS ANYWHERE WITHOUT HAZARD
- CORDLESS, SIMPLE AND SAFE TO OPERATE IN ALMOST ANY CONDITION
- READY TO USE IN 30 SECONDS AFTER IGNITION
- TIPS CHANGE IN SECONDS FOR SOLDERING GUN, TORCH OR HOT AIR BLOWER
- REMOVABLE LEC™ CONTAINS POWER FOR UP TO 120 MINUTES
- RECHARGE FROM BUTANE FUEL AVAILABLE ALMOST ANYWHERE
- FREE STANDING – DOES NOT REQUIRE SEPARATE STAND

### SPECIFICATIONS:

Length w/soldering tip ... 203mm (8in)  
 Weight (with LEC™) ..... 560 g  
 Approximate temp. .... 250-550°C  
     soldering tip (480-1000°F)  
 Torch ..... 1300°C (2500°F)  
 Gas container capacity . 40 ml  
 Operating Time ..... 100 min @  
     (one gas filling) . mid setting



DESCRIPTION	PART	TIP STYLE	PART	TIP STYLE	PART
Solder Pro 180™ with LEC™ Power Technology	A 8842	Heat Blower	A 8842PS70	Deflector	A 8842PS80

## EXCALIBUR BUTANE SOLDER / TORCH KIT

- BUTANE POWERED, SELF-IGNITING, PORTABLE, MULTI-FUNCTION HEAT TOOL
- 30W TO 100W POWER RANGE
- AUTOMATIC PIEZO IGNITION
- COMPLETE PORTABILITY
- COMFORTABLE GRIP
- RAPID TIP HEAT-UP
- COMPLETE WITH:

### SPECIFICATIONS:

Approximate Temperatures:  
 Soldering Tip ..... 250-500°C (480-950°F)  
 Torch ..... 1300°C (2400°F)  
 Hot Knife ..... 200-350°C (400-660°F)  
 Heat Blower ..... 250-500°C (480-950°F)  
 Gas Container Capacity ..... 15 grams  
 Operating Time (one gas filling) ..... 70 min at mid-setting



P/N 8843

DESCRIPTION	PART
EXCALIBUR BUTANE SOLDER / TORCH KIT	A 8843



# SAFETY ACCESSORIES

## PROTECTION FOR INDUSTRIAL JOBS

### BIONIC® SHIELD

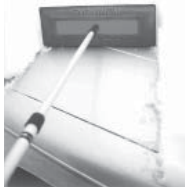
ULTIMATE COMFORT AND SUPERIOR PROTECTION  
**THE BIONIC SHIELD REDEFINES A HIGHER LEVEL OF TECHNOLOGY IN THE FACESHIELD CATEGORY. ITS ADVANCED ERGONOMIC DESIGN COMBINES SUPERIOR PROTECTION AND ALL-DAY COMFORT WITH THE KIND OF EASY-TO-USE FEATURES THAT WORKERS DESIRE.**

- ENHANCED PROTECTION FROM AIRBORNE DEBRIS
- EXCELLENT OPTICS AND INCREASED VISIBILITY
- EASILY REPLACEABLE VISOR WITH DUAL POSITION CHOICES
- SECURE VISOR ATTACHMENT
- LIGHTWEIGHT AND BALANCED, ERGONOMIC DESIGN FOR EXTENDED USE
- COMFORTABLE CELL FOAM ON BACK OF HEADGEAR
- BREATHABLE, REMOVEABLE, WASHABLE HEADBAND
- BLACK MATTE FINISH
- COMFORTABLY WORN WITH MOST GOGGLES AND RESPIRATORS
- FACESHIELD OFFERS SECONDARY PROTECTION AND MUST BE WORN WITH SPECTACLES OR GOGGLES
- PERFECT FOR WORKERS EXPOSED TO FALLING OR FLYING OBJECTS, IMPACT, CHEMICAL SPLASH, AND AIRBORNE DEBRIS
- HARDHAT ACCESSORY IS COMPATIBLE WITH MULTIPLE HARDHATS, INCLUDING WILLSON® AND MOST MAJOR COMPETITOR STYLES
- LEAVES SLOTS FREE
- IS 100% DIELECTRIC – AND NO METAL PARTS



DESCRIPTION	PART
Bionic Shield	A 8876
Bionic Shield Replacement Visor	A 8877
Bionic Shield Replacement Visor (Shaded 5.0)	A 8878
Bionic Shield Hardhat Adapter	A 8879

### VEHICLE SNOW REMOVER



**PUSH SNOW AWAY FAST!  
 WILL NOT SCRATCH PAINT  
 OR LEAVE SCUFF MARKS!**



- Quickly sweep off snow and push it away
- Oversized head safely removes snow from vehicles, trailers, awnings, spa covers, and all other delicate surfaces
- Push heavy, wet snow off the roof, hood, and trunk without scratching the paint, leaving scuff marks, or harming the finish or fabric
- Features the same high grade and durable foam, crosslinked polyethylene, used by auto dealers to clear dozens of cars after snow storms
- Telescoping handle
- Made in the USA



DESCRIPTION	PART
Vehicle Snow Remover	A 78029

# GLOVES

## SUPER GRIP GLOVES

- Heavy coat premium yellow PVC
- Surface of granulated plastic particles for super grip & long wear
- Superior resistance to cutting
- 12" length
- Uses: roto-rooter, fishing, water & sewer work, plywood manufacturing, heavy parts



DESCRIPTION	PART
SUPER GRIP GLOVES	A 59048

## GRIP PVC JERSEY LINED GLOVES

- Green, fully coated PVC work gloves
- Features a jersey lining with superior sandpaper grip finish



DESCRIPTION	PART
GRIP PVC JERSEY LINED GLOVES	F 59045

## PVC SAFETY ORANGE FOAM LINED GLOVES

- PVC coating resists chemicals, grease and oils
- Foam lining for optimum warmth and comfort
- Knit wrist



DESCRIPTION	PART
PVC GLOVES (LARGE)	C 59047
PVC GLOVES (SMALL)	C 59047SMALL

## NEOPRENE GLOVES

- Multi-dipped in premium-grade neoprene (PAIR)
- Offers superior durability against acids, caustics, oils, greases and many solvents
- Provides extra protection against cuts and punctures
- Rough finish offers great gripping capabilities



DESCRIPTION	PART
ROUGH FINISH NEOPRENE GLOVES	A 59033

## PREMIUM KNIT RUBBER COATED PALM

- White knit for comfort
- Blue latex palm coated for excellent grip
- Provides superior fit and dexterity
- Resists cuts and abrasion



DESCRIPTION	PART
PREMIUM KNIT RUBBER COATED (LARGE)	C 59044
PREMIUM KNIT RUBBER COATED (X-LARGE)	C 59044XL

## CUT RESISTANT GLOVES - KEVLAR®/STAINLESS STEEL COMPOSITE

- Cut resistance is ASTM level 4/CE level 5
- Blend of Kevlar®, wire-core steel and Cordura nylon for stellar cut protection
- Over a quarter-mile of steel in each glove
- Cut and abrasion-resistance is twice that of a regular Kevlar® glove
- PU coating has a very low particulate shed, offers good grip
- High abrasion resistance with great comfort and dexterity



### Applications

Sharp Steel • Circuit Boards • Automotive • Metal Fabrication • Assembly • Sheet Metal Work

DESCRIPTION	PART
Cut Resistant Gloves (Medium)	A 59055MED
Cut Resistant Gloves (Large)	A 59055LARGE
Cut Resistant Gloves (Extra Large)	A 59055XL

## GLOVE DISPENSER

- STORE YOUR BOXES OF GLOVES IN AN EASILY ACCESSIBLE LOCATION
- HOLDS MOST POPULAR BRANDS OF GLOVES
- STAINLESS STEEL TENSION SPRING KEEPS BOXES SECURELY IN PLACE
- DISPENSERS HAVE TWO 1/2" SLOTTED MOUNTING HOLES FOR WALL MOUNTING (FASTENERS INCLUDED)
- DURABLE AND ATTRACTIVE WHITE POWDER COATED FINISH IS RUST AND ACID RESISTANT
- DIMENSIONS: 5-11/16" W x 3-13/16" D x 10" H



DESCRIPTION	PART
Glove Dispenser	A 50020

# GLOVES – NITRILE

## NITRILE CHEMICAL RESISTANT GLOVES

- Resistant to most solvents and parts cleaners
- Stronger and more puncture resistant than regular latex gloves
- Hypoallergenic for hands sensitive to latex
- Snug fit helps keep liquids from leaking on hands
- Disposable, convenient, single-use saves clean-up time
- Made of 100% non-sterile nitrile polymer



100 GLOVES PER BOX

DESCRIPTION	PART
BLUE NITRILE GLOVES (X-LARGE)	A 59035
BLUE NITRILE GLOVES (LARGE)	A 59034
BLUE NITRILE GLOVES (MEDIUM)	A 59034MED
BLUE NITRILE GLOVES (SMALL)	A 59034SMALL

## NITRILE CHEMICAL RESISTANT GLOVES

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- Disposable, convenient, single-use saves clean-up time
- Made of 100% non-sterile nitrile polymer



100 GLOVES PER BOX

DESCRIPTION	PART
BLACK NITRILE GLOVES (M)	A 59054MED
BLACK NITRILE GLOVES (L)	A 59054LARGE
BLACK NITRILE GLOVES (XL)	A 59054XL
BLACK NITRILE GLOVES (XXL)	A 59054XXL

## NITRILE GLOVES – FLOCK LINED

- Provides excellent protection against cuts, abrasion, punctures
- Superior resistance to a broad range of solvents, animal fats and other chemicals
- Case hardened finish enhances chemical and abrasion resistance, while making them easier to pull on and off
- Non-slip grip makes wet work easier and safer
- Ergonomic design maximizes comfort

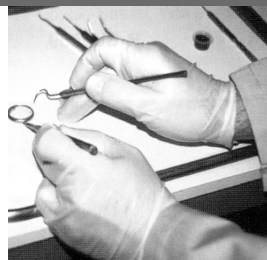


DESCRIPTION	PART
NITRILE GLOVES – FLOCK LINED (LARGE)	F 59037
NITRILE GLOVES – FLOCK LINED (MEDIUM)	F 59037MED

# GLOVES – LATEX

## INDUSTRIAL LATEX GLOVES

- Industrial-use, pre-powdered glove
- Wrist-length, reinforced rolled cuffs
- 5 mils thick
- Stretches to fit
- Excellent sensitivity and touch



(PAIR)  
100/BOX

DESCRIPTION	PART
LATEX DISPOSABLE GLOVES (LARGE)	A 59032
LATEX DISPOSABLE GLOVES (X-LARGE)	A 59032XL

## BLUE LIGHTNING GLOVES – LATEX

### BLUE LATEX / POWDER FREE APPROVED FOR MEDICAL USE

- Extra long 12" cuff for added protection
- 15 mils thick – super strength
- Additionally processed to remove extra latex proteins from the glove, which may reduce the risk of latex allergies.
- Meets or exceeds the emergency medical glove requirements of NFPA 1999, Standard on Protective Clothing for Emergency Medical operations, 2013 edition.
- Textured fingertips and smooth palm



50 GLOVES  
PER BOX

DESCRIPTION	PART
BLUE LIGHTNING GLOVES (X-LARGE)	A 59215XL
BLUE LIGHTNING GLOVES (LARGE)	A 59215LARGE
BLUE LIGHTNING GLOVES (MEDIUM)	A 59215MED
BLUE LIGHTNING GLOVES (SMALL)	A 59215SMALL

# ABSORBENTS

## FLUID ABSORBENTS – UNIVERSAL

Universal Rolls, Pads, Socks, and Drum Tops are made with Q-CEL™ technology! Q-CEL™ technology is the most significant absorbent development in almost 20 years! Industry Leading... You can take care of almost 90% of your industrial spill control with just a few absorbents.



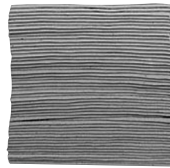
### Universal Absorbent Rolls

The market leader in absorbency vs. major competitors. Use for oil and water applications only, not for use with aggressive acids or caustics. The rolls have perforated tear-off sheets every 19". Made with recycled fibers. Class A fire retardant.



### Universal Absorbent Pads

The market leader in absorbency vs. major competitors. Use for oil and water applications only, not for use with aggressive acids or caustics. Made with recycled fibers. Class A fire retardant.



### Universal Absorbent Socks

Designed to meet the absorbency that you expect. Our socks provide great moldability in the workplace, ensuring the perfect fit for each job. Packed with our recycled fibers to help save our environment and yet is still a fast-acting sorbent. Definitely one of our best products yet! Use for oil and water applications only, not for use with aggressive acids or caustics. Made with recycled fibers. Class A fire retardant.



### Drum Tops

Big bulk, laminated Drum Top Pads, keep liquids from getting to the floor so there is no messy or hazardous cleanup. Use for oil and water applications only, not for use with aggressive acids or caustics. Made with recycled fibers. Class A fire retardant.



DESCRIPTION	PART
Universal Absorbent Roll, 28.5" x 125', perforated	A 28222
Universal Absorbent Socks, Gray Socks, 3" x 45"	I 28218
Universal Absorbent Pads, Gray Pads, 15" x 19", Laminated – Standard	T 28219
Drum Top Absorbent 22"	I 28224

## FLUID ABSORBENTS – UNIVERSAL SPILL KIT – PORTABLE 10" BUCKET

### Universal Spill Kit

Designed to handle small and medium spills. Universal absorbents are packed inside our patented bucket to keep the contents inside safe from liquids. Use for oil and water applications only, not for use with aggressive acids or caustics. Made with recycled fibers. Class A fire retardant.

### Spill Kit Contents:

- 6 Universal Pads (Basic Version)
- 2 Universal Socks
- 1 Hazardous Waste Disposal Bag (with plastic tie)
- 1 Pair Industrial Gloves



DESCRIPTION	PART
Universal Spill Kit	A 28230

# ABSORBENTS – OIL ONLY

## OIL EATER ABSORBENT DRIP PAN

The new Oil Eater Absorbent Drip pan is designed for leaks that occur in tight spaces – such as under machinery and pipes – and are too big for an absorbent pad. The Drip Pan is made of sturdy plastic and houses an eco-friendly absorbent pillow made of plant fibers and other renewable resources. When soiled, the pillow is easily removed and replaced with a new one.



### DESCRIPTION

### PART

Drip Pan (10" x 12" x 2")

A 28231

Replacement Pillow

A 28232

## OIL ONLY ROLLS

- Oil Only Rolls are made with meltblown polypropylene.
- They are a standard grade absorbent used for oil spills.
- The rolls have perforated tear-off sheets every 19".



### DESCRIPTION

### PART

Oil Only Absorbent Roll, 36" x 130', Perforated

A 28223

## OIL ONLY SPILL CONTAINMENT KIT – PORTABLE FIVE-GALLON PAIL

Take everything you need to clean up hazardous materials directly at the spill site.

### Includes:

- 5 sorbent socks
- 5 sorbent sheets
- One pair of nitrile gloves
- Polyethylene pail with cover

### Features and Benefits

- Oil only kit – Will not absorb water
- Ideal for service vehicles and for other confined areas
- Use in multiple locations
- Compact – Easy storage
- Light weight: 12 lbs
- Helps you in complying with EPA 40 CFR263.30 (a)



### DESCRIPTION

### PART

Oil Only Spill Containment Kit

A 28228

# ABSORBENTS – RAILROAD CONTAINMENT

## TRACK MAT – RAILROAD CONTAINMENT ABSORBENT

**For preventing or controlling oil spills, leaks, and drips,  
The Track Mat is capable of absorbing nearly three gallons  
of oil or other petroleum products per square yard.**

Our Track Mat is the heaviest, thickest and most absorbent barrier mat available. Its unique 3-ply construction includes an oil only polypropylene core, surrounded by an impenetrable barrier film that prevents absorbed liquids from leaching out. It also has a UV resistant cover-stock, providing an outdoor life of 12 to 18 months.

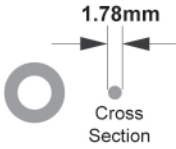
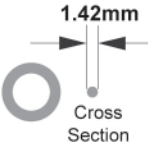
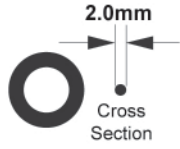
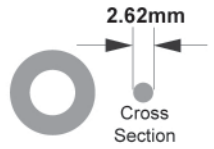
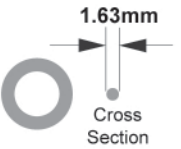

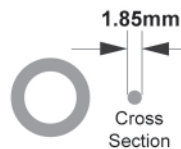
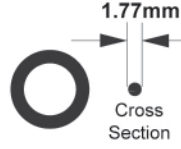
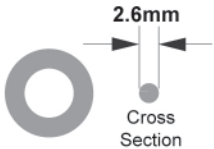
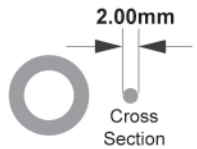
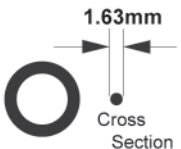
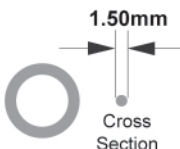


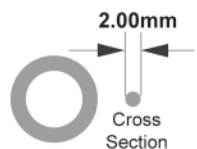
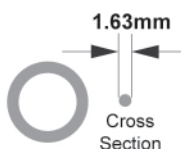
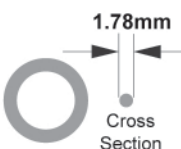
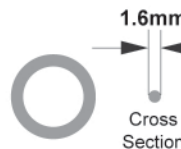
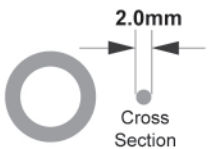
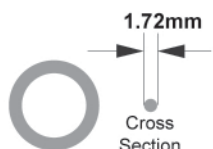
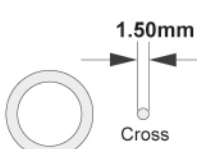
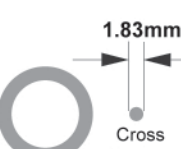
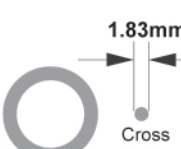

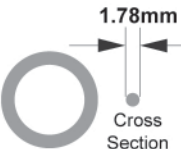
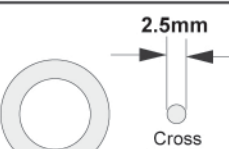
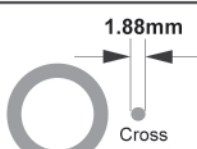

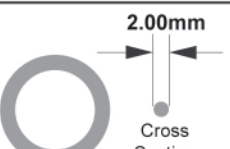
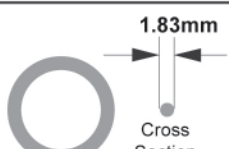
The Track Mat was originally designed for use between and outside railroad tracks, it is also widely used by transportation companies, utilities, refineries, steel mills, and in other environments in which a high absorbency barrier is required.



DESCRIPTION	PART	
Track Mat Inner Roll, 59" x 100'	A	28226
Track Mat Outer Roll, 19" x 100'	B	28227

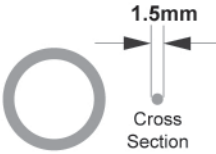
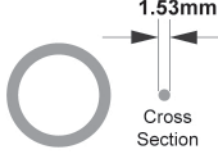
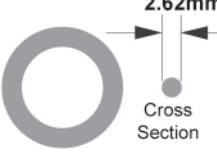
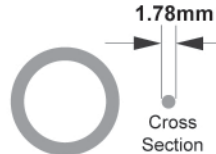
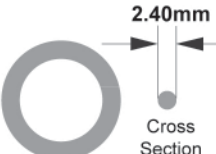
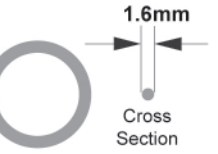
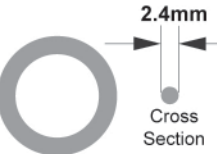

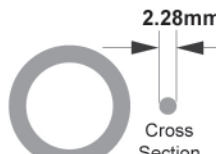
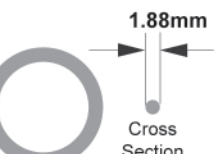
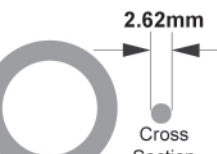
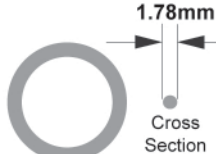
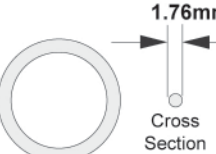
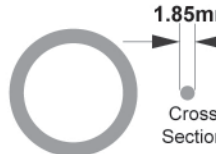
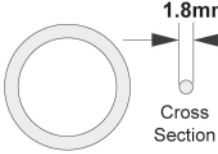
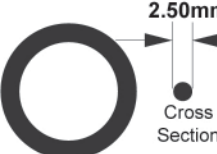



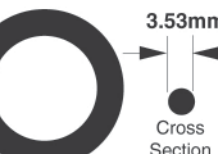
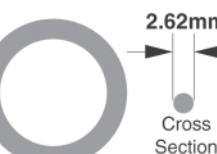

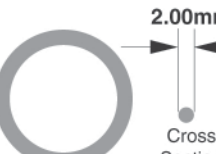
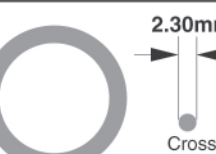

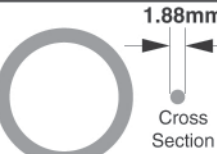

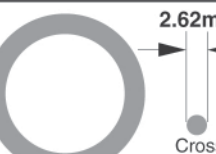
# A/C SERVICE COMPONENTS

## R12 AND R-134a COMPATIBLE A/C O-RINGS

 <p><b>1.78mm</b> Cross Section</p> <p><b>P/N 59745</b> CAPILLARY TUBE O-RING Package Quantity: 1</p>	 <p><b>1.42mm</b> Cross Section</p> <p><b>P/N 59746</b> NISSAN 6MM STV, EXP VALVE O-RING Package Quantity: 1</p>	 <p><b>2.0mm</b> Cross Section</p> <p><b>P/N 59747</b> HYUNDAI SERVICE O-RING Package Quantity: 1</p>	 <p><b>2.62mm</b> Cross Section</p> <p><b>P/N 59748</b> # 6 GM CAPTIVE O-RING Package Quantity: 1</p>	 <p><b>1.63mm</b> Cross Section</p> <p><b>P/N 59749</b> NISSAN 16MM HOSE FITTING O-RING Package Quantity: 1</p>
 <p><b>1.78mm</b> Cross Section</p> <p><b>P/N 59750</b> NISSAN M8 EXPANSION VALVE O-RING Package Quantity: 1</p>	 <p><b>1.85mm</b> Cross Section</p> <p><b>P/N 59751</b> NISSAN METRIC SERVICE O-RING Package Quantity: 1</p>	 <p><b>1.77mm</b> Cross Section</p> <p><b>P/N 59752</b> SUBARU / MAZDA FILTER DRIER/SRVC O-RING Package Quantity: 1</p>	 <p><b>2.6mm</b> Cross Section</p> <p><b>P/N 59753</b> JAGUAR SERVICE O-RING Package Quantity: 1</p>	 <p><b>2.00mm</b> Cross Section</p> <p><b>P/N 59754</b> GENERAL MOTORS ORIFICE TUBE O-RING Package Quantity: 1</p>
 <p><b>1.63mm</b> Cross Section</p> <p><b>P/N 59755</b> GM METRIC ORIFICE TUBE O-RING Package Quantity: 1</p>	 <p><b>1.50mm</b> Cross Section</p> <p><b>P/N 59756</b> M7 TOYOTA/IMPORT HOSE FITTING/DRIER O-RING Package Quantity: 1</p>	 <p><b>2.31mm</b> Cross Section</p> <p><b>P/N 59757</b> RANGE ROVER SERVICE O-RING Package Quantity: 1</p>	 <p><b>1.81mm</b> Cross Section</p> <p><b>P/N 59758</b> FORD #6 METRIC SPRING LOCK FTG O-RING Package Quantity: 1</p>	 <p><b>2.00mm</b> Cross Section</p> <p><b>P/N 59759</b> MERCEDES R-134A SERVICE O-RING Package Quantity: 1</p>
 <p><b>1.63mm</b> Cross Section</p> <p><b>P/N 59760</b> FORD ORIFICE TUBE O-RING Package Quantity: 1</p>	 <p><b>1.78mm</b> Cross Section</p> <p><b>P/N 59761</b> #6 HOSE FITTING/FILTER DRIER O-RING Package Quantity: 1</p>	 <p><b>1.6mm</b> Cross Section</p> <p><b>P/N 59762</b> JAGUAR SERVICE O-RING Package Quantity: 1</p>	 <p><b>2.0mm</b> Cross Section</p> <p><b>P/N 59763</b> FORD PRESSURE CYCLING SWITCH O-RING Package Quantity: 1</p>	 <p><b>1.72mm</b> Cross Section</p> <p><b>P/N 59764</b> JAGUAR SERVICE O-RING Package Quantity: 1</p>
 <p><b>1.50mm</b> Cross Section</p> <p><b>P/N 59765</b> VOLVO SERVICE O-RING Package Quantity: 1</p>	 <p><b>1.83mm</b> Cross Section</p> <p><b>P/N 59766</b> GM LOW SIDE PORT O-RING Package Quantity: 1</p>	 <p><b>1.83mm</b> Cross Section</p> <p><b>P/N 59767</b> HIGH PRESSURE RELIEF VALVE O-RING Package Quantity: 1</p>	 <p><b>2.62mm</b> Cross Section</p> <p><b>P/N 59768</b> #8 GM CAPTIVE O-RING Package Quantity: 1</p>	 <p><b>1.78mm</b> Cross Section</p> <p><b>P/N 59769</b> GM &amp; FORD PRES CYCLG SWITCH O-RING Package Quantity: 1</p>
 <p><b>2.5mm</b> Cross Section</p> <p><b>P/N 59770</b> VOLVO SERVICE O-RING Package Quantity: 1</p>	 <p><b>1.88mm</b> Cross Section</p> <p><b>P/N 59771</b> GM 1/2" DUAL METRIC O-RING Package Quantity: 1</p>	 <p><b>1.85mm</b> Cross Section</p> <p><b>P/N 59772</b> FORD #8 METRIC SPRINGLOCK O-RING Package Quantity: 1</p>	 <p><b>2.00mm</b> Cross Section</p> <p><b>P/N 59773</b> MERCEDES R-134A SERVICE O-RING Package Quantity: 1</p>	 <p><b>1.83mm</b> Cross Section</p> <p><b>P/N 59774</b> COMPRESSOR DISCHARGE FTG O-RING Package Quantity: 1</p>

# A/C SERVICE COMPONENTS

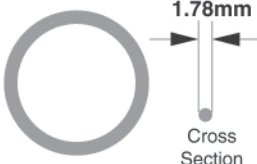
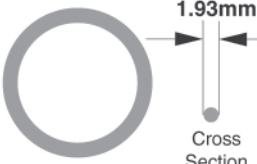
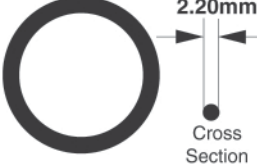
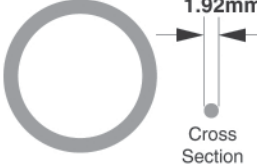

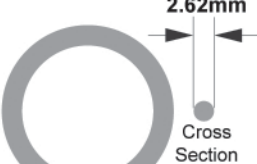
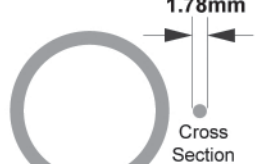
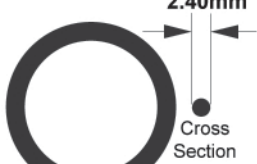
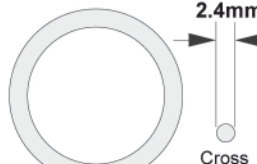

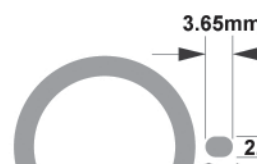

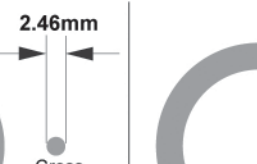
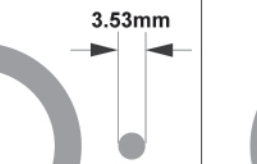

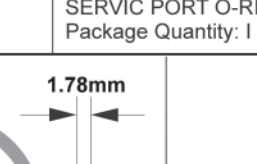

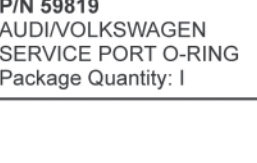

## R12 AND R-134a COMPATIBLE A/C O-RINGS

 <p><b>P/N 59775</b> TOYOTA SERVICE O-RING Package Quantity: 1</p>	 <p><b>P/N 59776</b> TOYOTA SERVICE O-RING Package Quantity: 1</p>	 <p><b>P/N 59777</b> NISSAN M12 COMP DISCHARGE O-RING Package Quantity: 1</p>	 <p><b>P/N 59778</b> GM / SUZUKI M11 R-134A EXP VLV O-RNG Package Quantity: 1</p>	 <p><b>P/N 59779</b> #8 HOSE FITTING O-RING Package Quantity: 1</p>
 <p><b>P/N 59780</b> NISSAN METRIC SERVICE O-RING Package Quantity: 1</p>	 <p><b>P/N 59781</b> JAGUAR SERVICE O-RING Package Quantity: 1</p>	 <p><b>P/N 59782</b> NISSAN R-134A SERVICE O-RING Package Quantity: 1</p>	 <p><b>P/N 59783</b> HONDA/ACURA/LXS/TYTA SRVC VLV O-RNG Package Quantity: 1</p>	 <p><b>P/N 59784</b> VW/AUDI SERVICE O-RING Package Quantity: 1</p>
 <p><b>P/N 59785</b> COND M11 O-RING US &amp; IMPORT VHCL Package Quantity: 1</p>	 <p><b>P/N 59786</b> GM 5/8" DUAL METRIC O-RING Package Quantity: 1</p>	 <p><b>P/N 59787</b> #10 GM CAPTIVE O-RING Package Quantity: 1</p>	 <p><b>P/N 59788</b> #8 COMPRESSION FITTING O-RING Package Quantity: 1</p>	 <p><b>P/N 59789</b> VOLVO SERVICE O-RING Package Quantity: 1</p>
 <p><b>P/N 59790</b> FORD #10 METRIC SPRINGLOCK O-RING Package Quantity: 1</p>	 <p><b>P/N 59791</b> VOLVO SERVICE O-RING Package Quantity: 1</p>	 <p><b>P/N 59792</b> IMPORT SERVICE VALVE O-RING Package Quantity: 1</p>	 <p><b>P/N 59793</b> IMPORT SUCTION FLANGE O-RING Package Quantity: 1</p>	 <p><b>P/N 59794</b> HYUNDAI SERVICE O-RING Package Quantity: 1</p>
 <p><b>P/N 59795</b> NISSAN R-134A SERVICE O-RING Package Quantity: 1</p>	 <p><b>P/N 59796</b> SAAB COMPRESSOR PORT O-RING Package Quantity: 1</p>	 <p><b>P/N 59797</b> #12 GM CAPTIVE O-RING Package Quantity: 1</p>	 <p><b>P/N 59798</b> #10 HOSE FITTING O-RING Package Quantity: 1</p>	 <p><b>P/N 59799</b> NIHON DKV14C DISCHARGE PORT O-RING Package Quantity: 1</p>
 <p><b>P/N 59800</b> NISSAN R-134A SERVICE O-RING Package Quantity: 1</p>	 <p><b>P/N 59801</b> IMPORT DISCHARGE FLANGE O-RING Package Quantity: 1</p>	 <p><b>P/N 59802</b> GM 3/4" DUAL METRIC O-RING Package Quantity: 1</p>	 <p><b>P/N 59803</b> NISSAN SERVICE VALVE O-RING Package Quantity: 1</p>	 <p><b>P/N 59804</b> SANDEN COMP PAD MOUNT DSCHRG O-RNG Package Quantity: 1</p>







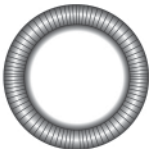

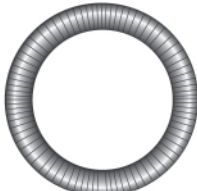
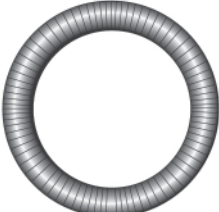


# A/C SERVICE COMPONENTS

## R12 AND R-134a COMPATIBLE A/C O-RINGS

 <p><b>P/N 59805</b> GM #12 HOSE FITTING O-RING Package Quantity: 1</p>	 <p><b>P/N 59806</b> FORD #12 METRIC SPRINGLOCK O-RING Package Quantity: 1</p>	 <p><b>P/N 59807</b> IMPORT SERVICE VALVE O-RING Package Quantity: 1</p>	 <p><b>P/N 59808</b> CONTROL VALVE UPPER O-RING Package Quantity: 1</p>	 <p><b>P/N 59809</b> SERVICE VALVE O-RING Package Quantity: 1</p>
 <p><b>P/N 59810</b> DIESEL 17G DISCHARGE PORT O-RING Package Quantity: 1</p>	 <p><b>P/N 59811</b> #12 HOSE FITTING O-RING Package Quantity: 1</p>	 <p><b>P/N 59812</b> IMPORT SERVICE VALVE O-RING Package Quantity: 1</p>	 <p><b>P/N 59813</b> VOLVO SERVICE O-RING Package Quantity: 1</p>	 <p><b>P/N 59814</b> 10P COMP SUCTION/DISCHARGE PORT O-RING Package Quantity: 1</p>
 <p><b>P/N 59815</b> FORD OVAL SERVICE VALVE O-RING Package Quantity: 1</p>	 <p><b>P/N 59816</b> DOMESTIC COMP SERVIC PORT O-RING Package Quantity: 1</p>	 <p><b>P/N 59817</b> GM SERVICE VALVE O-RING Package Quantity: 1</p>	 <p><b>P/N 59818</b> SANDEN SUCTION PORT O-RING Package Quantity: 1</p>	
 <p><b>P/N 59819</b> AUDI/VOLKSWAGEN SERVICE PORT O-RING Package Quantity: 1</p>	 <p><b>P/N 59820</b> GM SERVICE VALVE O-RING Package Quantity: 1</p>	 <p><b>P/N 59821</b> VOLVO SERVICE O-RING Package Quantity: 1</p>		
 <p><b>P/N 59822</b> CHRYSLER RV2 DISCHARGE O-RING Package Quantity: 1</p>	 <p><b>P/N 59823</b> GM OVAL SERV O-RING Package Quantity: 1</p>			

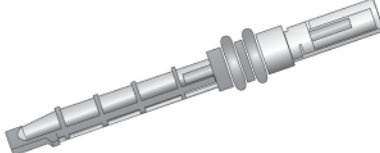

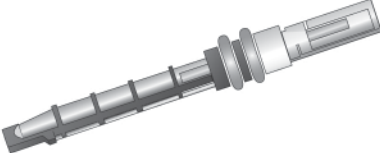
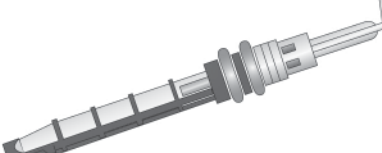

# A/C SERVICE COMPONENTS

## SEALS AND GARTER SPRINGS / LUBRICANT

 <p>1.98mm Cross Section</p> <p><b>P/N 59824</b> GENERAL MOTORS 11MM O-RING Package Quantity: 1</p>	 <p>1.78mm Cross Section</p> <p><b>P/N 59825</b> CONTROL VALVE UPPER O-RING Package Quantity: 1</p>	<p><b>LATHE CUT SEAL</b></p>  <p>Cross Section</p> <p><b>P/N 59826</b> COMPRESSOR ROTOLOCK TEFLON SEAL Package Quantity: 1</p>	<p><b>MOLDED SEAL</b></p>  <p><b>P/N 59827</b> MERCEDES SCTN DISCHARG MANIFOLD SEAL Package Quantity: 1</p>
 <p><b>P/N 59828</b> CHRYSLER, FORD #6 GARTER SPRING Package Quantity: 1</p>	 <p><b>P/N 59829</b> CHRYSLER, FORD # 8 GARTER SPRING Package Quantity: 1</p>	 <p><b>P/N 59830</b> CHRYSLER, FORD #10 GARTER SPRING Package Quantity: 1</p>	 <p><b>P/N 59831</b> CHRYSLER, FORD #12 GARTER SPRING Package Quantity: 1</p>
 <p><b>P/N 59832</b> R12 / R-134A POE OIL TUBE 4CC Package Quantity: 1</p>			
<p><b>P/N 74396</b></p> <p><b>A/C System Lubricant – For O-Rings, Seals and Parts</b></p> <ul style="list-style-type: none"> <li>• For R12 and R134a A/C Systems</li> <li>• Resealable tubes</li> <li>• 4 cc each</li> <li>• Pack of 5</li> </ul> 			

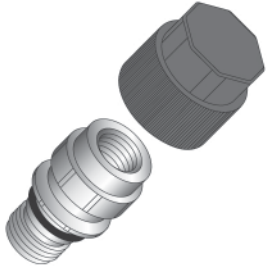
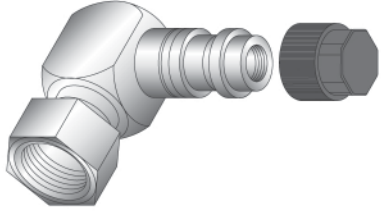
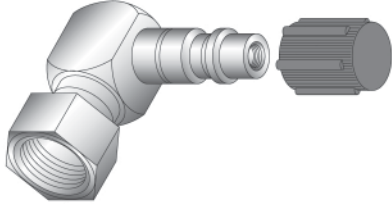
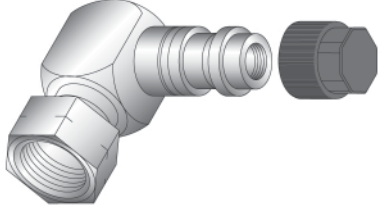
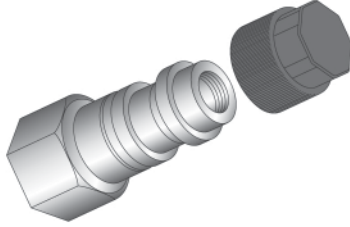
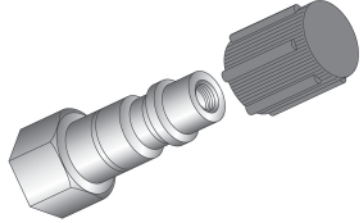
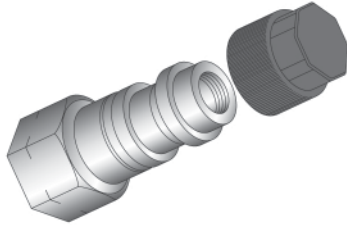
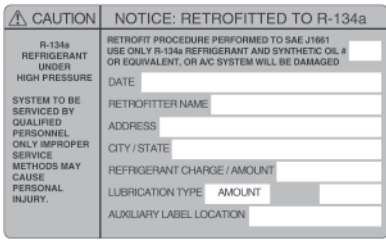


# A/C SERVICE COMPONENTS

## A/C ORIFICE TUBES

 <p><b>P/N 59845</b> GM &amp; IMPORT WHITE ORIFICE TUBE Package Quantity: E</p>	 <p><b>P/N 59846</b> FORD &amp; IMPORT BLUE ORIFICE TUBE Package Quantity: E</p>
 <p><b>P/N 59847</b> FORD &amp; IMPORT GREEN ORIFICE TUBE Package Quantity: E</p>	 <p><b>P/N 59848</b> FORD &amp; IMPORT RED ORIFICE TUBE Package Quantity: E</p>
 <p><b>P/N 59849</b> FORD &amp; IMPORT ORANGE ORIFICE TUBE Package Quantity: E</p>	 <p><b>P/N 59850</b> GM &amp; IMPORT BLACK/WHITE ORIFICE TUBE Package Quantity: E</p>
 <p><b>P/N 59851</b> FORD BROWN ORIFICE TUBE Package Quantity: E</p>	 <p><b>P/N 59852</b> CHRYSLER PURPLE ORIFICE TUBE Package Quantity: E</p>
 <p><b>P/N 59853</b> GM &amp; IMPORT YELLOW/WHITE ORIFICE TUBE Package Quantity: E</p>	 <p><b>P/N 59854</b> GM YELLOW/WHITE ORIFICE TUBE Package Quantity: E</p>
 <p><b>P/N 59855</b> FORD BLACK/WHITE ORIFICE TUBE Package Quantity: E</p>	 <p><b>P/N 59856</b> DODGE/CHRYSLER ORANGE T-TOP ORIFICE TUBE Package Quantity: E</p>

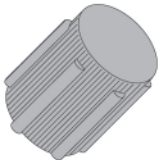
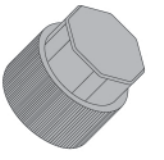




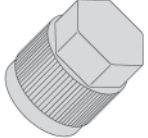
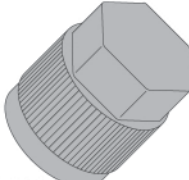

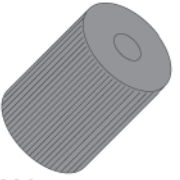





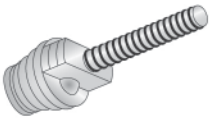
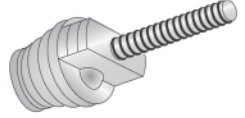
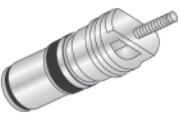

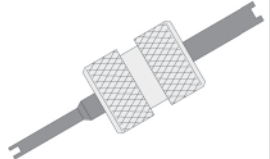
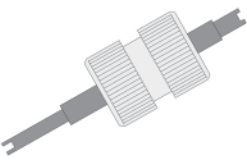
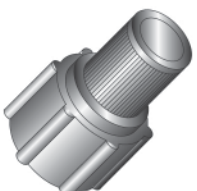
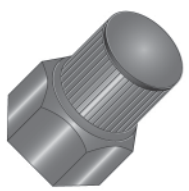
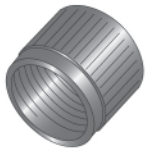
# A/C SERVICE COMPONENTS

## RETRO-FIT A/C ADAPTERS

 <p><b>P/N 59862</b> GM RETRO ADAPTER RED CAP/VALVE CORE 16MM Package Quantity: C</p>	 <p><b>P/N 59863</b> 90° M16 x 1/4" R-134a ADAPTER/CAP-VALVE Package Quantity: A</p>																										
 <p><b>P/N 59864</b> 90° M13 x 1/4" R-134a ADAPTER/CAP-VALVE Package Quantity: A</p>	 <p><b>P/N 59865</b> 90° M16 x 3/16" R-134a ADAPTER/CAP-VALVE Package Quantity: A</p>																										
 <p><b>P/N 59866</b> M16 x 1/4" R-134a ADAPTER/CAP-VALVE Package Quantity: C</p>	 <p><b>P/N 59867</b> M13 x 1/4" R-134a ADAPTER/CAP-VALVE Package Quantity: C</p>																										
 <p><b>P/N 59868</b> M16 x 3/16" R-134a ADAPTER/CAP-VALVE Package Quantity: C</p>	 <p><b>P/N 59869</b> STANDARD R-134a RETROFIT LABEL Package Quantity: I</p> <table border="1" data-bbox="1068 1297 1451 1535"> <tr> <td rowspan="2"><b>CAUTION</b></td> <td>R-134a REFRIGERANT UNDER HIGH PRESSURE</td> <td><b>NOTICE: RETROFITTED TO R-134a</b></td> </tr> <tr> <td>SYSTEM TO BE SERVICED BY QUALIFIED PERSONNEL ONLY. IMPROPER SERVICE METHODS MAY CAUSE PERSONAL INJURY.</td> <td>RETROFIT PROCEDURE PERFORMED TO SAE J1981 USE ONLY R-134a REFRIGERANT AND SYNTHETIC OIL # OR EQUIVALENT. OR A/C SYSTEM WILL BE DAMAGED</td> </tr> <tr> <td></td> <td>DATE</td> <td></td> </tr> <tr> <td></td> <td>RETROFITTER NAME</td> <td></td> </tr> <tr> <td></td> <td>ADDRESS</td> <td></td> </tr> <tr> <td></td> <td>CITY / STATE</td> <td></td> </tr> <tr> <td></td> <td>REFRIGERANT CHARGE / AMOUNT</td> <td></td> </tr> <tr> <td></td> <td>LUBRICATION TYPE    AMOUNT</td> <td></td> </tr> <tr> <td></td> <td>AUXILIARY LABEL LOCATION</td> <td></td> </tr> </table>	<b>CAUTION</b>	R-134a REFRIGERANT UNDER HIGH PRESSURE	<b>NOTICE: RETROFITTED TO R-134a</b>	SYSTEM TO BE SERVICED BY QUALIFIED PERSONNEL ONLY. IMPROPER SERVICE METHODS MAY CAUSE PERSONAL INJURY.	RETROFIT PROCEDURE PERFORMED TO SAE J1981 USE ONLY R-134a REFRIGERANT AND SYNTHETIC OIL # OR EQUIVALENT. OR A/C SYSTEM WILL BE DAMAGED		DATE			RETROFITTER NAME			ADDRESS			CITY / STATE			REFRIGERANT CHARGE / AMOUNT			LUBRICATION TYPE    AMOUNT			AUXILIARY LABEL LOCATION	
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	AUXILIARY LABEL LOCATION																										
 <p><b>P/N 59870</b> 3/16" BLOCK OFF CAP Package Quantity: C</p>	 <p><b>P/N 59871</b> 1/4" BLOCK OFF CAP Package Quantity: C</p>																										

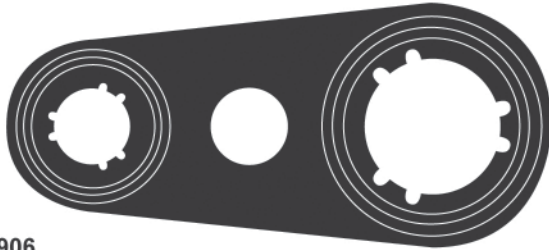
# A/C SERVICE COMPONENTS

## CAPS AND VALVE CORES

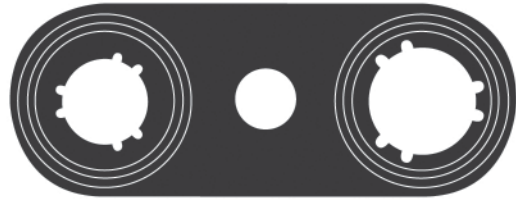
 <p><b>P/N 59877</b> M13 BLUE R-134a LOW SIDE VALVE PORT CAP Package Quantity: I</p>	 <p><b>P/N 59878</b> M16 RED R-134a HIGH SIDE VALVE PORT CAP Package Quantity: I</p>	 <p><b>P/N 59879</b> 3/16" BLK R-12 VALVE PORT PLASTIC CAP Package Quantity: I</p>	 <p><b>P/N 59880</b> 1/4" BLK R-12 VALVE PORT PLASTIC CAP Package Quantity: I</p>	 <p><b>P/N 59881</b> M13 BLUE R-134a LOW SIDE VALVE PORT CAP Package Quantity: E</p>
 <p><b>P/N 59882</b> M16 RED R-134a VSI VALVE PORT CAP Package Quantity: E</p>	 <p><b>P/N 59883</b> M13 BLUE R-134a LOW SIDE VALVE PORT CAP Package Quantity: E</p>	 <p><b>P/N 59884</b> M16 RED R-134a HIGH SIDE VALVE PORT CAP Package Quantity: E</p>	 <p><b>P/N 59885</b> M13 BLK R-134a LOW SIDE VALVE PORT CAP Package Quantity: E</p>	 <p><b>P/N 59886</b> M16 BLK R-134a HIGH SIDE VALVE PORT CAP Package Quantity: E</p>
 <p><b>P/N 59887</b> M9 - 1.0 LOW SIDE VALVE PORT CAP Package Quantity: I</p>	 <p><b>P/N 59888</b> M10 - 1.25 HIGH SIDE VALVE PORT CAP Package Quantity: I</p>	 <p><b>P/N 59889</b> R-12 &amp; R-134a US/IMPORT STD. FLOW VALVE CORE Package Quantity: I</p>	 <p><b>P/N 59890</b> M6 R-134a JRA IMPORT HIGH FLOW VALVE CORE Package Quantity: I</p>	 <p><b>P/N 59891</b> GM R-12 &amp; R-134a LG BORE HIGH FLOW VALVE CORE Package Quantity: E</p>
 <p><b>P/N 59892</b> M8 R-134a U.S. EATON SSV HIGH FLOW VALVE CORE Package Quantity: E</p>	 <p><b>P/N 59893</b> M10 R-134a US EATON SSV HIGH FLOW VALVE CORE Package Quantity: E</p>	 <p><b>P/N 59894</b> M8 R-134a PEUGEOT &amp; VOLVO HIGH FLOW VALVE CORE Package Quantity: E</p>	 <p><b>P/N 59896</b> M5 R-12/R-134a RENALT FR STD. FLOW VALVE CORE Package Quantity: E</p>	 <p><b>P/N 59897</b> M8 &amp; M10 EATON SSV VALVE CORE TOOL Package Quantity: A</p>
 <p><b>P/N 59898</b> R-12 &amp; R-134a STD. &amp; HIGH FLOW VALVE TOOL Package Quantity: A</p>	 <p><b>P/N 59899</b> YORK / TECUMSEH SERVICE VALVE CAP Package Quantity: E</p>	 <p><b>P/N 59900</b> M12X1.5 ROUND CAP W/ SEAL Package Quantity: E</p>	 <p><b>P/N 59901</b> M10X1.25 BELL HEX CAP W/ SEAL Package Quantity: E</p>	

# A/C SERVICE COMPONENTS

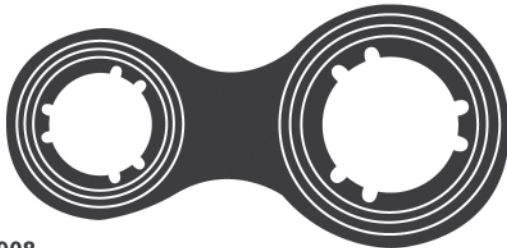
## METAL GASKETS AND PILOTS



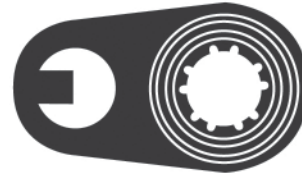
**P/N 59906**  
 CHRYSLER VALVE SUCTION / LIQUID LINE GASKET  
 Package Quantity: 1



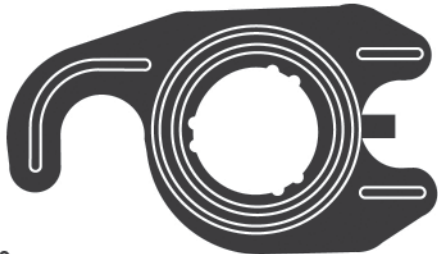
**P/N 59907**  
 CHRYSLER CONDENSOR BLOCK GASKET  
 Package Quantity: 1



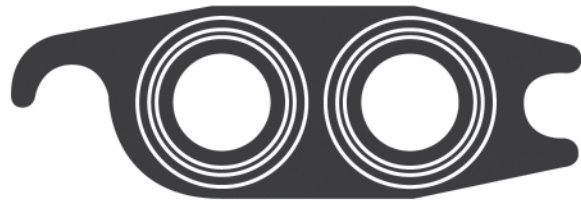
**P/N 59908**  
 CHRYSLER STD. BLOCK EXPANSION VALVE GASKET  
 Package Quantity: 1



**P/N 59909**  
 CHRYSLER STD. BLOCK FILTER DRIER GASKET  
 Package Quantity: 1



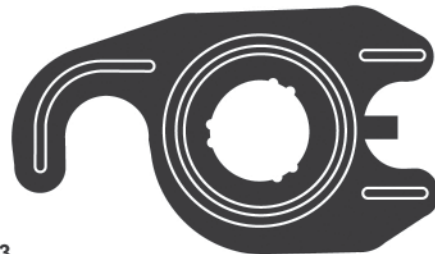
**P/N 59910**  
 CHRYS 6C17 5/8" ID SRVC FLANGE GSKT  
 Package Quantity: 1



**P/N 59911**  
 CHRYS C171 & A590 SRVC PORT GASKET  
 Package Quantity: 1



**P/N 59912**  
 CHRYSLER 6C17 SERVICE FLANGE GASKET  
 Package Quantity: 1



**P/N 59913**  
 CHRYSLER 6C17 SRVC FLANGE GASKET 1/2" ID  
 Package Quantity: 1





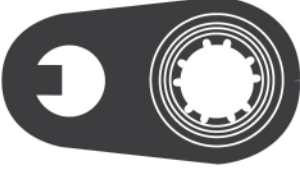
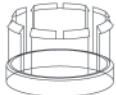








**P/N 59914**  
 CHRYSLER BLK BLOCK EXPN VALVE GASKET  
 Package Quantity: 1



**P/N 59915**  
 GM DUAL O-RING CON MTL BCKP GASKET #8  
 Package Quantity: 1

# A/C SERVICE COMPONENTS

## METAL GASKETS AND PILOTS

 <p><b>P/N 59916</b> GM DUAL O-RING CON METAL BCKP GSKT #10 Package Quantity: 1</p>	 <p><b>P/N 59917</b> GM DUAL O-RING CON METAL BCKP GSKT #12 Package Quantity: 1</p>
 <p><b>P/N 59918</b> CHRYSLER FILTER BLOCK GASKET .377 BLT HOLE Package Quantity: 1</p>	 <p><b>P/N 59919</b> CHRYSLER SUCTION/DISCHARGE PORT PLASTIC PILOT Package Quantity: 1</p>
 <p><b>P/N 59920</b> CHRYSLER SUCTION PORT GASKET 16MM ID Package Quantity: 1</p>	 <p><b>P/N 59921</b> CHRYSLER 5/8 KJ HOS FTG MTL GSKT/O-RING Package Quantity: 1</p>
 <p><b>P/N 59922</b> CHRYSLER 3/8 LQD LNE MTL GSKT/O-RNG KIT Package Quantity: 1</p>	 <p><b>P/N 59923</b> CHRYSLER VALVE SUCTION/DISCHARGE PILOT SET Package Quantity: 1</p>
 <p><b>P/N 59924</b> CHRYSLER VALVE SUCTION/DISCHARGE PILOT SET Package Quantity: 1</p>	 <p><b>P/N 59925</b> CHRYSLER DISCHARGE PORT GASKET Package Quantity: 1</p>
 <p><b>P/N 59926</b> CHRYSLER DISCHARGE GASKET &amp; O-RING Package Quantity: 1</p>	 <p><b>P/N 59927</b> CHRYSLER SUCTION GASKET &amp; O-RING Package Quantity: 1</p>

# A/C SERVICE COMPONENTS

## SEALING WASHERS

 <p><b>P/N 59933</b> GM 5/8" ID COMPRESSOR SEALING WASHER - BLACK Package Quantity: D</p>	 <p><b>P/N 59934</b> GM/CHRYSLER 5/8" ID COMPRESSOR SEALING WASHER - SILVER Package Quantity: D</p>
 <p><b>P/N 59935</b> GM 3/4" ID COMPRESSOR SEALING WASHER - SILVER Package Quantity: D</p>	 <p><b>P/N 59936</b> GM COMPRESSOR RETRO-FIT SEALING WASHER - GREEN Package Quantity: D</p>
 <p><b>P/N 59937</b> GM COMPRESSOR RETRO-FIT SEALING WASHER - RED Package Quantity: D</p>	 <p><b>P/N 59938</b> GM COMPRESSOR RETRO-FIT SEALING WASHER - YELLOW Package Quantity: D</p>
 <p><b>P/N 59939</b> DODGE COMPRESSOR SUCTION PORT SEALING WASHER - SILVER Package Quantity: D</p>	 <p><b>P/N 59940</b> DODGE COMPRESSOR DISCHARGE PORT SEALING WASHER - GOLD Package Quantity: D</p>
 <p><b>P/N 59941</b> CHRYSLER, GM, OPEL 5/8" ID SEALING WASHER Package Quantity: D</p>	 <p><b>P/N 59942</b> CHRYSLER, GM, OPEL 8MM SEALING WASHER Package Quantity: D</p>
 <p><b>P/N 59943</b> CHRYSLER, GM, OPEL 11MM SEALING WASHER Package Quantity: D</p>	 <p><b>P/N 59944</b> GM 17MM SEALING WASHER Package Quantity: D</p>



# A/C SERVICE COMPONENTS

EASY TO OPERATE A/C TOOLS & AIR CONDITIONING EQUIPMENT

## A/C R134A HOSE RECHARGE KIT

For use with 12 ounce containers of R-134a Refrigerant.



DESCRIPTION	PART
A/C R-134a Hose Recharge Kit	A 78045

## PRESTITE TAPE

For insulation of pipes, fittings, and A/C lines.

- 1/8" thick x 2" wide x 30 ft. long roll



DESCRIPTION	PART
Prestite Tape	A 32905

## A/C FLUSH GUN

**Air Conditioner  
Flush Gun**

**With Hose And  
Cut Off Valve.**



DESCRIPTION	PART
A/C Flush Gun	A 78047

## A/C DIGITAL TEST THERMOMETER

For Home And Auto A/C Systems

- C/F Button Reads -50°C to 150°C & -58°F to 320°F
- Comes With Extra Battery



DESCRIPTION	PART
A/C Digital Test Thermometer	A 78046

# LEAK DETECTION

## ULTRASONIC DIAGNOSTIC TOOL KIT

### THE ULTRASONIC DETECTIVE

#### Listen To Problems Before They Become Breakdowns

Converts and amplifies inaudible ultrasonic sound into audible “natural” sound for accurate diagnosis of leaks and defects. Finds problems before they result in major breakdowns!

- Detects air brake, tire, compressed air, vacuum, EVAP system, and other pressurized leaks quickly and effortlessly.
- Pinpoints gear and bearing wear in wheel hubs, transmissions, transfer cases, differentials, and electric motors.
- Checks for electrical discharge associated with insulation breakdown, carbon tracking, and arcing.
- Finds air and water leaks around faulty seals, gaskets, weather stripping in passenger cabs, trailers, and other non-pressurized enclosures.

*2 year warranty*

#### Ideal For Detecting:

- Air brake leaks
- Compressed air leaks
- Gear and bearing wear
- Vacuum leaks
- EVAP system leaks
- Electrical discharge
- Exhaust leaks
- Refrigerant leaks
- Gas and liquid turbulence
- Cabin seal and gasket integrity

#### Applications:

- Automotive
- Heavy-duty trucks
- Industrial
- Marine
- Railroad
- Air conditioning
- Refrigeration

#### Kit Includes:

**Ultrasonic Receiver**  
Features both audio feedback and 10 bar LED indicator for zeroing in on the problem source.

**Ultrasonic Emitter**  
Emits ultrasonic pulses for testing faulty seals and gaskets in non-pressurized enclosures



#### Headphones

Full-sized headphone set with 3.5 mm stereo jack.

#### Air Probe and Contact Probe

Air and contact probes optimize receiver versatility and extend user's reach.

#### Padded Carrying Case

### DESCRIPTION

The Ultrasonic Detective – Ultrasonic Diagnostic Tool Kit

### PART

A 78039

### Replacement Parts:

- Padded Carrying Case, P/N 78039C
- Headphones, P/N 78051
- Ultrasonic Emitter, P/N 78048  
Emits ultrasonic pulses for testing faulty seals and gaskets in non-pressurized enclosures.
- Ultrasonic Nylon Air Probe, P/N 78049  
The Nylon Air Probe optimizes receiver versatility and extends the user's reach.
- Ultrasonic Solid Contact Probe, P/N 78050  
The Solid Contact Probe optimizes receiver versatility and extends the user's reach.



P/N 78048



P/N 78049



P/N 78050

# LEAK DETECTION

## HEAVY DUTY LEAK DETECTION KIT

### Find Undetectable Leaks Fast!

### Slash Operating Costs, Reduce Fleet Downtime, and Save on Diagnostic Labor!

Includes everything needed for complete A/C and fluid leak detection (LOW-SIDE injection). Dye injector is the easiest, most accurate, and most compact method of adding dye to any truck, bus, train, off-road, and refrigerated transport vehicle's A/C system!

### Kit Includes:

- Leak detection mini high-intensity LED flashlight
- Injector with (2) universal A/C dye cartridges for servicing up to 28 vehicles
- All-In-One concentrated dye for oil, fuel, ATF, PS, and hydraulic leaks - 8 oz. bottle
- Coolant dye - 8 oz. bottle
- Fluorescence enhancing glasses and plastic case.



### Replacement Parts



P/N 78042

#### All-in-One Oil Dye - 8 oz.

For oil, fuel, ATF, power steering, and hydraulic leaks. Serves up to 16 vehicles. This unique, full-spectrum formula contains two different fluorescent dyes; one designed to fluoresce best under UV, and the other under blue light.

No matter what type of inspection lamp you use, our All-In-One dye will glow brighter than ever!

Super-effective and economical, All-In-One dye contains over twice the amount of active ingredients per dose as competitors' dyes. A single one ounce bottle can often be used for two or more applications, offering dramatic savings! Our All-In-One dye ensures you'll always have the right dye on hand when you need it!

#### Super Intensity LED Flashlight w/ Glasses

Ultra Compact leak detection flashlight and glasses.

- Very high intensity (compare to 75W lamp) LED bulb with 100,000 hours service life
- Over 4 hours of peak performance
- Inspection range to 6 feet (1.8 m)
- Powered by 3 AA batteries (included)
- Fluorescence-enhancing glasses

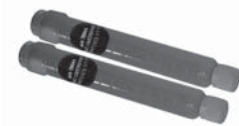


P/N 78043

#### Coolant Dye - 8 oz.

Leak detection dye for all engine coolants and auto body leak checks.

Finds leaks in radiators, hoses, water pumps, and fittings. Also ideal for pinpointing wind and water leaks in truck/trailer/auto bodies.



P/N 78041

#### Universal A/C Dye Cartridge - 6 pk.

It's cost effective — Each disposable universal dye cartridge treats up to

14 vehicle A/C systems. The revolutionary new way to add fluorescent dyes into vehicle air conditioning and refrigeration

systems - without the use of additional refrigerant. Just one connection, then turn the handle to inject the dye - no complicated hookups!

Ideal for preventive and programmed maintenance. The dye remains safely in the system for future inspections.

# BIOREMEDIATION PARTS WASHER

## SMARTWASHER® MOBILE PARTS/BRAKE WASHER

The SmartWasher® uses a unique technology called bioremediation. (Ozzys) breakdown “eat” the grease and oil or carbon-based products in the OzzyJuice and turn those contaminants into harmless carbon dioxide and water EVAPORATION.

Microbes (Ozzys) continuously eat the contaminants out of the OzzyJuice leaving it clean and strong every time. The microbes (Ozzys) will “eat” grease, oil, mineral spirits, solvents and other petroleum based products, just to name a few. Because of bioremediation and as long as the SmartWasher is maintained properly, the customer should NEVER have to change the fluid.

### OzzyJuice Eats:

- Crude Oil
- Hydraulic Transmission Fluid
- Cutting Oils
- Ink/Toner
- Asphalt
- Burned-On Carbon
- Automotive Varnish
- Animal Fat
- Impacted Grease
- Fifth Wheel Grease
- Resin Products
- Automotive Grease
- Bearing Grease
- Solder & Flux
- Motor Oil
- Creosote



SmartWasher®  
P/N 27723

Overall Dimensions	43" x 27" x 42"
Inside Sink Dimensions	27" x 23" x 8"
Parts Washer Structure	Heavy-Duty HDPE
Controls	Toggle Switch
Pump Capacity	300 gph
Adjustable Thermostat	105° to 115° F
Flow Control Timer	10 Minutes
Standard Equipment	Customized Dolly
Certified	ETL (UL/CSA), CE, NSF
SmartWasher Start-up Kit	Ships completely assembled, with one OzzyMat™ and enough OzzyJuice® to get started.



OzzyJuice® Parts/Brake Solution  
P/N 27724

OzzyJuice® Degreaser Solution  
P/N 27726

OzzyJuice® Truck Degreasing Solution  
P/N 27727

OzzyJuice® Metal Degreasing Solution  
P/N 27728

OzzyJuice® Aircraft/Weapon Degreaser  
P/N 27729

OzzyJuice® Heavy Duty Degreaser Solution  
P/N 27731



OzzyMat™ Multi-Layer Fluid Activator  
P/N 27725

OzzyMat™ Single Layer Fluid Activator  
P/N 27730

# BIOREMEDIATION PARTS WASHER

## OVERVIEW OF SMARTWASHER® SYSTEMS



### SmartWasher® Mobile Parts/Brake Washer

P/N 27723

- 300 gph Pump
- Onboard Diagnostics / Adjustable Thermostat
- Load Capacity of 550 lbs.
- Overall Dimensions: 43" x 27" x 42"
- Inside Sink Dimensions: 27" x 23" x 8"
- Customized Dolly
- No Health & Safety Hazards
- No Environmental Damage
- No Toxic Solvents
- No Service Contracts
- No Waste Hauling
- No Flash Point



### SmartWasher® Signature

P/N 27722

- 300 gph Pump
- Onboard Diagnostics
- Adjustable Thermostat
- Load Capacity of 550 lbs.
- Overall Dimensions: 39" x 29" x 40"
- Inside Sink Dimensions: 26" x 17" x 8"
- No Health & Safety Hazards
- No Environmental Damage
- No Toxic Solvents
- No Service Contracts
- No Waste Hauling
- No Flash Point



### SmartWasher® Super Sink XE

P/N 27721

- 300 gph Pump
- Onboard Diagnostics / Adjustable Thermostat
- Load Capacity of 550 lbs.
- Overall Dimensions: 47" x 38" x 42"
- Inside Sink Dimensions: 41" x 26" x 8"
- 2 brush stations, light kit and parts basket
- No Health & Safety Hazards
- No Environmental Damage
- No Toxic Solvents
- No Service Contracts
- No Waste Hauling
- No Flash Point



### SmartWasher® Super Sink

P/N 27720

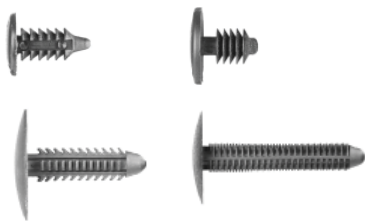
- 300 gph Pump
- Onboard Diagnostics
- Adjustable Thermostat
- Load Capacity of 550 lbs.
- Overall Dimensions: 47" x 38" x 42"
- Inside Sink Dimensions: 41" x 26" x 8"
- No Health & Safety Hazards
- No Environmental Damage
- No Toxic Solvents
- No Service Contracts
- No Waste Hauling
- No Flash Point

All SmartWashers ship completely assembled with one OzzyMat™ & enough OzzyJuice® to get started.

# NYLON RETAINERS

FOR AUTOMOTIVE AND TRUCK APPLICATIONS

UNIVERSAL NYLON RETAINERS / BLACK AND BLUE



- Covers 2.5 mm to 10 mm hole sizes
- Nylon Shield Retainers
- Weatherstrip Retainers
- Dash Panel Retainers
- Rear Hood Seal Retainers
- Bumper Filler Retainers
- Fascia Panel Retainers
- Textured Head Panel Retainers
- Trim Panel Retainers
- Radiator Panel Retainers
- Fascia Bumper Retainers



DESCRIPTION	HOLE SIZE	PANEL RANGE	HEAD	STEM	PART	
Nylon Shield Retainer, Black	7/64" (2.5mm)	.069" - .250"	7/32"	25/64"	C	9720
Nylon Shield Retainer, Black	5/32" (4mm)	.030" - .275"	23/64"	7/16"	C	9721
Nylon Shield Retainer, Black	3/16" (4.5mm)	.080" - .200"	7/16"	21/64"	N	9722
Weatherstrip Retainer, Black	3/16" (4.5mm)	.125" - .310"	3/8"	17/32"	N	9723
Dash Panel Retainer, Black	3/16" (4.5mm)	.060" - .390"	7/16"	21/32"	R	9724
Nylon Shield Retainer, Blue	13/64" (5.3mm)	.065" - .515"	3/4"	11/16"	R	9725
Short Weatherstrip Retainer, Black	13/64" (5.3mm)	.030" - .285"	10 mm	11.5 mm	R	9726
Short Weatherstrip Retainer, Black	13/64" (5.3mm)	.030" - .365"	19/32"	5/8"	R	9727
Nylon Shield Retainer, Black	7/32" (5.5mm)	.060" - .565"	21/32"	3/4"	R	9728
Nylon Shield Retainer, Black	7/32" (5.5mm)	.080" - .545"	1"	25/32"	R	9729
Nylon Shield Retainer, Black	15/64" (6mm)	.035" - .285"	15/32"	1/2"	R	9730
Nylon Shield Retainer, Black	1/4" (6.4mm)	.070" - .805"	1"	1-1/16"	N	9731
Short Nylon Shield Retainer, Black	1/4" (6.4mm)	.115" - .400"	11/16"	21/32"	C	9732
Long Nylon Shield Retainer, Black	1/4" (6.4mm)	.095" - .540"	23/32"	13/16"	C	9733
Fascia Panel Retainer, Black	1/4" (6.4mm)	.070" - .590"	25.5 mm	20 mm	R	9734
Bumper Filler Retainer, Black	1/4" (6.4mm)	.110" - .460"	1/2"	23/32"	R	9735
Textured Head Panel Retainer, Black	9/32" (7.1mm)	.075" - 1.510"	1"	1-3/4"	N	9736
Nylon Shield Retainer, Black	5/16" (7.8mm)	.080" - .800"	3/4"	1-1/16"	N	9737
Nylon Shield Retainer, Black	5/16" (7.8mm)	.080" - .270"	33/64"	19/32"	N	9738
Trim Panel Retainer, Black	5/16" (7.8mm)	.078" - .490"	3/4"	31/32"	N	9739
Rear Hood Seal Retainer, Black	5/16" (7.8mm)	.060" - 1.025"	3/4"	1-7/16"	N	9740
Trim Panel Retainer, Black	23/94" (9mm)	.060" - .510"	16 mm	19.5 mm	R	9741
Radiator Panel Retainer, Black	3/8" (9.5mm)	.115" - .565"	1"	27/32"	N	9742
Fascia Bumper Retainer, Black	25/64" (10mm)	.040" - .787"	22 mm	30 mm	R	9743

# NYLON RETAINERS

FOR AUTOMOTIVE AND TRUCK APPLICATIONS

ERGO TUFLOKS NYLON PUSH-TYPE RETAINERS / BLACK



- Hole Sizes: 6.5 mm to 10 mm
- Flange Sizes: 14 mm to 25 mm
- Panel Ranges: 2 mm to 10 mm



DESCRIPTION	HOLE SIZE	PANEL RANGE	STEM	FLANGE	PART	
Ergo Tuflocks Retainer	6.5mm	2mm - 4.5mm	18mm	18mm	N	9760
Ergo Tuflocks Retainer	6.5mm	4.5mm - 7mm	20mm	18mm	R	9761
Ergo Tuflocks Retainer	6.5mm	7mm - 9.5mm	22mm	14mm	N	9762
Ergo Tuflocks Retainer	8mm	5mm - 7mm	16mm	19mm	N	9763
Ergo Tuflocks Retainer	8.5mm	2mm - 4.5mm	20.5mm	20mm	N	9764
Ergo Tuflocks Retainer	8.5mm	2.7mm - 5.3mm	14mm	19mm	R	9765
Ergo Tuflocks Retainer	8.5mm	4.5mm - 7mm	22mm	20mm	N	9766
Ergo Tuflocks Retainer	8.5mm	7mm - 10mm	24mm	20mm	N	9767
Ergo Tuflocks Retainer	9.5mm	2.95mm - 5.75mm	20mm	18mm	N	9768
Ergo Tuflocks Retainer	10mm	3mm - 6mm	20mm	25mm	K	9769
Ergo Tuflocks Retainer	10.5mm	6mm - 9mm	22.5mm	25mm	K	9770





# Wheel Weight Bin Assortments

## Lead Weights - Coated

With more cars and light trucks coming equipped with expensive alloy wheels, it is important to have the right products to properly service them. This means the right fit and the right coating. Chromate's polymer coating is the approved original equipment coating used on new cars' and light trucks' wheel weights to prevent corrosion of the alloy wheel that normally occurs when uncoated or improperly coated wheel weights are used. They are designed to meet or exceed original equipment manufacturers specifications to protect the wheels from damaging corrosion for the life of the vehicle, when recommended service intervals are followed.

- 40-hole Bin (Labeled)
- 33-3/4" Wide x 22-1/2" High x 12" Deep
- 640 pieces

### Bin Assortment Contains the Following:

- Type P ..... 50150 - 50157
- Type FN ..... 50194 - 50207
- Type AW ..... 50250 - 50257
- Type IAW ..... 50275 - 50282
- Type MC ..... 50300 - 50307

## Lead Free Zinc Weights - Coated

There is growing concern of lead wheel weights and lead's effects on the environment. Europe has already mandated the elimination of lead and the U.S. is researching similar measures. To ensure the market has an effective alternative, Chromate now offers Zinc wheel weights. These weights have the same functionality, appearance, and the same fit characteristics as conventional wheel weights. These new lead-free weights are designed and produced for cars with either steel or alloy wheels and are coated with a special wheel protector coating.

- 40-hole Bin (Labeled)
- 33-3/4" Wide x 22-1/2" High x 12" Deep
- 400 pieces

### Bin Assortment Contains the Following:

- Type P ..... 50323 - 50330
- Type MC ..... 50335 - 50342
- Type LH ..... 50346 - 50353
- Type IAW ..... 50359 - 50366
- Type FN ..... 50371 - 50378



**P/N 7852**



Chromate helps you renew your lead weights while making it easy for you to be environmentally responsible. Chromate accepts used wheel weights and even pays the freight! Chromate makes available free-of-charge return boxes that hold approximately 50 pounds of weights per box. See back page for details.



**P/N 7853**